

**School of Psychology and Speech Pathology**

**Development and Testing of Metacognitive Therapy for Prolonged  
Grief Disorder: A Randomised Controlled Trial**

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**This thesis is presented for the Degree of  
Doctor of Philosophy  
of  
Curtin University**

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## DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

The research presented and reported in this thesis was conducted in accordance with the National Health and Medical Research Council National Statement on Ethical Conduct in Human Research (2007) – updated March 2014. The proposed research study received human research ethics approval from the Curtin University Human Research Ethics Committee (EC00262), Approval Number HR 41/2013 Jenine Anne Wenn: Date: 19/03/2013



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## LIST OF ABBREVIATIONS

CAS:	Cognitive attentional Syndrome
CBI:	Core Bereavement Items
CBT:	Cognitive Behavioural Therapy
CGI:	Clinical Global Impression – Improvement Scale
DASS:	The Depression Anxiety Stress Scales-21
DPM:	Dual Process Model
DSM:	Diagnostic Statistical Manual of Mental Disorders
GAD:	Generalised Anxiety Disorder
GLMM:	Generalised Linear Mixed Model
ICC	Intra-class Correlation
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10 <sup>th</sup> Revision
IUT:	Intolerance-of-uncertainty Therapy
MCGT:	Metacognitive Grief Therapy
MCQ-30:	Metacognitions Questionnaire-30
MCT:	Metacognitive Therapy
MCMI:	Millon Clinical Multiaxial Inventory
MD:	Major Depressive Disorder
MINI:	Mini International Neuropsychiatric Interview
PGD:	Prolonged Grief Disorder
PG-13	Prolonged Grief Disorder Scale
PTSD:	Post-traumatic Stress Disorder
Q-LES-Q-18	Quality of Life Enjoyment and Satisfaction Questionnaire–18
RC	Reliable Change
RCT:	Randomised Controlled Trial
RNT:	Repetitive Negative Thinking
S-REF:	Self-regulatory Executive Function Model
WL:	Wait-list
UGRS:	Utrecht Grief Rumination Scale



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## NOTICE OF PUBLICATION

### Publications

Chapter three of this thesis has been published in the peer-reviewed journal: *British Medical Journal (BMJ) Open*.

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## STATEMENT OF CONTRIBUTION

The purpose of this statement is to summarise and identify the nature and extent of the intellectual input by the PhD candidate Jenine Wenn and co-authors on the study publication contained herein. Associate Professor Moira O'Connor, Associate Professor Lauren Breen and Professor Clare Rees were involved with the study conception, participated in the research design, and were involved with the project and the supervision of the PhD. Dr. Robert Kane provided assistance with the data analysis and interpretation. I, Jenine Wenn, contributed to the conception, design, data collection, analysis and interpretation, and drafted and revised the publication. Moira O'Connor, Lauren Breen, Robert Kane and Clare Rees participated in writing and approving the publication entitled:

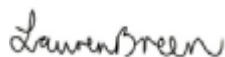
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I affirm the details stated in the Statement of Contribution are true and correct.



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## ABSTRACT

The death of a significant other is an emotionally distressing event that for the majority of people lessens as the loss is accommodated into their lives. However, some people, about 7-10% of the bereaved population, experience a more complicated form of grief called Prolonged Grief Disorder (PGD), involving fixed patterns of yearning and dwelling on the loss that causes extreme disruption to daily functioning. Despite the prevalence of this disorder, studies of psychotherapy for people suffering from PGD are scarce.

Thus far, the most effective interventions for PGD have used components of cognitive behavioural therapy such as restructuring the content of maladaptive thoughts, behavioural activation for symptoms of depression or exposure therapy for symptoms of posttraumatic stress disorder. Although these intervention studies have recently started to produce large effect sizes, a substantial proportion of participants do not achieve clinically significant recovery. Additionally, recent research has identified rumination and worry may be risk factors for PGD and yet existing interventions do not involve techniques that target these coping processes directly. Research on depression and anxiety has shown that rumination and worry are driven by an individual's metacognitive beliefs about the function these coping processes serve. However, no research has been conducted to identify the metacognitive beliefs involved in PGD, despite the potential role of metacognitions in the maintenance of the disorder.

This research project investigated the efficacy of Metacognitive Therapy (MCT) for bereaved individuals with prolonged grief symptomatology. Rather than focusing on challenging the content of thoughts, MCT supports a person to switch focus and detach from emotionally-laden thoughts by modifying and regulating unhelpful coping processes such as rumination and worry. MCT was adapted specifically for PGD to reduce the psychological distress and impaired function resulting from bereavement. The overall purpose of this research project was to test the feasibility, acceptability and efficacy of Metacognitive Grief Therapy (MCGT) for PGD, which was achieved in three phases.

Phase one comprised a review of the literature and semi-structured interviews with key members of the target population (bereavement specialists and bereaved people with elevated levels of PGD) to inform the development of MCGT. The aim

of phase one was to identify if unhelpful metacognitive beliefs were linked to maladaptive coping strategies maintaining PGD and to document the nature of these metacognitive beliefs. Grief specific metacognitive beliefs were then used to guide the development of MCGT and used as examples in the intervention to which bereaved people could personally relate. Phase two involved a pilot randomised controlled trial to evaluate the program. Bereaved participants ( $N=22$  intent-to-treat, male  $n = 1$  and female  $n = 21$ ; aged  $\geq 18$ ) were randomly assigned to either a wait-list control ( $n = 10$ ) or an intervention condition (MCGT;  $n = 12$ ). Participants attended six group MCGT sessions that ran for two hours per week. The primary outcome measure of PGD symptomatology and the secondary outcome measures of depression, anxiety, stress, rumination, metacognitive beliefs and quality of life were taken pre- and post-treatment for both groups and at the 3- and 6-month follow-up for the intervention group only. The wait-list control group were offered MCGT following the posttreatment assessment. A Generalised Linear Mixed Model (GLMM) was used to assess treatment efficacy. Phase three tested the integrity of the program, content compliance and the acceptability of MCGT for people experiencing prolonged grief symptomatology. A participant program satisfaction questionnaire was used to measure the social validity of the program and an implementation efficacy checklist completed by the facilitators evaluated the integrity of treatment delivery.

Participation in the MCGT program resulted in large significant reductions in prolonged grief symptomatology (Cohen's  $d = 1.7$ ), depression ( $d = 1.3$ ), anxiety ( $d = .8$ ), stress ( $d = 1.0$ ), rumination ( $d = .9$ ) and increased quality of life ( $d = .6$ ) and these were maintained at the 3- and 6-month intervention follow-ups. No between group differences were found in metacognitive beliefs at post-test, however, large effect sizes were identified from MCGT at the 3- and 6-month follow-ups ( $d = 1.0$ ). All participants in the intervention condition demonstrated improvement on measures of PGD with 85% experiencing a reliable change and 62% achieving clinically significant change at the 6-month follow-up, and 100% no longer met the full diagnostic criteria required for PGD diagnosis. Participants found the program informative, enjoyable and relevant to their everyday lives.

The findings of this research program provide an important first step towards improving the effectiveness of treatments for PGD by evaluating a theory driven, evidence-based program using a robust pilot RCT with a 3- and 6-month follow-up.



The findings from this research support the efficacy of MCGT as an important addition to the treatment armamentarium clinicians may use for PGD. Additionally, the results underscore the need for a large randomised controlled trial of MCGT against another active intervention and a wait-list control with a longer follow-up period.

## CHAPTER 1

### Introduction

Oh, it's something that people don't seem to understand. That when you're continually... when your minds continually going round and round and round the same questions all the time, and you're trying to grapple with what's happening to you, with this huge trauma, which it is. And, at the same time, you're trying to continue some sort of normal life, because you've still got to go to work, you've still got to interact with other people, you've still got to shop, you've still got to do all different things... And, you focus on work and maybe you're doing something else and then down you'd come, because when you were doing all that, you didn't give yourself time, let alone permission, to grieve. (Bereaved participant).

#### 1.1 Introduction

The death of a significant other is an inevitable and universal experience that can result in acute emotional distress and impaired functioning (Granek, 2010). For the majority of bereaved people, symptoms of grief become integrated, gradually reducing in intensity, which allows people to adapt and learn new ways of functioning in a world without the deceased (Bonanno et al., 2002). However, research has found that some bereaved people experience disabling symptoms that do not remit with time (Lichtenthal, Cruess, & Prigerson, 2004; Prigerson, Vanderwerker, & Maciejewski, 2008). Over the past few decades, researchers have consistently demonstrated that approximately 7-10% of the bereaved population experience a pathological form of grief, clearly separable from 'normal' grief, recently labelled Prolonged Grief Disorder (PGD; Aoun et al., 2015; Horowitz et al., 1997; Kersting, Brähler, Glaesmer, & Wagner, 2011; Prigerson et al., 1996; Prigerson et al., 2008).

The terminology for this disorder has been contested and various other terms, such as abnormal, chronic, unresolved, traumatic, and, more recently, 'complicated' and 'prolonged' grief, have been used to describe its complexity and chronicity (Prigerson et al., 2008; Shear et al., 2011). However, there is no disagreement about whether people with PGD require therapeutic support. The Diagnostic and Statistical Manual of Mental Disorders (DSM) has recognised that symptoms of grief can be

pathological with its inclusion of Persistent Complex Bereavement Disorder (a compromise between "complicated" and prolonged" grief; Maciejewski, Maercker, Boelen, & Prigerson, 2016) in its latest edition (DSM-5; APA, 2013); and the International Classification of Diseases is considering categorising PGD as a stress related disorder (Maercker et al., 2013). Recent research has suggested that, although PGD and Persistent Complex Bereavement Disorder have semantic differences (e.g., 6-month compared to 12-month post-loss criteria), they both measure the same diagnostic entity (determined by Inventory of Complicated Grief-Revised; Prigerson & Jacobs, 2001), and have greater predictive validity and diagnostic specificity than that of complicated grief (Maciejewski et al., 2016). Therefore, the present study will use the term PGD in reference to elevated levels of psychological distress experienced with grief.

People with PGD experience intense separation distress over the lost relationship, intrusive thoughts/images, denial, emptiness and an unremitting sense of meaninglessness (Maercker & Lalor, 2012). They typically avoid reminders of the loss, experience social and occupational impairment, and withdraw from previously enjoyed activities (Lund, Caserta, Utz, & De Vries, 2010). Their prolonged grief symptomatology significantly affects daily performance and social relationships, and is associated with self-neglect (e.g., nutrition and self-care) and substance use (Bradbeer, Helme, Yong, Kendig, & Gibson, 2003; Lichtenthal et al., 2004; Lund et al., 2010; Prigerson et al., 2008; Zisook, Shuchter, & Mulvihill, 1990). As a consequence, people with PGD experience more health issues such as impaired immune function, sleep disorders, cardiac and hypertension problems, cirrhosis of the liver, and cancer; resulting in higher disability and morbidity rates (Irwin, Daniels, & Weiner, 1987; Ott, 2003; Stroebe, Schut, & Stroebe, 2007).

People experiencing PGD also have greater medication use and frequent hospitalisation in comparison to the non-bereaved population (Bradbeer et al., 2003; Zisook et al., 1990). For many people experiencing PGD, life is described as unbearably painful and empty without the deceased, and they are at 8.21 times greater risk of suicidal ideation with intent (Latham & Prigerson, 2004). However, most people experiencing PGD do not seek support or psychological treatment, and they are often unaware they are experiencing a pathological form of grief (Ellifritt, Nelson, & Walsh, 2003; Lichtenthal et al., 2011). They can also experience social stigma because of their intense distress and consequently are not necessarily well-

supported by their social networks. People experiencing PGD can even self-stigmatise because they have failed to ‘move on’ and ‘get over’ the death (Breen & O’Connor, 2009). Therefore, despite the needs of this vulnerable group, they are typically unsupported in the community (Breen & O’Connor, 2011). Until recently, bereavement was classified under a “V” code in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as “a condition that may be a focus of clinical attention” (APA, 2000; p.25); and under a “Z” code in the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> Revision (ICD-10) for “when some circumstance or problem is present which influences the person's health status but is not in itself a current illness or injury” (WHO, 2015). Historically, both classification systems failed to recognise that prolonged grief may be pathological and, as such, little focus had been placed on the development of treatments specifically for PGD.

The DSM-IV advised clinicians to provide a diagnosis of Major Depressive Disorder (MD) if depressive symptoms persist for more than two months following the loss or a diagnosis of Post-traumatic Stress Disorder (PTSD) or another anxiety disorder (APA, 2000). Bereaved people have often been diagnosed with a combination of depression and PTSD following violent/traumatic deaths (Kaltman & Bonanno, 2003). However, factor analytic studies of PGD, anxiety and depression have established prolonged grief symptomatology are distinct from anxiety and depression and independently associated with considerable morbidity (Prigerson et al., 2008). Key features of PGD that are not captured by depression and anxiety include a prolonged and intense yearning for the deceased, avoidance behaviours (in relation to the loss), and a preoccupation with thoughts of the deceased (comprising intrusive thoughts of the death; Prigerson & Jacobs, 2001; Shear, Frank, Houck, & Reynolds, 2005).

These findings led to the development of a set of diagnostic criteria for inclusion in the DSM to ensure the effective diagnosis of this disorder (see Boelen & Prigerson, 2007). Researchers claim that although the majority of people experiencing non-pathological grief reactions do not require therapeutic intervention, people experiencing prolonged grief symptomatology would benefit from, and should be targeted for, intervention (Aoun et al., 2015; Wittouck, Van Autreve, De Jaegere, Portzky, & van Heeringen, 2011). Although controversy remains, surveys of the general community and health professionals are increasingly supportive of the

presence of the disorder and the utility of the diagnostic criteria (Breen, Penman, Prigerson, & Hewitt, 2015; Penman, Breen, Hewitt, & Prigerson, 2014).

A greater awareness of PGD and the development of a diagnostic assessment tool provided important steps for treatment interventions, because researchers need to be able to identify the disorder accurately in order to understand its prevalence better and begin to develop treatments specifically for PGD. There are approximately 153,580 deaths registered in Australia per year (Australian Bureau of Statistics, 2014), if each of these deaths left approximately 5 bereft people, more than 53,753 people will develop PGD every year (based on the prevalence rates from Aoun et al., 2015). Research has indicated that, once bereaved people are aware that the prolonged grief symptomatology they are experiencing is a more complicated form of grief, more than 90% are relieved and report an interest in receiving treatment (Johnson et al., 2009). Given the prevalence and the severity of PGD, it is important that people experiencing prolonged grief symptomatology are identified and that therapy programs are available for PGD specifically to help individuals integrate the loss into their lives (Sealey, Breen, O'Connor, & Aoun, 2015).

Effective treatments should be based on a clear conceptualisation of the mechanisms underlying the development and maintenance of PGD (Doering & Eisma, 2016). Thus far, treatments have predominantly used elements of Cognitive Behavioural Therapy (CBT) involving exposure, behavioural activation and restructuring the content of maladaptive thoughts (Jordan & Litz, 2014). The use of CBT is largely an historical artefact from previous clinical guidelines that viewed ongoing grief pathology as major depression (APA, 2000). CBT has long been the 'gold standard' evidence-based treatment for depression (Andrews, 1991; Khan, Faucett, Lichtenberg, Kirsch, & Brown, 2012). Treatment, therefore, was not underpinned by a clear conceptualisation of all the maintaining mechanisms specific to PGD.

Several risk factors have been identified for PGD; however, findings are mixed. Many studies have suggested individual factors such as gender, personal characteristics (e.g., coping styles, personality traits, mental and physical illness) prior to the death, and lack of available social and emotional support are associated with pathological forms of grief (Stroebe, 2001); whilst others argue psychosocial (e.g., social support and depression) and demographic factors (e.g., gender, relationship to deceased, finances) are not associated with pathological forms of grief

(Tomarken et al., 2008). An association between older age and greater psychological distress has been noted in some studies (Gilbar & Ben-Zur, 2002), but others have found lower levels of distress associated with older age (Houts, Lipton, Harvey, Simmonds, & J., 1989). Gender differences have been reported in some studies suggesting that widows experience more distress than widowers (Gilbar & Ben-Zur, 2002; Ringdal, Jordhøy, Ringdal, & Kaasa, 2001). In contrast, others have found widowers are at a higher risk than widows (Stroebe, 2001). However, authors of a systematic review of predictors for complications with grief (Lobb et al., 2010) argue that attachment style (insecure), personality traits (dependent), trauma exposure, a history of psychiatric illness, previous loss(es), lack of preparation for the death, and marital closeness are key factors in the development of PGD. Thus, identifying biopsychosocial risk factors for PGD is challenging, as each bereaved person has unique life experiences, internal resources and current stressors. As such, prospectively predicting the likelihood of an intense grief reaction is difficult.

A feature of PGD is that the person's thinking and attention becomes fixed in patterns of yearning and dwelling on the loss (Prigerson et al., 2009). Many people with PGD suffer mental anguish over the reality of the loss and its consequences (Stroebe, Hansson, Schut, & Stroebe, 2008). They ruminate over the events surrounding the death in an effort to 'make sense' of the loss or to find answers (Neimeyer, 2000), to maintain bonds with the deceased (Klass, 2006), or to imagine preventative scenarios in an effort to avoid the reality of the loss (Boelen, van den Hout, & van den Bout, 2006). Importantly, rumination (e.g., repetitive negative thinking) has been shown to be associated with, and predictive of, prolonged grief symptomatology (Eisma et al., 2014; Nolen-Hoeksema, Parker, & Larson, 1994). Although the therapeutic strategies used in CBT aim to re-structure the content of negative thoughts, if coping mechanisms such as rumination are central to PGD, these processes need to be addressed directly.

Research has indicated that maladaptive coping strategies such as rumination are driven by metacognitive appraisals of an internal or external event (Papageorgiou & Wells, 2001; Spada & Wells, 2006; Wells & Carter, 2001). Metacognition is a concept originally used by Flavell (1979) to refer to an awareness of knowledge (stored in memory), experiences (used to guide actions) and strategies (used to manage cognitions). The metacognitive model proposes that it is a person's metacognitive beliefs about the use of coping mechanisms (e.g., I need to ruminate to

find answers) that maintains persistent intrusive memories of the deceased and the associated distress (Bennett & Wells, 2010), preventing integration of the loss. Metacognitive Therapy (MCT) is a psychological treatment approach that targets maladaptive coping processes (e.g., repetitive negative thinking) by helping people develop new ways of regulating attention and relating to thoughts and beliefs. However, no investigations have been conducted on the metacognitive processes involved in PGD. Therefore, this research project sought to explore the feasibility, acceptability and efficacy of a metacognitive based therapy in ameliorating PGD.

## **1.2 Overview of Aims and Thesis Chapters**

There is a need for interventions for PGD to be grounded within theoretical and empirical contexts. A greater understanding of the mechanisms maintaining PGD and the development of interventions that target these mechanisms directly is necessary to improve the mental health outcomes for people experiencing prolonged grief symptomatology. Despite the prevalence of PGD, studies of psychotherapy for individuals suffering from the effects of PGD are scarce. Thus, the question of how to effectively treat people experiencing PGD is of critical importance and has the potential to make a significant contribution to the understanding of grief therapy in general.

Given that rumination is a defining feature of PGD there is potential value in examining the use of Metacognitive Therapy to target this maladaptive coping process in a clinical sample experiencing elevated levels of prolonged grief symptomatology. This research project aimed to test the feasibility, acceptability and efficacy of Metacognitive Therapy in treating people experiencing elevated levels of prolonged grief symptomatology. The specific aims of the project were to determine:

- If the metacognitive model of emotional disorders is relevant to prolonged grief symptomatology;
- The presence and content of metacognitive beliefs about coping processes held by people experiencing prolonged grief symptomatology;
- If a Metacognitive Therapy intervention for Grief reduces prolonged grief symptomatology, depression, anxiety, stress, repetitive negative thinking, and metacognitions and increases the quality of life of people experiencing prolonged grief symptomatology;

- If post intervention changes in prolonged grief symptomatology, depression, anxiety, stress, repetitive negative thinking, metacognitions and quality of life are maintained at a 3- and 6-month follow-up; and
- If changes in symptomatology following MCGT are mediated by reductions in metacognition and rumination scores.

The development and testing of MCGT involved three phases. Phase one identified the metacognitive beliefs about coping processes involved in PGD to guide the development of a MCT program that targeted the coping processes (e.g., rumination) responsible for the development and maintenance of PGD. This was achieved via a thorough review of the literature and an empirical study involving semi-structured interviews with key informants from the target population. Phase two involved a pilot randomised controlled trial to implement and evaluate a Metacognitive Grief Therapy (MCGT) program, with a 3- and 6-month follow-up. Phase three evaluated the feasibility and acceptability of MCGT for PGD.

*Chapter 2* presents a literature review of thanatological and metacognitive studies. The objective of this review was to provide a comprehensive analysis of the state of knowledge about the coping mechanisms that may be underlying the development and maintenance of PGD. The review aimed to identify the theories relevant to the successful integration of grief and recovery; identify the coping processes responsible for the maintenance of PGD; and to synthesise information from current empirically supported interventions for PGD to inform the development of Metacognitive Grief Therapy (MCGT).

*Chapter 3* reports the protocol for the proposed project outlining the plan for program development, methodology, evaluation, its feasibility and anticipated contributions to both theory and practice.

In *Chapter 4*, a qualitative study (Study One) is reported that involves semi-structured interviews with bereavement specialists and bereaved people to explore the metacognitive beliefs underlying PGD. To treat PGD with MCT successfully, the metacognitive beliefs that control, monitor and appraise thoughts involved in grief related coping processes needed to be specifically targeted (Wells, 2009). Since there was no Metacognitive Therapy program for grief, this study provided answers to the first aim of the project, which was to determine if the metacognitive model pertains to prolonged grief symptomatology. It also sought to extract grief-related



metacognitions to use in a metacognitive intervention for grief to which bereaved people could personally relate. This chapter reports on the findings from those interviews. Evidence that metacognitive beliefs pertain to PGD provided a rationale for study two of this thesis and future studies to investigate whether metacognitive interventions can reduce prolonged grief symptomatology.

*Chapter 5* outlines the steps taken to develop a group Metacognitive Grief Treatment (MCGT) into a program that targets the specific metacognitive processes responsible for the development and maintenance of PGD. The content of MCGT is primarily informed by the literature review (Chapter 2) and the information gleaned from the interviews conducted with bereavement specialists and people experiencing prolonged grief symptomatology (Chapter 4). Literature regarding metacognitive concepts and interventions is heavily drawn on to formulate a metacognitive model of PGD and to determine the metacognitive techniques that would target prolonged grief symptomatology directly.

*Chapter 6* describes the implementation, evaluation, efficacy and feasibility of MCGT for PGD. A randomised controlled trial was conducted to evaluate a 6-week group MCGT intervention with bereaved people experiencing elevated prolonged grief symptomatology. MCGT's efficacy as a primary intervention to ameliorate prolonged grief symptomatology, depression, anxiety, stress, repetitive negative thinking, metacognitions and quality of life is assessed post intervention, and at 3- and 6-months to assess if the effects produced from MCGT are maintained over time.

Finally, *Chapter 7* provides a general conclusion discussing the studies outlined in this thesis, their theoretical and clinical implications, limitations, strengths and suggested directions for future research.

## CHAPTER 2

### Literature Review

...for some people they spend quite a lot of time um thinking about the person who's died, or thinking about what's happened, or what it means for them, you know all sort of... those sorts of thoughts. But, other people will do a lot to block that out and will keep busy and push those thoughts away. I mean there are some people that you see that it's like it has just happened and its years later. (Bereavement specialist participant)

### 2.1 Dominant Theories of Grief

**2.1.1 Stage, phase and task models.** Freud (1917, 1963) was the first to propose the possibility of pathological mourning. He theorised that it arose from the inability to introject the loss of a significant other in a constructive manner, which left the bereaved individual repetitively going over events surrounding the death in an effort to process the loss. This psychodynamic position viewed grief as a detachment process, or decathexis from the 'love object' (the deceased). Ongoing pathological symptoms occurred when bereaved people failed to integrate the loss into their lives, resulting in an incomplete detachment. Based on this theory, Lindemann (1944) conducted a study of 101 bereaved people to distinguish 'normal' from 'abnormal' grief, and concluded that abnormal grief was indeed a 'disease' that required effective management to prevent long term problems. He argued that normal grief was acute, in that it should resolve within 4-6 weeks. Responsibility was placed on the bereaved to 'work through' their grief by cognitively confronting the loss, detaching from the deceased and forming new relationships as quickly as possible in order for normality to be reinstated (Stroebe & Schut, 1999).

Bowlby (1961) contributed to the 'grief work' hypothesis by proposing that grief occurred in overlapping *phases* (shock/numbness, yearning/searching for the deceased, despair/disorganisation & reorganisation). It was argued each phase needed to be worked through by the bereaved until it was resolved in order to integrate the loss successfully. Kübler-Ross (1969) developed a theory to describe five *stages* of anticipatory grief (denial, anger, bargaining, depression and

acceptance) experienced by terminally ill people in coming to terms with impending death. However, these were later misinterpreted as five stages of grief. They were incorporated into grief training and uncritically accepted by bereavement service providers (Breen, 2011; Genevro, Marshall, & Miller, 2004). Subsequently, clinicians became concerned if a stage was missed, and bereaved people were encouraged to pass through each discrete stage to achieve recovery (Worden, 1982, 2009).

The stage concept was built on by Worden (1982, 2009) with the provision of four tasks to be worked through for successful adjustment: 1) acceptance; 2) process emotional pain; 3) adjustment to life without the deceased; and 4) emotional disconnection from the deceased. Within this framework grief requires an active, ongoing and effortful process in coming to terms with the loss, and becomes pathological when a person is unable to work through the fourth task. Rando (1993) also contributed to the task model with what she called the “Six R’s” required for uncomplicated mourning: *recognition* of the loss; to *react* emotionally to the separation; *recollect/re-experience* memories of the lost relationship; *relinquish* old attachments to the deceased and accept the world has changed; *readjust* integrating the loss into daily life; and *reinvest* and form new relationships. Acute grief was expected to last for three to 12 weeks followed by a less disruptive mourning period of one to two years until the bereaved was able to ‘work through’ the loss (Horacek, 1995; Rubin, 1981). Intervention was only required when difficulty was experienced completing or resolving a task.

Although the above models differ in their approach, they all conceptualise grief as a largely linear and, at times, painful emotional adaptation to loss with a beginning and a resolution. Early grief research was based on a number of assumptions including: that grief is short-term; it needs to be worked through by the individual; it follows a set pattern; it is characterised by stages; it precedes death from an illness; and detachment from the deceased is required for culmination of grief (Breen & O'Connor, 2007). The efficacy of working through stages of grief was supported in one study (Maciejewski, Zhang, Block, & Prigerson, 2007), whilst others suggest the grief work hypothesis hinders effective coping and recovery

(Stroebe, 1993; Wortman & Silver, 1989). For instance, healthy people are incorrectly perceived as pathological (e.g., in denial or inhibited) when intense distress or impaired function is not experienced with grief (Wortman & Silver, 1989), or when stages/tasks are not completed (Horacek, 1995). Although there is little empirical evidence to support these assumptions, they have long been taught in mental health programs (Breen, Fernandez, O'Connor, & Pember, 2013; O'Connor & Breen, 2014), adopted by grief services and used to guide bereavement interventions (Hall, 2014; Jordan, 2000). Consequently, they have become ingrained cultural beliefs about grief and uncritically accepted by professional services; this has resulted in insufficient and often inappropriate, support for the bereaved (Breen & O'Connor, 2007; Ellifritt et al., 2003; Lichtenthal et al., 2011) and has hindered the progress of effective treatments for individuals with PGD (Breen, 2011).

The 'grief work' hypothesis remains in mainstream discourse today, whereby the bereaved are made aware of the need to work through the stages of grief as quickly as possible (Granek, 2010) and are often left feeling a sense of failure when they 'fail' to move on (Breen & O'Connor, 2007, 2011). Furthermore, the 'grief work' notion neglects other sources of stress that indirectly arise following the death of a significant other (e.g., legal matters, finances, children; Stroebe & Schut, 2008). Therefore, the stage, phase and task models are increasingly viewed by researchers and clinicians as too rigid to address all the unique biopsychosocial factors experienced by bereaved people (Hall, 2014).

**2.1.2 Narrative/Constructivist approaches.** The *Continuing Bonds* approach by Klass, Silverman, and Nickman (1996) provided a movement away from the ideology that emotional disconnection was required from the deceased for successful grieving. The continuing bonds approach offered a framework whereby maintaining a relationship with the deceased was seen as integral for healthy adaptation. Visiting the cemetery, dreaming of the deceased, holding onto possessions, conducting rituals or spending time with symbolic objects were presented (or perceived) as important in helping people feel the presence and maintain a connection with the deceased, whilst constructing a new social identity (Hall, 2014; Klass, 2006). However, continuing bonds with the deceased have not

always been found to be helpful, with some research revealing an association between continuing bonds and poorer adaptation, and has been shown to lead to greater levels of PGD (Field, Gal-Oz, & Bonanno, 2003; Field, Nichols, Holen, & Horowitz, 1999).

