

## **An Analysis of Media Information for Implementing Effective Countermeasure against Harmful Rumor**

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Several large earthquakes have occurred in Japan for the past few years, and they have given serious damage to various regions. As the earthquake which is fresh in one's memory, for example, the Chuetsu Offshore Earthquake occurred in 2007. When large scale earthquake occurred, the word of "harmful rumor" came to be frequently heard. The harmful rumor means an economic damage which is caused by the action that people regard actually safe foods or areas as dangerous and then abort consumption or sightseeing. [1]. In the case of earthquake, especially, the harmful rumor often arises in tourism industry. Currently, harmful rumor which gives substantial economic damage to neighboring area around disaster area have become serious social issue which must be solved.

Despite this, the problem of harmful rumor is not supported by laws or statutes of Government [2]. Moreover, academic studies on harmful rumor and its countermeasure are few. Therefore, the people who receives harmful rumor have to carry out the countermeasure through trial and error [3]. For this reason, the establishment of effective countermeasure for preventing harmful rumor is required immediately.

It is obvious that the information transmitted by the media is included as one of major causes for the occurrence and expansion of harmful rumor. Immediately after occurrence of earthquake, the biased information such as the earthquake magnitude and serious damage condition in disaster areas is transmitted to the general public. The biased information is reported by various media such as newspaper and web all the time. The general public mis-understand that neighboring sightseeing areas which do not actually receive damage have physical damages as serious as the disaster areas by looking at or hearing the biased coverage.

It is likely that the effect of countermeasure of harmful rumor depends on the media condition because the occurrence and expansion of harmful rumor relates to the media information. Therefore, the countermeasure for harmful rumor must be performed in consideration of

the condition of media information. Namely, sufficient effect of countermeasure may not be obtained even if the countermeasure is conducted in the biased condition that the media transmits only devastating damage aspects. It seems reasonable to suppose that the countermeasure should be performed when the media condition became appropriate condition that the coverage which give bad influence against sightseeing blow over. However, the studies on the countermeasure for harmful rumor based on the media trend have been not performed.

In this paper, we propose a countermeasure method for harmful rumor on the basis of media trend in order to implement speedy recovery from harmful rumor. In our research, first, we investigate the amount and content of information which is transmitted to the general public by the media when the earthquake occurred. Here, we employ newspaper and web news as investigation target. Newspaper has a feature which can transmit the information to the wide range of age, while web news has a feature that the circulation of information is speedy. We also analyze the difference among two medium which have different character. Additionally, we perform classification of articles reported by each media. In this classification, the articles are classified on the basis of whether the article gives bad influence to sightseeing or not. The temporal alterations in these analyses is examined.

These analyses are applied to three earthquake disasters which have recently occurred in Japan. Their earthquakes are “2007 Noto Earthquake”, “2007 Chuetsu Offshore Earthquake” and “2008 Iwate-Miyagi Nairiku Earthquake”. They were the earthquakes which gave serious physical damage to cities near seismic center. On the other hand, in these earthquakes, the sightseeing areas which are located comparatively near their disaster areas and do not almost have physical damage received economic damage by harmful rumor. We reveal the relationship between media information, physical damage and harmful rumor through the analysis of these earthquakes which have different range and magnitude of damage and different characteristic damage.

Finally, we discuss an effective countermeasure method for dispelling harmful rumor through these analysis results.

### **Keywords**

Harmful Rumour, Media Information, Earthquake

### **References**

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