

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.

“Help Yourself to CBT”

Mechanisms of Change within a Group Guided Self-Help Programme Targeting Low

Mood in New Zealand

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of

Clinical Psychology

Massey University, Albany, New Zealand

Inga Forman

2015

## ABSTRACT

This thesis explores the processes of change within a Low Intensity Cognitive Behaviour Therapy (LICBT) intervention targeting low mood in a community sample of adults in New Zealand. Low intensity interventions (e.g. self-help programmes) are a relatively new area of interest in the area of psychological treatment. They aim to increase people's access to evidence based methods of therapy whilst removing many of the major issues associated with traditional treatment methods, such as long waiting lists, financial limitations, and inaccessibility to many in the wider community (Lovell & Richards, 2000). LICBT interventions have been shown to significantly improve outcomes for mild to moderate depressive symptoms across different samples (McKendree-Smith, Floyd & Scogin, 2003).

The current study assessed change processes within the guided self-help programme 'Living life to the Full' (LLTTF, Williams, 2008). Due to methodological issues, the study was not able to soundly address hypotheses regarding the effectiveness of the programme. However, the statistical significance of changes across outcome measures were examined along with their *clinical* significance at an individual level. Participants showed statistically significant reductions in psychological distress from baseline to post-programme. Results for depression and quality of life were not significant. When results were examined at a single case level for clinical significance, a number of participants showed clinically significant change across the three main outcome measures.

An analysis of individual change processes was also completed, with the examination of early rapid response patterns for individual participants. Early rapid response patterns occurred for a number of participants, supporting preliminary evidence that certain change patterns apparent in CBT research may also occur in LICBT interventions. A link was also found between early rapid responding and more positive post programme outcomes. Group process results showed that as predicted, the low intensity nature of the programme is likely to have affected the perceived group environment and relationship to the group facilitator.

The LLTTF programme was positively evaluated by the majority of programme completers and though the sample size was small, results suggest this type of intervention is an effective platform from which to further develop low intensity therapeutic paradigms in New Zealand.

## ACKNOWLEDGEMENTS

I am grateful to all of the many, many people who have contributed to the conceptualisation, development, and finally the completion of this doctoral thesis.

Firstly, I would like to extend a huge thank you to all of the individuals who gave their time to take part in this research.

I would like to give a special thank you to Amy Montagu, in whom I had the very best research partner. Through our initial research meetings and confirmation, to the running of the programme, and presenting this research at multiple conferences, you have been awesome! It was invaluable having someone alongside me during this entire process as both a friend and a colleague to share in both the highs and the lows. With your eagle eye for detail and my PowerPoint skills, we made a great team. I would do research with you again in a heartbeat. Also, a big thank you to the other DClinPsych girls, in particular, Shannon Martin and Louise Cooper. The countless hours in the “stuffy room” and the support, ideas, motivation, and entertainment you provided to me were vital to the completion of this project.

Thank you to my supervisors Dr Beverly Haarhoff and Dr Mei Wah Williams. Your guidance through the many stages of this project and the feedback along the way have been much appreciated. A special thanks to Bev, my primary supervisor, for spending all those evenings with me supervising the running of the LLTTF programme and helping me move tables!

I would also like to extend a thank you to Dr Paul Merrick for his advice during the analysis process. His level-headed contributions in times of uncertainty were much appreciated.

I wish to acknowledge Professor Chris Williams for speaking with me regarding the development of this project and providing the materials at reduced cost. I appreciate your contributions, and your guidance in getting this research off the ground was most valuable.

Thank you to Harvey Jones for making us a fabulous website through which to register and screen our participants.

Thank you to my mother and father for supporting my long progression through study with nothing but optimism and motivation. You were both hugely encouraging and were always at the end of a phone with a listening ear if needed. I will always be grateful for your support and love.

Last but not least, thank you to my partner. You have always been 100% supportive and keen for me to make the most of this opportunity. You listened and gave suggestions and always had faith I could do this even when I was unsure myself, so for that I will always be grateful. I look forward to many years ahead with evenings and weekends free to spend with you!

## TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	vi
LIST OF APPENDICES	xi
LIST OF TABLES	xii
LIST OF FIGURES	xiii
INTRODUCTION AND OVERVIEW.....	1
Depression.....	1
Aims.....	2
Organisation of the thesis.....	3
CHAPTER 1- COGNITIVE BEHAVIOURAL THERAPY.....	5
Cognitive Behavioural Therapy: Therapeutic Process.....	7
Low Intensity Cognitive Behavioural Therapy (LICBT).....	12
A ‘Stepped Care’ Model of Treatment Delivery.....	15
Summary.....	19
CHAPTER 2- SELF-HELP.....	20
Delivery of Self-Help.....	21
Psychological Wellbeing Practitioner (PWP).....	21
Therapeutic Content.....	23
Summary.....	29
CHAPTER 3-GROUP THERAPY.....	30
LICBT Group Therapy.....	31
Guided Self-Help Groups.....	32
Measurement of Group Processes.....	35
Cohesion.....	37
Group Climate.....	37
Cohesion to the Therapist.....	39
LICBT Group Processes.....	41
Summary.....	43
CHAPTER 4- MEASUREMENT OF MECHANISMS OF CHANGE.....	44

Discontinuous change Processes.....	45
Early rapid response in CBT.....	46
Early rapid response in LICBT.....	47
Summary.....	48
CHAPTER 5- THE CURRENT STUDY.....	50
Living Life to the Full Programme.....	50
Group Processes.....	51
Clinical Significance and Change Processes.....	53
Further Considerations.....	53
A New Zealand context.....	55
Summary.....	58
Research Hypotheses.....	59
CHAPTER 6- METHODOLOGY.....	61
Participants.....	61
Recruitment.....	62
Guided Self-Help Programme.....	65
Group Facilitator.....	68
Procedure.....	70
Group Facilitator Training.....	70
Session Structure.....	71
Ethical Considerations.....	73
Measures.....	74
Outcome Measures.....	75
Patient Health Questionnaire 9 (PHQ-9).....	75
Clinical Outcomes in Routine Evaluation (CORE-10).....	75
Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-SF).....	77
Between Session Work Measure .....	77
Group Process Measures.....	77
Group Climate Questionnaire Short Form (GCQ-SF).....	78
Cohesion to the Therapist Scale (CTS).....	79
Post Intervention Feedback.....	79
Client Satisfaction Questionnaire (CSQ-8).....	79
Additional Qualitative Feedback.....	80



Analytical Approach.....	82
Initial Design.....	82
Design.....	82
Analysis of Outcome.....	83
Analysis of Process.....	84
Replication.....	84
Repeated Observations.....	84
Visual Analysis.....	85
Clinically Significant Change.....	85
CHAPTER 7- RESULTS.....	87
Overview.....	87
Preliminary Data Screening.....	88
Statistical Software Used.....	88
Missing Data.....	88
Missing Items on Outcome Measures.....	88
Absences.....	89
Normality.....	89
Outliers.....	89
Reliability Analysis.....	90
Descriptive Statistics.....	91
Bivariate Analysis of Outcome Measures.....	91
Analysis of Aggregated Outcome.....	93
Hypothesis 1.....	93
Sample for Analysis.....	93
Changes in Depression across LLTTF.....	93
Changes in Psychological Distress across LLTTF.....	94
Changes in Quality of Life across LLTTF.....	95
Summary.....	95
Hypothesis 2.....	95
Analysis of Individual Trajectories of Change.....	97
Overview.....	97
Hypothesis 3.....	97
Sample for Analysis.....	98

Individual Changes in Depression.....	98
Patterns of Change in Depression.....	100
Follow up.....	102
Individual Changes in Psychological Distress.....	102
Patterns of Change in Psychological Distress.....	104
Follow up.....	105
Individual Changes in Quality of Life.....	107
Patterns of Change in Quality of Life.....	107
Follow up.....	109
Summary.....	111
Hypothesis 4.....	111
Early Rapid Response.....	112
Depression.....	113
Psychological Distress.....	114
Quality of Life.....	114
Summary.....	115
Exploration of Group Change Processes.....	115
Hypothesis 5.....	115
Group Climate.....	116
Engagement.....	116
Engagement Subscale Raw Item Analysis.....	117
Conflict.....	118
Conflict Subscale Raw Item Analysis.....	118
Avoidance.....	119
Avoidance Subscale Raw Item Analysis.....	120
Hypothesis 6.....	121
Group Climate and Outcome.....	121
Summary.....	123
Hypothesis 7.....	124
Cohesion to the Facilitator.....	124
Positive Qualities.....	124
Cohesion to the Facilitator Raw Item Analysis.....	125
Hypothesis 8.....	126

Positive Qualities and Outcome.....	126
Summary.....	127
Participant Adherence and Satisfaction with LLTTF.....	127
Hypothesis 9.....	127
Completion of Self-Help Materials between Classes.....	127
Hypothesis 10.....	128
Participant Satisfaction with the Programme.....	128
Feedback from Participants who Withdrew from the Programme.....	129
CHAPTER 8- DISCUSSION.....	130
Overview.....	130
Review of Research Hypotheses and Findings.....	131
Outcome.....	131
Individual Process.....	132
Group Process.....	136
Participant adherence and satisfaction.....	142
Contributions to the Literature.....	150
Limitations of the Current Research.....	153
Recommendations for Future Research.....	158
Final Conclusions.....	162
REFERENCES.....	166
APPENDICES.....	194

## **LIST OF APPENDICES**

Appendix A-1: 'Help Yourself to CBT' Research Study Participant Information Sheet

Appendix A-2: 'Help Yourself to CBT' Research Study Participant Consent Form.

Appendix A-3: Recruitment Screening Questions.

Appendix B-1: Risk Protocol.

Appendix C-1: Results: Clinically Significant Change on Outcome Measures.

Appendix C-2: Results: Group Process Individual Results.

Appendix D-1: Participant Post-Programme Additional Feedback Questions.

## LIST OF TABLES

### Chapter 6

6.1	Summary of participant demographics.....	65
6.2	Overview of session content for the Living Life to the Full programme by Professor Chris Williams (Williams, 2008).....	69
6.3	Selected Group process measures and their component- perspective combinations (Johnson et al., 2005).....	78
6.4	Measurement points for outcome and process measures across baseline, intervention and follow up phases.....	81

### Chapter 7

7.1	Pearson product-moment correlations between outcome measures of depression, psychological distress and quality of Life.....	91
7.2	Medians, means, and standard deviations for scores on the PHQ-9, CORE-10, Q-LES-Q-SF outcome measures across the LLTTF intervention.....	92
7.3	Depression severity scores across baseline, post-programme and follow up measurement points, and clinical significance of changes.....	99
7.4	Severity of psychological distress (CORE-10) at baseline, post-programme, and follow-up, along with clinical significance of changes...	104
7.5	Quality of life (Q-LES-Q-SF) reports at baseline, post programme, and follow up, along with clinical significance of changes.....	108

## LIST OF FIGURES

### Chapter 6

6.1	Flow chart of participant progression through the programme.....	65
-----	--	----

### Chapter 7

7.1	Standardised representation of median scores for PHQ-9, CORE-10 and Q-LES-Q-SF outcome measures across the LLTTF programme.....	97
7.2	Individual depression severity scores (PHQ-9) across baseline, intervention, and follow up measurement points.....	101
7.3	Individual psychological distress scores (CORE-10) across baseline, intervention and follow up measurement points.....	106
7.4	Individual quality of life scores (Q-LES-Q-SF) across baseline, intervention and follow up measurement points.....	110
7.5	Mean engagement subscale scores on the group climate questionnaire- short form (GCQ-SF) across the LLTTF programme.....	117
7.6	Mean conflict subscale scores on the group climate questionnaire- short form (GCQ-SF) across the LLTTF programme.....	119
7.7	Mean avoidance subscale scores on the group climate questionnaire- short form (GCQ-SF) across the LLTTF programme.....	120
7.8	Mean participant scores on the positive qualities subscale of the cohesion to the facilitator scale across the LLTTF programme.....	125



## INTRODUCTION AND OVERVIEW

### Depression

The term *depression* is broadly used to refer to the depressive disorders specified in the Diagnostic and Statistical Manual, 5<sup>th</sup> Edition (DSM-5, American Psychiatric Association, 2013). Depressive disorders are characterized by the presence of a sad, empty or irritable mood in addition to physical and cognitive changes which make it difficult for an individual to function (APA, 2013). Major depressive disorder is one of the most common conditions within the category and is characterised by episodes involving symptoms such as depressed mood, a diminished interest in pleasurable activities, loss of energy, feelings of guilt or worthlessness, along with changes in appetite, sleep, psychomotor activity and concentration. Recurrent thoughts of death or suicide may also be present. Symptoms must be present for at least two weeks in duration for a diagnosis of major depressive disorder to be made (APA, 2013).

Major Depressive disorder presents a widespread problem globally. It is a leading cause of economic burden in the developed world, due to its crippling effects on individuals' ability to work, and it is the primary cause of disability for both males and females (World Health Organisation, 2008). Depression is a debilitating disorder for many, with more than three quarters of those with depression experiencing multiple episodes (recurrent depression) (Hollon & Beck, 2004). Additionally, for up to a quarter of individuals with depression, episodes will last up to two years (chronic depression).

Depression is estimated to affect up to one in six New Zealanders (Ministry of Health, 2009). New Zealand mental health surveys have found that the lifetime prevalence for any mood disorder in the general New Zealand population is 20.2% (Oakley Browne,



Elisabeth Wells, Scott, & Mcgee, 2006), and the lifetime prevalence for major depressive disorder specifically is 16% (Wells et al., 2006). Lifetime prevalence rates of major depressive disorder in New Zealand were estimated to be 20.3% for females and 11.4% for males (Oakley Browne et al., 2006).

Given the impact of depressive disorders globally, including in New Zealand, the importance of continued research into the development of interventions for depression is clear. Cognitive Behavioural Therapy (CBT) is currently regarded as the most empirically supported therapeutic approach, with applications to a wide variety of mental health problems, including depression (Craske, 2010). Because CBT is one of the most practised and researched therapeutic approaches, its application is fast-growing and constantly evolving (Beck, 2005). It is the continued advancement and wider dissemination of this form of therapy which provides the basis for the current thesis.

### **Aims**

The primary aims of this thesis are to examine the effectiveness of a low intensity CBT group programme for low mood in a New Zealand context. A subsequent evaluation of individual change trajectories and discontinuous change patterns across different individuals will be made, with regards to how these change patterns may contribute to individual outcomes. The development of group processes and their relationship to outcomes will also be examined. Lastly, an assessment of feedback regarding how the low intensity intervention is perceived by participants will be made. Of particular focus will be the use of programme materials outside of group sessions, and overall satisfaction with the programme.

## **Organisation of the Thesis**

Chapter one will detail the development of CBT, along with how changes are being made to the way in which the efficacy of CBT is determined through empirical research. Chapter two will examine a new form of CBT, low intensity CBT (LICBT). Empirical research on the use of LICBT treatments will be presented, in particular the literature regarding the self-help subset of LICBT, which is the focus of the intervention under investigation. How LICBT deviates from the traditional forms of CBT therapy will be detailed in terms of the mode of delivery and the therapeutic content itself.

The use of groups to deliver this new form of therapy is a relatively new concept in the literature. Chapter three critically examines the research and results regarding the use of LICBT with groups to date to make way for the current research. A particular focus in this instance is whether the group processes observed in previous studies regarding group climate and cohesion to the therapist occur as might be expected in the current group in consideration of differences in group facilitator role, group size and the low intensity nature of the therapeutic content.

Chapter four will discuss discontinuous change patterns which have been thoroughly investigated in traditional CBT literature, and based on recent preliminary findings, have also been noted to occur in some low intensity interventions. The way such processes may relate to the current LICBT intervention will be discussed. Chapter five will detail the current study.

Chapter six outlines the methodology of the current research project. This is divided into two sections, the first of which pertains to a description of the Living Life to the

Full programme, and describes participant characteristics, recruitment processes, ethical considerations, and a presentation of the outcome and process measures used in the study. The second section presents the analytical approach taken in the current study, including the analysis of outcome *and* process, with a particular focus on *clinically* significant change.

Chapter seven presents the results of the current research, which include an analysis of aggregated outcomes, analysis of individual trajectories of change across the programme, an examination of early response patterns in the results, and an exploration of group change processes.

Lastly, chapter eight presents the discussion of the current results. This covers a review of the research hypotheses and findings. The chapter also discusses the various contributions made by this study to the LICBT literature, implications of these results for clinical practise in New Zealand, limitations of the study, and recommendations for future research.

## CHAPTER ONE: COGNITIVE BEHAVIOURAL THERAPY

The prevalence of depression is on the rise globally and there has been a call from the World Health Organisation for a coordinated effort to combat this disorder at a national level (World Health Organisation, 2008). Due to the increase in prevalence of depression, there is increased pressure on service providers to manage the growing number of individuals requiring therapeutic services. Traditional evidence-based treatment approaches for depression, such as Cognitive Behavioural Therapy (CBT), although effective, are time consuming and costly processes, with the recommended number of CBT sessions required to treat depression in many cases being between twelve and twenty sessions (Williams & Chellingsworth, 2010). Due to an increase in the number of people being referred to services for CBT treatment and the resulting strain on resources, the implementation of client selection criteria within many service providers has been necessary. Factors such as severity and chronicity now often determine whether or not people receive treatment priority. This has resulted in those who may benefit most from CBT treatment (e.g. individuals with mild to moderate symptoms of depression and anxiety) being made to wait longer for treatment, potentially exacerbating their issues, so that those, who may in fact be less responsive to CBT (i.e. those with more severe issues), can receive treatment (Williams & Chellingsworth, 2010).

Whilst studies evaluating traditional CBT have amassed considerable evidence showing both efficacy and effectiveness, due to the factors outlined above, CBT in its current form remains unsuitable or unattainable for many. This has led to efforts to develop additional evidence-based therapeutic approaches in order to reach more people in need.

The importance of this movement has been stressed across much of the research (Lovell & Richards, 2000; Bower & Gilbody, 2005; Clark et al., 2009). The need for increased therapeutic opportunities has been highlighted by Wang, Demler, & Kessler (2002), who state that in the United States, only one in six individuals with a severe mental illness (e.g. major depressive disorder) receive treatment which would be classed as 'minimally adequate'. Minimally adequate treatment was defined as either a prescription of appropriate medication (e.g. antidepressant or anxiolytic) in addition to four sessions with a mental health specialist, or eight or more visits with a mental health specialist alone. These figures highlight the number of people (five out of six) who may not receive any treatment at all. This study referred only to severe mental illness and did not encompass those suffering with mild or moderate problems. The situation in New Zealand is similar. A 2006 survey showed that New Zealand has a high prevalence of mental illness compared with others in the developed world, with only the United States having a higher prevalence of any disorder (Wells et al., 2006). The survey indicated that only 58% of individuals in New Zealand with a serious mental health problem access mental health services. The rate of mental health sector contact was lower for minority Māori and Pacific peoples despite higher prevalence rates for mental health disorders within these ethnic populations. In addition, across all countries surveyed, including in New Zealand, more severe problems were more likely to be treated compared to mild and moderate problems. Based on this, it is clear that the scope of efforts to diversify CBT to make it more accessible is vast.

CBT is one of the most utilised and well-researched forms of psychotherapy, stemming from its development in the 1970s (Mansell, & Taylor, 2012). Traditional CBT has been shown to be effective in the treatment of, and prevention of relapse for, a variety of

clinical presentations (Butler, Chapman, Forman, & Beck, 2006). The National Institute for Clinical Excellence (NICE) undertakes research into the efficacy of different therapeutic approaches and makes recommendations to the United Kingdom's National Health Service (NHS). The NICE guidelines from previous years (e.g. NICE 2004a, 2004b, 2005b) have all made recommendations for the use of CBT therapies in the treatment of disorders such as depression, schizophrenia, eating disorders, generalised anxiety, panic, and post-traumatic stress (Westbrook, Kennerley, & Kirk, 2007). With regards to depression in particular, CBT continues to perform well across tightly controlled efficacy trials when compared with wait list controls, antidepressant medication, and in some cases when compared to other psychotherapies (NICE, 2004b). In addition, when used in conjunction with antidepressant medication, CBT produces greater improvements in the reduction of depressive symptoms compared to medication use alone, though this may not extend to post treatment follow-up (NICE, 2004b).

### **Cognitive Behavioural Therapy: Therapeutic Process**

Prior to discussing the newer developments in CBT interventions a brief review of the central tenets of traditional CBT will be made. The development of CBT spans three waves, with the major concepts being rooted in behavioural and cognitive therapy, known as the 'first wave'. From these two separate schools of thought, regarding how experiences could shape behaviour (behavioural therapy), and how biases in thinking styles could contribute to psychological distress (cognitive therapy), emerged CBT (Westbrook et al., 2007).

A second wave of development occurred due to the identification of obvious limitations in these purely behavioural or purely cognitive approaches and led to the merging of

these two schools of thought into what is now called cognitive behavioural therapy (CBT). Limitations centred largely on the fact that each school of thought was thought to be ignoring an important aspect of influence over individuals' psychological state. CBT is now an integration of both cognitive and behavioural principles. For example, CBT considers behaviour to be important in influencing our thoughts and emotions, thus behavioural empiricism became a core part of CBT therapy (e.g. behavioural experiments) (Westbrook et al., 2007; Mansell, & Taylor, 2012). The cognitive aspect maintains that an individual's cognitions (thoughts, beliefs, and interpretations) influence their reactions to situations, and this also forms the basis of CBT therapy. This is known as cognitive specificity and refers to how particular thoughts determine the impact of events on individuals' emotional and behavioural reactions (Wills & Sanders 2012). Different themes of appraisal have been shown to be more closely related to different problems and have led to the development of a number of different disorder specific conceptualisations. For example, the theme of loss and defeat is linked to depression, while themes of danger and threat are related to anxiety. Identifying such themes in individual clients provides a starting point for intervening with these various problems (Wills & Sanders, 2012).

As CBT expanded treatment protocols to include more chronic and complex presentations, a third wave of CBT therapies emerged in the 1990s. These further extended the basic CBT concept and integrated other theoretical influences, for example the use of meditation in mindfulness-based cognitive therapy (MBCT), and mindfulness practise in Dialectical Behaviour Therapy (DBT) (Mansell, & Taylor, 2012). A major change in this area was also the new emphasis on acknowledging and accepting, but not engaging with, unhelpful thoughts, rather than challenging them as was the case

previously (Moorey, 2012). This can be seen in Acceptance and Commitment Therapy (ACT) (Wills & Sanders, 2012). These newer models have been shown to be particularly appropriate for more complex difficulties for which the previous models of CBT were not so apt at dealing with (Wills & Sanders, 2012). This includes fundamental personality difficulties, traumatic histories, and markedly inflexible anxiety problems.

Beck (1995) asked how, with all these developments, does CBT remain recognisable? The answer is that despite all the diversity in modern CBT, there are underlying principles which apply across the board (Mansell, & Taylor, 2012). Firstly, CBT emphasises that therapy is collaborative between the therapist and the client. This involves both parties working together to understand the client's difficulties, and bring about change through use of information provided by both parties in what is termed 'guided discovery'. Secondly, CBT emphasises the present and how current problems can be managed. Third, empiricism is an important principle of CBT, based on the idea that personal beliefs are developed through our experiences with the world. It is postulated that clients should be encouraged to test out beliefs that they hold in real world situations. This can be seen, for example, through the use behavioural experiments in CBT. Lastly, CBT is underpinned by the concept of rationalism, that behaviour and feelings can be explained by an individual's thinking. Understanding these thought processes allows for change in other personal domains to occur.

These underlying principles of CBT have remained constant throughout its development. They posit an overarching rationale for how CBT is practised, and provide an operationalised form of therapy which can be applied to a multitude of



psychological problems (Mansell, & Taylor, 2012; (Beck, 1995). CBT practice is therefore based on theory relating to a specific disorder, and the way in which this can be adapted to the conceptualisation of an individual client (Beck, 1995). A CBT session is generally highly structured, the idea being that clients feel more comfortable when they know what to expect both within single sessions and across the therapy process as a whole (Beck, 1995). In collaboration with one another, the therapist and the client then begin to develop a conceptualisation based on the client's presenting problems. This conceptualisation allows for connections to be made between CBT theory regarding how problems may be developed and maintained, and the individual experience of the particular client (Westbrook et al., 2007).

After an initial conceptualisation has been developed with the client, a CBT therapy session often includes setting an agenda to structure the session, doing a mood check, reviewing the client's presenting problems, and setting goals for therapy (Beck, 1995). The therapist may then explain the CBT model to the client (e.g. using a 5-part model; Greenberger & Padesky, 1995) and discuss how this may be used to help the client with their particular problem. The length of therapy may also be discussed. For the treatment of depression it is suggested that twelve to twenty sessions may be required, though this varies depending on the presenting problem (Williams & Chellingsworth, 2010). Time may also be spent educating the client about the problems they have been having in an effort to normalise and validate their concerns, and setting homework to complete over the coming week regarding what has been covered in therapy (Beck, 1995). Subsequent sessions follow a similar framework, while also including bridging from the previous session.

The therapeutic content of traditional CBT sessions is made up of a combination of cognitive and behavioural techniques aimed at altering thoughts and behaviours which are contributing to the clients presenting problems (Westbrook et al., 2007). In terms of cognitions, the main role of the therapist is to help the client identify and record the different thoughts and images they experience (Westbrook et al., 2007). Such thoughts may include certain thinking errors or biases which can cause problems when these information processing styles become dominant for an individual. One of the main goals here is to teach clients to view cognitions as mental events, not necessarily as the 'truth', so they are able to gain more control over these thoughts. This control may come in the form of gathering evidence for and against the negative thoughts and thus gaining a new perspective on their initial negative conclusions. This is often where behavioural techniques fit into CBT. Through behavioural experiments, the validity of negative automatic thoughts is able to be determined. Actually experiencing the confirming or disconfirming of these thoughts makes the process more memorable for clients and new cognitions are thought to be more likely to connect with the individual if they are directly experienced (Westbrook et al., 2007).

CBT maintains that through developmental experiences, people develop beliefs about themselves, others and the world (Beck, 1995). These are known as 'core beliefs' and are said to be robust and rigid ideas which are difficult to shift. Individuals tend to focus on information which confirms these beliefs, and discount information to the contrary. This leads to the maintenance of beliefs which may be inaccurate (Beck, 1995). Core beliefs influence a chain of thinking in response to situations. They influence the development of rules, attitudes and assumptions which determine how certain situations are viewed. In turn, this affects how the individual thinks, feels and behaves (Beck,

1995). CBT focuses on the notion that dysfunctional core beliefs are able to be unlearned and replaced with functional beliefs. Therapy initially focuses on symptom alleviation through targeting surface thoughts. The focus then moves to the modification of core beliefs for more long term change and relapse prevention (Beck, 1995).

### **Low Intensity Cognitive Behavioural Therapy (LICBT)**

In continuation of the progression of CBT, a new development has emerged in the form of Low Intensity Cognitive Behavioural Therapy (LICBT). LICBT is a therapeutic approach which aims to increase access to evidence-based methods of therapy, while removing many of the major obstacles associated with traditional treatment methods, such as; a lack of access to skilled practitioners, restricted entry criteria, and financial limitations. These can all result in long waiting lists and make such treatments inaccessible to many in the wider community (Lovell & Richards, 2000). LICBT was created in an effort to extend the availability of CBT to meet rises in demand for therapeutic services due to increases in the prevalence of depression. It is driven by the aim to improve access to evidence-based interventions without compromising on the quality and effectiveness of the services received. LICBT originated in the United Kingdom (UK), where innovative government initiatives introduced this form of intervention as a core component of mental health care in the National Health Service (Bennett-Levy, 2010). Since its beginnings within the UK, low intensity interventions have subsequently emerged internationally in countries such as Australia, Sweden, Canada, Holland, United States of America, and Hong Kong (Bennett-Levy, 2010; Cheng & Dizon, 2012).

‘Low Intensity’ refers to treatment which is based in evidence, but which is adapted to be provided in a way where usage of specialist therapist time is reduced, e.g. through the implementation of brief therapies, or where interventions are delivered in a more cost effective way e.g. the use of group programmes (Bower & Gilbody, 2005; Lovell & Richards, 2000). LICBT aims to use “the minimum amount of intervention to create the maximum gain;” the intention being, to reserve first access to traditional high intensity therapy for those suffering from more severe problems (Bennett-Levy, Richards, & Farrand, 2010, p.8). As such, low intensity treatments are not intended to be separate from existing mental health services, instead they are intended to be delivered within the context of a treatment system which enables the provision of varying degrees of treatment and is designed to ensure people receive the most appropriate level of treatment for their needs (e.g. a stepped care model) (Baguley et al., 2010).

In terms of cost-effectiveness, a number of benefits of low intensity approaches to treatment have been identified. These include, the use of specialist low intensity workers to deliver interventions in the place of therapists, and the use of brief one to one sessions or groups to deliver the support components of these interventions. This allows low intensity workers to potentially see a greater number of clients (IAPT, 2011). The generally inexpensive nature of therapy materials in LICBT self-administered interventions (e.g. self-help), as well as their potential to be widely distributed (e.g. computerised CBT) or re-used by the individual, are also evidence for the cost effectiveness of these interventions (Williams & Whitfield, 2001). There is discussion that LICBT approaches to treatment may have wider economic and social cost benefits in that they allow a greater number of individuals to access treatment and may also reach individuals who would not pursue traditional therapeutic treatment options

(Williams & Whitfield, 2001). This is predicted to result in long-term reduced social costs related to supporting individuals who have mental health issues and because of this are more likely to have difficulty obtaining or staying in employment, are more likely live in insecure housing, and suffer from more physical health issues (United Kingdom Department of Health, 2011, United Kingdom Department of Health, 2012).

However, the cost-effectiveness of low intensity approaches to treatment compared with more traditional approaches is yet to be established. It cannot be said that because equivalent clinical outcomes have emerged from a number of studies looking at low intensity interventions that they are more cost effective than usual care options simply due to reduced therapist input (Bower and Gilbody, 2005). Possible cost-shifting must be considered, where additional costs may fall to the individual or wider health system. Specifically, there is evidence to suggest that some individuals may require further treatment after completing a low intensity intervention (Treasure, Schmidt, Troop, Tiller, Todd & Turnbull, 1996). Costs involved with individuals engaging in other treatment concurrent to low intensity interventions must be taken into account (e.g. medication), in addition to possible costs resulting from individuals who, while in treatment, are assessed as requiring more intensive intervention. The latter may involve costs to do with with changing treatment providers or services, as well as the cost of time spent making such assessments (Bower & Gilbody, 2005). Issues such as low take up and high rates of attrition, as well as low rates of adherence to treatment, are all likely to affect costs in the roll out of LICBT interventions (Shafran et al., 2009; de Graaf et al., 2007). Research is yet to comprehensively address the cost effectiveness of low intensity interventions with respect to the wider system within which they operate.

### **A 'Stepped Care' Model of Treatment Delivery**

The efficacy of CBT has been well supported in research trials to date (Westbrook et al., 2007). Focus is now shifting to examine the efficacy of CBT in service based evaluations, that is, how it fares in uncontrolled clinical services compared to tightly controlled research environments (Westbrook et al., 2007). This is an attempt to bridge the gap that continues to exist between practice and research, and combat criticism of the highly controlled nature of CBT research, which results in questions about its generalisability to real world environments (Barkham & Mellor-Clark, 2003). One of the most prominent examples of such a naturalistic CBT trial is the Improving Access to Psychological Therapies (IAPT) initiative in England (Gyani, Shafran, Layard, & Clark, 2011).

IAPT was launched in 2007 in an attempt to organise the mental health system in such a way that many of the aforementioned issues associated with traditional treatment methods, such as; a lack of access to skilled practitioners, restricted entry criteria, and financial limitations, are reduced. In contrast to most controlled research settings, IAPT does not control for “complexity, chronicity or comorbidity”, and these are all issues faced on a regular basis within clinical practise (Moorey, 2012, p. 58). An IAPT pilot project was implemented in 2006 at two demonstration sites in Doncaster and Newham in England, and based on the positive results observed at these sites, the initiative underwent further expansion in terms of increased funding and ‘roll-out’ of the programme across the country (Clark et al., 2009). The IAPT initiative aims to structure the delivery of treatment in such a way that an extra 900,000 people in the UK are afforded access to evidence based treatment for depression and anxiety (United Kingdom Department of Health, 2011; Richards, 2010). Mental health services at pilot

sites received additional funding to expand treatment services for depression and anxiety specifically, in particular dealing with these problems using CBT-based interventions within a 'Stepped Care' framework.

'Stepped Care' is a model of treatment delivery in which individuals are allocated services based on a five-step system where increased severity of the problem results in additional support being given to the individual (Richards, 2010). A stepped care system is based on two main principles (Richards, 2010; Bower & Gilbody, 2005). Firstly, the principle of 'least burden', that any recommended treatment should be the least restrictive in terms of treatment intensity, but still likely to create significant health gain for the individual. Secondly, the system must contain a 'self-correcting mechanism', that is, through consistent monitoring if it becomes evident that significant health gain is not being achieved through the current treatment, the individual is able to 'step up' to a higher intensity treatment option or be allocated to another form of treatment. Thus, the monitoring of progress and outcome using objective measures is imperative in such a system (Bower & Gilbody, 2005). For mild depression, treatment steps consist of basic assessment, recognition, and management of the problem in primary care facilities. This is in comparison to more severe depression, which may require the involvement of specialist mental health services or inpatient care (NICE, 2004). Clients with milder forms of depression are offered various low intensity therapeutic options as the first step in the treatment process, and treatment intensity is able to be adjusted as necessary (Richards, 2010). Low intensity interventions may be offered as an adjunct to other forms of treatment which may be utilised by the client concurrently (e.g. medication). Low intensity interventions include programmes with a

focus on increasing physical activity, problem solving, computerised CBT, and self-help. Self-help will be the focus of the current research project.

Results from the first three years of the IAPT initiative are positive, with significant improvements having been noted in the number of people being able to access treatment and the resulting recovery rates for those engaging in such treatment (United Kingdom Department of Health, 2012). This is also reflected in improvements in employment attainment and retention, and a reduction in those requiring welfare payments. In view of such positive results, both in terms of individual and economic gains, the English Government pledged a further £400 million to the IAPT initiative to further expand and improve the programme until 2015 (United Kingdom Department of Health, 2012).

Support for the provision of LICBT approaches is increasing, with initiatives being expanded both within the UK and in other countries, as governments realise the enormity of the economic and social cost of high prevalence disorders (Centre for Economic Performance, 2006). The STEPS model used by one of the primary mental health services in Glasgow, Scotland can be viewed as a variant of stepped care in the IAPT initiative, with similar emphasis on offering easily accessible, prompt, and effective interventions for different levels of problem severity (White, 2010). Interventions are often low intensity and include, stress control and depression classes, therapist contact by phone or through an advice clinic, and access to psycho-educational materials about stress and associated problems. Canada also introduced a similar approach to increase the availability of CBT interventions (British Columbia Mental Health and Addiction Services, 2009). Their 'Bounce Back' programme offers various self-help programmes to individuals suffering from mild depression, mild



anxiety, and chronic health problems. These include guided self-help in the form of telephone support and self-help workbooks. Australia launched the nation-wide Beyond Blue programme in the year 2000 with the view of increasing awareness of depression, anxiety and substance-use disorders and addressing many of the issues associated with these problems in community-focused campaigns. This involved the development of early intervention and prevention schemes, providing information to those with such disorders and their carers, along with effective treatment options, and supporting healthcare workers in depression training (Beyond Blue, 2010). Among the multitude of programmes launched under the Beyond Blue initiative are LICBT options, such as a self-help manual called *Taking care of yourself and your family* which includes information on the symptoms of depression, anxiety, anger, substance abuse, and what can be done about these (Ashfield, 2011). Internet based self-help programmes are also part of this initiative including; an online intervention for Bipolar Disorder ('Mood swings'), and 'e-couch,' which is comprised of online CBT-based modules for depression, anxiety, relationship problems, and grief (Beyond Blue, 2010).

More recently the New Zealand Ministry of Health has also referred to 'stepped care' as a model of interest regarding the future of New Zealand's primary care system (New Zealand Ministry of Health, 2009). This has been extended in the Ministry of Health's Service Development Plan 2012-2017 in which specific expressions of interest were made regarding increasing the uptake of evidence-based technology therapies, such as online programmes emphasising self-help ('e-therapies'), as well as providing access to brief interventions to address issues such as depression and anxiety (New Zealand Ministry of Health, 2012). Specifically, face-to-face individual and group programmes are referred to, with an emphasis on developing self-management skills in people with

emerging mental health problems. This reflects a growing interest in developing ways to deal with high prevalence mental health problems, where service effectiveness is not compromised, and where such options are well-integrated into a primary health care framework. In such a well-integrated stepped care system, services aim to “intervene in the least intrusive way,” by offering the least restrictive treatment options first, and enabling people to move through the system as required, that is, being able to ‘step up’ to a higher intensity treatment option if the current intervention is not achieving significant gain (New Zealand Ministry of Health, 2012: p.53; Joice, Freeman, Toplis & Bienkowski, 2010).

### **Summary**

Following the well-established success of traditional CBT therapy, the development of low intensity CBT treatment approaches are a recent and exciting advancement in intervention options for depression. Though LICBT options come in a multitude of forms, the self-help subset of LICBT interventions will be the focus of the current research and will be discussed in more detail presently.

## CHAPTER TWO: SELF-HELP

LICBT initiatives differ from traditional CBT in a multitude of ways, including both the way in which they may be delivered, and the content of the therapy programmes themselves. Self-help is a form of low intensity intervention in which evidence-based treatments are manualised and individuals are essentially taught to become their own therapists (Williams, 2012). The approach is highly educational, and individuals learn skills of self-assessment, self-management and self-change (Williams, 2012). However, self-help differs substantially from psycho-education approaches which focus only on increasing knowledge (Williams & Whitfield, 2001).

Whether delivered in workbook or computerised forms, self-help aims to develop client's "knowledge, skills and coping strategies," and emphasises self-management with reduced therapist contact (MacLeod, Martinez, & Williams, 2009, p.61). There are a number of clear advantages to utilising self-help approaches (Williams & Whitfield, 2001). Firstly, treatment is able to be offered promptly and often at little cost. The interventions may be perceived as more acceptable to clients and can avoid the stigma perceived by some of attending therapy. The client is able to work through the materials in their own time and at their own pace, building on skills learnt in support sessions. Lastly, the possession of self-help materials allows the client to update or consolidate their skills at any time without additional cost. In a practical sense, self-help approaches may also appeal to those living in rural or inaccessible communities, those without transport, or those who may be facing economic hardship (Mains & Scogin, 2003). Such low intensity treatments are recommended for use with individuals facing mild to moderate problems (NICE, 2009).