The *Meaning Reconstruction* theory developed by Neimeyer (2000) proposes that three primary meaning-making processes are fundamental in the grieving process: the ability to comprehend the loss or discover an explanation as to why the death happened (sense-making); the ability to find personal worth or significance from the death (benefit-finding); and reconceptualising one's sense of identity in the wake of the loss (identity reconstruction). Within this model, bereaved people need to 'make sense' of the death or find meaning (e.g., spiritual or positive) to integrate the loss. This is difficult, however, when a death is perceived to be unfair, irreconcilable or challenges people's worldviews, such as sudden (e.g., an accident), premature (e.g., a child) or violent (e.g., homicide) deaths. These types of death impede positive integration of the loss into a person's 'self-narrative' and failure to find meaning leads to the development of prolonged grief symptomatology (Breen, Karangoda, Kane, Howting, & Aoun, 2017; Neimeyer, Burk, Mackay, & van Dyke Stringer, 2010). Although there is some empirical support for this model (MacKinnon et al., 2015; Neimeyer et al., 2010), other researchers argue that for those unable to 'make sense' of the death, it may not be meaning reconstruction that reduces distress, but rather a diminishing of focus (Davis, Nolen-Hoeksema, & Larson, 1998; Hall, 2014).

**2.1.3 Attachment.** Attachment theorists, guided by Bowlby's (1980) maternal-infant attachment relationship, argue bereavement outcomes are dependent on an individual's internalised working model of their attachment with the deceased before it was disrupted by the death (Noppe, 2000). This internalised working model is based on long term memory representations of early relationships that are used to regulate emotions and guide expectations for the self and interactions with others (Shear & Shair, 2005). Adults with a secure attachment style are able to develop close supportive relationships with others that are reciprocal, as they view others as having good intentions, and being trustworthy and reliable (Simpson, 1990).

Researchers have found this style of attachment is associated with greater psychological adjustment following loss (Fraley & Bonanno, 2004). In contrast, adults with an insecure anxious attachment style view themselves as unconfident and underappreciated and others as unwilling to commit and unreliable; they have difficulty forming relationships and can become overly dependent on the attachment figure (Simpson, 1990). Bereaved individuals with an insecure anxious attachment style have been shown to experience higher levels of prolonged grief symptomatology (Nolen-Hoeksema & Larson, 1999; Silverman, Johnson, & Prigerson, 2001; Vanderwerker, Jacobs, Parkes, & Prigerson, 2006), as their working model drives the need for continuing bonds with the deceased (Neimeyer, 2006). As such, it has been argued they continually resist separation and seek proximity to the deceased (e.g., avoiding reminders of the loss and ruminating over memories), and continue to experience intense symptoms until the death of the relationship is integrated into the working model (Neimeyer, 2006; Shear et al., 2007).

Neurobiological studies have found unique brain activity between prefrontal regulatory regions and the amygdala that direct attention towards reminders of the deceased attachment figure in people with PGD (Freed, Yanagihara, Hirsch, & Mann, 2009); these regions are purported to mediate attentional and emotional separation distress reactions. Furthermore, a study by O'Connor et al. (2008) found that the neural reward centre (nucleus accumbens) was activated in bereaved people with PGD when they were presented with reminders of the deceased. Although the sample was small and comprised only women, the authors concluded that, similar to addiction, the continued craving for the attachment figure is perpetuated by the activation of the reward pathways in response to reminders of the deceased, preventing healthy adaptation and engagement in current life. Although these findings have enhanced our understanding of why some people become preoccupied with the loss, they do not account for the other sources of stress encountered by bereaved people.

**2.1.4 Dynamic process models.** Rubin (1981) developed the *Two-Track Model of Bereavement* to provide a multifaceted view of grief that incorporates the functional and relational factors involved in loss. The first track encompasses 10

domains that relate to the impact of the loss on functioning: anxiety, depressive affect and cognitions, somatisation, familial and interpersonal relationships, self-esteem, meaning, work, and investment in life tasks. The second track outlines 10 domains related to the maintenance or transformation of lost relationship: imagery and memory, emotional disconnection, positive and negative affect related to deceased, preoccupation with the loss, idealisation, conflict, grief processes, identity, and memorialisation and transformation of the loss/deceased. This model provides a multilayered, overlapping and overarching grief process that offered a biopsychosocial and emotional attachment perspective of grief and accommodated gender, ethnic and religious differences (Rubin, 1999).

Stroebe and Schut (1999) developed a stressor-specific coping model called the *Dual Process Model of Coping with Bereavement* to overcome the shortcomings of early conceptualisations of stage, phase and task models. The dual process model articulates that an oscillation is required between loss-orientation and restoration-oriented activities. This approach is viewed as the most prominent contemporary bereavement theory. Loss-orientation focuses on the painful emotions and thoughts surrounding the loss (the core elements of grief), whilst restoration-orientation focuses on reorientation to life without the deceased (Stroebe & Schut, 2008). This dual process model provides a framework for understanding pathological forms of grief (i.e., prolonged, delayed, or absent). Pathological grief occurs when exclusive focus is on either the loss (resulting in intense symptoms or no progress) or restoration (resulting in denial or inhibition). The model proposes that both orientations are required in the coping process, in that the bereaved need to confront elements of loss or restoration, whilst at other times avoiding them or continuing with other aspects of life.

There is growing evidence in support of this coping model (Bennett, Gibbons, & Mackenzie-Smith, 2010; Lund et al., 2010; Stroebe & Schut, 2010). Bennett et al. (2010) conducted 92 interviews with widowed men and women to explore the association between loss and restoration coping processes and psychological adjustment in the first year post-loss. A further 13 interviews were conducted with widowed people to explore restoration coping processes (adaptation;

new role/identity/relationships; avoidance behaviours and new activities).

Denial/avoidance of change and distractions from grief were found to be associated with poorer adjustment, whilst intrusion of grief (e.g., continuing bonds) and new role/identity/relationships were associated with better adjustment. The findings supported that concurrently focusing on both loss and restoration activities were associated with healthy adjustment. The authors concluded that the dual process model articulated the everyday experiences of bereaved people aptly.

## **2.2 Grief Interventions**

The limited awareness and understanding of grief processes and symptomatology has been a barrier to the development/provision of effective treatment interventions within the clinical setting. Although the dominant ‘working through’ grief discourse has been disputed by research, it is still accepted by many services and endorsed within grief interventions (Breen et al., 2013; Breen & O'Connor, 2007). Even though many service providers are aware that grief occurs within a cultural, political and social context that is unique to each individual, many still base therapies on grief work, stages, and task theories (Breen, 2011; Breen & O'Connor, 2007; O'Connor & Breen, 2014; Payne, Jarrett, Wiles, & Field, 2002; Wiles, Jarrett, Payne, & Field, 2002).

Empirical evidence has demonstrated interventions for people experiencing ‘normal’ levels of grief are not efficacious and have the potential to hinder grief recovery (Genevro et al., 2004; Jordan & Neimeyer, 2003; Kato & Mann, 1999; Schut, Stroebe, van den Bout, & Terheggen, 2001). Researchers have identified that most bereaved people are able to integrate the loss into their lives and recover without intervention (Aoun et al., 2015; Jordan & Neimeyer, 2003). Although, this is a subject of debate, with others arguing these findings are based on weak research with methodological flaws (Larson & Hoyt, 2007; Waller et al., 2016). The feasibility of a meaning based group therapy for ‘normal’ grief was also recently supported in research (MacKinnon et al., 2015). However, research has consistently demonstrated that people experiencing PGD do benefit from treatment (Currier, Neimeyer, & Berman, 2008; Waller et al., 2016; Wittouck et al., 2011).



### 2.3 Treatments for Complicated and Prolonged Grief

At the beginning of the last decade, effective, empirically-based psychotherapy treatments for complicated forms of grief were scarce. Standard treatments for depression (e.g., interpersonal psychotherapy and antidepressants) had produced minimal improvements (Reynolds et al., 1999; Zisook, Shuchter, & Pedrelli, 2001). However, treatments tailored to PGD were producing promising results (Boelen, de Keijser, van den Hout, & van den Bout, 2007; Shear et al., 2005; Wagner, Knaevelsrud, & Maercker, 2006). Although these findings provided support that treatments are more efficacious when tailored to PGD, a meta-analysis in 2011 by Wittouck et al. revealed treatments for PGD were producing only moderate effect sizes. Since Wittouck and colleagues' meta-analysis was published, the development and testing of targeted interventions tailored to PGD has been a small but growing field (e.g., Bryant et al., 2014; Kersting et al., 2013; Litz et al., 2014; Papa, Sewell, Garrison-Diehn, & Rummel, 2013; Shear et al., 2014) and interventions have been tested across a variety of modes, including individual, internet and group treatments.

**2.3.1 Individual treatment.** A frontier intervention study was conducted by Shear et al. (2005) using the Dual Process Model (Stroebe & Schut, 1999) as a framework to modify interpersonal psychotherapy for depression into a complicated grief treatment that targeted depressive symptoms (e.g., sadness, guilt, and social withdrawal) and trauma (disbelief, intrusive images and avoidance behaviours). The 20-session intervention focused on adjustment to the loss through exposure for PTSD, interpersonal therapy and encouraging the restoration of life goals using motivational interviewing. Individuals diagnosed with prolonged grief symptomatology were assigned to either a cognitive grief treatment ( $n = 49$ ) or an interpersonal psychotherapy for depression ( $n = 46$ ) treatment group. Greater improvements were found from cognitive grief treatment in comparison to interpersonal psychotherapy, which substantiated the need for interventions targeting prolonged grief symptomatology. However, the low cognitive grief treatment group recovery rate (51%) suggested further work is required in this area.

Furthermore, Boelen, de Keijser, van den Hout, and van den Bout (2007) compared CBT (6 sessions of cognitive restructuring and 6 sessions of exposure)

with 12 sessions of supportive counselling (a treatment facilitating optimal adjustment). The results revealed both components of the CBT intervention were significantly more effective than supportive counselling in reducing prolonged grief symptomatology. Moreover, exposure was found to be more beneficial than cognitive restructuring, with a higher dropout rate occurring during cognitive restructuring sessions. Based on these findings, the authors suggested future research on prolonged grief symptomatology treatments targeting avoidance would be more beneficial than those targeting maladaptive thoughts.

An uncontrolled trial of behavioural activation and exposure therapy with 26 participants by Acierno et al. (2012) demonstrated that significant reductions in PGD symptomatology could be achieved within five sessions (3 with therapist & 2 via telephone). The treatment comprised a 1-page manual and an intervention video providing psychoeducation and encouragement of daily (3 hour) participation in activities aimed at restoration and loss (30 minutes of the 3 hours with reminders). Similarly, Papa et al. (2013) trialled 12-14 sessions of behaviour activation exclusively focused on restoration activities (identifying and substituting rumination/longing/yearning and avoidance with alternate behaviours). People with prolonged grief symptomatology were randomised to either an immediate ( $n = 13$ ) or delayed start group ( $n = 12$ ). The intervention was found to reduce prolonged grief, depression and PTSD symptomatology effectively.

A randomised clinical trial of complicated grief therapy (Shear et al., 2005) achieved large significant reductions in grief symptomatology with aged people (Shear et al., 2014). Moreover, Rosner, Pfoh, Kotoučová, and Hagl (2014) found clinically significant improvement ( $d = 1.65$ ; 42% recovered) from a 20-25 session integrative CBT program for PGD trialed with 24 individuals with PGD compared to 27 waitlist controls. The protocol comprised three parts: 7 sessions focused on stabilising and motivating clients; 9 sessions of relaxation and challenging dysfunctional thoughts; and 4 sessions addressing restoration and continuing bonds. However, the treatment took between 9 to 11 months for most participants to complete and had an attrition rate of 21%. Nonetheless, the findings from the above

studies provided further support for the efficacy of treatment programs for PGD delivered in individual format.

**2.3.2 Internet treatments.** Internet-delivered interventions have also produced significant improvements in PGD. For example, Wagner et al. (2006) trialed an internet delivered bi-weekly 45-minute writing intervention with 55 bereaved people experiencing complicated symptoms of grief. Participants were randomised to a treatment ( $n = 29$ ) or waitlist condition ( $n = 26$ ). The 5-week CBT intervention (comprising exposure, cognitive restructuring, integration and restoration) produced a greater reduction in prolonged grief symptomatology than the waitlist condition. Kersting et al. (2013) explored the efficacy of Wagner and colleagues' (2006) 5-week CBT program as an internet intervention for bereaved parents following the loss of a child through pregnancy. The intervention required participants to write assignments (45 minutes) focused on self-confrontation, cognitive restructuring and social relationships. Participants randomised to the treatment condition ( $n = 115$ ; 99 completed treatment) showed significant reductions in prolonged grief symptomatology, depression, posttraumatic stress and anxiety in comparison to the waitlist control group ( $n = 113$ ) and had a 51.5% recovery rate.

Moreover, an 18-session therapist-assisted CBT internet intervention called HEAL focusing on grief psychoeducation, self-care, wellness activities, and goal setting revealed significant reductions in PGD compared to waitlist controls (Litz et al., 2014); indicating exposure and cognitive restructuring may not be key components required for PGD interventions. The authors argued this type of therapy may be beneficial and cost effective as it was mainly self-guided. A recent therapist-guided 6-8 week internet-delivered intervention (Eisma, Boelen, et al., 2015) further explored this notion by comparing pure exposure ( $n = 18$ ; 33% attrition) against pure behavioural activation ( $n = 17$ ; 59% attrition) and a waiting list ( $n = 12$ ; 17% attrition). The findings indicated that exposure produced better results than behavioural activation; however, both interventions were comparable in reducing grief symptomatology without restructuring maladaptive thoughts.

**2.3.3 Group treatments.** The efficacy of group interventions tailored to PGD has also been demonstrated in recent randomised trials. Rosner, Lumbeck, and

Geissner (2011) examined the effect of a 9-session CBT program in addition to treatment as usual with inpatients experiencing comorbid PGD. The program comprised grief psychoeducation, cognitive restructuring, motivational change, the development of new perspectives, and one individual writing exposure session of the “worst” moment of the loss. Large reductions in PGD were found following grief treatment in comparison to the treatment as usual group.

Two group interventions modelled after cognitive grief treatment (Shear et al., 2005) provided further support for the efficacy of this treatment for prolonged grief symptomatology (Maccallum & Bryant, 2011; Supiano & Luptak, 2014). An uncontrolled 10-week trial of cognitive grief treatment by Maccallum and Bryant (2011) found reductions in prolonged grief symptomatology were associated with increased retrieval of positive memories of the deceased. In Supiano and colleague’s (2014) study, nine people in aged care received 16 sessions of cognitive grief treatment compared to eight people who received treatment as usual. Cognitive grief treatment produced greater reductions in PGD. However, some people found group participation difficult due to the distress elicited from self-disclosure and sharing in others grief, which may have contributed to the 25% attrition rate.

A recent study by Bryant et al. (2014) found exposure therapy was more effective than cognitive therapy alone in a 10-week CBT group program including 4 weeks of individual exposure. CBT comprised grief education; techniques to facilitate positive memories and new goals; and written letters to the deceased to support cognitive restructuring and conflict resolution. Participants were also randomised to four 1-hour individual sessions of exposure therapy or supportive counselling. CBT/exposure ( $n = 41$ ; 24% attrition) produced greater reductions in prolonged grief symptomatology, depression, negative appraisals, and functional impairment than CBT ( $n = 39$ ; 23% attrition). It was argued that exposure facilitated the emotional responses required to enable the loss to be processed effectively. Thus, the findings from this study suggest that the way thoughts, images and emotions are processed may be more fundamental in reducing PGD than addressing the content of thoughts.

The above studies highlight the efficacy and importance of using targeted interventions for PGD; however, a large proportion of people do not achieve clinical recovery, which may suggest the specific component most necessary for clinical change to occur is still unknown (Breen, Hall, & Bryant, 2017; Doering & Eisma, 2016). Moreover, online or in-person interventions that involve written assignments may not be suitable for all clients, as some people dislike writing or lack the skills required for effective written communication (Suler, 2001). Interventions have also required participants to complete long treatment protocols or have been compromised by substantial attrition. Furthermore, many group interventions have required additional sessions of individual exposure therapy, which may not be feasible in some health care settings. Therefore, to support a larger proportion of people experiencing PGD to accommodate the loss into their lives effectively, it is important that new treatments for PGD are explored and that all the maintaining factors involved are addressed (Doering & Eisma, 2016).

#### **2.4 Cognitive and Behavioural Coping Processes**

Research has consistently demonstrated that coping processes mediate bereavement outcomes. A large body of literature has established that many bereaved people use behavioural coping strategies (e.g., rituals, holding onto possessions) and rumination to maintain bonds, to recall memories of the deceased, to show respect in a culturally appropriate manner and to find answers or ‘make sense’ of the death (Breen & O'Connor, 2007; Field et al., 2003; Field et al., 1999; Neimeyer, 2000; Richards, Acree, & Folkman, 1999). Rumination has been demonstrated to mediate the effect of depressive symptoms, social support, and positive mood significantly in a study by van der Houwen, Stroebe, Schut, Stroebe, and van den Bout (2010). Bereaved people with low social support were found to ruminate more, resulting in increased prolonged grief symptomatology and reduced social engagement and positive affect.

Rumination has been defined as repetitive thoughts and behaviours that focus on depressive symptoms and the meaning of those symptoms (Nolen-Hoeksema, 1991). Depressive rumination has been shown to be associated with depressed mood in bereaved people (Nolen-Hoeksema et al., 1994). Grief rumination (repetitive

thoughts about the loss and its consequences and the emotions experienced in relation to the loss) has also been associated with increased prolonged grief symptomatology (Boelen, van den Hout, et al., 2006). This form of rumination, particularly over the injustice of the death, was found to be a stronger predictor of PGD than depressive rumination in a recent study (Eisma, Schut, et al., 2015).

Preliminary findings suggest bereaved people may use rumination as a cognitive and emotional avoidance strategy to avoid loss related stimuli (Eisma, Rinck, et al., 2015). This implicit anxious avoidant coping strategy may help bereaved people to direct the content of thoughts away from the reality of the loss (Boelen, van den Hout, et al., 2006; Eisma et al., 2013). Avoidant coping behaviours such as cognitive avoidance (e.g., suppression to avoid distressing thoughts and emotions) and avoidance behaviours (e.g., avoiding places, people and situations that invoke reminders of the loss) have also been associated with PGD in several studies (Boelen & van den Bout, 2010; Boelen & van den Hout, 2008; Shear et al., 2007).

Additionally, recent preliminary findings suggest worry may be associated with PGD (Eisma, Boelen, Schut, & Stroebe, 2017). Worry has been defined as repetitive negative thoughts and emotions about future events and their outcomes (Borkovec, Ray, & Stober, 1998). Worry in relation to the uncertainty of a future without the deceased has been correlated with PGD (Boelen, 2010; Boelen, van de Schoot, van den Hout, de Keijser, & van den Bout, 2010). Importantly, research has demonstrated that worry and rumination intensify grief symptoms and maintain PGD (Boelen, Stroebe, Schut, & Zijerveld, 2006; Eisma et al., 2017). Dysfunctional thinking styles such as worry and rumination are elements of repetitive negative thinking, which is a known transdiagnostic risk factor for psychological disorders (Ehring & Watkins, 2008; McEvoy, Mahoney, & Moulds, 2010).

## **2.5 Future Directions for Prolonged Grief Interventions**

Thus far, therapies for PGD have predominantly drawn from the cognitive behavioural model, which conceptualises the development and maintenance of PGD according to three factors: misinterpretations and problematic negative beliefs about grief; impaired integration of the loss into autobiographical knowledge; and avoidance (Boelen, van den Hout, et al., 2006). As such, key components of

cognitive behavioural treatments for PGD have included restructuring the content of maladaptive thoughts, behavioural activation and exposure therapy. Many interventions involve complex programs comprising several components, and little is known about which of these are inert or the mechanism(s) of change (Breen, Hall et al., 2017; Doering & Eisma, 2016).

Exposure therapy for PGD involves the repetitive recall of memories at the time of death to counter cognitive avoidance of the loss and restore gaps in autobiographical knowledge (Boelen, van den Hout, et al., 2006). However, the rationale for using exposure focused on the time of death is not clear, as it may not be the most distressing memory for bereaved people (Jordan & Litz, 2014); and PGD involves arousal in response to reminders of the loss and its consequences, rather than feared memories (Stroebe et al., 2008). A number of therapist assisted sessions are required for each person to recall their unique death story repetitively and, as such, it may not be suitable for services that can only offer a limited number of sessions. Although clients generally have been shown to improve from exposure, a large number of individuals have only shown partial improvement or fail to respond (see Sherman, 1998).

Furthermore, focusing on loss issues has been shown to hinder the oscillation between loss and restoration required for effective coping (Stroebe & Schut, 1999). Thus, treatment effectiveness may be compromised in interventions that repetitively discuss the events surrounding the death. This was supported in a study by Johnsen, Dyregrov, and Dyregrov (2012) that found individuals with PGD were less satisfied with group participation. The authors maintained that co-rumination (in depth conversations with others) over the loss may prolong grief symptomatology by keeping people focused on the loss rather than recovery. Therefore, an intervention based on the metacognitive model may be more suited to PGD as, rather than repetitively focusing on the content of each person's thoughts, the metacognitive approach targets the ability to regulate and process thoughts. As such, it may also offer potential value as a universal treatment for PGD that could be used in a group format.

## 2.6 The Metacognitive Model

Wells and Matthews (1994) developed the metacognitive model of psychological disorder based on the assumption that attention involves top-down processes that are not automatic. The model was framed within a general *self-regulatory executive function model* (S-REF), whereby attention to information is related to self-knowledge, with a person's goals and beliefs guiding the stimuli they attend to. Three levels of processing are involved: automatic low-level processing of stimuli; controlled processing of action and thought; and a fixed store of self-beliefs (Matthews & Wells, 2000). This model suggests that psychological distress results from the perseverance of a consciously perceived belief, creating an attentional bias due to constant monitoring. Although perseverance is important for self-regulating emotionally distressing situations, an elevated perseverance can limit an individual's ability to process information (Wells & Matthews, 1994).

People with an elevated level of perseveration have difficulty developing coping strategies and are more prone to developing a cognitive-attentional syndrome (CAS; Wells & Matthews, 1994). The CAS is a dysfunctional thinking style that has been found to intensify and prolong emotional distress. The CAS has three components: negative repetitive thinking, threat monitoring and maladaptive coping behaviours (e.g., thought suppression, substance abuse, avoidance). Continued focus on threats and social factors (e.g., finances, childcare, health, and employment) contribute to negative repetitive thinking and the negative appraisal of coping, which elevates vulnerability and distress. Repetitive negative thinking keeps attention focused on loss issues, exhausting the processing resources required to return thinking to a flexible and trauma-free status (Wells, 2009).

Given the key factors identified in the maintenance of PGD, the metacognitive model of emotional disorder suggests modification of the CAS may be essential in ameliorating PGD. Metacognitive Therapy (MCT) targets metacognitions: the ability to think about thinking (Wells & Matthews, 1994). MCT is considered part of the third-wave of CBT that also includes mindfulness based therapies and acceptance and commitment therapy. All of these share in common a focus on the process of thinking rather than the content of thoughts. However, MCT



focuses on the metacognitive beliefs (rules) that prompt the use of inflexible coping strategies by using techniques such as detached mindfulness and attention training to help people see themselves as separate from their thoughts, emotions, beliefs and memories. This approach does not modify cognitions or memories of the deceased. MCT alters the CAS by supporting people to recognise and regulate repetitive negative thinking and modify CAS behaviours such as the rituals the person feels compelled to do or avoidance behaviours (e.g., trying to push specific thoughts away). MCT implements strategies to deal with intrusive thoughts, allowing individuals to shift from the CAS (e.g., worry, threat monitoring and maladaptive behaviours) by interrupting repetitive negative thinking and helping people develop a flexible and non-repetitive thinking style. The application of this therapy could potentially help people to switch focus between the domains of loss and restoration. The ability to focus on one could provide relief from the other, allowing the individual to accommodate the loss gradually (see Figure 1; Stroebe & Schut, 1999).

### **2.7 Efficacy of Metacognitive Therapy for Psychological Disorders**

Thus far, MCT has not been trialled for PGD with a literature search revealing no intervention studies in this area. However, there is empirical evidence that supports the use of MCT for a wide range of psychological disorders. MCT's efficacy has been demonstrated in studies of Obsessive-Compulsive Disorder (Fisher & Wells, 2008; Moritz, Jelinek, Hauschildt, & Naber, 2010; Rees & van Koesveld, 2008, 2009); Major Depressive Disorder (Nordahl, 2009; Papageorgiou & Wells, 2000; Siegle, Ghinassi, & Thase, 2007; Wells et al., 2009, 2012); Schizophrenia (Moritz, Veckenstedt, Randjbar, Vitzthum, & Woodward, 2011); Body Dysmorphic Disorder (Rabiei, Mulken, Kalantari, Molavi, & Bahrami, 2012); Generalised Anxiety Disorder (van der Heiden, Muris, & van der Molen, 2012; Wells et al., 2010); Social Phobia (McEvoy, Mahoney, Perinib, & Kingsep, 2009; McEvoy & Perini, 2009); and PTSD (Wells & Colbear, 2012; Wells & Sembi, 2004; Wells et al., 2008). For example, Papageorgiou and Wells (2015) tested the effectiveness of a 12 session group MCT with 10 people with treatment-resistant (to antidepressants & CBT) major depressive disorder and found significant reductions in metacognitive beliefs, rumination, depression and anxiety that were maintained at the 6-month

follow up. The 6-month follow-up revealed a 70% recovery rate with 20% improved and no attrition, suggesting MCT was effective and acceptable for people nonresponsive to CBT and antidepressant medication.

Similarly, MCT was compared with Applied Relaxation with 20 clients diagnosed with generalised anxiety disorder (GAD) in a pilot study by Wells et al. (2010). The results suggested MCT was highly effective in controlling excessive worry. The post-test and 12-month follow-up revealed MCT was superior to applied relaxation with large standardised recovery rates of 80% (worry) and 60% (anxiety) compared to the 10% and 20% found for applied relaxation. Further support for the effectiveness of MCT for GAD was provided in a larger randomised controlled trial ( $N=126$ ) by van der Heiden, Muris, and van der Molen (2012). The study compared up to 14 individual sessions of MCT and intolerance-of-uncertainty therapy (IUT) with a wait-list control group. Both treatments produced large effect sizes (Cohen's  $d$  ranging between 0.94 and 2.39). However, MCT was found to be superior to IUT (i.e., MCT 91% vs. IUT 80%) with a larger percentage of participants no longer meeting the diagnostic criteria for GAD. Group MCT for repetitive negative thinking was also found to be an effective treatment for people ( $N=52$ ) with GAD (McEvoy et al., 2015). The brief six sessions, with a one-month follow-up (session 7), MCT protocol produced significant reductions in positive and negative metacognitive beliefs, repetitive negative thinking, positive and negative affect and increased quality of life.

Moreover, Wells et al. (2008) conducted an open trial of MCT for chronic PTSD with 13 people. Measures were taken at pre-test, post-test and at 3- and 6-month follow-up using self-reports on PTSD, anxiety and depression. Large and significant reductions were found on all measures and maintained at both the 3- and 6-month follow-ups with an 89% recovery rate. The effectiveness of MCT for chronic PTSD was further supported in a controlled trial by Wells and Colbear (2012) of an eight ( $mean = 6.4$ ) session program with 20 people. The findings revealed significant improvement in PTSD symptoms, anxiety and depression in the post-test and 3- and 6-month assessments, with an 80% recovery rate. The effect could only be attributed to MCT as the control group showed no improvement.

Based on these findings the authors endorsed MCT as a brief and highly effective treatment for chronic PTSD. These findings demonstrate that MCT effectively provides people with new ways to respond to distressing events and is effective in reducing prolonged trauma-related thinking and symptomatology.

Given MCT has shown efficacy across a number of psychological disorders, and that the metacognitive model proposes that these disorders are largely maintained by rumination/worry, it follows that this approach may also be applicable to PGD. The metacognitive approach is in sharp contrast to traditional CBT due to the emphasis on helping clients learn to detach and observe thoughts rather than engage with them. MCT could help people experiencing prolonged grief regulate and control repetitive negative thinking, or avoidance in response to traumatic memories. According to Wells (2008):

Just like your body, your mind is equipped with a means of healing itself. If you have a physical scar it is best to leave it alone and not to keep interfering with it, as this will slow down the healing process. So it is with your mind after trauma. Your intrusive thoughts and symptoms are like a scar and it is best to leave them to their own devices. Do not interfere with them by worrying or ruminating in response to them, or by avoiding and pushing thoughts away. You must allow the healing process to take care of itself and gradually the scar will fade. (pp. 90-91)

## **2.8 Overview of Research Rationale**

Researchers have demonstrated that a number of bereaved people experience a complicated form of grief called PGD following the loss of a significant other that causes adverse psychological effects. Encouragingly, the recent inclusion of Persistent Complex Bereavement Disorder in the fifth edition of the DSM (APA, 2013) means more people with pathological symptoms of grief will be identified; however, current effective evidence-based therapies in place for this disorder are limited (Doering & Eisma, 2016). Researchers have used various components of interventions for other psychological disorders (e.g., interpersonal psychotherapy for depression; and cognitive behavioural techniques for depression and PTSD), but it remains unclear which component is most required or most effective.

