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SCHOOL RESILIENCE ACCOMPANIMENT FOR DISASTER MITIGATION IN JAPANESE ELEMENTARY SCHOOL

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CHAPTER I
INTRODUCTION

A. Background

Reducing disaster risks becomes a global issue and a new paradigm which requires a commitment from every nation in their working plans by referring to Hyogo Framework for Action (HFA) 2005-2015 (Ainuddin and Routray, 2012, Amaratunga, 2014) and The Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030, which include (a) Strengthening disaster risk governance to manage disaster risk; (b) Investing in disaster risk reduction for resilience; (c) Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery; and (d) Rehabilitation and reconstruction. The fundamental program of HFA and SFDRR which is kept being done is reducing disaster risks, which means reducing deaths and the loss of social economic assets, and environmental damages because of disasters. Therefore, reducing disaster risks in a structurally and non-structurally holistic way should be done in order to gain optimum results in disaster mitigation (Haigh and Amaratunga, 2015; Pribadi, 2008). As a consequence, disaster mitigation should be done comprehensively and multi-dimensionally, and it needs adaptive theoretical development to buils resilience (Coetzee, Van Niekerk and Raju, 2016).

Disaster mitigation should be understood comprehensively. In this case, disaster management should consider every condition in the natural and social construct holistically because the risk of the disasters cannot be significantly separated from predisposition, susceptibility, fragility, weakness, and deficiencies or lack of capacities. This is in line with what de Almeida, Welle and Birkmann (2016, pp. 251–272) state, "This is a comprehensive conception of risk, accounting for the overlap between, on the one hand, exposure to natural hazards and, on the other, socio-economic/cultural conditions and processes, i. e. vulnerability, which is itself composed of susceptibility, coping capacities and adaptive capacities."

Disaster risk reduction management requires optimal mitigation that requires a response to the attitudes and behaviors that support all components of the society. Therefore, realizing the importance of awareness, concern and shared responsibility of all citizens of the nation will be vulnerable to potential disaster conditions, including

efforts to reduce the impact of the disaster on the level of risk that may occur in the region of each residence. In this context, disaster awareness culture is needed in public life, especially in the school to support a culture of preparedness.

The success of disaster mitigation is highly determined by social resilience. Social resilience becomes a significant aspect which should be strengthened in a disaster-prone society by strengthening its social capital roles (Lucini, 2013, pp. 58–71). Similar to Lucini, Arbon et al. (2016, pp. 201–215) develop a "Scorecard" tool to be used for measuring people's resilience in encountering disasters, planning what strengthens resilience, allocating money, and developing emergency programs and management of disasters which build the local people's resilience. In their research findings, a conclusion which can be drawn is that social resilience is crucial for disaster mitigation which can be improved personally and collectively.

The low level of social resilience influences the school's ability for disaster mitigation. There are many destroyed schools and dead students because of disasters (Shrestha et al., 2012, pp. 52–65; Matsuura and Shaw, 2015, pp. 613–633; Ophiyandri et al., 2013, pp. 236–249). The social facts prove that social resilience which has not been optimized in a disaster-prone area will contribute to the school ruination, both physically and non-physically. A more alarming condition is that the number of students who become victims is big enough. Some research shows that social resilience has not been optimally built by school for disaster mitigation. Either formally or informally, social resilience has not become a strong culture in Indonesian social lives.

As explained by Dwiningrum (2011) and Dwiningrum (2014), school resilience is not easily built since it involves many aspects to be improved by the society. Besides, school resilience depends on the school community's knowledge. There is a tendency that the level of awareness of disasters in schools in disaster-prone areas is low, meaning that the school resilience is likely to be low. In conclusion from research findings, there is the same tendency that Indonesian school readiness in coping with disasters has not been optimum (Dwiningrum, 2008; 2011). This condition is in line with the result of a research conducted by Baytiyeh and Naja (2016) in Lebanon that there is a tendency of the lack of society's awareness on the knowledge about disaster mitigation related to preparation for earthquake, so that schools have to

be more involved in creating programs which is expected to be able to enrich the school community's knowledge on disaster and disaster mitigation.

A. Problem Identification and Formulation

1. Identify the problem:
    a. Disaster mitigation has not been comprehensively covered;
    b. Management to reduce risk requires optimal mitigation which requires a response to attitudes and behaviors that support all components of society. most of the workforce has not been able to make creative and innovative business plans;
    c. Many schools were destroyed and students died in the disaster

2. Formulation of the problem: "How to Accompaniment School Resilience for Disaster Mitigation in Japanese Elementary School?"

B. Purpose of Activities

In general, this service aims to provide insight and experience for schools in Amaraki Japan so that they can have school resilience for disaster mitigation".

C. Activity Benefits

1. For Lecturers

This community service activity can improve insight and skills among lecturers in training and simulating school resilience programs for disaster mitigation.

This community service activity is expected to add insight and increase sensitivity, as well as the skills of teachers and students, especially in overcoming problems of school resilience for earthquake disaster mitigation.

