



RESEARCH ARTICLE

Analysis of the Understanding Level of the Indonesian Residents to Flood-Impacted Insurance Products

Yulial Hikmah^{1*}, Padang Wicaksono², Debrina Vita Ferezagia³, Ira Rosianal Hikmah⁴

^{1,3} Vocational Education Program, Universitas Indonesia, Depok, Indonesia

² Faculty of Economics and Business, Universitas Indonesia, Depok, Indonesia

⁴ Politeknik Siber dan Sandi Negara, Bogor, Indonesia

ARTICLE INFO	ABSTRACT
Received: Apr 26, 2024	<p>Natural disasters cause casualties, environmental damage, property losses, and psychological impacts. In 2020, almost the entire DKI Jakarta area was flooded and paralyzed all activities in Jakarta. Based on data from the National Disaster Management Agency (BNPB), East Jakarta is a city that is prone to flooding. One of the risk mitigations due to natural disasters is to buy insurance products. Flood insurance is critical because it can replace partially or entirely of the losses incurred. There is insurance due to flooding, including Property Insurance (to protect property such as houses), Health Insurance (to protect post-flood health), Vehicle Insurance (to protect vehicles damaged by flooding), and Life Insurance if it causes death. This research aims to determine the level of understanding of the Indonesian, especially those living in East Jakarta, to the flood-impacted insurance products. The data used in this study are primary data obtained through surveys by interviewing and filling out questionnaires. The results show that the level of understanding of the Indonesian people towards flood insurance products is still low. However, based on the data obtained, the Indonesian population has a high risk of flooding. Therefore, there is a need for education about risk mitigation.</p>
Accepted: Aug 24, 2024	
Keywords	
Flood	
Risk mitigation	
Insurance products	
Level of understanding	
*Corresponding Author:	
yulialhikmah47@ui.ac.id	

INTRODUCTION

Based on the 2015-2019 National Disaster Management Plan Book, the Unitary State of the Republic of Indonesia (NKRI) territory is a disaster-prone area. Its position, located on the equator and in an archipelago, creates a high potential for various types of hydrometeorological-related disasters, such as floods, flash floods, droughts, extreme weather (hurricanes), powerful waves and abrasion, as well as land and forest fires. Based on disaster data compiled by the BNPB Data, Information and Public Relations Center, in the last 30 years (1982 – 2012), as many as 10,817 incidents occurred, dominated by floods with 4,121 events (38%), and the rest were other disasters, such as landslides, hurricanes, droughts, etc. (BNPB RI, 2014)

Floods are natural disasters that often occur in Indonesia, especially in high rainfall conditions in areas with relatively flat topography (Seniarwan et al., 2013). Flood damage can be divided into four types: direct tangible damage (e.g., physical damage from contact with water), indirect (e.g., loss of production and income), direct intangible (e.g., loss of life), and indirect (e.g., trauma) (Sidi, 2017). Based on the Flood Disaster Risk Study, there are ten priority provinces to focus on flood disaster management activities: DKI Jakarta Province (BNPB RI, 2014).

Reporting from the CNN Indonesia website (2019), one of the major floods in Jakarta had existed since the 1600s when Jan Pieterszoon Coen served as Governor-General of the VOC (Gunawibawa & Oktiani, 2020). Geologically and geomorphologically, the DKI Jakarta area itself has constantly been flooded. In addition, the presence of morphometry of the 13 river flows that cross the DKI Jakarta area is also an access for surface water flow (direct runoff) originating from rainfall in the upstream region to enter the DKI Jakarta area. So, it's natural that the DKI Jakarta area is a flood area (Harsoyo, 2013). The flood disaster that occurred in early 2020 was one of the enormous floods that had ever happened in Jakarta. BMKG noted that the flood disaster in Jakarta occurred in 39 urban villages, and more than 11,000 people were displaced (Gunawibawa & Oktiani, 2020). Based on news articles on the official BNPB website, the most affected areas are in East Jakarta District, which is 20 Sub-District from 8 Districts (BNPB RI, 2020).