### **Delivery of Self-Help**

Programmes can be delivered in various ways, from pure self-help, which has no supportive component, to guided self-help in which there is a component of monitoring and guidance from a support person (Williams & Martinez, 2008). This support may come from a mental health professional (e.g. therapist or mental health nurse), but in many instances a person trained specifically to deliver low intensity treatments runs these guided self-help programmes, as it is more cost-effective (Baguley et al., 2010). Titles for this support role have been used interchangeably in the literature and include, wellbeing coach, paraprofessional, low intensity worker, and facilitator. However, the preferred term, as used by IAPT (Baguley et al., 2010) is Psychological Wellbeing Practitioner (PWP); therefore this term will be used henceforth.

### **Psychological Wellbeing Practitioner (PWP)**

Definitions of the PWP role differ across contexts and literature. The IAPT curriculum (Richards, Farrand & Chellingsworth, 2011, p.1) defines a PWP as an individual trained to “assess and support patients with common mental health problems- principally anxiety and depression”. These individuals are trained specifically in the delivery of low intensity CBT programmes and are not required to have formal healthcare or CBT qualifications (Baguley et al., 2010). Because of this, full supervision by a mental health professional is required for all PWPs. This supervision can be administered through the revision of routine client outcome measures, as well as face-to-face clinical supervision. In the UK PWP roles are diversifying. The role can now be similar to that of a case manager, in which PWPs liaise with general practitioners and other primary care staff. This role requires more extensive training, compared with PWPs whose role is simply

to run a particular programme and offer support to those taking part, for which less training is required.

The effect of PWP presence on outcomes is generally said to be positive, with research showing that the effects are often greater than for wait-list control, or 'pure' self-help conditions, and are in some cases comparable to results gained from therapist-delivered programmes (Gellatly, Bower, Hennessy, Richards, Gilbody, & Lovell, 2007). Christenson and Jacobson (1994) also claim that there is evidence to suggest that there is little difference in the outcomes of low intensity interventions delivered by professional therapists compared to PWPs. However, across different research paradigms the PWP role is often not clearly defined so it is difficult to say what it is that leads to these positive outcomes (Durlak, 1979). Factors such as interpersonal style, warmth, empathy and genuineness, and the use of therapeutic strategies usually employed by professionals, have all been implicated in contributing to PWP effectiveness in low intensity programme outcomes (Durlak, 1979). Because much of the research indicates that extensive "professional mental health education, training, and experience do not appear to be necessary prerequisites for an effective helping person," the benefits of using PWPs to run low intensity programmes are becoming increasingly apparent (Durlak, 1979, p.80). Increased demand for professionals, who require long training periods, and the high cost of employing these individuals is able to be somewhat tempered by the use of PWP support workers in the dissemination of low intensity interventions (Farrand, Confue, Byng, & Shaw, 2009). Because of the low intensity nature of PWP client contact, according to IAPT (2011), such individuals are also able to carry a higher case load than a therapist (up to 45 clients at a time).

## **Therapeutic Content**

The content of self-help programmes is often based largely on CBT principles, as currently it is CBT-based self-help which has an existing evidence base (Baguley et al., 2010; Williams, 2001). CBT is a theoretically sound and empirically supported approach, which utilises clear structures to target the relationship between individuals' thoughts, feelings, physical symptoms, and behaviours (Williams & Garland, 2002). A CBT self-help approach will often incorporate components such as psycho-education for understanding problem thoughts and behaviours, and specific action responses aimed at changing these thoughts and behaviours (Williams, 2003; Richards & Suckling, 2009). It is important to emphasise however, that guided self-help is not a form of psychotherapy and the role of the PWP is not to deliver a psychotherapy programme. The proviso of guided self-help is that it is a self-administered intervention, where the individual learns to help themselves. The role of a trained PWP is simply to support individuals and enable them to make optimal use of the self-help materials by introducing these materials to them, monitoring progress, and reviewing outcomes (Richards, Farrand & Chellingsworth, 2011). Self-help enables an individual to immediately access a flexible form of intervention, and reduces the amount of time or length of time spent with a health care practitioner (Williams, 2003). To date, guided self-help has been predominantly administered through the use of self-help books, but has more recently been extended to computerised modes of administration such as CD-ROM or internet programmes. PWP guidance has also been delivered through various means, from face-to-face individual or group contact, to the use of telephone, text message, email, and online methods of contact such as forums (Richards, Farrand & Chellingsworth, 2011).

Self-help programmes delivered in various forms have been shown to be effective in the reduction of symptoms for a multitude of problems. An online programme for adolescents with bulimia nervosa, 'Overcoming Bulimia Online', found significant improvements in bulimic symptomology, which were maintained at six month follow-up (Pretorius et al., 2009). Guided self-help in the form of a self-help manual and four short face-to-face guidance sessions with a therapist, in addition to usual care, was shown to improve subjective perceptions of health in individuals suffering from somatoform disorders (Sharpe et al., 2011). This was in comparison to those receiving usual care only. Given the link of perfectionism to the development of obsessive compulsive disorder (OCD) and depression, Pleva and Wade (2006) looked at the effectiveness of pure versus guided self-help in reducing OCD and depressive symptomology. It was noted that a greater proportion of participants in the guided condition experienced clinically significant reductions in symptomology. It was also noteworthy that no individuals in the guided condition experienced a worsening of depressive symptoms as was noted for 20% of participants in the pure self-help condition. This was speculated to be due to an increase in insight into problematic thoughts and behaviours due to the intervention but an inability for some to make changes in these areas without support from a therapist. The authors reflected that perhaps guided self-help interventions may be a safer alternative to those with less or no support.

A guided self-help programme for anxiety, which consisted of a written self-help programme, in addition to the support of a project worker who aided participants in the acquisition of coping, relaxation, and problem solving skills was implemented by Kupshik and Fisher (1999). Conditions which received greater amounts of support

(weekly meetings with project worker vs. telephone contact only) showed greater improvement in anxiety symptoms. Rapee, Abbott, Bailee & Gaston (2007) investigated the effect of self-help (both pure and guided) on social phobia compared with a waitlist control group. The pure self-help condition (bibliotherapy only) was limited in its effectiveness, judged by the proportion of individuals at the end of the intervention who met criteria for a DSM-IV diagnosis of social phobia (American Psychiatric Association, 1994). The guided self-help condition, where bibliotherapy was augmented by five group sessions conducted by a therapist, was significantly more effective in this regard. In fact, the guided self-help condition did not differ significantly from the treatment as usual condition (10 therapist led group sessions).

Furmark et al. (2009) utilised a guided self-help approach in the context of social anxiety, offering an online computer based intervention, which included a self-help manual, weekly email contact with a therapist, and an online discussion forum for all participants. This was compared to a 'pure' self-help condition where only the self-help manual was provided. Compared to a wait-list control group, both self-help treatment approaches resulted in statistically significant improvements in social anxiety. The guided condition however, resulted in slightly higher effect sizes and was shown to demonstrate continued improvements from post-programme to follow up. An internet-based self-help protocol, also targeting social anxiety, was proposed by Schulz, Stolz & Berger (2014). They proposed a comparison of a guided self-help condition with weekly email contact with a psychologist with another which consisted of a therapist guided online group discussion forum. Attempts to determine what kinds of support are most effective within guided self-help paradigms are now emerging within the research literature, indicating a possible progression in the research field from simple



comparisons of pure versus guided approaches to looking at the different modes of support, as well as comparing different levels of supportive contact.

Regarding guided self-help for depression specifically, computer-based CBT interventions have shown some success with regards to symptom reduction, and acceptability when compared with usual care or control conditions (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010). Within such interventions, the guided self-help condition may include for example an online participant discussion forum as well as minimal therapist feedback (via email) (Andersson et al., 2005).

Williams et al. (2013) found similar success with regards to a reduction in depression when comparing a guided self-help programme (bibliotherapy with two hours of guided support throughout) with treatment as usual from a general practitioner in a primary care setting. The authors concluded that guided self-help was substantially more effective than treatment as usual. Smit et al. (2006) demonstrated that not only can guided self-help be effective in the treatment of depressive symptoms in a primary care setting, but such interventions also show promise as a method of preventing the onset of a depressive disorder in participants who are experiencing sub-threshold depressive symptoms.

Floyd, Scogin, Mckendree-Smith, Floyd & Rokke (2004) examined guided self-help for older adults. They compared face to face psychotherapy to a bibliotherapy intervention which involved four support phone calls from a therapist. A participant-rated measure of depression found that face to face psychotherapy was superior in terms of a reduction in depressive symptoms; however a clinician-rated measure reported no difference

between the two groups in terms of outcome. It was also observed that those in the bibliotherapy condition continued to show improvements in depression post-treatment until a three month follow up. Individuals in the psychotherapy condition showed no ongoing change in this follow up period. A subsequent follow up study with the same sample by several of the same authors (Floyd et al., 2006) found that the treatment gains in response to the guided self- help intervention were still evident at a two year follow up. Compared with the psychotherapy sample, the bibliotherapy participants were observed to have more recurrences of depression within these two years, indicating that such low intensity approaches to treatment may result in less stable outcomes and may reflect a need for ongoing support e.g. ‘booster’ sessions.

In looking to apply guided self-help to individuals with partially remitted depression (an issue thought to affect up to 50-60% of individuals with depression), Schlogelhofer et al. (2014) found that the implementation of a guided self-help programme, in conjunction with psychopharmacology as a method of usual care, was not effective in reducing depressive symptoms. However, a reduction in the use of negative stress coping strategies was observed for these individuals.

A meta-analysis by Gellatly et al. (2007) of 34 studies comparing treatments for depression found a large effect for studies which implemented guided self-help. This was reduced to a moderate effect in cases where self-help was administered without a component of guidance. Cuijpers, Donker, van Straten, Li, & Andersson (2010) completed a meta-analysis comparing guided self-help to face to face psychotherapy. This showed that both types of intervention were comparable in terms of treatment effect for depression and anxiety. This comparable effect extended to a one year follow-

up. The authors conclude with the suggestion that based on the positive results of research on guided self-help to date, it is time to begin thinking about how such interventions can be introduced into routine treatment (Cuijpers et al., 2010).

Some literature in this area however, has not supported the positive outcomes reported above. Coull and Morris (2011) completed a systematic review of literature focused on guided self-help for depression and anxiety specifically. They highlighted inconsistencies within literature on the topic, specifically noting that greater effectiveness was often reported by studies which were deemed to have lower quality methodologies. Lovell et al. (2008) modelled the development of an intervention for guided self-help targeting depression and completed an exploratory randomised controlled trial (RCT) using this protocol. Results of the RCT were not significant for reductions in depression across treatment. Though the intervention was in line with best evidence-based practice, this did not appear to result in greater effectiveness in terms of participant depression outcomes. Results were in line with several studies in primary care settings which had not been so rigorously developed and which also failed to find significant reductions in depression and anxiety (Mead et al. 2005; Salkovskis, Rimes, Stephenson, Sacks & Scott, 2006). Within the sample reviewed by Coull & Morris (2011), there was evidence of limited effectiveness for studies completed within routine clinical practice. A review by Khan, Bower & Rogers (2007) identified a number of themes potentially underlying the complexity of creating successful self-help interventions in primary care settings. These included issues around ensuring primary care is viewed as an acceptable location for mental healthcare to take place, as well as supporting clients to engage actively with the intervention as is intended with self-help forms of treatment. Questions have also been raised about the effect of initial severity of

depression with regards to treatment effects for low intensity interventions (Bower et al., 2013). Some research has indicated greater treatment benefit for those who start off with more severe depression, while it is clear that guidelines for the use of low intensity interventions note its specificity for mild to moderate depression (NICE, 2009). It is apparent that research is yet to clearly ascertain what is optimal in the provision of guided self-help. Further research is needed, particularly with reference to clinical settings, given the lack of conclusive evidence for guided self-help outside of research settings, with clinically representative samples (Coull & Morris, 2011).

### **Summary**

Building on the success of low intensity self-help approaches is the idea of using groups to deliver self-help. This is a concept that has developed in response to the clear effectiveness of standard CBT group therapy (see chapter 3), as well as the documented effectiveness and increasing acceptability of different modes of LICBT intervention.

### CHAPTER 3: GROUP THERAPY

Traditional CBT group therapy for depression in controlled research settings is well supported in terms of efficacy (Peterson & Halstead, 1998). As a result, group treatments are currently offered within the majority of mental health organisations and services, in addition to their advancement into non-traditional settings such as community homes, and employee assistance programmes (Dies, 1992). However, there is less empirical research supporting the use of group CBT interventions in such non-research, community settings. This is thought to be due to the fact that client populations in these community settings are often more heterogeneous. For example, community samples often include the presence of comorbidity, clients may be engaged in other therapies concurrently, and the programmes tend to have less restrictive inclusion criteria than controlled research studies (Peterson & Halstead, 1998). This can lead to perceptions that internal validity is compromised. Although the results of such uncontrolled studies may not be so clear-cut due to less rigorous participant recruitment criteria, they are thought to have considerably more external validity in terms of the extent to which the results are generalisable to the 'real world'. Research attempting to replicate findings regarding the effectiveness of CBT group therapies in such uncontrolled settings has produced promising results in many instances (Peterson & Halstead, 1998). A group CBT study conducted by Peterson and Halstead (1998) looked to ascertain whether group therapy conducted in a community setting, without the aforementioned constraints of traditional research trials, would produce comparable results. A statistically significant reduction in depression was observed, however it was not to the same magnitude as effects reported in previous research trials. This was attributed to the uncontrolled nature of the study, as previous research has also

demonstrated that in particular, treatment outcome is reduced when comorbidity is not controlled for (Wexler & Nelson, 1993).

### **LICBT Group Therapy**

Group therapy is one of the most cost-effective ways of providing psychological treatment, as it enables the provision of therapy to a greater number of people at one time (Dies, 1992). LICBT approaches to group interventions are furthering the concept of providing accessible, abbreviated, and cost-effective interventions to the high volume of individuals suffering from high prevalence problems (e.g. mild depression). LICBT group interventions have been delivered to groups numbering over one hundred in some cases (White, 2010), far surpassing traditional CBT group therapy regarding the ability to reach a greater number of people at one time. Research in this area remains in its infancy, though promising results are emerging from the use of a variety of low intensity interventions which are delivered in a group format.

CBT stress management workshops which were made available to the general public were implemented by Brown, Cochrane, & Hancox (2000). This research was based on a previous study which compared a larger scale workshop with smaller weekly group and found that the larger group was just as effective in the reduction of stress and anxiety (Brown, Cochrane, Mack, Leung, & Hancox, 1998). The workshops consisted of psycho-education regarding stress, as well as the teaching and practise of coping techniques, such as relaxation. Stress and anxiety were measured both on the day of the workshop and three months post workshop. Significant decreases in both these constructs were noted across several outcome measures. This programme was said to be both effective and economical and was able to capture a client group who may not

otherwise be referred to mental health services, but who still reported elevated levels of stress and anxiety. A programme such as this is proposed by the authors to be suitable as a widespread low intensity, large group intervention (Brown, Cochrane, & Hancox, 2000).

The effectiveness and acceptability of a brief CBT psycho-education programme for anxiety was investigated by Houghton and Saxon (2007). The programme was run in large groups (24 per class) by mental health nurses with CBT training. The sample included participants with both clinical and non-clinical anxiety. A number of clients made significant improvements across the four 90-minute classes, with the authors stating that this programme would be a useful low intensity intervention for anxiety under a 'stepped care' model.

### **Guided Self-Help Groups**

The use of support groups or classes specifically in *guided self-help* paradigms is also increasing. Guided self-help groups are a step removed from LICBT group therapies run by mental health professionals, which simply deliver CBT therapy on a larger scale or in briefer forms. LICBT guided self-help groups maintain the benefits of cost-effectiveness; allowing for large numbers of individuals to be given access to adapted interventions at one time, while also reducing the need for skilled practitioners to run these groups, using trained PWP's for this purpose. Chellingsworth, Williams, McCreath, Tanto, and Thomilson (2010) refer to a number of classes which use written self-help materials as the focus of their classes. These include, the 'Living Life to the Full' classes (Williams, 2008), 'Triumph over Phobia' classes (Marks, 2005), the 'Mind over Mood' programme which is able to be delivered in a group format (Greenberger &

Padesky, 1995), and the Overcoming Low Self-Esteem confidence classes (Brown, Elliott, Boardman, Ferns, & Morrison, 2004). However, there is limited empirical evidence available so far to support the efficacy and acceptability of such guided self-help programmes delivered in a class format.

The Overcoming Low Self-Esteem self-help manual has been utilised in a series of large-scale confidence workshops run by clinical psychologists, primarily targeting depression (Brown et al., 2004). The workshops were advertised as ‘self-confidence workshops’ rather than ‘depression workshops’ in an effort to increase take-up rates. People were able to self-refer to these workshops, with no exclusion criteria employed. This resulted in a large response from the general public with many participants attending (39%) who had not previously consulted any primary care services for their current problems. Treatment targeted low self-confidence using a CBT framework consisting of psycho-education, cognitive and behavioural methods for improving self-confidence, and goal setting. Results were positive, with significant reductions in stress and depression, and increases in self-esteem, as noted on primary measures of depression (the Beck Depression Inventory; Beck, Steer, & Brown, 1996), anxiety (Spielberger’s State-Trait Anxiety Inventory; Spielberger, Gorsuch, & Luchene, 1970), and self-esteem (Rosenbergs Self-esteem Scale; Rosenberg, 1979).

Evidence for the ‘Living with Fear’ self- help manual for anxiety has been well established. Research comparing the use of this self-help manual with the support of a psychiatrist, the manual alone, and a computerised form of the manual, all resulted in significant reductions in anxiety for individuals with agoraphobia, specific phobia, and social phobia (Marks, 1978; Marks, 1992). The ‘Living with Fear’ programme is also



used within a charity self-help group called Triumph over Phobia. This group is run by a lay person who previously suffered from anxiety and now aids others in overcoming their problems using the same programme. Qualitative reports regarding the efficacy of this programme have been positive and significant reductions in ratings on the Fear Questionnaire support this (Marks, 1979; Bonham-Christie & Marks, unpublished, cited in Marks, 1992). A number of similar groups utilising this programme have been documented across the United Kingdom, though their efficacy is yet to be determined.

One report detailed the findings of twenty-two groups in Northern Ireland who completed 'Living Life to the Full', a CBT-based self-help programme (Collins, 2010; Williams, 2008). This evaluation was based on a qualitative measure of participants' understanding of depression and stress, and their perception of the benefits of this programme. Participants' rating of this programme was 6.9 out of a possible 7 on a likert scale (1=very poor, 7=excellent). A standardised measure was also administered. Scores on the General Health Questionnaire (GHQ; Goldberg & Williams, 1988), a measure designed to detect "psychiatric disorders in community settings" showed a significant positive shift in psychological wellbeing between pre-programme and post-programme time periods (Collins, 2010). Qualitative reports detailing the experience of running such programmes across a number of settings also depict some promising results. For example, the 'Living Life to the Full' programme was implemented in a number of services across Canada with 85% of participants who completed the course finding it "useful to very useful" (Williams 2008; Canadian Mental Health Association, 2010). Lloyd and Abdulrahman (2011) ran the 'Living Life to the Full' programme for a minority female group in the UK. Feedback from programme completers was largely positive in this instance also.

### **Measurement of Group Processes**

There are numerous reasons proposed across the literature for the success of group treatment approaches. Groups are thought to provide an added component to individual therapies, in which people are given the opportunity to “form friendships, swap helpful hints and tips, and realise that they are not the only person who feels like this” (Williams & Chellingsworth, 2010, p.110). Of particular interest in group therapy research are the group processes, or what occurs in the group independently of the content presented (Strauss, Burlingame, & Bormann, 2008). It is now recommended in research settings that, along with individual outcome measures, group-level processes, such as cohesion, are also measured (Strauss et al., 2008). These have been shown to be predictive of individual and group success in group therapy and can shed light on how different members may experience the group environment. The measurement of these constructs has generally been in the form of a static (one-off) measurement (Kivlighan & Tarrant, 2001). More recent literature indicates that the patterns of change occurring across group processes are better predictors of group member outcomes, thus a more dynamic method of measurement (i.e. multiple points of measurement) is said to be more useful.

Gaining an understanding of processes within group psychotherapy is made more difficult due to the more complex interpersonal relationships within group therapy approaches (Johnson, Burlingame, Olsen, Davies, & Gleave, 2005). For example, relationships in group psychotherapy are able to be formed between group members (member-member), a member and the leader (member-leader), and between a member and the group as a whole (member-group). To date two thirds of the literature has focused on the member-group relationship, with very few studies incorporating aspects

of the member-member, or member-leader relationships. Research is now moving toward incorporating the measurement of other interactions in group therapy. Johnson et al. (2005) developed a conceptual model to explain the components of a group therapy experience (Strauss et al., 2008). Two components emerged; *relationship structure* and *relationship quality*. Three relationship *structures* are said to exist within a group, namely; the member-leader relationship, the member-member relationship, and the member relationship to the group as a whole. Relationship *quality* is defined by three factors; a positive relational bond (cohesion, engagement, and positive aspects of members and leader), a positive working alliance (agreement on tasks, and goals of therapy), and negative therapeutic factors (conflict, and lack of empathy from members or leader) (Bormann & Strauss, 2007; Jensen et al., 2012; Johnson et al, 2005).

To enable the measurement of these different components of group therapy, the CORE-R battery of measures was developed (Strauss et al., 2008). This group of measures was collated to provide those running group therapies in clinical practice and research situations with a series of measures which can be easily utilised in the measurement of pre-group factors, group process, and group outcomes. This development occurred in response to suggestions that the evidence base of group therapy was being compromised by the huge diversity in measures being used. Thus, the CORE-R provides a toolkit of measures, all of which are “(a) well-established, (b) psychometrically sound, (c) represent basic aspects of group therapeutic processes, (d) reflect process variables on an individual and group level at the same time and are (e) relatively short and economic in use” (Strauss et al., 2008, p. 1231).

## **Cohesion**

Group cohesion is one of the nine therapeutic factors described by Yalom (1995) and is among the most studied aspects of group process. It has been identified as one of the most important therapeutic factors in group therapy and is said to play a role somewhat analogous to the role of the therapeutic alliance in individual therapy (Joyce, Piper, & Ogrodniczuk, 2007). Cohesion can be broadly described as the presence of trust, belonging, and togetherness within a group, though definitions and the measurement of the construct have been hugely varied across the literature (Yalom & Leszcz, 2005; Burlingame, McClendon, & Alonso, 2011). Essentially cohesion refers to “*the therapeutic relationship in group psychotherapy*”, which is a result of the many different interactions occurring within a group treatment context (Burlingame, Fuhriman, & Johnson, 2001: p. 373). Despite the lack of an operationalised definition and the varied way in which the construct has been measured, the relationship between cohesion and therapeutic outcomes is well established across different group structures and client problems (Burlingame et al., 2011). Cohesion is a central construct within both of the group processes discussed below.

## **Group Climate**

One of the most popular ways of measuring individual perceptions of group treatment is through the group’s climate (member-group relationship). Group climate refers to the atmosphere of a group and is thought to encompass a multitude of factors which contribute to a group’s therapeutic environment, namely; engagement, avoidance, and conflict (Ogrodniczuk & Piper, 2003). Engagement is said to reflect a cohesive environment and willingness of members to take part in the group. Avoidance refers to the level of responsibility members take regarding examining their problems and the

extent to which they adhere to group norms or depend on instruction. Conflict refers to interpersonal friction which can result in anger, distrust, or tension in the group. These constructs are thought to comprise the overall group climate or atmosphere.

A study by Ogrodniczuk and Piper (2003) looked at group climate in two brief group therapy interventions for complicated grief. They found group climate to be significantly related to individual outcomes. In particular, high levels of engagement were found to result in more positive outcomes for individuals. Group climate is thought to be an important indicator of treatment success or failure. Previous research has often observed group climate using one off measurements of the construct (Kivlighan & Lily, 1997), however, the patterns of change in group climate across treatment have also been examined and this is now thought to be more predictive of treatment outcomes for participants (Kivlighan & Tarrant, 2001). This has been assessed both in terms of complex patterns of group climate change (Kivlighan & Lilly, 1997) and more simple linear changes in group climate (Kivlighan & Tarrant, 2001). Braaten (1989) measured group climate in the fourth session of a fourteen session treatment process and found that higher levels of engagement and lower levels of avoidance were predictive of more positive outcomes. This study was the first of its kind to examine the effect of early group climate on outcomes. This is thought to be particularly relevant to short-term group therapy groups such as the current study (Ogrodniczuk & Piper, 2003).

One study compared group climate using the Group Climate Questionnaire Short form (Mackenzie, 1983), in a brief crisis group therapy consisting of eight 1.5 hour sessions, to traditional long term therapy groups, which were open-ended and without time limit

(Joyce, Azim, & Morin, 1988). The emergence and development of group processes such as group climate was predicted to be accelerated due to the time limited nature of the brief crisis group and the more intensive therapeutic activity of the clinicians which was more didactic and directive in nature. In terms of group climate, results showed that those in the brief crisis groups experienced lower levels of both conflict and avoidance, and reported greater and more rapid decreases in behaviours associated with these factors over the course of the group. Both groups reported an increase in engagement across treatment, though the brief crisis group perceived a significantly greater increase than the long term treatment group. Based on the results of this study, it is apparent that with different structure, therapist actions, and content focus, group treatments are subject to large differences in the way processes develop. Group climate has also been shown to be related to retention of participants in research, with those demonstrating lower levels of engagement being more likely to drop out of therapy (Connelly, Piper, de Carufel, & Debbane, 1986).

### **Cohesion to the Therapist**

The approach taken by a therapy group leader in terms of interpersonal factors (e.g. openness, empathy, warmth) has been shown to predict cohesiveness and outcome (Bieling, McCabe, & Antony, 2013). However, some research suggests that in group therapy the leader's role is somewhat less important than in individual therapy, as it is attenuated by the client's experience of member-member and member-group relationships (Fuhriman & Burlingame, 1990). Essentially a group leader's role is to primarily be the manager of relationships within a group, as well as being a partner in these relationships (Fuhriman & Burlingame, 1990). The group leader is said to model interactions and set the tone for other interactions within the group.

Based on based on Yalom's (1995) hypothesis that it is the role of the group leader to create group climate, Kivlighan and Tarrant (2001) examined the effect of group leaders on group climate and individual outcomes in a group for youth, focused on both structured intervention, and group discussion and interaction. It was found that group climate mediates the relationship between leadership factors and individual outcomes. In particular, a positive leadership style was associated with increased levels of engagement, and decreased levels of conflict on the group climate measure. An increasingly active and engaged group climate was related to increased treatment benefit.

Research has also shown however, that the effect of the leader differs across different types of group intervention. The effect of the group leader on group processes and outcomes in a psycho-education group intervention for depression was investigated by Antonuccio, Davis, Lewinsohn, and Breckenridge (1987). In these groups less emphasis was placed on traditional group therapy leader-member relationships, with the leader taking a role akin to that of a teacher and the members taking the role of pupils (Cuijpers, 1998). This study showed that members perceived the leader differently across a number of qualities such as warmth, directivity, enthusiasm, and clarity. Leaders who were perceived to be warmer and less directive produced groups with higher levels of cohesion. However, these different levels of cohesion did not significantly influence depression outcomes. This demonstrates that though the leader may influence group processes this does not always translate into an effect on outcomes regarding the effectiveness of a programme or intervention. Treatment outcomes from

low intensity forms of group therapy may be less likely to be influenced by leadership factors due to the de-emphasised therapeutic relationship as in Antonuccio et al. (1987). As referred to by Kivlighan and Tarrant (2001), the intertwined nature of group leader effects and group climate processes highlights the importance of capturing both of these aspects of group process; group-member and member-leader relationships. Therefore, also examined in the current study is the member-leader relationship. This will be achieved using the Cohesion to the Therapist Scale (CTS), which aims to measure an individual's perception of cohesion to the therapist (Piper, Marrache, Lacroix, Richardsen, & Jones, 1983). The measure looks at positive qualities, dissatisfaction with the leaders role, and personal compatibility, across the same dimensions as the group climate questionnaire as recommended by Johnson et al. (2005) model, the bond relationship, working relationship and negative relationship (Strauss et al., 2008).

### **LICBT Group Processes**

How individuals may experience a LICBT group based on measures of group climate and cohesion to the group leader, and how this may differentially affect outcome measures, is a relatively unexplored area of research. Research regarding group processes discussed above has predominantly focused on small therapy groups. The development of group climate is said to be affected by a multitude of factors including; treatment approach, culture, treatment setting, whether interpersonal processes are stressed, and characteristics of the participants (e.g. diagnosis) (Burlingame, Strauss, & Joyce, 2013). Because LICBT is a relatively new type of group intervention, the influence of the *treatment approach* is anticipated to affect the development of group climate processes.



The larger number of individuals who are able to partake in a LICBT group intervention at one time may impact on the development of group climate. Research into the construct of cohesion and its effect on outcome measures was looked at by Burlingame et al. (2011) in a meta-analysis of 40 studies. Cohesion predicted outcome across therapeutic orientations (interpersonal, psychodynamic, and CBT). Several moderating variables were identified in the relationship between cohesion and outcome. Groups with a larger number of members (more than nine) displayed a weaker relationship, as did those with fewer than twelve treatment sessions. Groups which emphasised member interaction produced higher cohesion scores (Burlingame, Strauss, & Joyce, 2013).

In work units, sports teams, and social groups an increase in group size has been shown to negatively affect cohesion by way of affecting member interactions, communication, coordination of group resources, group decision making, and perceptions of personal responsibility (Carron & Spink, 1995). Spink and Carron (1994) conducted research into the effect of group size on cohesion in small (<20) and large (>40) exercise classes. Such exercise classes are thought to engage few of the processes mentioned above as negatively impacting on the development of cohesion, and thus it was proposed that perhaps greater group size may not influence cohesiveness as it has in studies focusing on group units in other contexts. The results revealed that in fact cohesion was greater in the smaller groups. However, this fact could be off-set by the implementation of an intervention designed to enhance communication and interaction of group members (e.g. group goal setting); indicating that group cohesion is not a static construct.

## **Summary**

The use of groups in the delivery of LICBT interventions is a relatively new concept, though interest in the use of this mode of delivery is rapidly increasing due to its effectiveness in targeting programme delivery to larger numbers of individuals simultaneously (White, 2010). In investigating the effectiveness of groups, the importance of measuring group processes in addition to outcomes has been stressed (Strauss et al., 2008). Group processes give valuable insight into how group treatments are perceived, and are also predictive of outcomes in some instances. This is particularly informative in the case of new and emerging treatment approaches such as LICBT.

## CHAPTER FOUR: MEASUREMENT OF MECHANISMS OF CHANGE

Outcome research has supported the efficacy of a CBT approach to psychotherapy across a wide variety of clinical presentations. The central question in research regarding psychotherapy is whether change has occurred over time (Laurenceau, Hayes, & Feldman, 2007). Traditional research designs have focused on answering this question through the determination of statistically significant changes between pre-treatment and post-treatment, or statistically significant differences between more than one group. These designs answer questions regarding treatment efficacy, and although they are the “gold standard” for efficacy research, they do not present the practical information required for best clinical practice (Newnham & Page, 2010, p.131).

Questions surrounding the mechanisms involved in the *process* of change have only just started to be explored, that is, why and how an intervention works, and for whom (Hayes, Hope, & Hayes, 2007; Laurenceau et al., 2007). These research designs explore the processes which occur across the intervention between pre-treatment and post-treatment, and are useful in both the development of treatment approaches, and the refinement of these interventions where necessary (Laurenceau et al., 2007). Research investigating the process of change addresses the course or shape that the change process takes, moderators involved in the change process (e.g. for whom and under what conditions does change occur?), and mediators of the change process (e.g. why is change occurring?) (Laurenceau et al., 2007).

With traditional outcome research, outcomes are often aggregated, which can mask possible differences among individuals (Blampied, 2001). There is often little or no

information regarding variability of responses both within individuals, and between different individuals (Jacobson & Truax, 1991). Regardless of whether there is a significant treatment effect, some individuals in the treatment group may not have changed, or may have even deteriorated.

This brings the issue of *clinical* versus *statistical* significance to the fore. Statistical significance, with its focus on aggregated scores, fails to address the issue of whether the intervention resulted in any change for the client in terms of their functioning and everyday life, which is the focus of clinical significance (Kazdin, 2003). A clinically significant intervention has been referred to as leading to a decrease in distress, a restoration of levels of functioning, and increased quality of life for an individual (Blampied, 2001). It is the importance of highlighting clinically significant change that requires the analysis of treatment programmes at the individual level.

Process research examines the course of change across therapy both within and across individuals, enabling a more fine grained inspection of results. To date research has favoured the evidence-based methods over more practice-focused research whose methods allow results to be readily applied in the clinical settings for which they are intended (Lambert, 2013). It is now proposed that these schools of thought can be viewed as complementary to one another, one need not be deemed superior to the other.

### **Discontinuous Change Processes**

Traditional research methods using group averages provide patterns of change which often appear gradual and linear (Hayes, Laurenceau, Feldman, Strauss, & Cardaciotto, 2007). However, research using repeated assessments of change has made it clear that a

lot of change in psychotherapy is non-linear and discontinuous. The study of these discontinuous change processes requires repeated assessment and the study of individual cases instead of aggregated group results. This method of looking at data is somewhat of a revival of the single case analysis, which allows for the inspection of the processes which are facilitating, inhibiting, or preventing change (Hayes et al., 2007). Illustrating such discontinuities in individuals change trajectories can highlight areas of therapy which can be more closely examined to reveal the important change processes occurring (Hayes et al., 2007).

For depression, three main change patterns are discussed in the literature (Hayes et al., 2007). Firstly, *early rapid response* refers to a substantial decrease in depressive symptoms by the fourth session which then levels off. Secondly, *sudden gains* are improvements between one session and another, which are lasting. Lastly, *depression spikes* refer to increases in depression, which are followed by a decrease in symptoms. Such processes are not apparent in traditional methods of aggregated analysis, however, a more fine grained analysis allows for the identification of these important transition points which can reveal important detail about what is occurring for a client during the treatment process (Hayes et al., 2007).

### **Early Rapid Response in CBT**

Research concerned specifically with *early rapid response* has found that the occurrence of this phenomenon predicts more positive outcomes in depression (Hayes et al., 2007). One study examined the rates of symptom reduction over different phases of treatment in relation to the likelihood of symptom return at three and six months post treatment (Santor & Segal, 2001). It was found that early symptom reductions, achieved

in the first few sessions of treatment, were an important indicator of lasting treatment gains. A similar result was noted by Renaud et al. (1998) who examined early rapid response in adolescents with depression and found that early responses to treatment were predictive of better post treatment outcomes up to two years after the conclusion of treatment.

Other research suggests that early rapid responding may also apply to mental health problems other than depression, such as bulimia nervosa (Wilson, Fairburn, Agras, Walsh, & Kraemer, 2002) and alcohol abuse (Breslin & Sobell, 1997), and thus it may be a more generalised phenomenon than was originally thought (Wilson, 1999).

### **Early Rapid Response in LICBT**

There is currently little known research which has investigated what therapeutic processes may emerge over the course of a LICBT programme. One study investigated early change in individuals who accessed low intensity interventions in a primary care mental health service (Delgadillo et al., 2013). Session-to-session change scores were calculated, and an evaluation was made of whether change in the early stages of therapy was predictive of reliable and clinically significant change post treatment. Results showed that individuals who showed improvement early in treatment were significantly more likely to fully recover compared to those who did not show these improvements. Similar results were also documented in a low intensity intervention for binge eating disorder, in which early rapid responses were indicative of greater improvements in eating pathology and depressive symptomology (Masheb & Grilo, 2007).

The investigation of mechanisms of change in LICBT is particularly relevant to the application of this new form of intervention within practice settings, as the study of process allows for interventions to be adapted and adjusted on an individual basis in real-time, and can give valuable insight into how the intervention is being received along the way. When low intensity interventions are delivered within a ‘stepped care’ model of service delivery in clinical settings, there is the option to ‘step up’ to higher intensity interventions. If clients are able to be identified as requiring additional services earlier based on the analysis of processes during the low intensity intervention, referral to these higher intensity alternatives could be made more timely (Delgadillo et al., 2013).

For psychotherapy to become more productive, client and therapy variables that underlie the change process in different forms of treatment must be identified (Blatt & Felsen, 1993). It is clear that clients come to treatment with different “needs, problems, character styles, defences, and adaptive capacities” and it therefore follows that they should respond differently to various interventions, and that the process of this change will also differ (Blatt & Felsen, 1993, p. 254).

### **Summary**

The examination of discontinuous change processes in LICBT interventions is a new area of research. Early research suggests that LICBT interventions do produce individual change patterns similar to those seen in traditional CBT therapies, such as early symptom change (Masheb & Grilo, 2007; Delgadillo et al., 2013). Such patterns of change have also been shown to be related to more positive final treatment outcomes in LICBT treatments. Though preliminary research indicates that well known change

processes can occur in LICBT treatments, it is evident that further research is required, addressing more thoroughly these change processes. In addition, it is important that the assessment of results is made in such a way that the individual variability in participant responses is able to be captured, and that the determination of not only *statistical* significance, but also the *clinical* significance of findings, is able to be made.



## CHAPTER FIVE: THE CURRENT STUDY

The use of self-help in the early treatment of mild to moderate depression has been endorsed by NICE (2004b) guidelines for depression (Martinez, Whitfield, Dafters, & Williams, 2008). Much of the research highlights significant improvements across outcome measures for self-help paradigms compared to waitlist or ‘usual care’ control groups (Williams & Whitfield, 2001). These results, noted across a range of patient populations for a number of different mental health issues, such as depression, anxiety, and bulimia nervosa, demonstrate that such low intensity approaches to therapy may offer results akin to standard treatment approaches, particularly for individuals suffering from ‘sub-threshold’ mental health problems.

### **Living Life to the Full Programme**

A low intensity group guided self-help approach targeting low mood in adults is a new concept in the context of New Zealand. Following the success of low intensity group paradigms in the United Kingdom the current study will examine the effectiveness of a LICBT guided self- help programme, ‘Living Life to the Full’ (LLTTF), which will be delivered in a class format (Williams, 2008). Support and direction will be provided by an individual trained in the delivery of this particular LICBT programme.

