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Why is statistics perceived as difficult and can practice during training change perceptions? Insights from a prospective mathematics teacher.

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Summary: An investigation into prospective mathematics/statistics teachers' ($n = 134$) conceptual understanding of statistics and attitudes to statistics carried out at the University of Limerick revealed an overall positive attitude to statistics but a perception that it can be a difficult subject, in particular that it requires a great deal of discipline and time to learn. This latter result motivated a follow-up qualitative study ($n = 9$) to uncover the factors contributing to positive attitude and the concomitant perceptions of difficulty. What emerged was evidence of the lasting impact secondary teachers and their perceptions of statistics had on these students. The study also reveals the potential of teaching practice to act as a vehicle to challenge the perceived difficulty of learning statistics and provide prospective teachers with the opportunity to develop confidence in statistics as both learners and teachers.

Classification: C29 K19 D79

Keywords: statistics; probability; difficulties; teachers' perception; preservice teachers; perception of difficulties; teacher knowledge; teaching practice

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