A flood is also a disaster that relatively causes the most losses. According to BNPB (2013), losses caused by floods, especially indirect losses, may rank first or second after the earthquake or tsunami (Rosyidie, 2013). Losses due to flooding can be in the form of damage to buildings, loss of valuables, and losses that result in not going to work and school. Floods cannot be prevented, but they can be controlled, and the impact of losses can be reduced (Findayani, 2015). Floods in several Jabodetabek (Jakarta Bogor Depok Tangerang Bekasi) areas since January 1, 2020, have had a significant impact on the economy. According to a senior researcher from the Institute for Development of Economics and Finance (INDEF), Bhima Yudhistira Adhinegara, the economic loss due to the disaster, according to the flood in 2007, reached more than IDR 10 trillion (IDX, January 3, 2020) (Ginting, 2020). Although to carry out housing recovery by rebuilding, the government and humanitarian organizations have provided financial assistance. However, the costs offered by the government and humanitarian organizations are not entirely sufficient to cover all the necessary housing costs (Jonkman & Vrijling, 2008). For this reason, public awareness in anticipating the provision of funds to overcome the costs of rebuilding houses damaged by floods needs to be improved, both in rural and urban areas (Sidi, 2017). According to BNPB in the Tough Agile Response Book in Facing Disasters (2017), one of the steps taken by the community in pre-disaster in dealing with flood disasters is to consider flood insurance (BNPB RI, 2017).

In developed countries, flood disaster management is regulated by a program created by the government, namely the Flood Insurance Program. The government's Flood Insurance Program is mutually subsidized with the flood insurance program available for real estate or house owners and car owners located in flood hazard areas. The community participating in the flood insurance program engages in the Flood Insurance Program initiated by the government (Sidi, 2017). In Indonesia, not many people follow insurance, especially flood insurance. There is insurance due to flooding, including Property Insurance (to protect property such as electronic goods), Health Insurance (to protect health after a flood), Vehicle Insurance (to protect vehicles damaged by flooding), and Life Insurance if it causes death. In this study, the researcher wanted to know the level of understanding of the Indonesian people, especially those who live in East Jakarta, on insurance products that were affected by the flood.

2 LITERATURE REVIEW

2.1 Risk and Insurance

Risk is the uncertainty of loss. The uncertainty can be in terms of time, place, and to whom the event occurred, while the loss in question must be valued in money. According to Naron, 2008 in a book published by the Financial Services Authority (OJK), there are three risk components, namely: (Otoritas Jasa Keuangan (OJK), 2016)

Risk has an element of uncertainty

The risk of causing an implication of loss

Risk arises due to one or more reasons

Risk cannot be eliminated but can be shared, managed, and significantly reduced with the help of insurance (Basaula, 2017). Insurance can legally be defined as an agreement between two parties, namely the insurer (insurance company) and the insured (individual or business entity). Insurers bind themselves to provide compensation to the insured in an event or disaster guaranteed by the policy. The insured pays a sum of money to the insurer called the premium. Based on the type, insurance is divided into two groups, namely: (Otoritas Jasa Keuangan (OJK), 2016)

Life Insurance is insurance with the object of coverage in the form of a person, and the insured is a person's life.

General Insurance provides guarantees against losses that occur in property, both movable and immovable property, and provides legal liability guarantees to third parties who suffer losses.

The types of insurance in Indonesia, among others: (Cermati.com, 2020; Otoritas Jasa Keuangan (OJK), 2016)

Life Insurance. This type of insurance is known to provide financial benefits to the insured upon his death.

Health Insurance. Health insurance is an insurance product that handles the insured's health problems due to an illness and bears the cost of the treatment process.

Vehicle insurance. This insurance, which is the most popular in Indonesia, is a type of car insurance that focuses on dependents for injury to others or against damage to other people's vehicles caused by the insured. Based on the OJK, this coverage can be extended to additional risks, one of which is the risk of flooding.

Home and Property Ownership Insurance. As an asset that is considered quite valuable, usually, homeowners will protect themselves and their assets which can be a house or personal property with a home and property ownership insurance. This insurance provides protection against loss or damage that may occur to certain personal belongings of the insured.

2.2 Validity and Reliability of Questionnaire

A research instrument is a tool used to measure the observed natural and social phenomena (Sugiyono, 2018). One of the research instruments is a questionnaire (Syahraeni, 2016). Questionnaires have an essential role in determining the validity of the data obtained in each study, which determines the quality of the instrument used (Nuryani, 2019). The tools that have been compiled, then tested are carried out to find out the instruments gathered are good instruments that meet the validity and reliability requirements (Sundari, 2016). Validity is a measurement, will answer the question "Are the variables (indicators) studied measuring (representing) the variables to be measured?" while reliability will answer the question: "Are the (results) measurements of the variables (indicators) studied consistent or reliable?" (Arifin, 2018).

