

APPLICATION STORYTELLING AND PLAYING METHOD TO IMPROVE PSYCHOLOGICAL PREPAREDNESS FOR EARTHQUAKE IN KINDERGARTEN CHILDREN

by

Kartika Nur Fathiyah and Farida Harahap
Department of Educational Psychology and Guidance lecturers
in Universitas Negeri Yogyakarta

ABSTRACT

The research was motivated by the fact that Indonesia is a country prone to earthquakes. During these preventive measures to face the devastating earthquake has not been done. Children rarely actively involved to confront the devastating earthquake. This study attempts to determine the increase in psychological preparedness to face the devastating earthquake in kindergarten children.

This research is a class action (action research) that conducted based on the concept of cyclic Kemmis and Taggart which includes the planning, implementation, monitoring and evaluation, and reflection. The research subjects were all kindergarten students in TK Sulthoni, Plosokuning, Sleman DIY. Data collection techniques through the observation of the action process and observations of student reactions, and interview the students. The collected data were analyzed with reflective and evaluative analysis and descriptive analytical further processed.

The results after one time through the cycle with two measures showed that children can understand what to do in an earthquake occurs, children enjoy participating in activities and children are able to perform self-rescue measures.

Key words: telling stories and playing, disaster preparedness, child

INTRODUCTION

DIY is one of the Indonesian provinces that quite prone to natural disasters earthquakes. DIY geographical position at the meeting were two plates of the euro-asia plate and Australian plate potential catastrophic natural tectonic earthquakes accompanied by tsunami. The potential vulnerability is evident from the existence of tectonic earthquake in Yogyakarta May 27, 2006. Recorded 5048 people died and over 150 thousand people suffered physical injury or disability (Data Yogyakarta

Provincial Government in 2007 in Ismaji, 2007). That Enormity of the earthquake disaster puts them in fourth place of the world's biggest disasters at 2006 year (Source: Asian Disaster Preparedness Center, Thailand; ECLAC, EM-DAT, the World Bank).

Tragically, many victims were children. An estimated 2 billion people affected by disasters in the world during 1990-1999, 80 percent are women and children (UNICEF, 2002). Earthquake and Tsunami Aceh, among the victims died, disappeared, or survived, 35 percent are children (Suryopratomo, 2005). Earthquake Yogyakarta and Central Java last May 27, 2006, from about 6000 people died and more than 30,000 people were seriously injured and light, many of whom are children and elderly (Winardi et al, 2006).

The number of child casualties, not apart from the fact that children are often neglected in every phase of disaster management. When disaster comes, the child with minimal knowledge does not know what to do. The child has a physical weakness to save themselves than adults. If the survivors, children could become victims again at this stage of disaster response because children are rarely involved in disaster management, for example, in danger of disaster risk awareness. Not to mention the impact is more complex for children. In an emergency situation or disaster, children are very susceptible to trauma and pain (UNICEF, 2002), malnutrition, exploitation, kidnapping, and sexual violence (anonymous, 2004). Those things are piling up in the mind of a child and became a traumatic experience that causes psychological disorders for children.

Disasters can not be prevented. However, casualties can be minimized if the population includes children have an early psychological readiness to natural disasters. Development of an early psychological preparedness against natural disasters should have been formed from an early age. Thus, when disaster struck, the victim fell especially children, can be minimized because the children as the most vulnerable groups of victims who have had an early psychological preparedness for natural disasters.

Educational institutions, including the kindergarten is one source of knowledge about the transformation of early psychological preparation strategies against natural disasters on students. In some countries such as Mexico, Romania, and New Zealand, the introduction of natural disasters are integrated into the learning materials. Similarly, in Brazil, Venezuela, Cuba and Japan (UNISDR, 2006). However, in Indonesia the school as an educational institution has not been engaged to build an early psychological preparedness to natural disasters.

The number of child casualties in any disaster management in Indonesia raise awareness about the importance of the various parties concerned on the children in each phase of disaster management. Emerging awareness of the importance of preparing children early on the face of natural disasters, including the preparation of the psychological condition of the child so the child is ready and know what to do when disaster strikes. However, train children about disasters and strategies are not as easy to deal with adults. Children need appropriate methods and in accordance with the level of development. Characteristics associated with kindergarten children who always want to move, explore, explore, talk and ask, as well as exchanging ideas in a pleasant atmosphere, delivery of content that is important for children to have psychological preparedness for natural disasters requires its own method. The method in accordance with these characteristics include the method of storytelling and play.

