Information seeking behaviour of residents towards the work of the architect

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Abstract. Indonesia is included in the area of the ring of fire so that various regions in Indonesia are vulnerable to disasters, including areas around the capital Jakarta. Unpredictable disasters can occur at any time so the community must equip themselves with knowledge of disasters, especially related to shelter. This study aims to look at the information seeking behaviour of the community in relation to their place of residence and in the context of the work of architects. Is the architect's work in community dwellings considered safe enough in the face of disasters? The research method used is the Neuroresearch method, mixed method research. The study population is residents of housing complexes in the Greater Jakarta area. The sampling technique used is cluster random sampling. The number of samples was 743 people. Data collection techniques using a questionnaire scale Likert 1 to 5. The results showed a difference in the ability of the community in information seeking behaviour viewed from the area of residence and educational background.

Keywords: Information Seeking Behaviour, Disaster, Architects

1. Introduction

Housing development in various major cities in Indonesia, especially Jakarta and its surrounding areas continues to increase and experience high density [1], [2]. High density makes the housing has a quality construction and design that is not able to guarantee safety or comfort for its inhabitants [3]. The quality of housing, housing design and construction are important factors that must be considered, especially for cities in Indonesia. Indonesia is included in the area of the ring of fire because Indonesia is on the volcano line [4]. This condition has resulted in regions in Indonesia which have a high potential for natural disasters as a result of earthquakes and volcanoes [5].

Various major natural disasters that have been experienced provide a special note. Short-term and long-term losses experienced provide potential benefits when there are good intervention designs on
community physical assets [6]. Therefore, the community and the government must start collaborating to think and prepare various anticipations and design appropriate and comprehensive interventions so that the benefits of the community can be felt on a long-term scale.

The right program can be arranged but requires a long time. Unpredictable natural disaster conditions require the community to move quickly to minimize the impact. The most basic thing that can be done is how the community is able to equip themselves with the desire to respond and understand the disasters that may occur in the surrounding environment. Information seeking behaviour is a behaviour that must be owned by the community. A study in Surakarta suggested a regular program to increase student knowledge as part of the community for disaster response [7]. Knowledge enhancement can also be started by how the community seeks information related to their place of residence. Is the shelter that is a place to live is safe enough in anticipation of a disaster.

This research intends to see further whether the community's competence to actively seek information so that it is embedded in the subconscious how to anticipate disasters and what will be done when disasters occur. These two things are prioritized in the closest area, the residential complex. Resident housing residents will be faced with the work of architects who need to be criticized whether his work has been able to answer the needs of residents' security. With the resulting impact, the community must be sensitive and continue to support this effort.

The formulation of the problem in this study are (1) how is the tendency of the condition of the capacity of housing residents in Jabodetabek in investigating information and disaster response (InfoSeek_Y) ?, (2) which indicators are the most dominant determining the formation of housing capacity in Jabodetabek in investigating information and disaster response (InfoSeek_Y)? InfoSeek_Y) ?, (3) Which item most dominantly determines the formation of housing capacity in Jabodetabek in investigating information and disaster response (InfoSeek_Y) ?, and (4) is there a difference in terms of the formation of housing capacity in Jabodetabek in investigating information and responding to disasters (InfoSeek_Y)? disaster (InfoSeek_Y), if distinguished by various categories of housing background?

2. Literature Review
Natural disasters cause many losses, including fatalities, damage to housing, the environment, property and psychological impacts on society [8]. A study conducted on students in Surakarta in the context of understanding disaster found that students’ readiness in facing disasters could be measured from three parameters namely knowledge and attitudes, emergency planning and early warning systems. The cultural and geographical diversity of the Indonesian people provides a distinctive picture related to knowledge to anticipate disasters, for example a group of people in North Sumatra apply disaster knowledge by not building dwelling on sloping areas or riverbanks [9].

The house is a basic human need as a shelter, a place of refuge, a place to build social life, cultural objects, the actualization of personality and identity [10]. Knowledge of housing that must meet several aspects including fulfilling the security of residents from various threats of natural disasters that can occur at any time is the basic capital of the community in understanding and anticipating disasters. Therefore, residents must be able to continue to be active in finding various information relating to this security.

In this case the behaviour of information seeking by residents can be seen from how they sought information at first, then how they explored the information and how they finally formulated the information so that it becomes useful information especially in criticizing the area of residence so that it is more responsive to disasters.