Furthermore, many treatment interventions have not been based on all the theoretical context of PGD (Jordan & Litz, 2014). The most effective interventions have predominately used exposure therapy. However, it is not certain if repetitive focus on the loss is necessary for people to accommodate this loss (Jordan & Litz, 2014; Papa et al., 2013). Unlike PTSD, people with PGD do not experience hypervigilance in response to threat or feared memories, they instead suffer hyperarousal in response to reminders of the lost relationship (Shear et al., 2011). At present, the most effective cognitive and behavioural treatment interventions for PGD have only achieved clinically significant recovery for approximately half of the participants (Doering & Eisma, 2016). Despite the strong theoretical rationale for a therapy targeting maladaptive coping processes involved in the development of PGD, such as repetitive negative thinking, this proposition has not been investigated in any depth (Jordan & Litz, 2014) and very few studies have been conducted on mechanisms that mediate PGD. Given the intensity of PGD, it is important that treatments identify and target all the maintaining factors involved directly so that bereaved people in the community are better supported (Prigerson et al., 2008).

This study sought to resolve these shortcomings by examining the effectiveness of an intervention that would directly target all the maladaptive coping mechanisms associated with PGD identified in this chapter (rumination, worry, avoidance strategies and hyperarousal in response to reminders of the loss). The study will evaluate the efficacy of using a manualised group Metacognitive Grief Therapy (MCGT) program to reduce PGD. MCGT will target maladaptive coping mechanisms directly by helping people identify and regulate the way they respond to their thoughts and beliefs about the loss and the utilisation of maladaptive coping behaviours. For instance, it enhances metacognitive flexibility by targeting the coping strategies (e.g., repetitive negative thinking) that keep attentional focus exclusively on the loss, which in turn allows bereaved people to problem solve and make decisions about their future (e.g., employment, finances, family, leisure activities). Thus, it will support people's ability to regulate attention and switch focus between loss and restoration activities, which is congruent with the Dual Process Model (Stroebe & Schut, 1999).

MCT is a proven efficacious treatment for several emotional disorders. However, thus far, no research has been conducted on the effectiveness of this treatment for PGD. Hence, the aim of this project was to contribute to existing knowledge by exploring the metacognitive processes involved in PGD, adapting MCT into MCGT in order to target the identified metacognitive processes, and conducting a randomised controlled trial to evaluate the feasibility, efficacy and acceptability of MCGT in reducing psychological distress.

## CHAPTER 3

### Protocol for a Randomized Controlled Trial of Metacognitive Grief Therapy

#### 1.1 Overview

Chapter Three provides a detailed outline of the protocol for each phase of this research project. The randomised controlled trial was developed using the CONSORT 2010 guidelines for conducting randomised pilot and feasibility trials (Eldridge et al., 2016) and the SPIRIT 2013 checklist for the protocol of a clinical trial (Chan et al., 2013). Wenn developed the research design, intervention and implementation under the guidance of O'Connor, Breen and Rees. Wenn drafted the manuscript and Rees provided clinical expertise and MCT training. The methodology was developed with support from an expert statistician (Kane). The protocol article has been published in the peer-reviewed journal: British Medical Journal (BMJ) Open. Wenn, J., O'Connor, M., Breen, L. J., Kane, R. T., & Rees, C. S. (2016). Efficacy of Metacognitive Therapy for prolonged grief disorder. *BMJ Open*, 5, e007221. doi: 10.1136/bmjopen-2014-007221.

# BMJ Open Efficacy of metacognitive therapy for prolonged grief disorder: protocol for a randomised controlled trial

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## ABSTRACT

**Introduction:** Studies of effective psychotherapy for individuals suffering from the effects of prolonged grief disorder (PGD) are scarce. This paper describes the protocol for an evaluation of a metacognitive therapy programme designed specifically for PGD, to reduce the psychological distress and loss of functioning resulting from bereavement.

**Methods and analysis:** The proposed trial comprises three phases. Phase 1 consists of a review of the literature and semistructured interviews with key members of the target population to inform the development of a metacognitive therapy programme for Prolonged Grief. Phase 2 involves a randomised controlled trial to implement and evaluate the programme. Male and female adults (N=34) will be randomly assigned to either a wait list or an intervention group. Measures of PGD, anxiety, depression, rumination, metacognitions and quality of life will be taken pretreatment and posttreatment and at the 3-month and 6-month follow-up. The generalised linear mixed model will be used to assess treatment efficacy. Phase 3 will test the social validity of the programme.

**Discussion:** This study is the first empirical investigation of the efficacy of a targeted metacognitive treatment programme for PGD. A focus on identifying and changing the metacognitive mechanisms underpinning the development and maintenance of prolonged grief is likely to be beneficial to theory and practice.

**Ethics:** Ethics approval was obtained from Curtin University Human Research Ethics Committee (Approval number HR 41/2013.)

Trial registration number: ACTRN12613001270707.

## Strengths and limitations of this study

- This is the first randomised controlled trial testing the effectiveness of a targeted metacognitive treatment intervention to reduce prolonged grief disorder symptomatology.
- The study will establish the mechanisms by which the intervention is effective.
- The study will also determine if a short manualised intervention is acceptable for people with prolonged grief disorder.
- If the intervention is not acceptable, this study will identify the factors contributing to a negative outcome.

of life, substance abuse<sup>2,3</sup> and a reduced likelihood to seek assistance from mental health services.<sup>5</sup> These individuals experience separation distress, involving an unrelenting yearning for the deceased, a sense of meaninglessness, and difficulty accepting the loss, all of which remain elevated for 6 months or more following the loss.<sup>4-6</sup> Individuals experiencing PGD also fail to exercise regularly, withdraw from social activities and neglect their own nutrition.<sup>7</sup>

Grief was historically excluded from diagnostic nosology on the basis that it was an inevitable and natural response to a traumatic event.<sup>4</sup> However, persistent complex bereavement disorder is a condition for further study in the latest Diagnostic and Statistical Manual of Mental Disorders (DSM)<sup>8</sup> and PGD is likely to be included in the forthcoming International Classification of Diseases (ICD).<sup>9</sup> There is growing empirical evidence supporting the distinction between normal and diagnosable grief reactions and attention has turned to the development of treatments specifically for PGD.

## Grief interventions

The lack of understanding of grief within a clinical framework has been a barrier to effective treatment interventions.<sup>10</sup> Although the emphasis on 'working through' different



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## INTRODUCTION

It is increasingly argued that a significant minority of bereaved individuals experience a more complicated form of grief called prolonged grief disorder (PGD) following the death of a significant other.<sup>1-4</sup> Their prolonged grief causes significant social and occupational impairment and is associated with suicidality, poorer health-related quality

stages of grief has been challenged in recent years, the idea remains uncritically accepted by many service providers,<sup>10</sup> and many grief service providers still draw on stage, task and process models.<sup>11 12</sup> Grief interventions for 'normal' grief have not been efficacious and in many cases have even obstructed grief processes.<sup>13</sup>

Interventions based on standard treatments for depression show minimal effects.<sup>14 15</sup> However, treatments tailored to PGD symptoms demonstrate better outcomes.<sup>16–18</sup> For example, one study<sup>17</sup> compared cognitive behavioural therapy (CBT; 6 sessions of cognitive restructuring and 6 sessions of exposure therapy) with 12 sessions of supportive counselling (SC). CBT was found to be more effective than SC, and the exposure therapy component of CBT was found to be more beneficial than cognitive restructuring, suggesting that avoidance behaviours may be more central to PGD than the content of thoughts. Similarly, another study<sup>18</sup> adapted interpersonal psychotherapy for depression (IPT) into a complicated grief treatment (CGT) that targeted depressive symptoms and trauma over 16 sessions. CGT was found to have significantly greater reductions in symptomatology than IPT alone, providing support for the need to tailor treatments to symptomatology. However, only 51% of the intervention group responded to treatment, suggesting more work is required in this area.

The need for an effective treatment for PGD is further supported by a recent meta-analysis,<sup>19</sup> which found that interventions targeting complications experienced in grief have only had moderate effect sizes. One of the possible reasons for the moderate effect sizes may be that therapies were not based on a theoretical model underpinning all the symptoms of PGD. The dominant model is the cognitive behavioural model, which suggests difficulty integrating the loss into autobiographical knowledge, negative global beliefs, misconceived grief symptoms and avoidance behaviours underpin the development and maintenance of PGD.<sup>20</sup> CBT primarily focuses on exposure to traumatic memories, the repetitive recall of events, behavioural activation and restructuring the content of maladaptive thoughts. While maladaptive thoughts (eg, 'I'm not good enough'; 'I'm vulnerable'; 'I'm at threat') are characteristic of depression, anxiety and post-traumatic stress disorder (PTSD), PGD is distinct from these disorders. Although some overlapping in symptomatology occurs with that of depression, anxiety and PTSD, symptoms of separation distress, yearning, disbelief and a sense of meaninglessness are unique to PGD.<sup>20 21</sup> PGD involves preoccupation with mental anguish over the reality of the loss and an inability to consider a future without the deceased.<sup>21</sup> The metacognitive model would suggest that treatment effectiveness may be improved by shifting the focus away from reappraisal of the content of thoughts to focusing on modifying unhelpful metacognitive processes understood to maintain distress.<sup>22</sup> The death of a loved one comprises many realistic thoughts involving the events surrounding the death, shock that the loved one will not

be returning and the financial stressors now faced. Therefore, addressing how bereaved individuals process loss-related thoughts may be more effective than addressing what they think.

Studies have identified that some bereaved individuals ruminate over memories of the deceased in an effort to 'make sense' of the death,<sup>23</sup> or to 'properly mourn' or to maintain bonds with the deceased.<sup>10 24 25</sup> Importantly, studies have clearly demonstrated that rumination intensifies grief symptoms.<sup>26 27</sup> Rumination has been shown to be an anxious avoidant coping strategy, whereby events in the past and counterfactual thoughts (eg, 'what if I'd stayed home that day') are rehearsed by the bereaved to avoid emotions and thoughts related to the reality of the loss.<sup>28 29</sup> Rumination, postevent processing and worry have a common underlying construct called repetitive negative thinking, which has recently been identified as a transdiagnostic process.<sup>30–32</sup> Repetitive negative thinking about issues related to past experiences or worries about the future<sup>30</sup> keeps attention fixed on distressing information (eg, the injustice and consequences of the loss), which impairs the chance of developing coping strategies, promotes maladaptive behaviours, drives away social support and perpetuates depressive symptoms.<sup>33 34</sup> A recent study<sup>35</sup> found individuals with low social support ruminated more, causing higher levels of PGD symptoms and lower levels of positive mood. For grief treatment to be effective, it is important that techniques are grounded within an information processing framework that targets the way distressing information is processed, to prevent people developing maladaptive coping processes (eg, rumination and worry). The metacognitive model posits metacognitions give rise to maladaptive patterns of thinking.<sup>36</sup> Therefore, a treatment based on a metacognitive model may be better suited to PGD, as this model targets the way information is processed rather than focusing on the content of thoughts.

#### The metacognitive model of psychological disorder

The metacognitive model suggests psychological disorders result from repetitive negative thinking over a perceived belief (eg, the world is dangerous), creating an attentional bias due to a constant focus on and monitoring of this belief.<sup>22</sup> Therefore, individuals with a high level of repetitive negative thinking are less likely to develop coping strategies and more likely to develop a cognitive attentional syndrome. The cognitive attentional syndrome, comprising worry/rumination, threat monitoring and maladaptive coping behaviours, has been found to intensify and prolong psychological distress.<sup>36</sup> Metacognitive beliefs about the function of these coping processes maintain the cognitive attentional syndrome.<sup>36</sup> Given that rumination is a key factor identified in the development and maintenance of PGD, a metacognitive model of psychological disorder would suggest that modification of this dysfunctional thinking style would be essential in treating this condition.



Metacognitive therapy (MCT) alters a dysfunctional thinking style by helping individuals understand their 'thoughts about thoughts' and regulate unhelpful thoughts and feelings. It uses detached mindfulness to educate people to be 'mindful' of thoughts, emotions, beliefs and memories without exclusively focusing on them, and to help people see themselves as separate to their thoughts.<sup>36</sup> MCT deals with intrusive symptoms, allowing individuals to shift from self-processing by interrupting negative thoughts and gaining a flexible non-repetitive thinking style.<sup>36</sup> This model complements the dominant model of grief which proposes that the moving between loss and restoration domains allows the grieving individual to gradually accommodate the loss.<sup>37</sup>

#### Efficacy of metacognitive treatment

Efficacy of MCT has been demonstrated in studies of major depressive disorder;<sup>38–40</sup> obsessive-compulsive disorder;<sup>41–43</sup> social phobia;<sup>44–45</sup> generalised anxiety disorder;<sup>46–47</sup> and PTSD.<sup>48–50</sup> Wells et al<sup>40</sup> evaluated the effectiveness of eight sessions of MCT with a sample of 12 patients with treatment-resistant recurrent Major Depressive Disorder and found large and clinically significant reductions in attentional control, rumination, worry and metacognitive beliefs that were maintained at the 6-month and 12-month follow-ups. The 12-month follow-up revealed that 80% of patients had recovered; suggesting MCT is an effective treatment for patients non-responsive to antidepressant medication and previous psychological treatments. Moreover, the effectiveness of MCT for chronic PTSD was recently supported in a controlled trial<sup>48</sup> with 20 patients revealing significant reductions in PTSD symptoms, anxiety and depression in the MCT group at post-test and at the 3-month and 6-month follow-up, with recovery rates of 60–80% maintained at the 6-month follow-up. These studies demonstrate that MCT is effective in helping patients respond to intrusive and dysfunctional thoughts. Also, excellent outcomes with MCT have been achieved in as little as six sessions, indicating that this approach may offer a brief and cost-effective alternative to the treatment of mental health difficulties. As such, there is potential value in the evaluation of this type of intervention for PGD.

#### Aims of the MCT trial

The aims of this study are to: (1) document the types of metacognitive beliefs characteristic of those presenting with PGD and use the information gleaned to guide the development of an MCT programme specifically for bereaved people; (2) investigate the efficacy of this metacognitive grief therapy (MCGT) in reducing psychological distress by conducting a randomised controlled trial; (3) evaluate the integrity of programme delivery and treatment adherence; and (4) determine the appropriateness and acceptability of the MCGT programme for individuals with PGD.

#### Hypotheses

1. The intervention group will report significantly greater pre–post decreases in PGD symptomatology, metacognitions, rumination, depression, anxiety and stress, compared to the wait-list group.
2. The intervention group will report a significantly greater pre–post increase in quality of life, compared to the wait-list group.
3. For the intervention group, post-intervention changes in PGD symptomatology, metacognitions, rumination, depression, anxiety, stress and quality of life will be maintained at the 3-month and 6-month follow-up.
4. Symptom change in the intervention group will be mediated by reductions in metacognition and rumination scores.

#### METHODS

##### Phase 1

##### MCGT development

The cognitive processes that control, monitor and appraise thinking need to be specifically targeted to treat PGD successfully.<sup>36</sup> Therefore, we needed to explore the metacognitions involved in PGD to ascertain if the metacognitive model was applicable to PGD and to find clinically relevant examples to incorporate into the intervention that bereaved people could personally relate to. A sequential methodological approach was used to develop the MCGT treatment protocol. Step 1 involved a review of the literature to determine the domains known to engage coping processes that disrupt the grieving process (eg, cognitions, emotions, behaviours, etc). This information was used to inform the interview questions for step 2. Step 2 involved semistructured interviews with psychiatrists/psychologists and people with elevated PGD symptomatology to extract the metacognitive beliefs driving maladaptive coping processes within each domain. Step 3 used the information gleaned to adapt 'Metacognitive Therapy for Anxiety and Depression'<sup>36</sup> into a MCGT treatment that directly targets the metacognitive beliefs involved in PGD.

**Design:** A qualitative research design using semistructured interviews was adopted to provide some topic consistency, while allowing each interview to be adapted to each informant.

**Participants:** A small sample was considered sufficient<sup>51</sup> for the information required to refine the existing MCT programme by Wells<sup>36</sup> into a programme specifically for PGD. Thus, psychiatrists/psychologists (N=6) willing to share their knowledge and experience were purposively recruited in order to understand the key metacognitions pertaining to PGD. The findings were used iteratively to refine the interview questions for participants with PGD. In investigating people's experiences and cognitive processes, hearing the voices of people with PGD was of utmost importance. Bereaved adults (N=5) with elevated levels of PGD symptomatology (cut-off score of  $\geq 26$ ) and social/occupational/functional

impairment (determined by the PGD Scale;<sup>4 52</sup>) were recruited through purposive sampling.

**Procedure:** Participants were interviewed (for approximately 60 min) using an interview schedule comprising open-ended questions developed to extract metacognitive beliefs across the domains derived from step 1. The thoughts from each domain that triggered maladaptive emotions or behavioural responses were explored (eg, by asking what was driving that thought, emotion or behaviour) to find the metacognitions associated with them. Given the complexities and sensitivities of interviewing bereft people, it was necessary to utilise a person-centred method of interviewing so that the participants conveyed their experiences from their own perspectives. The interviewer engaged the participant by asking questions such as: "Can you give me an example of things you do to feel closer to, to remember, or in remembrance of (name)?"... "Why do you do this?"... "What's positive about that?"... "What's negative about that?" The interviews continued until saturation, as defined by no new metacognitions arising. Participants were compensated for their time with a gift voucher. The interviews were audio recorded and transcribed verbatim.

**Analysis:** The analysis process incorporated constant comparison, which is the continual comparison of data, within and between transcripts, so that similarities and differences are revealed.<sup>53</sup> This method was used to generate the identification and description of metacognitions involved in PGD to inform the examples used in the intervention.

#### Intervention content

The MCGT programme was developed as a modified version of MCT, which targets the metacognitive beliefs guiding maladaptive coping strategies, and eliminates worry/rumination and fixed attention, which in turn allows the metacognitive flexibility required for normal cognitions to occur.<sup>36</sup> MCT comprises three components: engagement in therapy, MCT and maintenance. The MCGT programme was produced by modifying each of these components, manualised in 'Metacognitive Therapy for Anxiety and Depression' (see [table 1](#); contact first author for details). Treatment manualisation is important in evaluating the effects of a specific treatment, as it allows treatment standardisation and fidelity assessment and an operational definition of the treatment.<sup>54</sup> These tailored face-to-face sessions (involving 10 or fewer participants) will run for 2 hours once a week over 6 weeks. Two hours per session is thought to assist participants to feel engaged in the group process.<sup>55</sup> Each group session will be facilitated by the first author and a co-facilitator (both clinical psychology trainees) and will be held at the Curtin University Adult Psychology Clinic or a more geographically appropriate community centre, with refreshments provided. Participants will be asked to complete homework activities between sessions.

**Table 1** Outline of 'Metacognitive Grief Therapy'

Session	Content
1	Normalise grief symptoms Formulate metacognitive model of grief Enhance awareness of metacognitions Introduce metacognition self-monitoring
2	Explore the link between metacognitions, emotions and behaviour Changing unhelpful metacognitions into helpful metacognitions Introduce detached mindfulness Introduce rumination/worry postponement
3	Detached mindfulness practice Introduce attention training Challenge positive metacognitive beliefs about rumination/worry
4	Attention training practice Challenge uncontrollability metacognitions and positive beliefs about rumination Explore metacognitive beliefs about avoidant coping Challenge unhelpful metacognitive beliefs about pleasant activity scheduling
5	Detached mindfulness and attention training practice Programme review Maintenance planning
6	Detached mindfulness and attention training practice Relapse prevention

#### Phase 2

##### Participants

Participants will be bereaved individuals aged 18 years or more who are at least 6 months post the death of a significant other. Participant inclusion criteria are: English speaking; able to provide written informed consent; presence of PGD (determined by PG-13 cut-off score<sup>4</sup>); and if taking medication (namely, antidepressants or other mood stabilisers), the medication must be stable for 1 month prior to baseline assessment and dosage and medication must remain the same throughout the treatment period including follow-up. Participant exclusion criteria will be: a high suicidal risk (determined by the Mini International Neuropsychiatric Interview; MINI<sup>56</sup>); current substance abuse or dependence; current other psychological treatment; and a pre-existing psychotic or bipolar disorder or neurological history, according to DSM, 4th Edition, Text Revision (DSM IV-TR) diagnostic criteria, as measured by the MINI.<sup>56</sup>

##### Sample size

Hypotheses 1–2 predict Group×Time interactions. Assuming that these interactions are 'moderate to large' ( $f=0.31+$ ), then 17 participants per group ( $N=34$ ) should give the generalised linear mixed model (GLMM) an 80% chance of capturing the interaction effects at an  $\alpha$ -level of 0.01 (allowing for Bonferroni corrections).

Hypothesis 3 predicts significant therapeutic changes on all outcomes between the pretest and 3-month follow-up and between the pretest and 6-month follow-up. Seventeen participants per group will provide an 80% chance of capturing 'moderate to large' changes at a Bonferroni-adjusted  $\alpha$ -level of 0.01. The mediation effects predicated in hypothesis 4 will be tested by estimating the significance of the mediation pathway with a bootstrapping procedure. Thirty-four participants should sufficiently power this procedure. This sample size was calculated with the aid of G\*Power 3.<sup>58</sup> A moderate to large effect is assumed based on previous MCT intervention studies.<sup>40 59</sup>

#### Recruitment

Participants from the metropolitan community of Perth, Western Australia will be recruited through advertisements in print media/websites/newsletters/flyers in palliative care centres, bereavement groups, medical and mental health centres, local shopping centre boards, community newspapers, television and radio.

#### Measures

##### Descriptive measures

The following demographic information will be provided by each participant: age, gender, postcode, general medical history, current psychological treatment, cultural background, relationship with the deceased, and employment status, date and cause of deceased's death.

The Millon Clinical Multiaxial Inventory (MCMI<sup>57</sup>); will be used to describe the clinical personality patterns and severe personality pathology of the population. It is a 175-item true/false self-report questionnaire designed to assess indicators of DSM-V Axis II disorders. The MCMI has shown test-retest reliability coefficients ranging from 0.77 to 0.87.<sup>57 60</sup>

##### Diagnostic measures

The Mini International Neuropsychiatric Interview (MINI<sup>56</sup>); will be used to determine the presence/absence of other possible comorbid disorders. The MINI is a short diagnostic structured interview that provides a diagnosis based on the DSM-V Axis I or ICD, Revision 10 (ICD-10) criteria. The suicidality section will be used to assess suicidal risk and ideation. The MINI classifies levels of suicidality into four groups: no suicidal risk, low suicidal risk, moderate suicidal risk and high suicidal risk. It has been shown to have high test-retest reliability (0.76–0.93) and validity.<sup>61</sup>

The PGD Scale (PG-13<sup>4</sup>); will be used as the primary measure to determine the diagnostic status and symptom severity of PGD. It is a 13-item self-report questionnaire that assesses PGD symptoms using a five-point Likert scale (0–4) representing increasing levels of symptom severity. One of the two 'separation distress' symptoms and five of the nine 'cognitive, emotional, and behavioural' symptoms are required for diagnosis.

A total score (range: 0–44) is determined by summing the scores. The PG-13 has shown adequate internal consistency (Cronbach's  $\alpha$ =.82) and incremental validity.<sup>3 5</sup>

##### Self-report measures

Core Bereavement Items (CBI<sup>62</sup>); will be used as a general measure of grief severity. The 17-item questionnaire is scored on a four-point Likert scale ranging from 0 (never) to 3 (continuously), and has three subscales: 'Images & Thoughts' (7 items), 'Acute Separation' (5 items) and 'Grief' (5 items). A total score can be obtained by summing the subscales ranging from 0 to 51. The scale has shown high internal consistency ( $\alpha$ =.92) and validity.<sup>62 63</sup>

Depression Anxiety Stress Scales-21 (DASS-21<sup>64</sup>); will be used to measure symptoms of depression, anxiety and stress. The 21-item questionnaire requires participants to rate symptoms on a four-point Likert scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). The scale consists of depression, anxiety and stress subscales that can be summed to produce a total distress score. Higher scores indicate higher symptomatology distress. High internal consistency has been demonstrated for the depression ( $\alpha$ =.94), anxiety ( $\alpha$ =.87) and stress ( $\alpha$ =.91) scales and validity.<sup>64–67</sup>

The Repetitive Thinking Questionnaire (RTQ<sup>32</sup>); will be used to assess all types of repetitive negative thinking. The 31-item measure of transdiagnostic perseverative thinking comprises two subscales: repetitive negative thinking (27 items) and absence of repetitive thinking (4 items). It is rated on a five-point Likert scale ranging from 1 (not at all true) to 5 (very true). The RTQ has been found to have high internal consistency ( $\alpha$ =0.72–0.93) and convergent validity.<sup>32</sup>

The Utrecht Grief Rumination Scale (UGRS<sup>27</sup>); will be used to measure grief-specific rumination. This 15-item self-report measure of recurrent, repetitive and self-focused thoughts about the loss comprises five subscales: thoughts about consequences and meaning of the loss; thoughts about social support; 'what-if' questions; 'why' questions and thoughts about feelings. A total score can be obtained by summing the subscales. Items are rated on a five-point Likert scale ranging from 1 (never) to 5 (very often). The UGRS has been found to have excellent internal consistency ( $\alpha$ =.90), and validity.<sup>27</sup>

The Metacognitions Questionnaire-30 (MCQ-30<sup>68</sup>); will be used to measure metacognitions. Each item on this 30-item self-report measure is rated on a four-point Likert scale ranging from 1 (do not agree) to 4 (agree very much) on five separate subscales: positive beliefs about worry, negative beliefs about worry concerning uncontrollability and danger, low cognitive confidence, need to control thoughts, and cognitive self-consciousness.<sup>68</sup> A total MCQ-30 score is obtained by summing the subscales. A high score indicates stronger beliefs about the need to control and the negative consequences associated with intrusive thoughts. Internal consistency across individual subscales on the MCQ-30



has been found to range from 0.72 to 0.93 with a total internal consistency of 0.93 and a test-retest reliability of 0.75.<sup>35 68</sup>

The Quality of Life Enjoyment and Satisfaction Questionnaire-18 (Q-LES-Q-18<sup>69</sup>); will be used to measure general quality of life and specific life domain levels of enjoyment and satisfaction. It is an 18-item self-report scale measuring specific life domains: physical health, subjective feelings, leisure time activity, social relationships, and satisfaction with medication. A five-point Likert scale ranging from 1 (not at all) to 5 (all the time) is used for responses. General quality of life index is measured by summing the 18 items. The Q-LES-Q-18 has good construct and concurrent validity, as well as high internal consistency ranging from 0.82 to 0.94 and test-retest reliability ranging from 0.71 to 0.83.<sup>69</sup>

#### Therapist measure

The Clinical Global Impression (CGI-Improvement Scale (CGI-IS<sup>70</sup>); will be used to rate each participant's improvement or decline in post-treatment assessment. It is a global rating of improvement in clinical disorders ranging from 1 (very much improved) to 4 (no change) to 7 (very much worse). It has shown high inter-rater reliability (0.87–0.99). To limit experimenter effects, the

first author and an independent experienced psychologist will use this scale to compare baseline and follow-up interviews. Treatment response will be indicated by a rating of 1 (completely recovered), 2 (very much better) or 3 (much better). Inter-rater reliability will be calculated using Cohen's  $\kappa$  statistic.<sup>71</sup>

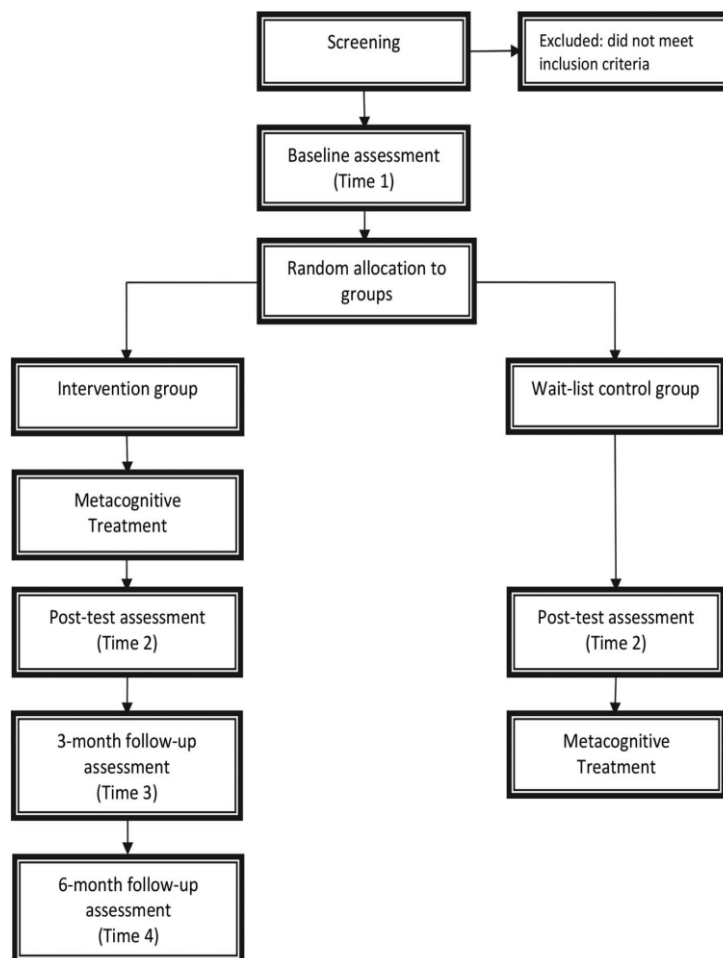
#### Trial design

A randomised experimental pretest/posttest wait-list control group design with a 3-month and 6-month follow-up for the intervention group will be used to evaluate the effects of MCGT on PGD. The outcome variables are anxiety, stress and depression (DASS-21); grief distress (PG-13/CBI); rumination (RTQ/UGRS), metacognitions (MCQ-30) and quality of life (Q-LES-Q18). The independent variables are the group condition (MCGT; WL), and time (pretest, posttest, 3-month and 6-month follow-up). A study design flow chart is shown in [figure 1](#).