2. For Schools in Amaraki Japan

This PPM activity is expected to provide additional reinforcement in school resilience for disaster mitigation in Japanese Elementary School

CHAPTER II
LITERATURE REVIEW

A. Disaster Mitigation

Disaster is an event that is inherent in social life. The event of a disaster may be in the form of natural disasters, non-natural disasters, and social disaster is a condition that is not expected attendance. However, catastrophic events, especially natural disasters can happen anytime and anywhere in the world, due to the natural disasters usually occur suddenly, are less or not detected by careful calculation before so that casualties and property (Dwiningrum, 2011, 2012: 14).

Studies on the prone area disaster is very interesting because the phenomenon continues to occur in the life of our society, even late phenomenon for disaster prompted scientists to examine more deeply again. For the people of Indonesia over the last 5 years is the study of "disaster" started to become a research study. To understand the concept of disaster depends on the approach to "disaster". Broadly speaking there are three approaches to the problem of "disaster" that is, as a paradigm to understand the phenomenon of catastrophic (Abdullah, 2009: 12-21 quoted Dwiningrum 2014).

According to Krishna S. Pribadi (2008), mitigation may consist of structural mitigation and non-structural mitigation. Structural mitigation is an action to reduce or avoid possible impacts of a physical disaster. Some of the examples of structural mitigation measures are the construction of earthquake-resistant housing, infrastructure development, construction of levees along the river, and so forth. While non-structural mitigation measures related policies, development awareness, knowledge development, public commitment, as well as implementation and operational methods, including participatory mechanisms and the dissemination of information, which is done to reduce the risks related to the impact of disasters. Mitigation is the most efficient measures to reduce the impact caused by the disaster. School community awareness about disaster mitigation is also essential.

Disaster management is the science related to the effort to curate the risks, which include preparatory actions, support and rebuild communities when disasters occur. In general, disaster management is a continuous process carried out by individuals,

groups, and communities manage hazards in an effort to reduce the impact of the disaster. Disaster management effectiveness relies on the integration of all elements, both non-governmental and government. Activities at each hierarchy (individual, group society) influence on different levels. As for the disaster management cycle consists of four stages, namely: a) prevention / mitigation; b) at a stage before disaster preparedness; c) The emergency response; and d) the rehabilitation and reconstruction phase after a disaster.

Effectiveness of disaster management relies on the integration of all elements, both non-governmental and government. Activity at each hierarchy (individual, group, society) may affect at different levels. The disaster management cycle consists of four stages, namely the prevention / mitigation; b) at the stage of pre-disaster preparedness; c) emergency response, and d) the rehabilitation and reconstruction phase after the disaster. Mitigation is an action taken to reduce the impact caused by the disaster. Moreover, the mitigation phase focuses on the long term to reduce the risk of disaster. Implementation of mitigation strategies can be viewed as part of the recovery process if mitigation measures carried out after the disaster. However, despite the implementation of recovery efforts, the actions taken to eliminate or reduce the risk of future periods are categorized as mitigation measures (Krishna S. Pribadi; 2008 cited by Dwiningrum, 2011, 2012).

B. School Resilience

The concept of resilience or endurance becomes a study for numerous studies on hazard, ecology, psychology, sociology, public health, etc. Resilience as a concept is used more in ecology rather than in other fields. Therefore, resilience has not become an important study in other fields like that which stresses on the significance of social system and biophysical system to encounter a wide range of danger of disasters and how the people can recover from them (Shiwaku et al., 2016). Maguire and Hagan introduce three dimensions of resilience towards disaster, comprising resistance, recovery, and creativity. Within their study, resistance is defined as a distance between pre-disaster levels and the time required by people to recover from distraction (Shiwaku et al., 2016).

Resilience is discussed in many researches with some differences in how to approach it. How to measure resilience, for instance, is still being developed comprehensively. A multidimensional approach is needed in building resilient people (Garmezy, 1991, pp. 416–430). Many variables should be taken into account in order that people can become resilient. Irajifar, Sipe and Alizadeh (2016) summarize that the efforts to build urban people to become resilient are determined by many factors such as the density of the population, the resilience towards disasters, and some controlling contextual variables like outcome level and the house ownership. In social life, the aspects that build social resilience are important, especially in the disaster-prone areas so that the number of victims of disasters can be significantly reduced. This opinion is supported by Gaillard (2007) that resilience is needed by society in giving response to danger.

Building resilience is not easy. The understanding on school resilience and susceptibility of natural disasters are the priorities of policies around the world. Resilience and susceptibility become materials for decision making process by considering various aspects of life such as human and social capital, infrastructure, economic capital, and institution, that is in accordance with the stages of facing disasters, i.e. preparing, absorbing, recovering, and adapting (Bakkensen et al., 2016). Furthermore, building school resilience requires a strong social relation with the society. Kumaraswamy, Zou and Zhang (2015, pp. 468–484) stress the significance of the synergy among public, private, and community partnership in building the infrastructures after a disaster.

