

### 1021 A STUDY ON DIFFERENCES OF SURVIVAL SWIMMING COURSES IN THAILAND

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**Background** In Thailand, drowning is the number one cause of death among children under 15 years of age. In this age group, there were 11,776 drowning deaths between 2005 and 2014, most of which occurred in natural water settings. Among children under 15 years, only 23.7% can swim, even though Thailand has implemented the survival swimming course since 2009. However, due to limitations in incorporating such lessons into the educational curriculums, the survival swimming course has to be taught in full and modified according to the situations of each locality, with differences in training periods and types of natural water.

**Objective** To study the differences in learning activities in various survival swimming courses in Thailand.

**Methods** This research was conducted to assess the differences in the learning activities for children in the survival swimming courses, both full courses and those modified according to the local context. Data were collected using a self-administered questionnaire and an in-depth interview form and then analysed to determine percentages and standard deviations; and t-test as well as odds ratio was performed.

**Results** The children who took the full survival swimming course were found to have better knowledge and skills in water safety, survival and problem-solving in emergency situation, than those who took the applied swimming courses. Their average score was significantly different ( $P < 0.05$ ), but their average scores on water rescue skills were not different. Among full course children, their scores on water safety, water survival skills, water rescue skills, and problem-solving skills were 8.9-fold, 4.1-fold, 1.4-fold, and 10.3-fold higher than those taking the applied courses, respectively; and their capabilities in survival swimming and drowning prevention were 5.2-fold and 7.7-fold higher than those taking the applied courses, respectively.

**Conclusion and discussion** Children who took the full survival swimming course had better survival swimming capabilities and drowning prevention skills than those who took the applied course. However, the water rescue skills in both groups were not much different, probably because they all were taught to memorise the key message “shout, throw, and hand over” regularly and consistently during the course, not just during the lessons.

**Recommendations** For the maximum benefit of drowning prevention, the full survival swimming course should be used. But for developing countries with limited resources, the applied course might be used; and the knowledge and skills on this matter should also be taught while learning other subjects.

#### Definitions

- Taking the full survival swimming course means intensive learning in all 3 modules for 15 hours at a standard swimming pool.
- Taking the applied survival swimming course means learning in all 3 modules with different intensity levels, depending on the local context, not for all 15 hours, at a mobile swimming pool, a fish pond or a natural water setting.

## Technology – Solutions and Applications for Safety

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### 1022 MOVIT YELLOW FLAG (AUTOMATIC TRACK SAFETY SYSTEM)

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**Background** For the safety of riders at motorsport accommodations ‘yellow flag marshals’ are present at various locations on the track. The job of these people is to warn the riders in case of a dangerous situation. In most cases a dangerous situation means that a colleague competitor has crashed within the next section of the track. Riders must anticipate by slowing down and avoid jumping. Especially the landing area behind a jump is extremely dangerous, because a rider cannot adjust the bike’s route until the moment of the landing. What’s the problem? In recent years a number of serious accidents happened on various tracks. These accidents could in most cases probably have been avoided with the use of flag marshals. Organisers experience more and more difficulties finding a sufficient number of good people for this important job. At international and national races they still succeed most of the time, although it may cost a lot of effort and money. At free practices and small club events there are no people available or the price is too high for the track owner. As a result there are free practices and club events without (a sufficient number of good) flag marshals. This means a high risk for competitors. In various countries, legislation is being prepared to make flag marshals mandatory during free practices.

**Methods** Movit Yellow Flag is an automatic system that replaces (or is additional to) the ‘yellow flag marshals’ at motorsport accommodations. The system provides one or more warning light signals for the competitors at a practice or race in case of a dangerous situation on the track. This works completely automatically and without human interaction. The Movit Yellow Flag system is based upon a small sending device on each motorcycle, with sensors that detect gravity and acceleration. In case a competitor crashes one or more light signals get automatically activated, so oncoming riders know that a vehicle of their colleague competitor is on the track within the next section. Riders can anticipate by slowing down and avoid jumping. At the moment the vehicle starts moving again the light signals are switched off automatically.

**Results** A working demo version has been developed already in 2014–2015, the production version will be available at the start of the 2016 Motocross season.

### 1023 EXAMINING TECHNOSTRESS IN NORDIC REGION AND INDIAN SUBCONTINENT

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**Background** Despite some academic debates about ICT-induced stress in organisations, the various factors leading to this social phenomenon have not received considerable research attention. Although, differences of opinion still exist, most agree that overtime technostress can induce potentially dangerous

psychosomatic sickness that hampers an individual's personal and professional competence, along with negatively affecting emotions, family, and social relationships. Technostress is a detrimental psychosomatic association between human beings and latest ICT; effects of which can undermine safety and wellbeing in home settings and workplace situations. The theoretical interpretation of ICT-induced stress or technostress is often poorly understood across academic, public, and policy domains. This is mainly due to the fact that technostress is a complex phenomenon involving a range of variables that vary from culture to culture including organisation's own working culture. This paper addresses this literature gap by critically examining the variables responsible for technostress in two distinct world regions: Nordic region and Indian subcontinent. In later sections, the paper discusses the implication of the findings and offers various empowering suggestions to all the players involved in technostress.