#### Procedure

Following ethical approval from Curtin University Human Research Ethics committee, participants who express an interest to take part in the study will be screened by telephone. Those who meet inclusion

**Figure 1** The 'Metacognitive Grief Therapy (MCGT) Program' proposed design and progress phases.





criteria will then attend an individual assessment session where they will read and sign consent forms, complete the MCMI and be interviewed using the MINI. Eligible participants will then be randomly allocated to the intervention or wait-list control condition via computer generated randomised numbers. The self-report measures will be conducted at preintervention and thereafter post-tests will be conducted at treatment completion, and at 3-months and 6-months from treatment completion for the intervention group only (via post or assistance from a psychology graduate trainee). Only the primary researcher will have access to the participants' data, which will be coded with an ID number and cross referenced in a university database to maintain confidentiality and preserve anonymity beyond the primary researcher. Any identifying information (ie, consent forms and demographic details) will be kept separate from the data and locked in a secured university filing cabinet for a period of 5 years, after which it will be destroyed. Participant compensation will be in the form of a gift voucher at post-test and 6-month assessment points. Following the post-test, MGCT will be offered to the wait-list control group, to ensure they also benefit from participation in the study. Participants in the wait-list control groups will receive a monthly phone call or email to ensure waiting for treatment is not detrimental and that they remain in the study. Treatment participants wishing to drop out of the study and wait-list participants demonstrating a need for immediate intervention will be withdrawn from the study and provided appropriate referral information.

#### Data analysis

A GLMM will be used to test H1 and H2. The GLMM is 'generalised' in the sense that it can handle outcome variables with markedly non-normal distributions; GLMM is 'mixed' in the sense that it includes random and fixed effects. The present GLMM includes one categorical random effect (participant), one categorical fixed effect (group: intervention, control), one ordinal fixed effect (time: pretest, post-test, 3-month follow-up, 6-month follow-up), and the Group×Time interaction. A second GLMM will be developed to test H3. This GLMM will include one categorical random effect (participant) and one ordinal fixed effect (time: pretest, post-test, 3-month follow-up, 6-month follow-up) will be implemented through SPSS's (V.22) GENLINUX procedure. In order to optimise the likelihood of convergence, a separate GLMM analysis will be run for each of the outcome measures (PG-13, CBI, DASS, RTQ, UGRS, MCQ-30, Q-LES-Q-18). Analysing each outcome independently of the others will inflate the family-wise error rate and the per-test  $\alpha$  will therefore need to be corrected to control the inflation. In order to conserve statistical power, the  $\alpha$  correction will be applied within groups of conceptually related outcomes rather than across the entire set of outcomes.

GLMM will assume a normal probability distribution for the outcome and link it to the fixed effects (group, time, group×time) with an identity function.<sup>72</sup> If the outcome does not have a normal distribution, then the parameter estimates of the covariance matrix will be computed with robust statistics. In order to make the model robust to violations of sphericity, the covariance matrix will be changed from the default of compound symmetry to autoregressive.

The mediation effects predicted in H4 will be tested with structural equation modelling in order to adjust for the relatively low reliabilities associated with change scores. The significance of the mediation pathways will be tested with a bootstrapping procedure based on 1000 draws as implemented by Mplus (V.5.2). Assuming 'moderate to large' mediation effects as per previous MCT intervention studies,<sup>40 59</sup> G×Power<sup>373</sup> estimates that 34 participants will sufficiently power these tests. The mediation model will include one binary independent variable (group: intervention vs control), inputting to two mediating variables (metacognition and rumination), which then input to one outcome variable (eg, PGD). To conserve statistical power, separate mediation models will be tested for each of the other outcome variables. The mediating variables will be pre-post change scores, and the outcome variables will be pre-follow-up change scores.

Randomisation to groups should ensure that the groups are matched in terms of potentially confounding demographic covariates; but this process can be undermined by participant attrition. We will therefore attempt to identify confounding demographic variables (ie, demographic variables that show between-group differences and are correlated with the outcome at any of the assessment points) and control for them statistically by including them as covariates in the GLMM analyses. Pretest differences on the outcome variables are controlled by including pretest scores as the first level of the time factor in the GLMM analyses.

Participant attrition occurs in longitudinal data irrespective of the number of sessions completed. Participants who miss two treatment sessions will be regarded as dropouts. To optimise power, the outcome data for all participants will be analysed (regardless of the number of sessions completed) using the 'dose' (ie, number of sessions) as a covariate in the GLMM. Compared to the traditional statistical procedures for analysing behavioural change (eg, repeated measures analysis of variance), GLMM is less sensitive to participant attrition, does not rely on participants providing data at every assessment point, can deal with unequally spaced data collection points, is robust to unequal group sizes, does not require equal variances at each time point, does not require equal covariance between all pairs of time points (ie, sphericity), and is able to account for correlations among repeated measurements.<sup>72</sup> GLMM will analyse all pretest scores on the outcomes regardless of whether participants attend posttest and follow-up



assessments. This reduces sampling bias and the need to replace missing data. To assess if dropouts differ with completers they will be compared on demographics and baseline outcome measures. Treatment effect sizes on all outcomes will be calculated using Cohen's *d* statistic.<sup>74</sup> Once an intervention effect has been established at the group level, an estimate of the clinical significance of the change will be calculated using the reliable change index. This will be assessed by calculating the degree to which participants change on the outcome variable divided by the SE of the difference between the pretest and posttest scores. A Reliable Change Index greater than an absolute value of 1.96 will reflect a reliable change.<sup>75</sup>

### Phase 3

#### Programme integrity and content compliance

The first author and the group co-facilitator (both clinical psychology trainees) will be trained by a clinical psychologist MCT specialist. According to the intention-to-treat principle, researchers must assess protocol adherence in order to provide an unbiased assessment of treatment efficacy.<sup>73</sup> To evaluate the integrity of the programme delivery and treatment adherence, each group session will be checked to ensure it is delivered in accordance with the MCGT session-by-session module overview. This involves the independent completion of a programme implementation effectiveness checklist by the first author and co-facilitator at the completion of each session. Each item will be rated using a 10-point Likert scale. A minimum of 10% of the video recordings for each session will also be reviewed by a supervisor with a clinical psychology background for protocol adherence. Inter-rater reliability will be calculated using the 'average measures' intraclass correlation using the 'two way random model' in conjunction with the 'consistency procedure'.<sup>76</sup>

#### Social validity

At programme completion, the social validity of the entire programme will be measured using the Programme Satisfaction Questionnaire adapted from a depression and anxiety prevention programme.<sup>77</sup> The participants will complete questionnaires comprising an overall programme rating (section A), the practicality of the skills taught (section B) and a qualitative interview (section C). Sections A and B will be rated on a five-point Likert scale ranging from 1 (not at all) to 5 (very much). The five open-ended questions in section C allow participants to identify programme components least and most enjoyed and information most utilised. The questionnaires will determine the appropriateness and acceptability of the programme. Descriptive statistics will be used to analyse the quantitative responses of the Programme Satisfaction Questionnaire. The open-ended qualitative responses to each question will be summarised.

## DISCUSSION

There is very robust evidence demonstrating that PGD differs from normal grief in terms of symptoms, aetiology, outcomes, course and response to treatment<sup>4</sup> and that people with PGD experience self-blame<sup>78</sup> and are under-represented in mental health services.<sup>5</sup> Existing interventions show some promise, but their effectiveness is limited. Recent studies suggest there is a need for treatments to incorporate techniques that deal with rumination, as it is associated with and predictive of PGD.<sup>27-29</sup> Given the severity of PGD, it is important to address directly the factors involved to limit the extent to which the death of a significant other may constitute a broader risk to bereaved individuals' long-term health outcomes.

This paper is a comprehensive description of the methodology used to develop, implement and evaluate MCGT, a MCT programme for PGD. MCT is an efficacious treatment for several psychological disorders (supporting the regulation of cognitive processes); however, no research has been conducted on the effectiveness of this treatment for people with PGD. It is proposed that an intervention based on the metacognitions of this subset of bereaved individuals will target the dysfunctional coping processes (eg, rumination, worry and avoidance behaviours) that keep attention focused on distressing and unhelpful information, depleting the processing resources required for thinking to return to its normal trauma free status.

The proposed study will evaluate the efficacy of manualised MCGT to reduce PGD symptoms. This study will determine if MCGT is likely to be effective in reducing PGD symptoms and will establish the mechanisms by which the intervention may be effective. The study will also determine if MCGT is able to enhance the quality of life for people with PGD and if the intervention is acceptable to them. If MCGT is not effective, the study will identify the factors that contributed to a negative outcome.

This research has implications for healthcare professionals who work with bereaved clients. A validated short intervention that is acceptable to bereaved people would benefit services where long-term care is not an alternative.<sup>6</sup> The proposed research is innovative because it will provide much needed empirical evidence to guide future programmes that target PGD and, if MCGT proves to be effective, it will provide a precise intervention that ameliorates PGD symptomatology. As such, this study makes an important contribution to theory and practice.

**Dissemination** The results will be documented in published peer reviewed academic journals. No identifying information will be provided; participant confidentiality will be upheld at all times.

**Contributors** LJB conceived the study. JW, MOC, LJB, CSR developed the research design, methodology, intervention and implementation. JW drafted the manuscript. CSR provided clinical expertise and MCT training. RTK provided statistical input into the design. All authors edited drafts of the manuscript and approved the final manuscript.



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**Ethics approval** Ethics approval gained from Curtin University.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data sharing statement** All de-identified aggregate data for these studies will be freely available in the published papers. All quantitative data generated from the project will be made available via Curtin Universities Research Data Repository ([espace@Curtin](mailto:espace@Curtin)). DOIs to these data will be provided and cited in any future published articles using this data. There are no security, licensing or ethical issues related to the expected data. No pre-existing data will be used, all data will be generated directly as a result of the project.

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## Efficacy of metacognitive therapy for prolonged grief disorder: protocol for a randomised controlled trial

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## **CHAPTER 4**

### **Investigating Metacognitive Beliefs Involved in Prolonged Grief**

#### **4.1 Overview**

Chapter Four provides the information gleaned from the first phase of this research involving interviews conducted with bereavement specialists and bereaved people experiencing elevated prolonged grief symptomatology. The aim of this phase was to identify the metacognitive beliefs linked to unhelpful coping processes involved in PGD. This chapter will provide a detailed account of the findings and their implications for future research and clinical practice. The research from this chapter is under review for publication: Wenn J., O'Connor, M., Breen, L. J., & Rees, C. S. (under review). An exploratory study of metacognitive beliefs about coping processes in prolonged grief symptomatology.

**An exploratory study of metacognitive beliefs about coping processes  
in prolonged grief symptomatology**

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**Abstract**

Despite research examining the role of metacognitive beliefs about coping processes in maintaining psychological disorders, to date, no studies have explored their role in the maintenance of prolonged grief. Twelve semi-structured interviews were conducted with bereavement specialists and bereaved people with elevated grief to identify metacognitive beliefs about coping processes relevant to prolonged grief. Analysis revealed several metacognitive beliefs potentially driving maladaptive coping processes used by people with prolonged grief symptomatology. Findings may underpin the development of interventions that aim to modify unhelpful metacognitive beliefs that perpetuate maladaptive coping processes.

*Keywords:* Prolonged Grief Disorder; Complicated Grief; Persistent Complex Bereavement Disorder; Metacognitive beliefs.

The death of a significant other is a universal experience that can result in intense psychological distress for those left behind until the loss is accommodated into their lives (Granek, 2010). However, approximately 7% of the bereaved population experiences prolonged grief (Aoun et al., 2015; Kersting et al., 2011). Prolonged Grief Disorder (PGD) is characterised by intense separation distress, and cognitive, emotional and behavioural symptoms that remain elevated for six months or more (Prigerson et al., 2009a). PGD is associated with social and occupational impairment, suicidality, hypertension, cardiac problems, substance abuse, depression, and posttraumatic stress disorder (PTSD; Lichtenthal et al., 2004; Prigerson et al., 2008). Given PGD persists without targeted intervention, it is critical that therapeutic support is available for people experiencing PGD (Sealey, O'Connor, Aoun, & Breen, 2015; Wittouck et al., 2011).

Cognitive and behavioural treatments for PGD focus on integrating the loss into autobiographical memory through the repeated exposure to events surrounding the death, addressing the content of grief-related cognitions and behavioural activation (Boelen et al., 2007; Shear et al., 2005; Wagner et al., 2006). Although

these tailored interventions have produced significant reductions in PGD symptomatology (Bryant et al., 2014; Eisma, Boelen, et al., 2015; Kersting et al., 2013; Papa et al., 2013; Shear et al., 2014), a substantial proportion of participants does not achieve clinically relevant effects (Doering & Eisma, 2016) and little is known about the therapeutic components or mechanism(s) of change (Breen, Hall, & Bryant, 2017). To treat a greater proportion of people experiencing PGD effectively, the mechanisms underlying the development and maintenance of PGD symptomatology need to be identified and targeted directly.

Recent research investigating cognitive processes involved in PGD suggests worry and rumination may play a role in mediating bereavement outcomes (Eisma et al., 2017; Eisma, Schut, et al., 2015). Both worry and rumination have been conceptualised as forms of maladaptive coping that are commonly associated with psychological distress (Nolen-Hoeksema, 1991; Nolen-Hoeksema et al., 1994; Wells, 1995). Worry is a form of repetitive thinking defined as thoughts and images focused on future oriented events and their potential negative outcomes (Borkovec et al., 1998). Excessive worry about future stressors and the uncertainty of the future has been associated with higher levels of PGD (Boelen, 2010; Boelen, Reijntjes, & Smid, 2016; Ehring & Watkins, 2008; Eisma et al., 2017).

Similarly, grief rumination, involving repetitive thinking about the loss, the emotions related to the loss and the consequences of the loss, has been found to intensify PGD symptomatology (Boelen, van den Hout, et al., 2006; Eisma et al., 2014). A strong association has been found between ruminating over the perceived injustice of the death and both depression and PGD (Eisma, Schut, et al., 2015). Additionally, using the deceased's possessions to assist ruminating over memories of the deceased is associated with PGD (Boelen, Stroebe, et al., 2006; Field et al., 1999). Preliminary findings suggest bereaved people may use rumination as a means of implicitly avoiding the reality of the loss (Eisma, Rinck, et al., 2015). It is suggested this anxious avoidant coping strategy allows bereaved people to self-regulate their thoughts away from the reality of the loss, which, in turn, may prevent them from integrating the loss into their lives (Boelen, van den Hout, et al., 2006; Eisma et al., 2013; Stroebe, Boelen, et al., 2007).

Rumination and worry are components of repetitive negative thinking, which is a transdiagnostic risk factor for psychological disorders (McEvoy, Watson, Watkins, & Nathan, 2013). It has been proposed that repetitive negative thinking and

executive control deficits (e.g., inhibition and attention regulation) may keep attention focused on negative over-general memories, which leaves gaps in the information recalled and impedes the emotional processing required for adaptation to grief (Maccallum & Bryant, 2010). Bereaved people may use repetitive negative thinking to focus on unresolved issues, which in turn increases distress when they cannot be resolved (Watkins & Moulds, 2013).

An overlooked area in bereavement research pertains to the role of metacognitive beliefs (knowledge and beliefs about one's own cognitive processes) in grief-related coping processes (e.g., repetitive negative thinking). The metacognitive model suggests that metacognitive beliefs that support the use of repetitive negative thinking in response to distress create an attentional bias called cognitive-attentional syndrome (Wells & Matthews, 1994). This syndrome comprises three components: worry/rumination, threat monitoring (increased attention to potential danger) and maladaptive coping behaviours (e.g., thought suppression, compulsions) that have been shown to intensify and prolong emotional distress.

An individual's metacognitive beliefs underpin their thoughts, feelings and actions in response to an event (Rees & Anderson, 2013). Metacognitive beliefs can be divided into positive and negative categories according to the individual's appraisal of the utility of the belief (Papageorgiou & Wells, 2001). Thus, a positive metacognitive belief is "Worry is a helpful coping strategy" while a negative metacognitive belief is "Worry is dangerous to my health". An individual can simultaneously hold positive and negative metacognitive beliefs about the same coping strategy. Wells (2009) proposed that these beliefs drive an individual's engagement in dysfunctional coping processes. For example, in generalised anxiety disorder, worry is used as a coping strategy and is maintained by both positive ("Worrying helps prepare me for future negative events") and negative ("My worry is out of control") metacognitive beliefs. The metacognitive model applied to understanding the maintenance of PGD would suggest that metacognitive beliefs drive an individual's use of maladaptive coping strategies (e.g., repetitive negative thinking). If this is indeed the case, interventions for PGD could potentially be enhanced by focusing on the identification and modification of metacognitive beliefs that drive maladaptive coping processes that maintain distress.

Recent studies of depression, PTSD and anxiety have demonstrated that enhancing an individual's metacognitive capacity (knowledge and regulation of

cognitive processes) can significantly reduce pathological symptomatology (McEvoy et al., 2009; Wells et al., 2012; Wells et al., 2008). Metacognitive Therapy (MCT) targets unhelpful positive and negative metacognitions about maladaptive coping processes such as repetitive negative thinking (Papageorgiou & Wells, 2001; Wells, 2009). Metacognitive beliefs about maladaptive coping processes may keep attention exclusively focused on distressing information (e.g., the lost relationship, uncertainty of the future, financial stressors now faced, threat monitoring) or increase coping behaviours (e.g., thought suppression, compulsions/rituals), depleting the processing resources required for flexible thinking to accommodate the loss (Wells, 2009). MCT incorporates techniques such as detached mindfulness and attention training, which would help people separate themselves from their thoughts and switch focus from repetitive negative thinking to daily activities (Wells, 2005). Thus, this intervention appears to complement the contemporary model of grief which proposes an oscillation between loss and restoration activities is required to accommodate loss (Stroebe & Schut, 1999).

However, no qualitative research has explored the metacognitive beliefs related to PGD. Thus, the aim of this study was to identify the presence and types of metacognitive beliefs relevant to PGD symptomatology, by interviewing bereavement specialists and bereaved people. The aim of consulting with bereavement specialists was to gain an insight of instances that were perceived as representative or typical of the metacognitive beliefs held by clients with PGD to achieve comparability across different cases (Teddle & Yu, 2007). The aim of interviewing bereaved people with PGD symptomatology was to identify if metacognitive beliefs were linked to coping strategies that maintained distress. As no previous studies have investigated metacognitive beliefs and PGD, the information gathered here will provide an important first step in determining the potential of the metacognitive model to inform conceptualisations of PGD and the development of metacognitive grief interventions (Wenn, O'Connor, Breen, Kane, & Rees, 2015).

## **Method**

### **Design and Participants**

This study adopted a qualitative design as the aims were exploratory. Bereavement specialists were accessed either from existing networks of one of the senior authors, snowballing and via an internet search. These specialists were approached directly by phone or email. Inclusion criteria for the specialists were the

ability to speak English and extensive experience in working with bereaved clients. Inclusion criteria for the bereaved participants were elevated PGD symptomatology (Prolonged Grief Disorder Scale cut-off score of  $\geq 26$ , based on previous prevalence rates; Prigerson et al., 2009b; Tomarken et al., 2012) and the ability to speak English. The bereaved people were recruited using a nonprobability, purposive sampling approach in the metropolitan and outer metropolitan area of Perth, Western Australia. Initially, bereavement groups and palliative care services were contacted and then snowballing was used for further recruitment. As the focus of qualitative research is on depth and richness, recruitment ceased when enough data was extracted from the interviews to identify the presence of metacognitive beliefs about the coping processes involved in the cognitive-attentional syndrome (Creswell, 1998; Morse, 1995). The final sample comprised six bereavement specialists and six bereaved people.

### **Materials**

**Screening Measure:** The Prolonged Grief Disorder Scale (PG-13; Prigerson et al., 2009a) was used to determine the PGD symptom severity and diagnostic status for the bereaved participants. It is a 13-item self-report questionnaire that requires symptoms to persist for a period of 6 months or more, one of two “separation distress” symptoms, five of nine “cognitive, emotional, and behavioural” symptoms and social/occupational impairment for diagnosis. Eleven questions use a 5-point Likert scale (1-5) to rate symptom frequency and the sum of these scores can be used to determine the total grief score (range: 11-55). The PG-13 has high internal consistency (Cronbach’s  $\alpha=.94$ ), test-retest reliability (.80) and incremental validity (Lichtenthal et al., 2011; Prigerson et al., 2008; Sealey, Breen, et al., 2015) and has been validated in Australian samples (Aoun et al., 2015).

**Interview Schedules:** Data were collected using a semi-structured interview schedule comprising open-ended questions designed to probe for metacognitive beliefs driving the use of dysfunctional coping processes such as repetitive negative thinking and maladaptive coping behaviours. Separate interview schedules were used for the specialists and the bereaved (see Appendix). The semi-structured interview approach provided some topic consistency, whilst allowing each interview to be adapted to each participant. This person-centred method accommodates the complexities and sensitivities involved in interviewing bereft people and allows

participants to convey their experiences from their own perspectives (Johns, 1994; Sque, Walker, & Long-Sutehall, 2014).

Metacognitive beliefs were elicited by querying the purpose of the coping process (e.g., repetitive thoughts about the loss). If positive or negative metacognitive beliefs about the coping process were reported these were further explored by asking about the advantages/disadvantages of using the coping process. Coping behaviours were explored by asking what participants did in response to grief-related thoughts, emotions and images and the advantage/disadvantages of using that coping behaviour.

### **Procedure**

Following ethics approval from the university Human Research Ethics Committee, the first author arranged a mutually-convenient time and location (e.g., university office or participant's home; 1 specialist completed the interview via the phone & 1 via email) for the interviews with the specialists and bereaved who expressed an interest in participating in the study and informed consent was obtained. The bereaved participants were screened for eligibility using the PG-13. The one-on-one interviews of approximately 60 minutes were conducted with specialists/bereaved over a two-month period. Each interview was digitally-recorded and the specialists/bereaved were compensated for their time with a \$50 gift voucher.

### **Analysis**

Descriptive statistics were used to assess demographic variables. The interviews were transcribed verbatim (by a transcription service) and the recordings were repeatedly listened to by the first author to become familiar with the content and to check for transcription accuracy. The recordings were deleted following these checks and identifying information was excluded from the transcripts. The transcripts were analysed using a constant comparison method, which involved a continual comparison of data, within and between transcripts, to identify similarities and differences in metacognitive beliefs about coping processes (Lincoln & Guba, 1985). This framework compares and contrasts interview transcripts by themes, analysis and theoretical sampling to generate a theory grounded in the data (Kolb, 2012).

Analysis began after the first interview so that metacognitive beliefs identified in an interview were probed in the next interview. Initially, the text was read and salient metacognitive beliefs were highlighted in each transcript by the first author. The text was reread and the metacognitive beliefs were then transferred to



spread sheets where they were coded based on (a) common themes identified as relevant to the coping process and (b) whether their function was appraised as positive or negative metacognitive beliefs. Summaries were written for the major codes, aided by the use of field notes and data extracts. To augment the rigor of the analysis, regular meetings were held with the research team (experienced in grief research, qualitative research and clinical psychology practice). During this iterative process, themes were checked, discussed and refined, and new themes were created until a consensus was achieved within the team. Two clinical psychologists (one provisional and one with extensive experience) from the team then further refined the metacognitive beliefs related to these themes. The themes were then reviewed by a bereaved participant for authenticity.

### **Findings**

One female psychiatrist and five female psychologists (palliative care/grief specialists) were interviewed. Specialists' years of experience ranged from 9 to 30 years ( $M = 17$ ;  $SD = 7.7$ ). Six female bereaved participants were screened and then interviewed: three widows (2 = cancer and 1 = fishing accident) and three bereaved mothers (1 = adult son to cancer, 1 = adult son to suicide, and 1 = adult daughter to childbirth). Their ages ranged from 29 to 63 years ( $M = 48.2$ ;  $SD = 13.9$ ) and the age of the deceased ranged from 24 to 72 years ( $M = 37.7$ ;  $SD = 18.2$ ). The time since the loss ranged from 10 months to 5 years ( $M = 2.4$  years;  $SD = 1.7$ ). PG-13 scores ranged from 27 to 37 ( $M = 33.6$ ;  $SD = 4.4$ ; 3 people met the full diagnostic criteria for PGD).

The participants reported a range of positive and negative metacognitive beliefs related to the use of repetitive negative thinking (e.g., rumination, worry), threat monitoring and coping behaviours (e.g., suppression, rituals, emotional regulation). Illustrative extracts of these metacognitive beliefs identified by the participants are provided in Table 1.

Table 1

*Positive and negative metacognitive beliefs held by bereaved people with prolonged grief symptomatology.*

COPING PROCESS	POSITIVE METACOGNTIVE BELIEFS	NEGATIVE METACOGNTIVE BELIEFS
<b>Repetitive negative thinking</b>	<p><b>Thinking/going over things will help me make sense of the death</b></p> <p><i>“That’s part of making sense. The questioning and the going over and over and over...” [B4] “Nothing useful at all, or maybe, I might think I am going to find an answer.” [B2] “The full-on internalising and ruminating and going over, it’s a very internal process. Yes, they get fixated. They keep assessing and reviewing, they get nostalgic. You know, that part of processing, part of coming to terms with the enormity of it is often reviewing and a lot of making sense, when sometimes it’s impossible.” [S5]</i></p> <p><b>I need to think about them so that they are not forgotten</b></p> <p><i>“...it is my responsibility to hold the memory of this person and if I don’t I’m letting him down...if I move on from this it would be disloyal.” [S6]</i></p> <p><i>“Some people do move on quicker. I know I won’t and I don’t want to. I want to remember my son every day and I want him.” [B3]</i></p>	<p><b>I can’t stop thinking about my loved one – my thinking is out of control</b></p> <p><i>“I tend to over think things and my brain doesn’t stop.” [B5] “Definitely no control. That was upsetting me more and getting more frustrated.” [B2] “They do feel a sense of... can talk about feeling a bit out of control.” [S2]</i></p> <p><b>Thinking/my grief could cause harm to my wellbeing</b></p> <p><i>“I might die of an illness, but I know I will die of a broken heart... I’m just too scared to question it and find out. Just know that my brain can’t take it.” [B3] “Yeah, the going crazy is something that people sometimes worry about.” [S2]</i></p> <p><b>It is not normal to be thinking/grieving like this</b></p> <p><i>“I just think aw you’re going to make yourself crazy, you’ve got to stop. I often say I’ll end up in [psychiatric hospital], so yeah there is that worry of going insane.” [B2] “A lot of my work with people is actually</i></p>

**Thinking will help me make sense of how the death could have been prevented** *normalising their experience. I guess, because they already feel like they're not doing grieving the way that they're supposed to.* [S2]

*"I was trying to make sense of the situation. I felt responsible – that I could stop this from happening."* [B6]

*"Perception of preventability, because a perception of preventability locks people into a narrative which has a story of how it might not have happened, rather than accepting that it has happened."* [S1]

**Thinking will help me determine the extent of my loss and what life would be like if they were still here**

*"Sometimes people do hone in on all the things that they are missing in the present moment that would have been happening. Yes, it's like revisiting each time, but with a new layer of what have I lost this year."* [S1] *"And, oh I wonder what he would be doing or I wonder what he would look like, my next photo is not going to have (deceased) in it. I'm just tired. I'm not tired of grieving, but that part of grieving... like my mind is just so confused and I had a bit of, like a break down."* [B3]

**Thinking over every angle of a situation will help me make decisions on my own**

*"I guess it's a case of not only am I left now making normal or*

*household/family decisions on my own, it's work as well, because we did everything together. So, it's all decisions kind of thing have gone from talking to someone about it, to now talking to yourself, going crazy and trying to weigh up the pros and cons yourself and you know not seeing other angles and or points of view and things." [B2]*

**Thinking/questioning my grief will help me determine the 'right' way to grieve to make sure I show respect/loyalty**

*"Yeah, I do overthink things way too much... I was worried that I was coping too well and I wasn't as distraught as maybe a widow should be, and then I was doubting myself, for not loving him as much, which was silly." [B5] Like, after your child has died, the first time that you smile or you're laughing with that automatically, and you think, oh, am I supposed to be laughing... does that mean... There does come a time as you work through grieving that you do actually make choices [B4] "Yeah, what does it mean if I'm happy or I at times enjoy things... I think guilt is pretty common. I've seen that with most people that I see. Yeah, a lot of sense of feeling confused." [S2]*

<b>Threat Monitoring</b>	<p><b>Thinking about future scenarios problems/threats helps me feel in control prepare/cope</b></p> <p><i>“Yeah, so insecurity, sense of security, dread of the future, unpredictability of life and death is fully enhanced and over emphasized... Well yeah, then usually when they’re trying to control something they try and bring their life down into controllable chunks.” [S5]</i></p> <p><i>“I think in the end that’s my way of calming myself down, imagining every possible scenario, thinking of the way I deal with it, so then I’ll be ok. Well, I think maybe because I wasn’t in control with (deceased) situation and I need to control something.” [B5]</i></p>	<p><b>Thinking about future problems/threats is exhausting and sad</b></p> <p><i>“It is pretty exhausting... I just wake up and I don’t smile at anything... Just not living in the moment... I just need to relax a bit.” [B5]</i></p>
	<p><b>Monitoring my emotions/waiting for sadness to subside helps me control/prevent future situations</b></p> <p><i>“I don’t have the motivation at the moment, so maybe when that motivation comes I will be more wanting to do it, and feeling more happy about doing it, and not so much sadness behind it, and then I guess that will be a time when I do it, when the sadness is not so strong. That might be the time when I go right I am going to do something now.” [B2]</i></p> <p><i>I’ve stepped back a lot now. Like I don’t do things I used to do with friends because I’m always like... I don’t know what day I’m going to be depressed. [B3]“You would find then,</i></p>	