3. Research Method
Research methods with Neuroresearch through exploratory, explanatory and confirmatory analysis [11], [12]. The study population is residents of residential complexes throughout Greater Jakarta. Sampling technique with cluster random sampling. The total sample of 94 housing complexes, each of
which houses represented 1 person as a source of data that is as many as 743 people. Data collection techniques with Likert scale questionnaire 1 to 5. The research paradigm is as shown below:

![Diagram of research paradigm](image)

**Figure 1.** Research Paradigm

### 4. Result

#### 4.1. First Research Results:

Before conducting proof about the tendency of the capacity of housing residents in Jabodetabek in finding information and disaster response (InfoSeek_Y), researchers first set 3 (three) categories of conclusions, namely: (1) unable to seek information and response to disasters, (2) less able to search for disasters information and disaster response, and (3) able to find information and disaster response. The results are like the following (Figure 2).
Based on the results of statistical analysis, the range of the lower bound up to the upper bound of 32.2653 to 34.0150 can be interpreted that the residents are less able to search for information and respond significantly to the disaster at $\alpha < 0.05$.

4.2. Second Research Results:
The second research result is finding the most dominant indicator determining the emergence of the capacity of housing residents in Jabodetabek in finding information and disaster response (InfoSeek_Y). The proof is analyzed with Binary Segmentation which is also called Classification and Regression Trees. In this analysis, researchers set a Prunning Depth of 2, Prunning Parent of 2, and Prunning Child of 1 and a significance level of $\alpha < 0.05$. The analysis found as in Figure 3 below.
Based on Figure 2 above, Starting Capacity (Ind_Start) is the most dominant indicator determining the formation of the ability to Look for Information and Disaster Response (InfoSeek_Y). Improvements to this indicator are able to improve the ability to search for information and response to disasters (InfoSeek_Y) by 11,968 times from the data condition. How to improve Starting Capacity (Ind_Start) by increasing Chaing Capacity (Ind_Chaining) together with Exploration Capacity (Ind_Expl). Both improvements will have an impact on an increase of 6,559 times the Starting Capacity (Ind_Start).

4.3 Third Research Results:
The second research result is finding the most dominant item determining the emergence of the capacity of housing residents in Jabodetabek in finding information and disaster response (InfoSeek_Y). The proof is analyzed with Binary Segmentation which is also called Classification and Regression Trees. In this analysis, researchers set a Prunning Depth of 2, Prunning Parent of 2, and Prunning Child of 1 and a significance level of $\alpha < 0.05$. The analysis found as in Figure 4 below.

Based on Figure 4, the Ability to Find Supporting Information about Disasters (Item_4) is the most dominant item determining the formation of the ability to Find Information and Disaster Response (InfoSeek_Y). Improvements to this indicator can improve the ability to search for information and response to disasters (InfoSeek_Y) by 11,015 times this data condition. How to improve the Ability to Find Supporting Information about Disasters (Item_4) by increasing the ability to Search for Disaster Sources (Item_2) together with the Ability to Find Valid Information about Disasters (Item_6). Both improvements will have an impact on an increase of 7,034 times the ability to find Supporting Information about Disasters (Item_4) at this time.

4.4 Fourth Research Results:
The results showed that: Housing residents from the City of Serpong lack the ability to search for information and disaster response (InfoSeek_Y) significantly at $\alpha < 0.05$. While residents from other cities apparently did not have the ability to search for information and respond to disasters (InfoSeek_Y).

There is no difference in the ability to search for information and response to disasters (InfoSeek_Y) if distinguished by sex with a t-test of 0.544 is non-significant at $\alpha > 0.05$. This means that residents who respond to men and women are in the same condition as men and women assessors who are equally less able to seek information and respond significantly to disasters at $\alpha < 0.05$. 
Residents of housing with a master’s education background lack the ability to search for information and disaster response significantly at \( \alpha < 0.05 \), while residents with other educational backgrounds are apparently unable to find information.

5. Conclusion
The diversity of community competencies in finding information and responding to disasters relating to housing is an important aspect to be considered by both the community itself, the government and the architects. Disaster as an unavoidable condition requires all parties to have the same understanding in anticipating disaster risk. The government needs to provide the right information for the community. The architects also have to have the right knowledge of disaster risk and anticipation so that it can be implemented in their work to build a safe dwelling. The most important thing is that people must consciously and independently increase their knowledge of disasters so that they begin to implement active behaviour to be responsive and alert so as to minimize the potential for greater losses.

6. References
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