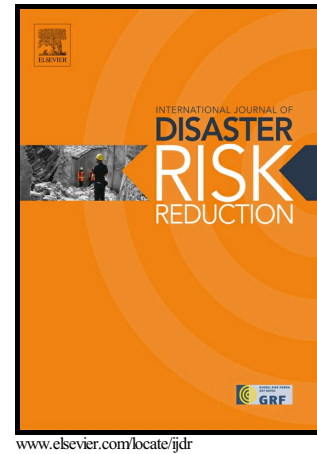


Author's Accepted Manuscript

Factors Influencing Fire, Earthquake, and Cyclone
Risk Perception in Yangon, Myanmar

Glenn Fernandez, Aye Min Tun, Kenji Okazaki,
Saw Htwe Zaw, Kyaw Kyaw



PII: S2212-4209(18)30228-0
DOI: <https://doi.org/10.1016/j.ijdr.2018.02.028>
Reference: IJDRR810

To appear in: *International Journal of Disaster Risk Reduction*

Received date: 26 September 2017
Revised date: 15 February 2018
Accepted date: 19 February 2018

Cite this article as: Glenn Fernandez, Aye Min Tun, Kenji Okazaki, Saw Htwe Zaw and Kyaw Kyaw, Factors Influencing Fire, Earthquake, and Cyclone Risk Perception in Yangon, Myanmar, *International Journal of Disaster Risk Reduction*, <https://doi.org/10.1016/j.ijdr.2018.02.028>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Factors Influencing Fire, Earthquake, and Cyclone Risk Perception in Yangon, Myanmar^{*}Glenn Fernandez^{a1*}, Aye Min Tun^a, Kenji Okazaki^a, Saw Htwe Zaw^b, Kyaw Kyaw^c^aGraduate School of Global Environmental Studies, Kyoto University^bMyanmar Earthquake Committee, Myanmar Engineering Society^cDepartment of Civil Engineering, Yangon Technological University

^{*}Correspondence concerning this article should be addressed to Glenn Fernandez, Graduate School of Global Environmental Studies, Kyoto University, Yoshida Honmachi, Sakyo-ku, Kyoto 606-8501, Japan. E-mail: fernandez.glennfiel.4m@kyoto-u.ac.jp

Abstract

This study investigated the factors that influence fire, earthquake, and cyclone risk perception in Yangon, Myanmar. In a survey, 199 respondents (85 males and 114 females, mean age 51 (SD 12), age range 17-80) rated seven risk perception items on a Likert scale of 1 to 5. Ordered probit regression was performed on the ratings and the socio-demographic and experiential factors of the respondents to determine if relationships exist between them. The Nagelkerke pseudo- R^2 values of our ordered probit regression models range from 0.021 to 0.125. The results show that different sets of factors influence risk perception of fire, of earthquake, and of cyclone. One finding that is common across the three hazards is that none of the socio-demographic and experiential factors seem to influence the perceived ability to control the impacts of fire, earthquake, and cyclone. The results of this study can be used to fill in the gap in empirical risk perception research in Yangon and to encourage education campaigns necessary to enhance the residents' understanding of and preparedness for disaster risks.

Keywords: Psychometric approach, socio-demographic factors, disaster experience

^{*} This research was supported by the Grant for Global Sustainability (GGS) Project of the United Nations University (UNU), Tokyo, Japan. Aye Min Tun would like to thank the Japanese Grant Aid for Human Resource Development (JDS) which allowed him to pursue his Master's degree at Kyoto University.

¹ Glenn Fernandez, Graduate School of Global Environmental Studies, Kyoto University; Aye Min Tun, Graduate School of Global Environmental Studies, Kyoto University; Kenji Okazaki, Graduate School of Global Environmental Studies, Kyoto University; Saw Htwe Zaw, Myanmar Earthquake Committee, Myanmar Engineering Society; Kyaw Kyaw, Department of Civil Engineering, Yangon Technological University.

Download English Version:

<https://daneshyari.com/en/article/7471494>

Download Persian Version:

<https://daneshyari.com/article/7471494>

[Daneshyari.com](https://daneshyari.com)