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*Approval was obtained for this study from the Northern A Region, Health and Disability Human Ethics Committee on the 17<sup>th</sup> June 2014. Reference number, 14/NTA/85*

**PTSD and Cardiac Surgery: A randomised, controlled pilot study to  
assess the effect of a brief psychoeducational intervention.**

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**A thesis presented in partial fulfillment of the requirements for the  
degree of**

**Master of Arts**

**in**

**Psychology**

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## **Abstract**

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Cardiac surgery can be traumatic and stressful, and as a result many people experience psychological difficulties following treatment. Post Traumatic Stress Disorder (PTSD) is now being investigated in post-surgical populations with surprising results. Prevalence rates for PTSD following cardiac surgery range from 10% to 38%. Current knowledge regarding PTSD in post-surgical populations is limited, and many studies are concerned with risk factors and prevalence rates, and have not investigated the effects of psychological interventions. Thus, the magnitude of improvement in long-term outcomes resulting from the use of preventative interventions is unclear. With this in mind, the current study was created to investigate the effect of a brief psychoeducational intervention to prevent the symptoms of PTSD, and improve the adaptive coping behaviours of people who have survived cardiac surgery. This research question was addressed as a pilot study and utilised a randomised, controlled design that enlisted 33 participants awaiting cardiac surgery at a single site. The effectiveness of the intervention was evaluated by comparing it to the standard treatment patients are currently offered upon admission to the cardiac ward. Standardised self-report measures were collected during baseline, treatment and once at two-week follow-up. Results showed that, compared to pre-treatment levels, the majority of participants who received the intervention demonstrated a reduction in PTSD symptoms and an increase in adaptive coping behaviours related to recovery after cardiac surgery. Findings are interpreted in terms of previous literature and implications are discussed according to theory, research and clinical practice. Limitations of the study are outlined and recommendations for future research are discussed. Suggestions for future research include evaluating the effectiveness of the manual in a larger, more diverse group of people, extending follow-up periods and utilising more rigorous measures. Overall, preliminary findings support the effectiveness of the Coping After Cardiac Surgery Manual in treating people who have undergone cardiac surgery.

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## **Appendices**

A: Impact of Events Scale – Revised

B: Brief COPE

C: Recruitment article from the North Shore Times Advertiser

D: Study Information Sheet

E: Consent to Participate Form

F: The Coping After Cardiac Surgery Manual

G: Approval letter from Health and Disabilities Ethics Committee, Northern A  
region

H: Letter from Massey University Māori Research Advisor

I: Letter from Helen Wihongi, Māori Research Advisor – WDHB

J: Institutional approval letter from Auckland District Health Board.

## List of Abbreviations

ACH	Auckland City Hospital
ACS	Acute Coronary Syndrome
CABG	Coronary Artery Bypass Graft
CAPS	Clinician Administered PTSD Scale
CBT	Cognitive Behaviour Therapy
CDI	Cardioverter Defibrillator Implantation
CR	Cognitive Restructuring
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, 4.
EMDR	Eye Movement Desensitisation Reprocessing
ET	Exposure Therapy
HT	Heart Transplant
ICU	Intensive Care Unit
IE	Imaginal Exposure
IES-R	Impact of Events Scale – Revised
PMR	Progressive Muscle Relaxation
PTSD	Posttraumatic Stress Disorder
PTSS-10	Posttraumatic Symptom Scale – 10 items
SCID	Structural Clinical Interview for DSM – IV
STAI	State-Trait Anxiety Inventory
WHO	World Health Organization