In keeping with the values of LICBT, this programme will maximise the ability to provide support for a greater number of people at one time, in addition to incorporating individuals with a greater variation of problems (Bennett-Levy, 2010). Participants will be recruited through an advertising campaign from the community (as opposed to a clinical population), as this is thought to be the population for which self-help is most

relevant and useful (Bailer et al., 2004). The proposed methodology will be based on a structured linear model approach to self-help, where mandatory content is set and participants follow a step-by-step approach to treatment (Williams & Morrison, 2010). This differs from other approaches which are more learner-led (e.g. where clients choose for themselves the combination of workbooks they wish to work on). Such approaches may be more suited to an individual self-help programme, whereas it is thought that this structured approach will be more effective in a group environment

### **Group Processes**

The member-group relationship and member-leader relationships are anticipated to be the most prominent processes in the current study given that the group is larger than most traditional CBT group therapy groups, and will be facilitated by a support person instead of a healthcare professional. The effect this will have on members' perceptions of the group and leader requires closer examination. The development of these two group processes across programme delivery as well as their relationship to participant outcomes will be examined in the current study. The member-member relationship will not be examined, as this relationship is predicted to be less important given that the style of the class is less therapeutically-based and more learning oriented. Intimate sharing between group members (e.g. learning to give and receive personal feedback), is not anticipated to form a large aspect of each individuals' experience of the programme (Burlingame, Fuhriman, & Johnson, 2001).

In a LICBT class, cohesion could be predicted to be negatively affected by the greater group size. However, in keeping with the results of research by Carron & Spink, (1995), many of the group processes affected by increased group size may not be applicable to a

LICBT class therefore their effect may be negligible. This is predicted particularly in cases where opportunity for interaction and communication are enhanced. The current study will make efforts to foster group climate through interaction between members during the running of the programme, as this has been shown to ameliorate reductions in cohesion resulting from factors such as larger group size (Spink & Carron, 1994).

An issue often raised with low intensity interventions, is that there can be a lack of emphasis placed on the role of the therapeutic alliance in such approaches (Newman, Erickson, Przeworski, & Dzus, 2003). How this may affect outcomes is a topic of extensive debate and whether outcomes from such therapies can be as good as those which emphasise extensive therapist contact is yet to be determined. A qualitative study investigating client perceptions of the mechanisms of change in low intensity CBT therapies noted that face-to-face contact seemed to lay the foundations for change and was highlighted as a key factor by participants (Quigg, J., n.d). The current study seeks to emphasise the importance of support and guidance by having the programme led by a trained support person, in addition to utilising a supportive group style of programme delivery. The nature of the relationship between this support person and the group members in a programme such as this will be examined in this study. Cohesion to the therapist is generally thought to be less significant in group therapy compared to individual therapy. In addition, the 'class-like' style of delivery of the LLTTF programme may result in a different pattern of member-leader cohesion development compared with a traditional therapist-client relationship.

### **Clinical Significance and Change Processes**

The current study reflects an attempt to produce research which is in line with clinical practice, therefore the processes of change occurring throughout the intervention will be investigated through the examination of results on a single case basis. With regards to outcome analysis both *clinical* and *statistical* significance will be of interest. Discontinuous change processes will also be investigated, with *early rapid response* patterns being of interest. Early rapid response is common in traditional CBT therapy and has been noted to occur in some LICBT interventions. Analysis will be focused on determining whether such patterns emerge in the current study, and their relationship to individual outcomes.

### **Further Considerations**

There are still some reservations about low-cost, low intensity therapeutic interventions (Newman, Erickson, Przeworski, & Dzus, 2003). This is partly to do with the fact that such approaches may not be suitable for all individuals, such as those with severe depression accompanied by low energy and difficulty concentrating, those with sensory deficits which may prevent them utilising many of the materials, and those who may simply not be interested in a self-help style of therapy (Williams, 2001; Newman, Erickson, Przeworski, & Dzus, 2003). The acceptability of the mode of intervention for participants is thought to largely influence attrition rates and treatment success for clients (NICE, 2004b). The current study will attempt to incorporate some of these concerns by optimising participant choice in the treatment process. This includes whether they would prefer to be part of a guided self-help group in the current study, or whether they would rather receive an individualised approach with one-on-one guided self-help offered in the context of a separate research project running concurrently

alongside this project. Individuals will be asked to make this choice during the registration process. Participant satisfaction with the programme will be measured post-intervention, in addition to the gathering of qualitative perspectives on participation in the programme.

Participant expectations of the type of treatment that will be received may also play a role in therapy outcomes. McKendree-Smith, Floyd, & Scogin (2003) discuss two studies which measured negative outcomes in minimal contact bibliotherapy for depression. One noted significant negative outcomes due to this type of therapy (Mohr et al., 1990), and the other found a substantially lower rate of negative outcome (Scogin et al., 1996). This is thought to be somewhat attributable to the way in which participants entered the study. Those in Scogin et al. (1996) were aware from the point they signed up for the study that they were going to partake in a bibliotherapy intervention. This is thought to be in contrast to those in the other study where participants may have been expecting more intensive treatment, as the bibliotherapy treatment condition was part of a larger study comparing psychotherapy treatments. Considerations will be made with regards to informing participants about the low intensity nature of the programme, and clearly explaining the purpose of the current research.

In line with a change in the way controlled efficacy studies are now being perceived (Bailer et al., 2004), the current study will involve minimal screening processes, and exclusion criteria will relate only to factors which would directly affect the ability of participants to complete the programme, or to individuals who would be unlikely to benefit from the programme (see Methodology). Within controlled efficacy studies

potential participants (80-90%) are often excluded from research due to factors such as complex mental illness (e.g. co-morbidity; Bailer et al., 2004). The design of this research project is an attempt to diverge from such regulated and tightly controlled randomised controlled trials which have largely dominated research to date. This is an attempt to produce a research paradigm which accurately reflects the population for which guided self-help was designed, and which can be generalised to the real world settings in which it is intended for use.

### **A New Zealand Context**

New Zealand, like other Western countries has high rates of diagnosable mental health disorder (approximately one quarter of the population in the last six months) (Bushnell et al. 2003). It is estimated that a further one quarter of this sample do not go on to access any form of support from a service. Those who do seek support generally do so through a general medical practice. However, within general practice, low rates of consultation for mental health problems have been observed. This is somewhat attributable to the fact that New Zealand's system requires a fee for service for access to general practice and primary healthcare. This is likely to be a barrier for patients accessing mental health services. In an analysis of General Practitioner (GP) practice in New Zealand, Bushnell et al (2003) reported an estimate from GPs that around half of their patients had experienced some form of psychological problem in the last year, but that only one in ten suffered problems in the moderate to severe range. The most prevalent psychological problems noted by this sample of GPs were depression, anxiety and substance use problems. This information may suggest a number of things. Firstly, there are individuals with diagnosable mental health problems who do not tend to access any service for support. Secondly, of those who *do* access support an estimated nine out

of ten are experiencing mild symptomology. This indicates the need for approaches to mental health treatment in New Zealand which may capture those currently missed by services, as well as one which may assist those who are evidently motivated to seek treatment, but may not qualify for access to funded mental health due to ratings of lower symptom severity.

Research into public awareness and knowledge about mental health (mental health literacy) has been the subject of some research in Australia (Form, Barney, Christiansen, Hight, Kelly & Kitchener, 2006). Increased mental health literacy has been linked to increased ability to recognise, manage, and prevent mental health problems. Gaps in public knowledge can lead to reduced help-seeking behaviour and reduced adherence to recommended interventions. This reduced help seeking is not only linked to a lack of knowledge but is also attributed to stigma, both in oneself and the perceived stigma of others. A New Zealand based analysis of media depictions of mental illness highlighted that negative depictions of mental illness dominated the examined media samples (Coverdale, Nairn, & Claasen, 2002). It was considered that this could serve to reinforce stereotypic understandings of mental health problems, which are often stigmatising. For example, that those with a mental health problem are dangerous or unpredictable. The authors noted concern that such results may contribute to a lack of help-seeking behaviour as well as determining the responses of family, friends and carers of those with mental illness. Leibowitz (2010) reported that stigma can particularly deter people from seeking help for milder mental health problems. Individuals may wait until problems become more severe and it becomes worth risking the possible stigmatisation from others. Low intensity approaches to treatment may be a solution to some of the issues detailed above. They are able to be marketed in a way

which avoids language associated with negative attitudes to mental illness and people are often able to self-refer which avoids involvement with a number of services.

The indigenous Maori of New Zealand, along with other minority groups (e.g. Pacific peoples), experience higher rates of mental health problems and are also less likely to seek support from services (Wells et al. 2006). Research into these observed differences in prevalence of mental health problems has shown that though Maori in some cases report higher rates of socioeconomic disadvantage, this does not entirely account for these differences, indicating that ethnicity-specific factors may play a role (Tapsell & Mellsoop, 2007). It has also been speculated that factors such as; rapid urbanisation, misdiagnosis, treatment mismanagement and differential access to community and primary care may explain this discrepancy to some degree (Tapsell & Mellsoop, 2007). A Maori model of mental health – Te Whare Tapa Wha (four walls of the house) conceptualises mental health as dimensions which contribute to overall wellbeing (Durie, 1994). These dimensions include: mental, emotional, and thoughts; physical; spiritual; and family and relationships. This model mandates that each dimension is connected to the others and cannot be viewed alone. It is therefore possible that the current mental health system, focused largely on addressing specific issues within these dimensions in isolation, is not working within a framework which is appreciated by minority groups and could explain the observed lower service uptake. Durie (2001) noted that Maori have different concepts of health and illness. It makes sense then that different approaches to managing mental illness with minority groups in New Zealand are required. Some research has incorporated this concept with low intensity approaches to treatment. One New Zealand research group has developed a computerised self-help programme 'SPARX' for adolescents with depression (Merry, Stasiak, Shepherd,



Frampton, Fleming & Lucassen, 2012). This has recently been adapted for Maori adolescents with positive initial research into how the intervention may be received by Maori clients (Shepherd, Fleming, Lucassen, Stasiak, Lambie & Merry, 2015). Another project looked at the impact of the Living Life to the Full Programme with Asian students (Lee, 2014). Results demonstrated that the programme resulted in statistically significant changes in depression, anxiety, and quality of life. Though the current project will not specifically tailor content or presentation to specific minority populations, or target particular ethnic groups in recruitment, it is promising that previous LICBT research specific to minority New Zealand based populations has garnered a positive response.

### **Summary**

Research shows that guided self-help can significantly improve outcome measures for mild to moderate depressive symptoms across samples of adolescents, adults, and older adults (McKendree-Smith et al., 2003). The current study seeks to examine the effectiveness of a low intensity group guided self-help programme, Living Life to the Full, targeting low mood in a New Zealand context. An exploratory evaluation of *early rapid response* change processes within individuals will also be made, along with an examination of the development of group process variables across programme delivery. Participant adherence to the programme and satisfaction with this form of intervention will also be evaluated.

## **Research Hypotheses**

### **Outcome**

- 1) The LLTTF programme will result in decreases in depression and psychological distress, and an increase in quality of life.
- 2) These treatment gains will be maintained from programme completion and across follow up.

### **Individual Process**

- 3) Participants are expected to experience reliable and clinically significant change across the LLTTF programme.
- 4) Early rapid response patterns of change are predicted to be evident in the examination of change trajectories for individual participants. The presence of such patterns is expected to be associated with more positive treatment outcomes.

### **Group Process**

- 5) Factors associated with group cohesion (climate) are expected to develop differently to patterns noted in previous literature with group programmes, given the fewer opportunities for interaction within the LLTTF programme.
- 6) A significant difference in level of perceived group cohesion at mid-treatment is expected in comparing participants who experience reliable and clinically significant change by post-treatment and those who do not.
- 7) Cohesion to the facilitator is anticipated to develop differently to patterns described in the relevant literature, due to the de-emphasised therapist role in this low intensity programme. This is will be reflected through lower scores on the cohesion to the facilitator measure.

- 8) Higher levels of cohesion to the programme facilitator are expected to be related to higher levels of group cohesion.

**Participant adherence and satisfaction**

- 9) Participants will make use of the programme materials and skills outside of structured sessions as is intended by the self-help nature of the programme.
- 10) Participants will report being satisfied with the LLTTF programme and the guided self-help form of delivery.

## CHAPTER SIX: METHODOLOGY

### **Participants**

Participants were all over the age of 18 years. Minimal restrictions for acceptance into the programme were placed on applicants in terms of variables such as age, gender, ethnicity, education level, or comorbidity. Exclusion criteria were limited to; client perceived difficulties with partaking in a programme which is largely reading and writing-based, a current diagnosis of psychosis, active suicidality or past suicide attempts, and client disclosed substance abuse or dependence problems. These were thought to be appropriate exclusions given that self-help programmes are targeted toward mild to moderate mental health problems and have limited scope managing severe mental health problems (Williams, 2001). Respondents who were screened from the study during the registration process were given information regarding help resources which may be of use to them; for example, The Crisis Assessment and Treatment Team (CATT) (see Appendix B-1 for a detailed risk protocol).

Demographics of the initial sample ( $N=19$ ) can be seen below in Table 6.1. Of particular note is that 47.4% of participants reported having sought previous treatment for their presenting problem, with 36.8% never having engaged in treatment for their particular problem. This indicates that as intended, this programme may engage individuals who would not otherwise receive or choose to participate in other forms of treatment. All participants met the selection criteria outlined above. Symptom severity will be discussed in detail in the results section.

Table 6.1

*Summary of participant demographics (N=19)*

	<i>N=19</i>	Percentage (%)
<u>Gender</u>		
Male	4	21.1%
Female	15	78.9%
<u>Age</u>		
20-29	2	10.5%
30-39	5	26.3%
40-49	6	31.6%
50-59	5	26.3%
Did not disclose	1	5.3%
<u>Ethnicity</u>		
NZ/European	12	63.2%
Asian	3	15.8%
Middle Eastern	1	5.3%
South African	3	15.8%
<u>Previous Treatment</u>		
Yes	9	47.4%
No	7	36.8%
Did not disclose	3	15.8%
<u>Medication</u>		
Yes	4	21.1%
No	13	68.4%
Did not disclose	2	10.5%
<u>Attrition during treatment</u>		
Completers	13	68.2%
Non-completers	6	31.8%

**Recruitment.** Participants for this study were recruited through a joint advertising campaign with another low intensity CBT project running concurrently. This consisted of two advertisements in the local newspaper (North Shore Times), an advertisement in

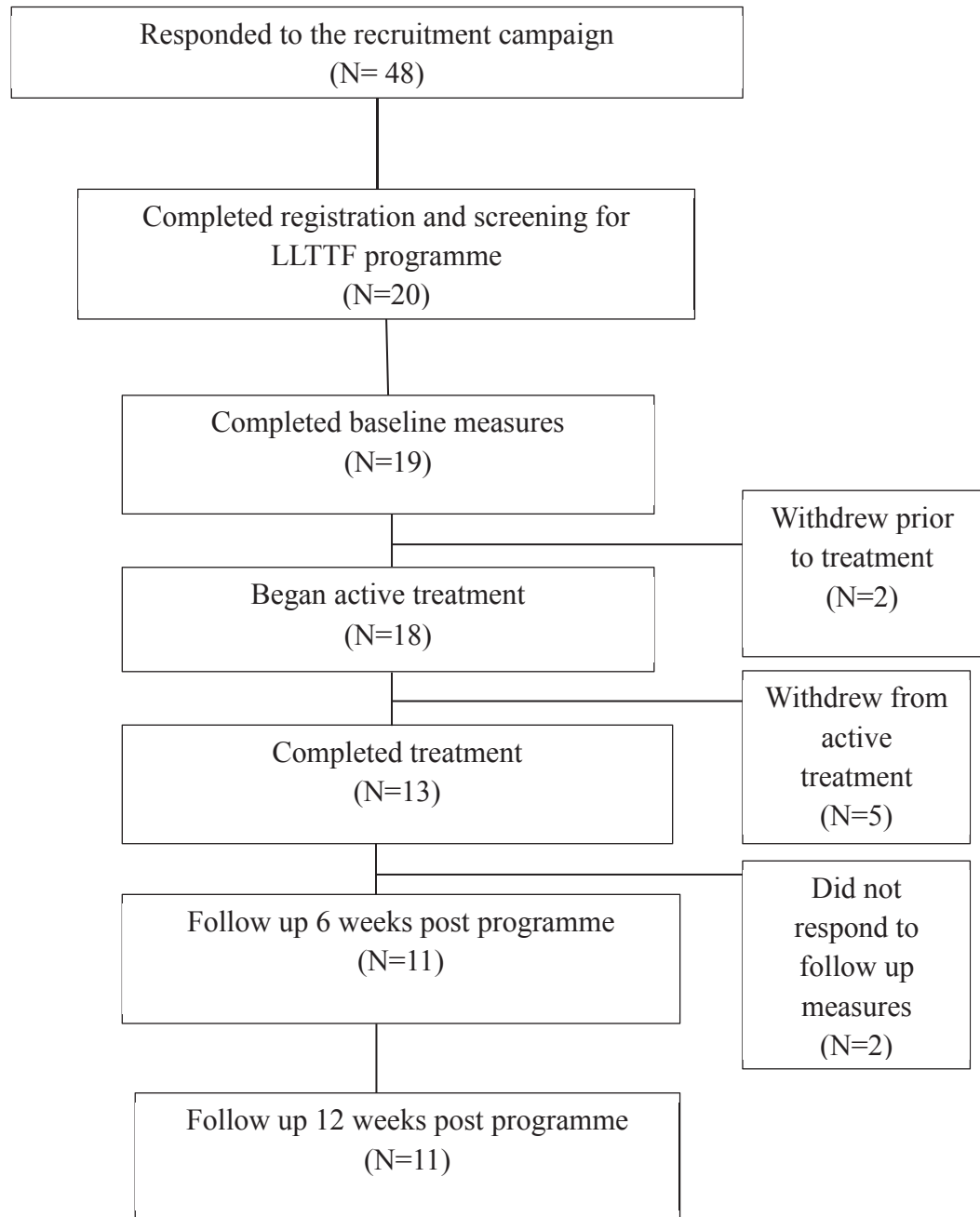
a local newsletter (Coffee news), an advertisement on an auction and classifieds website (Trademe), and the distribution of flyers and posters in public areas such as libraries, universities, community centres, schools, and supermarkets. Social networking was also utilised with a Facebook profile page being set up where people could comment, share the page with contacts, and directly access the registration website from the programme's profile page. These advertisements contained general information about the two separate doctoral programmes including; that the programmes were guided self-help programmes aiming to aid people in overcoming low mood and other common difficulties, in addition to contact details, a timeframe for the beginning and duration of the programmes, and directions to the registration website.

The aforementioned website was developed so interested individuals were able to complete the screening process online, and register for the programme (see appendix A-3). The website contained specific information about the two programmes, along with profiles of the support people running them. A screening process was set up with a number of questions based around previously mentioned exclusion criteria. Participants invited to proceed with registration following screening were then able to select which programme they would prefer to take part in, either the group-based approach of the current study, or an individual-based approach run by another doctoral student. Those who selected the group-based approach proceeded with the Living Life to the Full course delivered in a group format.

Figure 6.1 below demonstrates the progression of participants through the study. Forty-eight people signed up to partake in the two studies running concurrently. Twenty enrolled to take part in the current group study and nineteen completed the baseline

measures and entered the programme. Thirteen participants were actively involved in the programme at its conclusion and eleven people completed follow up. Reasons for the drop out of six participants during the programme will be examined further in the Discussion. Participation in this research was voluntary and participants were able to leave the self-help group at any time. The programme was free to participants.

Decisions about a desired sample size were made using both a power calculation as well as an examination of studies which utilised methods of analysis similar to what was planned (Sachenweger, 2010). This number was estimated at between 25 and 30 participants. Because the recruited sample was smaller than this ( $n=20$ ), and throughout the programme seven participants were lost through attrition, the approach to analysis was adapted to accommodate this (see section on analytical approach). Given the resulting design predominantly examined data at a single case level, revised sample size targets were not required.



*Figure 6.1.* Flow chart of participants' progression through the programme.

### **Guided Self-Help Programme**

The Living Life to the Full (LLTTF) low intensity CBT course was developed by Professor Chris Williams (2008). This manualised guided self-help programme was delivered to participants in the current study. The LLTTF programme was an initiative



to create an accessible and jargon-free way of presenting CBT and is designed to be used in a group format with the presence of a support person (see page 19 for a description of the role of a Psychological Wellbeing Practitioner, PWP). The programme consists of eight weekly support and learning sessions which run for 90 minutes each. Booklets provide the self-help component of the programme. PowerPoint slides, worksheets, posters, and other small tools used for psycho-education and clarification purposes are utilised within support sessions.

The LLTTF course is based around eight booklets (the *'little CBT'* book series) which focus on several main areas consistent with “low mood, anxiety and other common difficulties” (Williams & Chellingsworth, 2010, p 111). The course is based on the catch phrase ‘12 hours that can change your life’ and each session is based around one of the ‘little CBT’ books provided to participants each week. Each session has a theme and additional resources are colour-coded to fit with the associated book. Participants are given one book per session to work through in their own time and at their own pace, and class content covers one booklet per session.

The self-help booklets cover a range of topics. The ‘Write all over your bathroom mirror’ booklet is provided as a guide to orient the individual to the programme. It includes information for how to increase the chances of successfully completing the programme, such as increasing support networks, making use of the group facilitator, and how to deal with issues which may arise along the way such as becoming overwhelmed or ‘stuck’. Subsequent sessions and their content are displayed in Table 6.2 below.

The LLTTF programme targets all intervention towards five major areas (situation, thoughts, emotions, physical symptoms, and behaviour) under what Professor Chris Williams calls, The Five Areas approach. This approach incorporates the key components of the traditional CBT five part model, but the language in which it is delivered is simplified in an effort to increase accessibility (Williams & Morrison, 2010). The approach surmises that an individual's life situation can result in altered behaviour, altered thinking, altered feelings, and altered physical feelings all of which contribute to a person's overall wellbeing. The five areas are said to be interdependent and change in one area results in change in the other areas, whether this change is positive or negative. For example, the way an individual thinks about a certain situation, may also impact on the way they feel emotionally and physically, and the way they behave as a result (Williams & Garland, 2002). Classes are focused around several of these identified areas. In particular, books are targeted at, 'changing unhelpful behaviours', 'changing upsetting thinking', and 'fixing problems'.

Group participants are encouraged to work on their individual problems between sessions as the self-help component of the course suggests. However, work is also completed within sessions, for example, learning to plan to implement strategies to solve problems. Group sessions and the tasks set within these sessions are a means of facilitating discussion, in addition to being a way for group members to receive support and encouragement from one other (Williams & Chellingsworth, 2010). This can be achieved through breaking the larger group into smaller more intimate discussion groups at times during a session.

**Group Facilitator.** The support or *guided* component of the LLTTF programme was provided by a group facilitator. Two second year doctoral students of clinical psychology (including the author) were trained to fulfil this support role. Two separate doctoral research projects were run, including the current study.

The role of the facilitator in the current study was to deliver the LLTTF programme and provide support to those undertaking the programme. The Improving Access to Psychological Therapies (IAPT) PWP training guidelines (Richards & Whyte, 2009) were developed to support the training of those delivering low intensity interventions in the United Kingdom. Several aspects of these guidelines were incorporated into training in the current research; such as the use of role play, ensuring ability to explain the facilitator role to clients, and competently ensuring client expectations for treatment matched what they would receive. However, the PWP role for which this manual was developed, is more extensive than the more limited guiding and support role in the current context, therefore these guidelines were not used as a basis for complete training. There is no available qualification for the role of delivering of low intensity interventions in New Zealand; therefore a training programme was developed for the purposes of the current research.

Table 6.2

*Overview of session content for the Living Life to the Full Programme by Professor Chris Williams (Williams, 2008).*

Session and associated self-help booklet	Content
1. "Write all over your bathroom mirror", and "Why do I feel so bad?"	<ul style="list-style-type: none"> <li>• Programme overview.</li> <li>• The Five Areas approach overview using the Vicious circle (altered thinking, altered feelings, altered physical feelings, and altered behaviour).</li> </ul>
2. "I can't be bothered doing anything."	<ul style="list-style-type: none"> <li>• Focus on altered behaviour section of the vicious circle.</li> <li>• Identify current activity levels, including ratings for achievement, pleasure and closeness to others.</li> <li>• Make a plan to increase activity levels</li> <li>• Break one item down into small chunks and come up with alternatives ideas to get it done if things get in the way.</li> </ul>
3. "Why does everything always go wrong?"	<ul style="list-style-type: none"> <li>• Focus on altered thinking section of the vicious circle.</li> <li>• Amazing Bad Thought Busting Programme (Label it, Leave it, Stand up to it, Look at it differently).</li> </ul>
4. "I'm not good enough."	<ul style="list-style-type: none"> <li>• Targeting low confidence</li> <li>• Choosing sensible ideas not negative ones.</li> <li>• Practise acting with confidence</li> <li>• Having realistic goals</li> </ul>
5. "How to fix almost everything."	<ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Easy four step plan (break plan into chunks, brainstorm ways to do the first chunk, choose an idea and make a plan to do it, check the plan and put it into action).</li> </ul>
6. "The things you do that mess you up."	<ul style="list-style-type: none"> <li>• Identifying actions we take when we are feeling down (substance use, eating for comfort, self-harm, hitting out at other people).</li> <li>• Use easy four step plan to reduce these unhelpful behaviours.</li> <li>• Identifying helpful behaviours.</li> </ul>
7. "Are you strong enough to keep your temper?"	<ul style="list-style-type: none"> <li>• Identifying things which cause anger</li> <li>• Advantages and disadvantages of engaging with people when angry.</li> <li>• Four steps for anger: <ol style="list-style-type: none"> <li>1. Identifying what pushes your buttons.</li> <li>2. Know your early warning system.</li> <li>3. Know where the escape hatches are.</li> <li>4. Give yourself respect for leaving the situation.</li> </ol> </li> <li>• Relaxation session with anxiety control script.</li> </ul>
8. "10 things you can do to feel happier straight away."	<ul style="list-style-type: none"> <li>• Coverage of 10 small changes which can improve low mood (eating breakfast, exercise, doing a good deed for another person each day).</li> </ul>

## Procedure

**Group Facilitator Training.** Training initially involved attending a course of lectures for the *Theory and Practice of CBT* paper within the Postgraduate Diploma in CBT at Massey University. Content consisted of an examination of the cognitive model and its variants along with coverage of relevant empirical research. Practical experience in utilising assessment instruments and CBT procedures for intervention was also gained through demonstrations and role plays. A specific low intensity CBT training workshop delivered by two registered clinical psychologists was also attended across a two day period. The ‘CBT Clinicians Guide to using the Five Areas Approach’ served as an initial basis for support training (Williams & Chellingsworth, 2010). Training centred on the acquisition of skills related to the application of The Five Areas approach within sessions, along with more practical skills necessary for the running of LLTTF classes.

The LLTTF programme provides resources such as support scripts to aid in the structuring and delivery of session content. These served as the basis for role plays and practise sessions for the trainee group facilitator and were adapted in accordance with the personal style of delivery of the individual facilitator as is recommended by the programme materials. The online modules of the LLTTF course were also completed in order to help familiarise the trainee with the content of the programme.

As per the risk protocol (See Appendix B-1), face-to-face weekly supervision was provided by the same clinicians involved in the training of the facilitator. In addition, one supervisor was on the premises during all instances of client contact. Participant outcome measures were reviewed by the supervisor to ensure that any significant

negative changes which may have occurred throughout treatment were followed up. Participants in the study were fully informed of the fact that the individual running the self-help programme was a facilitator, not a trained clinician, and was trained only in the administration of this particular programme.

**Session structure.** The Living Life to the Full group met with the group facilitator for eight classes of 90 minutes, for a total programme comprised of 12 hours of support time. Classes were held weekly on a Tuesday evening from 6.30-8pm for eight weeks. Psychometric measures were administered at the beginning of each session. For one week prior to the start of the programme, participants were asked to complete these psychometric measures on the registration website as a baseline condition. Measures were then completed by participants by hand at the beginning of each session of the eight week programme. Follow-up measures were administered six and twelve weeks after the conclusion of the programme, and at these times participants were again asked to complete psychometric measures online as a follow-up condition. The use of the website format for the administration of measures at baseline and follow-up is an effort to make the process more accessible and flexible for participants, as they were able to complete measures at their own convenience using a survey link which remained active for a one week period.

The first session began with an introduction to the format of the LLTTF course. Emphasis was placed on the fact that the programme was intended to be a means to support individuals in their use of this evidence-based self-help package (Williams & Chellingsworth, 2010). The aim was to provide coverage of a range of important life skills, and dealing with *individual* issues in depth was deemphasised. An information

sheet containing the details of the research along with information regarding help services for individuals who may become more seriously unwell throughout the programme, was also provided in this initial session. Refreshments were available at the beginning of each class and at this time resources were distributed for the week ahead. Psychometric measures were also administered at this time and were completed by participants before the content portion of each session began. The initial class began with a group discussion regarding ground rules for the group. This exercise was intended to act as both an ice breaker and a chance for participants to express what they felt was important in the running of these classes. Issues such as confidentiality, punctuality, respecting cultural differences, and letting everyone have a say were some of the issues raised and a list of ground rules was compiled and mounted on the wall for subsequent classes.

The content of the first class consisted of an overview of the principles of Five Areas CBT using the 'Why do I feel so bad?' book. This included coverage of altered thinking, altered feelings, altered behaviour, and altered physical symptoms. During each class a brief review of the material in the little CBT book of the week was conducted, and the small tasks in the books were completed during class time. Resources such as posters, PowerPoint slides, a DVD, and worksheets were also used within group sessions to emphasise key topics. Subsequent sessions followed similar formats with one theme being the focus of each session, and the associated book and resources being used to explore the issue and possible solutions. A brief review of the previous session occurred at the beginning of each class based on individuals' self-reflection exercises, which were to be completed in their own time. This often allowed

for a short discussion on problems people may have had and solutions to these problems which other members of the group or the facilitator may suggest.

Six and twelve weeks after the eighth and final group session, participants were sent email reminders to fill out the psychometric measures online in an effort to assess the potential lasting effects of the programme. An additional measure assessing client satisfaction with the programme was incorporated at the six week follow up.

### **Ethical Considerations**

The Health and Disability Ethics Committee (#CEN/11/09/051) granted ethical approval for the running of this low intensity group self-help programme with adults. Approval was gained in June 2012 through an amendment to the Massey Centre for Psychology's ethics application regarding running group therapy sessions (December 2011). This project therefore sits under the auspices of the Massey Centre for Psychology's ethics application.

Several considerations were made in order to ensure the smooth running of the LLTTF group sessions. In any case where a participant was noted to have experienced a decrease in functioning or become increasingly unwell, based on group facilitator or supervisor observation, or as indicated by outcome measures, steps were in place to ensure the individual's safety. Information regarding who to contact if a crisis occurs along with other applicable services were given to all participants at the beginning of the course. If a change in behaviour was noted during the programme, the individual would be offered further assistance and services as per the risk protocol (see Appendix B-1).



Steps to manage disruptive individuals were also considered in relation to the smooth running of the LLTTF programme. Williams and Chellingsworth (2010) provide detailed recommendations for such issues and these were covered in group facilitator training. These included dealing with disruptive individuals or those causing conflict with other members. The issuing of a warning if these behaviours occurred was recommended, and as a last resort asking the individual to no longer attend the group.

Privacy and confidentiality were key ethical issues in the current study due to sharing of personal information within group sessions. At the initial class confidentiality was highlighted as a group ground rule. This was emphasised both in terms of individuals feeling comfortable disclosing personal information within the group, in addition to the importance of not identifying individuals to others outside of the group.

Cultural consultation was also sought in preparation for the running of the group. A meeting with a university cultural consultant was held and the research project was discussed with reference to its relevance to Maori. An agreement was made for continued consultation should any cultural issues arise during the running of the programme. No participants in the programme identified as Maori at registration, therefore this consultation was not required on an on-going basis.

## **Measures**

The process and outcome measures used in the current study are described in detail below.

## **Outcome Measures**

**Patient health questionnaire 9 (PHQ-9).** The PHQ-9 (Kroenke, Spitzer, & Williams, 2001) is a nine item depression measure derived from the full Patient Health Questionnaire, which screens for numerous mental disorders such as depression, anxiety, somatoform, and alcohol problems. The PHQ-9 is a multipurpose self-report instrument used to screen for, provisionally diagnose, and monitor severity of depression. The measure incorporates DSM-IV-TR (American Psychiatric Association, 2000) criteria for major depression and also factors in frequency of symptom presentation, both of which contribute to severity scoring. Each item is scored based on the presence of a symptom and how often it is experienced, from 0 (not at all) to 3 (nearly every day), resulting in a maximum score of 27. Scores of 5, 10, 15 and 20 represent cut-off points for mild, moderate, moderately severe, and severe depression respectively. A score of less than five on the measure is said to represent minimal or no depression. The measure also includes an un-scored question, ‘How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?’ This gives an impression of the individuals’ global perception of the extent of the impairment in their functioning. The PHQ-9 has established reliability and validity as measure of depression severity (Kroenke et al., 2001). The measure can be completed in less than two minutes and is freely available to users in a community setting.

**Clinical outcomes in routine evaluation 10 (CORE-10).** The CORE-10 (Lyne, Barratt, Evans, & Barkham, 2006) is a variation of the original CORE outcome measure (CORE-OM), a 34 item self-report measure which assesses high and low intensity factors of four domains; subjective wellbeing (4 items), psychological problems (12

items), functioning (12 items), and risk of harm to self and others (6 items). The CORE-10 is a shortened version of the CORE-OM. It is recommended that this shortened version be used if the measure is to be administered on a session by session basis, as in the current study, to reduce the load on participants (Andrews, Twigg, Minami, & Johnson, 2011).

The CORE-10 includes a mixture of low and high intensity questions (e.g. 'I have felt tense, anxious or nervous' versus 'I have made plans to end my life'), as well as questions which are both positively and negatively framed ('I have felt I have someone to turn to for support when needed'; 'I have felt panic or terror'). The use of items measuring higher and lower intensities of symptomology increases the range of scores and makes the measure more sensitive to change. Because the current study is examining a community sample, this is particularly relevant. A measure which captures a milder spectrum of symptomology is useful in this instance to contrast the use of the PHQ-9, which adheres to DSM-IV-TR (American Psychiatric Association, 2000) criteria for major depressive disorder and thus may be less sensitive to issues which are not so severe.

The CORE-10 has been shown to be highly sensitive to change and correlates very highly ( $r=.94$ ) with the original CORE-OM measure (Andrews et al., 2011). The measure also has good reliability ( $\alpha=.80$ ). A score of greater than 11 on the measure, out of a maximum score of 40, is said to indicate that the respondent falls within a clinical population and a change in score of six points or greater is said to indicate reliable change (Barkham et al., 2013; Connell et al., 2007). Use of the CORE measures is extensive within the United Kingdom and variants of the original CORE-OM

measure have been shown to be reliable and valid measures with good sensitivity to change across treatment (Evans et al., 2002). Permission was granted from the author of this measure for its use in this research project.

**Quality of life enjoyment and satisfaction questionnaire (Q-LES-Q-SF).** The Q-LES-Q-SF (Endicott, Nee, Harrison, & Blumenthal, 1993) is a frequently used outcome measure in psychiatric research. It is a 16 item self-report scale which assesses constructs such as physical health, subjective feelings, leisure activities, and social relationships. The resulting score is expressed as a percentage of the total possible score of 70 and presents the individuals perceived quality of living across the aforementioned factors. Reported test-retest reliability for this measure ranges from .86 in a community sample (Rapaport, Clary, Fayyad, & Endicott, 2005) to .93 (Stevanovic, 2011). Permission was granted by the author for the use of this measure in this study.

**Between session work measure.** Participants were asked to complete a short qualitative questionnaire each week regarding whether or not they had spent time during the previous week using the relevant little CBT book, and utilising skills learnt during the programme. If yes, they were asked to estimate the amount of time spent doing each of these. If no, they were asked to specify what stopped them doing so.

### **Group Process Measures**

The group process measures in the current study were selected in accordance with suggestions made by Strauss et al. (2008) in the development of the CORE-R battery of group measures. This ‘toolbox’ of measures was developed in an effort to reduce the huge differences in measures used across group therapy research. Both measures adhere

to the model proposed by Johnson et al. (2005) in that they measure the bond, working, and negative relationships within the group (see page 31 for a review of this model). Measures which focus on the member-group and member-leader relationships have been selected given these were anticipated to contribute most to group experience in the current study (see Table 6.3).

Table 6.3.

*Selected Group process measures and their component- perspective combinations (Johnson et al., 2005).*

Measure and Subscales	Bond Relationship		Working Relationship		Negative Relationship	
	Therapist	Group	Therapist	Group	Therapist	Group
Group Climate Questionnaire – Short Form						
Engagement		✓				
Conflict					✓	
Avoidance						✓
Cohesion to the Therapist						
Positive Qualities	✓					
Personal Compatibility			✓		✓	
Dissatisfaction						

**Group climate questionnaire- short form (GCQ-S).** Group climate has been referred to as the relationship cultivated by the group setting (Johnson et al., 2006). The presence of supportive relationships within a group environment can significantly influence individuals' perceptions and views of the group, in addition to their treatment outcomes (see page 32). The GCQ-S (Makenzie, 1983) is one of the most commonly used measures in group research. It is comprised of 3 subscales measuring; engagement (e.g. group cohesion, self-disclosure), conflict (e.g. interpersonal anger, tension), and avoidance (e.g. avoiding issues between members, dependence on group leader). The

reliability of these subscales respectively is, .94, .88 .92 (Kivlighan & Goldfine, 1991). The measure is freely available to use and distribute.

**Cohesion to the therapist scale (CTS).** The Cohesion to the therapist scale (CTS; Piper et al., 1983) is a 9 item self-report measure. The scale measures cohesion to the therapist, as perceived by individual members of a group (Strauss et al., 2008). The measure is comprised of three subscales. The positive qualities subscale assesses individual perceptions of the group leader's trustworthiness, likability, and communicability. The personal compatibility subscale assesses potential for friendship, similarity and familiarity. The final subscale, dissatisfaction with the leader's role, assesses any perception of a leader's lack of expressiveness, activity, or attentiveness. The CTS is one part of a broader measure, which looks at cohesion across member-member, member-group, and member-leader relationships.

Only one subscale of this measure was able to be accessed; therefore only the positive qualities subscale was used in analysis. For the purpose of the current study the measure was renamed 'group facilitator questionnaire,' and throughout the questionnaire, where the term 'therapist' was used, it was replaced with the term 'facilitator'. The term 'facilitator' will be used henceforth in this document.

