

Utilizing behavioral psychology for disaster prevention and mitigation

During the Great East Japan Earthquake, people in the stricken area acted in an orderly manner. People around the world admired them.

Prof. Tsuneyuki Abe has been studying for years how cosmetics, which aim to beautify the appearance, influence people's feelings. He took notice of people's actions and changes in their state of mind in the stricken area, and surveyed it from the perspective of beautifying behavior.

For example the survey examined whether there are any relationships between usual manner-consciousness and actions permissible in times of disaster. Then he tried to compare these relationships on an international scale.



Prof. Abe held lecture meetings for volunteer disaster victim support staff to learn the basics, and proposed to aid the disaster victims in practical and emotional terms.

Professor, Psychology, Human Sciences, Graduate School of Arts and Letters

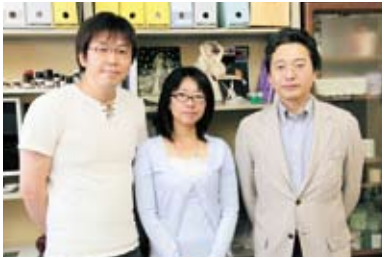
Tsuneyuki Abe

Born in Niigata Prefecture in 1961. Graduated from the doctoral course of the Department of Human Sciences, Graduate School of Arts and Letters, Tohoku University. Worked as Senior Researcher, Shiseido Institute of Beauty Sciences. Appointed as Assistant Professor and Associate Professor of the Psychology Course. Has been in his current position since 2010. The Editor-in-Chief of "Japanese Journal of Research on Emotions" (since 2010).  
<http://www.sal.tohoku.ac.jp/psychology/index-j.html>  
[http://www.sal.tohoku.ac.jp/staff/04030103\\_abe.html](http://www.sal.tohoku.ac.jp/staff/04030103_abe.html)

This is unprecedented in past disaster surveys. Simultaneously, with the help of the participating disaster victims, he conducted fixed point observation, in which he asked the participants to continuously record changes in their actions and their state of mind during the recovery process.

"Now, the Tohoku University Disaster Control Research Center (DCRC) is proceeding to create a database of buildings damaged by the earthquakes and tsunamis. I expect that the disaster's whole picture will become clear by unifying this earthquake disaster database and the database of social phenomena. At the same time, I hope to elucidate social factors that reduce panic disorder during a disaster,

and find clues to social behavioral patterns, which will lead to disaster prevention or mitigation," says Prof. Abe.



From left: Mr. Akio Honda, Ms. Juthatip Wiwattanapantuwong, and Prof. Abe. Mr. Honda, who has a Ph.D. in Literature, looked through all the articles of local newspapers immediately after the East Japan Earthquake, looked at keywords they used, and studied how they changed as time passed. Ms. Wiwattanapantuwong studied at a university in Thailand, and entered the Doctoral Program after graduating from the Master's Program. She studies the differences between Thailand and Japan regarding disaster prevention actions.

Immediately after the Great East Japan Earthquake, Prof. Kayoko Hirano participated in the Emergency Medical Care Support Dispatch Team, assisted the Division of Nursing at Tohoku University Hospital, and performed health consultation in surrounding shelters, all while working with the Division of Nursing, University Hospital. She also started a network called the "Regional Contribution Project" in order to share information and knowledge which are useful for supporting disaster victims from other universities/colleges and organizations. "We did all that we could do on a patchwork basis. However, as time passed, we came to consider what regional contributions the university could make, and we changed the

direction of activity," Prof. Hirano recalls. In this earthquake, the health and sanitation systems in particular were largely damaged in the areas hit by tsunami. The damage of Ishinomaki City was especially serious. Accordingly, an agreement was concluded with Ishinomaki to provide support to them in order to restore health and sanitation systems there over three years.

Moreover the Graduate School of Medicine established the "Center for Community Health" to help with activities for restoration of health and sanitation systems in each stricken area in Miyagi Prefecture. They will survey the needs of residents based on eight challenges\* concerning regional health care, and from this extract

relevant issues and subjects, then make proposals and advise.

"Although I think that restoration of the public administration will not take much time, it will take a long time for local residents to return to their original lives. Resumption of activity at the Center for Community Health may also be a long way off," says Prof. Hirano.

The Department of Nursing dispatched students from various universities and fields, not only than undergraduate/graduate students in the School of Medicine, to aid stricken areas within the prefecture. It also conducted medical support, health consultation in the shelters, door-to-door surveys on all houses (in Ishinomaki), and led student aid volunteers.



Prof. Hirano led preparation of the Response Manual for New Influenza Viruses (FY 2009) and Violence Prevention Manual (FY 2010), and distributed them to nurses and concerned organizations nationwide.



Professor, International Nursing Management, Health Development Nursing Science, Health Science, Graduate School of Medicine

Kayoko Hirano

Born in Kanagawa in 1948. Graduated from the doctoral course of Social Welfare Studies, Graduate School of Social Welfare Studies, Toyo University. Ph.D. (Social welfare study) . Worked as Health Officer, Health Service Bureau, Ministry of Health and Welfare, Director of Public Health Nursing, The National Institute of Public Health. Has been in her current position since 2008.



As Manager of the Health Guidance Office at the Ministry of Health, Labour and Welfare since 1994, Prof. Hirano structured the "Nationwide Public Health Nurse Dispatch System," which works out issues that are impossible to solve through self-reliance, with neighborhood, and broad-based, public support. She also participated to create the "Health Public Nurse Action Manual at Disasters" together with concerned self-governing body and functional organizations.

\* -- Eight challenges: Community survey, Health guidance, Infection prevention, Mental health, Maternal and child health, Exercise guidance, Nutritional guidance, Care prevention

Supporting restoration of regional health and sanitation systems