School resilience is really determined by the teachers and students' contribution as well as the community's. Therefore, teachers' and students' contribution is important in building school resilience, mainly at schools which are located in disaster-prone areas. This is in line with the research conducted by Shiwaku et al. (2016), which concludes that students will have the integrity and independence as well as a more resilient personality if they have eight main attributes. They are (1) having a stable relation with their peers; (2) having problem-solving skills; (3) designing a realistic future; (4) positively trying to achieve and handle all tasks effectively; (5) experiencing success in one or more fields of life; (6) having a capability to communicate

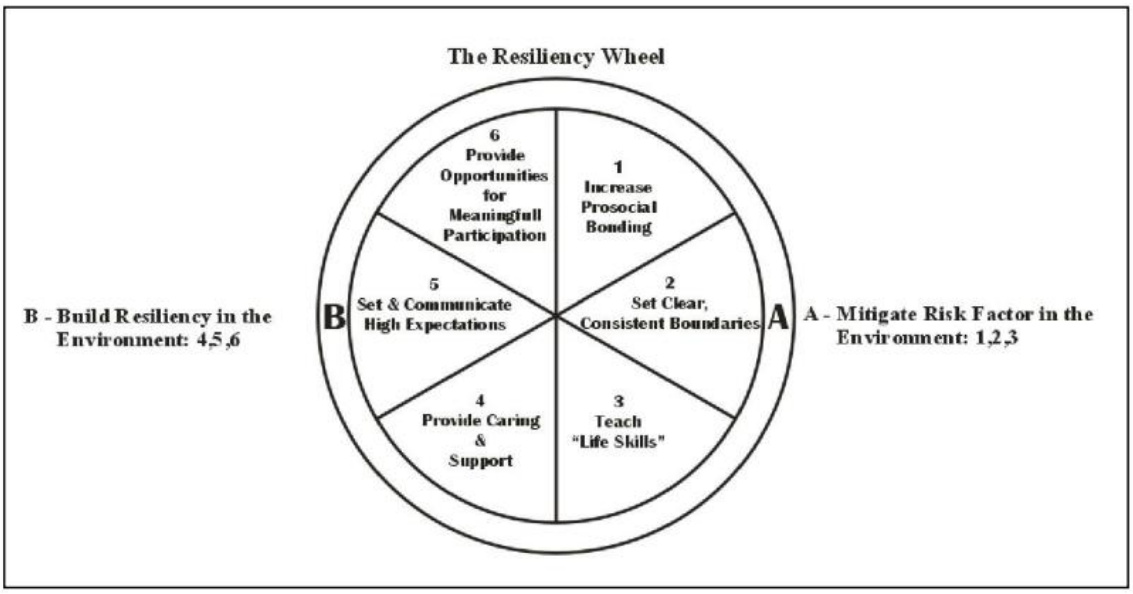
effectively; (7) having a strong attachment with at least one adult; and (8) being responsible for themselves and their behavior (Shiwaku et al., 2016).

C. Factor of School Resilience

Resilience is an individual's ability to revive and adapt to a disaster's effects. Measuring resilience of disasters now becomes a study that gains more attention from researchers (Arbon et al., 2016, pp. 201–215). The efforts to understand resilience cannot be separated from two factors, i.e. protective factor and risk factor (Barankin & Khanlou, 2009, via Dewi and Hendriani, 2014, pp. 37–38). Resilience always involves adversity as risk factors and the existence of a positive adjustment which refers to the protective factors as the reaction in facing risks. Risk factors are factors that can directly increase a high potential risk for individuals, as well as increasing their probability to behave negatively (Karina, 2014; Dewi and Hendriani, 2014, p. 37). The risk factors of resilience can come from various sources, either external factor such as family or internal factors which come from the individuals themselves (Grothberg (1999) via Nasution, 2011). The second factor is the protective factors which come from the existence of a positive adjustment that lead to the improvement or protection towards the risk factor when facing an adversity (Nasution, 2011). The protective factors have important roles in modifying the negative effects the adversity and in enabling to enhance someone's resilience (Nasution, 2011).

School as a critical environment is expected to develop teachers' and students' resilience optimally, and to evoke them from an adversity and adapt to various changes. It is associated with the teachers' ability to develop social and vocational academic competence (Ririkin and Hoopman via Henderson and Milstein, 2003, pp. 11–26; Esquivel, Doll and Oades-Sese, 2011, pp. 649–651). Every person has a different ability in developing resilience aspects. Therefore, school plays a role to develop teachers' and students' resilience which is really needed to deal with the various changes and for disaster mitigation. Teachers have a direct role in developing students' resilience. The involvement of teachers in improving school resilience is determined by many aspects such as personal competence, social competence, school culture, and school facilities, lingkungan yang nyaman dan aman untuk belajar

(Henderson and Milstein, 2003; Kiswarday, 2012; Condly, 2006; Poliner and Benson, 2013; Hassanain, 2006).



School resilience is a social process built by two principles, i.e. mitigating risk factor in the environment and building resilience in the environment (Henderson and Milstein, 2003). Henderson and Milstein (2003) explain that the stages in constructing resilience in schools are determined by six variables, i.e. increase bonding, set clear and consistent boundaries, teach life skills, provide caring and support, set and communicate high expectations, and provide opportunities for meaningful participation. In constructing the school resilience, teachers have an important role in integrating the entire aspects so that students are more resilient, as described in Figure 1 (Henderson and Milstein, 2003; Poliner and Benson, 2013).

