SUMMARY

The following pilot study was developed to address the clear need for information in the marketing of safety. It measures knowledge, attitude and behaviour with regard to safety recommendations in the home and in leisure activities.

Development of a suitable survey tool

A standardised questionnaire was developed as part of the project. This was based on findings from an Austrian study, but was modified and expanded for the present pilot study after a critical evaluation by the project partners.

The questionnaire consists of a core module that was used in all of the countries that participated in the survey, and of supplementary modules that can be adapted for each country depending on its particular requirements. These modules can be combined and expanded as desired and can also be used for future surveys.

The questionnaire contains sets of questions on the topic of accident prevention for the following principal target groups:

- Total population, including people actively engaged in sports activities, and cyclists
- Parents of small children (under 6 years of age)
- The elderly (65 and over)

The sets of questions chosen are a representative selection from several topic areas relating to accident prevention for various target groups. They illustrate the flexibility of the survey tool in the present pilot study.

Design and implementation of a pilot study in four European countries

Due to budget constraints, it was not possible to carry out a separate survey in every European country. A smaller number of countries had to be selected for the present pilot study. To ensure a suitable geographic spread, two northern European countries (the Netherlands and Denmark), a central European country (Austria) and a southern European country (Greece) were chosen for the survey.

Target groups for planning accident prevention strategies

One of the main aims of the present analysis was to describe precisely the target groups for accident prevention measures so that future accident prevention strategies can be planned more quickly and efficiently.

Accordingly, a typology of safety recommendations was devised for each country, reflecting the varying patterns in relation to knowledge, attitude and behaviour.

The following five principal groups were obtained by combining the different result categories for knowledge, attitude and behaviour:

Type 1

There is no (urgent) need for action on recommendations that score high values in all three dimensions. For the purposes of effective accident prevention, this would be the ideal pattern for the safety recommendations included in the study.

Type 2

In the case of recommendations with a high recognition factor and a very positive attitude, in conjunction with a low or medium rate of implementation, there are no direct conclusions to be drawn for communication strategies in accident prevention campaigns. In this case, further analysis is required to determine the barriers and restrictions that prevent greater implementation of safety recommendations in practice. Possible restrictions could include the price of acquiring a safety product being too high. Another possibility is that the recipient does not immediately perceive the preventive benefit of a particular safety recommendation. More in-depth studies of a qualitative nature are recommended to provide more information on such restrictions and the reasons for failure to act upon safety recommendations.

Type 3

Recommendations that have only a low or medium recognition factor are the most accessible for prevention campaigns, because the level of knowledge here can be influenced most easily using standard methods of mass communication.

Major, area-wide campaigns are needed to substantially increase the recognition factor of recommendations among the various target groups of the general population. These campaigns need to be repeated at regular intervals to anchor the message in the public consciousness. Such campaigns are often expensive and harbour the risk of being dissipated. However, such dissipation effects can be minimised by a precise focus on the target group.

Type 4

Recommendations for which the positive attitude is only moderate or weak. Image problems of this kind can be addressed by special image-oriented campaigns that focus on the advantages of the recommendation or product.

Type 5

Recommendations that are implemented to a high degree, but which have only a low recognition factor. Although these safety recommendations are often followed in daily life, the safety aspect, or the preventive benefit of the recommendation, is not perceived (e.g. in the case of a hot water thermostat to prevent infants being scalded). This safety benefit should be made the key focus of communication with the target group and manufacturers of safety products could also stress this aspect as a way of promoting sales.

If the typologies are allocated to specific safety recommendations, we obtain the following target group profiles for the various countries (cf. Table 1 to Table 3):

Table 1: Target group profile: General safety recommendations; na... not asked

General Safety Recommendations	A Type	DK Type	NL Type	GR Type
Not drink alcohol when skiing	1	na	na	na
Crossing the street when the traffic light is red	x	1	na	na
Warm-up before engaging in sports activities	2	1	na	na
Pedestrian: Reflective clothing when it is dark	2	2	3,4	3
Safety certified ladder in the house	2	3	3	3,4
Usage of electrical appliances in the bathroom	2	5	5	1
Lightning rod protector	2	3,4	3,4	3
Skiers: adjust their ski binding before each season	2	na	na	na
Residual current circuit breaker checked at least twice a year	3	na	na	na
Smoke detector	3,4	2	2	3
Electrical lights on Christmas tree	3,4	3,4	5	5
Household work after drinking alcohol	na	3,4	na	na
Fire extinguisher	na	na	na	2