Testing the validity of each questionnaire item is carried out using the product-moment correlation technique between the scores of each questionnaire item and the total score (sum of each questionnaire score) (Notoatmodjo, 2005; Sugiyono & Wibowo, 2002). The instrument is valid if the correlation value (Pearson correlation) is positive and the correlation probability value [sig. (2-tailed)] < significant level (α) (Triton, 2005). In this study, a significance level of 10% was used. Reliability testing is carried out after all statements have been tested for validity (Syahraeni, 2016). This research uses the Cronbach's Alpha measure to test its reliability. The questionnaire is reliable if the Cronbach Alpha value is greater than the r table (Triton, 2005).

3 METHODOLOGY/MATERIALS

3.1 Research Samples

The population in this research was the population of Indonesia. This study uses a non-probability purposive sampling technique, which is a sampling technique with specific considerations (Sugiyono, 2014). DKI Jakarta is one of the areas in Indonesia that always experiences flooding every year. In addition, the researchers also determined other criteria in selecting the city, namely based on the BNPB (National Disaster Management Agency) report that East Jakarta City was the worst affected by floods (BNPB RI, 2020; Nisa, 2020). Furthermore, the Head of the BNPB Disaster Data, Information and Communication Center, Agus Wibowo, said eight sub-districts in East Jakarta with the highest number of flood victims, namely 752 families (2476 people) (Andayani, 2020; CNN Indonesia, 2020). The population of East Jakarta City itself is not small. Due to limited time, cost, and resources, this research selected several Neighborhood Units that did and are still experiencing flooding in early 2020. The Neighborhood Units selection was based on news articles in some mass media (Komara, 2020; Kumparan News, 2020; Putra, 2020).

Sampling was carried out twice. First, 15 samples were used for questionnaire testing, and second, 140 samples were used to analyze the level of understanding of insurance and insurance products due to flooding. The distribution of the first and second sampling can be seen in Table 1 and Table 2.

Table 1: Distribution of Sample Data for Questionnaire Testing

District	Sub-District	The Number of Samples
Duren Sawit	Pondok Bambu	4
Jatinegara	Bidara Cina	1
Kramat Jati	Cawang	5
Pulo Gadung	Pisangan Timur	5
Total		15

Table 2: Distribution of Sample Data for Research

District	Sub-District	The Number of Samples
Duren Sawit	Pondok Bambu	10
Jatinegara	Bidara Cina	25
	Kampung Melayu	22
	Rawa Bunga	10
Kramat Jati	Cawang	25
	Cililitan	10
Makasar	Cipinang Melayu	18
Pulo Gadung	Pisangan Timur	20
Total		140

3.2 Method of Collecting Data

The number of research samples was 140 families. Data were collected through interviews and also by filling out online questionnaires. The reason for conducting interviews is because several questions must be given directly to see the truth and validity of the respondent's answers. However, even though it was completed with an interview, this research still complies with the health protocol (covid-19 pandemic). The data collection process through interviews and online filling can be seen in Figure 1 and Figure 2.



Figure 1. Online Questionnaire Display



Figure 2. Survey Documentation

3.3 Research Questionnaires and Questionnaire Testing

Before taking samples for research, the researchers compiled two questionnaires to measure the understanding of insurance and flood impact insurance products. The questionnaire can be seen in Table 3 and Table 4. The researchers tested the validity and reliability of the questionnaire. The results of the questionnaire test to know the validity and reliability of the questionnaire can be seen in Table 5, Table 6, and Table 7. Based on Table 5 and Table 6, it can be seen that the two questionnaires that have been compiled are valid in 10% significance level. Based on Table 7, it can be seen that the questionnaires are reliable.

Table 3: Questionnaire 1

No	Code	Questions
1	A	Do you know about insurance?
2	B	Do you agree with the following statement: Insurance is an agreement between the insured and the insurer which obliges the insured to pay a premium to compensate for the risks that will occur?
3	C	Do you agree with the following statement: The function of insurance is to control the risks that will occur?
4	D	Do you know the types of insurance?
5	E	Do you know some insurance companies in Indonesia?
6	F	Do you know the purpose of insurance?

