

International Conference on Environmental Psychology (ICEP) 4.-5. September 2019 in Plymouth, UK

Talk: (How) Do visitors of open air events adapt to heat stress? Exploring vulnerability, risk awareness and adaptive behaviour via interviews and behavioural observations

Anna Heidenreich, Martin Buchner, Ariane Walz, Annegret Thieken Universität Potsdam

Introduction:

We are facing an increase in heat stress during summer. Open air events are especially exposed and require individual and organisational adaptation. This case study explores visitors' behaviour and perception during six weekends in 2018 at a six-monthly horticultural show with 700'000 visitors in total.

Methods:

306 visitors were interviewed about their weather perception, risk awareness, risk knowledge and heat adaptation behaviour. In addition, 2750 behavioural observations were made. Correlation analyses, ANOVA and multiple regression analyses were conducted.

Results:

During the examination period temperatures recorded at the exhibition ground varied between 19°C and 35°C. Differences in adaptation behaviour were observed between cold and rainy days (<25°C), warm summer days (25-30°C) and hot days (>30°C). Age and physical fitness had an impact on the perception of heat and the reported thermal stress. Self-reported adaptation behaviour could mostly be confirmed by the behavioural observations. Most interviewees (90%) were unaware of official heat warnings. Concerning adaptation measures against heat stress, most people saw a high individual responsibility and held the organizers not strongly responsible.

Discussion:

Recommendations are given to organizers of future open air events planning for visitors' safety and comfort. Tailored risk communication may foster public awareness for heat stress.



International Conference on Environmental Psychology (ICEP) 4.-5. September 2019 in Plymouth, UK

Poster: Alternative ways of flood risk communication: Evaluating a serious game and a workshop

Anna Heidenreich, Torsten Masson, Sebastian Bamberg, Annegret Thieken Universität Potsdam

Introduction:

Household-level protection measures can help reduce potential damage to private households in flood-prone areas. To promote private protection, different risk communication methods are applied. Brochures and online material are most frequently used as means of risk communication, while workshops and serious games are rather innovative methods which potentially reach a broader audience and offer different learning opportunities. To date, risk communication methods are rarely evaluated. They have both not been implemented and evaluated systematically, so far. These studies aim at filling this gap.

Methods:

In independent (quasi-)experimental studies, set in flood-prone communities, a workshop and a serious game on private flood protection were evaluated. A pre-post questionnaire based on the protection motivation theory (PMT) was used. For statistical evaluation repeated measures ANOVA were performed.

Results:

The serious game and the workshop had a positive impact on different PMT constructs, such as self-efficacy and protection motivation, while fear was not affected.

Discussion:

The results imply the potential of the still rarely used risk communication methods. Difficulties in the evaluation process are discussed and the need for further development and implementation of alternative risk communication methods is emphasised.