D. Roadmap of Research

Based on some of the key findings in previous studies, the comparative study with Japan is needed, because Japan has sufficient experience to be effective in mitigating disasters by strengthening the social role in the school.

Year	Research	Findings
2009	Creativity in Learning Management Mitigation-Bencana in Yogyakarta and Central Java Province	Learning creativity is needed in the management of disaster-prone learning in school

2010	Mapping Social Capital In the Elementary and Secondary School in DIY	Social capital school have not been strong although this is required by schools in disaster-prone areas.
2011	School Role in Disaster Mitigation in Junior High School in Indonesia an Philippines, 2011	There is a difference of knowledge and awareness on disaster seen in junior high school students in Indonesia and Phillipies. The level of knowledge and awareness about disaster in Indonesia is still relatively low.
2012	The Idea of Social Capital Development in School Quality Improvement Post-eruption of Merapi	Social capital has not been used optimally to improve the quality of school after disaster.
2012	Model of Safety School	Building a school model of disaster awareness requires a comprehensive approach that is exploring the power of social and cultural capitals.
2013	School Resiliency and Social Capital of Regrouping Policy After Merapi Eruption in the Special District of Yogyakarta	Regrouping policies to improve the quality of school after the disaster requires social capital in order to reduce the social conflict at the beginning of the process of merging the two schools.
2015-2016	Resilience Development and School-Based Social Capital For Disaster Mitigation Education	Mapping the resilience of teachers and students in disaster-prone areas have not been located in a strong position, because the role of social capital has not been used to develop the resilience of the school. Whereas the resilience of teachers and students is the initial capital to build resilience schools needed for disaster mitigation
2017	Comparative Study: Resilience of School in Indonesia and Japan for Mitigation Disaster	Strengthening the resilience of the school through the elaboration of the differences and similarities resilience profile schools in Indonesia and Japan. Learning from Japan will give an overview of empirical to build resilience of the school to have awareness of disaster mitigation
2018-2019	Resilience Development Based on Local Wisdom for Disaster Mitigation	Development of school resilience refers to the strength of the indigenous communities are expected to be more effective to develop resilience schools. By strengthening local wisdom, then it can be a source of inspiration for the values or the progress of society supporters who give importance to the life and progress of society. Similarly, with the resilience of the school, then the

		school can play a more active to form disaster mitigation
2019-2020	Resilience Development Based on Science Park	The development of community resilience requires a comprehensive approach that is more optimal role in disaster mitigation. The development of innovative strategies, through the development of science park, is expected to build a culture of disaster awareness on disaster-prone communities

B. Problem Solving Framework

Reducing disaster risks becomes a global issue and a new paradigm which requires a commitment from every nation in their working plans by referring to Hyogo Framework for Action (HFA) 2005-2015. Disaster mitigation should be understood comprehensively. In this case, disaster management should consider every condition in the natural and social construct holistically because the risk of the disasters cannot be significantly separated from predisposition, susceptibility, fragility, weakness, and deficiencies or lack of capacities. Disaster risk reduction management requires optimal mitigation that requires a response to the attitudes and behaviors that support all components of the society. Therefore, realizing the importance of awareness, concern and shared responsibility of all citizens of the nation will be vulnerable to potential disaster conditions, including efforts to reduce the impact of the disaster on the level of risk that may occur in the region of each residence. school resilience is not easily built since it involves many aspects to be improved by the society. In addition, school resilience depends on the school community's knowledge.

Untuk mengatasi hal tersebut, perlu pelatihan dalam upaya untuk melatih tenaga kerja dalam suatu progam pelatihan pengembangan resiliensi tenaga kerja sebagai modal untuk membuat bisnis yang kreatif.

RESEARCH METHOD

A. Research Approach

This research will be conducted by employing a combination of qualitative and quantitative methods applying sequential mixed method (Creswell and Clark, 2003). By mixing the approaches, it is expected that comprehensive data will be obtained. The research will be took place in three senior high schools in disaster-prone areas, two schools in Indonesia and one school in Japan. The population will be students and teachers. Cluster sampling technique is applied to get 30 teachers and 100 students in each school

B. Data Collection Technique

The research instruments are questionnaire, interview, documentation, and observation sheet. The instruments are adapted from the concept of school resilience developed by Henderson and Milstein (2003). In this research, the six variables were developed into indicators in 20 questions which measure the resilience of the school by providing the illustrations of the collected data. The instruments were then validated by experts in the subject and in psychometry.