*that people almost don't want to leave their home, they don't want to go out into the world because they can't control that. So, people can become quite reclusive in their grief. It doesn't necessarily mean that they're pathological, it means that they need to protect themselves and their vulnerability.” [S5]*

**Coping  
behaviour**

**Suppressing grief related thoughts and emotions will stop me from feeling distressed**

*“You're not having to think about why I feel. I think I tend to over think things so I try not to, maybe think too much why I feel it. Just try to think things about avoiding the feeling. So, I shut down to stop it. Yeah, maybe it is a coping mechanism for me to not feel that, but I don't know how I'm going to get over that. It's been 12 months of me doing that. Crying, every time I start I think, shit stop, stop... I guess I just want to be more positive and just try not to cry.” [B5]*

**Avoiding the future helps me stay close to them**

*“I guess I used to look into the future a bit. I guess I do a little bit now, but I'm trying not to. I don't know, maybe because I might feel further away from him. It'll be more real if I move on.” [B5]*

**It's bad to suppress my grief, because it prevents me from releasing emotions**

*“It's like I talk to myself in my head and I convince myself. I guess in a way it's been good at the time, but still I think it's bad now because I have bottled so much up. Yeah, I don't think I'm releasing the anger properly.” [B5] “There's some people who are very much able to shut that off, um... but not in a helpful way I wouldn't suggest.” [S2]*

**If I avoid future oriented activities I don't have to accept the reality they are no longer in my life.**

*"I'm not accomplishing things... I'm not finalising things. What I'm doing for me now are things I am doing for me... I just can't. I haven't dealt with my husband's superannuation. It's like it is the final thing. So, I'll find other things to do, it's a real good, fabulous example of procrastination."* [B1]

*"I think it's again the final... it's almost like a sense of final accepting that he's not coming back and I'm probably just not ready. All his drawers are still full."* [B2]

**Keeping busy will stop me from having to think about my loss**

*"But, other people will do a lot to block that out and will keep busy and push those thoughts away. I mean there are some people that you see that it's like it has just happened and its years later."* [S2] *"I was so busy trying to keep myself busy that I didn't have time to think."* [B1]

**Regulating/suppressing my emotions will protect me and others from discomfort**

*"Cause I'm not... yeah when I'm with other people I'm not who I am most of the time. It's like I put on a different... I put on a more smile or more you*

**Not accomplishing future oriented activities makes me feel stuck, insecure and doubt myself**

*"I am walking around in circles, because I know that that's sitting there waiting for me. That's what I get annoyed with... I'm just not on top of this one and that's where the doubt starts to creep in. The insecurity, the getting older, I'm not coping well. I guess the insecurity and that feeling of self-doubt."* [B1]

**Keeping myself busy is exhausting**

*"I found I just kept myself too busy and then I'd just be exhausted. I felt I wasn't doing it for me, I was doing it to keep me occupied."* [B1]

**Regulating my emotions leaves me exhausted**

*"...it's exhausting to try and pretend to be happy... So that they don't have to worry about me."* [B5] *"I'm just run down. Some days I just spend two to three days in bed."*

*know... because like I said it's my grief and I can't let everybody see me like that..." [B3] "So, it's this social expectation of me saying I'm okay so they feel better about me and I don't make them worry. I won't cry in front of people. I only cry around me. I won't even cry around my mum. I don't like that because it makes us both uncomfortable." [B5]*

*Cause (daughter)'s around I don't get to be upset so much, cause I try not to for her. I'll just be having a shower... I'll just burst out crying, because I'm trying to hide a lot of it." [B3]*

**Conducting rituals, familiar routines and spending time with possessions will help me remember them and maintain a connection/loyalty**

*"Every now and then I look at all of her photos before I go to sleep at night. I look at the photo of her on my wall every day. So that I don't forget her. I want to try to feel as though she is still around. It made me feel as though I was being loyal to her." [B6] "It has a purpose and there's usually fear behind that; that they're going to forget the one that they love. Yeah, it keeps them in that loop of doing similar things." [S5]*

**Spending time with objects/conducting rituals can make me feel worse**

*"A client who used to constantly read the obituaries and I think she suggested that that wasn't helping her very much. So, maybe there are times when people are doing things and they don't help them very much." [S2] "Sometimes, it makes it hard. I feel guilty if I don't do them. I just don't want him to be disappointed." [B5] "Sometimes it makes me even sadder." [B6]*

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*Note.* [S1 – 6] Represents bereavement specialists and [B1 – 6] represents bereaved participants.

### **Repetitive Negative Thinking**

All specialist and bereaved participants indicated bereaved people held the positive metacognitive belief that engaging in repetitive negative thinking was a useful coping strategy. All participants expressed that repetitive negative thinking about the loss was important in order to try to find answers or make sense of the loss and its consequences. For example, some reported using repetitive negative thinking



to answer questions about how the death could have been prevented, the consequences of the death, appropriate ways to grieve or how to cope. Others indicated that thinking repetitively about the deceased was a way of maintaining a connection with the deceased. However, at the same time, most participants (5 specialists, 5 bereaved) expressed negative metacognitive beliefs that engaging in this repetitive negative thinking could become uncontrollable and cause harm to their mental and physical wellbeing.

### **Threat Monitoring**

The participants (2 specialists, 5 bereaved) indicated bereaved people held the positive metacognitive belief that engaging in threat monitoring was a means to prepare for future situations that could potentially cause further distress. For example, repetitive thinking about all the possibilities of what could go wrong at a future event was viewed as a helpful strategy to control/limit future stressors. Some bereaved participants avoided social situations due to concerns they would be depressed or become distressed at the event. However, at the same time some participants (1 specialists, 5 bereaved) expressed the negative metacognitive belief that engaging in threat monitoring resulted in feeling exhausted.

### **Coping Behaviours**

Participants (5 specialists, 6 bereaved) indicated bereaved people held the positive metacognitive belief that some coping behaviours were a means to regulate grief symptomatology. Cognitive, emotional and behavioural coping strategies involving the suppression of emotions, thoughts and images and/or the use of distractions (e.g., keeping busy) were employed as a means to avoid the intense emotions associated with thinking about the death/deceased. Avoidance of future-oriented activities was driven by the metacognitive belief that doing so was a means to avoid the reality that the deceased would not be returning. Similarly, avoidance of relinquishing the deceased's possessions was viewed as a means to prevent the distress associated with the reality of the loss. The data indicated some bereaved people held the positive metacognitive belief that conducting rituals and spending time with symbolic objects (e.g., gifts from the deceased or the deceased's possessions) maintained a connection with the deceased. The data indicated that at times, the rituals impaired the participants' ability to engage freely in activities, as the activity had to be structured around the rituals. For instance, symbolic objects had to be taken on holidays to ensure the ritual was maintained.

However, at the same time, participants (5 specialists, 5 bereaved) expressed the negative metacognitive belief that engaging in coping behaviours was exhausting. For example, some participants reported their grief did not dissipate through the use of suppression as a coping strategy. Rather, they reported that it occurred spontaneously when least expected. Other participants recognised the coping behaviours they were using made it more difficult for them to release pent up emotions and bereaved participants' spoke of feeling exhausted, numb, guilty, and more vulnerable after using them.

### **Discussion**

The findings of this preliminary study provide initial evidence that the metacognitive model of psychological disorder (Wells & Matthews, 1996) may be relevant for understanding the development and maintenance of PGD. Individuals with prolonged grief symptomatology were found to hold positive and negative metacognitive beliefs about grief-related coping processes. In line with previous work on depression (Papageorgiou & Wells, 2001), individuals with prolonged grief symptomatology were found to have positive metacognitive beliefs about repetitive negative thinking being a useful coping strategy to problem solve, cope and find answers; negative metacognitive beliefs that repetitive negative thinking was uncontrollable or could cause harm; and positive metacognitive beliefs about the benefit of coping behaviours (e.g., suppression, rituals). The participants in this study described several well-established societal expectations that underpin these metacognitive beliefs: personal expectations for one's grief, social expectations about appropriate grief reactions and dominant cultural expectations that restrict rather than support bereavement (Breen & O'Connor, 2007; Costa, Hall, & Stewart, 2007; Harris, 2010). These expectations could become internalised (Breen & O'Connor, 2009; Kauffman, 2002) and may subsequently lead bereaved individuals to engage in maladaptive coping strategies (e.g., repetitive negative thinking) due to rigidly held metacognitive beliefs (e.g., "I must not stop thinking about the deceased").

Although there was some variety in how the metacognitive beliefs about the coping process were used (e.g., repetitive negative thinking was used for: making sense of the death, its preventability, maintaining loyalty), there was consistency in the metacognitive beliefs articulated about the advantage/disadvantage of the function of the coping process. However, the way some of these metacognitive

beliefs manifested was found to be different to those observed in other psychological disorders (Bailey & Wells, 2015; Papageorgiou & Wells, 2001; Wells & Cartwright-Hatton, 2004). For instance, the study identified positive metacognitive beliefs that could potentially be new and specific to grief such as: the importance of using repetitive negative thinking for the preservation of memories; emotional regulation to show respect/love for the deceased; and coping behaviours to avoid the reality of the loss (e.g., suppression) and to maintain a connection with the deceased (e.g., the use of symbolic objects/rituals). Metacognitive beliefs such as these could be problematic, as they may prevent bereaved individuals from accommodating the loss into their lives.

Positive metacognitive beliefs about the use of repetitive negative thinking to remain connected to the deceased or to avoid the reality of the loss could keep people focused on memories from the past, instead of developing future-orientated coping strategies. Moreover, positive metacognitive beliefs promoting the use of worry or threat monitoring to prepare for the future by focusing on threats/problems and suppression to avoid thoughts, emotions and intrusive images could increase distress and serve to reinforce concerns of vulnerability (de Bruin, Muris, & Rassin, 2007; Wells & Carter, 2001). It is also possible coping behaviours elevate the importance of metacognitive beliefs. For instance, the positive metacognitive belief “This ritual/object maintains a connection with my loved one” could result in people fusing the deceased person with the object, rather than seeing the object as separate to the deceased (Fisher & Wells, 2008). Metacognitive beliefs may make thoughts more powerful by changing the emotion linked to the thought. Therefore, metacognitive beliefs about coping processes could potentially intensify and prolong grief symptomatology.

This study is the first to explore the metacognitive beliefs involved in prolonged grief and was innovative in its focus on the metacognitive beliefs pertaining to loss and the coping strategies employed to deal with prolonged grief. However, the study is not without its limitations. The sample was small, comprised only women, and did not include all common methods of death or relationships to the deceased. Samples comprising mostly women are very common in bereavement research (Genevro et al., 2004; Newson, Boelen, Hek, Hofman, & Tiemeier, 2011). Due to the narrow objective of this study, a sample of 12 participants was sufficient to identify if metacognitive beliefs were involved in prolonged grief symptomatology

(Creswell, 1998; Morse, 1995). The information gleaned from the specialist interviews reflected instances across various ages, gender and types of death, and a range of examples pertaining to coping processes were identified across the sample. However, future research should be conducted to explore metacognitive beliefs in larger and more diverse samples, as it is possible different metacognitive beliefs may emerge. Future research could also compare those with high and low levels of grief symptomatology to investigate if these metacognitive beliefs are specific to those with PGD. Such research would further refine metacognitive interventions for this vulnerable group. An additional avenue of research concerns the development of a metacognitive scale specifically for PGD that could be used to explore the association between the endorsement of metacognitive beliefs about coping processes and PGD.

These tentative findings indicate there may be potential value for conceptualisations/models of PGD that include the role of metacognitive beliefs in maintaining coping processes. The preliminary findings suggest that it may be the way thoughts are processed that prevents people with prolonged grief symptomatology from integrating the loss into their lives. These individuals may process grief in a manner that engages unhelpful metacognitive beliefs about coping processes that impede their ability to accommodate the loss. These preliminary findings offer support for the potential value of targeting metacognitive beliefs in treatment programs for PGD. Such interventions would need to focus on unhelpful metacognitive beliefs, and assist bereaved people to identify and regulate maladaptive coping processes.

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## Appendix

### Interview Guide (Bereavement Specialists)

I would like to hear about your understanding of Prolonged Grief. I hope that this information will assist in developing an effective treatment for those suffering from this form of grief. I would like to ask you some detailed questions about your patients/clients' experiences of prolonged grief.

- 1) Can you please describe a typical 'case' of prolonged grief? (*prompt: or can you tell me about a client who had prolonged or complicated grief?*)
  - 2) From your experience, describe how often clients spend thinking about their loved ones (*prompt: that is how much time would be spent each day thinking about them?*)
  - 3) What typically happens when they think about their loved one?
  - 4) What types of thoughts do they have?
  - 5) Would you say these thoughts can be useful, and if so, how are they helpful/useful for the bereaved person?
  - 6) What do they find less useful, or problematic, about these thoughts?
  - 8) Do your clients spend a lot of time worrying or ruminating?
    - If yes, what do they worry about?
    - What do they ruminate over?
  - 9) Do these clients' think there are advantages to thinking in these ways?
  - 10) Do your clients' think there are disadvantages to thinking in these ways?
  - 11) Do your clients' try not to think about the loss?
    - If yes, what do they do to try to stop their thoughts?
    - How effective are these strategies?
  - 12) How do they manage their symptoms?
  - 13) Do your clients' carry out any rituals for the deceased?
    - If yes, please describe typical patterns of thinking that clients' employ when engaging in rituals?
    - How do they feel before, during and after the rituals?
    - What are the advantages/disadvantages of doing these rituals?
  - 14) What works best in supporting or treating your clients?
  - 15) Are there any other issues that you are aware of that I have not covered?
- We've come to the end of my questions. Thank you for your time.

### Bereaved Interview Guide

I would like to hear about your experiences in your own words, or from your point of view, since your (relationship to deceased and phrase used by each participant - e.g. since your son passed away). I hope that this information will assist in developing effective supports for those grieving the death of a loved one.

- 1) Tell me about how grief is for you?
  - 2) Tell me about a typical day?
  - 3) What happens when you remember (name)? Emotions?
    - How do you feel when you remember (name)?"
  - 4) How often or how much of your day, do you think of (name)?
    - What's positive about that?
    - What's less positive about that?
  - 5) Give me an example of the types of thoughts you have?
    - Why do you think this happens?
    - When this happens, what do you do?
  - 6) What are the good things about these thoughts?
  - 7) What are the less positive things about these thoughts?
  - 8) Can you describe what happens when you are thinking about your loved one?
    - Do you feel in control of your thoughts?
    - If you're not in control, what do you do?
    - Do you try to stop the thoughts?
    - How do you try to stop the thoughts?
  - 9) Do you sometimes keep going over what happened?
    - If yes, does this help or is this helpful to you?
    - How is this unhelpful to you?
  - 10) Do you think anything could happen to you from having these thoughts? Give me an example?
  - 11) Can you give me an example of things you do to feel closer to, to remember, or in remembrance of (name)?
    - Why do you do this?
    - What's positive about that?
    - What's negative about that?
    - What do you think about whilst doing .....?
    - How do you feel before, during and after doing .....?
    - What do you think would happen if you stopped?
  - 12) Has anything taken on a new meaning for you.
  - 13) Are you concerned how you will be perceived by others?
  - 14) What do you do to manage your distress? What are the advantages/disadvantages of doing these?
  - 15) What would it mean if you stopped thinking about (name)?
- Is there anything else you can think of that I haven't asked you? We've come to the end of my questions. Thank you for your time. How are you feeling?

## CHAPTER 5

### Program Development

People get lots and lots of messages that they should be better, they should be moving on, they should be ok, and the reality is that when you have lost somebody that was a significant part of your life, you're not ok in 12 months. (Bereavement specialist)

#### 5.1 Overview

The program development phase of this research program involved a sequential methodological approach to develop a theory-driven and empirically-based metacognitive intervention for PGD. Step one entailed a literature review (see Chapter 2), which identified that several maladaptive coping processes were risk factors for PGD and that these coping processes could be the product of a person's metacognitive beliefs about the function they served. Step two involved semi-structured interviews with bereavement specialists ( $n = 6$ ) and bereaved people with elevated levels of prolonged grief symptomatology ( $n = 6$ ) to identify if metacognitive beliefs were relevant to PGD (see Chapter 4). Step three used the information gleaned from the first two steps to adapt Metacognitive Therapy (Rees & van Koesveld, 2009; Wells, 2005) for treatment of prolonged grief. This chapter outlines in detail each step and concludes with the outline of the Metacognitive Grief Therapy (MCGT) program.

#### 5.2 Initial Program Development

**5.2.1 Step one.** At the outset of this study in 2012, a literature review revealed interventions for PGD were scarce. A frontier study involving a 20-session cognitive behavioural treatment comprising exposure therapy, interpersonal therapy, and motivational interviewing specifically designed for complicated grief (Shear et al., 2005) and a 12-session intervention comprising six-sessions of cognitive restructuring and six-sessions of exposure (Boelen et al., 2007) demonstrated reductions in PGD symptomatology. Similarly, a 10-session internet intervention involving writing assignments over a five-week period comprising exposure and cognitive restructuring to help people process the loss was found to reduce symptomatology significantly in comparison to no-treatment (Wagner et al., 2006). However, these interventions for PGD were complex in terms of the number of treatment components used, and there was little description regarding their

theoretical foundation or evidence-base. Further, they had only moderate effect sizes (Jordan & Litz, 2014; Wittouck et al., 2011). These effect sizes supported the use of therapeutic interventions for PGD, but raised questions about what more could be done to tailor interventions to target the mechanisms underlying PGD directly.

The outcomes of comparative studies trialling exposure therapy against cognitive restructuring and behavioural activation (Boelen et al., 2007; Eisma, Boelen, et al., 2015) found exposure therapy produces greater reductions in PGD symptomatology than behavioural activation or cognitive restructuring. The findings from these studies suggest that treatments targeting the way loss-related thoughts, emotions and images are processed may be more effective than challenging and restructuring the content of maladaptive thoughts. However, exposure therapy requires several individual sessions as each person's death story is unique and, as such, may not be cost effective or feasible for some services that can only offer a limited number of sessions or support groups. Thus far, the most effective group interventions have required additional individual sessions of exposure therapy with a therapist (Bryant et al., 2014; Maccallum & Bryant, 2011; Rosner et al., 2011).

Furthermore, group interventions for PGD have experienced substantial attrition and have not produced the effect sizes achieved by individual interventions (Bryant et al., 2014; Maccallum & Bryant, 2011; Piper, Ogrodniczuk, Joyce, Weideman, & Rosie, 2007; Rosner et al., 2011; Supiano & Luptak, 2014). Although research has shown some bereaved people have expressed interest in participating in support groups to identify with similar others (Dyregrov & Dyregrov, 2008), it has been argued the large attrition rates observed in group participation may result from the distress elicited from being exposed to others' death stories (Johnsen et al., 2012; Supiano & Luptak, 2014).

A further review of the literature found a number of studies that pointed to the importance of coping processes such as rumination and worry in response to grief-related thoughts, emotions and images, as potential mediators of PGD (Boelen, 2010; Eisma et al., 2017; Eisma et al., 2013). The literature also indicated that a person's metacognitive beliefs about these maladaptive coping processes used to manage distress are associated with the development and maintenance of emotional disorders (Wells et al., 2009). Thus, this research sought to overcome the shortcomings of previous interventions by trialling a Metacognitive Grief Therapy (MCGT) in a

group setting, as this form of therapy does not involve exposure to the content of death-related thoughts.

Important components required in MCGT include techniques targeting maladaptive coping processes (Boelen et al., 2016; Eisma et al., 2017; Eisma et al., 2013; Field et al., 2003; Nolen-Hoeksema et al., 1994) and maintaining PGD symptomatology (e.g., anxiety, hyperarousal, and low mood; Horowitz et al., 1997; Prigerson & Jacobs, 2001; Shear et al., 2011). However, the literature review revealed there was an absence of a metacognitive model for prolonged grief and no randomised controlled trials of metacognitive interventions for prolonged grief, which made it difficult to trial this form of therapy with people experiencing PGD. Therefore, step two sought to explore if the model was theoretically applicable to this population.

**5.2.2 Step two.** A number of bereavement service providers and people with elevated prolonged grief symptomatology were interviewed to gain an insight of instances that were perceived to be representative of metacognitions involved in PGD. A constant comparison method (Lincoln & Guba, 1985) was used to compare the information within and between the interviews to reveal the differences and similarities in the coping processes employed by people with PGD; and the metacognitions that may be underlying them. The salient metacognitions involved in PGD were then used to inform the development of MCGT. The interviews conducted with the key informants (see Chapter 4) identified the presence and content of several positive and negative metacognitive beliefs directing the application of maladaptive coping processes.

**5.2.3 Step three.** The first two steps, outlined above, suggested that MCGT would need to incorporate techniques that target metacognitive beliefs about repetitive negative thinking, emotional regulation, threat monitoring (in response to images, thoughts, places and situations related to the loss), and maladaptive coping behaviours (e.g., obsessive rituals/spending time with objects, substance misuse and avoidance coping behaviours such as suppression and social withdrawal). This information was vital to ensure that MCGT specifically targeted all the maintaining factors to treat PGD effectively. The information was used to draft an outline of the program and a facilitator manual. The initial draft was then discussed and refined through consultation with a clinical psychologist, two grief experts and bereaved participants experiencing prolonged grief symptomatology for feedback.



### **5.3 Clinical, Expert and Bereaved Participant Consultation and Feedback**

Following development of the initial draft for the MCGT program by the PhD candidate (Wenn), the supervisory team (two experienced grief researchers and a clinical psychologist) were consulted for feedback. Feedback was obtained in the form of hand written notes on a hard copy of the draft under review. The main change suggested was that the language and some of the examples needed to be simplified to ensure that participants could quickly gain a clear understanding of the metacognitive concepts and their relevance to the grieving process. Additional examples were also suggested for use in group exercises and discussion. This feedback, and suggested amendments, was integrated into the MCGT manual and reviewed again by the supervisory team for further feedback.

Once the final draft was completed, each session of the manual was reviewed with a clinical psychologist experienced in the delivery of Metacognitive Therapy (Rees) this expert consultation increases the effectiveness of treatment implementation and integrity (Kelleher, Riley-Tillman, & Power, 2008). The MCGT program was deemed to be clinically sound by the experienced clinical psychologist, in that it aligned well with the metacognitive model and had good use of examples, practice exercises and homework. A bereaved participant with PGD (from the qualitative study - Chapter 4) and a facilitator of a bereavement support group were then consulted to provide feedback on the final manuscript. The bereaved participant confirmed the appropriateness and suitability of the MCGT program from her perspective; reflecting that reading the metacognitive examples made her realise that although each person's experience of grief was unique, their beliefs about coping processes were similar. The bereavement service provider considered the MCGT program for bereaved people to be appropriate and found the examples and content relatable and relevant. She highlighted that MCGT did not pathologise grief; rather, it would help people develop strategies to manage their grief.

### **5.4 A Metacognitive Formulation of Prolonged Grief**

The metacognitive model of PGD (Figure 1) was developed from the findings from the first two steps above and is based on Wells' metacognitive model of psychological disorder (Wells, 1999; Wells & Matthews, 1996). Within the metacognitive model of PGD, expectations for grief are triggers for the development of repetitive negative thinking and threat monitoring, which leads to maladaptive coping behaviours and PGD symptomatology. The way in which negative thoughts

about grief were processed was conceptualised as the trigger for the development of PGD rather than the grief experienced following the death of a significant other.

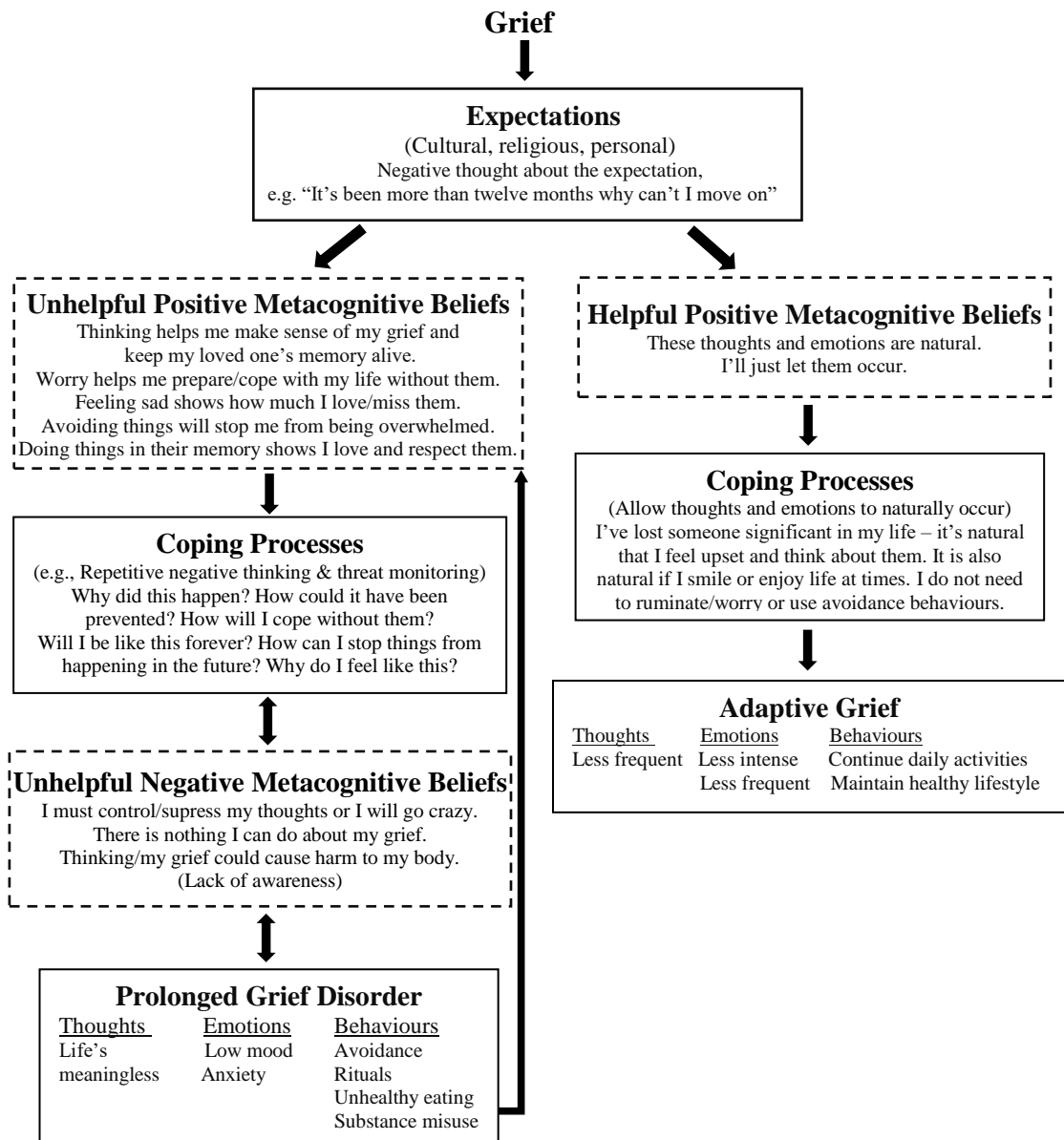


Figure 1. Metacognitive Model of Prolonged and Adaptive Grief

### 5.5 Metacognitive Grief Therapy

The MCGT program was promoted as a workshop in an effort to overcome the stigma associated with attending bereavement support groups (Bambauer & Prigerson, 2006). Past studies have found the proportion of bereaved people who attend bereavement support groups is small (Levy & Derby, 1992) due to cultural views that seeking support is a sign of weakness and vulnerability, and should thus be avoided (Blazina & Marks, 2001). The term workshop implied that the sessions

would be psychoeducational rather than supportive and, as such, would be more likely to be perceived as growth-oriented rather than support seeking (Blazina & Marks, 2001). The MCGT workshop comprised six two-hour group sessions as this number of sessions has been successfully used with other disorders (Wells et al., 2009; Wells & King, 2006). Three groups were held at Curtin University Psychology Clinic and one in a geographically convenient library group room in an outer metropolitan area.

MCGT is theory driven in that it is informed by the maintaining factors identified in the literature and a theoretical model (see Figure 1) that could account for the development and maintenance of PGD. The literature search regarding maladaptive grief-related coping processes and their role in the development of pathological symptoms (Boelen, 2010; Eisma et al., 2017; Eisma et al., 2013) indicated that the metacognitive model provided the clearest conceptualisation of the maintenance of PGD symptomatology (Papageorgiou & Wells, 2001; Wells, 1995; Wells & Matthews, 1996). Within this framework, bereaved people's attentional bias towards loss stimuli keeps people 'stuck' in intense grief, due to the development of a cognitive attentional syndrome involving repetitive negative thinking, threat monitoring and maladaptive coping behaviours. MCGT is empirically driven, in that the grief related metacognitions used in the program are drawn from semi-structured interviews with grief specialists and people experiencing PGD symptomatology. The above metacognitive model for grief, developed from these empirical findings (see Figure 1) became the framework for MCGT.

