

ISSC 2016 : International Soft Science Conference

Source Credibility and Psychological Well-Being among Residents Lived at Flood Prone Areas

Che Su Mustaffa^{a*}, Nurlela Zakaria^b

* Corresponding author: Che Su Mustaffa, chesu402@uum.edu.my

^a*School of Multimedia Technology and Communication, UUM CAS, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia. chesu402@uum.edu.my*

^b*School of Multimedia Technology and Communication, UUM CAS, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia.*

Abstract

<http://dx.doi.org/10.15405/epsbs.2016.08.25>

This paper is to examine the relationship of perceived source credibility with psychological well-being among residents lived at flood prone areas. Quantitative approach has been conducted towards 386 residents lived at flood prone areas in Kubang Pasu district at Kedah. Few literatures on source credibility and psychological well-being have been discussed in this paper. The findings of the this study is to fulfilled the gap from previous and applied it in flood disaster management. The findings in this paper also support for the relationships between source credibility and psychological well-being among resident lived at flood prone areas.

© 2016 Published by Future Academy www.FutureAcademy.org.uk

Keywords: Source credibility; psychological well-being; flood disaster.

1. Introduction

Strategic disaster management cycle involves stages of preparation, emergency response and disaster recovery (Tiangchali, 2012). The first stages of disaster management actions will help people from death and injury when disasters occurs (Mayhorn & McLaughlin, 2014). Malaysia has confront natural disasters such as landslides, floods and tsunamis caused. For floods in Malaysia it occurs during a long period of heavy rainfall, geographical position of Malaysia and the tropical monsoon every year

(Shaluf & Ahmadun, 2004). This natural flood disaster will happen every years especially at Kedah, Johor, Negeri Sembilan, Melaka, Terengganu, Pahang and Kelantan.

The risk of flood disaster can be reduced by having an effective risk communication process between spokesperson and people in flood prone areas. The element in risk communication is source credibility, channel and the information flood warning (Mayhorn & McLaughlin, 2014). Source credibility of the spokesperson that can help people living in flood-prone areas to maintain psychological well-being of their health and well-being of the family himself (Blanchard-Boehm & Cook, 2004; Thomson & Ito, 2012). Source credibility of the spokesperson is also affecting the attitudes, goals, persuade, and influence the behavior of recipients of the message (Kurita, Nakamura, Kodama & Colombage, 2006).

The effect of natural flood disasters can be reduced when residents lived at live at flood prone areas having effective warning dissemination information such as the emergency message and evacuation orders (Fothergill & Peek, 2004). Previous research also highlights the importance of source credibility in the process of information delivery floods. Source credibility of spokesperson will help people living in flood-prone areas to act effectively. Although, past studies show lack of research about source credibility in the field of disaster management especially in Asia contexts.

Therefore, the objective of this study was to investigate the relationship between the source credibility and psychological well-being of residents lived at lived at flood prone areas. This study also will identify the dominant dimension of source credibility in predict psychological well-being. In this study, source credibility were defined as reliability of the quality spokesperson to that provide flood information that will perceived by people who live in flood-prone areas. Spokesperson in this study is Village Development and Security Committee (JKKK) under the authority of the Ministry of Rural and Regional Development. JKKK is the closest spokesperson and always available for the people living in villages and housing residents. Psychological well-being in this study are positive feelings experienced by people living in flood prone areas. They have the ability to control stress in their life and keep a positive attitude such as joy and self-satisfaction.

2. Literature Review: Source Credibility and Psychological Well-being

The credibility of the source has been examined in several fields such as marketing (Eisend, 2004), managing crisis (Arpan, 2002), advertising (Clow et al., 2008), and health information (Bates et al., 2006). Previous studies also shows that the credibility of the source has substantial impact on the receivers of the message. Source credibility is important in marketing to influence and persuade consumers (Blanchard-Boehm & Cook, 2004).

The issue of the source credibility in disaster are important because there is a problem in managing the warning message between source and receiver. Overload of information also created doubtful about the quality of information (Bates et al., 2006). In this situation, source credibility are very important aspect in disaster because residents lived at live at flood prone areas needs to evaluate information received by them (Blanchard-Boehm & Cook, 2004). In flood disaster context, the spokesperson should be credible enough to persuade people to receive flood disaster preparedness messages (Thomson & Ito, 2012).

