

These SMEs are mostly run by private enterprises in unorganised sector to avoid legal obligations of Occupational Safety and Health (OSH) provisions. Basic OSH provisions are not maintained in such establishments. This study was conducted in Delhi city of India for the accidents took place between 2011 to 2014. The objective of the study is to analyse the type of accidents and to establish a relationship between training/experience of workers to occurrence of accidents. At the end of the study it is aimed to design a Participatory Action Oriented Training (PAOT) programme.

Methods Survey and Data analysis methods, followed by applying simple statistical techniques were used for this study. The accident related data for the study period, collected from the labour department and Police stations, were analysed for the study. The study was completed in April-2015

Results It was found that most of the accidents took place in SMEs situated in unorganised/Non industrial areas in Delhi. The causes of accidents are predominantly unsafe machinery or working conditions and lack of training of worker.

Conclusions Adequate training to workers and managing safe and healthy workplace are fundamental responsibility of every employer for prevention of accidents. There is no safety culture in SMEs in India. It has been revealed from this study that two critical points for ultimate results of accidents in SMEs are: unsafe machinery/equipment or working condition and lack of workers training and experience. High emphasis needs to be given to develop safe workplace and workers training. This is possible in large extent by Participatory Action Oriented Training (PAOT), easily available and low cost solutions.

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THE INFLUENCE OF PARENTS AND PEERS ON ADOLESCENT ATTITUDES TOWARD HELMET USE IN THE UNITED STATES

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Background Bicycling is a common form of recreation and physical activity for adolescents. The World Health Organisation (WHO) recommends the use of helmets to decrease the chance of injury during wheeled activities. Despite these recommendations, helmet-use rates in the United States are low (i.e., 5%–20%). One reason may be that adolescents fear that helmet-use may be viewed negatively by peers. The purpose of the study was to examine adolescent attitudes toward helmet use among hypothetical peers and determine whether parent and peer helmet-use influenced adolescents' decisions to wear helmets.

Methods Participants were 40 males aged 10–14 ($M = 12.03$, $SD = 1.48$) from a school in the Midwestern United States. The sample included African American (40%), Caucasian (30%), Bi-racial (18%), and Hispanic (5%) youth. All youth reported riding bicycles on a weekly basis. Youth were presented with a series of photographs of same-age, same-sex peers riding bicycles with or without helmets. Perceptions of the hypothetical peer were measured using the Revised Adjective Checklist.

Results The majority of youth (60%) reported "never" or "rarely" wearing a helmet. Participants selected significantly more positive adjectives (e.g., smart, healthy, honest) to describe the helmeted hypothetical peer ($M = 27.32$, $SD = 3.78$) than the peer without a helmet ($M = 24.66$, $SD = 5.75$), $t(39) = 2.60$, $p = .01$; moderate effect size $d = 0.55$. Youth's self-reported helmet-use was significantly higher when their parents required

helmet-use, $r(38) = 0.63$, $p < 0.01$, and when friends wore helmets, $r(38) = 0.65$, $p < 0.01$.

Conclusions Youth in this study were more likely to wear helmets when friends wore helmets and when parents required helmet use. Contrary to expectations, participants in this study viewed a hypothetical peer wearing a helmet more favourably than a peer who was not wearing a helmet. Future research should examine the disconnect between adolescents' favourable perceptions of helmet-use and their low rates of use.

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MONITORING REGIONAL ACCIDENTAL INJURY SITUATION IN FINLAND

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Background Official Statistics of Finland (OSF) are a wide collection of statistics describing society's development and state and must have common quality criteria, which are compatible with European Statistical System quality criteria. However, there is no OSF statistics focused solely on injuries, nor a database on the subject.

The National Institute for Health and Welfare (THL) produces information on Finland's injury statistics. For monitoring regional injury situation, THL produces national injury reports, published since 2009, divided into rescue regions and health care districts. National injury reports are released once a year and are intended to improve regional and local safety planning.

Methods Data is collected from the THL Injury Database which contains all deaths and hospital care periods for injuries and external causes of mortality from 1996 to 2013 (ICD-10 codes S00-T983 and V00-Y98). THL Injury Database's data originates from Finland's National Hospital Discharge register and Statistics Finland's Causes of Death register.

Standardised mortality/morbidity rate based on indirect age- and gender standardisation is used for comparing regional accidental injury deaths, hospital care periods, number of patients and hospital care days.

Results Injuries leading to hospital care periods happens more often in Northern and Eastern Finland than in Southern and Western Finland. Most injuries occur in leisure and free time. Falls are the most common cause of death and reason for hospital care periods in the whole country.

Regional differences are explained among other things by varying alcohol consumption, local care practices and population structure.

Conclusions Regional national injury reports provide up-to-date information on municipalities' injury situation. Injury reports guide local officials involved in safety planning to the right direction.

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WHAT FACTORS PREDICT SAFETY BEING VALUED AT WORK?