Storytelling is one of providing learning experiences for children by giving a story verbally. Through this story-telling method, will create an atmosphere of fresh, interesting, and raises the child a unique experience, without losing the main purpose of delivery of content. Storytelling can be a medium to convey the values and knowledge and develop fantasy, cognition, and language of children (Moeslichatun, 2003).

Storytelling for a child is something fun. Through the story of a child can develop his imagination be whatever he wants. In the story a child can gain a lot of little value to the process of learning and development. In addition, according to Graves (in Nugraha and Rachmawati, 2000) tells the story can also serve as a tool to

support a wide range of knowledge and values in children. Solehudin and Hidayat (in Nugraha and Rachmawati, 2000) adds that telling activity can also serve to establish a close relationship with the child. Through the activity of telling educators can interact in a warm and intimate.

Playing by the Gordon and Browne (in Moeslichatun, 2003) is the work of childhood and mirrors the growth of children. Play is an activity that gives satisfaction to the children, while giving a child a chance to practice, exploit, manipulate, and repeat any exercise that can be done to transform the imaginative things that are similar to the adult world.

This research considered important enough to remember the potential for earthquake-Indonesia including Yogyakarta needs to be addressed by the strategy of the nation's resilience to natural disasters. In addition, during this, children are rarely involved in the effort to build the nation's resilience to disasters. Yet on the other hand it is a lot of children become victims in any disaster due to various limitations that are owned. Another thing that makes this study important is that during this disaster is still a curative and rehabilitative. Not yet entered a preventive strategy in the form of mitigation. Mitigation is an effort made to reduce the impact of disasters, both structurally through the creation of physical structures, physical and non-structural through legislation and training (www.mpbi.org).

RESEARCH METHODS

This study use a model of action research. The focus of this study lies in the actions of stories and games that will be given to kindergarten students as an effort to prepare psychological preparedness for natural disasters for kindergarten students. Next it will be evaluated whether these methods can improve the psychological readiness of kindergarten students at an early stage facing natural disasters.

The design of this study refers to the implementation process of action research proposed by Kemmis and Taggart (Arikunto, 1997) which includes:

planning, action, observation, reflection, and designing the next action. The subject of this study are kindergarten students of TK Sulthoni Plosokuning III Minomartani Ngaglik Sleman. Data collection method in this research is observation, interview, and test. Techniques of data analysis was done by using qualitative descriptive analysis. This technique is used to interpret the data as it is in accordance with that occurred in the process of action implementation , based on logical thinking through inductive way of thinking, analogical, and comparative. The data obtained were subsequently used as a basis for reflection. Namely the evaluation efforts undertaken by collaborative between researchers and teachers in Sulthoni Plosokuning kindergarten to solve problems that occurred the research progresses. If the results of reflection to conclude that act on a cycle has not obtained the results as expected, will be followed by fixing the initial plan in accordance with the results of an analysis of the findings in the cycle. And so forth until the expected purpose can be achieved.

Indicators of successful action that determine high psychological preparedness of natural disasters , include:

1. Cognitive aspects of readiness, It is the students' knowledge and understanding of the material in depth disaster. Success criteria shown quantitatively and qualitatively. Quantitatively demonstrated by the number of students who are able to understand the knowledge about the earthquake and rescue themselves from the earthquake. Qualitatively shown by the results of observation and in-depth interviews that indicate the presence of student reasoning about subject matter, the emergence of student skills, and high student performance and confidence in performing simulations.
2. Affective aspect of readiness. It is indicated by a sense of responsibility for safety, compliance to execute instructions and sincerity in doing the whole act of rescue oneself from disaster
3. Aspects of motor readiness. It is indicated by the children responses to save themselves spontaneously and perform simulated escape sequences correctly.

RESEARCH RESULTS

A. Action 1 : Storytelling method to prepare the children face the earthquake

Psychologically

Preparation of research begins with the coordination of the research team with the principal and teachers in Sulthoni Plosokuning kindergarten. In coordination, It was discussed about the general picture of the research plan included the background of this research, goals and benefits of research.

In accordance with the procedure classroom action research model proposed by Kemmis and Taggart (Arikunto, 1997) then the steps performed in one cycle includes planning, action, observation, reflection, and designing the next action.

