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Unpacking Mathematics Anxiety in Year 9 Students

A thesis presented in partial fulfilment of
the requirements for the degree of:

Master of Education
in
Mathematics Education

Massey University
New Zealand

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2017

Abstract

This thesis explored the extent of mathematics anxiety in Year 9 students in a rural/provincial region of New Zealand. The study's aim was to examine how students' individual and school variables (such as gender, ethnicity, school decile, school gender type and school type) related to their levels of mathematics anxiety. This mixed methods sequential explanatory design utilised two phases: First, a survey was completed by 434 Year 9 students to identify their levels of mathematics anxiety (in terms of mathematics learning anxiety and mathematics test anxiety). Second, focus group interviews were conducted with the most highly-mathematically-anxious students to examine their experiences with mathematics anxiety. The results showed that 21.4% of students, particularly girls, reported high levels of mathematics anxiety. Social categories for which mathematics anxiety was most prevalent was, in general, consistent with the “priority learners” identified by the New Zealand Education Review Office—Māori and Pāsifika students and those from low socioeconomic backgrounds. The four main themes that emerged from the interviews were: the importance of teacher quality; the detrimental effect of high-frequency, high-stakes assessment; the impact of social comparison; and the big jump when starting secondary school. Reasons accounting for these results, and implications for teaching and learning, are discussed.

Acknowledgements

Firstly, my thanks go to the Board of Trustees, Principal, and colleagues from the school at which I teach, for supporting me to complete this research, especially the time afforded to me.

I am grateful to have received practical and financial support from TeachNZ and Massey University's Institute of Education which has made life a lot easier.

I appreciate for the “green light” from all of the participating schools and their Boards of Trustees, Principals, and teachers. It is humbling and encouraging that our wider school community has seen this research as important for the advancement of our collective understanding of our young people's experiences with mathematics. A big thank you to all of the students who participated in this study; I really appreciate your openness, honesty and willingness to participate. It is great that your voice will be heard. Thanks also to your obliging parents who allowed you to participate.

My sincere thanks go to my supervisor, Professor Margaret Walshaw, and my co-supervisor, Raewyn Eden. Your patience, support, advice, guidance, and encouragement during this rollercoaster ride has been truly amazing.

Finally, thank you to my husband Shane. Words cannot do justice to describe the myriad of ways in which you have supported me throughout this challenging process. I sincerely appreciate the many small sacrifices that our family (including our children Cameron and Lauren) have made to enable me to do this thing. x

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