### **Post Intervention Feedback**

**Client satisfaction questionnaire (CSQ-8).** The CSQ-8 (Attkisson & Zwick, 1982) is a brief measure developed to measure general satisfaction across various health and human services (Attkisson & Zwick, 1982). It was originally developed as an 18 item self-report questionnaire; however the brief eight item version has been deemed to

be equivalent or even superior in terms of performance. Items enquire about client's opinions and conclusions regarding services they have received, with items such as; 'Have the services you have received helped you to deal more effectively with your problems?', and 'If you were to seek help again, would you come back to our program?' Responses are given on four-point scales with an overall score of 0-32. All items are positively worded however, the directionality of responses (negative to positive or positive to negative) and numerical anchors are randomly reversed (high to low or low to high). The measure results in a single score for overall satisfaction, with higher values pertaining to higher satisfaction ratings. Psychometric properties of this measure are consistently good, with coefficient alpha values ranging from  $\alpha=.83$  to  $\alpha=.93$  (Larsen, Attkisson, Hargreaves, & Nguyen, 1979). This measure was purchased for use from the official website.

**Additional qualitative feedback.** Feedback questions were administered in the last class of the programme to gather information regarding which aspects of the course participants found helpful/unhelpful or liked/disliked, as well as information regarding what they would have liked more or less of in the programme, and the overall impact of the course on participants' lives.

Additional feedback questions were sent to participants during the follow up period, querying whether the self-help programme materials had been used since the programmes conclusion, any skills from the programme that were still being used, the overall impact that the programme may have had on participants' present life situation, and any unhelpful aspects of the programme. An invitation to share further comments about the programme was also made.





## **Analytical Approach**

This section will provide an overview of the analytical approach utilised in the current study. This involves initial and final design considerations and a review of the methods of analysis which were selected for use.

### **Initial Design**

In the planning of this research, a multi-level modelling (MLM) design was planned in order to examine change over time. This approach would allow for the development of individual growth curves and was suited to the longitudinal design in place. The individual growth curves were of particular interest given individuals were anticipated to differ in their initial symptom severity as well as the extent to which they experienced change throughout the programme. The data would be ‘nested’ in two levels and this approach to analysis would allow for the analysis of both within person change (level 1), and change between individuals (level 2). MLM is also flexible in allowing for missing data (Kwok et al, 2008).

Once the LLTTF programme was complete it was considered that the sample size had become too small by way of attrition to effectively utilise this method of analysis. It was decided that analysis would instead consist of a single case approach (discussed below). Because the design was not initially established for this method of analysis, this resulted in a research design in which participants no longer served as their own control condition (as in MLM). In addition the baseline condition was not long enough for a trend to be established as ideally occurs in single case analysis. This results in a lack of ability to detect differences between the baseline and treatment phases (Blampied, 2001). As such, the conclusions able to be drawn from the outcome data are limited, in

that observed changes cannot be attributed to the effect of the LLTTF programme. This specifically affects how conclusions relating to hypotheses about treatment effectiveness (see page 51) are presented and discussed. Changes across the time points of interest for these relevant hypotheses will still be observed, however discussion will be largely speculative.

## **Design**

**Analysis of Outcome.** Non-parametric statistics were chosen to analyse the results regarding change across LLTTF programme duration. Though distributions were normal, non-parametric tests provide a good option for analysis where sample sizes are small (e.g. less than 20) (Pett, 1997). In addition, the tests selected utilise median instead of mean values and are therefore less influenced by outlying scores and large standard deviations. Because standard deviations in the current study were noted to be relatively large, and the sample size was small, this was thought to be a more conservative measure of participant outcomes.

The Friedman test is the non-parametric alternative to the one-way repeated measures ANOVA and is used to compare three or more paired observations (Pallant, 2010). The assumptions of this test consist of the data being continuous, that there are multiple observations (repeated measures) from a single sample, and observations are independent (Pett, 1997). The test is non-directional, therefore post hoc analysis is required to determine where differences lie (Pett, 1997). The Wilcoxon Signed Ranks test was used for this purpose. The Friedman test will be run using data from participants who were present at all observation points of interest, as the test does not

deal with missing data points. Therefore it must be noted that these particular results may not be representative of every participant in the study.

**Analysis of Process.** A single case approach is considered well suited to the current study given the focus on process aspects of the results and the small sample size ( $N=19$ ). Key to a single case approach is replication, repeated measurement of constructs of interest, and visual analysis using basic line graphs for the inspection of results (Blampied, 2000). All of these factors are included in the current research design and this method will be used to make inferences about the processes involved in individual change across the LLTTF intervention. Statistical tests will be used where relevant to support these results.

**Replication.** A common criticism of single case designs is there is less evidence for the generality of findings (external validity) (Kazdin, 2003). However, the effect of this can be minimised through replication across cases. This, in addition to repeated observations within subjects (discussed below) provides a good platform for making inferences about change processes in the current study.

**Repeated Observations.** A single case analysis requires repeated measurement of outcomes over the course of treatment. Pre-post intervention designs result in a linear change pattern being deduced, however the introduction of repeated points of measurement across time allows for more complex shapes of change to be examined (Laurenceau et al., 2007). Repeatedly measured longitudinal data allows for this closer examination of intra and inter- individual change across time.

**Visual Analysis.** Within a single case approach the dominant method of analysis of outcomes is visual analysis. This involves the inspection of graphed data for each individual across consecutive time points enabling the deduction of patterns in the data across time points (Kazdin, 2003). Data often includes observations from before the intervention comes into effect, during its implementation, and after its conclusion (Kazdin, 2003). Changes in the level, trend (slope), and latency (speed of change) in each individual's graph are then able to be easily examined across these different phases. The benefits of this form of analysis include the fact that judgements regarding conclusions and hypotheses are able to be made fairly quickly, the presentation of data is quick and simple, and results are easily understood, making them more accessible (Busse, Kratochwill, & Elliott, 1995). Visual analysis is useful in the determination of large effect sizes, however it has been criticised for being insensitive to more subtle changes (Busse et al., 1995). When treatment effects are small it has also been noted that the interpretation of these results can become more unstable and prone to error.

### **Clinically Significant Change**

The most common method of establishing clinically significant change is the reliable change index (RCI) method by Jacobson and Truax (1991). Reliable change indices are a simple method of analysis which allow for the determination of whether change in outcomes are due to *actual* change, or due to random error (Ferguson, Robinson, & Splaine, 2002). The calculated RCI value denotes the number of scale points that an individual must move if the score is to be classified as statistically reliable. The RCI value alone does not signify clinical significance. In addition, post programme scores must fall in the range of normative values (Jacobson & Truax, 1991). Individuals are then classified as; recovered (having met RCI and cut off criteria), improved (meet RCI

but initial score was not within clinical cut off score), unchanged (met neither criteria), or deteriorated (showed reliable change in a worsening direction) (McGlinchey, Atkins, & Jacobson, 2002).

RCI criteria are used in the current study to identify individuals who experience clinically significant change on outcome measures. They will also be utilised in the examination of individual patterns of change across treatment, particularly early rapid responses to treatment. Reliable improvement within the early stages of treatment will be determined using the RCI change score criteria. Participants who experience reliable improvement in the early stages of treatment will be identified as early rapid responders. The criteria used to establish early rapid responding in the current study will be discussed in the results section. The extent to which early rapid responding influences final outcomes will then be investigated, with regards to whether these participants are more likely achieve clinically significant outcomes by treatment termination as is suggested by the literature (Delgado et al., 2013; Haas, Hill, Lambert, & Morrell, 2002).

## CHAPTER SEVEN: RESULTS

### Overview

Chapter seven will present the results of the current research project. A review of preliminary data screening will be made initially. Following this, an analysis of outcomes will be made with regards to the primary outcome measures of depression, psychological distress, and quality of life.

With regards to the analysis of process, the extent to which *clinically significant* change occurs for participants will be examined. The development of individual change trajectories in response to this LICBT intervention will be explored. Of particular focus in this instance will be *early rapid response* patterns, which have been shown to occur in both traditional CBT, and in preliminary research on low intensity interventions. Such responses have been shown to predict more positive treatment outcomes (Hayes et al., 2007; Delgadillo et al., 2013). An investigation of early rapid response patterns in the Living Life to the Full programme will be made, along with an examination of their relationship to treatment outcomes.

Group process variables will also be examined at an individual level. Patterns of development for group climate, and cohesion to the programme facilitator will be analysed with the view of ascertaining whether such patterns differ or are similar to those noted in previous research using other group therapy approaches. The relationship of these variables to the clinical significance of individual outcomes will also be investigated.

Lastly, participant satisfaction with the programme is assessed, along with the extent to which participants became involved in completing tasks from the Living Life to the Full programme between sessions (homework), as is the intention of the *self-help* component of the programme.

### **Preliminary Data Screening**

#### **Statistical Software Used**

Data was analysed using the Statistical Package for Social Sciences (SPSS) for Windows, Version 20.0 (SPSS Inc., 2011).

#### **Missing Data**

Missing values analysis was conducted in SPSS to explore the extent to which data was missing from the sample. Missing data was categorised into missing items on outcome measures, and missing data due to individual absences from sessions.

**Missing items on outcome measures.** Missing data in the sample was generally low for missing items on each outcome measure, ranging from 0.08-0.17%. Little's Missing Completely at Random (MCAR) test showed that missing data for items on outcome measures was missing completely at random (Little, 1988; Acock, 2005). Because the number of missing items was low, data was imputed using the expectation-maximisation technique in SPSS. This process was utilised instead of case deletion (list-wise or pair-wise) in which incomplete cases are discarded (Schafer & Graham, 2002). This has the potential to create bias as complete cases may not be representative of the complete population. Because of the small sample size in this study (N=19) removing incomplete cases was not plausible due to the loss of power. Instead, during the

imputation process, missing values were filled in to allow total scores for these participants to be calculated. This involved the imputation of four items across three participants. All missing data points were from different items across two outcome measures; three from the QLES-Q-SF measure and one from the CORE-10. The imputation of such a small number of items would be unlikely to affect overall results.

**Absences.** Cases where data was missing due to absence were excluded when analyses requiring these particular time points were conducted. This resulted in smaller sample sizes for some analyses and is discussed where relevant.

### **Normality**

Data from the three primary outcome measures was screened for normality and outliers. Skewness and Kurtosis values were calculated for each measure with significance being determined by a skewness score of greater than 2 and a kurtosis score of greater than 7 (Curran, West, & Finch, 1996). Skewness and Kurtosis values for each outcome measure were within these parameters. The Kolmogorov-Smirnov statistic was also calculated and was non-significant for each outcome measure, indicating that distribution scores were normal.

### **Outliers**

Four outliers were noted in the dataset. One of these outliers was a high CORE-10 score, and the other three related to particularly low scores on the PHQ-9. However in comparing the 5% trimmed mean with the mean values, little difference was observed and so these scores were retained (Pallant, 2010). Outliers are expected in clinical



research and are accounted for in the following analysis with the use of non-parametric tests which utilise the median instead of the mean in the comparison of scores.

### **Reliability Analyses**

Cronbach's alpha was calculated for each of the primary outcome measures used in the current study. Alpha values were .81, .67 and .89 for the PHQ-9, CORE-10, and Q-LES-Q-SF respectively, all of which were considered adequate. Though .70 is a reliability threshold often denoted in the literature, lower thresholds have also been utilised, particularly in preliminary research (Nunnally, 1967). The obtained alpha value for the PHQ-9 is comparable to those gained in other studies with reported values of .86 to .89 (Kroenke et al., 2001). The alpha for the Q-LES-Q-SF is also consistent with those reported in previous research (.90, Stevanovic, 2011). The alpha value for the CORE-10 was found to be lower than observed in previous studies which have reported alpha values ranging from .80 to .90 (Andrews et al., 2011; Barkham et al., 2013). In addition, the reliability of the CORE-10 has been well established in previous literature (Barkham et al., 2013). Based on this, the measure was not excluded from the current study.

Reliability analyses were also completed for each of the group process measures. Alpha values for each subscale of the group climate questionnaire (GCQ-SF) were acceptable; Engagement .86, Conflict .95 and Avoidance .82, and all are comparable to those noted in other studies (Kivlighan & Goldfine, 1991). The Positive Qualities subscale of the cohesion to the therapist scale (CTS) also provided an acceptable alpha value of .93.

## Descriptive Statistics

The medians, means, and standard deviations for each outcome measure are displayed in Table 7.2.

## Bivariate Analysis of Outcome Measures

In order to examine the bivariate relationships between the outcome variables used in the current study, Pearson product-moment correlation coefficients were calculated (see Table 7.1). There was a strong positive correlation between the PHQ-9 and CORE-10 measures,  $r = 0.77$ ,  $n = 13$ ,  $p < 0.001$ , indicating that high depression ratings are also associated with higher ratings of psychological distress. Analyses showed a strong, negative correlation between the Q-LES-Q-SF and the PHQ-9,  $r = -0.69$ ,  $n = 13$ ,  $p < 0.001$ , indicating that higher depression scores are associated with lower scores on the measure of quality of life. Similar results were gained for the relationship between the Q-LES-Q-SF and the CORE-10,  $r = -0.72$ ,  $n = 13$ ,  $p < 0.001$ , again indicating that higher reports of psychological distress are associated with lower quality of life ratings.

Table 7.1

*Pearson Product-moment Correlations between Outcome Measures of Depression, Psychological Distress, and Quality of Life.*

Measure	PHQ-9	CORE-10	Q-LES-Q-SF
PHQ-9	-		
CORE-10	.77**	-	
Q-LES-Q-SF	-.69**	-.72**	-

\*\*  $p < 0.01$  (2 tailed)

Table 7.2

*Medians, Means and Standard Deviations for scores on the PHQ-9, CORE-10, and Q-LES-Q-SF outcome measures across the LLTF intervention.*

Week	N	Outcome Measure								
		PHQ-9			CORE-10			Q-LES-Q-SF		
		<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>M</i>	<i>SD</i>
Baseline	19	8.00	8.42	6.32	16.00	16.05	5.45	54.00	57.21	14.80
1	15	7.00	7.80	5.89	12.00	12.40	6.12	53.00	57.00	15.28
2	14	6.00	7.50	5.27	10.50	12.79	7.61	55.50	57.93	13.75
3	13	6.00	7.00	5.23	11.00	10.08	6.28	63.00	62.46	15.10
4	11	4.00	4.91	4.06	10.00	9.09	5.09	70.00	69.00	15.72
5	7	3.00	4.86	4.71	7.00	7.71	4.57	70.00	72.00	16.99
6	9	5.00	5.78	3.03	10.00	9.89	4.46	57.00	60.89	11.30
7	13	4.00	4.69	2.87	8.00	6.92	3.84	68.00	68.69	15.90
8	12	3.50	4.42	3.68	7.00	7.25	3.67	75.00	74.92	14.36
Follow-up 6 weeks	11	2.00	3.18	3.34	5.00	6.00	4.20	70.00	74.09	16.48
Follow-up 12 weeks	11	1.00	2.64	3.72	3.00	5.00	4.12	73.00	71.82	15.49

*Note.* Ranges for these measures are as follows: PHQ-9 = 0-27, CORE-10= 0- 40, Q-LES-Q-SF= 0-100).

## Analysis of Aggregated Outcome

**Hypothesis 1. The LLTTF programme will result in significant decreases in depression and psychological distress, and increases in quality of life.**

### Sample for Analysis

The following analyses involved the examination of three time points (baseline, mid-programme and post-programme). The use of three time points gives a more comprehensive overview of change across the LLTTF programme compared with the more common pre-post programme analysis. These analyses only incorporate data from participants who have all three observations available for the time points of interest. Due to participant absences during the programme only 11 participants met these requirements for analysis of time points during the LLTTF programme, and 9 participants for analysis of follow up time points.

### Changes in Depression across LLTTF

A Friedman test was carried out on the median PHQ-9 total scores across three time points (baseline, week 4 and week 8). The result demonstrated that there was no significant difference in PHQ-9 depression scores across these measurement points,  $\chi^2(2, n=11) = 0.00, p=1.000$ . However, median values showed the expected decrease in depression from baseline ( $Mdn = 8.00$ ), to mid-way through the intervention ( $Mdn = 4.00$ ), and at programme termination by week 8 ( $Mdn = 3.50$ ) (see Table 7.1). This result does not support the hypothesis that significant improvements in depression would occur across the LLTTF programme across baseline, week 4 and week 8 time points.

### **Changes in Psychological Distress across LLTTF**

A Friedman test was carried out on median CORE-10 scores for baseline, week 4, and week 8. A significant difference in psychological distress scores was noted across these time points,  $X^2(2, n=11) = 9.0, p = 0.011$ . Median values showed a decrease in psychological distress from baseline ( $Mdn = 16.0$ ), to week 4 ( $Mdn = 10.0$ ), and to programme termination at week 8 ( $Mdn = 7.0$ ) (see Table 7.1).

Having established a significant difference in psychological distress across the three time points, post hoc analyses were carried out to investigate which of the time points differed significantly from one another (baseline, week 4, week 8). Three individual Wilcoxon Signed Rank Tests were used for this purpose. Wilcoxon Signed Rank tests showed a significant decrease in psychological distress scores from baseline to week 4,  $z = -2.14, p = 0.033$  (medium effect,  $r = 0.39$ ). However, in guarding for type 1 error resulting from multiple comparisons, alpha values were adjusted (Pallant, 2010). The Bonferroni adjusted alpha value was set at .017. As a result of this adjustment, this difference was no longer significant.

A Wilcoxon Signed Rank test also showed a significant decrease in psychological distress from baseline to week 8,  $z = -2.80, p = 0.005$  (large effect,  $r = 0.51$ ). This remained significant despite the use of the adjusted alpha value of .017. There was no significant decrease in psychological distress from week four to week 8 of the programme. Results support the hypothesis that psychological distress as measured by the CORE-10 would decrease across delivery of the LLTTF programme.

### **Changes in Quality of Life across LLTTF**

As expected, median scores on the Q-LES-Q-SF measure of quality of life were seen to increase across baseline ( $Mdn= 54.00$ ), to week 4 of the intervention ( $Mdn= 70.00$ ) and continuing to programme termination at week 8 ( $Mdn= 75.00$ ) (see Table 7.1). However, a Friedman test showed a non-significant difference in quality of life scores across these time points,  $X^2 = (2, n=11) = 4.67, p= 0.097$ . This result does not support the hypothesis that quality of life scores would increase across the LLTTF intervention.

### **Summary**

Analysis of outcome measures for depression, psychological distress and quality of life showed varied results. The PHQ-9 measure of depression did not reflect an expected significant reduction in depression across the LLTTF programme. The results of the quality of life measure also demonstrated non-significant changes across the programme. Results from the CORE-10 measure however, showed a significant reduction in psychological distress across the LLTTF programme from baseline to week 8. Figure 7.1 uses a standardised scale to graphically display these results, which enables the direct comparison of participant outcomes across the three main outcome measures. These results show *some* of the expected change occurring in constructs of interest across measurement points.

**Hypothesis 2. Treatment gains made during the LLTTF programme will be maintained from programme completion across follow up time points.**

An additional Friedman test was completed to investigate whether the significant difference in psychological distress on the CORE-10 across the LLTTF programme

would be maintained after programme termination, across follow-up time points at six and twelve weeks post-programme. Median values highlight that scores continued to decrease from week 8 ( $Mdn= 7.00$ ), to follow up six weeks post programme ( $Mdn=5.00$ ), and again at follow up twelve weeks post-programme ( $Mdn= 3.00$ ). A significant difference in psychological distress scores emerged across these time points,  $X^2(2, n=9) = 7.29, p= 0.026$ .

Post hoc analysis using Wilcoxon signed rank tests showed a significant decrease in psychological distress from week 8 to follow up at twelve weeks,  $z= -2.02, p=0.043$  (medium effect,  $r= 0.42$ ). When the adjusted alpha value of .017 was applied for multiple comparisons this decrease was no longer significant. Decreases in psychological distress for all other time points were non-significant.

The design of the research project means participant change cannot be attributed to the LLTTF programme and thus changes cannot be referred to as ‘treatment gains’ as the hypothesis refers to. However, inspection of psychological distress median scores from post programme and follow up indicate that the observed changes were maintained as predicted and in fact continued to decrease significantly across follow up time points. The specific time points responsible for this decrease could not be specified due to correction for multiple comparisons.

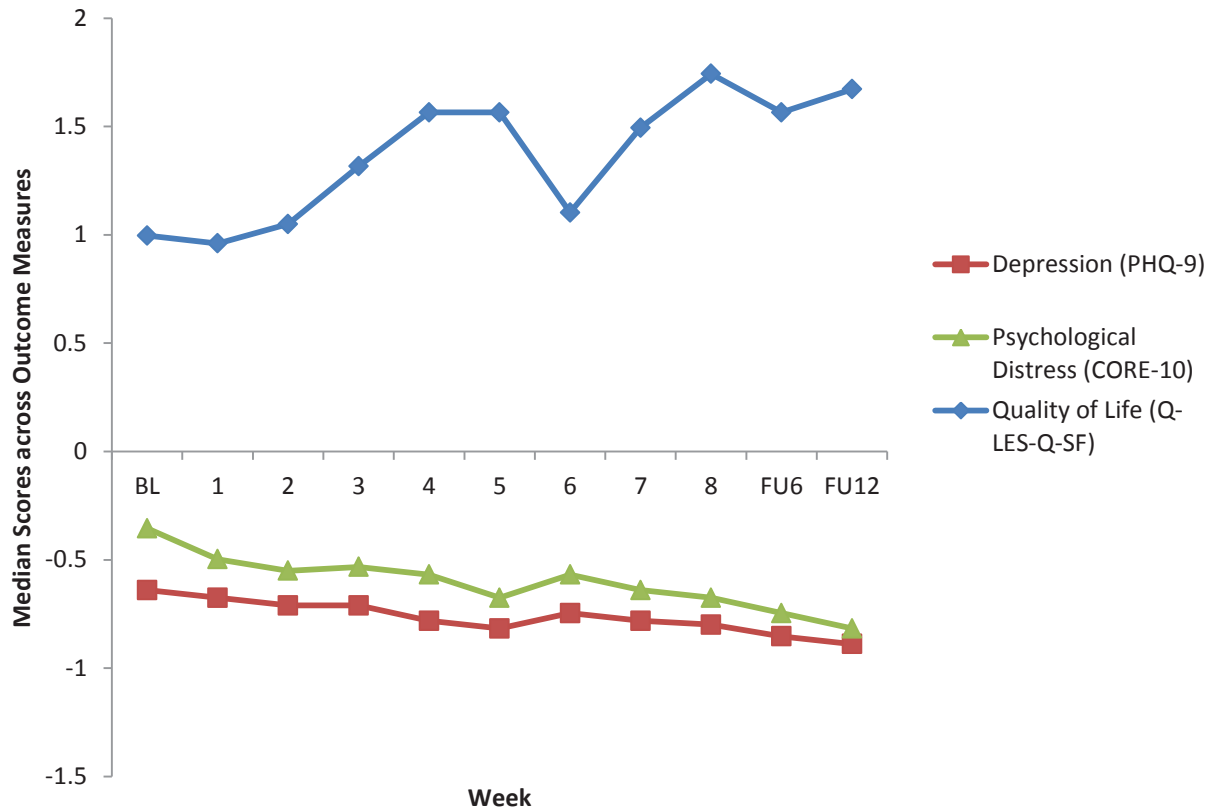


Figure 7.1. Standardised representation of median scores for PHQ-9, CORE-10 and Q-LES-Q-SF outcome measures across the LLTTF programme.

### Analysis of Individual Trajectories of Change

#### Overview

This section of analysis will examine whether reliable and clinically significant change occurred over the course of the LLTTF programme. In addition, the different trajectories of change for each individual will be explored.

**Hypothesis 3. Individuals will experience clinically significant change across the LLTTF programme.**



## Sample for Analysis

The following analyses includes participants who were actively involved in the LLTTF programme until programme termination ( $n=13$ ).

## Individual Changes in Depression

Table 7.3 presents depression severity scores from baseline to the end of the programme (week 8) based on cut off scores specified as 0, 5, 10, 15 and 20 for minimal or no depression, mild, moderate, moderately severe, and severe depression respectively (Kroenke et al., 2001).

Baseline scores on the PHQ-9 across participants varied significantly, meeting cut-off points for no depression, mild, moderate, moderately severe, and severe depression. At baseline, four cases did not meet criteria for depression, three cases met criteria for mild depression, three were moderate, two were moderately severe, and one fell in the severe range of depression. By the end of treatment seven participants were included in the no depression range, four were in the mild severity range, and two individuals, initially both in the no depression category, reported increased severity scores and were now in mild (case 11) and moderate ranges (case 4).

The reliable change index for the PHQ-9 measure requires a pre-treatment score of  $>10$  and a post-treatment score of  $<9$ , combined with an improvement of  $>5$  points on the measure for reliable and clinically significant change (CSC) criterion to be met (McMillan, Gilbody, & Richards, 2010). Six participants (46.2%) showed reliable and clinically significant change on the PHQ-9 (cases 2, 3, 5, 6, 10 and 13) and can be said to have recovered (Table 7.3). Seven participants were not in the clinical range at

baseline and therefore could not meet the criteria for clinically significant change. Such participants could only be deemed to experience reliable improvement, deterioration, or no change (see Appendix C-1). Two of these participants demonstrated reliable deterioration in depression severity with significant increase in scores across the programme (cases 4 and 11). Five participants remained unchanged in terms of depression severity (cases 1, 7, 8, 9 and 12).

Table 7.3.

*Depression severity scores across baseline, post programme, and follow up measurement points, along with clinical significance of changes and the reliability of this change.*

Case	Depression severity baseline	Depression severity post-programme (week 8)	Depression severity 12 week follow up	Reliable and CSC from baseline to post-programme (week 8)
1	No Depression	No Depression	-	No
2	Severe	Mild	Mild	Yes
3	Moderate	No Depression	No Depression	Yes
4	No Depression	Moderate	No Depression	Deterioration
5	Moderate	No Depression	No Depression	Yes
6	Moderately Severe	Mild	No Depression	Yes
7	Mild	Mild	Moderate	No
8	Mild	No Depression	No Depression	No
9	Mild	Mild*	No Depression	No
10	Moderate	No Depression	No Depression	Yes
11	No Depression	Mild	-	Deterioration
12	No Depression	No Depression	No Depression	No
13	Moderately Severe	No Depression	-	Yes

*Note 1.* \*Due to absence, an end of treatment (week 8) score was not available for case 9, therefore a score from the previous measurement point (week 7) was utilised in its place to gauge post-programme depression severity.

**Patterns of change in depression.** Shapes of change on the PHQ-9 measure of depression severity across the intervention process were variable and non-linear (see Figure 7.2). Eight of the thirteen participants showed a general downward trend as expected from baseline to post-programme (cases 2, 3, 5, 8, 9, 10, 11 and 13). However across all cases there was substantial variability which warrants further discussion.

Of participants classified as having no depression at baseline (cases 1, 4, 11, 12), one experienced very little change across the programme (case 1), two experienced slight increases across the programme's duration (cases 11 and 12), and one experienced a variable increase in symptoms with multiple peaks across weeks, the largest of which occurring across the last two weeks of the programme, prompting a change in classification from no depression to moderate depression (case 4).

Three participants were deemed to be mildly depressed at baseline (cases 7, 8, and 9). All three reported very different patterns of change across the programme. Case 7 showed a steady increase in depression to week three and then a relatively steady decrease for the last three weeks of the programme. Case 8 showed little change in depression severity across time, with a small decrease in depression in the final week of the programme. Case 9 began to experience a decrease in symptoms, however, after being absent for three consecutive classes returned and reported an increase in symptoms. An improvement from baseline to post-programme was still noted for this individual.

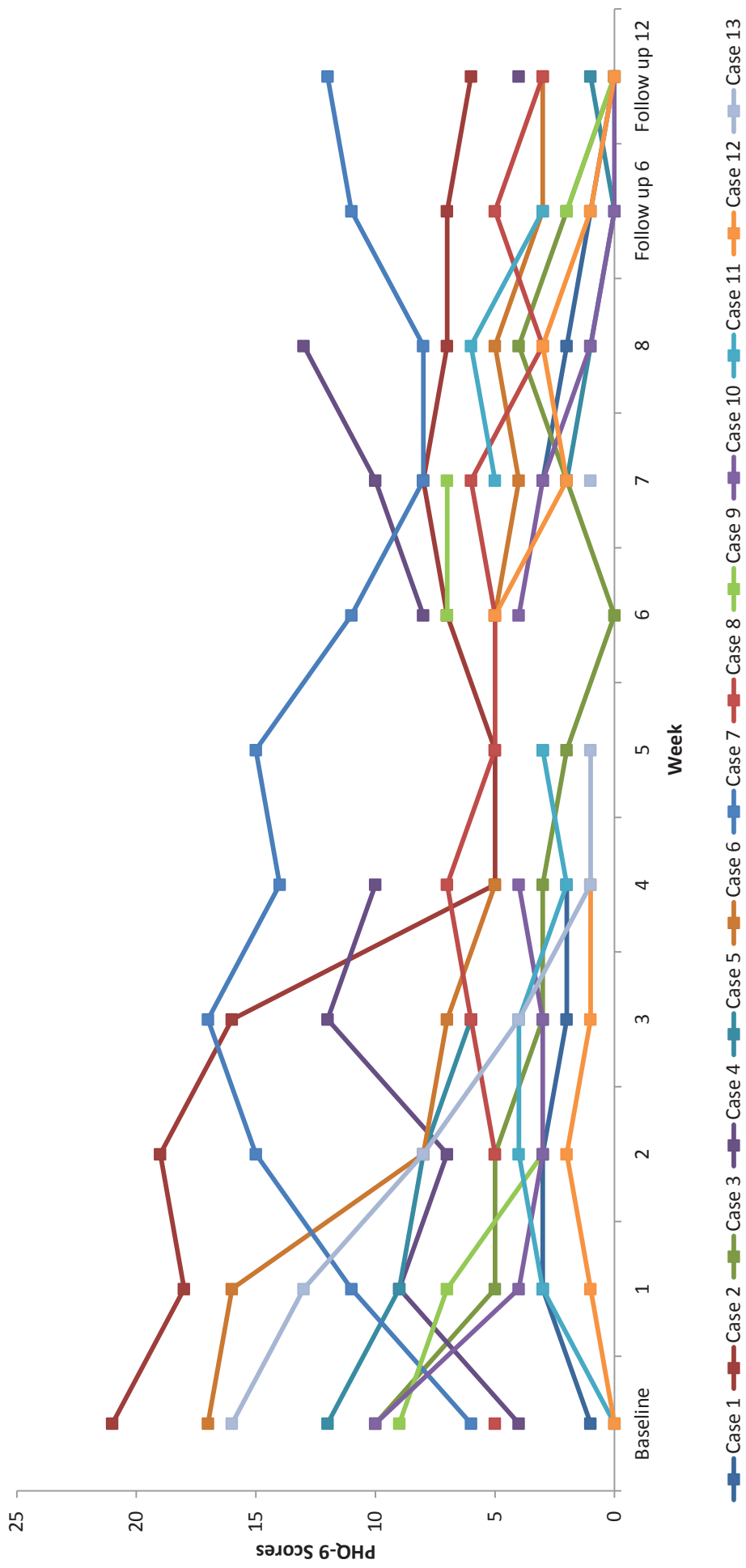


Figure 7.2. Individual depression severity scores (PHQ-9) across baseline, intervention and follow up measurement points.

Two participants were moderately depressed at baseline (cases 3 and 10), both of whom showed a steady, consistent decrease in depression severity to post programme and into follow up. Cases 6 and 13 were moderately-severe at baseline and both also showed a steady decrease in depression severity to post-programme. Both of these cases showed particularly rapid decreases in the first half of the programme.

One participant was severely depressed at baseline (case 2). A decrease in depression severity can be seen to be relatively consistent for the first three classes after which a rapid improvement occurs between weeks three and four. This improvement was largely maintained to post-programme and into follow-up.

**Follow up.** At the 12 week follow up, ten out of the total thirteen participants were classified as having no depression, one remained mildly depressed, and one participant had experienced an increase in depression after treatment finished and was now in the moderate range (case 7). Case 11 did not provide follow up data at 12 weeks post programme, therefore data from the six week follow up was examined. One participant did not complete follow up measures at this time point (case 13).

### **Individual Changes in Psychological Distress**

Table 7.4 shows changes in psychological distress for programme completers over time. At baseline, eleven of the thirteen programme completers were categorised as being in the clinical range for general psychological distress on the CORE-10 measure with scores above 11 out of a maximum possible score of 40 (Connell et al., 2007; Barkham et al, 2013).

Two participants who were classified as having no depression on the PHQ-9 were also not in the clinical range on the CORE-10 (cases 1 and 4). Five participants who were in the no depression or mild depression range on the PHQ-9 were in the clinical range on the CORE-10. Because the CORE-10 contains items relating to other problem presentations, this may indicate that the primary issues of concern for these participants were based in difficulties other than depression, such as anxiety or social functioning (cases 7, 8, 9, 11 and 12) (Barkham et al., 2013).

Reliable and clinically significant change on the CORE-10 has been determined to be a change in score of  $>6$  across the programme, *in addition* to a post treatment score below the clinical cut off of 11 (Connell et al., 2007; Barkham et al., 2013). Eight participants (61.5%) in the clinical range on the CORE-10 demonstrated reliable and clinically significant change on the measure from baseline to the end of the programme and can be said to have recovered (cases 2, 3, 5, 6, 9, 10, 12, 13). Three participants were in the clinical range at baseline but did not show reliable change (cases 7, 8 and 11). The two participants in the non-clinical range on the CORE-10 at baseline remained unchanged at post programme (cases 1 and 4).

Table 7.4

*Severity of psychological distress (CORE-10) at baseline, post programme, and follow up, along with clinical significance of changes and the reliability of this change.*

Case	Clinical status at baseline	Status by post-programme (week 8)	Status at follow up (12 weeks)	Reliable and CSC from baseline to post-programme (week 8)
1	Non clinical	Non clinical	Non clinical	No
2	Clinical	Non clinical	Non clinical	Yes
3	Clinical	Non clinical	Non clinical	Yes
4	Non clinical	Non clinical	Non clinical	No
5	Clinical	Non clinical	Non clinical	Yes
6	Clinical	Non clinical	Non clinical	Yes
7	Clinical	Clinical	Clinical	No
8	Clinical	Clinical	Non clinical	No
9	Clinical	Non clinical	Non clinical	Yes*
10	Clinical	Non clinical	Non clinical	Yes
11	Clinical	Non clinical	Non clinical	No
12	Clinical	Non clinical	Non clinical	Yes
13	Clinical	Non clinical	-	Yes

*Note 1.* \*Due to absence, an end of treatment (week 8) score was not available for case 9, therefore a score from the previous measurement point (week 7) was utilised in its place to gauge changes in psychological distress for this participant.

**Patterns of Change in Psychological Distress.** Similar to the PHQ-9, results from the CORE-10 were variable and non-linear (see Figure 7.3). Trajectories for individuals in the clinical range who experienced reliable change were discontinuous, though all demonstrate a pattern of decrease across the running of the programme. Some individuals experienced a somewhat steady rate of reduction in distress (cases 3, 5, 6, 12), while others made more variable gains across the treatment process (cases 2, 9, 10, 13). Cases 2 and 13 in particular demonstrated periods of large reductions in distress in the first half of the intervention. Case 9 was absent from four of the eight classes in the programme, and though a reliable decrease in distress can be noted, the trajectory of change for this individual is difficult to analyse. When absences occurred; it was noted that for some participants, scores on the CORE-10 would increase briefly before

reducing in subsequent sessions (e.g. cases 6, 9 and 11). For others, an absence did not significantly influence an established decreasing trajectory (cases 1, 5, 10, 12, and 13).

Five participants did not experience reliable change on the CORE-10 measure, that is they did not shift >6 points on the measure. Two cases were in the non-clinical range on the measure, one of which showed very little change across time (case 1), and the other showed an increase in distress across the running of the programme (case 4). Of those in the clinical range who did not experience reliable change, cases 7 and 11 showed relatively flat trajectories of change across the programme. Case 8 was more variable, with an initial decrease in score noted during the first three classes attended, which then levelled off. A spike in score can be seen during the last week of the programme.

**Follow up.** At 12 week follow up 10 participants had continued to improve on the CORE-10 measure. Two of these individuals had made further clinically significant change from post-programme to three month follow up (cases 9 and 10) and one had improved and changed from clinical to non-clinical status by follow up (case 8). One client experienced no further change (case 4) and one had experienced a worsening of symptoms post-programme (case 7). Twelve week follow up data was not received for case 11; therefore data from the six week follow up was examined. Case 13 did not complete any follow up measures.



