

We're only human: Understanding personality, anxiety, and computer self-efficacy.

Lynda Corner
Eastern Institute of Technology
lcorner@eit.ac.nz

Dr Michael Verhaart
(Supervisor)
Eastern Institute of Technology
mverhaart@eit.ac.nz

ABSTRACT

Technology is having a greater impact on tertiary education in New Zealand, particularly in traditionally non-technical subjects. As educational technology is progressively incorporated in tertiary programmes, academic staff from all disciplines are required to upskill. Academic staff can find technology training challenging due to infrastructure, resource, and other less tangible constraints. Personality traits and computer anxiety have been extensively studied in relation to computer self-efficacy, the perceived usefulness, and perceived ease of use of technology. This paper proposes an investigation into the relationships between personality traits, computer anxiety and educational technology training in a New Zealand polytechnic environment.

Keywords: personality traits; computer anxiety; computer self-efficacy; workplace training; technology training; New Zealand

1. INTRODUCTION

Training delivery can be a hit and miss affair, with workshops suiting some staff and not others, while online self-directed options are time consuming to create and to keep relevant. Many academic staff prefer a just-in-time (JIT) model of support, learning small snippets as they are required, rather than a more holistic approach prior to the technology's implementation. This can result in a narrow understanding of the technology, causing follow on issues (Day & Corner, 2014).

An alternative approach would be to deliver training that provides a greater depth of concept, with improved computer self-efficacy, curiosity and computer playfulness (Achim & Kassim, 2015).

A positive approach to technology, and reduced computer anxiety could benefit not only the user, but also the trainer, the students, and the institute as a whole.

What is the impact of personality traits, computer anxiety, and computer self-efficacy on educational technology training at a New Zealand polytechnic?

Aims & objectives

To identify the relationships between the Big Five personality traits (Mount & Barrick, 1998), computer-anxiety, and computer self-efficacy in academic teaching staff at a provincial New Zealand polytechnic.

- 1 Develop a measurement tool to assess the three foci
- 2 Examine beliefs and attitudes towards technology training
- 3 Identify staff personality traits, level of computer anxiety, and level of computer self-efficacy
- 4 Demonstrate a significant three-way correlation between personality traits, computer-anxiety, and computer self-efficacy
- 5 Develop a practical solution for training delivery to account for personality and computer-anxiety, that has the potential to reduce computer-anxiety and improve computer self-efficacy

2. METHODS

A mixed methods approach will be used for this project, using both quantitative and qualitative methods. Two questionnaires, two research sessions and focus groups form the bulk of the data collection techniques. Anecdotal or informal qualitative data may be recorded where and when appropriate.

Questionnaire 1 (Q1)

Developed from the Big Five Inventory, and the Computer Use Self Efficacy (CUSE) questionnaires, plus questions to assess computer anxiety. Additional questions will be added to assess the perception and understanding of RS1.

Questionnaire 2 (Q2)

The questions in this questionnaire will incorporate the CUSE questionnaire once again, and assess the perception and understanding of Research Session 2.

Research Session 1 (RS1)

Delivery of two small computer concepts. New to the participants, but useful in their educational technology use. Q1 responses will be gathered at the end of the session.

The poster is a multi-column layout with a central graphic. The title is at the top in a stylized font. Below the title, there are three main columns of text. The first column is titled 'Introduction' and discusses the challenges of training delivery. The second column is titled 'What is the impact of personality traits, computer anxiety, and computer self-efficacy on educational technology training at a New Zealand polytechnic?' and contains a central graphic with a person's head and a computer monitor. The third column is titled 'Methods' and describes the mixed methods approach. At the bottom, there is a 'Conclusion' section and a footer with the EIT School of Computing logo and the year 2016.

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Research Session 2 (RS2)

Delivery of two small computer concepts. New to the participants, but useful and unrelated to the concepts in RS1. Designed to consider the responses to Q1. Q2 responses will be gathered at the end of the session.

3. CONCLUSION

The study of training experiences may be considered a superficial undertaking, however it is the intangible nature of participants' personalities that can have a significant effect on computer self-efficacy, and therefore training outcomes.

The results intend to inform development of more effective training programmes, saving education advisors and service staff training hours from running repeat courses. A movement towards computer self-efficacy will encourage an innovative, curious institute that can deftly incorporate emerging technologies and adapt to change quickly. These outcomes would result in significant financial savings for the institute.

Further research in the form of a longer study of educational technology use, and subsequent computer self-efficacy of former participants is recommended. The development of a training framework could extend into a practical and

adaptable solution for a range of training applications and environments.

4. REFERENCES

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