Aspects	Variables	Indicator of School Resilience
Mitigation risk factros in the environment		
1	Increase bonding	a. Positive organizational culture and mutual support. b. Togetherness in risk-taking and learning improvement. **c.** Clear vision and mission which are communicated and agreed upon
2	Set clear and consistent boundaries	a. Cooperative and mutual support. b. Sharing to achieve the school goals. c. Involvement in policies and rules
3	Teach life skills	a. All of the efforts are for the school development. b. Risk-taking in the individual's skill development. c. The existence of practical role model.
Building resilience in the environment		
4	Provide caring and support	a. All school members have a sense of belonging. b. Cooperation is enhanced. c. Give appreciation for every success.

		d. Have leaders with good time management.
5	Set and communicate high expectations	a. The importance of individual's effort. b. Risk-taking courage. c. Positive behavior d. Individual development is improved and monitored.
6	Provide opportunities for meaningful participation	a. The contribution of each member is considered very important. b. The members grow and learn various strategies and show mutual respect c. Encourage experiments

C. Data Analysis Tehnique

The results of the validity and reliability test of the questions in the instrument (36 questions). A question can be considered as valid when the value of r count which is the value of Corrected Item-Total Correlation > from r-table. Thus, five questions were disqualified from the instrument. After that, the researcher obtained that the Cronbach Alpha value is 0.891. The researcher employed various techniques in collecting the data i.e. questionnaire, in depth interview, and interview guideline as well as FGD (Focused Group Discussion). The researcher employed SPSS 17.00 version for Windows in testing the validity and reliability of the instruments.

D. Research Schedule

No	Activity	2017							
		4	5	6	7	8	9	10	11	12
1	Seminar proposal									
2	Instrument development									
3	Instrument validation									
4	Data collection									
5	Presenting paper at ICNHDM									
6	Data entry and analysis									
7	Preliminary report									
8	Preparing paper for journal JAABE									
9	Preparing final report									
10	Final report seminar and submission									

BAB IV
RESULT

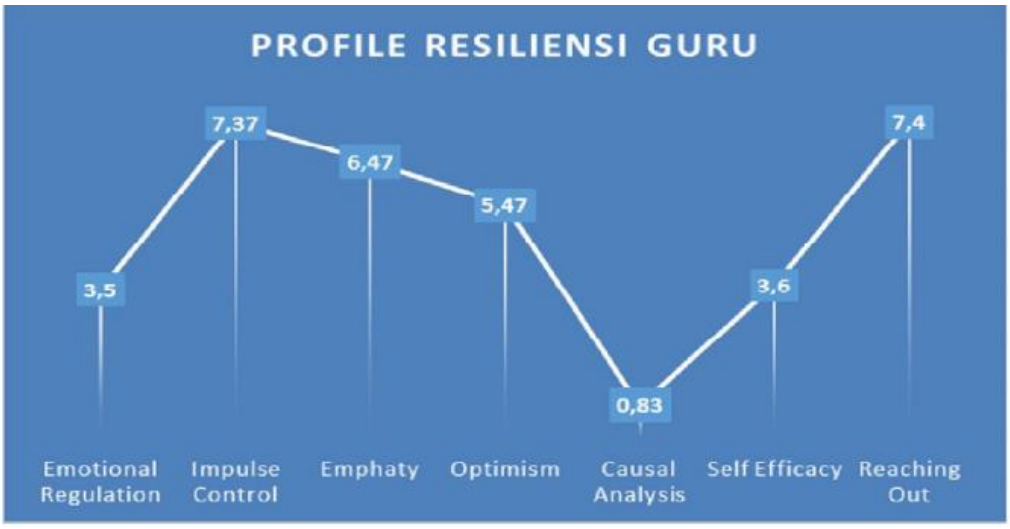
Based on the analysis of the personal resilience instrument analyzed using descriptive statistical techniques in the SPSS for Windows program, it can be reported in the following table:

Table 1. Results of the Resilience Quatient Test (RQ) of Teachers in Yogya

Statistics

		Emosional Regulation	Impulse Control	Empathi	Optimism	Causal Analysis	Self Efficacy	Reaching Out
N	Valid	30	30	30	30	30	30	30
	Missing	1	1	1	1	1	1	1
Mean		**3.50**	**7.37**	**6.47**	**5.47**	**.83**	**3.60**	**7.40**
Std. Deviation		3.866	3.891	3.893	2.956	2.614	3.519	3.784
Range		16	14	19	12	12	15	14
Minimum		-4	1	0	-1	-5	-4	-1
Maximum		12	15	19	11	7	11	13

The average value (mean) of the 7 factors of the Resilience Quatient Test of these teachers can be displayed in the form of a profile as follows



Furthermore, the average value of each of the resilience factors above will be interpreted based on the reference value that has been determined in the Resilience Quotient Test. The reference value can be seen in the following table:

Acuan	Emotional Regulation	Impulse Control	Emphaty	Optimism	Causal Analysis	Self Efficaccy	Reaching Out
Above Average	>13	>0	>12	>6	>8	>10	>9
Average	6 s/d 13	-6 s/d 0	3 s/d 12	-2 s/d 6	0 s/d 8	6 s/d 10	4 s/d 9
Below Average	<6	<-6	<3	<-2	<0	<6	<4

Comparison of the results of the average value obtained with the reference value of each factor shows that of the 7 resilience factors, 2 factors are in the below average category (emotional regulation & self efficacy), 1 factor is in the above average category (impulse control) & 4 factors are in the average category (empathy, optimism, causal analysis & reaching out).

