



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

SCHOOL OF PSYCHOLOGY

SEMINAR

(Open to the public)

Date:

Friday, 21 May

Time:

12.00—1.00pm

Room:

JG.17

Title of Presentation:

How are Pain and Anxiety Experienced and Remember?: Effects of Stress, Culture, and Relief

Pain and anxiety are ubiquitous parts of human experience, are known to interact either synergistically or competitively, and are influenced by a variety of cultural and other biopsychosocial factors. Health care patients with high anxiety are likely to have exaggerated memory of past pain and greater prediction of future pain. Previously, it has been unclear, however, if memory of anxiety is exaggerated in a manner similar to pain, and if anxiety and pain assimilate in memory over time. Highly stressful situations, such as the emergency oral surgery situation that is the focus of this investigation, provide a unique opportunity to study the interacting effects of pain and anxiety over time. Patients from Appalachia in the USA who were undergoing oral surgery with local anesthesia rated their anxiety and pain before, during, and 2+ weeks after the procedure. Measures of trait dental anxiety and fear of pain also were collected. Results lend support to the idea that memory of pain becomes exaggerated with time, and memory of anxiety becomes exaggerated for high anxiety patients. After relief from pain, ratings of anxiety and pain assimilate over time. These results highlight the important role both trait dental anxiety and state anxiety play in exaggerating recall and subsequent prediction of pain, especially for highly anxious patients. Findings are discussed in terms of cultural influences and the impact of memory of pain and anxiety on future health care behaviors. Moreover, implications are presented not only for oral surgery and other dental settings, but for medical procedures in general, and childbirth as well.

Daniel W. McNeil, Ph.D.



Daniel W. McNeil, Ph.D. – Dan is a visiting Fulbright Senior Scholar in the Department of Psychology at the University of Waikato, working in the Maori and Psychology Research Unit. Dr. McNeil is a Professor of Psychology, and a Clinical Professor of Dental Practice and Rural Health, at West Virginia University in the USA, where he also is an Eberly Professor of Outstanding Public Service. Dan's work is interdisciplinary, and focuses in part on the psychological implications of cross-cultural interactions, which is the focus of his Fulbright fellowship in New Zealand.

Professor McNeil supervises masters theses and doctoral dissertations as a faculty member in the training program in Clinical Psychology at West Virginia University. He directs the Anxiety, Psychophysiology, and Pain Research Laboratory at West Virginia University. His work is funded by the National Institutes of Health. Dan is a clinical researcher in health psychology, including behavioral dentistry, studying the experience and expression of emotion,