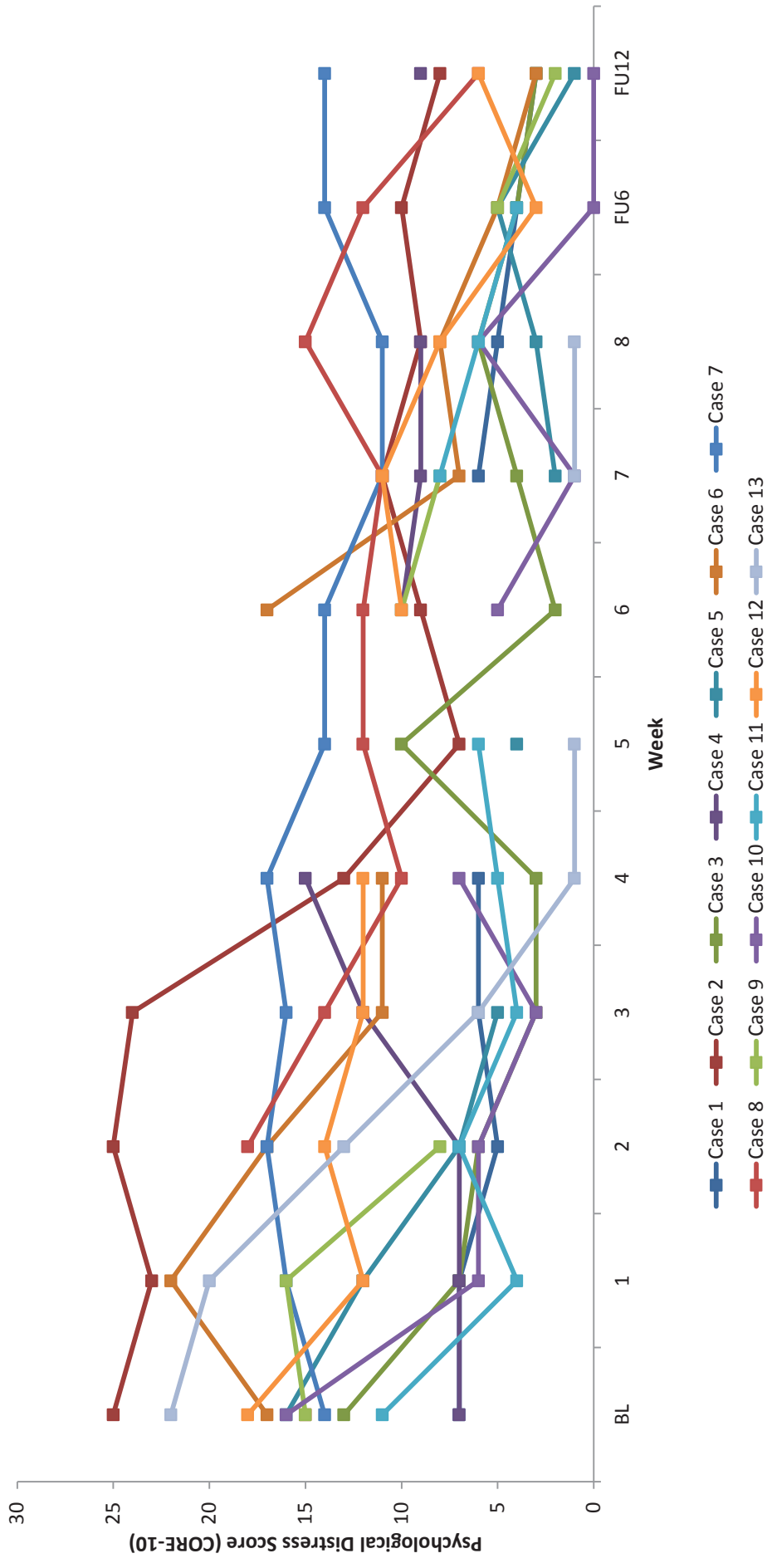


Figure 7.3. Individual psychological distress scores (CORE-10) across baseline, intervention and follow up measurement points.

### **Individual Changes in Quality of Life**

In determining whether clinically significant change in quality of life had occurred for programme completers, a reliable change index (RCI) was calculated for the Q-LES-Q-SF using the approach by Jacobson and Truax (1991).

$$RCI = 1.96 * SD * \sqrt{2} * \sqrt{(1-\alpha)}^1$$

$$RCI = 1.96 * 14.80 * \sqrt{2} * \sqrt{(1-0.89)}$$

$$RCI = 13.61$$

The current study used a clinical cut off of score of 50.70, which has been established as being two standard deviations from community norms reported in the literature (Swan, Watson, & Nathan, 2009; Eisen et al., 2006). The RCI was used in conjunction with this clinical cut off score to denote clinically significant change for each individual.

Based on this RCI, two programme completers (15.4%) showed reliable change in the expected direction from baseline to post programme (cases 2 and 13). The majority of participants were unable to experience clinically significant change on this outcome measure due to reporting baseline scores in the functional range prior to the programme starting (see Table 7.5).

**Patterns of Change in Quality of Life.** Trajectories of change varied greatly between cases (see Figure 7.4). Of the two cases showing clinically significant change, case 2 showed little change across the first three weeks of classes then scores peaked during weeks four and seven, and this second gain was maintained to the last week of the

---

<sup>1</sup> SD (Standard Deviation), \* (Multiply by),  $\alpha$  (Cronbach's Alpha).

programme. Case 13 showed a rapid increase in quality of life across programme duration.

Table 7.5.

*Quality of life (Q-LES-Q-SF) reports at baseline, post programme, and follow up, along with clinical significance of changes and the reliability of this change.*

Case	Clinical status at baseline	Status by post-programme (week 8)	Status at follow up (12 weeks)	Reliable and CSC from baseline to post-programme (week 8)
1	Non clinical	Non clinical	Non clinical	No
2	Clinical	Non clinical	Clinical	Yes
3	Non clinical	Non clinical	Non clinical	No
4	Non clinical	Non clinical	Non clinical	No
5	Non clinical	Non clinical	Non clinical	No
6	Non clinical	Non clinical	Non clinical	No
7	Clinical	Non clinical	Clinical	No
8	Non clinical	Non clinical	Non clinical	No
9	Clinical	Clinical*	Non clinical	No
10	Non clinical	Non clinical	Non clinical	No
11	Non clinical	Non clinical	Non clinical	No
12	Non clinical	Non clinical	Non clinical	No
13	Clinical	Non clinical	Non clinical	Yes

*Note 1.* \*Due to absence, an end of treatment (week 8) score was not available for case 9, therefore a score from the previous measurement point (week 7) was utilised in its place to gauge changes in quality of life for this participant.

The remaining eleven participants showed no significant change in quality of life across the programme. Nine of these cases reported scores at baseline which were within the functional range and continued to be in this range for the extent of the programme so criterion for clinically significant change could not be met. Reliable improvement however, was evident for five of these participants (cases 4, 5, 6, 8, and 12) (see Appendix C-1). Case 9 remained in the clinical range at both baseline and post programme. Case 7 shifted from the clinical into the functional range by post programme; however this change was not reliable.

**Follow up.** Follow up data was collected for twelve participants (see Table 7.5). Case 13 did not complete follow up measures. Three month follow up data for case 11 was not available; therefore the reported score from the 6 week follow up was examined for this participant. From post programme to three month follow up, seven participants reported continued increases in quality of life on the Q-LES-Q-SF measure (Cases 1, 4, 6, 8, 9, 11, 12). For case 9 this increase was reliable and was a shift from the clinical range into the functional range. Four participants reported no significant change from post programme to follow up (cases 3, 5, 7 and 10). Case 2 reported a reliable deterioration from post programme to three month follow up, returning to the reported score at baseline.

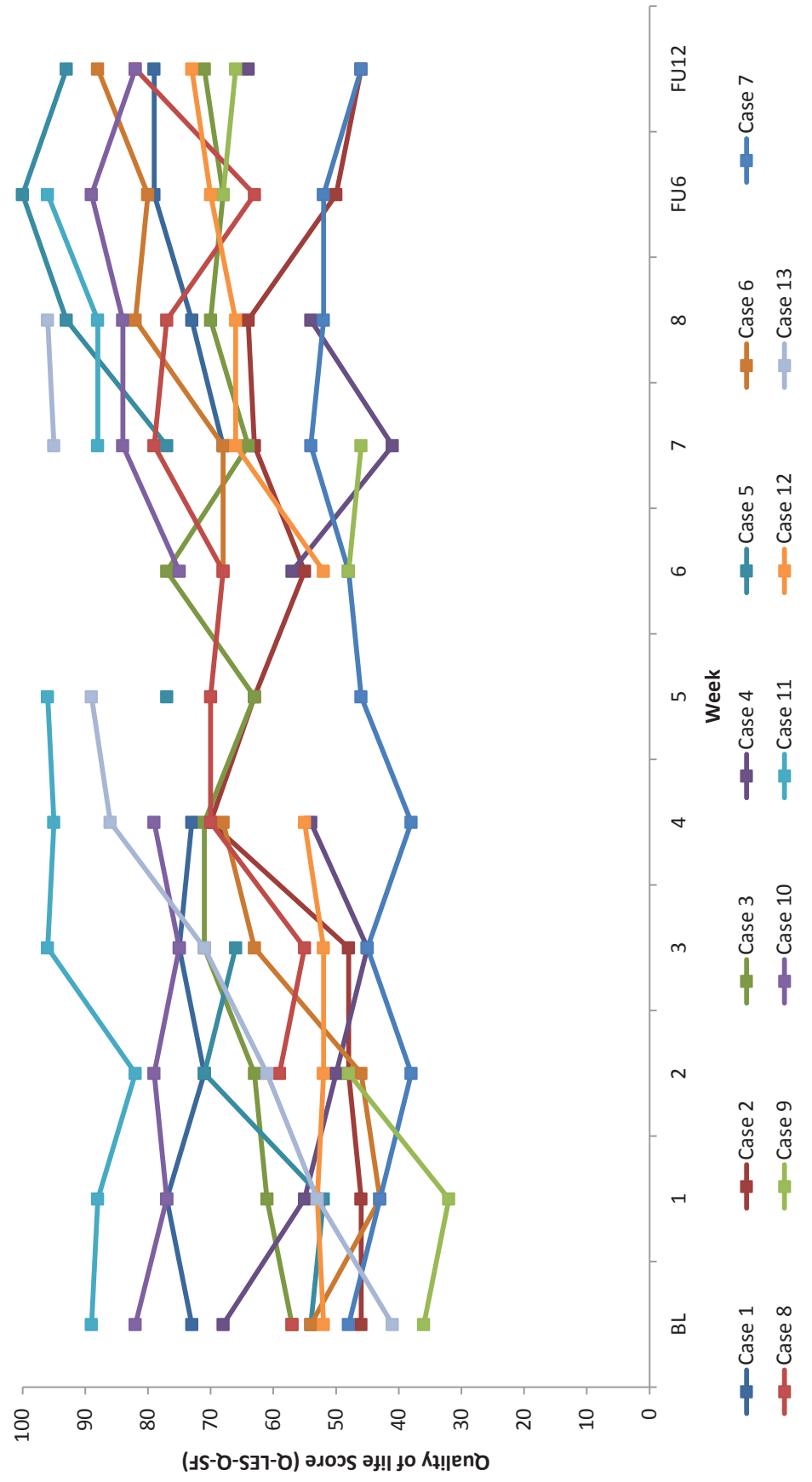


Figure 7.4. Individual quality of life scores (Q-LES-Q-SF) across baseline, intervention and follow up measurement points.

**Summary.** Questions regarding the clinical significance of results showed that at an individual level, participants showed greater levels of change than initial aggregated outcome analyses suggested. For depression, almost half of participants showed reliable and clinically significant change (6 cases). For psychological distress over half of participants experienced reliable and clinically significant change (8 cases). Only two participants showed clinically significant change in quality of life, though this low number is likely due to the small number of participants (4 cases) in the clinical range on this measure prior to the programme starting. When coupled with the number of participants showing reliable *improvement* (5 cases), positive changes were seen to be occurring for many participants (see Appendix C-1).

Patterns of change within and between participants highlight the great variability that can occur within one group completing the same treatment programme. Analyses of individual change trajectories will be further investigated, with particular reference to a well-established change pattern in the literature; early rapid response.

**Hypothesis 4. Early rapid response patterns of change are predicted to be evident in change trajectories for individual participants. The presence of such patterns is expected to be associated with more positive treatment outcomes.**

Overall, trajectories of change across the three outcome measures were varied both between and within individuals. An investigation was made regarding whether early change patterns would emerge in the current low intensity paradigm, given these patterns are well established in traditional CBT treatments, and have also been shown to occur in low intensity CBT interventions (Ilardi & Craighead, 1994; Delgadillo et al.,

2013). The impact of these change patterns on outcome measures was examined and in line with previous literature there was an expectation that these patterns would be associated with more positive post-programme outcomes as determined by reliable change indices.

### **Early Rapid Response**

In order to determine the extent to which change consistent with early rapid response patterns had occurred in the current study, the percent of change was examined from baseline to week four of the programme. Previous research with early rapid response in traditional CBT has used varying time points for the measurement of this construct. Four weeks has been reported to be a period in which a high proportion of total change occurs for many participants (Ilardi & Craighead, 1994). Some studies have delivered multiple sessions per week, making comparisons between studies difficult (Longmore & Worrell, 2007). In addition, because the current study was implementing a low intensity programme, time points comparable to those in previous literature on traditional CBT were difficult to ascertain. Studies that have reported on early change in low intensity interventions have also been noted to use session four as a cut off for early change (Masheb & Grilo, 2007), though up to six sessions have also been examined (Delgadillo et al., 2013). Therefore, session four was deemed a reasonable cut off point in the current study given that this has been an established time point of interest in both traditional CBT and low intensity CBT literature (Longmore & Worrell, 2007).

For programme completers, by session four of the programme, 87.75% of total change in depression scores (PHQ-9) had occurred. 79% of changes in psychological distress (CORE-10) had occurred at this time. Quality of life scores were slightly slower to

change however, with 66.5% of change having occurred by session four of the programme (Q-LES-Q-SF). This is consistent with previous research which has noted that between 50% and 80% of changes on outcome measures, such as the Beck Depression Inventory and the Hamilton Rating Scale for Depression, are made in the first four weeks of treatment (Hamilton, 1960; Ilardi & Craighead, 1994; Beck, Steer, & Brown, 1996). In the case of the PHQ-9 this indication of change based on previous literature was surpassed. Having established that large proportions of change did occur in the early stages of the current low intensity programme, a more fine grained analysis of change was made on a single case basis, examining both improvement and deterioration.

Previous research has demonstrated that early reliable improvement is predictive of achieving reliable and clinically significant change by post programme in low intensity interventions (Delgado et al., 2013). Session to session change scores were examined for the first four weeks of the programme by subtracting change scores from baseline scores for each participant (Delgado et al., 2013). Change scores from RCI criteria for each measure were used as an indicator of reliable improvement. This refers to the number of points on the measure an individual is required to change before being deemed to have changed reliably. This was then compared to post programme where the additional RCI criteria (change from the clinical to the functional range) was used to indicate reliable *and* clinically significant change.

**Depression.** For the PHQ-9 a change of >5 points on the measure was taken as indicative of reliable improvement (McMillan et al., 2010). Six participants were noted to have experienced reliable improvement on the PHQ-9 by the fourth week of



treatment (cases, 2, 3, 5, 6, 10 and 13). The session three score was used for case 5 due to absence in session four. These were the same six participants to experience reliable *and* clinically significant change by the end of the programme. That is, by the end of treatment these participants had improved >5 points on the measure, as well as having pre-treatment scores of >10, and post-treatment scores of <9 (McMillan et al., 2010).

**Psychological Distress.** For the CORE-10 the RCI of >6 was used as an indicator of change. Eight participants showed reliable change on the measure by session four of the programme (cases 2, 3, 5, 6, 10, 12, and 13). These were the same participants to show reliable and clinically significant change on the measure by post programme.

**Quality of Life.** For the Q-LES-Q-SF a change in score of 13.61 was used as an indicator of improvement. Two participants in the clinical range showed reliable improvement by session four of the programme (cases 2 and 13). These were the only two participants to experience reliable and clinically significant change by post programme.

Two participants who were not in the clinical range at baseline also experienced reliable improvement on the Q-LES-Q-SF by session four (case 3 and 6). For case 6 scores continued to increase and this change remained reliable at post programme. For case 3, improvement was no longer reliable at post programme due to a small fluctuation in score. Additionally, because these two participants were not in the clinical population at baseline, criteria for clinically significant change cannot be met. One participant showed reliable deterioration (case 4) by session four and this continued to post programme, however, all scores for this participant remained in the functional range.

**Summary.** These results support those in previous research which has examined early change in low intensity interventions, with participants showing early improvement being more likely to recover (show reliable *and* clinically significant change by post programme) (Delgadillo et al., 2013). Though such changes cannot be attributed to the intervention in this study due to design limitations, it is interesting to note that *all* participants in the current study who demonstrated reliable improvement by session four of the programme were those who showed reliable and clinically significant change by post programme. These results could provide support for the body of evidence regarding more traditional treatment approaches showing that individuals who respond quickly and positively to treatment are more likely to achieve more positive outcomes by the end of treatment (Newnham & Page, 2010).

### **Exploration of Group Change Processes**

The following section will examine how group climate and cohesion to the group facilitator developed over the course of the LLTTF programme. The relationship of these group processes to participants' depression, psychological distress, and quality of life outcomes will also be investigated.

**Hypothesis 5. Factors associated with group cohesion (climate) are expected to develop differently to patterns noted in previous literature with group programmes, given the fewer opportunities for interaction within the LLTTF programme.**

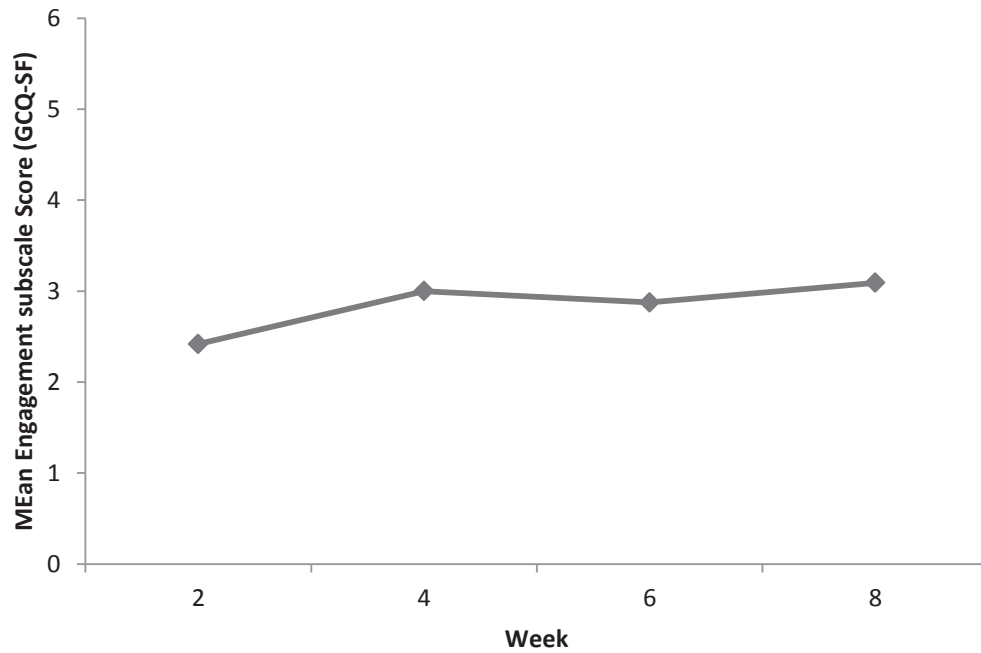
## **Group Climate**

Group climate scores will be examined using the three individual subscales of the measure; engagement, conflict, and avoidance. Measures were taken fortnightly for the extent of the programme. One individual did not complete the questionnaires for any of the group process measures. In an effort to deduce what may determine different scores across the different subscales, a raw item data analysis was also conducted for each subscale of the Group Climate Questionnaire and also for the Cohesion to the Facilitator measure.

## **Engagement**

Figure 7.5 presents mean participant scores of engagement across the programme (see Appendix C-2 for individual ratings). Scores showed an overall slight increase over time with more individuals rating higher engagement by post programme. Scores across the programme predominantly ranged from two to four out of a possible six points, with one participant reporting a score of one during the first week of measurement.

Increases in engagement across the programme were noted for seven participants. A particularly clear increase in engagement was reported for one individual, while other cases showed more varied increases. Several participants were absent for certain measurement points and therefore patterns of change are difficult to ascertain. Three participants displayed no change over time, maintaining moderate engagement scores across the programme.



*Figure 7.5.* Mean Engagement subscale scores on the Group Climate Questionnaire-Short Form (GCQ-SF) across the LLTTF programme.

**Engagement Subscale Raw Item Analysis.** Of the items comprising the engagement subscale, one item was consistently rated highly by participants, particularly across the last three measurement points (The members felt what was happening was important and there was a sense of participation). Scores on another item also increased slightly over time (The members liked and cared about each other). Two items were initially rated lower than the other items on this subscale (The members challenged and confronted each other in their efforts to sort things out; The members revealed sensitive personal information or feelings). Both increased slightly over the course of the programme, though the latter remained one of the lowest rated items across participants for this subscale, with many participants still rating ‘not at all’ for this item in the last week of the programme. Scores for the item ‘members tried to understand why they do the things they do, tried to reason it out’ decreased over time. There seemed to be no

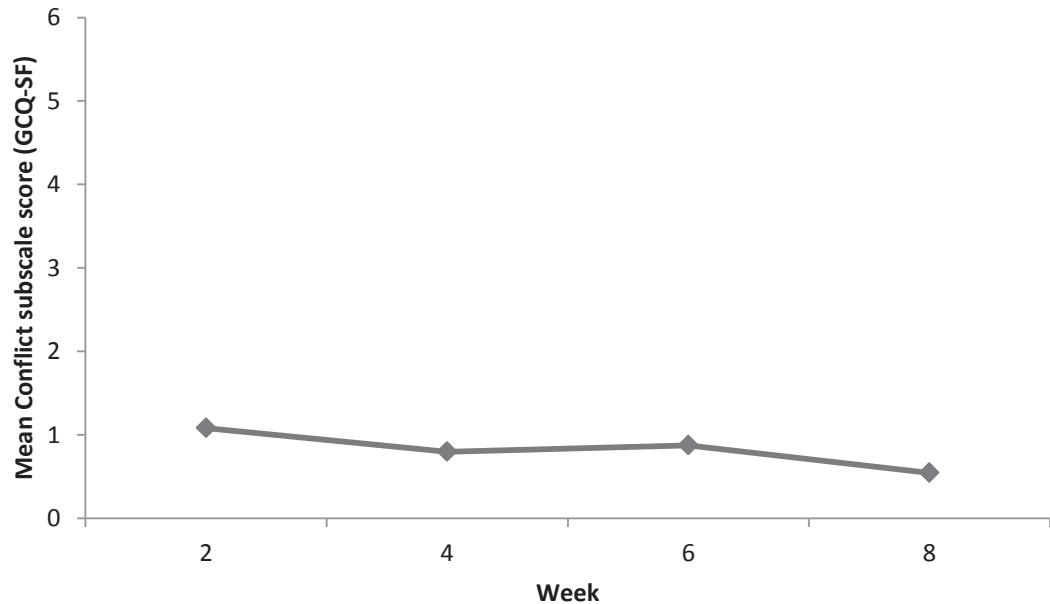
clear cause of increases or decreases on this subscale over time, item ratings fluctuated across weeks, both within and between participants.

### **Conflict**

Figure 7.6 presents participant scores on the conflict subscale for programme completers (see Appendix C-2 for individual ratings). Overall, scores for this subscale were very low indicating little perception of conflict by participants in the programme. Two participants reported no conflict for the entirety of the programme and another also did not report any conflict, however was absent for two of the four measurement points. Two cases demonstrated a decrease in conflict across time, though scores were very low to begin with. Remaining participants showed a varied pattern of change across the programme. The individual who reported the highest levels of conflict across all participants of measurement rated conflict in the group as significantly higher than all other participants across all weeks of measurement, with a highest rating of five out of a possible six points in week four of the programme. Scores for this individual showed a decrease in the last week of the programme with a rating of two.

**Conflict Subscales Raw Item Analysis.** Participant ratings on the conflict subscale were very low overall. With the exception of one participant, all individuals responded to two of the four items on this subscale with “not at all” for each measurement point (There was friction and anger between the members; The members rejected and distrusted each other). The participant who rated positively on this item also rated higher than other participants on the other items of this subscale. The two items which were primarily responsible for any changes in score across time were the two most highly rated items on the conflict subscale (The members were distant and withdrawn from each other;

The members appeared tense and anxious). The former decreased over time, and ratings on the latter were somewhat inconsistent, with some participants scoring the item higher, particularly in the first half of the programme.

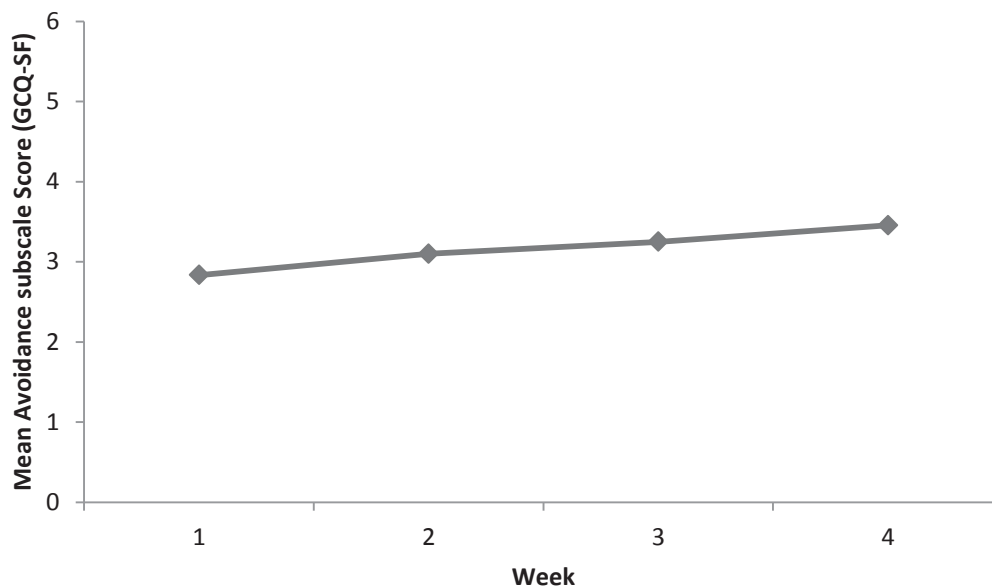


*Figure 7.6.* Mean Conflict subscale scores on the Group Climate Questionnaire- Short Form across the LLTTF programme.

### **Avoidance**

Figure 7.7 graphically presents mean scores on the avoidance subscale for programme completers (see Appendix C-2 for individual ratings). Participants reported highest scores on this subscale compared with the other two subscales on the GCQ-SF measure. Overall, avoidance scores increased across measurement points. Five participants reported a clear increase in avoidance across the programme. Other participants demonstrated more gradual or varied increases, with some reporting relatively high levels of perceived avoidance by the last week of the programme. Several participants did not show any change in score in comparing first and last measurement points and one participant showed a varied decrease in avoidance rating.

**Avoidance Subscale Raw Item Analysis.** The avoidance subscale was the highest rated subscale overall. Avoidance ratings increased over time and when examining raw data it could be seen that some items were more influential in creating this increase than others. One item experienced little change across programme duration (The members avoided looking at important issues going on between themselves). Another item had the highest ratings overall but only increased slightly over the course of the programme (The members depended on the group leader(s) for direction). This suggests that the group members felt that the group leader was largely responsible for directing the process of the programme. The last item of the avoidance subscale had low ratings initially but ratings increased during the programme and by the end were in the moderate to very high range for most participants (The members appeared to do things the way they thought would be acceptable to the group).



*Figure 7.7.* Mean Avoidance subscale scores on the Group Climate Questionnaire-Short Form across the LLTTF programme.

**Hypothesis 6. A significant difference in level of perceived group cohesion at mid-treatment was expected in comparing participants who experienced reliable and clinically significant change by post-treatment and those who did not.**

### **Group Climate and Outcome**

Group cohesion, particularly high levels of engagement and low levels of avoidance and conflict, has been significantly related to individual treatment outcome (Braaten, 1989; Ogrodniczuk & Piper, 2003). Braaten (1989) found that higher levels of engagement and low levels of avoidance in early treatment (session 4 of 14) were predictive of more positive post treatment outcomes. This effect of early group climate on treatment outcomes is particularly relevant given the brief nature of the LLTTF programme. In the current study participants group cohesion scores at mid-treatment (week 4) were examined, in relation to outcomes of depression, psychological distress and quality of life (PHQ-9, CORE-10 and Q-LES-Q-SF) to determine whether a significant difference would emerge when comparing perceived group cohesion at mid-treatment, and the clinical significance of results by post programme.

A visual inspection of the data was completed initially. Of the two cases that showed highest engagement by week four (cases 4 and 8), one showed reliable deterioration on the PHQ-9 and Q-LES-Q-SF (case 4) by post programme, and the other (case 8) showed no reliable change on any of the outcome measures. However, both of these cases also reported moderate to high avoidance scores in the first half of the programme. This may have moderated some of the effects of their high reported engagement scores, resulting in less influence on outcome measures.



Case 2 showed little change in engagement across the programme, reporting consistent moderate scores, but showed reliable change on all three outcome measures. Low to moderate avoidance scores were noted for this case. Engagement decreased across the programme for case 10. However, reliable change was reported on both the PHQ-9 and CORE-10 measures. This participant reported low to moderate avoidance scores.

High levels of conflict in group climate has been associated with negative member outcomes (Kivlighan & Tarrant, 2001). One participant reported moderate- high levels of perceived conflict across the programme (case 6), compared with the relatively consistent low ratings of other participants. However, this participant showed clinically significant change on two of the three outcome measures, PHQ-9 and CORE-10.

There did not seem to be visibly discernible patterns of change between group climate subscale scores and outcome measures. Participants looked to vary greatly in their perception of the groups' climate and there was no visible consistency surrounding these scores and the subsequent clinical significance of outcomes.

Mann-Whitney U tests were conducted to investigate whether there was a statistical difference in participant ratings of group climate factors at week four of treatment and the clinical significance of their post-programme outcomes. This test revealed no significant difference between group climate engagement ratings of participants who experienced clinically significant change on the PHQ-9 and those who did not,  $U= 4.50$ ,  $z= -1.90$ ,  $p= 0.06$ ,  $r= 0.60$ . Results were also non-significant between group climate conflict ratings and clinical significance,  $U= 11.50$ ,  $z= -0.24$ ,  $p=0.811$ ,  $r=0.08$ , and

group climate avoidance ratings and clinical significance,  $U=11.50$ ,  $z= -.22$ ,  $p=0.83$ ,  $r=0.07$ .

Mann Whitney U tests also failed to reveal a significant differences between mid-treatment group climate ratings of participants who experienced clinically significant change on the CORE-10 and those who did not. This occurred across all group climate subscales; engagement  $U=4.00$ ,  $z= -1.94$ ,  $p=.053$ ,  $r=.061$ , conflict  $U=8.50$ ,  $z= -0.85$ ,  $p=.393$ ,  $r=0.27$ , and avoidance  $U=11.00$ ,  $z=-0.22$ ,  $p=.824$ ,  $r= .07$ .

The results of Mann Whitney U tests analysing Q-LES-Q-SF scores and group climate components were also non-significant across engagement  $U=4.00$ ,  $z= -1.19$ ,  $p=.236$ ,  $r=0.37$ , conflict  $U=7.50$ ,  $z=-0.15$ ,  $p= .881$ ,  $r=.04$ , and avoidance subscales  $U=7.50$ ,  $z=-0.14$ ,  $p=.891$ ,  $r=0.01$ .

**Summary.** Group climate subscales showed variable scores across the LLTTF programme. Avoidance was the highest rated subscale of the measure, followed by engagement. The conflict subscale was rated comparatively low by most participants. Analysis of the raw item data for each subscale revealed that there were certain items which were rated variably and were therefore more responsible for changes in subscale ratings over the programme's duration.

The contribution of the different facets of group climate to participant outcomes was also examined, with no patterns being able to be identified. The extent to which the low intensity nature of the programme may have influenced the development of group

climate itself, as well as possible effects on participant outcomes will be further discussed.

**Hypothesis 7. Cohesion to the facilitator is anticipated to develop differently to patterns described in the relevant literature, due to the de-emphasised therapist role in this low intensity programme. This is predicted to be reflected in lower scores on the cohesion to the facilitator measure.**

### **Cohesion to the Facilitator**

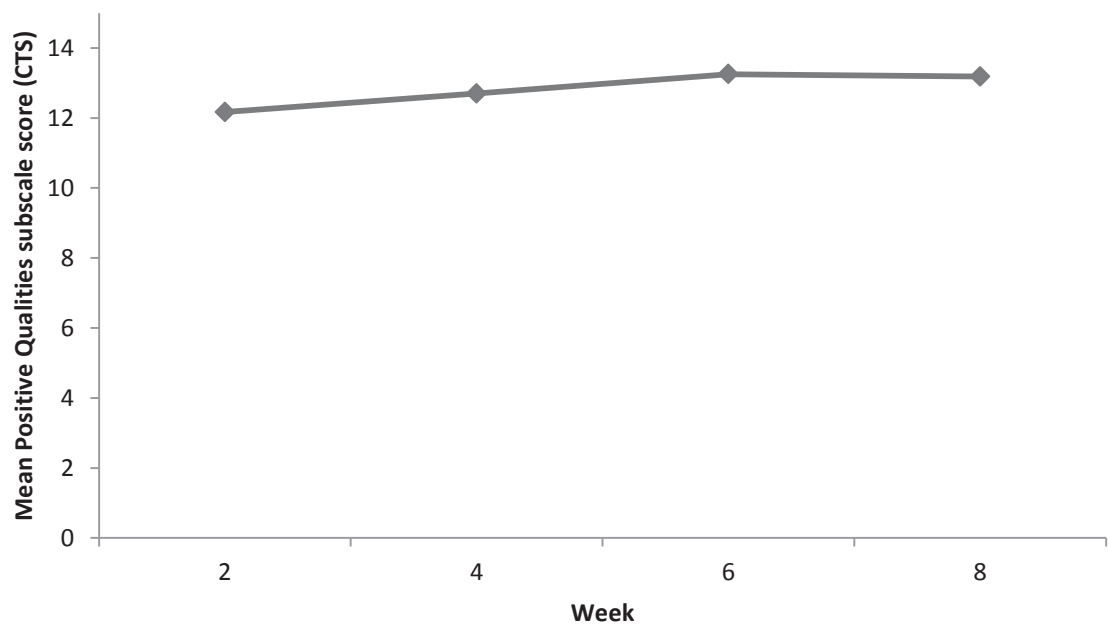
Data was only able to be analysed for the positive qualities subscale of the cohesion to the facilitator measure (CTS). This subscale measures the bond relationship of the member-leader interaction, and is analogous to the engagement subscale of the GCQ-SF which looks at the bond relationship of the member-group interaction (see *Table 6.3* in Chapter six). This subscale is thought to have the most utility of the three subscales comprising the full measure (Joyce, 2005).

### **Positive Qualities**

Figure 7.8 graphically displays participants' mean scores on the positive qualities subscale of the CTS. Scores on the measure were predominantly moderate-high (3-5), with only one participant reporting a score of less than 3 (moderate) on the measure across the programme's entirety. Three cases gave maximum scores across all weeks of the programme indicating a consistent positive perception of the group facilitator. Five cases experienced increases in their perception of positive qualities of the group leader over the course of the programme, while others' ratings were more variable, or did not change at all.

**Cohesion to the Facilitator Raw Item Analysis.** A closer examination of raw item data was made in order to determine what items may be responsible for any increases or decreases in ratings on the positive qualities subscale.

The greatest amount of change occurred for participant ratings on the item ‘I find it easy to communicate with the facilitator’, which could be seen to increase over time. Ratings on the item ‘I trust the facilitator’ increased slightly across the programme, while scores on the item ‘I like the facilitator’ remained relatively stable.



*Figure 7.8.* Mean participant scores on the Positive qualities subscale of the Cohesion to the Facilitator scale across the LLTTF programme.

**Hypothesis 8. Higher levels of cohesion to the programme facilitator are expected to be related to higher levels of group cohesion.**

### **Positive Qualities and Outcome**

Cohesion to the group leader has been most prominently linked to treatment outcomes through the mediator of group climate. That is, a more positive leadership style has been linked to higher engagement and lower conflict ratings on the Group Climate Questionnaire- Short Form (GCQ-SF), which in turn have been linked to more positive treatment outcomes (Kivlighan & Tarrant, 2001). A visual inspection of the positive qualities subscale of the CTS was made with regard to whether those rating the group leader highly on this construct would also rate higher on the engagement subscale and lower on the conflict subscale compared with other participants. There were no visible patterns evident regarding this hypothesis.

Pearson correlations showed that ratings on the positive qualities subscale of the CTS were significantly, negatively correlated with ratings on the conflict ( $r=-0.40$ ,  $n=39$ ,  $p=0.01$ ) and avoidance ( $r=-0.47$ ,  $n=39$ ,  $p=0.001$ ) subscales of the GCQ-SF, indicating that higher positive qualities ratings of the facilitator on the CTS are associated with lower ratings on both the conflict and avoidance facets of group climate.

A correlation between the positive qualities subscale of the group facilitator questionnaire and the engagement subscale of the GCQ-SF did not produce a significant correlation ( $r= .26$ ,  $n=10$ ,  $p=0.12$ ). The link between a positive leadership style and perceptions of higher engagement and lower conflict in relation to group climate was therefore partially supported by these results.

**Summary.** Ratings on the positive qualities subscale of the cohesion to the facilitator measure were consistently moderate-high indicating a positive perception of the group facilitator reported by most participants. The development of this construct over the course of the programme can be attributed predominantly to subscale items regarding ease of communication with the facilitator and trust of the facilitator, which both increased across programme delivery. With regard to the proposed effect of this construct on group climate scores, it was noted that a greater positive perception of the group facilitator was significantly related to lower conflict and avoidance ratings on this measure.

### **Participant Adherence and Satisfaction with LLTTF**

**Hypothesis 9. Participants will make use of the programme materials and skills outside of structured sessions as is intended by the self-help nature of the programme.**

#### **Completion of Self-Help Materials between Classes**

The majority of participants in the current study reported engaging in aspects of the programme outside of class time, as is intended by the structure of the guided self-help programme. Across all weeks of the programme participants reported having used the relevant little CBT book of the week between classes 72.4% of the time. Of the 27.6% of observations where participants reported not using the relevant book, the most common reasons given for this were primarily a lack of time (34.6%) or being unable to get motivated (34.6%). This was followed by having been absent from the class the

previous week (19.2%), which would mean the individual had not received the self-help book for that week. Other reasons cited by participants included feeling that the book for that week was not relevant to them (7.7%), or alternative reasons detailed by participants (e.g. had remembered the strategies from the class) (3.8%).

The amount of time per week spent using the self-help materials outside of the classes varied, with the majority of participants tending to spend less than 30 minutes (51.9%), or up to an hour (29.6%) using the materials. The frequency of those spending more than one hour per week using the self-help materials was significantly lower. This was only observed ten times across the programmes entirety for all participants.

The majority of participants also reported putting into practise skills they had learnt from the LLTTF programme (81.1% of the time). The kinds of skills being utilised were largely those learnt in the previous week's session (68.5%), though some reported that they were applying skills from a class prior to that (13%), or applying multiple skills learnt across several classes (14.8%).

**Hypothesis 10. Participants will report being satisfied with the LLTTF programme and the guided self-help form of delivery.**

### **Participant Satisfaction with the Programme**

Scores on the client satisfaction questionnaire ranged from 22-32 out of a possible maximum score of 40. All participants rated the quality of the service they received as good or excellent and all stated that they had received the kind of service they had wanted. Of the eleven participants that completed the measure, four stated that *all* of

their needs had been met by the programme; four reported that *most* of their needs had been met, and three reported that only a *few* of their needs were met. All participants stated that they would consider recommending the programme to a friend in need of similar help. Most ( $n=10$ ) participants stated they were satisfied with the amount of help they received; with one participant reporting they were dissatisfied. All participants noted that the service had helped them to deal effectively with their problems, and they were mostly or very satisfied with the service overall. Most ( $n=10$ ) participants stated that if they required help again they would come back to the programme, with one participant reporting that they did not think they would return to this programme in future. Further details regarding participants' satisfaction with the programme, and additional feedback about the programme was also gathered and will be examined in the discussion.

