Survey on mountain behavior and perception of avalanche risk

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INTRODUCTION

EDNA: Snow and avalanche community

It’s an outreach environment on snow and avalanches.

Non – profit training space

Merge snow and weather science, practical mountain skills and rescue skills → safety tools
INTRODUCTION

ACTIONS

- Training courses level 1, level 2 and update courses
- WEB page: http://www.iea.ad/edna
- Periodic conferences
- Brochures and guides
- DVA Park
- Etc.
INTRODUCTION

LEVEL 1:
- Basics on snow and avalanches
- Avalanche forecast bulletin
- Basic skills on planning a route
- Safety material
- Basic rescue
INTRODUCTION

LEVEL 2:
- Plan a route → weather and snow conditions, terrain
- Multiple burial search
- Organize a rescue
- First aid in the mountain
UPDATE COURSE

- Plan a route: home and terrain
- Rescue in a real scenario
- New protocols and new rescue items
INTRODUCTION

DVA Park in Ordino - Arcalís

Los esquiadores buscan nuevas sensaciones en la nieve. En el sector Arcalís de Vallnord, gracias a su orientación noreste, cuenta con la mejor nieve de los Pirineos, pero también es el emplazamiento ideal para los amantes del esquí de montaña y del freeride. Para muchos, éste es el esquí y el snow en estado puro, ya que se desciende por fuera pistas de nieve no tratada. Pero también hay que asumir una serie de medidas de seguridad para disfrutar al máximo de este deporte. De ahí la creación, esta temporada, del DVA Park en colaboración con el Centro de Estudios de la Nieve y la Montaña de Andorra (CENMA), para conocer el prototipo de esta instalación.
- Identify the several groups of winter sports practitioners in Andorra.

- Compare the behaviors among people who have followed some training program and those who do not, in order to evaluate the impact of these training courses.
SAMPLE

N=166

Gender

- 63% Male
- 37% Female

Training level

- 44% Advanced
- 34% Basic
- 22% WF

Age

- 31-35: 20%
- 26-30: 15%
- 36-40: 15%
- 41-45: 15%
- 46-50: 15%
- 51-55: 5%
- 56-60: 5%
- 61-65: 5%

Activities

- Ski mountaineering: 160
- Alpin ski/snowboard (ski): 140
- Freeride (ski & snowboard): 120
- Alpinism/Ice climbing: 100
- Splitboard: 80
- Heli ski: 60
- Snowmobile: 40

RESULTS
No relation observed between:

Training level – Age
Training level - Frequency
EQUIPMENT

Rescue equipment

No relation observed between:

- Rescue equipment – Age
- Rescue equipment - Frequency
- Rescue equipment – Years of experience

DVA

- 41% Yes
- 59% No

Shovel

- 24% Yes
- 76% No

Probe

- 30% Yes
- 70% No
PREPARING THE TRIP

Cartographic tools

Avalanche forecast

Rescue practice

Organizing avalanche rescue
PERCEPTION

Have it changed your perception after the training course?

- 44% Yes, I have more knowledge of the environment and I feel safer
- 52% Yes, I am more aware of the risk and I feel more vulnerable
- 4% I feel as safe as before doing the course

I do not consider myself a good connoisseur of the mountain and I do not feel capable to make decisions...

I am a good connoisseur of the mountain and I feel safe in this environment.

I am aware of the risks of the mountain and I feel vulnerable. I take conservative decisions.
CONCLUSIONS

The answers obtained in the survey suggest the following conclusions:

- People with specific **training** on avalanches and rescue are **better prepared** in their trips: they have the **safety equipment** at a higher percentage, they make more use of cartographic tools, they check the **avalanche forecast** in a higher percentage, they do more **rescue practices** during the season and feel more prepared to **organize the rescue** of their group. The higher the level of training is, the better prepared the trip is.

- There is a significant increase in the acquisition of **rescue equipment** after attending training courses.

- Concerning the perception of risk, the most well-trained people tend to rely more on their knowledge, although this fact does not imply that they take riskier choices than those who are not trained.
CONCLUSIONS

- This data shows the **importance of the continuous training** for winter sports practitioners. With basic training, people start to be aware (for example, with the acquisition of rescue equipment) but it seems that only with advanced training people feel really capable of taking decisions and acting according to the protocols learned.

- Finally, we have to do an effort to influence some specific collectives, including women and people with many years of experience; as well as offer advanced trainings to the freeriders collective.
Thank you very much for your attention