1. Planning Phase

Activities undertaken at the planning stage of the cycle 1 involves the selection of stories, setting the time and place, as well as deal with the teacher about telling stories and playing methods to be used for kindergarten children psychologically prepare for natural disasters.

The story that will be given is about how to save and prepare byself from the catastrophic earthquake. Story-telling method is done through media images and posters that will be told by the teacher. Teacher position is set to sit in a circle surrounded by students. Storytelling will be interspersed with questions to ask the child's understanding. It is estimated that this event runs for 1-1.5 hours.

The storytelling matter using the Package Child About Earthquake Countermeasures arranged in partnership Auswartiges AMT, Arbeiter-Samariter-Bund Deutschland EV (S ASB) and the Asian Disaster Reduction Center. Overall the story package consists of 6 sections, namely: 16 sheets of A2 size picture, 16 picture cards A5 size, a sheet of A2-sized poster of 10 suggestions, an A2 size poster landslide, 1 sheet of A2 size posters first Aid, and a sheet of instructions simulation of A2 size

As part of the package used in this study are:

- a. 16 Sheet Story Picture (A2 size 60 cm X 40 cm). This story contains knowledge about the earthquake and handling. Equipped with images and stories that match the theme of everyday life. These stories aim to introduce the process of evacuation of the disaster at the school on the student.
- b. 16 Sheets A5 size Playing Cards .This card is a card to play. Contains 8 pairs of images of disaster management. Behind the image there is TRUE and FALSE answer, answer the following reasons. This card is used after finished reading the story in the form of a guessing game for to measure student understanding of the stories

Materials to tell that belongs only consists of a package that can not be done in each class simultaneously. So, it was decided to collect in the field school students together to listen teachers talking about how to prepare for a catastrophic earthquake. Selected relaxing day Saturday, in the morning so that children are not too hot and bored if too long. Loudspeakers are also prepared so that the teacher's voice is heard loud talk and be heard all children. Camera and documentation tools are also prepared to record the child's activity during listening to the story.

Planned activities is expected to increase the knowledge, understanding and responsibility fchildren for facing frequent natural disasters in Indonesia, especially catastrophic earthquake that has happened in Yogya.

2. Actions Phase

Activities take place outside the classroom that is in the field who guided the school principal. All students sitting around a teacher. There are about 30 students male and female. Activity lasted for 2.5 hours ie from 07.30 am to 09.00 pm. The atmosphere takes place with a very supportive climate, sunny day with the cool air and no heat so that the children enjoy the atmosphere of the morning sitting outside the classroom listening to a story his teacher mother.

Activities in this story-telling method begins with the brainstorming. Which asks whether the child already knows the earthquake and what they know about earthquakes accompanied with an explanation of the importance of listening to stories about the earthquake. The core of this activity is to establish the child's knowledge by exploring their experiences of the earthquake that has taken place. The material of the initial form of the game in the form of guessing the questions contained on the cards on the measures to be taken when the earthquake came. This activity uses 16 sheets A5-sized Playing Cards. The contents of this playing card are pictures showing the response of child events when an earthquake.

Brainstorming and card games mentioned above works well as a pretest to measure students' psychological readiness for disasters. The results of the initial questions of the students indicated that they have not gotten the full story about the natural disasters earthquake that occurred in Indonesia from a parent or other information. They also have not known what strategy which have to do to face the earthquake.

This activity lasted for half an hour, which is then followed by storytelling. Implementation of story-telling method takes place smoothly, the details of the material content of the story is as follows: 16 Sheet Story Picture (A2 size 60 cm X 40 cm) that consists story about strong earthquake that make many people injuries , story about Indonesian condition that located in a deep and long fracture in the sea causes earthquake. the suggestion that people must always be vigilant when there is anearthquake, and strategy that have to do.

The process lasted for 1 hour to tell more because interspersed with the asking and the interruption because the children come forward to see images more clearly. It could be argued that the images have been adapted to the character of Indonesia and is made with images and colors that attract children's attention. After the teacher asks again finished telling the story, repeating the core story without an image and demonstrate what to do and followed the children together

simultaneously. The teacher then asks the child to recall the story to be carried back because next week there will be a simulated earthquake.