**Methods** Qualitative modes of inquiry including case studies are utilised in this examination to arrive at theoretical constructs, thereby drawing implications for the organisations' board and policy makers alike. The underlying premises hypothesise that the technostress severely affects individuals' wellbeing, social relationships, and offsets their productive competency, particularly at workplace.

**Results** Evidence indicates growing technostress in Indian subcontinent and Nordic region with increased anxiety, insomnia, psychical and mental strain, depression, and feelings of helplessness. Citizens in Nordic countries are more prone to technostress than their counterparts in Indian subcontinent because the latter suffers from the digital divide and ICT is yet not an integral component of homes and offices. Employees in IT industry often feel compulsive about delivering results in real-time without having enough time to engage in creative and sustained analysis. There are remarkable cultural differences between the two regions that resonate on personal and professional lives. Whereas electronic mails is a preferred medium of communication in Nordic region, traditional paper mail and hand written letters are still widely used throughout the Indian subcontinent with the exception of multinational companies in big cities.

**Conclusions** The technostress is a synthesis of complex variables working intricately together, and these factors vary in their complexity in two different cultural settings. Technostress is a growing problem which has affected Nordic region tremendously and has started to penetrate Indian subcontinent in big cities. At work places, Information Fatigue Syndrome caused by technostress is hampering concentration and professional competence of employees at a considerable rate. Technostress can be effectively dealt with creating awareness, training on ICT usage in organisations, and usage of ergonomic ICT hardware.

#### 1024 EFFECTIVE USE OF SOCIAL MEDIA IN INJURY PREVENTION

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**Background** With enough Facebook users to form the third largest country on the planet the question is not should we be using social media but rather how can we best use it. Social media is not a universal remedy for preventing injury, but it provides the opportunity for very real and untapped benefits to education, communication, and collaboration on a large-scale basis. The world of social connectedness allows for injury prevention

organisations to share information, engage, ask questions, post links, videos, and much more.

**Methods** Explore the points where injury prevention and social media intersect. Sometimes the point is with the individual and sometimes it's with the organisations. Platforms like Facebook, Twitter, You Tube, provide the mechanism for organisations to share messages and engage their communities, but it is in knowing how to use these tools effectively and efficiently that make the difference between success and failure.

**Results** Participants will learn the three golden rules to social media: (1) how to listen; (2) how to engage; and (3) how to measure. In addition learning about: defining your social media strategy; thinking about conversations instead of campaigns; crafting messages that resonate; overcoming organisational challenges; and when and who to ask for help.

**Conclusions** Social media is today's most transparent, engaging and interactive form of public relations. It combines real time content with authentic peer-to-peer communication. Social media is not about what each one of us does or says, but about what we do and say together, worldwide.

#### 1025 TECHNOLOGIES' USE, PERCEIVED RISKS, BENEFITS AND LAWS: A MULTIDIMENSIONAL UNFOLDING TECHNIQUE

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**Background** The use of the technologies in the everyday life brings benefits and risks, being a lot of them in home. According to the World Health Organisation, 90% of injuries to young children occur in or around home. Burns being in this place, the most frequent injury in Mexico.

**Methods** Multidimensional unfolding is a technique that maps ranking data into a low-multidimensional space that allows for a visual comprehension of the data. 28 parents of Guadalajara, Mexico (15 mothers, 13 fathers), were asked about frequency of use of technologies; involving cooking equipment, light, and heat sources. Then they sorted them in a series of cards, by three different criteria: perceived risk, benefits and the necessity for law implementation in their use.

**Results** The most used technologies were gas stove, lighter, water heater, iron, matches and microwave. The least used technologies were oil lamp, fireworks, wood stove, gas grill and electric grill. The three perceptual maps obtained have two dimensions, which show two sets of objects each: the subjects (the sample of 28 parents) as numbers, and the objects (each technology) as labels. Parents perceived: more risks from fireworks and wood stove; most benefits from gas stove, water heater, and microwave; and the need of laws for fireworks.

**Conclusions** Laws are one of the most efficient ways to get people to adopt safe behaviours. Although it is important to consider that, people are more willing to accept laws for those things that they do not use or perceive as beneficial. In this case, parents did not use fireworks and also perceived them as risky without benefit and with the necessity of laws. Unlike the gas stove, being the most used, perceived with more benefits; without risks, and no need for laws. This is the first exploration in Mexico about the theme. An overwhelming majority of burns occur in house and kitchen; it requires further research about overconfidence and optimism bias around technologies.