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Child Preparedness Model in Facing Landslide Disasters



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Abstract

Vulnerability in children occurs due to limited understanding of the risks that occur around them, resulting in a lack of preparedness. The Child Preparedness Model is a disaster management effort that focuses on children's preparedness in facing disasters. This research was carried out in stages, namely analyzing children's preparedness in facing landslides, followed by developing a Child Preparedness model to increase children's preparedness in facing landslides. The design of this research was a quantitative with a cross sectional approach. The research population was 120 children in Blimbing Village, Kediri Regency. The sampling technique used purposive sampling. The research instrument used a questionnaire to determine children's readiness to face the risk of landslides. The independent variable of this research was the Child Preparedness model and the dependent variable was children's readiness to face landslides. The data analysis by the SEMPLS test showed that input influences process control ($p=0.001$), process control influences effectors ($p=0.01$), effectors influence output ($p=0.02$), output influences resilience ($p=0.004$). There is a need to increase children's role in disaster management so that they are better prepared to face landslides.

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INTRODUCTION

Disaster management states that a disaster is an event that often results in damage, loss of human life, ecological disruption, loss of property, and even worsening health status (UU, 2007). Disasters occur due to natural, non-natural and human factors which often have an impact on property, lives and the environment (Panda, 2020). Disasters can also impact children (Seddighi, 2020). Vulnerability in children occurs due to limited understanding of the risks occurring around them, resulting in inadequate preparedness (Herdwiyanti, 2013). Careful planning needs to be prepared in the face of disasters (Niode, 2016). Disaster prevention and management is a process of taking action to prevent something from happening, but if something happens it can be addressed immediately so that it doesn't get worse and can be resolved immediately (Durrant, 2023). Kediri Regency is one of the regions that has highland areas that are at high risk of landslides (BNPB, 2021). Based on data from the East Java Central Statistics Agency, it is stated that Blimbing Village is an area where landslides occur every year (BPSJ, 2022). As a result of the landslides that occurred, the community experienced many material and non-material losses. Children's preparedness in facing landslides needs to be explored further considering that currently the focus on preparedness is still not a concern. Efforts to increase preparedness for landslides to reduce losses resulting from these disasters to a minimum. Disaster risk management efforts are based on appropriate governance (Opabola, 2023). Disaster risk governance is the systematic development and implementation of policies, strategies and practices to minimize vulnerability to the dangers of widespread disaster impacts throughout society in sustainable development. Disaster risk reduction is the systematic development and implementation of policies, strategies and practices to minimize vulnerability to hazards, and the widespread impact of disasters throughout society in sustainable development (Riskiyah, 2019). Preparing a disaster management plan is the entire aspect of development policy that is at risk of disaster, including activities before, during and after a disaster occurs (Paterlow, 2021). Disaster

risk management includes disaster prevention, preparedness mitigation, emergency response, and better recovery from the impacts of disasters. Strong capacity in dealing with disasters is related to programs to increase the capacity of sectors involved in disaster risk management so that they are able to anticipate disasters, be able to handle emergencies, and be able to recover from disasters. (Tuladhar, 2015, Aldrich, 2008). Steps in dealing with disaster situations that will occur require good organization (Indahri, 2017, Ansell, 2018). Children's preparedness in disaster risk management is still not considered even though children are a vulnerable group who need to be prepared, including in the preparedness phase (Mitchell, 2008). Disaster risk management can be done through Child Preparedness. The Child Preparedness Model is a disaster management effort that focuses on children's preparedness in facing disasters. With the Child Preparedness model, it is hoped that it will be able to increase children's preparedness for landslide disasters through appropriate and effective steps.