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Background Interest is growing in safety as a value in business life. However, there is no generally accepted definition of safety

as a value nor a conception of the factors that predict a high value for safety at work. The aim of this study was to examine the different aspects of safety as a value, and to determine the factors that predict that safety will be highly valued in organisations, and the relations between personal values, work values and safety as value. Understanding the factors related to the high value of safety is essential when aiming to improve safety in organisations, since values influence employee perception of safety and safety performance.

Methods We developed a 'Workplace values and value of safety' (WVVS) questionnaire based on a literature review and interviews. The questionnaire consists of A) three safety aspects: 1) safety performance, 2) safety values, and 3) factors that strengthen safety as a value; and B) Schwartz's Basic Human Values Scale (BHVS); and C) a Work Value Survey (WVS). The respondents ($n > 1200$) are from three Finnish companies from different fields of industries representing different personnel groups. We will use conventional statistical analysis, but also exploratory data-analysis techniques, aiming to identify interesting sub-populations whose behaviour differs from the norm, as well as to form a novel hypothesis regarding the effects of values on occupational safety.

Results The results show the factorial structure of the WVVS questionnaire, reveal the factors that predict a high value for safety, and show the relations between personal and work values and the value of safety.

Conclusions Our results improve understanding of practices that could support, promote and share safety as a value in organisations. We need new tools to share values and encourage members of the organisation to acquire them.

Drowning and Water Safety

Post Wed 3.11

1009 TRENDS IN DROWNING DEATHS AMONG CHILDREN IN JAPAN: 1995–2014

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Background In Japan, drowning is the second leading cause of deaths due to unintentional injuries following motor vehicle crashes among children. Drowning took the lives of 80 children aged 0–14 in 2014. The purpose of this study is to analyse the trends in drowning death rates and the share of drowning in unintentional injuries among children.

Methods Mortality data on unintentional injuries including drowning provided by the Vital Statistics of Japan was used. The deaths caused by the Great East Japan Earthquake in 2011 were removed from the analysis to avoid confounding.

Results The drowning death rate among all ages was 4.5 per 100,000 population in 1995, and 6.0 in 2014. Among infants under 1 year old, the drowning death rate was 1.9 per 100,000 population in 1995, and 0.2 in 2014. Among 1–4 year olds, the drowning death rate was 3.7 per 100,000 population in 1995, and 0.5 in 2014. Among 5–9 year olds, the drowning death rate was 1.7 per 100,000 population in 1995, and 0.4 in 2014.

Among 10–14 year olds, the drowning death rate was 0.7 per 100,000 population in 1995, and 0.6 in 2014.

The share of drowning death in all deaths due to unintentional injuries among all ages was 12.3% in 1995, and 19.2% in 2014. Among infants under 1 year old, the share of drowning death in all deaths due to unintentional injuries was 6.7% in 1995, and 2.6% in 2014. Among 1–4 year olds, the share of drowning death in all deaths due to unintentional injuries was 27.9% in 1995, and 18.6% in 2014. Among 5–9 year olds, the share of drowning death in all deaths due to unintentional injuries was 21.3% in 1995, and 31.4% in 2014. Among 10–14 year olds, the share of drowning death in all deaths due to unintentional injuries was 14.1% in 1995, and 29.4% in 2014.

Conclusions Drowning death rates among children decreased significantly, but the share of drowning death in all deaths due to unintentional injuries virtually did not change. This means that the incidence of drowning was stable and high compared to other unintentional injuries.

To reduce the number of drowning deaths, it is important for not only students but also parents, teachers and doctors to learn about drowning facts and statistics. It is also necessary to improve health education including drowning prevention curriculum in cooperation with various health specialties to create a healthy school environment for students.

1010 SLSA PERSONAL PROTECTIVE EQUIPMENT (PPE) PROJECT – DEVELOPMENT OF THE LEVEL 25 LIFEJACKET

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Background Surf Lifesavers and Lifeguards operate in an inherently hazardous aquatic environment. Recently, Surf Life Saving Australia (SLSA) has lost 3 lifesavers in surf sports competition and training, and in the United States there have been 2 lifeguards drowned during operational service.

The risk remains that a lifesaver or lifeguard may become incapacitated in the water, become submerged and unable to be located to receive timely medical attention.

The objective of the project was to deliver a specification for a lifejacket that would reliably return an incapacitated individual to the surface but also minimise impacts on performance to a level as low as reasonably possible.

Methods SLSA engaged James Cook University and SAI Global to conduct the assessment process and assist in development of a fit for purpose specification.

The first stage assessed and ruled out the Level 50 International Standard as having excessive buoyancy and adversely impacting exertion levels while conducting tasks such as duck diving. It was then hypothesised that a similarly designed slimline lifejacket with a lower level of buoyancy could feasibly fulfil the objectives.

The second stage assessed a variety of buoyancy aids that were not compliant with any standards. These devices were readily available in the international marketplace as impact vests, surface vests, and competition vests commonly used for individuals engaged in extreme sports such as wakeboarders, big wave surfers and kite boarders.

Results Testing of these non-compliant buoyancy aids indicated poor quality control over the production processes and varying rates of buoyancy that didn't necessarily correlate to size. This