Research in dental education focuses on enhancing theoretical and evidence-based policies and practices in teaching and learning. Researchers in the Dental Education Research Programme typically examine educational experiences in the Faculty and other dental education environments in order to foster a positive impact on education in both the clinical and traditional teaching and learning environments. We seek to use research to identify strategies and practices that can improve experiences and support for students and educators, both within the University of Otago Faculty of Dentistry, and in other education environments.

Research Projects

Do multifaceted admission processes predict performance of students in two Australasian dental programmes?

Investigators: Professor. A. Rich, Dr J. Rountree, Professor. G. Seymour (University of Otago), Dr D. Lekkas, Associate Professor T. Winning & Professor G. Townsend (University of Adelaide). Funded by the UMAT Consortium ($100,000)

The overall aim of this study is to investigate the relationship between the various components of multifaceted admission processes and academic and clinical performance of dental students (2005 – 2012) in two Australasian dental programmes. In addition, the study aims to identify what combination of admission components best predicts success of dental students. The long-term objective is to ensure that admission of dental students at the Universities of Otago and Adelaide continues to be undertaken using reliable, valid and efficient methods, that the skills of successful applicants are matched with our respective curricula requirements, and that the process is socially accountable.

Stress and mood states of New Zealand dental students

Investigators: Professor P. Brunton, Dr J. Broadbent, Dr L. Adam, Professor A. Rich, Mrs A. Meldrum (University of Otago) & Dr L. Jones (Massey University).

The aim of this study is to identify the stress, mood states and resilience of University of Otago Faculty of Dentistry undergraduate dental students. Information is being collected twice yearly using the Perceived Stress Scale Questionnaire (PSS), the Profile of Mood States Questionnaire (POMS-BI), and a brief resilience scale. The research results will provide important information that can be used, where appropriate, to create a healthier learning environment for students, and to help inform appropriate support interventions, if necessary.

Feedback processes in the clinical dental learning environment

Investigators: Dr L. Adam, Ms S. Ebbeling, Mrs A. Meldrum, Professor A. Rich & Dr A. McLean.

The aim of this project is to identify characteristics of effective feedback in the clinical dental education setting and to develop a set of resources for supporting and improving the approach to feedback by clinical teaching staff in the Bachelor of Oral Health (BOH) and Bachelor of Dental Surgery (BDS) programmes.
Professionalism for the undergraduate oral health professional

**Investigators:** Mrs R. Ahmadi, Dr L. Smith, Dr L. Adam, Mrs A. Meldrum & Dr S. Moffat.

This project is an investigation of Bachelor of Oral health (BOH) students' development of professionalism through their degree course. Data for the study comprises a review of the first year BOH curriculum in which the fundamentals of professionalism are taught, alongside interviews with staff and students from all years of the BOH programme. The results of the research will help inform the development of the BOH curriculum in regards to teaching professionalism.

Perceptions of stressors of undergraduate students

**Investigators:** Mrs H Olson, Dr L. Adam, Dr A. Tawse-Smith & Dr S. Moffat.

The aim of this study is to identify University of Otago Faculty of Dentistry undergraduate students' perceived stressors. Data collection is via the Dental Environment Stress Survey (DES). The research results will provide important information that can be used, where appropriate, to create a healthier learning environment for students, and assist students to develop strategies for managing stress in the future.

Measuring the attitudes of dental students towards social accountability

**Investigators:** Associate Professor L. Foster Page, Professor J. McMilian, Professor K. Lyons, Professor B. Gibson, V. Chen & C. Fisher

The aim of this project is to develop a social accountability measure for the dental environment. Data was gathered using a modified version of the Medical Students’ Attitudes Towards Underserved (MSATU) questionnaire. The instrument’s validity was assessed by an expert panel of eight academics and face validity was conducted with six students prior to a pilot study of BDS students. The instrument was consequently revised and further testing is required to ensure its robustness for measuring the concept of social accountability in New Zealand dental students.

Hanna Olson presenting her research at the 2016 College of Oral Health Academics (COHA) conference in Adelaide.

BDS Honours student Calum Fisher was awarded Best Oral Presentation in the Dental Education session at the 2016 SJWIR Research Symposium.
Grants and funding
Mrs R. Ahmadi, Dr L. Adam, Dr L. Smith, Mrs A. Meldrum. Professionalism for the Undergraduate Professional. University of Otago Teaching Development Grant $19,087
Dr L. Adam, Ms A. Meldrum, Prof. A. Rich, Dr A. McLean. Guidelines for providing feedback in the clinical dental setting. University of Otago Teaching Development Grant, $10,075

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Key Publications

Conference presentations and abstracts


Student research

Ebbeling S, Adam, L, Meldrum A, Rich A. Barriers to Learning in the Clinical Environment: A Dental Students’ Perspective (SJWRI Summer Studentship, 2015/16)


Garde, S., Tawse-Smith A. & Adam, L. Perceived stressors of undergraduate dental students at the University of Otago Faculty of Dentistry (Final year elective, 2015).

Ghazali, A., Tarif, Z., Brunton, P.A., & Loch, C. Repair vs. replacement of direct composite restorations: A survey of teaching and operative techniques in Oceania (Final year elective, 2016)