

## SELF-ESTIMATION OF ABILITY AMONG SKIERS AND SNOWBOARDERS IN ALPINE SKIING RESORTS

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In epidemiologic studies examining potential risk factors for skiing injuries, it is relevant to know the ability of the skier or snowboarder. This is usually done through self-reporting based on a single question asking the skier to classify his ability in four categories. However, although a number of different questions have been used, their ability to discriminate between better and less able skiers has not been studied. The aim of this study was therefore to validate five different questions designed to self-report skiing ability. Throughout the winter season of 2002, a random group of skiers in Norwegian alpine skiing resorts were asked to classify their ability into four categories by completing a questionnaire with five different questions based on: Ability (expert, advanced, intermediate, beginner), piste difficulty (off-piste, black piste, red piste, blue piste/childrens piste), turning technique (alpine skis: carving/short turns, parallell turns, stem turns, plough; snowboard: carving/short turns, continuous turns, interrupted turns, sliding on the edge), skiing experience (>5 seasons, 3-5 seasons, 1-2 seasons, <1 season of skiing), and falling frequency (never, now and then, every day, every run). After filling in the questionnaire, the participants were asked to make a test run under observation to define his or her skill. Observed and self-reported ability were compared using kappa analysis.

512 persons (243 females and 269 men) participated - 186 alpine, 164 snow board, 116 telemark and 46 blades/big foot.

The correlation between self estimated ability and observed skill was generally fair, with kappa values of 0,34 (ability), 0,33 (piste difficulty), 0,38 (turn technique), 0,26 (experience) and 0,16 (frequency of falling). In the alpine skier group, the kappa values were 0,28 (ability), 0,33 (piste difficulty), 0,43 (turn technique), 0,19 (experience) and 0,06 (frequency of falling); in the snowboard group: 0,35 (ability), 0,23 (piste difficulty), 0,33 (turn technique), 0,31 (experience) and 0,22 (freq. of falling); in the telemark group: 0,43 (ability), 0,47 (piste difficulty), 0,46 (turn technique), 0,36 (experience) and 0,20 (freq. of falling, and in the blades/big foot group: 0,32 (ability), 0,24 (piste difficulty), 0,36 (turn technique), 0,46 (experience), 0,26 (freq. of falling).

In conclusion, we found that the skier's ability to define their own skill based upon the given forms, were fair, but not outstanding. The telemarkers seem to be better in self-estimation. Estimation based upon turning technique or ability are best corresponding, whilst frequency of falling does not illustrate skiing ability.