Table 2: Target group profile: Child safety ; na... not asked

Recommendations for Child Safety	A Type	DK Type	NL Type	GR Type
Child/children in a child car seat	1	1	1	2
Chemicals/detergents out of reach	1	1	1	1
Medicine kept in a locked cabinet or in a locked drawer	1	2	1	2
Knives or other sharp instruments out of reach	1	2	1	1
Covers on the electrical sockets	1	2	2	2
Stair guard is in place	2	2	2	3
Stove guard is in place	2	3,4	3,4	3
Child/children not to play alone near swimming pools	1	5	5	1
Child/ren: helmet when bike riding	2	2	3,4	x
Child-proof window locks	2	3,4	3,4	2
Thermostat regulates the hot water	3	5	5	3
Baby-walker	na	5	na	3,4
Stickers on the windows and glass doors	na	na	na	3
Baby in the shower	na	na	na	3,4
Baby in the bathtub	na	na	na	3,4
Child sleeps on the upper bed of the bunk bed	na	na	na	3

Table 3: Target group profile: Safety for the Elderly; na... not asked

Recommendations for Safety for the Elderly	A Type	DK Type	NL Type	GR Type
Notice of slipping potential of the soles	5	5	5	2
Bathtub/shower: Slip-free mat	2	2	2	3
No slip rugs or loose cables	2	2	3	3
All doors thresholds (except the front door) removed	2	3,4	3	3,4
Eyesight checked once a year	2	3,4	3	5
Bathtub/shower: Grip handle	2	3,4	3,4	3

Main results in relation to knowledge, attitude and behaviour

General safety recommendations (total population as target group)

- The average awareness of safety recommendations is highest in Austria (80.7% average awareness), while the Netherlands and Denmark fall into the medium range category (68.3% and 62.2% respectively). In Greece, knowledge of safety measures in the total population target group is lowest, with an average awareness level of 51.8%.

- In terms of attitude to the safety recommendations, all four countries display similarly good results, with an average approval rate of between 70% and 80%.

- A similar picture to that for knowledge, but at a lower level, emerges in relation to implementing actual measures in practice: the safety recommendations are most frequently implemented in Denmark (by 52.5% on average). The Netherlands and Austria are in the medium range (49.3% and 46,3% respectively), while Greece is again at the rear with an average implementation rate of 33.7%.

- In Austria the index value for knowledge is higher than that for positive attitude, which means there is potential for achieving a higher level of approval for the safety recommendations. The gap, however, between the results for positive attitude and implementation of the measures is relatively insignificant when compared with the other three countries.

- The Netherlands and Denmark exhibit a different pattern: the average number of persons that have heard about safety recommendations is less than the average percentage for positive attitude. This means that while the population approves of the recommendations, it sometimes fails to identify them as safety recommendations.

- In Greece, the pattern is generally similar to the Netherlands and Denmark, but there is a greater disparity between the dimensions for positive attitude and knowledge, on the one hand, and between attitude and behaviour on the other. This means that the lack of knowledge on safety recommendations is greater than in the two other countries, or that the rate of implementation is lower.

- A uniform trend can be observed in Austria and Greece in relation to the socio-economic variables of income and social class for all three dimensions (knowledge, attitude and behaviour): the higher the family income and the higher the socio-economic class of the respondent, the higher is the corresponding index value. A similar patter emerges in Denmark, but only in relation to implementing the safety recommendations.

- In the Netherlands, there is a progressively more critical attitude to the safety recommendations that parallels the rise in the level of education, social class and income category. A similar pattern can be discerned there for awareness of the recommendations.

- In Austria and in the Netherlands, there is a tendency towards higher index values for knowledge, attitude and behaviour in larger households (with three persons or more).

- In Austria and in the Netherlands, the index values decrease as the size of the community increases. This effect applies for all three dimensions alike.