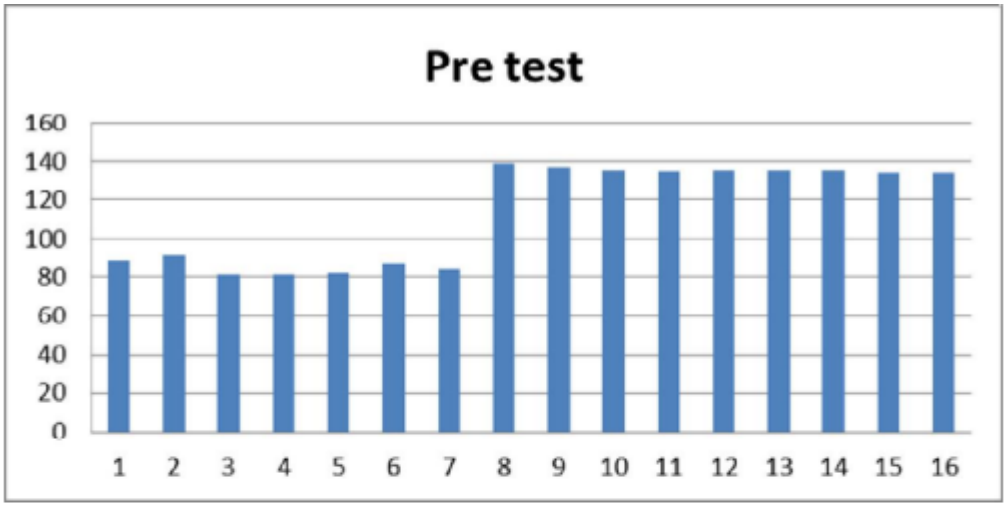
Two factors that are in the category below the average are Emotional Regulation (Mean = 3.50 < 6) and Self Efficacy (Mean = 3.60 , 6). The low Emotional Regulation of the teachers indicates a less resilient condition. due to lack of ability to remain calm under stressful conditions. Resilient individuals will use a series of skills to help control their emotions, attention & behavior, this is important for establishing interpersonal relationships, work success and maintaining physical health. This finding is quite interesting, because Emotional Regulation is basically related to Impulse Control. Individuals with strong Impulse Control tend to have high Emotional Regulation. Whereas the findings in this study indicate that the Impulse Control of the teachers is above the average (Mean = 7.37 > 0). Thus, it is necessary to make efforts to improve the Emotional Regulation of teachers.

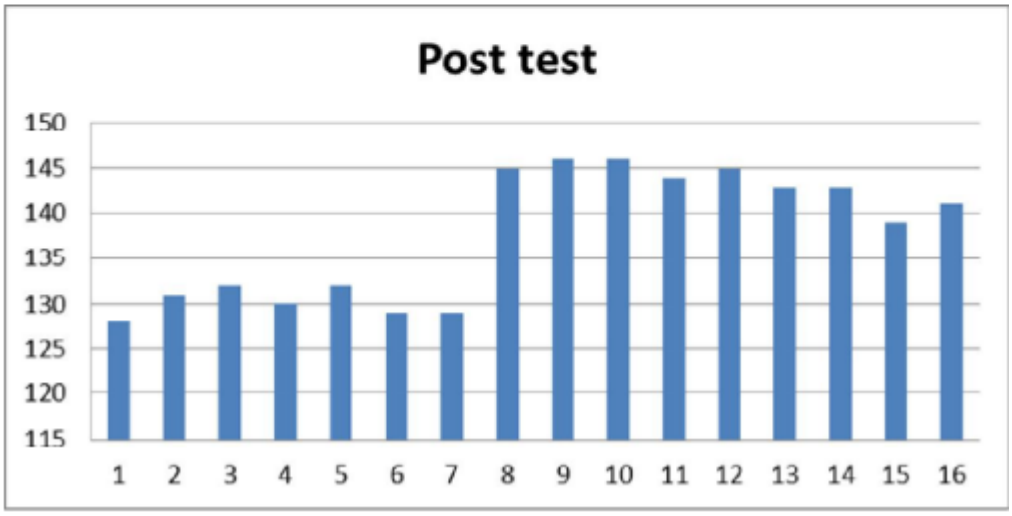
Besides Emotional Regulation, the factor in the lower average category is Self Efficacy (Mean = 3.60 < 6). Self efficacy describes a person's belief in his ability to achieve success. Therefore, the resulting low Self Efficacy indicates that teachers are less confident in their ability to solve problems & are less sure to achieve success, even though the Optimism factor is in the sufficient category. Because the key to achieving resilience & success is the Optimism & Self Efficacy factor as well.

While the other four factors, namely Empathy, Optimism, Causal analysis & Reaching out are in the average category. Among the four factors, although they are in the average category, the lowest value is in the Causal Analysis factor (Mean =

0.83). This shows that the ability of teachers to analyze a problem still needs to be improved, so that the ability to identify problems can be more accurate.