### **Feedback from Participants who withdrew from the Programme**

An email was sent to participants who withdrew from the LLTTF programme with questions regarding why they chose to discontinue, whether the programme was what they expected, aspects of programme they found helpful or unhelpful, and whether they would consider attending a similar programme again. Feedback was received from four of the five participants who withdrew from active treatment. Reasons for discontinuing the programme included having to care for a sick family member, a heavy workload, and the time required for travel to and from the course. All but one of these participants stated that the programme was what they expected it to be and they would consider trying a similar programme again in future. One participant did not find the programme to be what was expected and would not try something like it again.



## CHAPTER EIGHT: DISCUSSION

### Overview

The current research investigated changes processes across a LICBT group guided self-help programme, Living Life to the Full with regards to low mood in a sample of adults in New Zealand. As well as the examination of aggregated outcomes, data was also examined on a single case basis. This reflected an effort to determine not only the *statistical* significance but also the *clinical* significance of the findings, which are thought to be more applicable to practice-focused research such as the current study.

Analysis of individual change trajectories and patterns was also completed with the view of exploring *how* change occurred for participants in the programme, given the relative newness of the approach. In addition, early rapid response change processes within individuals were examined, along with the development of group processes across the programmes duration.

This chapter will summarise the findings of this research within the context of existing literature in the area. Subsequently, this chapter will comment on the contributions these results make to the literature, as well as the implications of these process and outcome findings for clinical practice. The strengths and limitations of this research paradigm will be discussed, making way for the identification of potential areas for the continuation of this research in future.

## **Review of Research Hypotheses and Findings**

### **Outcome**

**Hypothesis 1: The LLTTF programme will result in decreases in depression and psychological distress, and an increase in quality of life.**

Analyses of outcomes measures for depression, psychological distress, and quality of life showed variable results. A significant reduction in psychological distress was noted from baseline to post programme. However, due to the methodological design of the study, links between the effect of the LLTTF programme on this observed change are unable to be made. Significant changes in depression and quality of life were not found.

**Hypothesis 2: Treatment gains will be maintained from programme completion across follow up.**

Further analysis of the significant improvements noted for psychological distress show that changes were maintained across the follow up time period up to three months post programme. A significant decrease in psychological distress was observed from post programme across follow up time points.

Though the methodology does not allow for changes to be attributed to the LLTTF intervention, it may be speculated that this result may be indicative of participants continuing to use the self-help materials and apply the skills they learnt during the LLTTF programme after its termination. Given that a major focus of guided self-help programmes is to introduce and support the use of self- help materials for continued use

by individuals (Baguley et al., 2010), it is to be expected that changes in outcome measures would continue after the completion of the programme to some extent.

### **Individual Process**

**Hypothesis 3: Participants are expected to experience clinically significant change across the LLTTF programme.**

The current study investigated the clinical significance of changes in depression, psychological distress, and quality of life on an individual basis in an attempt to increase the relevance and application of these results to clinical practice. Therefore, the extent to which changes were meaningful for participants was examined at a single case level using reliable change indices (Jacobson & Truax, 1991). Six of the thirteen participants experienced clinically significant changes in depression by post programme as measured by the PHQ-9. Eight participants experienced clinically significant change in psychological distress as measured by the CORE-10. Two participants showed clinically significant change in quality of life across the programme as measured by the Q-LES-Q-SF. These findings highlight that although findings for depression and quality of life were statistically non-significant, when outcomes were aggregated meaningful changes were observed for many individuals.

Individual trajectories of change were visually inspected across depression, psychological distress, and quality of life measurement points, and their patterns of change across time. Overall, trajectories of change within and between individuals were extremely variable, though general expected trends (e.g. a decrease in depression) were discernible. It must be noted that many individuals in the sample were classified as

‘non-clinical’ based on clinical cut-off scores for the outcome measures, which have been established in the literature. Several of these individuals showed improvements on outcome measures, however, clinical significance is denoted by a pre-treatment score which falls within the clinical range (Jacobson & Truax, 1991). Where baseline scores were outside of clinical cut off scores, improvements in score could not be deemed clinically significant. The visual inspection of individual change trajectories allowed for such occurrences to be noted. This was particularly clear for changes in quality of life where nine of the thirteen participants were classed as being in the non-clinical population at baseline. Seven of these participants showed visible increases in quality of life across programme delivery, and five of these were noted to have experienced reliable improvement in quality of life (see Appendix C-1). This result indicates that this approach to capturing the scope of individual responses to treatment yields results which were not apparent at an aggregated level. Further comments on this will be made during discussion of the limitations of this research project.

**Hypothesis 4: Early rapid response patterns of change are predicted to be evident in the examination of change trajectories for individual participants. The presence of such patterns is expected to be associated with more positive treatment outcomes.**

The results of an investigation of early rapid response patterns in the current sample suggest the presence of this discontinuous change process. Due to design limitations, these changes cannot be attributed to the LLTTF programme, but will still be discussed. Early rapid response patterns are established in traditional CBT therapy (Hayes et al., 2007) and preliminary findings in the literature indicate that they occur in low intensity

treatments also, and are predictive of reliable and clinically significant change post programme (Delgadillo et al., 2013; Masheb & Grilo, 2007). The results of this study may support these findings. Early rapid responding in the current study was determined by the demonstration of reliable change by session four of the LLTTF programme.

For the PHQ-9 measure of depression, six cases were identified as having experienced early rapid responding. For the CORE-10 measure of psychological distress, eight cases met these criteria. For the Q-LES-Q-SF two cases showed this early change. All of the participants who showed this early change pattern were the same participants in the sample to achieve clinically significant change on each of these outcome measures by post-programme. These results strongly reinforce what external literature suggests; that early rapid responding can occur in low intensity paradigms and is important in predicting treatment outcomes (Delgadillo et al., 2013; Masheb & Grilo, 2007).

It is clear that the Q-LES-Q-SF measure of quality of life did not show the same magnitude of cases with early change as the measures of depression and psychological distress. No previous studies investigating early rapid responding in depression could be found to have included an outcome measure of quality of life or social functioning. This result may be reflective of the fact that changes in social functioning have been shown to be more gradual to change than depressive symptomology (Furukawa, 2001) and may therefore be less likely to show such rapid change.

This result reinforces the importance of taking outcome measures at each session. The identification of early rapid responding (ERR) in some programme participants was ultimately linked to the identification of more positive post-programme changes for

these individuals. Clients of clinical severity who do *not* show ERR may require a different approach to treatment given this link between ERR and clinically significant outcomes.

The implementation of a stepped care framework around a treatment programme such as this could allow for such participants to be ‘stepped up’ to a higher intensity treatment if these early rapid responses were not present and improvements in functioning were not being noted (Delgadillio et al., 2013). This is particularly important given findings which have shown that clients who are deemed to be ‘at risk’ of a lack of improvement in functioning during treatment, benefit from early identification of this and can demonstrate meaningful treatment gains when strategies are implemented accordingly. Lambert et al. (2002) presented therapists with feedback on the progress of their clients throughout the therapy process. For clients who had been identified as ‘at risk,’ therapeutic outcomes were more positive when therapists received this regular feedback about their client’s functioning. With progress information in the current study (early rapid responding) being shown to be an indicator of treatment outcome, this study adds to research in this area.

## **Group Process**

Group process results will be discussed individually, followed by a discussion of these findings in relation to relevant literature.

**Hypothesis 5: Factors associated with group cohesion (climate) are expected to develop differently to patterns noted in previous literature with group programmes, given the fewer opportunities for interaction within the LLTTF programme.**

Group climate has been linked to individual treatment outcomes. In particular, high levels of engagement and lower levels of avoidance have been associated with the most positive treatment outcomes (Braaten, 1989). It was of interest to note how the patterns of group climate developed in the current study, particularly given the low intensity nature of the programme. The LLTTF programme contained content which was not overtly applied to individual problems within the group sessions; rather the emphasis was on participants completing this aspect of the course in their own time, as per the 'self-help' aspect of the programme. Reduced emphasis on bonding between group members and with the facilitator was anticipated to be a consequence of this more didactic method of programme delivery. In recognition of this, opportunities for interaction among group members were maximised during the LLTTF programme delivery in order to enhance the prospect of a cohesive environment developing. Given knowledge of the effect of increased engagement and low avoidance on positive treatment outcomes, additional small group discussion exercises were incorporated where the large group was broken into small discussion groups to complete and share the results of activities. Such efforts were intended to result in increased group

cohesion, however, it was not known what effect this new therapeutic paradigm would have on this objective.

Results showed that engagement ratings were moderate across programme delivery, with ratings increasing slightly as the programme progressed. Several items used to rate engagement on the GCQ-SF were consistently rated low by participants. These items tended to be related to constructs which could be considered more reflective of a traditional group therapy environment, such as personal disclosure to the group (e.g. ‘The group members revealed sensitive personal information or feelings’).

The avoidance subscale of the GCQ-SF measure was the highest rated overall. Again, with raw item analysis this could be attributed to differences between the qualities of a low intensity guided self-help programme and those of more traditional group therapy approaches. It is unknown whether these higher levels of perceived avoidance were linked to poorer outcomes as could be expected based on previous research, or whether they are simply reflective of differing perceptions of this new mode of therapeutic intervention. Items which were consistently rated highly such as ‘the group members depended on the group leader/s for direction’ are likely to be a reflection of the style of delivery of the programme, in which the content is largely presented by the facilitator and only briefly discussed in session.

These results are also in line with the results of the conflict subscale where items reflective of a more detached style of therapeutic intervention were rated more highly (The members were distant and withdrawn from each other), though overall ratings of conflict were low.



**Hypothesis 6: A significant difference in level of perceived group cohesion at mid-treatment was expected in comparing treatment outcomes for participants who experienced reliable and clinically significant change by post-treatment and those who did not.**

Previous literature has demonstrated a link between group climate and treatment outcome (Ogrodniczuk & Piper, 2003) and this was also analysed in the current study. Group climate was analysed separately for each subscale of the measure and was compared to the clinical significance of outcomes across participants. In contrast to literature that has shown clear links between aspects of group climate and brief treatment outcomes, such as high engagement being linked with more positive outcomes (Ogrodniczuk & Piper, 2003), these links were not observed in the current study.

**Hypothesis 7: Cohesion to the programme facilitator is anticipated to develop differently to patterns described in the relevant literature, due to the de-emphasised therapist role in this low intensity programme. This is will be reflected through lower scores on the cohesion to the facilitator measure.**

Only one subscale of the cohesion to the facilitator measure was analysed, relating to positive qualities of the group facilitator. Results showed that ratings on this subscale were consistently high, reflecting a general positive regard for the group facilitator.

When raw item data was analysed for this subscale, items such as ‘I trust the facilitator’ were shown to increase, despite the prediction that such constructs might garner low ratings in a programme such as LLTTF, given the didactic method of presentation and the fact that the therapeutic tools in the programme lie within the programme itself rather than in the individual delivering the programme. It appears that though the roles of both group facilitator and client differed in this context, participants still perceived a positive relationship with the group facilitator.

**Hypothesis 8: Higher levels of cohesion to the programme facilitator are expected to be related to higher levels of group cohesion.**

With regards to measurement of cohesion to the facilitator, the positive qualities subscale indicated a positive perception of the group facilitator, with consistent high scores from the majority of participants across programme duration. Cohesion to the group leader has been shown to affect treatment outcomes through the mediator of group climate (Antonuccio et al., 1987). A positive leadership style has been linked to higher levels of engagement and lower levels of conflict in group treatments, which in turn have been associated with more positive treatment outcomes. Whether such a link between cohesion to the group facilitator and group climate would occur in the current study was investigated. Results showed a significant relationship between higher ratings of group facilitator positive qualities, and lower ratings of conflict and avoidance aspects of group climate. A significant relationship between group facilitator positive qualities and group climate engagement was not found. Therefore, the hypothesis that group cohesion and cohesion to the group facilitator would be associated was only partially supported.

Because the other two subscales making up the cohesion to the group facilitator measure were not available for use, the conclusions able to be drawn from the results of this subscale alone are limited.

### **Group Process Discussion**

The extent to which the low intensity nature of the programme may have influenced the development of group climate and cohesion to the facilitator, as well as their effect on participant outcomes warrants further discussion. As noted by Joyce, Azim, & Morin (1988) groups of different structure, therapist action, and content focus develop differently in terms of group processes such as group climate. High levels of engagement and low levels of conflict have consistently been attributed to positive treatment outcomes. However, lower levels of avoidance have also been linked to positive treatment outcomes (Braaten, 1989). Avoidance levels were rated the highest of all three subscales in the current study. Upon inspection of the raw item data these high ratings appeared to be due to a large amount of dependence on the group leader for direction, and that participants felt that group members appeared to do things the way they thought would be acceptable to the group. This may be reflective of the way the group programme in the current study operated, i.e. in a directive, “class-like” structure of delivery. This is consistent with the fact that the highest rated items on the conflict subscale also related to perceptions of group member anxiety and withdrawal, suggesting the style of the group may have made some participants feel less connected to one another, in addition to potentially looking to the group facilitator as the primary means of direction and support.

The 'low intensity' nature of the therapeutic content may also have prompted these higher perceptions of avoidance due to the modest amount of time spent exploring individual issues, the idea being, to focus on covering the main therapeutic concepts in class, with participants applying these concepts to their own issues between sessions. Because this therapeutic approach is relatively new, and despite efforts to make it clear that the purpose of the class was to learn life skills, some participants may have found the therapeutic approach to be lacking. This perception may be based on preconceived notions of what constitutes psychological therapy (e.g. intimate sharing of personal issues), and might be particularly relevant for those who had engaged in other treatment approaches for their problems previously (47.4% of participants).

With regards to the relationships between group process and treatment outcomes that have been reported in the literature, the current study was not able to support these links. No significant relationship was found between group climate and post programme outcomes. Reasons given in previous literature for the presence of this relationship include, that greater group cohesion could prompt clients to take more risks in the group therapy environment (e.g. sharing more intimately with the group), and result in a greater sense of optimism and expectation to get well. An engaged group has also been noted to result in a greater level of therapy-related work being completed (Ogrodniczuk & Piper, 2003). These factors have been shown to result in more favourable treatment outcomes (Joyce & Piper, 1998; Piper, Joyce, Rosie & Azim, 1994). Given the different group environment in the current study, including the more limited interactions between clients and the self-help emphasis of therapeutic work, it is possible that therapeutic elements other than group cohesion were responsible for the changes observed in this study. Speculatively, these may include, the greater flexibility of the self-help nature of

the LLTTF programme, or the increased sense of privacy afforded to individuals who may be less receptive to forms of therapy requiring intimate sharing. Linking this back to participant endorsement of high levels of avoidance in the group, in the context of the LLTTF programme, this result may simply reflect a greater sense of autonomy rather than disconnection from other group members as may be the perception in a traditional therapy group.

Significant relationships were found between cohesion to the group facilitator (positive qualities) and two aspects of group climate (conflict and avoidance). These were not directly related to treatment outcomes in the current study, however may provide partial evidence to support the mediational role of group climate between leadership factors and individual treatment outcomes described by Kivlighan and Tarrant (2001). Specifically, that positive perception of the group leader is related to a group climate of low conflict and high engagement, which in turn results in more positive treatment outcomes. These results support a link between the positive perception of the programme facilitator, and a climate of low conflict. It is possible that more information to support this hypothesis would have been found if the other subscales of the cohesion to the facilitator measure (personal compatibility and dissatisfaction) had been able to be utilised.

### **Participant adherence and satisfaction with the programme**

**Hypothesis 9: Participants will make use of the programme materials and skills outside of structured sessions as is intended by the self-help nature of the programme.**

The self-help nature of the LLTTF programme encourages participants to engage in work between sessions, such as working on the 'little CBT' booklets, completing additional worksheets and applying skills learnt during classes. The current study did not impose any formal structure for between session work. The extent to which participants engaged in between session work was recorded at each session and feedback was elicited at follow-up.

Results showed that across the programme the majority of participants used the relevant little CBT booklet of the week between classes, though the time spent for most participants reading or working on tasks from the books each week was little, typically less than 30 minutes. Feedback from participants regarding the little CBT books indicated that individuals enjoyed being able to take something away from the classes to use during the week, that the books themselves were easy to read and use, and the concepts easy to remember. Follow up feedback from six participants suggested that only half of them had used the little CBT materials since the programme concluded. These participants stated that the books had been useful to refresh the content of the course, and several reported that they had lent the booklets to friends and colleagues. One participant who had not used the booklets since the programme ended stated that this was due to not having felt the need to use them since the programme's conclusion, and another noted that it was comforting just knowing they were available in times of stress or anxiety and they provided a sense of safety.

Most participants reported putting into practise the skills they were learning at the LLTTF programme between sessions, though many did not specify which skills these

were. However, when this was recorded there were several skills which clearly resonated with many group members and were mentioned repeatedly by participants as being utilised throughout much of the programme. Skills related to identifying and changing negative thinking seemed to be extremely useful for participants (e.g. ‘bad thought spotter’ and unhelpful thinking styles). Exercises related to planning and problem solving were also well utilised across the programme (e.g. breaking goals into chunks, and the Easy 4 step plan for breaking down and solving problems). Confidence skills were also used by many participants such as, ‘acting’ more confident, and creating and revising a list of ‘OK things about me’. Lastly, the relaxation script was used by numerous participants. Access to the audio recording is available online and the recording was made available to participants to take away from the class on a USB memory drive.

Based on the results described above, in addition to feedback from participants regarding their perception of the self-help materials and the extent to which they utilised these, it appears that participants in the current study did engage with the guided self-help nature of the LLTTF programme. Feedback from participants suggests that the course self-help materials were used throughout the programme and by some after the programme, as they are intended to be used; to reinforce, consolidate, and review what was learnt during the programme (Williams & Whitfield, 2001). These results regarding adherence to the LLTTF programme provide promising preliminary evidence to suggest that guided self-help treatment paradigms such as the current research may present an acceptable approach to the treatment of mild to moderate psychological problems, such as low mood, anxiety, and stress, for New Zealanders.

**Hypothesis 10: Participants will report being satisfied with the LLTTF programme and the guided self-help form of delivery.**

### **Feedback from Programme Completers**

The measure of client satisfaction administered to programme completers post-programme indicated that the LLTTF programme was well-received by participants. All participants stated that the service they received was good or excellent, and that they had received the kind of service they wanted. All but one participant stated that they were satisfied with the service they had received. Many participants noted that *all* their needs had been met by the LLTTF programme, however, some felt that *most* or *only a few* of their needs had been met.

In order to gain more information about the aspects of the programme that participants liked and those they did not, additional anonymous feedback was sought post-programme (see Appendix D-1). Particularly helpful aspects of the course were reported to be the explanation of the vicious circle concept which seemed to resonate with participants. Building on this, participants also found useful the skills targeted at identifying their individual areas of difficulty, breaking their challenges into smaller pieces and making a plan to tackle each piece. “Every day easy strategies” to overcome difficulties, such as the guided relaxation script and the ‘10 things to make you feel happier straight away’ booklet, were also reported to be useful. More broadly, many participants reported that it was useful to understand more about why they might be experiencing these difficulties, and to know that other people were also experiencing similar problems. The normalisation and validation of participants’ situations seemed to be a positive experience for many. Also of mention are participant reports of finding the



provision of support in the LLTTF programme useful, both in terms of the group facilitator and the group itself. Participants seemed to find it especially useful when the larger group was broken down into smaller, more intimate discussion groups. Feedback from participants indicated they would have preferred more opportunities like this to interact with other individuals in the group.

Aspects of the group that participants did not like or found unhelpful were also recorded. Feedback varied, however several common themes emerged. Firstly, it was suggested that the programme was slightly too long and that it could possibly be completed in fewer sessions. Some participants also made reference to the somewhat 'lecture style' of delivery and mentioned that they would have felt more motivated to complete work between sessions if they knew they were going to discuss their progress with others in the group the following week. Respondents also stated that they would have benefited from a specific weekly plan for work they could complete between sessions. Participants were largely left to determine how much work they wanted to complete between sessions and what booklets or skills they used. Given research has shown the positive effect the completion of homework has on treatment outcomes for traditional CBT therapy (Kazantzis, Deane, & Ronan, 2000), it would be useful within the LLTTF programme to provide some structured expectation for participants to engage in brief exercises stemming from session content to be completed outside of sessions. The completion of homework assignments has been shown to provide clients the opportunity to consolidate learnings from sessions, test out beliefs, and generalise the skills being learnt to the situations in which problems tend to arise (Haarhoff & Kazantzis, 2007). Alongside the potential positive effects that a more structured approach to homework may have on treatment outcomes, the completion of homework

would also provide additional material for more personal discussion between group members during sessions.

Individuals also reported wanting a greater focus on relaxation during sessions, including more use of the relaxation script. This may be indicative of the number of individuals in the group with anxiety and stress as presenting problems. One participant who did not complete the programme gave feedback suggesting the programme and its materials were too simplistic. Information regarding participants' level of education was not gathered in this study; however it is important to consider how differing levels of education could affect the roll out of the programme across different contexts. It may be possible to pitch session content and group discussion at different levels based on education demographics.

Several participants gave feedback that the course content could possibly have fit across six rather than eight classes, as several of the classes ran short of the allocated 90 minutes. Given that participants in this study were often travelling quite a distance to get to the programme and had numerous other commitments including work and dependent children, a reduction in the number of classes could be an avenue of further investigation. This is also in line with research by Delgadillo et al. (2013) who found that optimal recovery rates in low intensity treatments occur between four and six sessions, after which the dose-response begins to decline.

### **Author's Reflection**

The author, as the group facilitator, observed a number of opportunities for improving the running of the LLTTF programme, many of which were identified by programme

participants also. Given this was the first group programme facilitated by the author this was a learning experience both in terms of presenting the content of the programme, and also managing the group environment itself. It is also important to consider the possible impact of the author's clinical psychology training on the results gained by this study. Though the author was relatively inexperienced running the LLTTF programme, a long period of extensive clinical psychology training had been undertaken prior to running the LLTTF programme, much of which was focused on working with clinical populations, delivering high intensity CBT therapy, and forming strong therapeutic relationships in the context of this therapy. It is possible that this experience influenced interactions with participants or the way in which discussions during sessions were managed outside of the confines of the didactic aspects of the programme.

Increased facilitator experience may strengthen the impact of the programme's strategies through being more able to engage group members to discuss personal experiences and make contributions to group discussions. Particularly in the early stages of the programme, many participants appeared hesitant to engage with the other group members. One participant commented that personal disclosures may have helped participants relate on a more meaningful level to the content. Even with opportunities for interaction and group activities being incorporated into each class, it still felt as though group support was a resource that was not maximised for much of the programme. This was perhaps due to a lack of time spent fostering an environment in which people felt comfortable sharing with one another and the group as a whole. With more experience running the programme, extra time during classes could be harnessed and used in the creation of such an environment and extending interactive opportunities and activities, as requested by participants in their feedback. Though less interaction is a

by-product of the self-help stance and brevity of LICBT intervention, it was clear that participants in this programme still sought interaction with one another. Their feedback suggests that maximising opportunities for interaction within the structure of the guided self-help programme would be worthwhile.

From the author's perspective, the content of the classes was straightforward to present and for the most part well-received by participants. However, as suggested in the feedback given by a number of participants, the 'Are you strong enough to keep your temper' session did not appear to be relevant to many of the group members. The content was therefore generalised to be applied with anxiety and stress in an effort to make the content more applicable to group members. The relaxation script was applied in this class, which many individuals reported finding extremely useful and most requested a copy to use at home. It is possible that the lack of applicability of the anger session was due to the lower proportion of males ( $n=4$ ) compared with females ( $n=15$ ) in the study. Literature suggests that gender itself does not influence the experience of anger; however gender-roles have been shown to (Kopper and Epperson, 1991). Those with 'masculine sex role identities' were shown to be more prone to anger, more likely to express this anger, and less likely to control its expression, compared with those with 'feminine sex role identities' (Kopper and Epperson, 1991).

There is no LLTTF session primarily focused on anxiety and panic which were primary concerns of many participants in the group. Given the high prevalence of symptoms of anxiety, as well as their comorbidity with depressive symptoms in many instances (Minneka, Watson & Clark, 1998), the importance of addressing these often concurrent

issues is stressed. A session with an anxiety focus was requested by group members, and could perhaps be given in place of the anger class where relevant.

### **Contributions to the Literature**

This research project highlights and extends on a field of psychological research which seeks to understand both the outcomes of treatment, and the processes (patterns, predictors and mechanisms of change) involved in these changes. This reflects advancements in both theory and methodology, which allow for the conceptualisation of treatment changes beyond simple linear change, through the analysis of participant progress session by session (Hayes et al., 2007). Though outcome results were limited by the design implemented in this study, the information captured by the analysis of process variables is considered rich. The individual process results were presented using visual analysis methods. This method enabled the determination of *when* and for *whom* changes occurred. The inspection of changes on items within outcome measures meant that *where* changes occurred could also be noted. It is again noted that conclusions based on these results are cautiously made due to the lack of control present in the research design. The additional assessment of clinically significant outcomes was completed through the examination of individual change scores on a single case basis. Through these methods, this research aimed to bridge the scientist-practitioner gap by making the results of this research straightforward in their interpretation, allowing for ease of application within the clinical settings for which the results are intended.

Of particular interest in the analysis of process in this study was an examination of early rapid response patterns for individual participants. Early rapid response has been identified and thoroughly investigated with regards to traditional CBT therapy (Ilardi &

Craighead, 1994). This analysis extends on research that has found that such patterns can also occur in low intensity interventions and do in fact predict more positive outcomes (Delgadillo et al., 2013; Masheb & Grilo, 2007). The results of the current study support this minimal available research on early rapid response in low intensity interventions with several participants in the clinical range on outcome measures showing this response pattern by session four of the LLTTF programme. Participants who showed this pattern of change then went on to show reliable and clinically significant change by post programme, highlighting the impact of this early change on eventual treatment outcomes. This finding emphasises the importance of ensuring maximum engagement in the early sessions of the LLTTF programme.

In keeping with the clinically focussed methodology was the naturalistic sample of participants in the current study. The method of recruitment, which targeted community populations and used unrestrictive screening criteria, allowed for the recruitment of participants who were not typical of tightly controlled academic research settings which have been criticised for their lack of generalisability to real world clinical settings (Bailer et al., 2004). This meant that participants were able to partake in the study regardless of their previous mental health treatment history, current medication status, and the presence of comorbid problems. Though this less controlled method of research has limitations regarding internal validity (Stulz, Lutz, Leach, Lucock, & Barkham, 2007), such a design is in line with changes to the way research paradigms are now being constructed to better reflect the heterogeneity of populations present in clinical settings and the types of individuals seeking self-help intervention. The limitations present in the current research design will be discussed where relevant below.

An abundance of research has investigated various issues surrounding the applicability of guided self-help interventions for certain populations. The suitability of self-help interventions for those with severe depression has been questioned by some (McKendree-Smith et al., 2003). However, the current study found that three participants who were initially classified as moderately severe or severely depressed made clinically significant improvements on outcome measures of depression and psychological distress (cases 2, 6, and 13). These participants were classified as having no depression (case 13) or mild depression (cases 6 and 13) by post programme. This is in contrast to literature which has presented guided self-help paradigms as primarily suitable for mild to moderate problems (NICE, 2004b). Under what conditions this may be the case, and given the small sample of this research, further work is needed.

This research project also reflects a new trend in mental health services; to offer increased choice for service users with regards to not only matching service intensity to client needs, but also offering a variety of interventions in the acknowledgement that not all consumers will engage with the same type of service (Bennett-Levy, 2010). Previous research has suggested that individuals respond to different types of therapeutic intervention and not all consumers will feel comfortable in a one-to-one therapy situation, or in a group situation. Providing choices for consumers is thought to increase access to treatment, as is the goal of low intensity forms of intervention (Bennett-Levy, 2010). If low intensity treatment options are presented as a viable alternative to more intensive therapies, rather than something to do while waiting for intensive treatment, the uptake of low intensity treatments is also increased. The current study recruited participants alongside another project running individual low intensity treatment and participants were able to choose which programme they preferred to

engage in. Low intensity treatment options compared to more intensive treatment can be preferred for a number of reasons including; cost, convenience, perceived stigma of traditional therapies, and personal preference (White, 2010). Participants who were more comfortable engaging in a group setting were able to partake in the current study, while those who may have felt overwhelmed or embarrassed by the notion of a group environment were still able to access treatment through a different medium. Only one participant to the knowledge of the author dropped out of the study due to feeling overwhelmed by the group environment itself and feeling unable to share personal information in the context of the larger group.

The way in which the programmes were portrayed during recruitment was also a major consideration of the current study. The terms used in the promotion of this low intensity programme were in line with the target of recruiting individuals with mild to moderate problems. The term ‘depression’ has been shown to reduce uptake of programmes (Bennett-Levy, 2010), therefore advertising focused on the use of terms such as ‘low mood’ and ‘common difficulties’ with a view to ‘teaching key life skills to overcome these’. It was found that this resulted in a large response to the recruitment campaign. Expressions of interest in taking part in the programme continued for several months after the intervention had been run.

### **Limitations of the Current Research**

There are several limitations evident in the current study. Firstly, the methodology employed did not include an adequate control condition and thus results cannot be attributed to LLTTF treatment effects. This meant hypotheses related to the effectiveness of the programme were not able to be addressed beyond the calculation of



results and speculative discussion of conclusions. Results could instead be attributed to a number of factors which threaten the validity of research studies. These include, the passage of time, measurement reactivity, maturation, and regression to the mean (Dimitrov & Rumhill, 2003). Retrospectively, the design of this project should have included a longer baseline condition, which would have allowed individuals to act as their own controls due to being able to establish a trend to compare with trends emerging in the intervention phase (Blampied, 2001). Alternatively a wait-list control group could have been employed. Either would allow for aggregated conclusions to be drawn about the effectiveness of the LLTTF programme; something this project was not able to do due to these design limitations.

Secondly, the small sample size upon which these results are based means that conclusions should be interpreted with caution, as results may not generalise to other samples or the use of other guided self-help programmes. The current study provides a promising initial exploration into how group guided self-help approaches might be perceived by individuals in a New Zealand context and the changes which may occur within such interventions. The visual and single case focus of the methods of analyses employed in the current study were suited to the small sample and the aim of ensuring the research is as accessible as possible to readers. However, for future extension or replication of this research, it is recommended that a larger sample be recruited, and methods of statistical analysis used which allow for the assessment of individual trajectories of change in a more comprehensive and reliable way. This is important given that visual analysis has faced criticism for being less sensitive to smaller effect sizes (Busse et al., 1995). Modern methods of analysis such as individual growth curve modelling, growth mixture modelling, and dynamical systems modelling allow for a

sensitive statistical analysis of group and individual change trajectories across the treatment process (Laurenceau et al., 2007).

Given discussion about the authors clinical psychology training and the unknown effect of this throughout the running of the programme, a measure of treatment fidelity would have ruled this out as a potential confounding variable. Treatment fidelity refers to the implementation of an intervention with adherence and competence (treatment integrity), as well as insurance that the conditions of the study differ from one another as is intended in comparing a treatment to a control condition (treatment differentiation) (Moncher & Prinz, 1991; Hildebrand et al., 2012). A LICBT study developed a framework for assessing the effectiveness of a guided self-help paradigm which included a fidelity assessment in the form of videotaped guided self-help sessions (Lovell et al. 2008). This specifically addressed the extent to which the intervention adhered to the treatment protocol. A rating manual containing required tasks for each session was constructed and session videos were examined by raters. These individuals determined whether the expected components of each session were present. Given the close supervision received in the current study, it would have been possible and undoubtedly useful to establish a similar method of monitoring this aspect of treatment fidelity.

Participants who initially scored particularly low on symptom measures were not able to demonstrate meaningful improvement across time due to the characteristics of the measurement instruments used in the current study (i.e. floor effects). This issue has been highlighted in the literature as occurring with low-impaired participants where certain measures do not allow enough room for improvement (Stulz et al., 2007). Given

that one of the purposes of LICBT is that it is delivered to individuals who are often suffering from mild to moderate problems, outcome measures which capture the low intensity nature of symptomology are required so that the floor effects observed in the current study do not occur. Despite the extensive use of the outcome measures chosen for this study across LICBT literature (Richards & Suckling, 2009; Barkham, Mellor-Clark, Connell, & Cahill, 2006), as well as efforts to utilise measures which incorporate low intensity items, such as the CORE-10 (Barkham et al., 2013), floor effects remained an issue for this research project. This may reflect that individuals seeking involvement in programmes such as this may not always present with active symptomology. Some may simply be attending to learn skills to help them avoid such problems or to gain information to help someone else who is struggling. Given previous research has indicated that preventive applications of guided self-help programmes have been shown to reduce onset of depressive episodes (Papworth, Marrinan, Marton, Keegan, Chaddock, 2013), it may be that several participants attended the programme for this purpose. A measure which assesses more general improvements in functioning is recommended, in addition to gathering more detailed information about participants' reasons for attending the programme.

Previous studies looking at clinically significant change have often been shown to exclude those in the sub-clinical range from analysis due to 'reliable change' definitions which require a change from a clinical to non-clinical score across time points of interest (Delgado et al., 2013). Many individuals in the study were classified as being in the non-clinical population for outcome measures at baseline, but still experienced reductions in depression and psychological distress, and increases in quality of life over the course of the LLTTF programme. Though these participants were included in the

analyses in the current study, such results were not well reflected in the methods used to evaluate clinically significant change. These cases were able to be identified through a classification of 'reliable improvement,' and the visual inspection of trajectories of change, however their changes seemed to be somewhat undervalued compared to those who experienced clinically significant change.

Given the focus of LICBT interventions being applied to mild to moderate problems, the implementation of a method more focused on looking at change in outcomes for participants who are within the functional range at baseline would have been a valuable addition to this study. The research field has given consideration to this issue. Studies have expanded on the basic concept of comparing clinical and non-clinical normative groups (Seggar, Lambert, & Hansen, 2002). An example of such a development is Tingley (1989) who divided a clinical group to include cut-offs for a continuum of severities (asymptomatic, mild, moderate, and severely distressed) resulting in different criteria for clinical change for each of these classifications. Barkham, Shapiro, Hardy & Rees (1999) utilised reliable change indices with a sample of individuals with subclinical depression. They also calculated separate RCI criteria for those with different levels of depression severity. Clinically significant change for those classified as asymptomatic to mildly depressed was determined using a lower cut-off score and RCI than those who were classified as mild to clinically depressed. Such an approach would likely have been a useful method of avoiding issues with under-representing change in participants with sub-clinical symptomology in the current study.

As depression is often a consequence of, or linked to the occurrence of mental health problems such as anxiety or stress (Mineka, Watson, & Clark, 1998), the fact that this

study did not incorporate a pure measure of anxiety is a limitation. Though two items from the CORE-10 measure of psychological distress relate to anxiety (Barkham et al., 2013), a complete measure of this construct is lacking. Several of the participants in the current study listed anxiety as a primary complaint upon registration, therefore outcomes for these participants may have been underestimated, given the primary focus on outcomes relating to aspects of low mood. Future research should ensure that such a measure is included in further examinations of LLTTF effectiveness.

### **Recommendations for Future Research**

Several opportunities for future research have also been identified with regards to the wider implications of this research project.

This study shares several of the limitations highlighted by McKendree Smith et al. (2003) as being of issue throughout much of the self-help literature to date. Firstly, primarily small samples have been used across the research, which can result in a lack of power to detect differences between groups in studies comparing different active treatment alternatives. In addition smaller samples make it more difficult to predict outcomes or investigate mechanisms of change in self-help therapies (McKendree-Smith et al., 2003). Replication of the current study with a larger sample is recommended. In addition to this McClay, Morrison, McConnachie, and Williams (2013) point out that LLTTF has not yet been the subject of research using randomised controlled trials (RCTs). The undertaking of a RCT study would serve to strengthen the results of preliminary research using the LLTTF programme, including the current study. McClay, Morrison, McConnachie, and Williams (2013) have recently provided a study protocol from which to develop a RCT study specifically using the LLTTF

programme. The recruitment of a sample of adequate size is an issue apparent in previous self-help research (McKendree et al., 2003) as well as in the current study. In consideration of this, it is also suggested that application of robust single case approaches to this area of research may provide an alternative approach to conducting larger scale research studies and subsequently managing the possible consequences of poor uptake and attrition.

Issues with the generalisability of results have been highlighted across self-help research primarily with regard to participants being largely well educated (McKendree-Smith et al., 2003). Issues of generalisability are also faced in the current study. During the introductory phases of the current study the opportunity to run the LLTTF programme in South Auckland arose. This region of Auckland is a lower socio economic area with high Māori (13.9%) and Pacific (19.2%) minority populations (McDermott, 2008; Auckland Regional Public Health Service [ARPHS], 2006). These minority groups have been shown to have higher rates of mental health problems and are also less likely to make contact with treatment providers when necessary (Wells et al., 2006). Therefore, South Auckland was considered an area which may benefit from a low intensity approach to psychological treatment. However, the choice was made to run the programme in Auckland's North Shore due to programme adaptations which were recommended for servicing a South Auckland population. Primarily this referred to anticipated difficulties regarding the comprehension of course materials and outcome measures by individuals (largely Pacific Peoples) for whom English is often a second language. In this case it may have also been necessary to enlist a group facilitator who was able to speak a Pacific Island language. Because this was not possible under the time and financial restraints of the current research project, and given that such a

programme was new in the context of New Zealand as a whole, the decision was made to administer the programme in an area where adaptations to the programme were not anticipated to be necessary. The demographics of Auckland's North shore indicated it was unlikely that such adaptations would be required, with Pacific Peoples making up only 3.0% of the population in this area (ARPHS, 2006). This decision was reinforced by the recruited sample, all of whom indicated at registration that they were comfortable partaking in a programme which was largely reading and writing based. The majority of participants in the current study identified as NZ/European (63.2%). As a result, research findings may only be applicable to the population which was serviced in this instance. However, this raises a noteworthy opportunity for future research to adapt the LLTTF programme for use with minority groups in New Zealand.