7	G	Do you know about insurance policies?
8	H	Do you know about insurance premiums?
9	I	Do you know about insurance products?
10	J	Do you know how to buy insurance products?

Table 4: Questionnaire 2

No	Code	Questions
1	K	Do you agree with the following statement: Insurance is one way to minimize losses from loss or damage to valuable objects that occur due to flooding?
2	L	Did you know that insurance products can be purchased to cover the losses you will receive from flooding each year?
3	M	Do you know about life insurance?
4	N	Do you know about health insurance?
5	O	Do you know about general insurance?
6	P	Do you know about property all-risk insurance?
7	Q	Do you know about auto insurance?

Table 5: Validity Test Results of Questionnaire 1

Code	Spearman's Rho Correlation Coefficient	Sig. (2-tailed)
A	0.703*	0.003
B	0.745*	0.001
C	0.597*	0.000
D	0.828*	0.000
E	0.777*	0.000
F	0.669*	0.006
G	0.814*	0.000
H	0.860*	0.000
I	0.778*	0.000
J	0.814*	0.000

* Correlation is significant at the 0.1 level (2-tailed)

Table 6: Validity Test Results of Questionnaire 2

Code	Spearman's Rho Correlation Coefficient	Sig. (2-tailed)
K	0.616*	0.014
L	0.753*	0.001
M	0.692*	0.004
N	0.833*	0.000
O	0.850*	0.000
P	0.850*	0.000
Q	0.865*	0.000

* Correlation is significant at the 0.1 level (2-tailed)

Table 7: Reliability Test Results

Questionnaire	Validity	Cronbach's Alpha
1	Yes (sig. level 10%)	0.932
2	Yes (sig. level 10%)	0.903

3.4 Data Analysis Method

Data analysis is an activity after data from all respondents or other data sources (Sugiyono, 2018). Ngalim Purwanto states that understanding or comprehension is the level of a person's ability to understand the meaning of concepts, situations, and facts he knows so that a person memorizes verbally and understands the concept of the problem or fact being asked (Purwanto, 2013). The questionnaire results in this study will be analyzed using descriptive statistical techniques and outlined in the form of percentages. Meanwhile, according to Anas Sudijono, to calculate the percentage is as follows: (Sudijono, 2012)

$$p = \frac{f}{N} \times 100\%$$

where p represents percentage figure, f represents the number of answer frequencies, and N represents the number of respondents.

The criteria in scoring the data for each factor can be known by categorizing it according to instrument (Azwar, 2017). Because this study will only divide into two categories, namely understand and not understand, then the division is that the respondent is said to understand if more than 50% of the questions are answered correctly, while the rest will not understand.

4 RESULTS AND FINDINGS

From 140 research samples, it can be seen the description of respondents' answers. Some general reports of the respondents can be seen in Figures 3 to 7. The first picture can be seen in Figure 3, namely information about the distribution of respondents' education levels. In Figure 3, it can be seen that most research respondents who have an educational background are high school graduates. Can be seen from the number of heads of families who are more than 50% high school graduates and the wife of the head of the family. In addition, other information was obtained regarding the respondent's experience of flooding, which can be seen in Figure 4. It was found that 99.3% of research respondents had experienced floods, and 94.3% of respondents experienced floods in the last year (2019). This shows that the research sample follows the target, namely the research sample, the majority of which have been and are still experiencing flooding. Figure 5 shows the percentage of evacuation frequency each year. It can be seen that there are still more than 12% of respondents who are evacuated more than four times each year.

