

groups of samples. The top ten social risks mentioned by the samples were those associated with: health, economics, food, education, family, crime, housing, employment, moral, media and technology. The research results showed that, in the midst of modernity, Thai people are still at risk with various social problems. Significant research results were:

1.) The Perception of Risk Society among Thai People. Characteristics of risk perceived by Thai people are largely external risks or manufactured risks such as risks of food, health, economy, employment, drugs, and technology. However most people gave priority to risks at a micro level rather than macro. Micro level risks having direct effect to their lives and families were, for example, food, health, education, housing, employment, drug and crime, and technology. However different types of risks affect different people in different ways.

Risk perception among participants can be explained by both Psychometric Approach and Cultural Theory. According to Psychometric Approach, most participants used availability heuristic to evaluate risks. On the other hand, cultural theory also plays an important role in explaining risk perception in this study.

2.) The Influence of Media on Risk Perception. The research found that participants received information about risk from the mass media, as well as interpersonal communication. Television and newspaper were major sources of risk information.

3.) The Definition of "Safe Society" in Thai Social Context. The researchers concluded that Thai people perceived "safe society" as: "The society where its members can live their daily lives without fear of lacking/instability in food security, family, housing, communities, and environments. The people were provided equal opportunities and extensive means to access health and education services. They had secured employment and adequate income in order to live their lives on the "sufficiency economy" concept. Their perception of a safe society should be risk-free from natural disasters, accidents, violence, drug and crime. The people should be offered/ provided with media literacy and protected equally by law and political rights. Society should be magnanimous, its members upholding high morale and values, appreciative of religion, and noble-minded.

#### MO-IV-4

**Barilli, Elisa;** Savadori, Lucia; Pighin, Stefania; Cremonesi, Laura; Ferrari, Augusto; Ferrari, Maurizio (University of Trento, DISCOF)  
elisa.barilli@unitn.it

##### **Ratio bias in clinical risk perception: When 1 in 200 is riskier than 5 in 1000.**

Several studies investigated individuals' perception of the same probability communicated using ratios with different numerators and denominators. A well-known finding is the ratio-bias phenomenon (see Miller, Turnbull, & McFarland, 1989; Denes-Raj, Epstein & Cole, 1995; Epstein & Pacini, 1999): individuals tend to perceive greater the probability of a given event when presented in the form of larger (e.g., 10 in 100) than smaller (e.g., 1 in 10) ratios. In traditional ratio-bias experiments participants are asked to make a choice (e.g. deciding from which jar out of two to withdraw a ball), the probability associated with each option is  $p = .01$  or larger and it is conveyed using small denominators (e.g. 10 and 100). The present study, instead, used a single option evaluation task, a much smaller probability ( $p = .005$ ) and larger denominators (i.e., 200 and 1000). These differences in design aimed both at increasing ecological validity and at generalizing results to the physician-patient communication domain. We conducted three experiments using different samples ( $N = 164$  pregnant women,  $N = 127$  normal population, and  $N = 58$  clinicians). Participants were asked to report their perceived level of the probability of contracting malaria [or hepatitis A] during a trip in Kenya in an hypothetical scenario. Probability was communicated to half of the sample using a small ratio (1 in 200) while to the other half using a large ratio (5 in 1000). Results

revealed an inverse ratio-bias phenomenon: probability was judged as significantly higher when conveyed in the form of "1 in 200" than in that of "5 in 1000". The bias was present both in pregnant woman and in normal population, but not in clinicians. Since lay people are better at understanding (picturing) probabilities expressed with smaller than larger ratios, we suppose they could consequently judge them as larger.

#### TU-IV-6

**Bell, Rainer;** Danscheid, Marco; Glade, Thomas; Pohl, Jürgen (Department of Geography, University of Bonn)

rainer@giub.uni-bonn.de

##### **New concept of a cooperative landslide risk management.**

Landslides cause severe economic damage and fatalities in many parts of the world. The consequences of single events could be significantly minimised if the development of a risky situation would be known in advance. Unfortunately, landslide early warning systems are only available either as expensive technical systems for single slopes or as regional systems giving information that a landslide in a region will occur. The latter does not provide information which slope will be affected. Thus, effective counter measures are limited.

Due to these limitations in existing early warning systems, a new concept of a cooperative landslide risk management is developed. Since large landslides in most cases show some indications that a catastrophic failure will occur (e.g. opening of cracks), the approach is based on gathering such specific information, so that effective counter measures can be organised. The concept involves local people who regularly visit potential landslide areas for other reasons and if trained could recognise changes like the opening of cracks in time (e.g. foresters, road administration, railway companies, building authorities, hiking clubs, residents, etc.). A cooperative system ensures that information is collected by local experts, checked on its reliability and forwarded to the Geological Survey who in risky situations can investigate the slope in detail and implement necessary risk reduction measures in cooperation with local and regional authorities.

The applicability of the developed concept is partly supported by the results of qualitative interviews. The concept has the potential to be transferred to other risky and local phenomena.

#### TU-IV-5

**Bennett, Chris** (Kings Centre for Risk Management)

chris.e.bennett@btinternet.com

##### **Responding to multiple, qualitatively different hazards: exploring how perceptions of risk mediate response and influence priorities for action.**

In 2004/5, 970,000 adverse events involving hospital patients were recorded in the UK. This paper presents some findings from the pilot for a PhD study of NHS staff which examines their perceptions of risk in relation to patient safety, and how they make decisions about relative importance and urgency.

The organisational focus for this research is an NHS acute hospital. Qualitative case study methods include observation on 10 randomly selected wards, in-depth recorded interviews with medical, nursing and managerial staff (around 100 respondents), and examination of historical and contemporary documentary material.

The data suggest that at any particular time individual staff can identify a number of actual or potential hazards to patients. However, they simultaneously perceive a number of other threats with salience for themselves, other staff, or the organisation. Whether threats to patients are given priority for action appears not to depend solely on the perceived magnitude