3. Monitoring Phase

This story-telling method of monitoring activities conducted in the form of questioning and observation to monitor the knowledge, understanding and feelings about the child psychologically natural disasters. After the teacher told the children, then the teacher asked the children about whether they understand what to do at the time of the earthquake. Furthermore, the children understand and answer the teacher guided the children to repeat the three things that should do is take cover, go out and find a safe place. As a result, three children were interviewed about what investigators have told her teacher. Generally, children can immediately understand the process of earthquake disaster. The most memorable child is hiding under the desk until the shaking stops, protecting the head from falling items and ran out of the house. When asked if ready to execute when the earthquake rescue children from expressing themselves ready and remember.

4. Evaluation and Reflection

The evaluation demonstrated the knowledge, understanding and feelings about the child psychologically natural disasters demonstrated children high motivation to listen to stories, answer questions and a desire to protect themselves in case of natural disasters.

The problems that occur in story-telling method is the selection of outdoor places that are less effective because of the limited size of the image to tell a story. Shown in the documentation, the children are so interested in the pictures so that they move from the chair and approached the teacher. After half an hour the story progresses the children who come forward more and more so that other children are sitting in a chair to feel disturbed and forward around the teachers involved. Some children stood up because the image seen is less clear and unobstructed.

Therefore if there is time, it takes repetition of this story-telling method in the class with fewer students (about 15-20s children) in which the teacher sitting in high chair holding his picture and the child sat on the carpet around the teacher. Based on the evaluation and reflection, action on the first cycle is continued on the second act of the method of play to prepare children psychologically to face catastrophic earthquake.

B. Actions 2: Play Method to prepare children face earthquake psychologically

This action contains the following activities: (1) planning, (2) implementation (3) monitoring, and (4) evaluation and reflection.

1. Plan

Based on the evaluation and reflection on an action research, we plan play activities for kindergarten children psychologically prepare for natural disasters. Play activities conducted in the form of simulated escape from an earthquake disaster. Planning is done by teachers to determine the time of execution and the actions or steps that must be done to guide the student teacher.

Instructions obtained from the simulation of guidance provided in the package instructions earthquake simulation of the Asian Disaster Reduction Center. These are:

1. Make a deal of time with the teachers to practice simulation. Should the practice of simulation performed in unison with all classes in the school
2. Use as an alarm bell. Ask the caretaker to ring when all classes are ready to do the simulation. The bell was rung 1-2 minutes.
3. Things that must be practiced:
 - a. Take cover under a table. Shelter under a table during the bell rings. Do not forget to ask students to hold on to the foot of the table.
 - b. Protect the head with a bag or a book. After the bell rang to stop asking the students to get out of the table and cover their heads with bags or books.

- c. Lined up neatly out of the classroom without talking, running, and encouraging. Instruct the students to line up one by one out of the classroom. Do not forget the students should continue to use as a protective bag or book.
 - d. Gathered together in the school yard. When all the students were in the schoolyard, the teacher should roll his disciples. But if ekolah location near the beach, head for higher ground. After that try again discuss other hazards after an earthquake.
4. After the simulation, we invite the students back to class each. If possible repeat the material by playing cards with pictures and ask the students the reasons for their answer. The for yhe next day, children assign to practice and make a path simulation evacuation / rescue at home with their parents and discuss about the task.

Planned earthquake simulation performed a week after the story-telling method is done.

2. Implementation

Play method for simulating earthquakes is carried out for 2 hours on the date and starting from 08.00 AM until 10:00 AM. As planned the previous practice of simulation performed in unison by all classes in the school. There was the sound of sirens as the cue to perform the simulation.

Activities undertaken include students as well as on the instructions are sheltering and holding on to a table leg under the table during the earthquake took place. The goal is to protect the head from objects that may fall due to shaken by the earthquake. Furthermore, the students left the room while protecting the head with a bag or a book. Furthermore, students gather in a safe place and listen to instructions from adults in order to escape the next teacher.

3. Monitoring

Monitoring activities carried out by way of observation and documentation through the camera and photograph during the activities take place. The results

showed an increase in children spontaneity of to save themselves, obedience in carrying out the teachers instructions either through direct supervision or through loudspeakers.

Play activities is followed by all students. Based on observations during the activity children seem very enthusiasm shown by the spirit to act as if there was a disaster.

4. Evaluation and Reflection

In general play activities indicate good results as desired, but do require repetition at a later time so that children are not forgotten. Therefore the teacher should be advised to do the simulation in a certain period so that students always remember about the behavior that must arise when disasters occur.