Well-being divided into three parts, namely psychological, societal and physical. Psychological well-being is the ability of residents lived at live at flood prone areas to control the stress in life by having positive attitude. Residents lived at live at flood prone areas must have a psychological and physical preparation by gained information from people who have the knowledge and skills to reduce the impact of this disaster (Nasir, Zainah & Khairudin, 2012).

Thus, the source of information is the single element that can guarantee the health and welfare of the residents lived at live at flood prone areas (Zuhaida & Maznisham, 2009). Construction of early warning and effective disaster management can bring down the impact of natural disasters. Nevertheless, residents lived at live at flood prone areas felt the impact of catastrophes can be cut down if they receive information about the disaster (Kurita et al., 2006).

2.1. Relationship between the variables

Previous studies have found awareness of people to receive information is driven by the source credibility of the spokesperson which is valid and fairly trusted (Berlo et al., 1969; Malka et al., 2009). Moreover, the source credibility of the spokesperson give benefit the recipient of a message through the message of awareness. It will help people take out the risk of flooding to their daily lives (Kurita et al., 2006). In this study, flood disaster management involving source credibility and psychological well-being has yet to be studied in the context floods disaster in Malaysia. This study also fulfilled the gap and continue to study the relationships between source credibility of the JKKK that have a very important role in ensuring psychological well-being of residents lived at live at flood prone areas (Nurlela & Che Su, 2014). The independent variables representing the source credibility of Village Development and Safety Committee (JKKK) as top management in flood prone areas. The dependent variable is the psychological well-being of the residents lived at live at flood prone areas.

3. Method

The population in this study refers to people in flood prone areas at Kubang Pasu, Kedah. Type of sampling be used in this study is Stratified Random Sampling. A total of 386 samples was selected to represent a population of 18,968 people. The procedure of selecting the sample in this study will utilize a sampling formula by Krejchic and Morgan (1970).

The questionnaire used in this study is separated into three parts, (A) the profile of respondents, part (B) Source Credibility and part (C) Psychological Well-being. Part B refers to the source credibility of the JKKK perceived by residents lived at live at flood prone areas. The researchers used an instrument that was set up by Tuppen (1974) to assess the source credibility of spokesperson containing 51 items and five dimensions. Instruments has used as appropriate to assess the perception others have about the source credibility of the spokesperson (Lumsden & Lumsden, 1996).

Part C is the dependent variable in this study is psychological well-being. Psychological Well-being variables in this study were measured using the Psychological Well-Being Scale (PWBS) (Ryff, 1989). These variables have 42 items with six dimensions of autonomy, environmental mastery, personal growth, positive relationships, life goals, and self-acceptance. A PWBS instrument has been

used in a variety of cultural contexts in order to strengthen research on psychological well-being (Van Dierendock, 2008).

In general, the instruments used in this study were formed and used by researchers in western contexts. The reliability of the instrument in this study assessed using alpha coefficient. Results of reliability source credibility ($\alpha = 0.88$) and the dimensions of trust ($\alpha = 0.82$), expertise ($\alpha = 0.65$), dynamic ($\alpha = 0.77$), cooperation ($\alpha = 0.70$), charisma ($\alpha = 0.70$) are acceptable in this study. Same goes with psychological well-being ($\alpha = 0.92$), autonomy dimension ($\alpha = 0.67$), environmental control ($\alpha = 0.60$), personal growth ($\alpha = 0.65$), positive relationships ($\alpha = 0.61$), goals of life ($\alpha = 0.63$) and self-acceptance ($\alpha = 0.70$). Result reliability that for each variable and dimension in acceptable level between 0.60 and above (Hair et al., 2014).

4. Findings

This study used quantitative methods by cross-sectional surveys approach. Data were collected by distributing questionnaires to the respondents. A total of 420 questionnaires were distributed to residents lived at live at flood prone areas in Kubang Pasu. A total of 386 were returned and analysed in this study.