METHOD

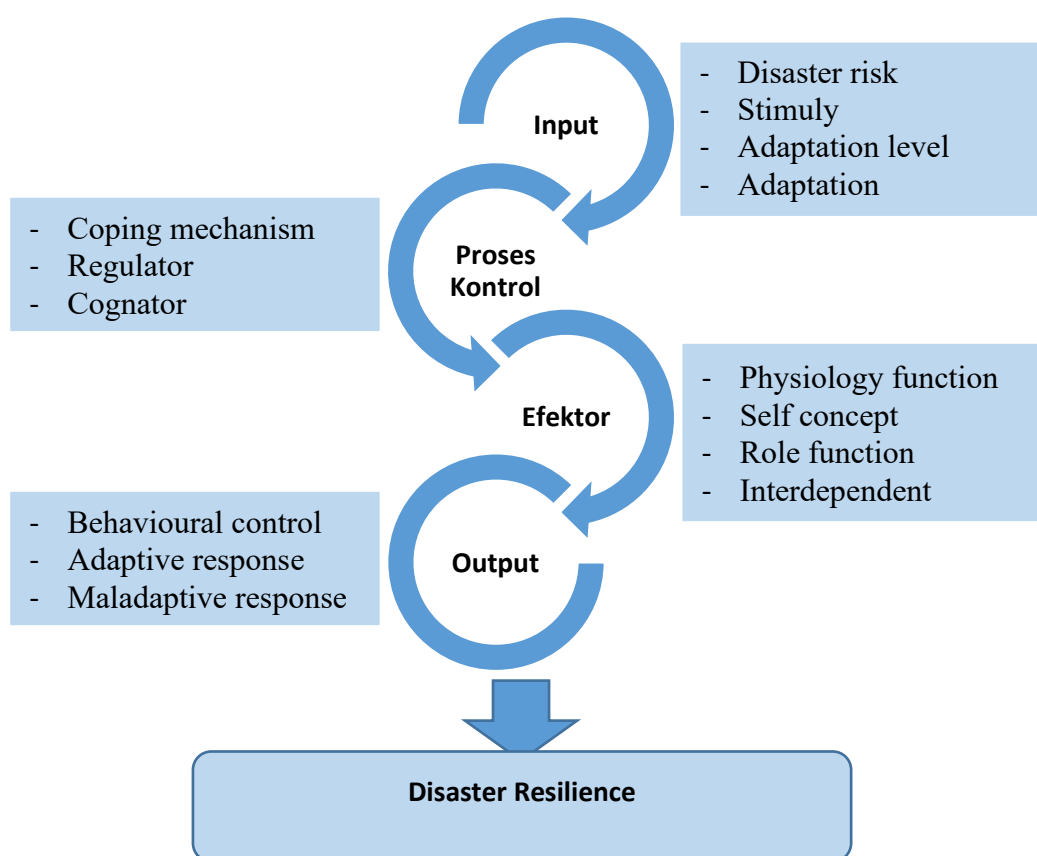
This research was conducted by analyzing children's preparedness in facing landslide disaster, followed by the development of Child Preparedness model in improving children's preparedness in facing landslide disaster. The research design is quantitative with cross sectional approach. The study population was children in Blimbing village, Kediri district, totaling 120 people. The research was conducted in Blimbing Village, Kediri Regency because the area is prone to landslides. The sampling technique used purposive sampling. The research instrument used a questionnaire to determine children's preparedness in facing the risk of landslides. Independent variable of this research is Child Preparedness model. While the Dependent variable is children's preparedness to face landslides. Data analysis of Child Preparedness model development on children's resilience in facing landslide disaster using Structural Equation Modeling-Partial Least Square Path Modeling test (SEM-PLS).

RESULT

Table 1 Characteristics of respondents

Indicators	Category	Amount	Percentage
Gender	Male	72	60%
	Female	48	40%
Age	6-8 years old	54	45%
	8-12 years old	66	55%
Education History	Never	102	85%
	Ever	18	15%

Based on the results of statistical tests using the Structural Equation Modeling-Partial Least Square Path Modeling (SEM-PLS) test, the results show that inputs affect the control process ($p=0.001$), the control process affects the effector ($p=0.01$), the effector affects the output ($p=0.02$), the output affects resilience ($p=0.004$). The Child Preparedness model is as follows:



Picture 1 Model Child Preparedness

DISCUSSION

Preparedness is a series of activities carried out in anticipation of disasters with appropriate and effective organization (BNPB, 2014). Preparedness will reduce casualties, property losses, and changes in community life. Children are a vulnerable group at risk of being affected by disasters because most children still cannot save themselves (Humsona, 2019). Children need to be given education about disasters as an effort to improve disaster preparedness. Disaster education can shape children's preparedness behavior in the face of disasters. Age is also a factor

that can affect children's disaster preparedness. With the increase in the age of the child, the child will become more mature, besides that with increasing age the information obtained will also be more and more. This is in accordance with previous research that most children have low knowledge about disaster preparedness (Widjanarko, 2018). Capacity development in children can be improved to increase children's resilience to disasters. Resilience is the ability of a person to face challenges and will be seen when someone faces difficult experiences and knows how to deal with or adapt. According to Mardikanto

(2017) Individual capacity building is an effort that can be done in order to improve or develop the quality of personal characteristics that are better in building resilience. Children are very important to increase resilience considering they are still vulnerable. Resilience is also influenced by factors from within a person such as spiritual education, and culture (Nuari, 2015).

CONCLUSION

Based on the research results, the following conclusions can be drawn: 1) Child preparedness is influenced by inputs, control processes, effectors, outputs, 2) Child Preparedness affects resilience to landslides.

SUGGESTION

Based on the above conclusions, the researchers suggest that all those involved in landslide disasters should further improve the inputs, control processes, effectors, and outputs in landslide disasters. Efforts are needed to increase the role of children in disaster governance to be more prepared in facing landslides. The Disaster Safe Education Unit should have a major contribution in addressing this issue within the school. Based on the above conclusions, the researcher suggests that all those involved in landslide disasters should further improve the inputs, control processes, effectors, and outputs in landslide disasters. Efforts should be made to increase the role of children in disaster governance to be more prepared in the face of landslides. The Disaster Safe Education Unit should have a major contribution in addressing this issue within the school.

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CONFLICTS OF INTEREST

The Authors do not have any conflict of interest.

AUTHOR CONTRIBUTIONS

All of the research team contributed to the research process.

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