DISCUSSION

The evaluation intended to determine the success or failure of the action taken so that the effectiveness of the research results indicated the presence of psychological readiness of children as seen from a simple indicator as follows:

1. Cognitive aspects of readiness that is the students' knowledge and understanding of the material in depth disaster. Quantitatively, after given storytelling and playing method about earthquake and strategy to face, there are increased the number of students who are able to understand the knowledge about the earthquake and rescue from the earthquake. Qualitatively shown by the results of observation and in-depth interviews that indicate the presence of children reasoning of subject matter, the emergence of skills, performance and confidence in performing simulations.
2. Affective aspect of readiness indicated by children sense of responsibility for safety, compliance execute instructions and earnest in doing the whole act of saving themselves from disaster

3. Aspects of motor readiness is indicated by the responses of students to save themselves spontaneously and perform simulated escape sequences correctly.

It could be argued that by storytelling can stimulate children cognitive, affective and psychomotor to prepare facing the earthquake disaster. Cognitively child is given information about the earthquake and what happened during the earthquake took place and how to save from the dangers during the earthquake.

Affectively the activities can stimulate children to save themselves, not panic, and feel responsible to protect themselves during an earthquake occurs. In psychomotor children are shown how and action to save themselves from harm. Shortage of classical story-telling method that is applied more than 15 children are in need of extensive because of the number of children too much, the media and the presentation of images that correspond to observations of children. Media images used in this study are only suitable for 15-20 children with small classrooms so that talks can happen and two-way dialogue between teachers and students. With small classes, teachers can determine whether the child really pay attention and understand the story.

Through play activities by means of simulation, knowledge gained through story-telling method can be practiced in a straightforward manner so that it can add memory, add new experiences and train the child and add the child's reaction spontaneity to save. In applying the method of playing with this simulation researchers found no deficiencies. Simulations must be repeated within a certain period so that children still remember the actions they need to do when an earthquake occurs.

CONCLUSION

1. Story-telling dan playing method capable of stimulating preschool age children in cognitive, affective and psychomotor to prepare themselves to face the catastrophic earthquake.

2. The drawback of the method applied in the classical style storytelling more than 15 children are in need of extensive because of the number of children is too many, need the media and the presentation of images in accordance with the observations of many children.
3. Media images used in this study are only suitable for 15-20 children with small classrooms so that talks can happen and built two-way dialogue between teachers and students. With smaller classes, teachers can determine whether the child really pay attention and understand the story.
4. Through play activities by means of simulation, knowledge gained through storytelling method can be practiced in a straightforward manner so that it can add memory, add new experiences, train the child, and add the child's reaction spontaneity save.

SUGGESTION

1. Henceforth, this activity should be developed into activities that are carried out periodically and the agenda for the schools in conducting preventive activities to prepare children for disasters.
2. For media developer child, it takes a lot of packages for disasters other stories with a larger size so that it can be applied both to classical class sizes small and large classes.
3. Media images are available and used in this study is intended for elementary school age children so that there are some flaws in the image is a color that is too much, the picture is less simple and the card series is the text which can not be understood by kindergarten age children who can not read. For more media images need to be made in accordance with kindergarten-age children because of media available is limited and can not be purchased because it is a training division of the NGOs in post-earthquake.

BIBLIOGRAPHY

- Ismaji, T.H. 2007. **Saigeg Saekab Kapti Refleksi Satu Tahun Gempa Yogyakarta**. Yogyakarta: Penerbit Pemerintah Provinsi DIY
- UNDP. 2006. Kerangka Acuan Pelaksanaan Pelatihan Orientasi Pengurangan dan Manajemen Risiko Bencana. *Paper*. Unpublished.
- United Nations International Strategy for Disaster Reduction (UNISDR).2006. Institutionalizing Integrated Disaster Risk Management At School”. *Paper*. Tidak diterbitkan.
- Nugraha,A dan Rachmawati, Y. 2005. *Metode Pengembangan Sosial Emosional*. Jakarta: Pusat Penerbitan Universitas Terbuka.
- MPBI (Masyarakat Penanggulangan Bencana Indonesia).2005. Hari Pengurangan Risiko Bencana se Dunia.
- Moeslichatun, 2003. *Metode Pengajaran di TK*. Jakarta: Depdikbud
- Arikunto. S. 1997. *Prosedur Penelitian, Suatu {Pendekatan Praktik}*. Jakarta: Rineka Cipta.