The main focus of MCGT was to help people acknowledge and allow grief related emotions, images and thoughts to occur naturally without interfering with them (e.g., by using repetitive negative thinking or suppression). The literature consistently identified grief-related rumination was a risk factor for PGD so participants were asked not to discuss the events surrounding the death during the workshop to limit co-rumination and vicarious trauma (Johnsen et al., 2012). This was sensitively approached during the assessment session by explaining the metacognitive model of grief and providing a brief explanation of the CAS (Wells & Matthews, 1996). Participants were informed that the purpose of the workshop was for them to increase their knowledge of prolonged grief and to learn new skills and techniques to help them manage their grief. Some participants expressed relief that they would not be exposed to the grief of others; stating that friends had questioned

why they would join a grief group and surround themselves with sadness when they were already sad. During the workshop, the facilitators attempted to redirect participant discussions (co-rumination) from death stories back to challenging the metacognitions impeding the grieving process. This was achieved by identifying the metacognitive belief underlying the topic of conversation (e.g., the need to keep thinking/talking about the unfairness of the death), identifying the distressing emotions elicited (e.g., anger/sadness), and exploring more helpful metacognitive beliefs (e.g., It is unfair and it's ok to feel sad. I don't need to ruminate about why it is unfair). Redirecting the topic of conversation demonstrated to participants how to identify unhelpful metacognitive beliefs and switch attentional focus from maladaptive coping processes (e.g., repetitive negative thinking).

### **5.6 Presentation Style**

MCGT was delivered via a PowerPoint presentation to capture people's attention through the use of visual aids (e.g., colourful pictures that exemplified the concepts) and an audio soundtrack (overlapping sounds) made by the Doctor of Philosophy candidate (Wenn) for attention training (for a full description of attention training, see Wells, 2007, 2009). The aim of providing complex information in an aural, written and visual format was to aid comprehension and accommodate different learning styles (e.g., visual, verbal and written) as research shows that learning is facilitated by using different approaches (Shah, Ahmed, Shenoy, & Srikant, 2013). Participants who did not wish to participate in written exercises were encouraged to think about their answers, so that they could still participate in group discussions. A white board was also used to capture and explore participants' metacognitive beliefs in detail. For example, if a person had the metacognition 'ruminating about why this has happened will help me find an answer' the subsequent chain of thoughts would be written on the whiteboard (e.g., 'why did this happen'... 'how could it have been prevented'... 'I won't cope without them'... 'there is nothing to look forward to'... 'will I feel like this forever'... 'my life is meaningless') and the usefulness of the metacognition and resulting thoughts and emotions would then be discussed further.

### **5.7 Program Outline**

The MCGT manual comprised three components: engagement in therapy (session 1), Metacognitive Therapy techniques (session 2 - 4), and maintenance/relapse prevention (sessions 5 – 6). Each session introduced the

structure for that session, reviewed homework (week 2 onwards), introduced metacognitive concepts and techniques and explained the homework required for the next week. At the beginning of each session participants were asked to complete the Bereavement Scale (see Appendix G) to identify the grief-related metacognitive beliefs and behaviours that needed to be explored and to assess their current level of distress, rumination and worry. An overview of the MCGT modules is presented below and the session outlines are available in Appendix H.

**5.7.1 Module one.** The objective of the first module was to familiarise participants with the group members, provide grief psycho-education, debunk cultural myths (e.g., expectations about grief), socialise participants to the metacognitive model of grief, enhance awareness of metacognitions, and practice the self-monitoring of metacognitions. Psycho-education was provided by normalising grief symptoms and explaining what causes grief to become pathological (e.g., PGD), and by discussing the metacognitive model of prolonged grief. Participants were asked to complete a worksheet (with assistance from the facilitators, if required) to explore their own metacognitive maintenance model (see Appendix H worksheet 1.2). The importance of self-monitoring metacognitions was discussed and participants were socialised to metacognitive thought diaries to challenge unhelpful metacognitions (see Appendix H worksheet 1.3).

**5.7.2 Module two.** The objective of the second module was to increase participants' awareness of unhelpful metacognitions about coping processes and their impact on thoughts, emotions and behaviours. This involved group exercises to help people identify and challenge unhelpful metacognitions (e.g., unhelpful: 'If I don't think about them, I will forget them'; helpful: 'They will always be a part of my life even if I'm not thinking about them'). Psychoeducation on thoughts was provided to support people's ability step back and observe thoughts rather than accepting them as facts or as important, and automatically engaging with them (e.g., acting on them, judging, over analysing, suppression). A suppression exercise (e.g., staring at a green frog for one minute and then trying to suppress thoughts of the frog for one minute; see Wells, 2005) was practiced to demonstrate the counter-productiveness of using suppression to control/stop intrusive thoughts and images. Metacognitive strategies were then taught to participants to support their ability to separate themselves from their thoughts, such as detached mindfulness and rumination/worry postponement (for a full description, see Wells, 2005). The following metaphor was used by the

facilitator to depict the importance of utilising detached mindfulness to allow thoughts, images and emotions to occur naturally:

*Grief is like large waves in the ocean: If you try to outswim them (avoidance), stop them (suppression) or thrash your way through them (repetitive negative thinking); they will just take you with them, crash over you and suck you under into the white wash; where it's hard to see a way out. However, if you just allow your body to float over them, it requires less energy and they will eventually pass. In time, the waves will reduce in size, become further apart and you will be able to see your way to shore.*

**5.7.3 Module three.** The objective of the third session was to gain a deeper understanding of the benefits gained from using detached mindfulness and to introduce and practice attention training. Experiential exercises were conducted to increase participants' competency in using detached mindfulness and to provide opportunities for people to experience how detachment from thoughts reduces distress. Participants were encouraged to allow thoughts, emotions and images to occur naturally without interfering with them (e.g., suppression, repetitive negative thinking, threat monitoring), and to become a passive observer of their grief. Participants were then introduced to the concept of attention training (Wells, 2005) as a useful strategy to redirect attention once detached mindfulness had been used to disengage from chains of repetitive negative thinking.

Psycho-education was provided to increase participants' awareness of how repetitively focusing attention on the same information instructs the brain to become alert to similar information in the future (Wells, 2009). Simply stated, it was explained that what captures your attention also captures your emotions, actions and life. This concept was then discussed in relation to the participants' support networks to help them understand that when people were not providing support it was possible their attention was focused on issues in their own lives rather than not caring. Helpful metacognitions that support the need to ask for help, or seek interaction if people did not provide support, were discussed (e.g., I do not need to ruminate about why people do not care about me, I can contact them when I need support).

**5.7.4 Module four.** The objective of session four was to challenge any lingering metacognitions about thoughts being uncontrollable and/or that repetitive negative thinking was a necessary coping strategy. Unhelpful metacognitive beliefs about avoidant coping were explored and challenged. Participants were asked to

complete a pleasant activity schedule to identify and challenge metacognitions that would impede engagement in activities and self-care. Participants were introduced to the concept of using situational attentional refocusing instead of threat monitoring (focusing on internal or external sources of threat); whereby attention was directed towards non-threatening cues rather than potential threats. Situations participants avoided due to concerns of potential threat/danger or hyperarousal were discussed, and non-threatening cues they could focus on instead were considered. For example, rather than thinking ahead about all the possible threat/dangers that could be encountered at a traffic intersection where a significant other died, they could look for non-threatening cues such as cars slowing down and stopping as they approached the intersection.

**5.7.5 Module five.** The fifth session involved a review of the material covered in previous sessions to consolidate the information learned and to strengthen the use of new skills by practicing the techniques covered. A maintenance plan was completed by participants to encourage continued application of the principles learned and to modify remaining unhelpful metacognitive beliefs. Participants were prepared for the end of the program by discussing and addressing any concerns in relation to the sessions coming to an end.

**5.7.6 Module six.** The final session focused on maintaining the skills developed by further practice of detached mindfulness and attention training techniques. Participants were asked to compare their bereavement scale scores from session one against those of the bereavement scale completed at the beginning of the session. This enabled participants to gauge their progress, identify areas of concern that required further work, and celebrate any gains achieved (regardless of how small). Strategies to maintain treatment gains were discussed and participants were encouraged to look back on the workshop notes to help them through difficult times. Managing setbacks and relapse prevention strategies were also discussed. Participants were advised that implementation of the techniques learnt during the program would need to be ongoing as it was usual for grief to peak and trough.

## **5.8 Summary**

There is a clear need for interventions that target the mechanisms maintaining PGD symptomatology (Jordan & Litz, 2014; Wittouck et al., 2011). This chapter outlined the development of a group MCGT program that incorporates strategies targeting the mechanisms directly maintaining PGD. MCGT was developed across

three steps. The first involved a literature review, which synthesised information from current empirically supported interventions for PGD, identified coping processes (e.g., rumination/worry) that may be risk factors for PGD and revealed that these coping processes could be driven by a person's metacognitive beliefs about their utility. Interviews were then conducted with bereavement specialists and bereaved people to identify the metacognitive beliefs linked to maladaptive coping strategies maintaining PGD. The final step used the metacognitive beliefs identified to formulate a metacognitive model for PGD and to guide the development of the MCGT program. Clinicians', experts' and bereaved peoples' experiences were drawn on to ensure the final draft of MCGT was clinically sound and appropriate prior to conducting the next phase of this research, which involves a pilot randomised controlled trial with a 3- and 6-month follow-up.



## CHAPTER 6

### **Metacognitive Grief Therapy: A Pilot Randomised Controlled Trial**

#### **6.1 Overview**

Chapter six provides the outcomes from the pilot randomised controlled trial of the group Metacognitive Grief Therapy (MCGT) program developed in phase one of this research project. This chapter details phase two and three of this project which involved the implementation and evaluation of the feasibility of the group MCGT program for people experiencing PGD. This chapter will provide a detailed account of the findings from the pilot randomised controlled trial of MCGT with a 3- and 6-month follow-up. The study was registered prior to the pilot RCT trial with Australian New Zealand Clinical Trials Registry: ACTRN12613001270707. Significant portions of the research from this chapter are under review for publication: Wenn, J., O'Connor, M., Kane, R. T., Rees, C. S., & Breen, L. J. (under review). A pilot randomised controlled trial of Metacognitive Therapy for prolonged grief disorder.

**A pilot randomised controlled trial of Metacognitive Therapy for prolonged grief disorder**

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**Abstract**

Prolonged Grief Disorder (PGD) is associated with significant distress and impairment and thus efforts to improve treatments are essential. The present study tested the efficacy of group Metacognitive Grief Therapy (MCGT) for PGD. Bereaved adult participants were randomly assigned to either a wait-list control ( $n = 10$ ) or a six-session intervention condition ( $n = 12$ ). Post-treatment intent-to-treat analyses showed MCGT reduced PGD symptomatology (Cohen's  $d = 1.7$ ), depression ( $d = 1.3$ ), anxiety ( $d = .8$ ), stress ( $d = 1.0$ ), repetitive negative thinking ( $d = .9$ ) and increased quality of life ( $d = .6$ ), and these effects were maintained at the 3- and 6-month follow-ups. No pre-post between-group differences were found in metacognitions, but large gains were identified from MCGT at the 3- and 6-month follow-ups ( $d = 1.0$ ). The results show promise for the utility of MCGT for reducing psychological distress and promoting quality of life.

**Key Words:** Prolonged grief disorder; Complicated grief; Group; Metacognitive Therapy; Pilot trial.

## Introduction

Prolonged Grief Disorder (PGD) is a debilitating condition experienced by approximately 7% of the bereaved population (Aoun et al., 2015; Kersting, Brähler, Glaesmer, & Wagner, 2011). Those experiencing PGD find it difficult to come to terms with the loss, lose their sense of purpose in life, and experience an unremitting yearning for the deceased (Prigerson et al., 2009). This intense distress is associated with social and occupational impairment and high levels of morbidity, suicidality, depression, and substance use (Prigerson, Vanderwerker, & Maciejewski, 2008). PGD is known to persist without adequate treatment (Lichtenthal et al., 2011), thus it is important people experiencing PGD symptomatology are identified and provided with support. The Diagnostic and Statistical Manual of Mental Disorders (DSM; APA, 2013) has included Persistent Complex Bereavement Disorder in its latest edition as a condition for further study and the International Classification of Diseases (ICD) is considering PGD as a category under stress related disorders (Maercker et al., 2013). Treatments specifically for PGD to ameliorate the loss of functioning and psychosocial distress resulting from bereavement are needed, and research is required to test the efficacy of these interventions.

Emerging evidence supports the use of psychosocial interventions designed to target PGD directly using components of cognitive behavioural therapy, such as restructuring the content of maladaptive thoughts, motivational interviewing, exposure therapy, and behavioural activation (Jordan & Litz, 2014). However, it is still not clear which therapeutic component(s) are most necessary for change (Breen, Hall, & Bryant, 2017) and a substantial proportion of participants does not achieve clinically significant reductions in symptomatology (Doering & Eisma, 2016). Unlike other psychological disorders, such as depression and anxiety, PGD involves mental anguish over many realistic thoughts about the events surrounding the death and the consequences of the loss (e.g., shock the deceased won't be returning, financial stressors), rather than maladaptive thoughts about perceived threat (Stroebe & Schut, 1999).

Research has identified excessive worry about the uncertainty of the future and repetitive thinking about the events and emotions related to the loss both intensify PGD symptomatology (Boelen, 2010; Boelen, Reijntjes, & Smid, 2016; Boelen, van den Hout, & van den Bout, 2006; Ehring & Watkins, 2008; Eisma et al., 2017; Eisma et al., 2014). Recent research has demonstrated that the use of

rumination as a coping process may be associated with poor bereavement outcomes (Eisma, Schut, et al., 2015) with a growing body of literature suggesting that rumination may be used as an anxious avoidant coping process by the bereaved as a means to avoid the reality of the loss (Eisma, Rinck, et al., 2015; Eisma et al., 2013). Therefore, a treatment for PGD that addresses the coping processes used to manage loss-related thoughts may be more effective than addressing the content of maladaptive thoughts.

Within the large family of cognitive behavioural therapies are contemporary approaches that do not emphasise modification of the content of thoughts. Rather, there is recognition that, for some clinical problems where rumination is a predominant feature, approaches that emphasise modification of this unhelpful process may be key in reducing overall distress. One such approach is metacognitive therapy (MCT), underpinned by the metacognitive model of psychological disorder, which is framed within a general *self-regulatory executive function model* (S-REF) and wherein attention to information is guided by a person's metacognitive beliefs about the purpose thoughts and behaviours serve (Wells & Matthews, 1994). The metacognitive model proposes that it is an individual's metacognitive beliefs about traumatic memories (e.g., I need to control distressing thoughts, I must ruminate to fill gaps in memory) that maintain persistent intrusions and prevents adaptive emotional processing (Bennett & Wells, 2010). Within this model, metacognitive beliefs that support the use of repetitive thinking create a cognitive-attentional syndrome (CAS; Wells & Matthews, 1994). The CAS involves chains of worry/rumination, threat monitoring and maladaptive coping behaviours (e.g., thought suppression and avoidance behaviours) that keep people exclusively focused on negative information.

Recent studies of MCT for mood and anxiety disorders have found enhancing an individual's knowledge and regulation of maladaptive cognitive processes reduces functional impairment significantly (McEvoy, Mahoney, Perinib, & Kingsep, 2009; Wells et al., 2012; Wells et al., 2008). MCT targets positive metacognitive beliefs about the advantages of engaging in rumination/worry and maladaptive avoidance coping behaviours (e.g., thought suppression), and negative metacognitive beliefs about thoughts being uncontrollable. The metacognitive model complements the dominant grief model, which is the Dual Process Model of Coping with Bereavement (DPM; Stroebe & Schut, 1999).

The DPM proposes that pathological grief occurs when exclusive focus is on either the loss (resulting in intense and unremitting grief) or restoration (resulting in denial or inhibition of grief). Metacognitive beliefs may keep bereaved people focused on loss issues, preventing them from integrating the loss into their lives and planning for the future. Therefore, treatment for PGD may be more effective if the focus is shifted away from the content of thoughts and toward the modification of unhelpful metacognitive beliefs that maintain a focus on the loss without an integration of the loss into their lives. Thus, the aim of this pilot study is to explore the efficacy and feasibility of a targeted metacognitive therapy (MCT) for PGD via a preliminary randomised controlled trial.

### **Hypotheses**

1. The intervention group will report significantly greater pre-post decreases in PGD symptomatology, metacognitions, repetitive negative thinking, depression, anxiety and stress, compared to the wait-list group.
2. The intervention group will report a significantly greater pre-post increase in quality of life, compared to the wait-list group.
3. For the intervention group, post-intervention changes in PGD symptomatology, metacognitions, repetitive negative thinking, depression, anxiety, stress and quality of life will be maintained at the 3- and 6-month follow-up.

### **Method**

#### **Trial Design**

The pilot trial for the efficacy of Metacognitive Grief Therapy (MCGT) for PGD was evaluated by using a randomised treatment/waitlist control group design with a 3- and 6-month follow-up (Wenn et al., 2015; see flowchart Fig. 1). The independent variables were group condition (MCGT; WL) and time. The dependent variable was treatment response, measured by the change in scores for grief symptomatology, depression, anxiety, stress, metacognitions, repetitive negative thinking, and quality of life. Conducting a pilot trial allows the operational components of the study to be tested to identify problems that may arise in a complex RCT (Eldridge et al., 2016). Such as, the willingness of participants to be randomised into a wait-list control condition, recruitment difficulties, the suitability of outcome measures, treatment acceptability, and attrition/follow-up rates (Arain, Campbell, Cooper, & Lancaster, 2010; Eldridge et al., 2016).

Assuming ‘moderate to large’ effects as shown in previous MCT intervention studies (Burnett, Middleton, Raphael, & Martinek, 1997; Wells et al., 2012), a conservative a priori G\*Power (Version 3.1; Montori & Guyatt, 2001) estimate showed 34 participants would provide an 80% chance of capturing intervention effects at an alpha-level of .05. Unfortunately, the sample size obtained in this study was smaller ( $n = 22$  intent-to-treat /  $n = 18$  completers). This may be due to the homogeneity of the group, dominant cultural assumptions that grief is a normal process that does not require intervention (Breen & O'Connor, 2007) or because we were drawing from a small proportion of a remote population (Perth, Western Australia). However, the small sample including the wait-list control group was considered sufficient for a pilot trial (Eldridge et al., 2016).

### **Participants**

Participants were bereaved individuals (age range 38 – 78) at least six months post the loss of a significant other. Inclusion criteria were: prolonged grief symptomatology (determined by PG-13 see measures; Prigerson et al., 2009); English speaking; written informed consent; for participants already taking medication (antidepressants/mood stabilisers), they needed to have commenced one month prior to enrollment and the dosage remain the same for the duration of the research. Participant exclusion criteria were: concurrent psychological intervention, substance abuse, high suicidal ideation, or pre-existing psychotic/bipolar/neurological disorder as measured by the Mini International Neuropsychiatric Interview (MINI; Sheehan et al., 1997).

### **Intervention Content and Delivery**

MCT targets the metacognitive beliefs underlying maladaptive coping strategies, which in turn modifies repetitive negative thinking and enhances flexible thinking. It involves attention re-training and the use of detached mindfulness (for a full description, see Wells, 2005) to develop bereaved people’s ability to disengage from emotionally laden thoughts, which in turn provides the space required to build coping strategies and process the loss. Thus, it changes the way distressing thoughts are processed rather than addressing the content. This bodes well for treating grief in a group setting, as individuals with PGD have been found to be less satisfied with group participation, due to co-rumination (conversations with others about the loss) that has been argued to prolong symptoms of yearning and preoccupation with the lost person (Johnsen et al., 2012).

MCGT was adapted from the MCT techniques used by Wells (2005) for emotional disorders, to ensure it aligned with established MCT protocols and comprised the elements required to effectively target unhelpful metacognitive processes. MCGT also incorporated grief specific examples to which bereaved people could relate, derived from interviews with people experiencing PGD symptomatology and bereavement specialists (Wenn et al., 2014). The MCGT protocol comprised grief psycho-education; identifying and challenging metacognitions; strategies for modifying metacognitions; maintenance planning, and relapse prevention (see Table 1; contact first author for details).

Table 1

*Outline of 'Metacognitive Grief Therapy'*

<b>Session</b>	<b>Content</b>
1	Psycho-education on grief/prolonged grief Formulate metacognitive model Enhance awareness of metacognitive beliefs Introduce the importance of self-monitoring metacognitive beliefs
2	Explore the link between metacognitions, emotions and behaviour Identify and challenge unhelpful metacognitive beliefs Introduce and practice detached mindfulness Introduce rumination/worry postponement
3	Detached mindfulness practice Introduce and practice attention training Challenge positive metacognitive beliefs about rumination/worry
4	Practice attention training Challenge negative metacognitive beliefs about thoughts/emotions/images being uncontrollable and positive beliefs about rumination Explore metacognitive beliefs about avoidant coping Introduce situational attentional refocusing Challenge unhelpful metacognitive beliefs about avoiding social and leisure activities

- |   |                             |
|---|-----------------------------|
| 5 | Practice attention training |
|   | Program review              |
|   | Maintenance Planning        |
| 6 | Practice attention training |
|   | Relapse prevention          |
- 

To test the applicability of the tailored face-to-face intervention in a group setting, it was presented as a 6-session workshop (<10 participants). The workshop ran for 2 hours per week over six weeks with refreshments provided and a 5 minute break mid way through, to facilitate the group process by allowing participants time to engage informal support (Jané-Llopis, Hosman, Jenkins, & Anderson, 2003). Each session was facilitated by the primary researcher (first author) and a co-facilitator (both provisionally registered psychologists under supervision) at the university adult psychology clinic or a community centre. A catch-up booster session was offered to participants who missed a session. Participants were asked to perform homework activities between sessions (e.g., self-monitoring metacognitions, detached mindfulness, and attention training).

### **Measures**

To limit error variance in the data structured interviews, self-reported measures and a separate therapist measure were used (Tabachnick & Fidell, 2007). A demographic information sheet was used to obtain descriptive information such as postcode, gender, psychiatric/psychological treatment history, medical history, nationality, employment status, relationship with the deceased, and the date and cause of death.

#### *Diagnostic measures*

*The Mini International Neuropsychiatric Interview* (MINI; Sheehan et al., 1997) was used to identify co-morbid disorders and assess suicidal risk and ideation. It involves a short structured interview based on the DSM-5 or ICD-10 criteria and has a high test-retest reliability (.76 - .93) and validity (Lecrubier et al., 1997).

*The Prolonged Grief Disorder Scale* (PG-13; Prigerson et al., 2009) was used as the primary measure to assess the diagnostic status and severity of PGD. Diagnosis requires endorsement of five criteria: A) bereavement via the death of a significant other, B) separation distress, C) duration  $\geq 6$  months, D) cognitive, emotional, and behavioural symptoms, and E) social/functional impairment. The 13-item scale requires a Yes/No response for two questions and uses a five-point Likert scale (1=



not at all to 5 = several times a day/overwhelmingly) to assess symptom severity. A total score is achieved by summing the scores (range; 11-55). Inclusion in this study required a cut-off score of 26 (Tomarken et al., 2012) or functional impairment (4/5 criteria; A, B, C & E) so that people with elevated or diagnosable levels of PGD could participate. The PG-13 has good internal consistency (Cronbach's  $\alpha = .82$ ) and incremental validity (Lichtenthal et al., 2011; Sealey, Breen, O'Connor, & Aoun, 2015). Internal consistency for PG-13 in the current sample was good ( $\alpha = .80$ ).

*Self-report measures*

*The Core Bereavement Items* (CBI; Burnett et al., 1997) was used as a primary measure of grief intensity. It comprises three subscales: images and thoughts, acute separation and grief. The scores from the subscales can be summed to obtain a total score (range; 0 – 51). The scale has high internal consistency ( $\alpha = .92$ ) and validity (Burnett et al., 1997; Keesee, Currier, & Neimeyer, 2008). The internal consistency in this sample for the total CBI was high ( $\alpha = .86$ ).

*The Depression Anxiety Stress Scales-21* (DASS-21; Lovibond & Lovibond, 1995) assesses depression, anxiety and stress and has high internal consistency for depression ( $\alpha = .94$ ), anxiety ( $\alpha = .87$ ), and stress ( $\alpha = .91$ ) scales and validity (Antony, Bieling, Cox, Enns, & Swinson, 1998; Lovibond & Lovibond, 1995; Szabó, 2010; Taylor, Lovibond, Nicholas, Crayley, & Wilson, 2005). In this sample, it had a high internal consistency for depression ( $\alpha = .88$ ), anxiety ( $\alpha = .87$ ) and stress ( $\alpha = .88$ ).

*Repetitive negative thinking: The Utrecht Grief Rumination Scale* (UGRS; Eisma et al., 2014) measures grief-specific repetitive negative thinking. It has five subscales: thoughts about consequences and meaning of the loss; thoughts about social support; what-if questions; why questions, and thoughts about feelings. A total score can be obtained by summing the subscales (range; 15 – 75) The internal consistency ( $\alpha = .90$ ) and validity (Eisma et al., 2014) of this measure have been shown to be excellent. In this sample, the internal consistency of the total UGRS was high ( $\alpha = .89$ ). *The Repetitive Thinking Questionnaire* (McEvoy et al., 2010) assesses various forms of repetitive negative thinking and comprises two subscales: repetitive negative thinking (RNT) and absence of repetitive thinking. It has high internal consistency ( $\alpha = .72 - .93$ ) and convergent validity (McEvoy et al., 2010). The internal consistency for repetitive negative thinking was high in this sample ( $\alpha = .93$ ).

*The Metacognitions Questionnaire-30* (MCQ-30; Wells & Cartwright-Hatton, 2004) was used to measure metacognitive beliefs. It has five subscales: positive beliefs about worry, negative beliefs about worry concerning uncontrollability and danger, low cognitive confidence, need to control thoughts, and cognitive self-consciousness. A total score can be achieved by summing the subscales (range; 30 – 120). The internal consistency has been shown to range from .72 to .93 across the subscales with a total internal consistency of .93 and a test-retest reliability of .75 (Wells & Cartwright-Hatton, 2004). In this sample the internal consistency ranged from .76 to .98 with a total internal consistency of .95.

*The Quality of Life Enjoyment and Satisfaction Questionnaire-18* (Q-LES-Q-18; Ritsner, Kurs, Gibel, Ratner, & Endicott, 2005) assesses general quality of life across the following domains: physical health, subjective feelings, leisure time activity, social relationships, and satisfaction with medication. A total score can be obtained by summing the subscales (range; 1 – 5). It has high internal consistency ranging from .82 to .94 and test-retest reliability ranging from .71 to .83 (Ritsner et al., 2005). In the current study, it had a high internal consistency of .89 and the subscales ranged from .71 to .89.

#### *Therapist measure*

*The Clinical Global Impression* (CGI; Guy, 1976) severity and improvement scales were used to rate each participant's pre to post-treatment progress. A global rating of severity in clinical disorders is determined by scores ranging from 1 - 7 (normal to among the most extremely ill) and an improvement is determined by scores ranging from 1 - 7 (very much improved to very much worse). A rating of 1, 2, or 3 (very much improved, much improved, or minimally improved) indicates response to treatment. It has high inter-rater reliability (.87 - .99). The first author and an experienced psychologist independently completed the scale to limit experimenter effects. The intra-class correlation (ICC), used to assess the inter-rater reliability using the 'two way mixed model' in conjunction with the 'consistency procedure' (Yen & Lo, 2002), revealed the raters agreed 98% of the time (95% CI, .97 - .99).

#### **Procedure**

Following ethical approval (University Human Research Ethics Committee: approval number HR 41/2013; trial registration number: ACTRN12613001270707), participants were recruited through advertisements on the radio/television and in

print media/websites/flyers/newsletters in shopping centres, bereavement groups, palliative care services, mental health providers, and medical centres. Participants who expressed an interest in the study were screened by telephone and then attended an individual session to provide informed consent and be interviewed with the MINI. The baseline diagnoses were determined by the interviewer (first author) prior to scoring the self-reported measures to ensure they were blind to participant diagnoses. Supervision with an experienced clinical psychologist confirmed the accuracy of the diagnoses. Eligible participants were randomised to an intervention or wait-list control condition via computer generated random numbers.

The primary and secondary self-report measures were completed by the intervention group at the interview session (baseline) and thereafter at treatment completion, and at 3- and 6-month follow-ups (via post or with assistance if required). The wait-list control group was offered MGCT after the posttest assessment, for ethical reasons, to limit participant distress. The wait-list control group completed the measures at baseline, after a six-week wait, at treatment completion, and at 3-6 month follow-ups. A monthly phone call was made to the wait-list control group participants to ensure waiting for treatment was not causing distress. All interviews and assessments were administered by the first author, for practical reasons, under the supervision of a clinical psychologist. To maintain confidentiality and preserve anonymity, an ID number was used to code the participants' data, which were then cross referenced in a university database. Identifying information (i.e., demographic information and consent forms) was kept in a locked filing cabinet in a secured university office. Participants were compensated at the posttest and 6-month assessment points with a small monetary gift voucher.

