Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Running head: EXPECTED CHANGE IN CBT

THE EXPECTED COURSE OF CHANGE FOR CLIENTS UNDERTAKING COGNITIVE BEHAVIOURAL THERAPY AS PREDICTED BY EXPERIENCED AND NOVICE CLINICIANS



Doctor of Clinical Psychology

Massey University

Palmerston North, New Zealand

Amber Fletcher

February, 2015

ACKNOWLEDGEMENTS

The completion of a doctoral degree requires commitment, strength and determination, not only from within, but from the people a candidate surrounds oneself with. The people that I list below have made navigating through challenges much more manageable and celebrating successes far more meaningful throughout my doctoral process.

First and foremost, I could not have completed my doctoral thesis without the support of my supervisors, Professor Emeritus Ian Evans, Cheryl Woolley, and Dr Steve Humphries. Ian, there is no doubt that I owe you many thanks for improving my abilities as an academic writer, but I also thank you for your continued support, patience, and belief in my capabilities as a researcher. Cheryl, I thank you for also being patient as well as for your ongoing encouragement, attention to detail, and dedication in supporting me to complete both my thesis and my internship. Steve, the sincere gratitude I have for you cannot be expressed in words but I will be forever grateful to you for enduring the constant emails, numerous queries, and days that I am sure you shared my frustrations (and almost tearing out of hair). Thank you for your knowledge, your patience, your calmness, and your kindness.

Thanks are also offered to Malcolm Louden for going beyond our expectations in realising our electronic task – it was instrumental in the success of this thesis. Thank you to Dr Gus Haberman for your support as a secondary supervisor to Steve, and for supporting me in succeeding with my confirmation process.

To my three biggest cheerleaders; my partner Phillip, my wonderful friend Amanda, and my mother, Joyce, thank you for the unwavering support, your attempts to understand my frustrations, the many treats, and for reminding me that "working hard is important, but there is something that matters more, believing in yourself." This all would have been unfeasible without you. I also extend my thanks to Yayo, my sisters Chrissie and Sonja, my stepfather Rob, Nana and Grandad, my beautiful nieces and nephew, Angel, Ryden, and Rubi-Rose, Andy and Diane, Livy, Veronica, Emma, Jared, Sam V, Sam R and Rebekah, Sarah and all my other friends and family that have provided me with support as well as multiple moments of joy that were very much needed.

For my clinical training in general I would like to thank my intern buddies, Rachael and Karen. I could not have wished for better support throughout the clinical process, and enjoyed knowing that there was someone there who completely understood what I was going through. Rachael in particular, I am so grateful to the programme for bringing your friendship into my life. Liz, I owe you my gratitude for your support early on in my clinical study and for your continued support throughout. Edwin, my office buddy for a short period and person to bounce my thoughts off, thank you for providing me with laughs over lame jokes, sharing your sweet treats and just offering a listening ear throughout the late stages of my internship and thesis. A huge thank you also goes to Jan Dickson for putting all her effort into reducing as much stress as possible throughout our training process; you are a beautiful, wonderful person. My clinical supervisor, Dr Erin Mooney, words cannot express how much I owe you for the wisdom, knowledge, and encouragement you still continue to provide me and for inspiring me to be the best clinician I can be. To the CAFS staff and other current and post clinical students, thank you for always motivating me, being compassionate, and validating my frustrations with challenges I faced.

ABSTRACT

Change, in the direction of improvement, is one of the main outcomes sought when treating mental health issues such as depression and anxiety. Historically, the focus of research has centred on change following the end of therapy, with recent discussions indicating that to promote better practice, understanding how the individual client changes, session-by-session, over the course of therapy is paramount. By incorporating a measure of progress at each session, it is proposed that clinicians will improve their ability to determine what reflects progress for clients, when intervention is required, and which aspects of therapy must be prioritised. Furthermore, the scientist-practitioner gap, where deficiencies in how practice influences research and how research influences practise have been identified and may be managed by actively collecting data about client progress. Practicing clinicians can then utilise research methods to both understand their own practice as well as provide insight into their practice that can influence further investigations. Using the primary therapy modality used to train New Zealand clinical psychologists, cognitive behavioural therapy (CBT), the present study aimed to provide an insight into what pattern of change was expected by both experienced and trainee clinicians when considering a client with depression and a client with anxiety undertaking a 12 session protocol of CBT, and how this compared to the current research literature. In addition, this study aimed to identify the pattern of change that was expected to occur for each client when considering overall symptoms, mood, and behavioural change. This was done by inviting experienced and trainee clinicians to complete an online task/questionnaire where participants were encouraged to plot session-by-session scores on three separate measures pertaining to each type of change using a specially designed graph. Despite the limitations of using hypothetical cases, findings showed that there