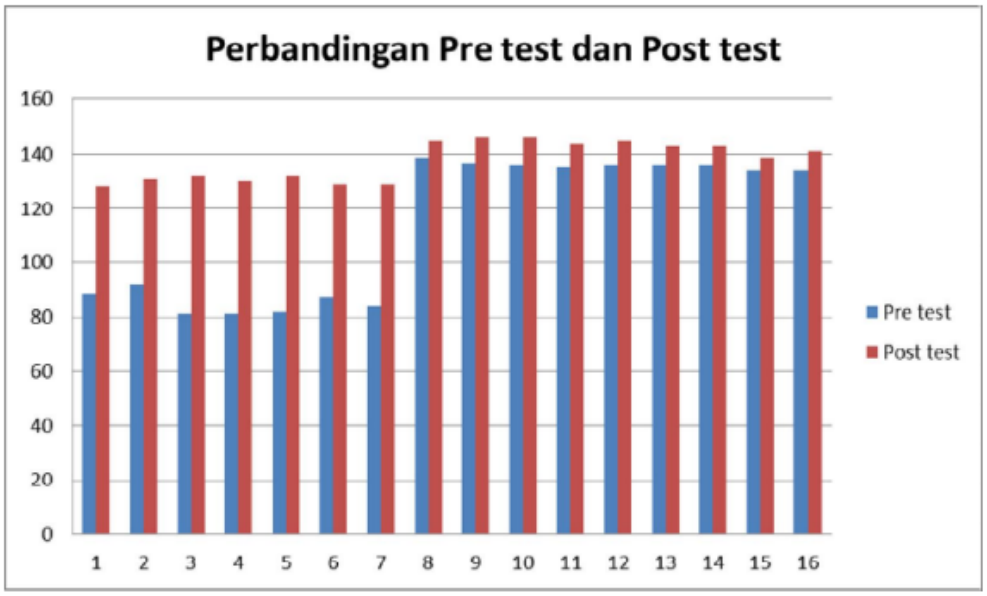
Based on Instrumnet 1 A-B, the results of the pre-test and post-test on disaster knowledge are related to the respondents' pre-test results, the lowest score is found in question numbers 3 and 4. From the number of questions it is known that respondents still do not understand about resilience and school resilience . Meanwhile, the highest score is number 8, which means that respondents find it very useful to learn about the concept of disaster management.





From the post test results of respondents, the lowest score is found in question number 1, which is about the concept of disaster management. As for the highest scores, there are numbers 9 and 10. From the number of questions, it can be seen that respondents find it very useful to learn about the concepts of disaster mitigation and

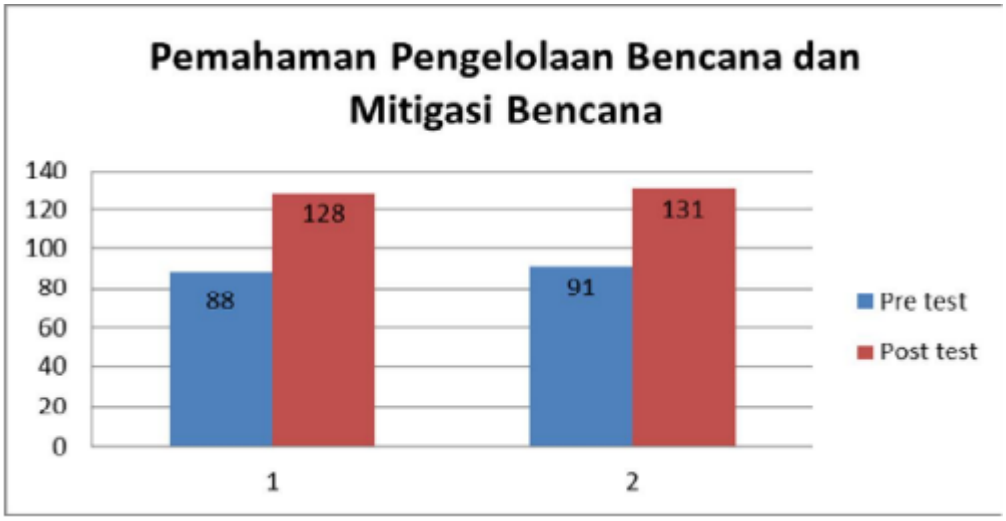
resilience. If the results of the pre-test and post-test analysis are compared, the results can be presented as follows:



From the picture above, it can be seen that the post-test results have increased the score from the previous pre-test results. This shows that the existence of training can increase respondents' understanding of the training material. In particular, this stage also reveals aspects of respondents' understanding of understanding disaster management and disaster mitigation before and after respondents participate in training in general, which can be described as follows:

Table 3. Understanding Disaster Management and Disaster Mitigation

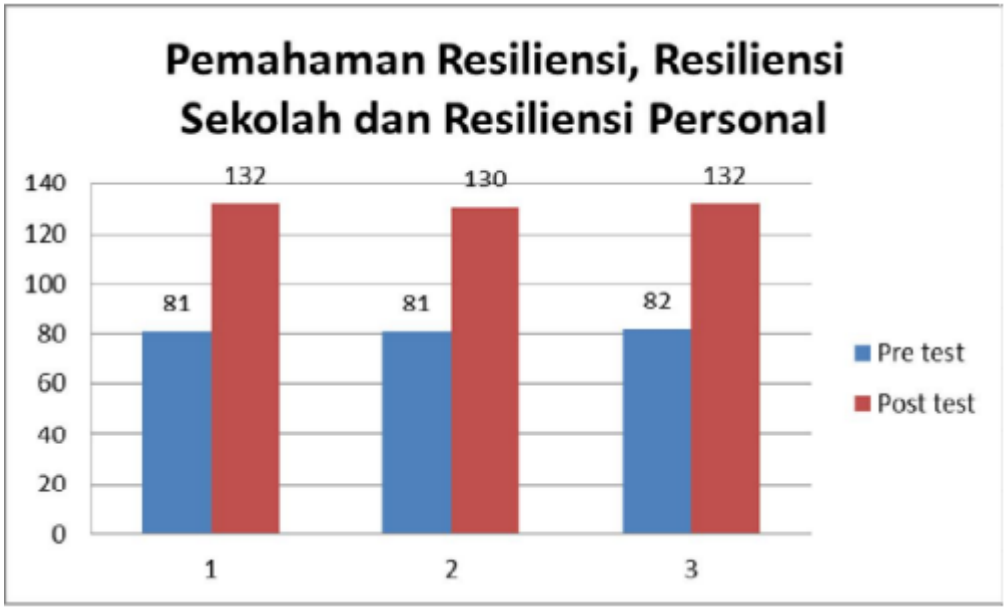
	Pre test	Post test
Pengelolaan Bencana	88	128
Mitigasi Bencana	91	131



From the picture above, it can be seen that the post-test results have increased the score from the previous pre-test results. In terms of understanding disaster management and disaster mitigation, there was an increase in the score of 40.

Table 4. Understanding Resilience, School Resilience, and Personal Resilience

	Pre test	Post test
Resiliensi	81	132
Resiliensi Sekolah	81	130
Resiliensi Personal	82	132



rom the picture above, it can be seen that the post-test results have increased the score from the previous pre-test results. In the matter of understanding resilience, there was an increase in the score of 51. In the question of understanding of school resilience,

there was an increase in the score of 49. Meanwhile, for the question of understanding personal resilience, there was an increase in the score of 50. is high in the understanding of resilience.

A. Materials for Strengthening Self-Concept, Resilience and Disaster Mitigation

Self-concept strengthening materials provide reinforcement for teachers and students to be more confident and have practical abilities. the participants were enthusiastic in responding to the dialogue with the participants and training companions, making the atmosphere more relaxed in learning.

B. Evaluation of Training Implementation

Evaluation is carried out, during the process and at the end of the activity. During the activity process, it can be seen that the enthusiasm of the participants was extraordinary. The training process was followed thoroughly, starting from the preparation stage to evaluation.

Table 1. Training Evaluation Criteria

No	Component	Indicator	Success Criteria	Data Collection Techniques
1.	***Cognitive***	The trainees master the material	Participants master 70% of the material	*Pre test* dan *post test*
2.	***Affektive***	Acceptance and response of participants in training	1. A minimum participation rate of 90% of active participants 2. The enthusiasm and enthusiasm of the participants in the game 3. Participants enjoy sharing opinions/ideas	Observation and Questionnaire
3.	***Plan Action*** (individual and school)	Participants have a post-training action plan	a. Creativity in expressing ideas in works/action plans	Content analysis of the two action plans.

			b. Making decisions based on the analysis that has been done.	

The evaluation results on 200 activity participants with a scale of 1 to 5 can be presented as follows.

Table 4. Evaluation of Training Implementation

No	Pertanyaan	Rerata	Kriteria
1.	Materi yang diberikan dibutuhkan oleh peserta.	4,66	Sangat baik
2,	Pencapaian sasaran program	4, 57	Sangat baik
3.	Efisiensi penggunaan waktu	4,58	Sangat baik
4.	Metode kursus yang digunakan	4,56	Sangat baik
5.	Kemampuan instruktur dalam membawakan materi	4,70	Sangat baik
6.	Partisipasi peserta dalam pelatihan	4,58	Sangat baik
7.	Materi pelatihan bisa diaplikasikan untuk wirausaha.	4,76	Sangat baik
8	Sarana pelatihan memadai (ruangan, media, alat praktek dsb)	4,60	Sangat baik
9.	Dukungan pelayanan staf	4,72	Sangat baik
10.	Kemanfaatan pelatihan bagi peserta	4,75	Sangat baik
	Rerata	4,65	Sangat baik

Hasil penilaian menunjukkan materi yang diberikan dibutuhkan oleh peserta (skor 4,66). Secara umum semua peserta sangat berterima kasih dengan diadaka*n*ya kegiatan seperti ini, karena kegiatan yang berupa peningkatan kemampuan sangat sulit dilaksanakan.

BAB V
KESIMPULAN

Kegiatan Pengabdian Masyarakat ini dapat berjalan dengan lancar sesuai dengan agenda dan tujuan yang sudah disepakati bersama. Pelatihan menyimpulkan bahwa sebagian besar peserta sangat membutuhkan pengetahuan yang dapat meningkatkan soft-skill agar mereka menjadi pribadi yang resilien dalam mitigasi bencana. Oleh karena itu pelatihan ini dapat memberikan pemahaman dan pengalaman yang lebih terkait resiliensi personal para peserta sesuai dengan tujuan awal.

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