### **Program Integrity and Content Compliance**

The group facilitators were trained and supervised by a clinical psychologist with extensive MCT experience. To assess the integrity of the detailed session by session manualised MCGT program delivery and to control for protocol adherence, an implementation efficacy checklist was completed independently by the group facilitator and the co-facilitator at completion of each session. The checklist assessed the overall success of the session, preparation (knowledge of materials, organization), presentation (clarity, pacing, thoroughness) and rapport using a 10-point Likert scale (1 = Very poor to 10 = Excellent). A supervisor with a clinical

psychology background reviewed a minimum of 10% of each session video recording for MCGT protocol adherence. The ICC (Yen & Lo, 2002) indicated that the inter-rater reliability on the implementation efficacy checklist was .79% (95% CI, .66 - .87).

### **Social Validity/Feasibility**

The social validity of the program was measured using a program satisfaction questionnaire adapted from a mood disorder program (Roberts, Ballantyne, & Van Der Klift, 2003). Participants rated the overall program (Section A); the practicality of the skills taught (Section B); and provided qualitative feedback (Section C). Sections A and B items were rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (very much) and section C comprised five open-ended questions for qualitative feedback about the components most and least enjoyed. The appropriateness and acceptability of the program was determined by the questionnaire. Descriptive statistics were used to summarise the quantitative and qualitative responses.

### **Data Analysis**

A Generalised Linear Mixed Model (GLMM) was used to test H1 and H2. The model included one categorical random effect (participant), one categorical fixed effect (group: intervention, control), one ordinal fixed effect (time: pretest, posttest), and the Group x Time interaction. A second GLMM was used to test H3, which included one categorical random effect (participant) and one ordinal fixed effect (time: pretest, posttest, 3 and 6-month follow-up). All GLMMs were implemented through SPSS's (Version 22) GENLINMIXED procedure.

In order to optimise the likelihood of convergence, a separate GLMM analysis was run for each of the outcome measures (PG-13, CBI, DASS-21, MCQ-30, Q-LES-Q-18, UGRS, RNT). To conserve statistical power, the alpha correction was applied within groups of conceptually related outcomes. The GLMM 'robust statistics' option was invoked to accommodate any violations of normality and homogeneity of variance. Violations of sphericity were accommodated by changing the covariance matrix from the default of compound symmetry to autoregressive.

Participants were considered to drop out if they missed more than two treatment sessions. To determine whether dropouts differed from completers, demographics and baseline outcome measures were compared and any between-group differences identified were controlled by including them as covariates in the

GLMM. In comparison to traditional statistical procedures for behavioural change, GLMM is less affected by attrition because the maximum likelihood procedure uses all the data at each assessment point, reducing sampling bias and the need to replace missing values (McCulloch & Neuhaus, 2013). Partial eta-squared and Cohen's *d* were used to assess treatment effect sizes (Durlak, 2009). A reliable change (RC) score was calculated for each participant. The RC score can be interpreted as the degree to which the participant changes on the outcome variable divided by the standard error of difference between the Time 1 and Time 2 scores. An absolute value of the RC score greater than 1.96 reflects a reliable change (Jacobson & Truax, 1991).

## Results

### Sample Characteristics and Baseline Differences

Of the 53 individuals who expressed interest, 22 were eligible and randomised as outlined in CONSORT flowchart in Figure 1; two dropped out after allocation (1 MCGT and 1 WL); four dropped out during treatment (1 male after 2 sessions [family crisis] and 3 females after 3 sessions [2 = due to another participant's grief; 1 = too distressed to be with others]; 2 completed MCGT individually). Two participants did not complete the 6-month follow-up assessment (1 = relocated; 1 = receiving counselling). Independent-sample *t*-tests and Fishers Exact tests revealed no significant baseline differences between groups on demographic and clinical profile characteristics (see Table 2). There were no significant differences between treatment completers and dropouts on demographic, co-morbid, or symptom variables (all  $t(20) < 1.41, p > .178$ ). There was no significant difference between the baseline scores for the treatment and waitlist group on the outcome measures, except on physical health (Q-LES-Q-18 subscale)  $t(36) = 3.29, p = .002$ , with the MCGT group exhibiting poorer physical health than the control group. No significant difference was found between the baseline scores for participants taking medication compared to not taking medication (all  $t(20) < 1.89, p > .313$ ).

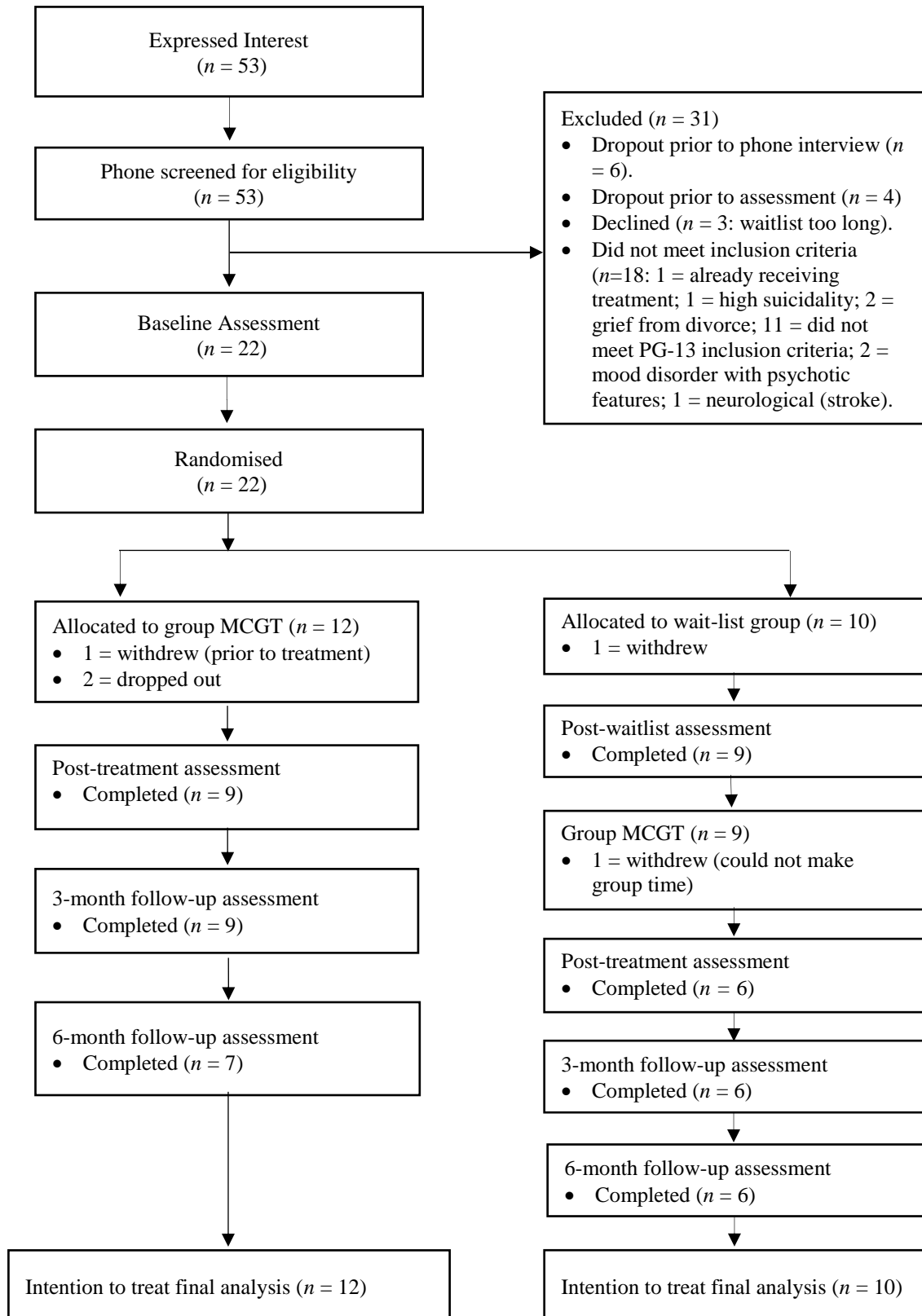


Figure 1. CONSORT flowchart of participants through the study

Table 2

*Demographic and clinical characteristics of intention-to-treat sample*

Characteristic	Treatment	Control	Total	Significance
	( <i>n</i> = 12)	( <i>n</i> = 10)	( <i>N</i> = 22)	
	<i>Range, mean (SD)</i>	<i>Range, mean (SD)</i>	<i>Mean (SD)</i>	<i>t(20) p</i>
Age	41-78, 61 (12.3)	38-75, 62 (10.4)	62 (11.2)	0.23 = .820
Time (months) post death	11-72, 29 (18.8)	6-60, 19 (18.5)	24 (18.4)	1.37 = .185
Relationship to deceased	<i>n (%)</i>	<i>n (%)</i>	<i>N (%)</i>	<i>Fisher's exact p</i>
Partner	8 (67)	10 (100)	18 (82)	= .068
Parent	3 (25)	0	3 (14)	= .143
Child	1 (8)	0	1 (5)	= .545
Employment status				
Employed	3 (25)	2 (20)	5 (23)	= .594
Self-funded retiree	2 (17)	1 (10)	3 (14)	= .571
Pension	7 (58)	7 (70)	14 (64)	= .454
Living situation				
Living alone	5 (42)	7 (70)	12 (55)	= .185
Cohabiting	7 (58)	3 (30)	10 (46)	= .185
Death type				
Sudden	3 (25)	4 (40)	7 (32)	= .384
Chronic illness	7 (58)	6 (60)	13 (59)	= .639
Accident	2 (17)	0	2 (9)	= .286
Clinical Profile				
PGD	6 (50)	4 (40)	10 (46)	= .485
MINI				
Depression	8 (67)	3 (30)	11 (50)	= .099
Anxiety Disorder	9 (75)	5 (50)	14 (64)	= .221
PTSD	1 (8.3)	1 (10)	2 (9)	= .714

*Note.* Data are expressed as range, means (*SD*) or as number (rounded %).

### Treatment Effects on Primary Outcomes

Large and significant Group x Time interactions (see Figure 2) were found for grief severity (PG-13;  $F(1,36) = 28.19, < p = .001$ ) and intensity (CBI;  $F(1,36) = 14.67, < p = .001$ ). Least significant difference (LSD) contrasts revealed group MCGT resulted in significant pre-post reductions on all measures of grief. In contrast, the control group was found to significantly increase in grief severity (PG-13;  $t(36) = 2.06, p = .047, d = 0.48$ ) and symptoms of acute separation on the CBI subscale ( $t(36) = 2.34, p = .025, d = 0.37$ ). At treatment completion, no MCGT

participants met the full diagnostic criteria required for PGD diagnosis, whilst in the control group this number increased from 4 to 5 participants.

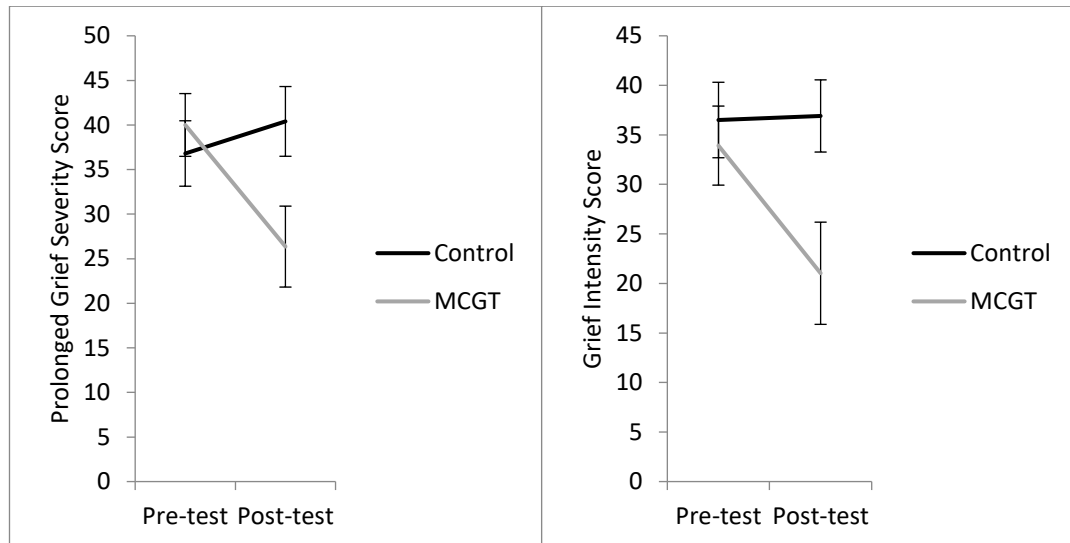


Figure 2. Change in primary outcome variables for prolonged grief severity (PG-13) and intensity (CBI).

### Treatment Effects on Secondary Outcomes

Large significant Group x Time interactions were found for depression, anxiety, stress, repetitive negative thinking (RNT/UGRS) and quality of life (see Table 3). Non-significant Group x Time interactions were found for metacognitive beliefs (MCQ-30); leisure time and social relationships (Q-LES-Q-18 subscales); and thoughts about consequences and meaning of the loss, thoughts about social relationships, and 'what if' thoughts (UGRS subscales). LSD contrasts showed that group MCGT resulted in significant pre-post reductions on measures of depression, anxiety, stress, overall repetitive negative thinking and quality of life. In contrast, the control group had a significant increase in anxiety ( $t(36) = 2.67, p = .011, d = 0.50$ ), stress ( $t(36) = 2.43, p = .020, d = 0.53$ ) and a significant decrease in physical health (Q-LES-Q-18 subscale;  $t(36) = 2.15, p = .038, d = 0.49$ ), but no significant changes in depression, metacognitions, or repetitive negative thinking.

### Maintenance of Change at 3- and 6-month Follow-up

No differences were found between treatment and treated control participants in session attendance ( $t(20) = .892, p = .383$ ). Session attendance for treatment completers ranged from 5 to 6 sessions with 73.3% completing all six. As outlined in



Table 4, non-significant interaction effects indicated that the treated controls made comparable gains to the treatment group after receiving MCGT across pre-treatment, post-treatment and follow-up on all outcome variables, except on the UGRS on the thoughts about feelings subscale. An LSD contrast revealed the treatment group had large significant pre-post reductions that were maintained at the 3-month follow-up with a further significant reduction at the 6-month follow-up; whilst the treated controls showed a large significant pre-post reduction with a further significant reduction at the 3-month follow-up that returned to post-treatment level at the 6-month follow-up.

Therefore, the means for the treatment and treated control groups were pooled. The large significant main effects of time found for grief severity and intensity (PG-13/CBI), depression, anxiety, stress, metacognitive beliefs, repetitive negative thinking (RNT/UGRS), and quality of life (see Table 4) suggest gains were made from MCGT and maintained at the 3- and 6-month follow-ups. The length of pre-treatment wait-times did not influence treatment outcomes (all  $r(15) < .300, p > .277$ ). No significant differences were identified between participants taking medication and those not taking medication on the treatment outcomes (all  $t(57) < 1.96, p > .06$ ).

Table 3

Secondary outcome variable means, (standard deviations) and effect sizes at baseline and post-treatment/post-waitlist for the intervention and control conditions (intention-to-treat analyses).

Measure	Group*Time		Partial $\eta^2$	Intervention condition			Control Condition		
	$F(1,36)$	$p$		Baseline	Post-treatment	Cohen's $d$	Baseline	Post-waitlist	Cohen's $d$
<b>Depression</b>	14.75	< .001*	.29	21.17 (9.39)	9.86 (8.21)	1.28	18.80 (9.93)	24.43 (11.26)	0.53
<b>Anxiety</b>	10.56	= .003*	.23	16.00 (10.81)	8.20 (9.46)	0.77	12.40 (10.91)	18.36 (13.06)	0.50
<b>Stress</b>	15.20	< .001*	.30	20.50 (10.46)	11.19 (7.27)	1.03	16.80 (8.63)	22.13 (11.23)	0.53
<b>MCQ-30</b>	0.83	= .367	.02	64.00 (18.46)	54.31 (14.69)	0.58	62.70 (20.55)	60.57 (24.25)	0.09
<b>Q-LES-Q-18</b>	6.96	= .012*	.16	2.96 (0.62)	3.43 (1.00)	0.56	3.29 (0.47)	3.07 (0.70)	0.37
PH	13.51	= .001*	.27	2.29 (0.55)	3.28 (1.49)	0.88	3.13 (0.63)	2.78 (0.79)	0.49
SF	4.35	= .044*	.11	3.22 (0.69)	3.61 (0.80)	0.52	3.24 (0.66)	2.96 (0.66)	0.42
LT	0.57	= .454	.02	3.25 (0.69)	3.30 (1.28)	0.05	3.53 (0.70)	3.32 (1.08)	0.23
SR	1.08	= .306	.03	3.05 (1.04)	3.49 (1.18)	0.40	3.34 (0.76)	3.28 (1.30)	0.06
<b>UGRS</b>	6.50	= .015*	.15	43.67 (10.88)	31.68 (15.14)	0.91	44.60 (14.51)	45.69 (14.55)	0.08
TCML	2.21	= .146	.06	11.33 (3.19)	8.58 (4.43)	0.71	11.40 (3.16)	11.50 (3.23)	0.03
TSS	1.84	= .184	.05	8.75 (4.19)	6.38 (2.84)	0.66	7.70 (3.35)	7.33 (3.73)	0.10
WI	2.49	= .123	.06	6.33 (2.53)	5.53 (3.08)	0.28	7.30 (3.57)	8.19 (4.30)	0.23
W	5.12	= .030*	.12	8.58 (3.67)	5.57 (3.71)	0.82	8.80 (3.45)	9.25 (5.12)	0.10
TF	5.76	= .022*	.14	8.67 (3.08)	5.69 (3.01)	0.98	9.40 (3.70)	9.53 (3.23)	0.04
<b>RNT</b>	6.57	= .015*	.15	88.67 (16.90)	65.98 (30.10)	0.93	78.70 (22.04)	83.12 (24.98)	0.19

Note. MCQ-30: Metacognitions Questionnaire; Q-LES-Q-18 = Quality of Life Enjoyment and Satisfaction Questionnaire; PH = Physical Health; SF = Subjective Feelings; LT = Leisure Time Activity; SR = Social Relationships; UGRS = Utrecht Grief Rumination Scale; TCML = Thoughts about Consequences & Meaning of the Loss; TSS = Thoughts about Social Support; WI = What-if questions; W = Why questions; TF = Thoughts about Feelings; RNT = Repetitive Negative Thinking.

\*Denotes a significant difference.

Table 4

*Outcome variables effect sizes and pooled means (standard deviations) at baseline, post-treatment, 3-month and 6-month follow-ups and t tests for treatment and treated control groups (intention-to treat analyses).*

Measure	Group*Time		$\eta^2$	Pre	Post	3-month	6-month	Pre-post		Pre-3-month		Pre-6-month	
	<i>F</i> (3, 57) <i>p</i>	Time <i>F</i> (3,57) <i>p</i>						<i>t</i> (61) <i>p</i>	<i>d</i>	<i>t</i> (61) <i>p</i>	<i>d</i>	<i>t</i> (61) <i>p</i>	<i>d</i>
<b>PG-13</b>	0.16 = .925	26.86 < .001*	.59	38.55 (7.36)	25.44 (8.82)	24.24 (7.79)	22.21 (8.91)	6.64 < .001	1.61	8.35 < .001	1.89	7.82 < .001	2.00
<b>CBI</b>	0.43 = .729	35.10 < .001*	.65	35.09 (7.41)	20.80 (8.96)	19.07 (8.16)	16.45 (8.82)	7.73 < .001	1.74	8.27 < .001	2.06	10.21 < .001	2.29
<b>Depression</b>	1.38 = .258	23.92 < .001*	.56	20.09 (9.71)	8.29 (7.27)	7.62 (8.54)	5.63 (6.52)	4.91 < .001	1.38	5.05 < .001	1.36	7.52 < .001	1.75
<b>Anxiety</b>	0.38 = .770	10.99 < .001*	.37	14.36 (11.02)	6.88 (8.54)	4.08 (5.49)	2.24 (5.16)	3.13 = .003	0.76	4.29 < .001	1.18	5.41 < .001	1.41
<b>Stress</b>	0.26 = .853	22.61 < .001*	.54	18.82 (9.85)	9.51 (6.89)	8.04 (9.90)	5.31 (6.75)	4.69 < .001	1.10	4.32 < .001	1.09	7.37 < .001	1.60
<b>MCQ-30</b>	0.98 = .408	10.47 < .001*	.36	63.41 (19.47)	50.95 (15.01)	46.41 (13.37)	44.23 (15.53)	2.84 = .006	0.72	3.41 = .001	1.02	4.03 < .001	1.09
<b>Q-LES-Q-18</b>	0.71 = .550	18.51 < .001*	.49	3.11 (0.56)	3.62 (0.94)	3.64 (0.66)	3.84 (0.66)	-3.02 = .004	0.66	-4.00 < .001	0.87	-5.87 < .001	1.19
<b>UGRS</b>	4.88 = .004*	15.73 < .001*	.45	44.09 (12.66)	29.66 (12.80)	26.99 (11.82)	25.71 (12.10)	4.56 < .001	1.13	5.66 < .001	1.40	6.71 < .001	1.48
<b>RNT</b>	2.10 = .110	36.75 < .001*	.66	84.14 (20.03)	59.69 (26.64)	46.03 (19.65)	45.06 (20.97)	3.93 < .001	1.04	7.56 < .001	1.92	8.58 < .001	1.91

*Note.*  $\eta^2$  = partial eta squared; *d* = Cohen's *d*; PG-13 = Prolonged Grief Disorder Scale; CBI = Core Bereavement Items; MCQ-30: Metacognitions Questionnaire; Q-LES-Q-18 = Quality of Life Enjoyment and Satisfaction Questionnaire; UGRS = Utrecht Grief Rumination Scale; RNT = Repetitive Negative Thinking.

\*Denotes a significant difference.

**Reliable Change and Clinically Significant Change**

Fisher's exact 1-sided tests revealed that a significantly greater proportion of MCGT participants showed pre-post reliable change in grief severity (PG-13:  $p = .005$ ), grief intensity (CBI:  $p = .008$ ), and stress ( $p = .041$ ) than the control group (see Table 5). There were no longer significant group differences once the control group received MCGT, suggesting both groups made similar gains following treatment. Where a cut-off score was not available, the criterion for clinically significant change was calculated in terms of both clinical and normative data following Jacobson and Truax (1991), by using the means and standard deviations from the present data and the literature. At least four representative studies were selected for each measure on the basis they provided normative data or clinical data showing significant treatment effect. The means and standard deviations were averaged across the studies to determine the norms to calculate clinical significant change criteria for each measure. At the 6-month follow-up, 62% of participants experienced a clinically significant change in grief severity and 100% in grief intensity (see Table 5).

Table 5

The number of participants in the treatment and treated control conditions who experienced reliable and clinical significant change on outcome variables between baseline and post-treatment/3- and 6 -month follow-up and control conditions who experienced reliable and clinical significant change on outcome variables between baseline and post-waitlist.

Measure Criterion	Treatment			Control			Fisher's exact (1-sided)	Treated Control			Fisher's exact (1-sided)	3mth follow-up (N = 15)			6mth follow-up (N = 13)		
	Post-treatment (n = 9)			Post-waitlist (n = 9)				Post-treatment (n = 6)				RC↓n RC↑n% CS			RC↓n RC↑n% CS		
	RC↓n	RC↑n	% CS	RC↓n	RC↑n	% CS		RC↓n	RC↑n	% CS		RC↓n	RC↑n	% CS	RC↓n	RC↑n	% CS
<b>PG-13</b> RC: 9, CS: 26	0	6 (67)	5	2 (22)	0	0	$p = .005^*$	0	4 (67)	3	$p = .713$	0	11 (73)	8	0	11 (85)	8
<b>CBI</b> RC: 8, CS: 31	0	7 (78)	6	1 (11)	1 (11)	1	$p = .008^*$	0	6 (100)	6	$p = .343$	0	13 (87)	13	0	13 (100)	13
<b>Depression</b> RC: 10, CS: 13	0	4 (44)	4	3 (33)	1 (11)	0	$p = .147$	0	3 (50)	3	$p = .622$	0	8 (53)	7	0	10 (77)	9
<b>Anxiety</b> RC: 11, CS: 9	0	3 (33)	2	2 (22)	0	0	$p = .103$	0	3 (50)	1	$p = .455$	0	6 (40)	5	0	6 (46)	4
<b>Stress</b> RC: 10, CS: 18	0	4 (44)	3	2 (22)	0	0	$p = .041^*$	0	3 (50)	3	$p = .622$	0	10 (67)	9	0	10 (77)	10
<b>MCQ-30</b> RC: 12, CS: 59	0	3 (33)	2	2 (22)	2 (22)	1	$p = .500$	0	3 (50)	2	$p = .455$	0	7 (47)	7	0	8 (62)	7
<b>Q-LES-Q-18</b> RC: .55, CS: 3.4	0	3 (33)	3	1 (11)	0	0	$p = .103$	0	3 (50)	3	$p = .455$	0	6 (40)	6	0	8 (62)	7
<b>UGRS</b> RC: 12, CS: 41	0	3 (33)	3	1 (11)	1 (11)	1	$p = .288$	0	5 (83)	5	$p = .084$	0	11 (73)	11	0	8 (62)	7
<b>RNT</b> RC: 16, CS: 72	0	4 (44)	3	2 (22)	1 (11)	0	$p = .147$	1	4 (67)	4	$p = .378$	0	13 (87)	12	0	12 (92)	9

Note. RC↓ = reliable decline; RC↑ = reliable improvement; n = number; % = rounded percent; CS = clinically significant change; PG-13 = Prolonged Grief Disorder Scale; CBI = Core Bereavement Items; MCQ-30: Metacognitions Questionnaire; Q-LES-Q-18 = Quality of Life Enjoyment and Satisfaction Questionnaire; UGRS = Utrecht Grief Rumination Scale; RNT = Repetitive Negative Thinking.

\*Denotes a significant difference.

### **Therapist Measure of Treated Participant's Progress (CGI)**

The GLMM non-significant Group x Time effect ( $F(3,50) = 1.43, p = .244$ ) indicated treatment and treated controls did not differ in their illness severity or recovery. There was a significant effect for time ( $F(3, 54) = 155.80, p < .001$ ) for the pooled groups. LSD contrasts revealed significant treatment gains were made from pre-post ( $t(54) = 8.49, p < .001, d = 3.63$ ), pre-3 months ( $t(54) = 12.48, p < .001, d = 4.19$ ) and pre-6 months ( $t(54) = 17.88, p < .001, d = 5.07$ ). The pretreatment severity of participants illness ratings ranged from 4 - 6 (moderately ill to severely ill;  $mean = 4.77, SD = .75, 95\% CI, 4.39 - 5.14$ ), to 3 - 1 (minimally to very much improved) at posttest ( $mean = 2.27, SD = .62, 95\% CI, 1.96 - 2.58$ ), the 3-month follow-up ( $mean = 1.77, SD = .68, 95\% CI, 1.43 - 2.11$ ) and 6-month follow-up ( $mean = 1.35, SD = .59, 95\% CI, 1.03 - 1.66$ ). Using a CGI score of 2 (much improved) to 1 (very much improved), treatment response was found to be 67% at posttest, 87% at the 3-month and 92% (85% rated <2) at the 6-month follow-up.

### **Programme Integrity and Content Compliance**

The co-facilitators rated the delivery of the program higher than the facilitator ( $Mean = 9.0, SD = .94$  range 6-10;  $Mean = 8.4, SD = .69$ , range 6-9). Descriptive statistics indicated that the overall success of the group was high ( $Mean = 8.2, SD = .90$ ), as were ratings of session preparation ( $Mean = 8.7, SD = .65$ ), presentation ( $Mean = 8.5, SD = .78$ ), and rapport ( $Mean = 9.01, SD = .55$ ). Review of the session recordings by a clinical psychologist with MCT experience confirmed the MGCT protocol was adhered.

### **Social Validity/Feasibility**

A feasibility analysis was conducted on the Program Satisfaction Questionnaire completed by 12 out of the 15 treatment completers. Descriptive statistics indicated all participants: looked forward to the program each week ( $Mean = 4.8, SD = .45$ , agree/very much = 100%); found the sessions easy to understand ( $Mean = 4.7, SD = .49$ , agree/very much = 100%); the program was useful in everyday life ( $Mean = 4.8, SD = .39$ , agree/very much = 100%); would recommend the program to others ( $Mean = 4.8, SD = .39$ , agree/very much = 100%); enjoyed participating in the program ( $Mean = 4.9, SD = .29$ , agree/very much = 100%); were satisfied with the content covered ( $Mean = 4.8, SD = .39$ , agree/very much = 100%); the program was effective in helping them ( $Mean = 4.6, SD = .52$ , agree/very much = 100%); they noticed positive changes in their lives from the program ( $Mean = 4.5$ ,

$SD = .52$ , agree/very much = 100%); they did not notice negative changes in their lives from the program ( $Mean = 1$ ,  $SD = .0$ , not at all = 100%); overall, rating of the program ( $Mean = 4.8$ ,  $SD = .39$ , agree/very much = 100%). Participant ratings for the usefulness of learning components of the program were as follows: grief psycho-education ( $Mean = 4.8$ ,  $SD = .62$ , agree/very much = 92%); what complicates grief ( $Mean = 4.9$ ,  $SD = .29$ , agree/very much = 100%); repetitive negative thinking ( $Mean = 4.9$ ,  $SD = .29$ , agree/very much = 100%); attentional control ( $Mean = 4.6$ ,  $SD = .52$ , agree/very much = 100%); detached mindfulness ( $Mean = 4.7$ ,  $SD = .49$ , agree/very much = 100%); metacognitions ( $Mean = 4.8$ ,  $SD = .45$ , agree/very much = 100%). Positive qualitative feedback indicated participants found the workshop helpful: “I have skills to help me move forward” ... “Understanding myself and being able to cope, accept and let go of my feelings”. Negative feedback suggested some participants would have preferred more sessions.