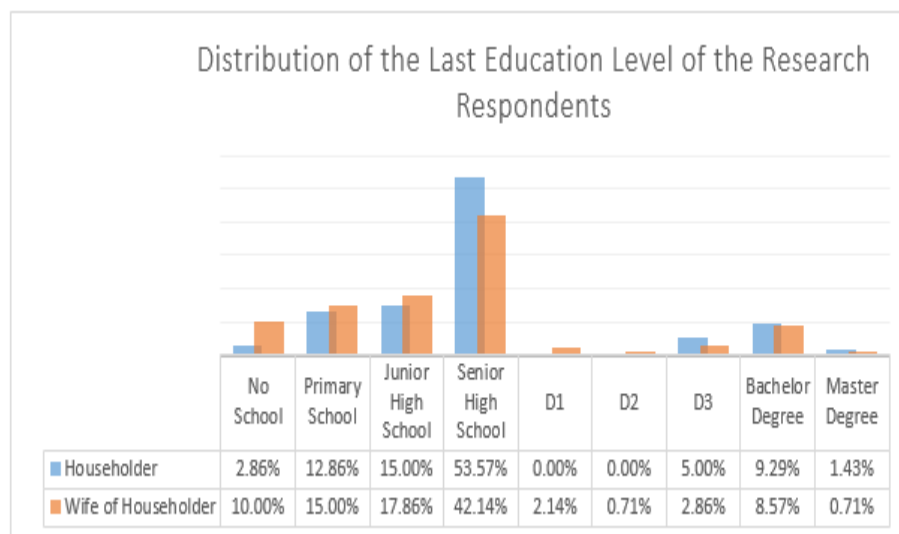


Figure 3. Distribution of the Last Education Level of Research Respondents

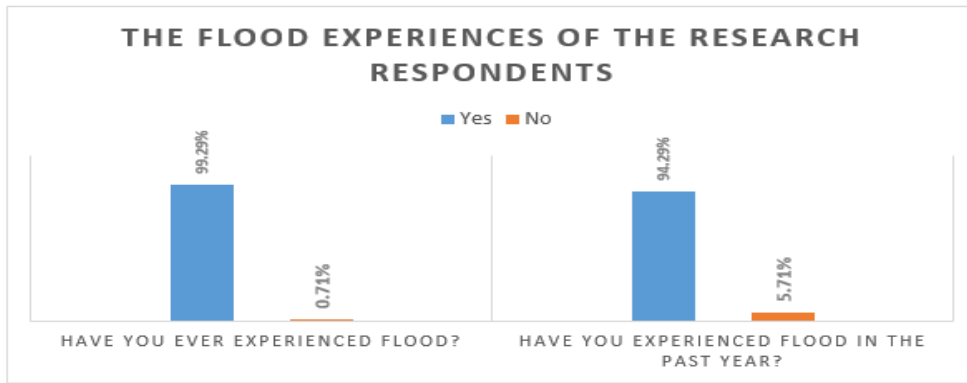


Figure 4. The Flood Experiences of The Research Respondents

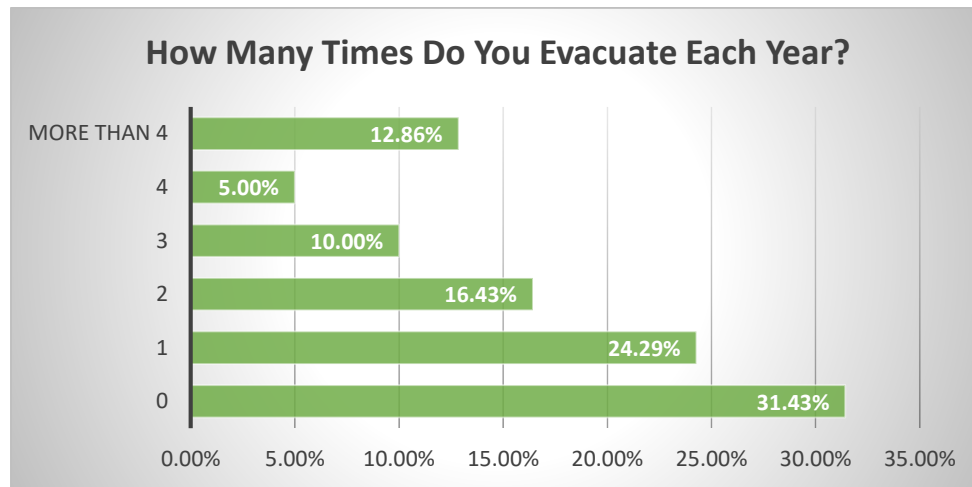


Figure 5. Frequency of Respondent Evacuation Every Year

Next is to analyze the respondents' level of understanding of insurance and flood impact insurance products. Figure 6 shows the results of the level of understanding of research respondents about insurance. In contrast, Figure 7 provides the level of understanding of research respondents about insurance products for the impact of floods. Based on Figure 6, it is found that more than half of the respondents (62%) do not understand insurance. Furthermore, only 23% of research respondents understand flood impact insurance products.

