

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