



The call of the clouds. High weather involvement in Austria.

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Weather knowledge will be higher among persons with weather exposed jobs, e.g. farmers. The most intense weather interest should be found among meteorologists and climatologists, but their motivation has not been sufficiently studied by the social sciences. Therefore, in late 2018, all 346 employees of the Austrian National Meteorological Service were free to access an anonymous explorative online internet questionnaire. 84 (24%) completed it fully. 31% were female, 69% male. Their average age was 45.2 years. 53% were meteorologists/climatologists/geophysicist, 77% had (applied) university education.

57% stated that their weather interest had developed spontaneously. Asked about the personal experience of 16 natural phenomena, over 50% had seen seven of them. Greatest weather risk was associated with floods, tornados and severe storms. Weather knowledge questions were correctly answered by nearly all. Emotions involved with weather observation were mostly positive.

A motivation questionnaire included 28 motifs from five domains. It was found that interest in science/technology, helping others, weather as beauty/ aesthetics, scientific research and nature contact were central for the group. Parallel survey data exist for the general population in the area Salzburg/Bavaria (N=80, 48% female, age mean 37) and for amateurs of the spotter/chaser group Skywarn Austria (N=30, 33% female, age mean 41).

15% of the general population kept weather records, and 50% of Skywarn. 25% of the general population had a small weather station, but 67% of Skywarn. 47% of Skywarn Austria described themselves as chasers, 77% as spotters.

The mean values of 16 weather experiences were 7.6 for professionals, 7.0 for Skywarn, 5.5 for the general population. All three groups named thunderstorms as favorite phenomena.

Main weather risks for Skywarn were tornado, earthquake, severe storm, for the general population tornado, earthquake and flood. The scores for weather knowledge were the same for professionals and Skywarn with 3.9, for the general population slightly lower (3.4). A PANAS emotion score was +2.4 for professionals, +1.9 for Skywarn, and +2.1 for the general population, so all three were in the positive range.

Motivation items were collected from Skywarn. Of their top 12 above-average items, 10 were identical with the professionals' top group, which indicates a comparable motivational background. Austrian professionals and amateurs displayed a predominance of scientific, social and aesthetic motifs, of positive emotions when observing weather, and similar personal weather experience. General population weather involvement is also high in Austria.