In general, respondents from 182 people (47.2%) were women, while 204 people (52.8%) were male. The majority of respondents were aged 51 years and above about 109 people or 28.2%. In addition, respondents aged 21 to 30 years, 31 to 40 and 41 to 50 years, respectively were 73, 90 and 83 people. The remainder of respondents aged 20 years and below. Further, the majority of respondents in this study is 213 people are Muslims or 55.2%. The remaining balance is non-Muslim respondents about 173 people or 44.8%.

Furthermore, these findings show that the majority of respondents were Malays are 208 people (53.9%). The balance remaining respondents are from the Indian, Chinese and Thai. In addition, the analysis shows that most of the respondents are married is a total of 240 people or 62.2%. In addition, respondents who never married are 115 people or 29.8%, while the remaining respondents who are widowed, divorced or single mothers. In addition, the majority of respondents are secondary school is 207 people or 53.6%, followed by respondents who have a certificate or diploma level education.

In addition, respondents who primary education is 23 people or 6% and respondents were not in school were 67 people or 17.4%. The remainder of is educated respondents Bachelor and Master. In addition, the result also shows that the overall respondents had flooded in their houses and moved to evacuation centers.

The results of correlation analysis showed that there was a significant relationship between the variables of source credibility and psychological well-being of residents lived at live at flood prone areas ($r = 0.17$, $p < 0.05$). Moreover, dimensions trust ($r = 0.17$, $p < 0.05$), expertise ($r = -0.37$, $p < 0.05$), dynamic ($r = -0.30$, $p < 0.05$), cooperation ($r = 0.13$, $p < 0.05$), charisma ($r = 0.13$, $p < 0.05$) showed that there was a significant relationship with psychological well-being.

Table 1 showed result of regression analysis using forced entry correlation shows the source credibility contributed 55% of the variance in psychological well-being (Table 2). Value R^2 is

statistically significant, with $F = 93.50$, $p < .00$. Result from stepwise showed only three main dimensions that describe the psychological well-being are trust, expertise, dynamic, and cooperation.

Table 2. Regression analysis of Source Credibility in Predict Psychological Well-being

Model	B	Beta	t	Sig.
Constant	94.92	0.62	13.99	0.00
Trust	1.35	-0.27	13.18	0.00
Expertise	-1.06	-0.28	-5.84	0.00
Dynamic	-1.37	0.21	-5.36	0.00
Cooperation	2.96	-0.12	4.20	0.00
Charisma	-.42	0.62	-1.86	0.06

$R^2 = 0.55$
Adjusted $R^2 = 0.55$
 $F = 93.50$, $p < .001$

5. Discussion

This study found there is a relationship between the perceived source credibility of the JKKK with psychological well-being of residents lived at live at flood prone areas. This finding is in line with the Pepper (2012) that the credibility of the spokesperson would be beneficial to ensure that the psychological well-being of recipients of the message during communication process when dealing with disasters (Berlo, Lemert & Mertz, 1969). This finding also in line with the findings about victims of the forest fires depends heavily on local informers who were in the area for hazards ensure their safety. So in this context, source credibility of spokesperson can help residents lived at live at flood prone areas to avoid damage and loss by having an awareness to respond accordingly without doubt because spokespersons are reliable sources to them.

This study has limitations in terms of sample selection and site selection studies. The researchers focused on the residents of the at flood risk area in the District Kubang Pasu because located in lowland areas. This study only examined the relationship between the dependent variables and independent variables that only describe the relationship and did not specify the cause and effect relationship between the occurrences of these two variables. Researchers also only focus on the source credibility of interpersonal communication by JKKK and do not perceive that other spokesperson.

The researchers also suggested methods of qualitative studies could be used to confirm the findings in detail. The interview can be conducted to learn more about the perception of information management from the top to the residents lived at live at flood prone areas. Furthermore, the scope of the spokesperson must be extended to look at the differences source credibility of other spokesperson.