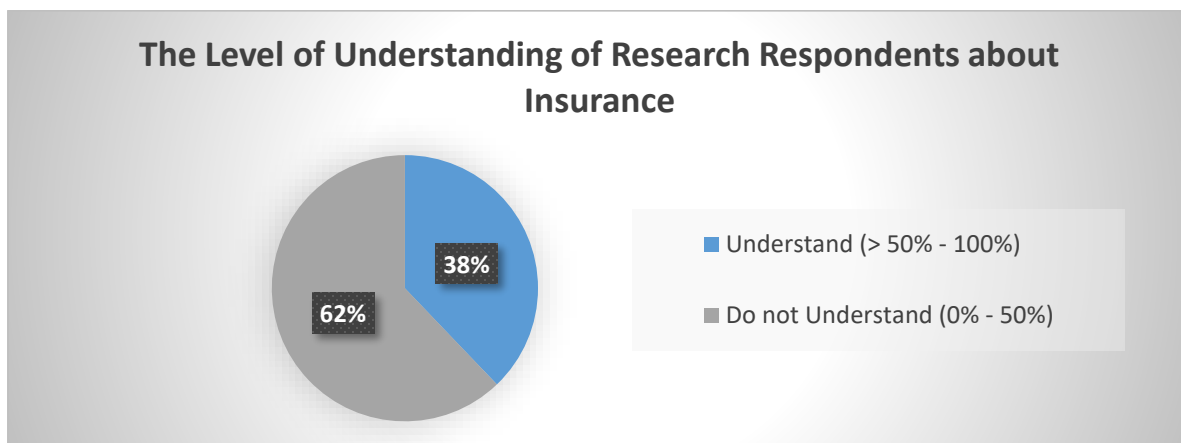


Figure 6: Distribution of Respondents' Level of Insurance Understanding

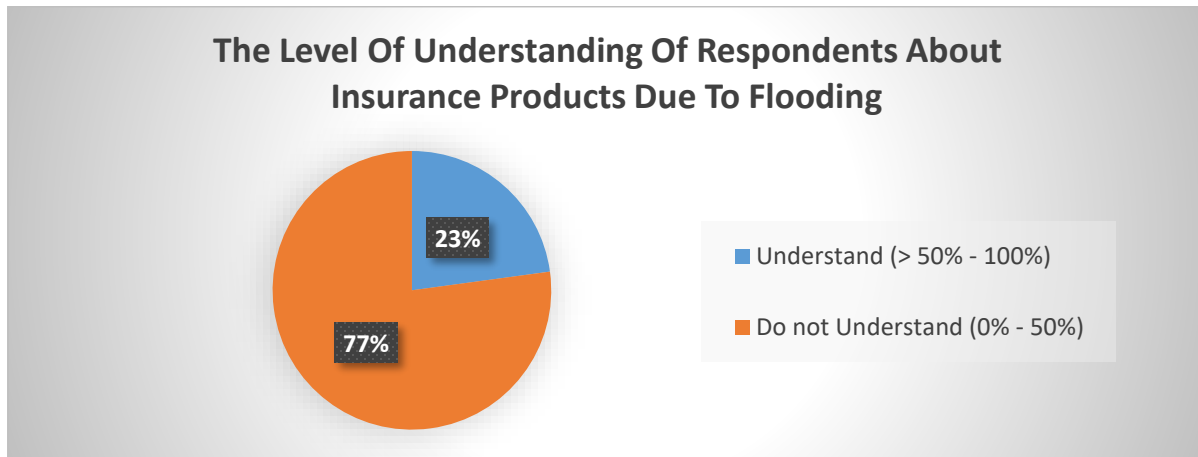


Figure 7. Distribution of Respondents' Level of Understanding Regarding Flood-Impacted Insurance Products

5 CONCLUSION

The level of understanding of the Indonesian population on Flood Impact Insurance Products is still deficient. However, the research respondents have a high risk because they have experienced and are still experiencing flooding. The risks involved range from financial losses, health problems, and even death. Therefore, the Indonesian population should consider one of the risk mitigations, namely by removing risks. One way is to buy flood impact insurance products. The low level of understanding is possible because most respondents' education is high school graduates, but further research needs to be done. Therefore, the suggestions that researchers can give to the government or interested parties are to provide socialization and education regarding the impacts and dangers of floods, efforts to prevent, and efforts to mitigate risks by introducing flood impact insurance products. The provision of socialization and education can be provided regularly. However, this is also one of the government's obligations to prevent flooding and help the community's economy to be able to buy the insurance product itself.

