



1. Executive summary

BACKGROUND: Whilst witnessing in recent years a range of disasters in Europe the following questions about human behaviour in crisis situations gain importance: How do people react in an emergency, and does culture have an impact on emergency behaviour? More significantly, could a better understanding of cultural response to crisis situations assist in developing better emergency procedures?

THE PROJECT: BeSeCu (Behaviour, Security and Culture) was an investigation of cross-cultural differences of human behaviour in crisis situations in order to better tailor security-related communication, instructions and procedures. The BeSeCu consortium includes researchers and SMEs, as well as first responder organisations from eight different countries.

METHODS: As part of the largest, multi-stage simultaneous field study on human response to crisis and evacuation, expert and survivor focus groups and a cross cultural field study with 1130 survivors and 3011 first responders were conducted in eight European countries with diverse cultural background. In addition as part of the experimental component of project BeSeCu three unannounced building evacuations were conducted in the Czech Republic, Turkey and Poland resulting in the generation of response phase data from 70, 51 and 192 people from each of the respective countries. This data was then compared with data from 104 individuals generated from a similar evacuation conducted previously in the UK.

RESULTS:

1. Study data enable analysis of whether culturally appropriate evacuation processes and security related communication are required.
2. Study showed where information of occupants is necessary.
3. Information about the situation itself is crucial for occupants in order to initiate an emergency response.
4. The study produced scientifically sound and cross-culturally validated instruments to assess human behaviour in security-relevant crisis situations across cultures of survivors of disasters (BeSeCu-S)
5. The study produced scientifically sound and cross-culturally validated instruments to assess attitudes and reactions of first responders concerning individual communication with disaster survivors (BeSeCu-FR).
6. Two comprehensive evacuation model validation data sets were developed from the Turkish and Polish evacuation trials.
7. A set of behaviours and cognitions which are unique or differ across cultures was identified, however indices for cross-culturally differences were identified, e.g. in prevention knowledge and safety culture habits
8. The results from the experimental programme demonstrate that there are significant differences in response time distributions and differences in Response Phase parameters between all four populations.
9. BeSeCu has gathered first evidence on non-verbal communication by first responders.

CONCLUSIONS: The significant findings from BeSeCu will inform future research and developments that aim to improve communication and evacuation. The results from the BeSeCu evacuation trials suggest that the observed differences in human behaviour are the result of cultural influences on Response Phase behaviour. However, further work is required before a definitive link between social culture and evacuation behaviour can be established.