In New Zealand minority groups have been shown to be less likely to access psychological treatment through current means (Tapsell & Mellsop, 2007). A new form of therapy, such as guided self-help may be well received by such populations, with the addition of any culture-specific adaptations which may be required. LLTTF has been used in one study with minority groups in the UK with good success (Lloyd & Abdulrahman, 2011). In this study cultural factors were at the forefront of programme delivery, including the presence of group facilitators who spoke the language of minority participants, and adaptations made to the programme regarding issues of cultural sensitivity and the translation of materials (Bennett-Levy, 2010; Llyod & Abdulrahman, 2011). As with any psychological therapy, services need to be made available to the entire population. This is particularly relevant to New Zealand, given the multicultural make-up of the population as well as the over-representation of minority groups with mental health problems, and the lack of access for these groups to

adequate services currently (Tapsell & Messop, 2007; Wells et al, 2006). There is clear opportunity in this instance for research into the adaptation of programmes such as LLTTF for delivery to minority populations in an effort to reduce this discrepancy of care.

It has been suggested that session by session changes in outcomes could be used in the monitoring of client progress in real-time throughout the treatment process (Newnham & Page, 2010). By looking at scores on outcome measures session by session, those who may not be making the expected amount of progress, are deteriorating, or making no change at all, can be readily identified and 'stepped up' to appropriate higher intensity interventions. This monitoring can be achieved with the use of expected treatment outcome trajectories (Newnham & Page, 2010). When clients deviate from these, further action can then be taken. Though the current study did utilise session by session measurements, the focus was not on identifying individuals who may require different treatment options. This could be an avenue for further research in line with the values of the stepped care system within which low intensity interventions are often based.

Previous research has highlighted the effect regular feedback to therapists about client progress can have on eventual client treatment outcomes, specifically for clients who are predicted to have poor treatment outcomes due to a lack of improvement in functioning during treatment (Lambert et al., 2002). Future studies may consider incorporating a feedback component within programmes such as this (e.g. within a session by session progress monitoring system), particularly for participants who do not



experience early rapid responding in the early stages of treatment, with the view that this may improve their outcomes.

The use of group guided self-help programmes such as LLTTF in the *prevention* of depression is also an idea for future research. Many participants in the current study were not classified as being in the clinical range on outcome measures for their problems. This may reflect an interest from people in simply gaining skills to prevent the worsening of existing sub-threshold problems or to prevent the occurrence of future problems. Research on engaging in interventions to prevent the onset of depression has produced promising results and has been proposed as a means of reducing the large burden currently on the mental health system to treat the growing number of individuals presenting with depression of clinical severity (Cuijpers, Van Straten, Smit, Mihalopoulos, & Beekman, 2008). Despite some concern regarding the lack of uptake of existing free preventative services in some areas of the world (Cuijpers, 2010; Bennett-Levy, 2010), the findings of the current study suggest that individuals with sub-threshold problems are interested in engaging in such interventions. The reasons behind this interest warrant further exploration.

### **Final Conclusions**

The primary aim of the current study was to examine change processes within a Living Life to the Full group guided self-help programme for low mood in a New Zealand context. Outcomes of statistical significance were modest and cannot be directly linked to the intervention. One outcome measure (psychological distress) showed a significant decrease across the time points of interest. The assessment of clinically significant change demonstrated that many participants showed change of clinical significance

across the three outcome measures, particularly relating to depression and psychological distress.

Processes of change for each individual were also of interest in the current study. The response trajectories for participants were examined with regards to the presence of early rapid response patterns. A link was observed between participants showing early rapid response patterns, and showing clinically significant change post-programme. The presence of early rapid response patterns in low intensity interventions is a relatively new area of research and the results from this study support emerging literature on the topic (Delgadillo et al., 2013).

Group process variables were analysed with regards to the development of these variables (group climate and cohesion to the therapist) over the course of the programme. Of particular interest was the way in which these processes developed given the low intensity nature of the LLTTF programme. Results from the group climate measure showed that participants were able to engage with the programme despite its larger size than traditional CBT groups, experienced low conflict across the intervention, and higher levels of avoidance than were anticipated. This high level of avoidance is thought to be linked to the structure of the low intensity programme; particularly its more structured and directive approach than traditional group therapies. There was no discernible pattern between the development of group climate processes and treatment outcomes as is evident across much of the literature (Kivlighan & Tarrant, 2001).

One major critique of low intensity therapy approaches is that there is a lack of emphasis on the therapeutic relationship (Newman et al., 2003). In addition to group

members' perception of the groups' climate, their perception of the group facilitator was also analysed. Scores on the positive qualities subscale were high, indicating a positive perception of the group facilitator. There was some evidence to support the presence of the mediational role that positive perception of the group leader has been shown to have on the development of a cohesive group climate. In past research this relationship has been shown to affect treatment outcomes (Kivlighan & Tarrant, 2001).

Participant satisfaction with the programme was assessed, with high levels of satisfaction being noted across participants. This satisfaction may also be reflected in the high number of individuals using the self-help materials between sessions, and those putting the skills they were learning into practise.

This research makes several contributions to the literature. First, with the implementation of a research design which examined change in detail at an individual level, a better understanding was able to be gained regarding the mechanisms of change involved in the delivery of this programme. This represents a change in the way the results of interventions are presented, that instead of simply accounting for pre and post change scores, change is able to be examined session by session, highlighting the heterogeneity of change processes that occur between individuals. In addition, the project looked at whether a common change process in CBT literature, early rapid response, occurred in a low intensity intervention, as early literature suggested would be the case (Delgadillo et al., 2013).

There is little research to date that has looked at guided self- help programmes run in a group format. The use of group process measures made it possible to assess whether group based change processes occurred similarly or differently in a low intensity paradigm compared with literature based on traditional group therapy. It emerged that

there were differences in the development of group climate possibly relating to the way the low intensity programme was structured (e.g. high perceived avoidance due to less personal disclosure), however, such differences in group climate did not look to be related to post programme outcomes, in contrast to links made in previous literature.

The naturalistic design of the current study is a reflection of changes in the way research is now being conducted, that is, with efforts to make the interpretation and application of findings in clinical settings easier. It is also in keeping with the premise of why low intensity interventions were developed; in an effort to increase access to treatment for those requiring it (Bennett-Levy, 2010). This study attempted to keep registration and screening criteria to a minimum in order to endorse this premise. The response from the recruitment campaign reflected these efforts, with individuals with a variety of symptom severities and presentations registering for the programme. Participant evaluation of the programme indicated that most found it a worthwhile experience. Given the New Zealand Ministry of Health's initiative to implement a stepped care system within the primary mental health sector (Ministry of Health, 2012), more rigorous research regarding the effectiveness of programmes such as LLTTF is recommended. Subsequently it may be considered that a programme such as this might be a suitable option for low intensity interventions within such a tiered system.

The Living Life to the Full programme was received well by participants in this study. The results of this research provide a promising contribution for the continuation of group guided self-help programmes in New Zealand.

## REFERENCES

- Acock, A. C. (2005). Working With Missing Values. *Journal of Marriage and Family*, 67(4), 1012–1028. doi:10.1111/j.1741-3737.2005.00191.x
- American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4<sup>th</sup> ed.) Washington DC: Author.
- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4<sup>th</sup> ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Andersson, G., Bergstrom, J., Hollandare, F., Carlbring, P., Kaldo, V., & Ekselius, L. (2005). Internet-based self-help for depression: randomised controlled trial. *The British Journal of Psychiatry*, 187(5), 456–461. doi:10.1192/bjp.187.5.456
- Andrews, G., Cuijpers, P., Craske, M. G., McEvoy, P., & Titov, N. (2010). Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: a meta-analysis. *PloS one*, 5(10), e13196. doi: 10.1371/journal.pone.0013196
- Andrews, W., Twigg, E., Minami, T., & Johnson, G. (2011). Piloting a practice research network: A 12-month evaluation of the Human Givens approach in primary care at a general medical practice: PRN treatment effectiveness evaluation. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(4), 389–405. doi:10.1111/j.2044-8341.2010.02004.x
- Antonuccio, D. O., Davis, C., Lewinsohn, P. M., & Breckenridge, J. S. (1987). Therapist variables related to cohesiveness in a group treatment for depression. *Small Group Behaviour*, 18(4), 557–564. doi:10.1177/104649648701800409

- Ashfield, J. (2011). *Taking Care of Yourself and Your Family: A Resource Book for Good Mental Health*. Adelaide, Australia: Published for beyondblue, the national depression initiative by Peacock Publications.
- Attkisson, C. C., & Zwick, R. (1982). The client satisfaction questionnaire: Psychometric properties and correlations with service utilization and psychotherapy outcome. *Evaluation and Program Planning*, *5*(3), 233–237. doi:10.1016/0149-7189(82)90074-X
- Auckland Regional Public Health Service (2006). *Demographic Profile- Census 2006*. Auckland: Ara Whanui Ltd.
- Baguley, C., Farrand, P., Hope, R., Leibowitz, J., Lovell, K., Lucock, M., ... Richards, D. (2010). Good practice guidance on the use of self-help materials within IAPT services. Retrieved from <http://eprints.hud.ac.uk/9017>
- Bailer, U., de Zwaan, M., Leisch, F., Strnad, A., Lennkh-Wolfsberg, C., El-Giamal, N., ... Kasper, S. (2004). Guided self-help versus cognitive-behavioural group therapy in the treatment of bulimia nervosa. *International Journal of Eating Disorders*, *35*(4), 522–537. doi:10.1002/eat.20003
- Barkham, M., Bewick, B., Mullin, T., Gilbody, S., Connell, J., Cahill, J., ... Evans, C. (2013). The CORE-10: A short measure of psychological distress for routine use in the psychological therapies. *Counselling and Psychotherapy Research*, *13*(1), 3–13. doi:10.1080/14733145.2012.729069
- Barkham, M., & Mellor-Clark, J. (2003). Bridging evidence-based practice and practice-based evidence: Developing a rigorous and relevant knowledge for the psychological therapies. *Clinical Psychology & Psychotherapy*, *10*(6), 319–327. doi:10.1002/cpp.379

- Barkham, M., Mellor-Clark, J., Connell, J., & Cahill, J. (2006). A core approach to practice-based evidence: A brief history of the origins and applications of the CORE-OM and CORE System. *Counselling and Psychotherapy Research*, 6(1), 3–15. doi:10.1080/14733140600581218
- Barkham, M., Shapiro, D. A., Hardy, G. E., & Rees, A. (1999). Psychotherapy in two-plus-one sessions: Outcomes of a randomized controlled trial of cognitive-behavioral and psychodynamic-interpersonal therapy for subsyndromal depression. *Journal of Consulting and Clinical Psychology*, 67(2), 201. doi: <http://dx.doi.org/10.1037/0022-006X.67.2.201>
- Bormann, B., & Strauss, B. (2007). Group climate, cohesion, alliance, and empathy as components of the therapeutic relationship within group psychotherapy-Test of a multilevel model. *Gruppenpsychotherapie und Gruppendynamik*, 43(1), 1-20.
- Bower, P., Kontopantelis, E., Sutton, A., Kendrick, T., Richards, D. A., Gilbody, S., ... & Liu, E. T. H. (2013). Influence of initial severity of depression on effectiveness of low intensity interventions: meta-analysis of individual patient data. *Bmj*, 346. doi: <http://dx.doi.org/10.1136/bmj.f540>.
- British Columbia Mental Health & Addiction Services. (2009, January). Provincial cognitive behaviour therapy (CBT) service framework. British Columbia Ministry of Health Services, limited circulation document.
- Beck, A. T. (2005). The current state of cognitive therapy: a 40-year retrospective. *Archives of General Psychiatry*, 62(9), 953.
- Beck, J. S. (1995). *Cognitive Therapy: Basics and Beyond*. New York: Guilford Press.
- Beck, A.T., Steer, R.A., Brown, G.K. (1996). *Manual for the BDI-II*. San Antonia, TX: The Psychological Corporation.

- Bennett-Levy, J. (2010). *Oxford guide to low intensity CBT interventions*. Oxford; New York: Oxford University Press.
- Bennett-Levy, J., Richards, D.A., & Farrand, P. (2010). Low intensity CBT interventions: a revolution in mental health care. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions* (pp.217-223). Oxford: Oxford University Press.
- Beyondblue: The National Depression Initiative (2010). *Targeted Research in Depression, Anxiety and related disorders- 2007-2010*. Australia: Beyond Blue Ltd.
- Bieling, P. J., McCabe, R. E., & Antony, M. M. (2013). *Cognitive-Behavioural Therapy in Groups*. Guilford Press.
- Blampied, N. M. (2000). Single-case research designs: A neglected alternative. *American Psychologist*, 55(8), 960–960. doi:10.1037/0003-066X.55.8.960
- Blampied, N. M. (2001). The Third Way: Single-Case Research, Training, and Practice in Clinical Psychology. *Australian Psychologist*, 36(2), 157–163. doi:10.1080/00050060108259648
- Blatt, S., & Felsen, I. (1993). Different Kinds of Folks may Need Different Kinds of Strokes: The Effect of Patients' Characteristics on Therapeutic Process and Outcome. *Psychotherapy Research*, 3(4), 245–259. doi:10.1080/10503309312331333829
- Bower, P., & Gilbody, S. (2005). Stepped care in psychological therapies: access, effectiveness and efficiency Narrative literature review. *The British Journal of Psychiatry*, 186(1), 11–17. doi:10.1192/bjp.186.1.11



- Bormann, B., & Strauss, B. (2007). Group climate, cohesion, alliance, and empathy as components of the therapeutic relationship within group psychotherapy-Test of a multilevel model. *Gruppenpsychotherapie und Gruppendynamik*, *43*(1), 1-20.
- Braaten, L. J. (1989). Predicting positive goal attainment and symptom reduction from early group climate dimensions. *International Journal of Group Psychotherapy*, *39*(3, Spec Issue), 377–387.
- Breslin, F. C., & Sobell, M. B. (1997). Toward a stepped care approach to treating problem drinkers: the predictive utility of within-treatment variables and therapist prognostic ratings. *Addiction*, *92*(11), 1479–1489.
- Brown, J. S., Cochrane, R., Mack, C. F., Leung, N., & Hancox, T. (1998). Comparison of effectiveness of large scale stress workshops with small stress/anxiety management training groups. *Behavioural and Cognitive Psychotherapy*, *26*, 219–236.
- Brown, J. S. L., Cochrane, R., & Hancox, T. (2000). Large-scale health promotion stress workshops for the general public: a controlled evaluation. *Behavioural and Cognitive Psychotherapy*, *28*(02), 139–151.
- Brown, J. S. L., Elliott, S. A., Boardman, J., Ferns, J., & Morrison, J. (2004). Meeting the unmet need for depression services with psycho-educational self-confidence workshops: preliminary report. *The British Journal of Psychiatry*, *185*(6), 511–515. doi:10.1192/bjp.185.6.511
- Burlingame, G. M., Fuhrman, A., & Johnson, J. E. (2001). Cohesion in group psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, *38*(4), 373–379. doi:10.1037/0033-3204.38.4.373
- Burlingame, G. M., McClendon, D. T., & Alonso, J. (2011). Cohesion in group therapy. *Psychotherapy*, *48*(1), 34–42. doi:10.1037/a0022063

- Burlingame, Strauss, & Joyce. (2013). Change mechanisms and effectiveness of small group treatments. In *Handbook of psychotherapy and behaviour change* (6th ed., pp. 640–689). New Jersey: John Wiley & Sons Inc.
- Bushnell, J., McLeod, D., Dowell, A. D., Salmond, C., Ramage, S., Collings, S., ... & McBain, L. (2003). The nature and prevalence of psychological problems in New Zealand primary healthcare: a report on Mental Health and General Practice Investigation (MaGPIe).
- Busse, R. T., Kratochwill, T. R., & Elliott, S. N. (1995). Meta-analysis for single-case consultation outcomes: Applications to research and practice. *Journal of School Psychology, 33*(4), 269–285. doi:10.1016/0022-4405(95)00014-D
- Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioural therapy: a review of meta-analyses. *Clinical Psychology Review, 26*(1), 17–31.
- Carron, A. V., & Spink, K. S. (1995). The group size-cohesion relationship in minimal groups. *Small Group Research, 26*(1), 86–105. doi:10.1177/1046496495261005
- Centre for Economic Performance (2006). *The depression report: a new deal for depression and anxiety disorders*. London: London school of Economics, and Political Science Centre for Economic Performance.
- Chellingsworth, M., Williams, C., McCreath, A., Tanto, P., & Thomilson, K. (2010). Using CBT-based self-help classes to deliver written materials in Health Service, further education and voluntary sector settings. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions* (pp.217-223). Oxford: Oxford University Press.

- Cheng, S. K., & Dizon, J. (2012). Computerised cognitive behavioural therapy for insomnia: A systematic review and meta-analysis. *Psychotherapy and Psychosomatics*, *81*(4), 206–216.
- Christensen, A., & Jacobson, N. S. (1994). Who (or what) can do psychotherapy: The status and challenge of nonprofessional therapies. *Psychological science*, *5*(1), 8-14.
- Clark, D. M., Layard, R., Smithies, R., Richards, D. A., Suckling, R., & Wright, B. (2009). Improving access to psychological therapy: Initial evaluation of two UK demonstration sites. *Behaviour Research and Therapy*, *47*(11), 910–920. doi:10.1016/j.brat.2009.07.010
- Collins, K. (2010). *Living life to the full programme: Interim Evaluation Report Aware Defeat Depression*. Unpublished Manuscript.
- Connell, J., Barkham, M., Stiles, W. B., Twigg, E., Singleton, N., Evans, O., & Miles, J. N. V. (2007). Distribution of CORE–OM scores in a general population, clinical cut-off points and comparison with the CIS–R. *The British Journal of Psychiatry*, *190*(1), 69–74. doi:10.1192/bjp.bp.105.017657
- Connelly, J. L., Piper, W. E., de Carufel, F. L., & Debbane, E. G. (1986). Premature termination in group psychotherapy: Pretherapy and early therapy predictors. *International Journal of Group Psychotherapy*, *36*(1), 145–152.
- Coull, G., & Morris, P. G. (2011). The clinical effectiveness of CBT-based guided self-help interventions for anxiety and depressive disorders: a systematic review. *Psychological Medicine*, *41*(11), 2239-2252. doi:  
<http://dx.doi.org/10.1017/S0033291711000900>

- Coverdale, J., Nairn, R., & Claasen, D. (2002). Depictions of mental illness in print media: a prospective national sample. *Australian and New Zealand Journal of Psychiatry*, *36*(5), 697-700. doi:10.1046/j.1440-1614.2002.00998.x
- Craske, M. G. (2010). *Cognitive-Behavioural Therapy*. Amer Psychological Assn.
- Cuijpers, P. (1998). A psychoeducational approach to the treatment of depression: A meta-analysis of Lewinsohn's 'Coping With Depression' course. *Behaviour Therapy*, *29*(3), 521–533.
- Cuijpers, P., Donker, T., van Straten, A., Li, J., & Andersson, G. (2010). Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A systematic review and meta-analysis of comparative outcome studies. *Psychological Medicine*, *40*(12), 1943–1957. doi:10.1017/S0033291710000772
- Cuijpers, P., Van Straten, A., Smit, F., Mihalopoulos, C., & Beekman, A. (2008). Preventing the onset of depressive disorders: a meta-analytic review of psychological interventions. *American Journal of Psychiatry*, *165*(10), 1272–1280.
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*(1), 16–29. doi:10.1037/1082-989X.1.1.16
- Delgadillo, J., McMillan, D., Lucock, M., Leach, C., Ali, S., & Gilbody, S. (2013). Early changes, attrition, and dose–response in low intensity psychological interventions. *British Journal of Clinical Psychology*, n/a–n/a. doi:10.1111/bjc.12031
- Dies, R. R. (1992). The future of group therapy. *Psychotherapy: Theory, Research, Practice, Training*, *29*(1), 58.

- Dimitrov, D. M., & Rumrill, Jr, P. D. (2003). Pretest-posttest designs and measurement of change. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 20(2), 159-165.
- Durie, M. (1994). Maori perspectives on health and illness. *Social dimensions of health and disease: New Zealand perspectives*, 194-203.
- Durie, M. (2001). A framework for considering Maori educational advancement. *Hui Taumata Mātauranga, Turangi/Taupo*, 9-11.
- Durlak, J.A. (1979). Comparative effectiveness of paraprofessional and professional helpers. *Psychological Bulletin*, 86, 80-92.
- Eisen, J. L., Mancebo, M. A., Pinto, A., Coles, M. E., Pagano, M. E., Stout, R., & Rasmussen, S. A. (2006). Impact of obsessive-compulsive disorder on quality of life. *Comprehensive Psychiatry*, 47(4), 270–275. doi:10.1016/j.comppsy.2005.11.006
- Endicott, J., Nee, J., Harrison, W., & Blumenthal, R. (1993). Quality of life enjoyment and satisfaction questionnaire: A new measure. *Psychopharmacology Bulletin*, 29(2), 321–326.
- Evans, C., Connell, J., Barkham, M., Margison, F., McGrath, G., Mellor-Clark, J., & Audin, K. (2002). Towards a standardised brief outcome measure: psychometric properties and utility of the CORE—OM. *The British Journal of Psychiatry*, 180(1), 51–60. doi:10.1192/bjp.180.1.51
- Farrand, P., Confue, P., Byng, R., & Shaw, S. (2009). Guided self-help supported by paraprofessional mental health workers: an uncontrolled before-after cohort study. *Health & Social Care in the Community*, 17(1), 9–17. doi:10.1111/j.1365-2524.2008.00792.x

- Ferguson, R. J., Robinson, A. B., & Splaine, M. (2002). Use of the Reliable Change Index to evaluate clinical significance in SF-36 outcomes. *Quality of Life Research, 11*(6), 509–516. doi:10.1023/A:1016350431190
- Floyd, M., Rohen, N., Shackelford, J., Hubbard, K., Parnell, M., Scogin, F. (2006). Two-Year Follow-Up of Bibliotherapy and Individual Cognitive Therapy for Depressed Older Adults. *Behaviour Modification, 30*(3), 281-294. doi: 10.1177/0145445503261176
- Floyd, M., Scogin, F., McKendree-Smith, N., Floyd, D., Rokke, P. (2004). Cognitive Therapy for Depression. A Comparison of Individual Psychotherapy and Bibliotherapy for Depressed Older Adults. *Behaviour Modification, 28* (2), 297-318. doi: 10.1177/0145445503259284.
- Fuhriman, A., & Burlingame, G. M. (1990). Consistency of Matter A Comparative Analysis of Individual and Group Process Variables. *The Counselling Psychologist, 18*(1), 6–63. doi:10.1177/0011000090181002
- Furmark, T., Carlbring, P., Hedman, E., Sonnenstein, A., Clevberger, P., Bohman, B.,...& Andersson, G. (2009). Guided and Un-guided Self-help for Social Anxiety Disorder. Randomised Controlled Trial. *The British Journal of Psychiatry, 195*, 4404-447. doi: 10.1192/bjp.bp.108.060996.
- Furukawa, T., Takehuchi, H., Hiroe, T., Mashiko, H., Kamei, K., Kitamura, T., Takahashi, K. (2001). Symptomatic recovery and social functioning in major depression. *Acta Psychiatrica Scandinavica, 103*(4), 257–261. doi:10.1034/j.1600-0447.2001.00140.x
- Gellatly, J., Bower, P., Hennessy, S., Richards, D., Gilbody, S., & Lovell, K. (2007). What makes self-help interventions effective in the management of depressive

symptoms? Meta-analysis and meta-regression. *Psychological Medicine*, 37(09), 1217–1228. doi:10.1017/S0033291707000062

Goldberg, D., & Williams, P. (1988). *A User's Guide to the GHQ*. Windsor: NFER-Nelson.

Greenberger, D., & Padesky, C. A. (1995). *Mind over mood*. New York: Guilford.

Gyani, A., Shafran, R., Layard, R., & Clark, D. (2011). Enhancing Recovery Rates in IAPT Services: Lessons from an Analysis of the One Year Data. Improving Access to Psychological Therapies, London, United Kingdom.

Haarhoff, B., & Kazantzis, N. (2007). How to supervise the use of homework in cognitive behaviour therapy: The role of trainee therapist beliefs. *Cognitive and Behavioural Practice*, 14, 325-332. doi:10.1016/j.cbpra.2006.08.004

Haas, E., Hill, R. ., Lambert, M. ., & Morrell, B. (2002). Do Early Responders to Psychotherapy Maintain Treatment Gains? *Journal of Clinical Psychology*, 58(9), 1157.

Hamilton, M. (1960). A Rating Scale for Depression. *Journal of Neurology, Neurosurgery, and Psychiatry*, 23(1), 56–62.

Hayes, A., Hope, D. A., & Hayes, S. (2007). Towards an Understanding of the Process and Mechanisms of Change in Cognitive Behavioural Therapy: Linking Innovative Methodology with Fundamental Questions. *Clinical Psychology Review*, 27(6), 679–681. doi:10.1016/j.cpr.2007.01.006

Hayes, A. M., Feldman, G. C., Beevers, C. G., Laurenceau, J.-P., Cardaciotto, L., & Lewis-Smith, J. (2007). Discontinuities and cognitive changes in an exposure-based cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, 75(3), 409–421. doi:10.1037/0022-006X.75.3.409

- Hayes, A. M., Laurenceau, J.-P., Feldman, G., Strauss, J. L., & Cardaciotto, L. (2007). Change is not always linear: The study of nonlinear and discontinuous patterns of change in psychotherapy. *Clinical Psychology Review, 27*(6), 715–723. doi:10.1016/j.cpr.2007.01.008
- Hildebrand, M. W., Host, H. H., Binder, E. F., Carpenter, B., Freedland, K. E., Morrow-Howell, N., ... & Lenze, E. J. (2012). Measuring treatment fidelity in a rehabilitation intervention study. *American journal of physical medicine & rehabilitation/Association of Academic Physiatrists, 91*(8), 715. doi:10.1097/PHM.0b013e31824ad462
- Hollon, S. ., & Beck, A. . (2004). Cognitive and Cognitive-Behavioural Therapies. In *Bergin and Garfield's Handbook of Psychotherapy and Behaviour Change*. John Wiley & Sons.
- Houghton, S., & Saxon, D. (2007). An evaluation of large group CBT psycho-education for anxiety disorders delivered in routine practice. *Patient Education and Counselling, 68*(1), 107–110. doi:10.1016/j.pec.2007.05.010
- Ilardi, S. S., & Craighead, W. E. (1994). The Role of Nonspecific Factors in Cognitive-Behaviour Therapy for Depression. *Clinical Psychology: Science and Practice, 1*(2), 138–155. doi:10.1111/j.1468-2850.1994.tb00016.x
- IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12–19. doi:10.1037/0022-006X.59.1.12
- Jensen, D. R., Abbott, M. K., Beecher, M. E., Griner, D., Golightly, T. R., & Cannon, J. A. (2012). Taking the pulse of the group: The utilization of practice-based



evidence in group psychotherapy. *Professional Psychology: Research and Practice*, 43(4), 388.

Johnson, J. E., Burlingame, G. M., Olsen, J. A., Davies, D. R., & Gleave, R. L. (2005). Group Climate, Cohesion, Alliance, and Empathy in Group Psychotherapy: Multilevel Structural Equation Models. *Journal of Counselling Psychology*, 52(3), 310–321. doi:10.1037/0022-0167.52.3.310

Johnson, J. E., Pulsipher, D., Ferrin, S. L., Burlingame, G. M., Davies, D. R., & Gleave, R. (2006). Measuring group processes: A comparison of the GCQ and CCI. *Group Dynamics: Theory, Research, and Practice*, 10(2), 136–145. doi:10.1037/1089-2699.10.2.136

Joice, A., Freeman, L., Toplis, L., & Bienkowski, G. (2010, January). *A review and discussion of psychological therapies and interventions delivered within stepped care service models*. Report prepared for NHS Education Scotland, Scotland.

Jorm, A. F., Barney, L. J., Christensen, H., Highet, N. J., Kelly, C. M., & Kitchener, B. A. (2006). Research on mental health literacy: what we know and what we still need to know. *Australian and New Zealand Journal of Psychiatry*, 40(1), 3-5. doi:10.1080/j.1440-1614.2006.01734.x

Joyce, A. (2005). The Revised CORE Battery: Assessment of Group Therapy Process. *Group Circles*, 2, 4–6.

Joyce, A. S., Azim, H., F. ..., & Morin, H. (1988). Brief crisis group psychotherapy versus the initial sessions of long-term group psychotherapy: An exploratory comparison. *Group*, 12(1), 3–19. doi:10.1007/BF01419848

Joyce, A.S., Piper, W.E. (1998). Expectancy, the Therapeutic Alliance, and Treatment Outcome in Short-Term Individual Psychotherapy. *Journal of Psychotherapy Practice and Research*. 7(3), 237-248.

- Joyce, A. S., Piper, W. E., & Ogrodniczuk, J. S. (2007). Therapeutic alliance and cohesion variables as predictors of outcome in short-term group psychotherapy. *International Journal of Group Psychotherapy, 57*(3), 269–296.
- Kopper, B.A., & Epperson, D.L. (1991). Women and Anger: Sex and Sex-role comparisons in the Expression of Anger. *Psychology of Women Quarterly, 15*(1), 7-14. doi: 10.1111/j.1471-6402.1991.tb00474.x
- Kazantzis, N., Deane, F.P., & Ronan, K.R. (2000). Homework assignments in cognitive and behavioural therapy: A meta-analysis. *Clinical Psychology Science and Practice, 7*(2), 189-202. doi: 10.1093/clipsy.7.2.189
- Kazdin, A. E. (2003). *Research design in clinical psychology*. Boston: Allyn and Bacon.
- Khan, N., Bower, P., & Rogers, A. (2007). Guided self-help in primary care mental health. *The British Journal of Psychiatry, 191*(3), 206-211. doi: 10.1192/bjp.bp.106.032011.
- Kivlighan, D. M. J., & Goldfine, D. C. (1991). Endorsement of therapeutic factors as a function of stage of group development and participant interpersonal attitudes. *Journal of Counselling Psychology, 38*(2), 150–158.
- Kivlighan, D. M. J., & Lilly, R. L. (1997). Developmental changes in group climate as they relate to therapeutic gain. *Group Dynamics: Theory, Research, and Practice, 1*(3), 208–221. doi:10.1037/1089-2699.1.3.208
- Kivlighan, D. M. J., & Tarrant, J. M. (2001). Does group climate mediate the group leadership–group member outcome relationship?: A test of Yalom’s hypotheses about leadership priorities. *Group Dynamics: Theory, Research, and Practice, 5*(3), 220–234. doi:10.1037/1089-2699.5.3.220
- Kivlighan, D. M., Jr., & Tarrant, J. M. (2001). Does group climate mediate the group leadership–group member outcome relationship?: A test of Yalom’s hypotheses

about leadership priorities. *Group Dynamics: Theory, Research, and Practice*, 5(3), 220–234. doi:10.1037//1089-2699.5.3.220

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9. *Journal of General Internal Medicine*, 16(9), 606–613.

Kupshik, G. A., & Fisher, C. R. (1999). Assisted bibliotherapy: effective, efficient treatment for moderate anxiety problems. *The British Journal of General Practice*, 49(438), 47.

Lambert, M.J., Whipple, J.L, Vermeersch, D.A., Smart, D.W., Hawkins, E.J., Mielsen, S.L., & Goates, M. (2002). Enhancing Psychotherapy Outcomes via Providing Feedback on Client Progress: A Replication. *Clinical Psychology and Psychotherapy*, 9(2), 91-103. doi: 10.1002/cpp.324

Lambert, M. (2013). *Bergin and Garfield's Handbook of Psychotherapy and Behaviour Change* (6th ed.). John Wiley & Sons.

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning*, 2(3), 197–207. doi:10.1016/0149-7189(79)90094-6

Laurenceau, J.-P., Hayes, A. M., & Feldman, G. C. (2007). Some methodological and statistical issues in the study of change processes in psychotherapy. *Clinical Psychology Review*, 27(6), 682–695. doi:10.1016/j.cpr.2007.01.007

Lee, K (2014). *The effectiveness and cultural compatibility of a guided self-help cognitive behaviour programme for Asian students in New Zealand* (Masters Dissertation). Massey Research Online.

Leibowitz, J. (2010). Improving access to low intensity interventions for ethnic minority communities. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson,

- K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions* (pp.217-223). Oxford: Oxford University Press.
- Little, R. J. A. (1988). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198–1202. doi:10.1080/01621459.1988.10478722
- Longmore, R. J., & Worrell, M. (2007). Do we need to challenge thoughts in cognitive behaviour therapy? *Clinical Psychology Review*, 27(2), 173–187. doi:10.1016/j.cpr.2006.08.001
- Lovell, K., Bower, P., Richards, D., Barkham, M., Sibbald, B., Roberts, C., ... & Hennessy, S. (2008). Developing guided self-help for depression using the Medical Research Council complex interventions framework: a description of the modelling phase and results of an exploratory randomised controlled trial. *Bmc Psychiatry*, 8(1), 91. doi:10.1186/1471-244X-8-91.
- Lovell, K., & Richards, D. (2000). Multiple Access Points & Levels of Entry (MAPLE): Ensuring Choice, Accessibility & Equity for CBT Services. *Behavioural and Cognitive Psychotherapy*, 28(4), 379–392.
- Lloyd, M., Abdulrahman, A.I. (2011). *Equally Connected: Living Life to the Full*. Scotland: NHS Health Scotland.
- Lyne, K. J., Barrett, P., Evans, C., & Barkham, M. (2006). Dimensions of variation on the CORE-OM. *British Journal of Clinical Psychology*, 45(2), 185–203. doi:10.1348/014466505X39106
- Mackenzie, K.R. (1983). The clinical application of a group climate measure. In *Advances in group psychotherapy: Integrating research and practise*. 159-170.

- MacLeod, M., Martinez, R., & Williams, C. (2009). Cognitive Behaviour Therapy self-help: who does it help and what are its drawbacks? *Behavioural and Cognitive Psychotherapy*, *37*(1), 61.
- Mains, J. A., & Scogin, F. R. (2003). The effectiveness of self-administered treatments: A practice-friendly review of the research. *Journal of Clinical Psychology*, *59*(2), 237–246. doi:10.1002/jclp.10145
- Mansell, W., & Taylor, J. (2012). CBT: Past, Present and Future. In W. Dryden & R. Branch (Eds.), *The CBT Handbook*. London: SAGE.
- Marks, I.M. (1978). *Living with fear: Understanding and coping with anxiety* (Vol. xiii). New York: McGraw-Hill.
- Marks, I.M. (1979). Brief standard self-rating for phobic patients. *Behaviour Research and Therapy*, *17*, 263-167.
- Marks, I.M. (1992). Innovations in mental health care delivery. *The British Journal of Psychiatry*, *160*(5), 589–597.
- Marks, I.M. (2005). *Living with Fear. Understanding and coping with anxiety* (2<sup>nd</sup> Edition). England: McGraw-Hill Publishing.
- Martinez, R., Whitfield, G., Dafters, R., & Williams, C. (2008). Can people read self-help manuals for depression? A challenge for the stepped care model and book prescription schemes. *Behavioural and Cognitive Psychotherapy*, *36*(01), 89–97.
- Masheb, R. M., & Grilo, C. M. (2007). Rapid response predicts treatment outcomes in binge eating disorder: Implications for stepped care. *Journal of Consulting and Clinical Psychology*, *75*(4), 639–644. doi:10.1037/0022-006X.75.4.639
- McClay, C.-A., Morrison, J., McConnachie, A., & Williams, C. (2013). A community-based group-guided self-help intervention for low mood and stress: study protocol for a randomized controlled trial. *Trials*, *14*(1), 392.

- McDermott, P. (2008, April). *Auckland's population*. A briefing paper prepared for the royal commission on Auckland governance. Cityscope consultants, Auckland.
- McGlinchey, J. B., Atkins, D. C., & Jacobson, N. S. (2002). Clinical significance methods: Which one to use and how useful are they? *Behaviour Therapy*, *33*(4), 529–550. doi:10.1016/S0005-7894(02)80015-6
- McKendree-Smith, N. L., Floyd, M., & Scogin, F. R. (2003). Self-administered treatments for depression: a review. *Journal of Clinical Psychology*, *59*(3), 275–288.
- McMillan, D., Gilbody, S., & Richards, D. (2010). Defining successful treatment outcome in depression using the PHQ-9: A comparison of methods. *Journal of Affective Disorders*, *127*(1–3), 122–129. doi:10.1016/j.jad.2010.04.030
- Mead, N., MacDonald, W., Bower, P., Lovell, K., Richards, D., Roberts, C., & Bucknall, A. (2005). The clinical effectiveness of guided self-help versus waiting-list control in the management of anxiety and depression: a randomized controlled trial. *Psychological medicine*, *35*(11), 1633-1643. doi: <http://dx.doi.org/10.1017/S003329170500560X>
- Merry, S. N., Stasiak, K., Shepherd, M., Frampton, C., Fleming, T., & Lucassen, M. F. (2012). The effectiveness of SPARX, a computerised self help intervention for adolescents seeking help for depression: randomised controlled non-inferiority trial. *Bmj*, *344*, e2598. doi: <http://dx.doi.org/10.1136/bmj.e2598>
- Mineka, S., Watson, D., & Clark, L. A. (1998). Comorbidity of Anxiety and Unipolar Mood Disorders. *Annual Review of Psychology*, *49*(1), 377–412. doi:10.1146/annurev.psych.49.1.377
- Mohr, D. C., Beutler, L. E., Engle, D., Shoham-Salomon, V., Bergan, J., Kaszniak, A. W., & Yost, E. B. (1990). Identification of patients at risk for nonresponse and

negative outcome in psychotherapy. *Journal of Consulting and Clinical Psychology*, 58(5), 622–628. doi:10.1037/0022-006X.58.5.622

Moncher, F. J. (1991). Treatment fidelity in outcome studies. *Clinical Psychology Review*, 11(3), 247-266. doi:10.1016/0272-7358(91)90103-2

Moorey, S. (2012). CBT: Past, Present and Future. In W. Dryden & R. Branch (Eds.), *The CBT Handbook*. London: SAGE.

Newman, M. G., Erickson, T., Przeworski, A., & Dzus, E. (2003). Self-help and minimal-contact therapies for anxiety disorders: Is human contact necessary for therapeutic efficacy? *Journal of Clinical Psychology*, 59(3), 251–274.

Newnham, E. A., & Page, A. C. (2010). Bridging the gap between best evidence and best practice in mental health. *Clinical Psychology Review*, 30(1), 127–142. doi:10.1016/j.cpr.2009.10.004

New Zealand Ministry of Health (2009). *Towards optimal primary mental health care in the new primary care environment: A draft guidance paper*. Wellington: Ministry of Health.

New Zealand Ministry of Health (2012). *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017*. Wellington: Ministry of Health.