Acknowledgement: The authors would like to thank the residents of East Jakarta who are willing to be respondents in this research, especially the heads of RT and RW who have allowed the author to conduct this research. The authors also thank the surveyors who helped the authors to obtain the data needed in the study while still implementing health protocols. This research was sponsored by the PUTI Grant Program of Universitas Indonesia, 2020. The authors would also like to express their appreciation for having been allowed to present this article at the 7th Asia International Conference (AIC) 2021.

REFERENCES

- Andayani, D. (2020, February 8). *BNPB: Hujan Sebabkan 23 Kecamatan di DKI Jakarta Terdampak Banjir*. DetikNews. <https://news.detik.com/berita/d-4891589/bnpb-hujan-sebabkan-23-kecamatan-didki-jakarta-terdampak-banjir>
- Arifin, M. H. (2018). Konsep-Konsep Dasar Statistika. In *Pengantar Statistika Sosial* (3rd ed.). Universitas Terbuka.
- Azwar, S. (2017). *Penyusunan Skala Psikologi* (2nd ed.). Pustaka Pelajar.
- Basaula, D. (2017). Customers Satisfaction towards Life Insurance Claim Settlement in Nepal. *Janapriya Journal of Interdisciplinary Studies*, 6(December), 29–44. <https://doi.org/10.3126/jjis.v6i0.19307>
- BNPB RI. (2014). *Rencana Nasional Penanggulangan Bencana 2015-2019*. https://www.bnpb.go.id/uploads/renas/1/BUKU_RENAS_PB.pdf

- BNPB RI. (2017). *Buku Saku Tanggap Tangkas Tangguh Menghadapi Bencana*. https://siaga.bnpb.go.id/hkb/po-content/uploads/documents/Buku_Saku-10Jan18_FA.pdf
- BNPB RI. (2020). *Hujan Lebat Sebabkan 23 Kecamatan DKI Jakarta Terdampak Banjir*. <https://bnpb.go.id/berita/hujan-lebat-sebabkan-23-kecamatan-dki-jakarta-terdampak-banjir>
- Cermati.com. (2020). *Jenis-Jenis Asuransi di Indonesia, Apa Saja?* <https://www.cermati.com/artikel/jenis-jenis-asuransi-di-indonesia-apa-saja>
- CNN Indonesia. (2020, February 8). *BNPB Sebut Banjir Rendam 23 Kecamatan di DKI, Jaktim Terparah*. <https://www.cnnindonesia.com/nasional/20200208215738-20-472935/bnpb-sebut-banjir-rendam-23-kecamatan-di-dki-jaktim-terparah>
- Findayani, A. (2015). Kesiap Siagaan Masyarakat dalam Penanggulangan Banjir di Kota Semarang. *Jurnal Geografi: Media Informasi Pengembangan Dan Profesi Kegeografian*, 2(1), 102–114. <https://doi.org/https://doi.org/10.15294/jg.v12i1.8019>
- Ginting, A. M. (2020). Dampak Ekonomi dan Kebijakan Mitigasi Risiko Banjir di DKI Jakarta dan Sekitarnya Tahun 2020. *Info Singkat*, XII(1), 19–24. https://berkas.dpr.go.id/puslit/files/info_singkat/Info_Singkat-XII-12-I-P3DI-Januari-2020-224.pdf
- Gunawibawa, E. Y., & Oktiani, H. (2020). Politik & Bencana Banjir Jakarta 2020: Analisis Peta Percapakan #JakartaBanjir. *Expose: Jurnal Ilmu Komunikasi*, 3(1), 60–75. <https://doi.org/https://doi.org/10.33021/exp.v3i1.989>
- Harsoyo, B. (2013). Mengulas Penyebab Banjir di Wilayah DKI Jakarta dari Sudut Pandang Geologi, Geomorfologi, dan Morfometri Sungai. *Jurnal Sains & Teknologi Modifikasi Cuaca*, 14(1), 37–43. <https://doi.org/https://doi.org/10.29122/jstmc.v14i1.2680>
- Jonkman, S. N., & Vrijling, J. K. (2008). Loss of Life due to Floods. *Journal Flood Risk Management*, 1(2008), 43–56.
- Komara, I. (2020, January 1). *Warga di 10 Lokasi Jakarta Timur Dievakuasi dari Banjir*. DetikNews. <https://news.detik.com/berita/d-4842307/warga-di-10-lokasi-jakarta-timur-dievakuasi-dari-banjir>
- Kumparan News. (2020). *Titik Banjir Jakarta Bertambah, Berikut Daftar 46 RW yang Terendam*. <https://kumparan.com/kumparannews/titik-banjir-jakarta-bertambah-berikut-daftar-46-rw-yang-terendam-1ssTJoGx9Qv/3>
- Nisa, K. (2020). *Rekapitulasi Data Banjir DKI Jakarta dan Penanggulangannya Tahun 2020*. <https://statistik.jakarta.go.id/rekapitulasi-data-banjir-dki-jakarta-dan-penanggulangannya-tahun-2020/>
- Notoatmodjo. (2005). *Metodologi Penelitian Kesehatan*. Rineka Cipta.
- Nuryani. (2019). Validity and Reliability Questionnaire of Knowledge, Attitude, and Practice of Balanced Diet Among Adolescent. *Gizi Dan Kesehatan*, 3(2), 37–46.
- Otoritas Jasa Keuangan (OJK). (2016). *Perasuransian: Seri Literasi Keuangan Perguruan Tinggi*. Otoritas Jasa Keuangan (OJK).
- Purwanto, N. (2013). *Prinsip-Prinsip dan Teknik Evaluasi Pengajaran*. Ramaja Rosdakarya.
- Putra, N. P. (2020). *Cek Titik Banjir di Ruas Jalan Jakarta Timur*. Liputan6. <https://www.liputan6.com/news/read/4186976/cek-titik-banjir-di-ruas-jalan-jakarta-timur>
- Rosyidie, A. (2013). Banjir: Fakta dan Dampaknya, serta Pengaruh dari Perubahan Guna Lahan. *Journal of Regional and City Planning*, 24(3), 241–249. <https://doi.org/https://doi.org/10.5614/jpww.2013.24.3.1>
- Seniorwan, S., Baskoro, D. P. T., & Gandasmita, K. (2013). Analisis Spasial Risiko Banjir Wilayah Sungai Manggottong, di Kabupaten Sinjai, Sulawesi Selatan. *Jurnal Ilmu Tanah Dan Lingkungan*, 15(1), 39–44. <https://doi.org/https://doi.org/10.29244/jitl.15.1.39-44>

