



### *Towards an aggregate index to measure Annoyance from wind turbines*

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Annoyance from wind turbine noise is usually measured by means of the single item ISO standard 5 or 11 point annoyance scale. However the question is whether this item sufficiently covers all aspects relevant for annoyance due to wind turbines. It is known from previous studies that annoyance from wind turbines is only partly explained by the actual sound levels and situational factors seem to play a key role. In 2018 Michaud presented an aggregate index of annoyance taking these situational aspects into account. The aggregate annoyance construct was developed to account for annoyance from multiple physical wind turbine features: noise, blinking warning lights, vibrations, visual impact and shadow flicker. The psychometric quality of the index was tested and the association with distance to the turbines was confirmed in two large samples of the Canadian Wind Turbine Noise and Health Study. Noise ranked among the lowest of the five features evaluated. The index showed to be associated with a range of health complaints and symptoms. This paper will present the results of a study performed in the Netherlands in 2021 among people living in the vicinity of a wind turbine park using the same index.