were no significant differences in predictions made by experienced or trainee clinicians, with clinicians overall predicting a decelerating curvilinear progression of change. When explored further, results indicated that clinician predictions differed from the research literature in a number of ways. Whether or not this can be attributed to lack of awareness of the research literature, or is reflective of the true nature of clinical practice, still requires further exploration.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
ABSTRACT	v
TABLE OF CONTENTS	vii
LIST OF FIGURES	ix
LIST OF TABLES	xi
CHAPTER ONE: INTRODUCTION	1
CHAPTER TWO: PSYCHOTHERAPY OUTCOME RESEARCH	
Classic Outcome Studies: Efficacy, Effectiveness, and Process-outcome Studies	
What Do We Mean by a Good Outcome?	
CHAPTER THREE: PERSPECTIVES ON CHANGE	
Theories and Principles of Change	
Other Aspects Related to the Pattern of Change	
Client Factors and Change	
Cognitive Behavioural Therapy and Change	
Interrelationships Between Overall Symptoms, Mood, and Behaviour Change	
Summary	
CHAPTER FOUR: THE NATURE OF THE CURRENT RESEARCH	
CHAPTER FIVE: METHOD	79
Ethics	79
Methodological Framework	79
Participants	81
Measures	82
Data Collection	94
Analyses	95
CHAPTER SIX: RESULTS	121
Demographics	121
Preliminary Analyses: Assumption Testing	122
Analysis 1: Clinician Awareness of Change Theories	124
Mr T	125
Analysis 2: Shape of Change over Sessions 2 -12	125
Analysis 3: Presence of Discontinuous Patterns of Change	145
Analysis 4: Continuous Change versus Discontinuous Change	146
Analysis 5: The Relationship between Overall Symptom, Mood and Behavioural Change	147
Analysis 6: Clinically Significant Symptom Reduction by the Final Session of Therapy	148

Analysis 7: Maintenance of Therapeutic Change at 3- and 6-Month Follow-up	149
Ms S	154
Analysis 2: Shape of Change over Session 2 -12	154
Analysis 3: Presence of Discontinuous Patterns of Change	173
Analysis 4: Gradual, Steady Change versus Variable Change	173
Analysis 5: The Relationship between Overall Symptom, Mood, and Behavioural C	hange.174
Analysis 6: Clinically significant symptom reduction by the final session of therapy	175
Analysis 7: Maintenance of therapeutic change at 3- and 6-month follow-up	176
CHAPTER SEVEN: DISCUSSION	183
Summary of Key Findings	183
Clinical and Practical Implications	193
Limitations	196
Conclusion	198
REFERENCES	201
APPENDIX A: ELECTRONIC TASK	238

LIST OF FIGURES

Figure 3.1. Example of an early rapid response using Beck Depression Inventory scores.
53
Figure 3.2. Example of a sudden gain using Beck Depression Inventory scores56
Figure 3.3. Example of a depression spike using Beck Depression Inventory scores58
Figure 5.1. Examples of linear, quadratic, and cubic curves
Figure 5.2. Example of predictions reflecting a smooth and continuous predicted trend.
111
Figure 5.3. Example of predictions reflecting a discontinuous predicted trend111
Figure 5.4. Original graph and graph adjusted to show scores progressing in the same
direction for client with depression
Figure 5.5. Original graph and graph adjusted to show scores progressing in the same
direction for client with anxiety114
Figure 5.6. Pre- and post-test scores and cut-off a, cut-off b, and cut-off c indications for
participant x (Jacobson & Truax, 1991; p14)117
Figure 6.1. Residual plot for negative affect score (PANAS-NA scores)122
Figure 6.2. Standardised residual scatter plot for negative affect across time (PANAS-NA
change)
Figure 6.3. Average BDI-II, PANAS-NA and No. of Activities score for Session 12, 3
month follow-up and 6 month follow-up.

Figure 6.4. Average BAI, PSWQ and percentage of activities score for Session 12, 3	
month follow-up and 6 month follow-up	

LIST OF TABLES

Table 6.1. Results of Fitting a Taxonomy of Multilevel Models for Change on the BDI-II
Across the Course of Therapy126
Table 6.2. Results of Fitting a Taxonomy of Multilevel Models for Change on the
PANAS-NA Across the Course of Therapy134
Table 6.3. Results of Fitting a Taxonomy of Multilevel Models for Change in the Number
of Activities Participated across the Course of Therapy
Table 6.4. Frequency of Each Sequence of Measured Dimension Expected for a Client
with Depression147
Table 6.5. Significance of Mauchly's Test of Sphericity for Session 12, 3 Month Follow-
up and 6 Month Follow-up for Overall Symptom Change (BDI-II), Negative Affect
(PANAS-NA) and Number of Activities149
Table 6.6. Results of Fitting a Taxonomy of Multilevel Models for Change on the BAI
Across the Course of Therapy156
Table 6.7. Results of Fitting a Taxonomy of Multilevel Models for Change on the PSWQ
Across the Course of Therapy164
Table 6.8. Results of Fitting a Taxonomy of Multilevel Models for Percent of Activities
Participated In over the Course of Therapy168
Table 6.9. Frequency of Each Sequence of Measured Dimension Expected for a Client
with Anxiety175

Table 6.10. Significance of Mauchly's Test of Sphericity for Session 12, 3	Month Follow-
up and 6 Month Follow-up for Overall Symptom Change (BAI), Level of	Worry (PSWQ)
and Percentage of Activities Participated In	176