- Sidi, P. (2017). *Pemanfaatan Ilmu Aktuaria dalam Mewujudkan Jaminan Risiko Banjir di dalam Konsep Smart City*. Universitas Terbuka (UT).
- Sudijono, A. (2012). *Pengantar Evaluasi Pendidikan*. PT. Raja Grafindo Persada.
- Sugiyono. (2014). *Memahami Penelitian Kualitatif*. Alfabeta.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Sugiyono, & Wibowo. (2002). *Statistika Penelitian dan Aplikasinya dengan SPSS 10.00 for Windows*. Alfabeta.
- Sundari, F. L. (2016). *Tingkat Pemahaman Siswa Kelas Atas terhadap Permainan Kasti di SDN Jlaban Kecamatan Sentolo Kabupaten Kulon Progo* [Universitas Negeri Yogyakarta]. <http://dx.doi.org/10.1016/j.jplph.2009.07.006%0Ahttp://dx.doi.org/10.1016/j.neps.2015.06.001%0Ahttps://www.abebooks.com/Trease-Evans-Pharmacognosy-13th-Edition-William/14174467122/bd>
- Syahaeni. (2016). *Analisis Tingkat Pemahaman Mahasiswa Jurusan Ilmu Perpustakaan Fakultas Adab dan Humaniora UIN Alauddin Makassar terhadap Sistem Klasifikasi DDC* [UIN Alauddin Makassar]. <http://dx.doi.org/10.1016/j.jplph.2009.07.006%0Ahttp://dx.doi.org/10.1016/j.neps.2015.06.001%0Ahttps://www.abebooks.com/Trease-Evans-Pharmacognosy-13th-Edition-William/14174467122/bd>
- Triton, P. (2005). *SPSS 13.0 Terapan: Riset Statistik Parametrik*. Andi Offset.