6. Conclusion

The aim of this study was to examine the relationship between source credibility of JKKK and psychological well-being among residents lived at live at flood prone areas in Malaysia. The findings prove that the source credibility of the JKKK plays a big role in determining the psychological well-being of residents lived at live at flood prone areas. However, JKKK knowledge about flood is still limited and traditional because depending on the weather forecast and the rate of rain to expect

flooding. Therefore, researchers suggest JKKK given training to increase knowledge about to flood especially villages are categorized as most risky in flood.

Acknowledgement

The authors wish to thank the Ministry of Education Malaysia for funding this study under the Long Term Research Grant Scheme (LRGS/b-u/2012/UUM/Teknologi Komunikasi dan Informasi).

References

- Arpan, L. M. (2002). When in Rome? The effects of spokesperson ethnicity on audience evaluation of crisis communication. *Journal of Business Communication*, 39(3), 314-339.
- Bates, B. R., Romina, S., Ahmed, R. & Hopson, D. (2006). The effect of source credibility on consumers' perception of the quality of health information on the Internet. *Medical Informations and the Internet in Medicine*, 31(1), 45-52.
- Berlo, D. K., Lemert, J. B. & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *Public Opinion Quarterly*, 33(4), 563-576.
- Blanchard-Boehm, R. D. & Cook, M. K. (2004). Risk communication and public education in Edmonton, Alberta, Canada on the 10th anniversary of the 'Black Friday' Tornado. *International Research in Geographical and Environmental Education*, 13(1), 38-53.
- Eisend, M. (2004). Is it still worth to be credible? A meta-analysis of temporal patterns of source credibility effects in marketing. *Advances in Consumer Research*, XXXI(31), 352-357.
- Fothergill, A. & Peek, L. A. (2004). Poverty and disasters in the United States: A review of recent sociological findings. *Natural Hazards*, 32(1), 89-110.
- Hair, Jr., J. F., Hult, G. T. M., Ringle, C. M. & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. United States: Sage.
- Krejchic, R. & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychology Measurement*, 30(3), 607-610.
- Kurita, T., Nakamura, A., Kodama, M. & Colombage, S. R. (2006). Tsunami public awareness and the disaster management system of Sri Lanka. *Disaster Prevention and Management*, 15(1), 92-110.
- Mayhorn, C. B. & McLaughlin, A. C. (2014). Warning the world of extreme events: A global perspective on risk communication for natural and technological disaster. *Safety Science*, 61(3), 43-50.
- Nasir, R., Zainah, A. Z., & Khairudin, R. (2012). Psychological effects on victims of the Johor Flood 2006/2007. *Asian Social Science*, 8(8), 126-133.
- Nurlela, Z. & Che Su, M. (2014) Source Credibility, Risk Communication and Well-being: A Conceptual Framework. *Procedia-Social and Behavioral Sciences*, 155, 178-183.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081.
- Shaluf, I. M. & Ahmadun, F. I. -R. (2006). Disaster types in Malaysia: An overview. *Disaster Prevention and Management*, 15(2), 286-298.
- Shklovski, I., Palen, L. & Sutton, J. (2008). Finding community through information and communication technology in disaster response. In Proceedings of the 2008 ACM Conference on Computer Supported Cooperative Work. 127-136.
- Thomson, R. & Ito, N. (2012). Social responsibility and sharing behaviours online: the twitter-sphere's response to the Fukushima disaster. *International Journal of Cyber Society and Education*, 5(1), 55-74.
- Tingsanchali, T. (2012). Urban flood disaster management. *Procedia Engineering*, 32(4), 25-37. doi:10.1016/j.proeng.2012.01.1233
- Tuppen, C. J. (1974). Dimensions of communicator credibility: An oblique solution. *Speech Monographs*, 41(3), 253-260.
- Van Dierendonck, D., Díaz, D., Rodríguez-Carvajal, R., Blanco, A. & Moreno-Jiménez, B. (2008). Ryff's six-factor model of psychological well-being, a Spanish exploration. *Social Indicators Research*, 87(3), 473-479.
- Zuhaida, A. J. & Maznisham, M. S. (2009). Isu dan cabaran yang dihadapi oleh pasukan perubahan dan kesihatan semasa bencana banjir di daerah Muar dan Keluang Johor. Unpublished article.