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**Risk intuitions and perceptions: a case study of four year 13 (grade 12) students.**

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Summary: In the New Zealand school statistics curriculum, year 12 students (aged 16–17) are required to solve problems that involve interpreting risk and relative risk within a range of meaningful contexts. In a small exploratory study we investigate the risk conceptions of four year 13 students who performed at the excellence level in their year 12 externally-assessed examination on this topic. Through questionnaires and interviews we investigate the ways in which these students perceive and express risks associated with a variety of everyday activities and also how they compare the risks of several adverse outcomes. We also explore the strategies they use when confronted with varied representations of risk such as visual, verbal and numerical. We will report on insights gained about these students’ reasoning with different risk representations, on how they interpret, evaluate and communicate risk.

*Classification:* D34 K94 K54 K74 C34

*Keywords:* risk; stochastics; probability theory; statistics; upper secondary; teaching; research; empirical investigations; communication of risk; definition; heuristics; risk perceptions; risk representations; risk interpretations; relative risk; curriculum; reasoning strategies; students’ risk conceptions

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