NICE (2004a). Anxiety: Management of Anxiety (Panic Disorder, With and Without Agoraphobia, and Generalised Anxiety Disorder) in Adults in Primary, Secondary and Community Care. Clinical Guideline 22. London: National Institute for Health and Clinical Excellence.

NICE (2004b). Depression: Management of Depression in Primary and Secondary Care. Clinical Guideline 23. London: National Institute for Health and Clinical Excellence.

- NICE (2005b). Post-Traumatic Stress Disorder (PTSD): The Management of PTSD in Adults and Children in Primary and Secondary Care. Clinical Guideline 26. London: National Institute for Health and Clinical Excellence.
- NICE (2009). Depression: The treatment and management of depression in adults. Partial upgrade of Clinical Guideline 23. London: National Institute for Health and Clinical Excellence.
- Nunnally, J. C. (1967). *Psychometric theory* (Vol. xiii). New York, NY, US: McGraw-Hill.
- Oakley Browne, M. A., Elisabeth Wells, J., Scott, K. M., & Mcgee, M. A. (2006). Lifetime prevalence and projected lifetime risk of DSM-IV disorders in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Australian and New Zealand Journal of Psychiatry*, 40(10), 865–874. doi:10.1080/j.1440-1614.2006.01905.x
- Ogrodniczuk, J. S., & Piper, W. E. (2003). The effect of group climate on outcome in two forms of short-term group therapy. *Group Dynamics: Theory, Research, and Practice*, 7(1), 64–76. doi:10.1037/1089-2699.7.1.64
- Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. McGraw-Hill International.
- Papworth, M., Marrinan, T., Martin, B., Keegan, D., & Chaddock, A. (2013). *Low Intensity Cognitive Behaviour Therapy. A Practitioners Guide*. Sage Publications Limited: London.
- Peterson, A. L., & Halstead, T. S. (1998). Group cognitive behaviour therapy for depression in a community setting: A clinical replication series. *Behaviour Therapy*, 29(1), 3–18.



- Pett, M. A. (1997). *Nonparametric Statistics in Health Care Research: Statistics for Small Samples and Unusual Distributions*. SAGE.
- Piper, W.E., Joyce, A.S., Rosie, A.S., & Azim, H.F.A. (1994). Psychological Mindedness, Work and Outcome in Day Treatment. *International Journal of Group Psychotherapy*, 44 (3), 291-311.
- Piper, W. E., Marrache, M., Lacroix, R., Richardsen, A. M., & Jones, B. D. (1983). Cohesion as a Basic Bond in Groups. *Human Relations*, 36(2), 93–108. doi:10.1177/001872678303600201
- Pleva, J., & Wade, T. (2007). Guided self-help versus pure self-help for perfectionism: A Randomised Controlled Trial. *Behaviour Research and Therapy*, 45(5), 849-861. doi:10.1016/j.brat.2006.08.009
- Pretorius, N., Arcelus, J., Beecham, J., Dawson, H., Doherty, F., Eisler, I., ... Johnson-Sabine, E. (2009). Cognitive-behavioural therapy for adolescents with bulimic symptomatology: The acceptability and effectiveness of internet-based delivery. *Behaviour Research and Therapy*, 47(9), 729–736.
- Quigg, J. (n.d.). *The mechanisms of change within low intensity IAPT intervention: A model of change drawing upon client experiences* (Unpublished Doctoral thesis). Lancaster University, Lancaster, United Kingdom.
- Rapee, R., Abbott, M., Bailee, A., & Gaston, J. (2007). Treatment of Social Phobia through Pure Self-help and Therapist-augmented Self-help. *British Journal of Psychiatry*, 191, 246-252. doi: 10.1192/bjp.bp.106.028167.
- Rapaport, M. H., Clary, C., Fayyad, R., & Endicott, J. (2005). Quality-of-life impairment in depressive and anxiety disorders. *American Journal of Psychiatry*, 162(6), 1171–1178.

- Renaud, J., Brent, D. ., Baugher, M., Birmaher, B., Kolko, D. ., & Bridge, J. (1998). Rapid Response to Psychosocial Treatment for Adolescent Depression: A Two-Year Follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(11), 1184–1190. doi:10.1097/00004583-199811000-00019
- Richards, D. A., & Suckling, R. (2009). Improving access to psychological therapies: phase IV prospective cohort study. *British Journal of Clinical Psychology*, 48(4), 377–396.
- Richards, D., & Whyte, M. (2009). Reach Out: National Programme Educator Materials to Support the Delivery of Training for Psychological Wellbeing Practitioners Delivering Low Intensity Interventions (2<sup>nd</sup> Ed.). United Kingdom: National Health Service.
- Richards, D. (2010). Access and organisation: putting low intensity interventions to work in clinical services. . In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions (pp.217-223)*. Oxford: Oxford University Press.
- Richards, D., Farrand P., & Chellingsworth, M. (2011). IAPT: National Curriculum for the Education of Psychological Wellbeing Practitioners (2<sup>nd</sup> Ed.). United Kingdom: National Health Service.
- Rosenberg, M. (1979). *Conceiving the Self*. New York: Basic Books.
- Sachsenweger, M. (2010). The impact of attributional style and homework experiences in Cognitive Behaviour Therapy for depression: a longitudinal investigation employing multilevel analysis: a dissertation presented in partial fulfillment of the requirements of the degree of Doctor of Clinical Psychology at Massey University, Albany, New Zealand.

- Salkovskis, P., Rimes, K., Stephenson, D., Sacks, G., & Scott, J. (2006). A randomized controlled trial of the use of self-help materials in addition to standard general practice treatment of depression compared to standard treatment alone. *Psychological medicine*, *36*(03), 325-333. doi:  
<http://dx.doi.org/10.1017/S0033291705006422>
- Santor, D. A., & Segal, Z. V. (2001). Predicting Symptom Return from Rate of Symptom Reduction in Cognitive–Behaviour Therapy for Depression. *Cognitive Therapy and Research*, *25*(2), 117–135.
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*(2), 147–177. doi:10.1037/1082-989X.7.2.147
- Schlögelhofer, M., Willinger, U., Wiesecker, G., Eder, H., Priesch, M., Itzlinger, U., ... & Aschauer, H. (2014). Clinical study results from a randomized controlled trial of cognitive behavioural guided self-help in patients with partially remitted depressive disorder. *Psychology and Psychotherapy: Theory, Research and Practice*, *87*(2), 178-190. doi: 10.1111/papt.12008
- Schulz, A., Stolz, T., & Berger, T. (2014). Internet-based individually versus group guided self-help treatment for social anxiety disorder: protocol of a randomized controlled trial. *BMC psychiatry*, *14*(1), 115. doi:10.1186/1471-244X-14-115.
- Scogin, F., Floyd, M., Jamison, C., Ackerson, J., Landreville, P., & Bissonnette, L. (1996). Negative outcomes: What is the evidence on self-administered treatments? *Journal of Consulting and Clinical Psychology*, *64*(5), 1086–1089. doi:10.1037/0022-006X.64.5.1086
- Seggar, L. B., Lambert, M. J., & Hansen, N. B. (2002). Assessing clinical significance: application to the Beck Depression Inventory. *Behavior Therapy*, *33*(2), 253-269. doi:10.1016/S0005-7894(02)80028-4

- Shafran, R., Clark, D.M., Fairburn, C.G., A., D.H., Ehlers, A., Freeston, M., Garety, P.A., Hollon, S.D., Öst, L.G., Salkovskis, P.M., Wilson, G.T. (2009). Mind the Gap: Improving the Dissemination of CBT, *Behaviour Research and Therapy*, doi: 10.1016/j.brat.2009.07.003
- Sharpe, M., Walker, J., Williams, C., Stone, J., Cavanagh, J., Murray, G., ... Carson, A. (2011). Guided self-help for functional (psychogenic) symptoms A randomized controlled efficacy trial. *Neurology*, 77(6), 564–572. doi:10.1212/WNL.0b013e318228c0c7
- Shepherd, M., Fleming, T., Lucassen, M., Stasiak, K., Lambie, I., & Merry, S. N. (2015). The Design and Relevance of a Computerized Gamified Depression Therapy Program for Indigenous Māori Adolescents. *JMIR Serious Games*, 3(1), e1. <http://doi.org/10.2196/games.3804>
- Spielberger, C., Gorsuch, R., & Luchene, R. (1970). State-Trait Anxiety Inventory: STAI. *Consulting Psychologists Press*.
- Spink, K. S., & Carron, A. V. (1994). Group Cohesion Effects in Exercise Classes. *Small Group Research*, 25(1), 26–42. doi:10.1177/1046496494251003
- Stevanovic, D. (2011). Quality of Life Enjoyment and Satisfaction Questionnaire—short form for quality of life assessments in clinical practice: a psychometric study. *Journal of Psychiatric and Mental Health Nursing*, 18(8), 744–750.
- Strauss, B., Burlingame, G. M., & Bormann, B. (2008). Using the CORE-R battery in group psychotherapy. *Journal of Clinical Psychology*, 64(11), 1225–1237. doi:10.1002/jclp.20535
- Stulz, N., Lutz, W., Leach, C., Lucock, M., & Barkham, M. (2007). Shapes of early change in psychotherapy under routine outpatient conditions. *Journal of*

*Consulting and Clinical Psychology*, 75(6), 864–874. doi:10.1037/0022-006X.75.6.864

Swan, A., Watson, H. J., & Nathan, P. R. (2009). Quality of life in depression: An important outcome measure in an outpatient cognitive–behavioural therapy group programme? *Clinical Psychology & Psychotherapy*, 16(6), 485–496.

Tingey, R. C. (1989). *Assessing clinical significance: Extensions in method and application to the SCL-90-R* (Doctoral dissertation, ProQuest Information & Learning).

Tapsell, R., & Mellso, G. (2007). The Contributions of Culture and Ethnicity To New Zealand Mental Health Research Findings. *International Journal of Social Psychiatry*, 53(4), 317–324. doi:10.1177/0020764006074525

United Kingdom Department of Health (2011) *Talking therapies: A four-year plan of action. A supporting document to 'No health without mental health': A cross-government mental health outcomes strategy for people of all ages*. United Kingdom: Department of Health.

United Kingdom Department of Health (2012) *No Health Without Mental Health: A Cross-Government Mental Health Outcomes Strategy for People of All Ages*. United Kingdom: Department of Health.

United Kingdom Department of Health (2012). *IAPT three-year report: The first million patients*. United Kingdom: Department of Health.

Wang, P. S., Demler, O., & Kessler, R. C. (2002). Adequacy of treatment for serious mental illness in the United States. *Journal Information*, 92(1). Retrieved from <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.92.1.92>

Wells, J., Oakley Browne, M., Scott, K., McGee, M., Baxter, J., Kokaua, J., ... Kokaua, J. (2006). *Te Rau Hinengaro: The New Zealand Mental Health Survey*:

- overview of methods and findings. *Australian & New Zealand Journal of Psychiatry*, 40(10), 835–844.
- Westbrook, Kennerley, & Kirk. (2007). *An Introduction to Cognitive Behaviour Therapy. Skills and Applications*. London: Sage Publications.
- Wexler, B. E., & Nelson, J. C. (1993). The Treatment of Major Depressive Disorders. *International Journal of Mental Health*, 22(2), 7–41. doi:10.2307/41344660
- White, J. (2010). Large group didactic CBT classes for common mental health problems. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions (pp.217-223)*. Oxford: Oxford University Press.
- White, J. (2010). The STEPS model: a high volume, multi-level, multi-purpose approach to address common mental health problems. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions (pp.217-223)*. Oxford: Oxford University Press.
- Williams, C. (2001). Use of written cognitive–behavioural therapy self-help materials to treat depression. *Advances in Psychiatric Treatment*, 7(3), 233–240.
- Williams, C., & Whitfield, G. (2001). Written and computer-based self-help treatments for depression. *British Medical Bulletin*, 57(1), 133–144. doi:10.1093/bmb/57.1.133
- Williams, C. (2003). New technologies in self-help: another effective way to get better? *European Eating Disorders Review*, 11(3), 170–182. doi:10.1002/erv.524
- Williams, C. (2008). *Living Life to the Full Class Resources*. Available at: <http://www.fiveareas.com>

- Williams, C. (2009) *Overcoming Depression and Low Mood* (3<sup>rd</sup> Ed.). London, United Kingdom: Hodder Arnold.
- Williams, C., & Morrison J. (2010) Using CBT-based self-help classes to deliver written materials in Health Service, further education and voluntary sector settings. In J. Bennett-Levy, D.A. Richards, P. Farrand, H. Christianson, K.M. Griffiths, D.J. Kavanagh, B. Klien, M.A. Lau, J. Proudfoot, L. Ritterband, J. White, & C. Williams. *Oxford Guide to Low Intensity CBT Interventions* (pp.217-223). Oxford: Oxford University Press.
- Williams, C., & Chellingsworth, M. (2010). *CBT: A Clinician's Guide to Using the Five Areas Approach*. CRC Press.
- Williams, C. (2012). CBT: Past, Present and Future. In W. Dryden & R. Branch (Eds.), *The CBT Handbook*. London: SAGE.
- Williams, C., & Garland, A. (2002). Identifying and challenging unhelpful thinking. *Advances in Psychiatric Treatment*, 8(5), 377–386.
- Williams, C., & Martinez, R. (2008). Increasing Access to CBT: Stepped Care and CBT Self-Help Models in Practice. *Behavioural and Cognitive Psychotherapy*, 36 (Special Issue 06), 675–683. doi:10.1017/S1352465808004864
- Williams, C., Wilson, P., Morrison, J., McMahon, A., Andrew, W., Allan, L., ... & Tansey, L. (2013). Guided self-help cognitive behavioural therapy for depression in primary care: a randomised controlled trial. *PloS one*, 8(1), e52735. doi: 10.1371/journal.pone.0052735
- Wills, F., & Sanders, D. (2012). *Cognitive Behaviour Therapy: Foundations for Practice* (3<sup>rd</sup> ed.). London: SAGE Publications Ltd.
- Wilson, G. T. (1999). Rapid Response to Cognitive Behaviour Therapy. *Clinical Psychology: Science and Practice*, 6(3), 289–292. doi:10.1093/clipsy.6.3.289

- Wilson, G. T., Fairburn, C. C., Agras, W. S., Walsh, B. T., & Kraemer, H. (2002). Cognitive-behavioural therapy for bulimia nervosa: Time course and mechanisms of change. *Journal of Consulting and Clinical Psychology, 70*(2), 267–274. doi:10.1037/0022-006X.70.2.267
- World Health Organisation (2008). The Global Burden of Disease 2004 update. [http://www.who.int/healthinfo/global\\_burden\\_disease/GBD\\_report\\_2004update\\_full.pdf](http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf). Accessed 12.7.2014.
- Yalom, L. D. (1995) *The Theory and Practice of Group Psychotherapy (4th ed.)*. New York: Basic Books.
- Yalom, I. ., & Leszcz, M. (2005). *The Theory and Practice of Group Psychotherapy*. New York: Basic Books.



**APPENDICES**

## APPENDIX A-1



### Help Yourself to CBT Research Study Information Sheet

You are invited to take part in research involving group and individual therapy for the treatment of depression and/or anxiety. Before deciding whether you wish to be involved in the research, please read the following information carefully to ensure you fully understand the nature of the research project and your rights should you choose to participate.

#### **What is the study about?**

The Centre for Psychology currently runs group and individual therapy for anxiety, depression and stress based on Cognitive Behaviour Therapy (CBT). CBT is a talking psychotherapy that research has shown to be effective for many different problems, such as anxiety, depression, and stress. CBT emphasises the importance of how you think about yourself, situations, the world and other people.

During times of distress, people think differently about themselves, others and the world. CBT practitioners help each person identify and change their unhelpful thinking and behaviour. The end result is often that the person feels better about themselves, for example less anxious and less depressed.

Low intensity CBT and the use of CBT self-help materials, is an innovative and evidence-based intervention that is being used with successful results in England, Scotland and Canada. It is different to traditional CBT as the emphasis is on the self-help materials themselves, and support for working through the materials is provided by a ‘paraprofessional’ or Psychological Wellness Professional. Low intensity CBT provides helpful strategies which can be used by most people to help them overcome their difficulties with symptoms of mild anxiety and depression.

This research aims to examine the effectiveness of CBT guided self-help. In particular we are interested in knowing if peoples’ thoughts, feelings, and behaviours change as a result of participating in a low intensity CBT intervention. In addition, we would like to know if these changes impact on your quality of life, and if they are maintained over time.

#### **Who is unable to take part?**

To participate in this research, you need to be 18 or over, and be experiencing symptoms of depression or anxiety. You will need to have sufficient skills in reading, writing and English language and must not meet diagnostic criteria for substance abuse, psychosis or borderline personality disorder. You must also be able to keep yourself safe from harm.

#### **What would I have to do?**

If you agree to participate you will receive low intensity CBT for depression or anxiety within a group or individual context, dependent on your preference. Therapy will be provided within the clinic with two facilitators who will be trained paraprofessionals and clinical psychology trainees in the Doctoral programme working under supervision. The group format will involve up to 20 participants and will run for 8 weeks. The individual format will have two options: assisted contact (where there will be three to four face-to-face sessions of support, and the rest will be via telephone or email); or minimal contact (support is provided via telephone or email, apart from the initial face-to-face session). Follow-up will occur at 6 and 12 weeks to help us understand the long-term effects of the low intensity therapy process, and at these times you will be asked to complete some questionnaires should you choose to take part. Questionnaires will be completed each week and should take no longer than 15 minutes. The follow up sessions are expected to take approximately 15 minutes for completing measures, and these may be completed online. At some of the sessions, videotaping may take place. This is to make sure that the paraprofessionals are adhering to our protocol and doing the best they can for you.

There will be no charge involved.

### **How will the study benefit you?**

CBT is an effective therapy for individuals with anxiety and depression, because what it teaches you is how your thoughts affect your behaviours, and how some simple techniques can help you gain control over these issues. One of the main benefits for you is a greater self-awareness of how to deal with issues that may lead to anxiety and depression and how to deal with them more effectively.

### **Will my information remain confidential?**

Yes. All your information will remain confidential at all times as part of standard procedures within the Centre for Psychology.

- Research data will only be accessed by researchers and clinical supervisors directly related to this study.
- Clinical data will only be available to those involved in your therapy.
- No material which could personally identify you will be used in any reports on this study.
- All data will be kept locked.
- Files will be stored in a separate location from both the identifying information and the DVD archive.
- You will not be personally identifiable in any research publications (e.g. in scientific journals) that result from this research

### **Your rights as a participants:**

If you choose to take part in the research, you have the right to:

- Withdraw from the study at any time;
- Decline to take part in this study, knowing this will not have any impact on what services you receive;

- Decline to answer any particular question;
- Ask any question about the study at any time during participation;
- Be given a summary of the findings of the study once it has been completed if you request it.

**Questions or concerns:**

If at any time you have questions or concerns about this study, you are welcome to contact Dr Mei Williams, Phone (09) 414 0800, extension 41222.

If you have any questions about any issues pertaining to Maori in this study, regardless of your own ethnicity, you are welcome to contact Dr Lily George, Postdoctoral Research Fellow at the Research Centre for Maori Health and Development, phone (09) 414 0800 extension 41594.

If you have any queries or concerns regarding your rights as a participant in this study you may wish to contact a Health and Disability Advocate, telephone 0800 555 050 Northland to Franklin.

**What happens from here:**

You will have the opportunity to ask us any questions before you agree to take part. If you do not wish to take part then you will still be able to receive therapy in a non-researched group or an individual format.

This study has received ethical approval from the Multi-Region Ethics Committee:  
Ref # CEN/11/09/051

Thank you for reading this information sheet.

## APPENDIX A-2



**‘Help Yourself to CBT’ Research Study**

## Participant Consent Form

I have read the information sheet for this study and have had the details explained to me. My questions about the research have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given contact details to use in case I have future questions about the study. I have also had the opportunity to use whanau / family support or a friend to help me ask questions and understand the study.

I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time.

I agree to provide information to the researchers for research purposes on the understanding that this will be confidential. The information I supply will only be used for the purpose of this study. All information will be treated confidentially within the Centre, subject to the ethical guidelines on the limits of confidentiality provided by the Psychological Society of New Zealand’s Code of Ethics, as per the Privacy Act (1993).

I have had adequate time to consider whether or not to take part in this study. I agree to participate in this study under the conditions set out in the Information Sheet.

**This consent form will be held for a period of ten (10) years**

Signature.....Date .....

Full Name (printed) .....

**APPENDIX A-3****Recruitment Screening Questions:**

1. Do you currently have a serious problem with alcohol or drugs?
2. Do you have a current mental health diagnosis for bipolar disorder, schizophrenia or other psychotic disorder?
3. Are you currently receiving mental health support for any mental health problem? (If yes, please specify).
4. It important that we make sure that you and the other participants remain safe throughout these programmes with regards to possible self-harm or harm of others. Do you think this will be a problem for you?
5. Please select your programme preference (option c. is the LLTTF programme)
  - a. I would like to be considered for an individual based programme with face-to-face contact with a support worker.
  - b. I would like to be considered for an individual based programme with telephone support with a support worker.
  - c. I would like to be considered for a group based programme in which a support worker leads the sessions.
6. I have read and understood the information sheet for this study and consent to collection of my responses.
7. Please enter your name and contact details below.
  - First name
  - Family name
  - Email address
  - Phone number (land line, including area code)
  - Mobile number
8. Have you had any prior treatment for this complaint?
9. Are you currently taking any medication?
10. What is your expectation of this treatment?

## APPENDIX B-1

### Risk Protocol

This risk protocol has been developed for reference during the running of the ‘Living Life to the Full’ and ‘Overcoming Depression and Low Mood’ guided self-help programmes (Chris Williams, 2008, 2009). This document also details steps which have been taken to ensure the smooth running of these programmes, including an account of the training which Psychological Wellbeing Practitioners (PWPs) will receive regarding risk, and managing individuals who may cause problems. It also documents possible sources of risk which may arise throughout the running of the programmes and how these will be managed. A list of alternative mental health services has been compiled, which individuals with certain problems may find more relevant to their issues. A list of such services will be presented to individuals in the first session of the programme, and use of these services may be encouraged if an individual becomes increasingly ill throughout the treatment process. Individuals who fail the online screening process will also be provided with information regarding the use of these services.

### PWP Training and Supervision

The PWPs (Inga Forman & Amy Montagu) running the programmes will receive training in the delivery of their respective guided self-help programmes. This training will be delivered by two registered clinical psychologists (Dr Beverly Haarhoff and Dr Mei Williams). Extensive face-to-face weekly supervision will also be provided by these psychologists, and with the permission of participants, sessions may be videotaped or observed by supervisors to aid in thorough supervision. Participant outcome measures will also be viewed by supervisors to ensure that any significant negative changes which may occur throughout treatment are followed up.

Participants will be fully informed of the fact that the individual running the self-help programme is a PWP not a trained clinician and has been trained only in the administration of the particular programme they are administering. This fact will again be emphasized in the initial intake session when clients are being briefed regarding informed consent.

### Instances of Risk

**Screening.** The purpose of this research is to make this programme accessible to as many applicants as possible. Thus, there are few exceptions to partaking in this programme. Applicants must be over the age of 18 and report confidence in their ability to partake in a programme which is reading and writing based. Those who report substance abuse or dependence, a current diagnosis of psychosis, or active or previous suicidality will be screened from the programme during online registration. This is to allow for the programme to target its intended audience of those experiencing mild to moderate problems. Other than this there are no restrictions on participant characteristics. If an individual is excluded from partaking in these research programmes, they will receive information regarding services which may be of more use to them.

**Risk during the programme.** All registered participants will be provided with a list of services prior to the onset of the first session. If PWPs perceive a worsening of

symptoms for any participant, either through observation or as demonstrated in outcome measures, PWPs will report this situation to at least one supervisor immediately, and the participant in question will be asked to attend a supervisory meeting with both the PWP and the supervisor. Supervisors will recommend actions to take from this point onwards. This will include offering access to services which may better suit their needs. For cases where suicidal ideation or intent is evident, the individual may be referred to the Crisis Assessment and Treatment Team (CATT).

### **Services**

- 1) If there is an emergency call 111 immediately, or go to your nearest emergency room.
- 2) Crisis assessment and treatment team (CATT) (09) 486 1419 or after hours (09) 486 8900
- 3) Suicide Prevention Helpline 0508 TAUTOKO (82 88 65) (open 8pm-12am, 7 days)
- 4) Alcohol Drug Helpline 0800787 797 –Free, confidential advice and support.
- 5) Other mental health problems, call to make an appointment at the Massey Centre for Psychology. Ph (09) 441-8175 or (09) 414-0800 Ext 41242. Email [centreforpsychology@massey.ac.nz](mailto:centreforpsychology@massey.ac.nz)



## APPENDIX C-1

### Results

#### Clinically Significant Change in Depression Severity

*Break down of clinically significant change (CSC) on the PHQ-9 between baseline (week 0) and programme termination (week 8).*

Clinically significant change (CSC)	Total N=13	Reliable change		
		No reliable change	Reliable Improvement	Reliable Deterioration
Failed to achieve CSC despite sufficient initial score	0	0	0	0
Started with score outside of criterion for CSC	7	5	0	2
Clinically significant change	6	0	6	0
Total	13	5	6	2

### Clinically Significant Change in Psychological Distress

*Clinically significant change (CSC) on the CORE-10 between baseline (week 0) and programme termination (week 8).*

Clinically significant change (CSC)	Total N=13	Reliable change		
		Reliable change	Reliable Improvement	Reliable Deterioration
Failed to achieve CSC despite sufficient initial score	<b>3</b>	0	0	0
Started with score outside of criterion for CSC	<b>2</b>	0	0	0
Clinically significant change	<b>8</b>	0	8	0
<b>Total</b>	<b>13</b>	5	8	0

### Clinically Significant Change in Quality of Life

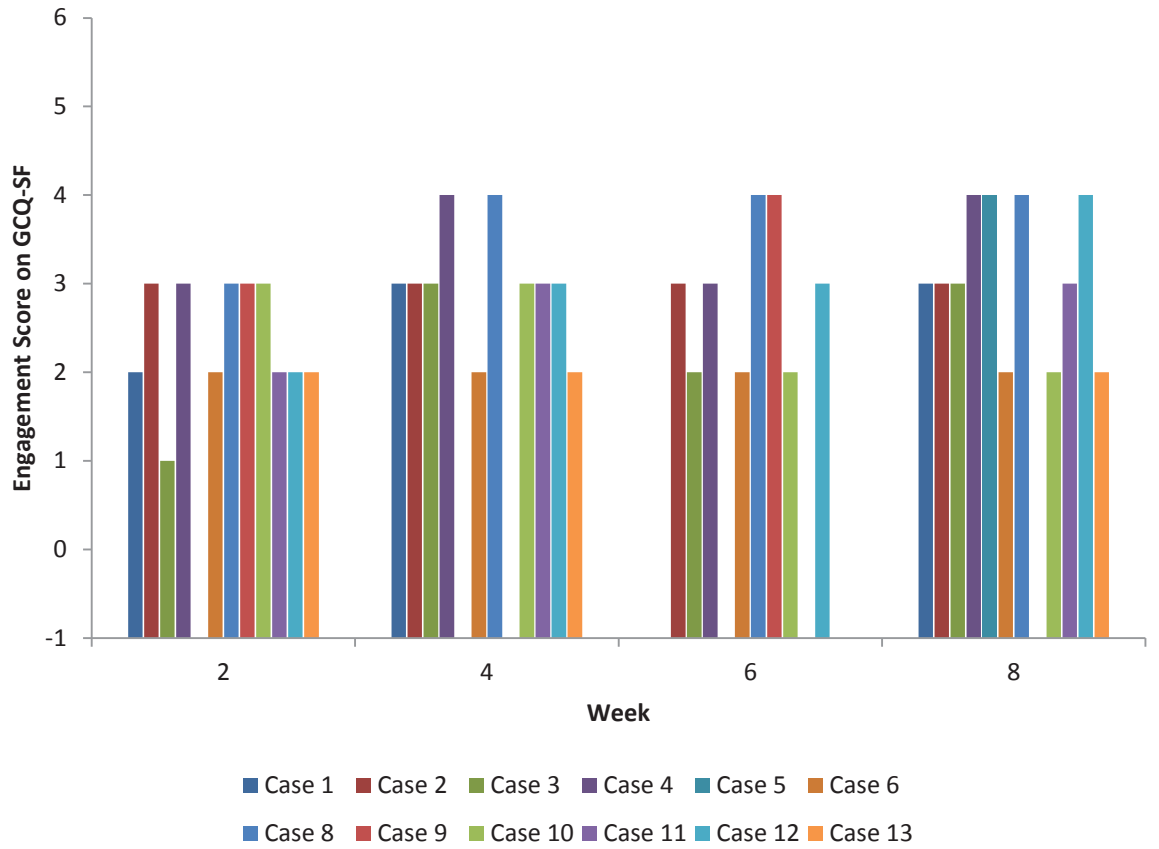
*Clinically significant change on the Q-LES-Q-SF between baseline (week 0) and programme termination (week 8).*

Clinically significant change (CSC)	Total N=13	Reliable change		
		No reliable change	Reliable Improvement	Reliable Deterioration
Failed to achieve CSC despite sufficient initial score	2	0	0	0
Started with score outside of criterion for CSC	9	4	5	0
Clinically significant change	2	0	2	0
Total	13	6	7	0

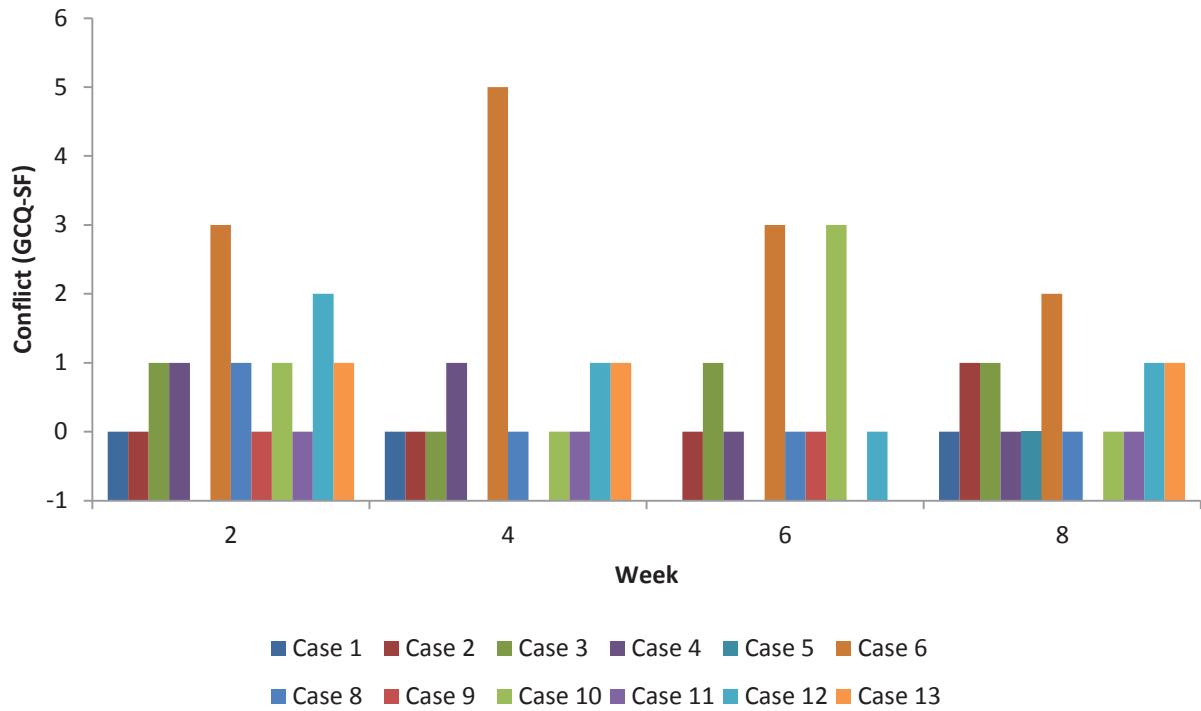
APPENDIX C-2

Group Process Results

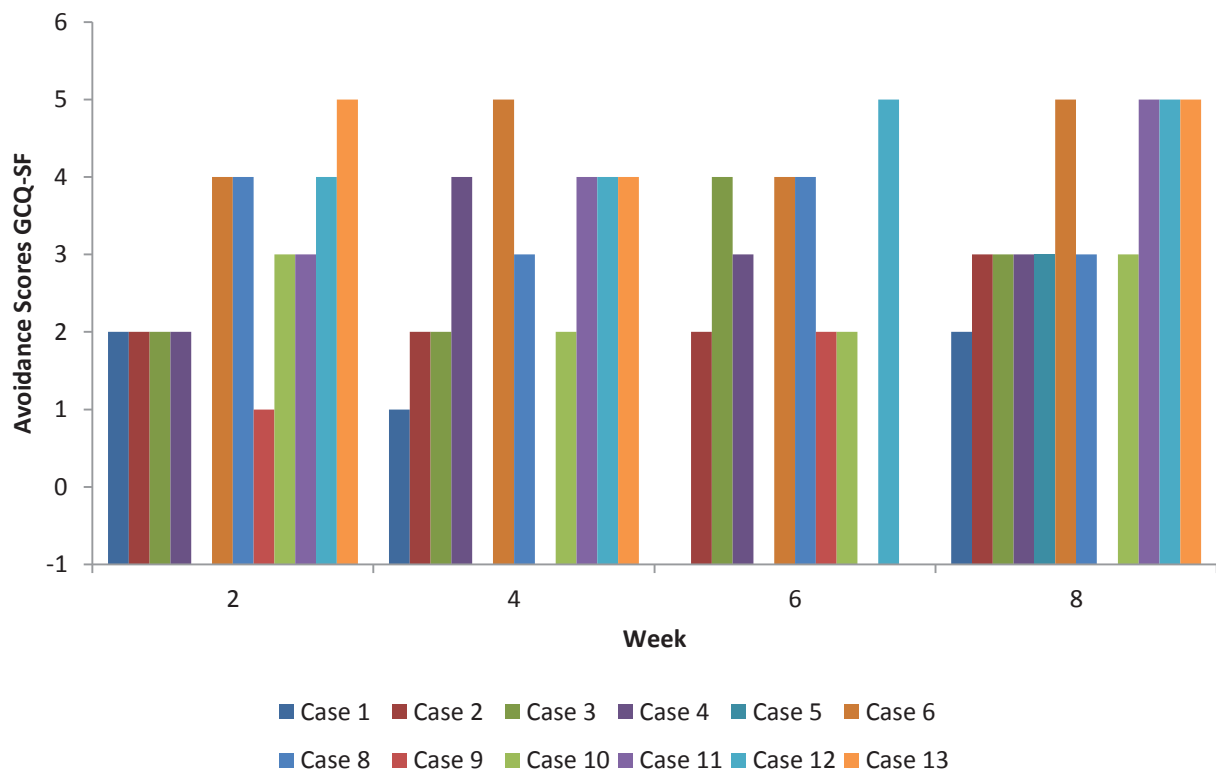
Individual Group Climate Results



Participant scores on the engagement subscale of the GCQ-SF during the intervention.

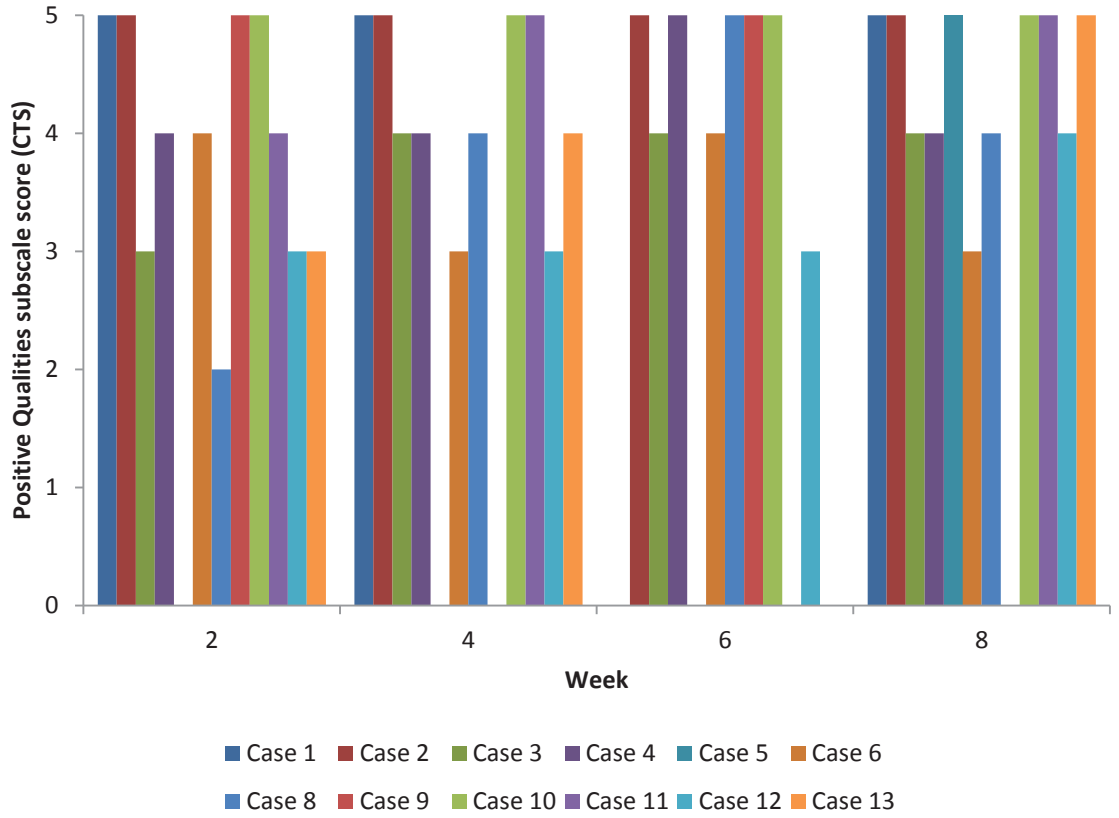


Participant scores on the conflict subscale of the GCQ-SF during the intervention.



Participant scores on the Avoidance subscale of the GCQ-SF during the intervention.

### Individual Cohesion to the Facilitator Results



Participant scores on the Positive qualities subscale of the CTS during the intervention.

**APPENDIX D-1****Participant Post-Programme Additional Feedback Questions**

- 1) What aspects of the course did you:
  - a) Find helpful or like?
  - b) Find unhelpful or dislike?
- 2) What would you have liked more or less of?
- 3) What impact has the course had on your life?