Recommendations on the subject of child safety (target group: parents of small children aged six or younger)

- Child safety is the area of accident prevention that produces the best results in all four countries in terms of the level of awareness of safety recommendations, approval of the latter and practical implementation of the recommendations.

- The level of awareness of recommendations on child safety is extremely good in all four countries with an average result of over 80%.

- In all four countries, there is only a very slight potential for improving attitudes towards the child safety recommendations in the survey.

- In practice, the implementation of prevention measures lags slightly behind the positive attitude to the recommendations. Despite this, the rate of implementation among parents of small children is higher than in the groups for the total population and the elderly.

- In Denmark and the Netherlands, the average number of persons who have heard about safety recommendations is marginally higher than the index value for positive attitude. This indicates that there is also a potential for improving the level of awareness on the topic of child safety. This is true to an even greater degree for Greece.

- In Greece and Denmark, in the target group of parents of small children, there is a link between high net household income and high level of education on the one hand, and higher indexes for knowledge, attitude and behaviour on the other. In the Netherlands, this effect can only be seen in relation to implementing the recommendations.

- In Austria, the indexes for knowledge, (positive) attitude and behaviour tend to drop as the size of the household increases.

- In Denmark, there tends to be higher indexes for knowledge, attitudes and behaviour in communities with a population of more than 10,000 than in communities of a smaller size.

Recommendations on the topic of safety for the elderly (target group: people over 65 years of age)

- In the comparison between countries, Austria has the best results for awareness of safety recommendations for the elderly (87.2% average awareness). The other three countries have very similar results, with only average awareness levels of between 67.7% (Netherlands) and 61.2% (Greece).

- Austria is also in the lead position for positive attitude, with an approval level of 90.7%. A striking feature is the relatively positive approval level in Greece (84.3%) in contrast to the low level of awareness of the recommendations.

- In the comparison between countries, there are also very good results in Austria for implementation in practice of the recommendations by the elderly (64.8%). The other three countries are much further back, with an average implementation rate of around 45%.

- The same pattern, but with varying degrees of clarity, can be seen in all four countries for the recommendations on safety for the elderly. The values for awareness range from slightly below (Austria: -3.5%) to substantially below (Greece –23.5%) the values for positive attitude. This means that there is also still potential for improving awareness of measures relating to the subject of safety for the elderly.

- In Austria and Denmark the index values for knowledge, attitude and behaviour drop as the household net income increases. This trend can also be seen in the Netherlands, but only for the dimensions knowledge and attitude.

- In the Netherlands, the values for the indexes of knowledge and attitude also fall as the level of education increases. The same trend is apparent in Austria, and additionally for the index of behaviour.

- In Greece, there is a link between high net household income and a positive attitude to the safety recommendations.

- The elderly in Austrian are much better informed on safety recommendations than elderly people in the other countries. Higher index values for knowledge, attitude and behaviour can also be seen among women in Denmark, whereas for Dutch women they are only higher for behaviour.

- There is also a rising trend for the index values for knowledge and implementation in larger communities in Austria. In Greece, this trend applies for knowledge and attitude.

Conclusions

- The present pilot study contains an adequately broad statistical base to illustrate in detail national differences in terms of knowledge, attitudes and behaviour on accident prevention topics in four European countries. It thus provides us for the first time with valuable information on the levels of acceptance and implementation of safety recommendations in the home and in leisure activities in the different European countries.

- The target group analysis reveals different approaches to prevention. On the basis of the results, it will now be possible to design appropriate accident prevention strategies and procedures to match requirements in the different countries.

- The results for knowledge, attitude and behaviour show that safety recommendations are frequently implemented in daily life without the safety aspect or the preventive benefits of the recommendations being perceived. This safety aspect should be made the central message when planning accident prevention campaigns.

- Knowledge about accident prevention measures and positive attitude do not always result in accident-prevention behaviour. In this case, further studies are needed to determine the barriers and restrictions that prevent greater implementation of safety recommendations in practice.

- By linking the present results with data surveys in the fields of personal injury and product safety, it will be possible to refine strategic planning in relation to setting priorities.

- If this survey tool were used periodically, it would be possible to evaluate the effectiveness of these strategies or that of specific accident prevention campaigns.

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