### **Discussion**

The results of this pilot study provide preliminary evidence for the efficacy and feasibility of a metacognitive-based intervention in treating PGD. All participants exhibited large reductions in PGD symptomatology and the improvements persisted at the 6-month follow-up. The large effect sizes observed on the PG-13 at posttreatment ( $d = 1.68$ ) and at follow-up ( $d = 1.89$ ;  $d = 2.00$ ) provide evidence supporting the efficacy of the 6-session MCGT group program. These findings are particularly promising because of the co-morbidity observed in this sample. Significant improvements in depression, anxiety, stress, repetitive negative thinking and quality of life also occurred post treatment and continued to improve at the 6-month follow-up. People in the waitlist exhibited significantly poorer grief pathology, anxiety, stress and physical health at posttest, providing further support for the need for early intervention for people experiencing PGD symptomatology (Sealey, Breen, et al., 2015). Significant improvements in metacognitive beliefs were not observed immediately following the intervention but did occur at 3- and 6-month follow-up.

These findings, along with significant post-test reductions in repetitive negative thinking, lend support for MCGT to target maladaptive metacognitive beliefs about coping strategies effectively. The lag in improvements on the metacognitive belief questionnaire could indicate that a person’s awareness and ability to identify and challenge grief-related metacognitive beliefs may take time to

develop. This may account for the additional improvements in grief rumination (e.g., thoughts about the consequences and meaning of the loss, thoughts about social support, and ‘what if’ thoughts) and social relationships identified in the follow-up analyses. Of particular interest were the large effect sizes found in metacognitive beliefs about the uncontrollability and danger of thoughts and the need to control thoughts. This finding indicates MCGT may have facilitated people’s ability to tolerate and manage distressing thoughts. Another explanation for the lack of change on the MCQ-30 may be that it was designed primarily to assess metacognitive beliefs about worry and, as such, may not have been specific enough to pick up changes in this sample. The measure may only have partially tapped into the grief-related metacognitions that shifted during the treatment. The development and inclusion of a grief specific metacognitive questionnaire in future research with a larger sample size may be useful.

Moreover, the posttreatment reductions in negative repetitive thinking and grief rumination over ‘why’ and ‘thoughts about feelings’, may have resulted in the improvements identified on the physical health and subjective feelings quality of life subscales. This finding is in accordance with extensive research that has demonstrated rumination over physical and emotional pain serves to heighten pain perception due to elevated levels of attentional focus on the pain (Eccleston, Crombez, Aldrich, & Stannard, 2001; Edwards, Tang, Wright, Salkovskis, & Timberlake, 2011; Eisma et al., 2014). Furthermore, in line with the metacognitive model of emotional disorders (Wells & Matthews, 1996), reductions in negative repetitive thinking may have facilitated the development of helpful coping processes, making it possible for people to confront previously avoided reminders of the loss (e.g., places and social events) and as such improved overall quality of life.

The findings are interesting as, unlike most other treatments for PGD, cognitive restructuring and extensive exposure therapy was not used. In contrast, to prevent co-rumination and vicarious trauma (Johnsen et al., 2012), participants were asked not to share stories about the death during the workshop. Metacognitive therapy facilitates habituation by promoting greater exposure to naturally occurring thoughts, images, emotions and avoided situations (Wells & Sembi, 2004), which may have allowed gradual adaptation to the loss and re-engagement in daily activities. This is congruent with Stroebe and Schut’s (1999) Dual Process Model of



grief wherein successful grieving requires a person to oscillate between loss and restoration activities.

The participants indicated that they found the program enjoyable, informative, and applicable to their everyday lives. Despite these efforts, three people did drop out due to the distress of being with other bereft people, therefore it is possible that MCGT might work better as an individual treatment. A strength of the study was the longitudinal design which controlled for effects such as time and individual differences, thus providing a clearer picture of the effect of MCGT on variables over time. The treatment effects in this study were also achieved within a short period of time using a manualised protocol delivered by novice facilitators. It is unlikely the large effects observed can be attributed to extraneous factors or spontaneous recovery, due to the stable baselines and various lengthy durations of PGD observed across the sample prior to the intervention. Although only a small sample was obtained, the pilot trial was still able to detect moderate to large treatment effects, suggesting the results could be attributable to group MCGT (Tabachnick & Fidell, 2007).

However, there are a number of limitations of this research study and the findings should be viewed with caution. The study was limited by the small sample size of predominately female participants grieving the loss of a spouse and, as such, may not be representative of all PGD cases. Although this represents a homogenous group at high risk for PGD (Newson et al., 2011), we consider these findings to be preliminarily and future research is warranted to further evaluate this new treatment approach for PGD. It was not deemed ethical to keep bereaved people waiting, thus another limitation was that the waitlist participants also received group MCGT following the post-waitlist assessment. This meant a direct comparison could not be made at the 3- and 6-month follow-ups to determine if MCGT significantly differed to the waitlist control condition. Additionally, the results may have been influenced by the primary researcher who administered the assessments and conducted the therapy, as such participants may have exaggerated treatment gains to please the therapist (Tabachnick & Fidell, 2007). It is also possible the improvements could be due to mere participation in a supportive group rather than the intervention itself, as no comparative treatment was used. However, it is important to note that PGD symptoms have been shown to persist and become chronic over time without targeted intervention, yet this pattern was not demonstrated at the 6-month follow-up.

Unfortunately, due to the small sample size obtained, the study was underpowered for mediation analyses to determine if repetitive negative thinking and metacognitive beliefs mediate PGD. Furthermore, all the participants had elevated grief symptomatology, which may have prevented significant mediation relationships between metacognitive beliefs and prolonged grief symptomatology emerging (Tabachnick & Fidell, 2007). Finally, no corrections were made for multiple comparisons given that this was the first time this therapy has been trialled, in which case there is less concern about type I errors (Eldridge et al., 2016).

Despite these limitations, MCGT appears to have produced changes in metacognitive beliefs underlying coping processes that are important in the maintenance of PGD (Eisma et al., 2013; Stroebe & Schut, 2008). These encouraging results support the need for larger randomised studies of the effects of MCGT in PGD against another treatment condition and a waitlist control group with a longer follow-up period. The study also supports the call for treatments to target PGD symptomatology directly and to identify the underlying mechanisms. This is important given that many interventions have several components and yet the efficacy of these components remains obscured (Jordan & Litz, 2014). The clinical implications from this study are that PGD treatments incorporating techniques that target maladaptive metacognitions directly may be integral for optimal treatment gains to be achieved for all bereaved individuals.

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**Conflict of Interest:** JW, MO'C, CSR, RTK, LJB declare they have no conflict of interest.

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**Ethical Approval:** The procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards

**Informed Consent:** Informed consent was obtained from all individual participants included in the study.

**Animal Rights:** No animals were involved in the study.

## CHAPTER 7

### General Discussion

One of the first things I tell bereaved parents when they first make contact with us is to be kind to yourself. And, that is so important, not only from the guilt, the failure, the loss of self-esteem, but for the need to allow yourself to give yourself permission to grieve. (Bereaved participant who facilitates bereavement groups)

#### 7.1 Overview

This research program was the first to develop, implement and evaluate the feasibility, acceptability and efficacy of using Metacognitive Therapy for PGD, in an effort to ameliorate the psychological distress resulting from the loss of a significant other. The development and testing of the Metacognitive Grief Therapy (MCGT) program involved three phases. Phase one identified the metacognitive process involved in PGD (Chapter 4) and adapted Metacognitive Therapy into a program that targeted the coping processes (e.g., rumination/worry) responsible for the development and maintenance of PGD (Chapter 5). Phase two involved a pilot randomised controlled trial to implement and evaluate the MCGT program for people with prolonged grief symptomatology, with a 3- and 6-month follow-up and Phase three evaluated the programme integrity and content compliance of MCGT (Chapter 6). This chapter summarises the major findings from each phase of this research, its unique contribution to the literature, the clinical implications, the strengths and limitations, and directions for future research. Finally, the major conclusions are presented.

#### 7.2 Major Findings and Contributions to the Literature

**7.2.1 Phase one.** The aim of this phase of the study was to document the types of metacognitive beliefs characteristic of those presenting with PGD and to use the information gleaned to develop MCT into a programme specifically for PGD. This phase of the program involved a search of the literature and an empirical study comprising semi-structured interviews with bereavement specialists to gain their insight from clients with PGD and bereaved people with elevated prolonged grief symptomatology to identify if unhelpful metacognitive beliefs were linked to maladaptive coping strategies that maintain distress.

The findings from this empirical study provided preliminary evidence supporting the relevance of the metacognitive model of psychological disorder

(Wells & Matthews, 1996) for understanding PGD. This study found a range of unhelpful positive and negative metacognitive beliefs related to PGD symptomatology. These findings are consistent with previous studies that have linked positive and negative metacognitive beliefs about rumination in major depressive disorder (Papageorgiou & Wells, 2001) and worry in generalised anxiety disorder (Cartwright-Hatton & Wells, 1997). People with PGD symptomatology were found to hold positive metacognitive beliefs about the usefulness of rumination/worry (repetitive negative thinking) in response to grief-related thoughts, emotions and images whilst simultaneously holding negative metacognitive beliefs about the same coping strategies being uncontrollable or causing harm. These findings reflect previous research on depression (Papageorgiou & Wells, 2001) and anxiety (Cartwright-Hatton & Wells, 1997). The findings from this study provide a unique contribution to the literature as it is the first to test the applicability of the metacognitive model of emotional disorders as applied to PGD and thus extends existing research of the metacognitive model (Wells & Matthews, 1996). The preliminary evidence from this study supports the notion that bereaved people hold unhelpful metacognitive beliefs about maladaptive coping processes involved in the development and maintenance of PGD.

This study also identified metacognitive beliefs that were distinct from those observed in depression and anxiety (Cartwright-Hatton & Wells, 1997; Papageorgiou & Wells, 2001). For example, positive metacognitive beliefs were identified about the importance of rumination to preserve memories, emotional regulation to show respect/love for the deceased, and coping behaviours as a means of avoiding the reality of the loss and maintain bonds. These metacognitive beliefs were found to be unhelpful when habitual use of the coping strategy prevented people from problem solving (Wells & Matthews, 1994) to help in facing the reality of the loss and accommodating it into their lives.

As several unhelpful metacognitive beliefs emerged about the use of repetitive negative thinking as a coping strategy, the findings contribute to the growing body of research suggesting that repetitive negative thinking (e.g., rumination and worry) may be a risk factor for PGD (Boelen et al., 2016; Boelen, van den Hout, et al., 2006; Eisma et al., 2017; Eisma et al., 2014). If metacognitive beliefs about coping processes (e.g., repetitive negative thinking in response to emotions, thoughts, and images about the death) keep people in a state of heightened

distress, metacognitions could potentially mediate PGD. Thus, this study provides evidence that a relationship may exist between these metacognitive beliefs and PGD, and supports the utility of developing a metacognitive scale for grief specifically.

The findings from this study provide further support that it is crucial interventions target mechanisms specific to PGD. The extensive clinical and expert consultation during this phase resulted in the development of an empirically and theoretically driven intervention specifically for PGD. Thus, this phase contributed to the existing gap in PGD treatment literature by developing an intervention that clearly documents the steps in development, and provides a detailed, transparent treatment manual that enables replication (see Chapter 5 & Appendix H). A thoroughly documented, theory driven and evidence-based intervention program for PGD is needed to advance current treatment interventions (Jordan & Litz, 2014).

The findings from this phase provided a unique contribution to the literature as no previous studies have investigated metacognitions and PGD. The information gathered provided an important first step in determining the potential of the metacognitive model in informing conceptualisations of PGD and contributed towards the development of MCGT outlined in Chapter Five. Importantly, for this project, these findings informed the second empirical study, a pilot RCT of Metacognitive Therapy conducted with people experiencing prolonged grief symptomatology. Thus, these findings have implications for the conceptualisation, assessment and treatment of prolonged grief symptomatology.

**7.2.2 Phase two.** The aim of phase two was to investigate the efficacy of Metacognitive Grief Therapy (MCGT) in reducing psychological distress by conducting a pilot randomised controlled trial. A pilot RCT was conducted with 22 participants randomised to either the six-session group MCGT program or a wait-list control condition. Assessments were conducted at post-test, and then at a 3- and 6-month follow-up.

The findings from this study make a major contribution to the existing literature as it is the first pilot RCT testing the efficacy of group MCGT with people experiencing prolonged grief symptomatology. Based on previous Metacognitive Therapy studies targeting emotional disorders (McEvoy & Perini, 2009; Moritz et al., 2010; Papageorgiou & Wells, 2015; van der Heiden et al., 2012; Wells & Colbear, 2012; Wells et al., 2012) it was hypothesised that there would be a significantly greater reduction on participants' outcome measures (grief

symptomatology, depression, anxiety and stress, repetitive negative thinking and quality of life) following MCGT in comparison to participants in the waitlist control condition. It was also anticipated that significant reductions on outcome measures following MCGT would be maintained at the 3- and 6-month follow-ups.

As hypothesised, participation in the MCGT program resulted in significant reductions in prolonged grief symptomatology (PG-13/CBI), depression, anxiety and stress, repetitive negative thinking (UGRS/RNT) and an overall improvement in quality of life, and these improvements were maintained or increased at follow-up. In contrast, the waitlist control group exhibited significantly poorer grief pathology, anxiety, stress and physical health at posttest. However, they were also found to make comparable gains after receiving MCGT. Although there was a non-significant difference found in metacognitive beliefs between the pre- and post-test assessment, a large significant effect was identified at the 3- and 6-month follow-ups ( $d = 1.02$ ;  $d = 1.09$ ). The large effect sizes observed on the prolonged grief symptom severity (PG-13) at posttreatment ( $d = 1.68$ ) and at follow-up ( $d = 1.89$ ;  $d = 2.00$ ) provided evidence that the 6-session MCGT group treatment program was highly efficient and effective in treating PGD. The mean reduction in prolonged grief symptom severity (PG-13) by the 6-month follow-up was 42% with 85% of participants identified as having a good level of functioning and minimal symptoms (on the CGI).

Based on previous Metacognitive Therapy studies targeting emotional disorders such as depression and anxiety (McEvoy & Perini, 2009; Moritz et al., 2010; Papageorgiou & Wells, 2015; van der Heiden et al., 2012; Wells & Colbear, 2012; Wells et al., 2012), it was hypothesised in the protocol paper (chapter 3) that the significantly greater reduction on participants' outcome measures (symptom change in the intervention group) would be mediated by reductions in metacognition and repetitive negative thinking scores following MCGT in comparison to participants in the waitlist control condition. However, the small sample obtained meant that the study was underpowered for the mediation analyses to be conducted. Thus, we were unable to determine if metacognitive beliefs and repetitive negative thinking mediated PGD.

The findings of group MCGT leading to large reductions in depression (post  $d = 1.28$ , 3-month  $d = 1.36$ , 6-month  $d = 1.75$ ) and anxiety (post  $d = .77$ , 3-month  $d = 1.18$  & 6-month  $d = 1.41$ ) are consistent with the body of research demonstrating the role of metacognitions in emotional disorder (McEvoy & Perini, 2009; Moritz et al.,

2010; Papageorgiou & Wells, 2015; van der Heiden et al., 2012; Wells & Colbear, 2012; Wells et al., 2012). However, it is interesting that effects for metacognitions did not emerge, although there was a downward trend in metacognitive scores following group MCGT in comparison to the waitlist control condition, the interaction effect was not significant. A possible explanation is that group MCGT did not target metacognitive beliefs sufficiently; however, this is unlikely given the large significant effect observed in reductions of repetitive negative thinking (post  $d = >.91$ , 3-month  $d = >1.40$  & 6-month  $d = >1.48$ ), which suggests that metacognitive beliefs about repetitive negative thinking were being targeted. An alternate explanation is that PGD symptomatology reduced as the participants' ability to identify and regulate metacognitive beliefs about maladaptive coping processes improved over time. The development of metacognitive awareness draws on previous learnt skills (e.g., procedural memories, declarative knowledge) to provide a foundation for the higher-level cognitions required to self-monitor and self-regulate processes (Flavell, 1979).

This study highlighted the feasibility of MCGT and its potential efficacy in producing significant reductions in PGD symptomatology. This study was also the first to show that MCGT produces significantly greater reliable change in PGD symptom severity/intensity and stress scores than a waitlist control condition. Although non-significant reliable change scores were found for the other variables (depression, anxiety, metacognitions, quality of life, grief rumination and repetitive negative thinking), the reliable change indices may have been conservative due to the large pre-intervention standard deviations arising from the small sample size (Jacobson & Truax, 1991). As such, this may not indicate that group MCGT did not lead to recovery on these variables. The six-month reliable change rates (PG-13 85%) were larger than those obtained in other group PGD treatment studies (Bryant et al., 2014; Maccallum & Bryant, 2011; Piper et al., 2007; Rosner et al., 2011; Supiano & Luptak, 2014). MCGT was also found to produce clinically significant change in PGD symptom severity (PG-13 scores) for 62% of the participants.

Therefore, the findings from this study provide support for the validity of the metacognitive model and Wells' (Wells, 2009; Wells & Matthews, 1996) conceptualisation of the development and maintenance of psychological disorder, by demonstrating MCGT significantly reduces pathological symptoms of grief. The large effect sizes and decrease in repetitive negative thinking corresponds with other



metacognitive studies that found reductions in rumination and worry led to reductions in psychological distress (Wells, 1999; Wells & Carter, 2001; Wells et al., 2009, 2012). These findings also extend the findings of Boelen et al. (2016), Eisma et al. (2017) and Eisma et al. (2013) by highlighting that worry and rumination may be risk factors for PGD.

In contrast to previous studies, meaning reconstruction, motivational interviewing, exposure therapy (of the moment of death) and restructuring the content of thoughts were not required for grief recovery (Bryant et al., 2014; Rosner et al., 2014; Shear et al., 2005; Wagner et al., 2006). As such, these findings further inform current understandings of the mechanisms underlying the development of PGD, the evidence for which is only just developing (Breen, Hall et al., 2017). The findings from this study suggest that it may be the metacognitive beliefs about maladaptive coping processes (e.g., repetitive negative thinking) that maintain PGD and thus these metacognitions need to be targeted by interventions to improve treatment effectiveness.

MCGT supports bereaved people to confront and accept negative thoughts and emotions, and uses detached mindfulness and attention training techniques to disengage from repetitive negative thinking (Wells, 2009). MCGT focused on disengagement from maladaptive coping processes, to disrupt bereaved people from focusing on the loss exclusively or avoiding social activities, which may have led to the increase observed in their overall quality of life. This finding is in line with the Dual Process Model whereby a flexible oscillation is required between grief and restoration orientated activities for healthy adaptation (Bennett et al., 2010; Stroebe & Schut, 1999). As such, these unique findings have implications for the validity of metacognitive model of PGD and establish the potential value of group MCGT as an efficacious treatment.

**7.2.3 Phase three.** The aim of phase three was to evaluate the programme integrity and content compliance of MCGT; and acceptability of the MCGT programme for individuals with PGD.

A separate implementation efficacy checklist (Appendix F) completed independently by the group facilitator and co-facilitator at the completion of each session confirmed that the integrity of treatment delivery was high, and a clinical psychologist with over a decade of experience in the delivery of Metacognitive Therapy endorsed the adherence of the treatment protocol. The participant

evaluations (Appendix E) provided evidence supporting that MCGT was well received and tolerated by bereaved people. Feedback from participants also indicated high levels of satisfaction with the program. This feedback, along with the low attrition rate (2 participants, or 13%, did not complete treatment), suggests that the program is acceptable to clients as well as being an effective intervention. Thus, given the co-morbidity of this sample, MCGT proved to be far from detrimental.

The participant evaluations indicated that the psycho-education, content and examples provided in MCGT were informative, relatable and applicable to the issues faced by people experiencing PGD symptomatology. Participants' knowledge of the metacognitive concepts and techniques used to regulate maladaptive coping processes was demonstrated in the significant reduction of metacognitions and PGD symptomatology observed at the 6-month follow-up. These findings provided further support for the utility of group MCGT for PGD.

### **7.3 Clinical Implications**

Developing, implementing and evaluating a theory driven and evidence-based program for PGD provides a valuable contribution towards the current understanding of the metacognitive beliefs underpinning the coping processes maintaining PGD, and how these processes can be targeted by interventions effectively. The findings from this research program highlight the importance of asking questions about metacognitive beliefs in the initial assessment session with clients presenting with PGD (Wells, 2009). For example, if a client holds the positive metacognitive belief that suppressing pleasant emotions or avoiding pleasurable activities shows love/loyalty to the deceased, the belief will need to be targeted by the therapist and modified to ensure the client's engagement in restoration activities is not obstructed.

Furthermore, in accordance with the metacognitive model of emotional disorders (Wells, 1995; Wells & Matthews, 1996), elevated positive metacognitive beliefs about the use of repetitive negative thinking to avoid the reality of the death or to cope with uncertainty (e.g., the future without the deceased) and negative experiences resulting from worry (increased concerns of vulnerability) or rumination (increased concerns of uncontrollability or physical/psychological harm) may be associated with elevated levels of PGD. Therefore, it may be beneficial for therapists working with bereaved clients to ensure they assess for PGD and incorporate metacognitive techniques that modify unhelpful metacognitions about the maladaptive coping processes used to manage grief.

The short group format allows treatment to be delivered efficiently by psychologists and may be a less expensive option for clients in comparison to individual treatment. However, three participants found group participation distressing (2 = due to another participant's grief; 1 = mood too low to be with others), which resulted in two participants completing MCGT via individual sessions. As such, one caveat is that it may be important that researchers/therapists identify people who might benefit from individual sessions. At present there are long waitlists for mental health services and, in the Australian context, the Government rebate is limited to 10 sessions with a psychologist per year (APS, 2013; Australian Government Department of Health, 2012); thus, group MCGT offers a brief and cost effective method for delivering therapy for PGD.

#### **7.4 Limitations**

This is the first study testing the efficacy of MCGT, and, as such, it alone cannot establish that group MCGT is an efficacious intervention and further research needs to be conducted. All three phases were based upon small samples comprising females who predominantly lost a spouse or a child and the findings may not generalise to all cases of PGD (Chambless & Hollon, 1998). For the pilot RCT in phase two, it was not deemed ethical to keep bereaved people waiting for the program, thus another limitation was that the waitlist participants also received group MCGT. Direct comparisons could, therefore, not be conducted at the 3- and 6-month follow-ups to identify if the waitlist control group still differed to MCGT participants.

As there was no comparative treatment it cannot be determined if MCGT is superior to other treatment interventions for PGD, or if the effect was from participation in a supportive group or attention from the therapist (Chambless & Hollon, 1998). The primary researcher may have influenced the results through delivering the therapy and conducting all the assessments. This may have led participants to inflate treatment gains in an effort to please the therapist, resulting in a response bias effect (Tabachnick & Fidell, 2007). Moreover, due to the recruitment of fewer participants than anticipated, mediational analyses could not be conducted to determine if MCGT targeted mechanisms specific to PGD. However, the findings suggest that the intervention led to reductions in prolonged grief symptomatology, depression, anxiety, stress, and repetitive negative thinking and improvements in

quality of life. This indicates MCGT may also be a suitable treatment for bereavement-related depression and/or anxiety.

Additionally, all participants had elevated prolonged grief symptomatology, which may have prevented significant mediation relationships between metacognitive beliefs and PGD emerging due to the restricted range of scores (Tabachnick & Fidell, 2007). The discrepancy in the findings for metacognitive beliefs may also be due to the clinical sensitivity of the metacognitive scale (MCQ-30; Wells & Cartwright-Hatton, 2004), which did not comprise grief-specific metacognitive beliefs (outlined in phase one) as it was designed for other emotional disorders (e.g., MD & GAD). The specificity of many of the questions with regard to worry (future focused) within the MCQ-30 may not have mapped well on to the experiences of those with prolonged grief, where ruminative (past focussed) or a mix of worry and ruminative processes, may be at play, but missed due to the working of the measure. Finally, the current sample size of 22 may not have been sufficient to capture an effect (Tabachnick & Fidell, 2007).

### **7.5 Strengths**

There are several strengths to this research. A pilot RCT design was used in accordance with the guidelines for conducting a feasibility efficacy trial (Eldridge et al., 2016). The longitudinal design strengthened the study by providing information about the treatment effects over a six month period (Chambless & Hollon, 1998; Chambless & Ollendick, 2001). The primary investigator also closely adhered to the main principles of Metacognitive Therapy to ensure MCGT replicated previous metacognitive interventions (Papageorgiou & Wells, 2000; Wells, 2005; Wells & Colbear, 2012; Wells et al., 2010). Close replication builds on previous research findings and increases the reliability of the data and the conclusions drawn about treatment efficacy (Hoffmann et al., 2014). The use of a representative sample, by not excluding participants with comorbid disorders as often observed in RCT's, means the findings more accurately reflect clients from 'real-world' clinical settings. A further strength of this study was that it included a measure of quality of life to examine whether reductions in psychopathology following group MCGT also led to an increase in quality of life. This provided unique information about the overall psychosocial impact of MCGT.

Following the use of the MINI, the baseline diagnoses were determined by the interviewer prior to scoring the self-reported measures to ensure blinding to

participant diagnoses. Supervision with an experienced clinical psychologist (Rees) confirmed the accuracy of the diagnoses. Furthermore, error variance in the data was limited by using structured interviews, self-reported measures and a separate therapist measure (Tabachnick & Fidell, 2007); and all the questionnaires selected to measure the symptomatology in this study had high internal consistency and validity in previous studies and were also found to have good internal consistency in this study. The use of GLMM to analyse the data increased accuracy by reducing error in the data by controlling for intra-group dependencies, missing data and participant attrition (McCulloch & Neuhaus, 2013). The data were also screened for violations of statistical assumptions prior to conducting the analyses to strengthen the accuracy of the results (McCulloch & Neuhaus, 2013).

Additionally, the RCT was able to detect moderate to large treatment effects despite the small sample size, which suggests the results were attributable to group MCGT (Tabachnick & Fidell, 2007). There were no significant differences between the treatment and waitlist participants' demographics or overall baseline outcome variables, which further supports that the intervention effects cannot be attributed to differences between the condition participants at baseline. The findings from this study indicate that group MCGT does not cause harm in comparison to no treatment at all. In contrast, the non-treatment group was found to increase significantly in PGD symptomatology, anxiety and stress prior to intervention, providing further support that people experiencing PGD require intervention because the symptomatology is highly unlikely to resolve without appropriate intervention (Prigerson et al., 2009; Sealey, Breen, et al., 2015).

## **7.6 Directions for Future Research**

The findings from Phase one indicated that metacognitive beliefs about the way thoughts, images, and emotions are processed may prevent people with PGD from accommodating the loss into their lives. Bereaved people appeared to process grief in a way that engaged repetitive negative thinking and maladaptive coping behaviours, which impeded the ability to problem solve. However, although this study has provided preliminary evidence suggesting metacognitions play a role in the development of PGD, further research is required to further explore the role of metacognitions in PGD in a broader range of people and cultures. A detailed understanding of the metacognitive processes implicated in PGD may further enhance the effectiveness of current interventions.

The findings from Phase one also offer preliminary data to guide the development of a metacognitive scale for PGD specifically. This study provides evidence that a relationship may exist between metacognitive beliefs and PGD and supports the necessity of developing a metacognitive scale for grief. The development of such a measure may be useful to explore associations between maladaptive metacognitive beliefs and PGD symptomatology in a larger sample size. This scale could also then be used to examine the concurrent and longitudinal relationships between metacognitive beliefs about maladaptive coping processes and grief symptomatology. This research would contribute to the existing disorder specific metacognitive questionnaires designed for clinical use (Papageorgiou & Wells, 2001; Spada & Wells, 2007; Wells & Cartwright-Hatton, 2004). Further research may also explore if metacognitive beliefs differ across gender and cultures to ensure treatment is sensitive to a client's needs.

The findings from Phase two provides preliminary evidence that future RCT trials of MCGT are warranted. The preliminary findings from this study warrant further research to establish the efficacy of MCGT in reducing PGD. Future research needs to be conducted with a larger sample to investigate the mechanisms of change and to validate these findings against another active treatment condition and a waitlist control group with a longer follow-up period. Additionally, further research exploring the efficacy of delivering MCGT as an individual intervention could provide support for this program for people who find group settings difficult. Research comparing group versus individual MCGT would also help determine the specific factors that contribute to the delivery of each therapy and its efficacy. Factors such as the strength of the dose received, a supportive environment, shared experiences and group inclusion could be examined to determine their impact on treatment outcome (Holmes & Kivlighan, 2000). Finally, as the majority of interventions for non-pathological grief have limited efficacy (Wittouck et al., 2011), and participants with subclinical levels of PGD also benefited from MCGT, it may be useful to trial the efficacy of using MCGT as a universal grief intervention (MacKinnon et al., 2015).

## **7.7 Conclusions**

This study is the first to investigate the use of MCGT for people with PGD. The overall aim of this research was to investigate the feasibility, acceptability and efficacy of MCGT for people experiencing PGD. The findings support the

metacognitive model of psychological disorder (Wells & Matthews, 1996), in that unhelpful positive and negative metacognitive beliefs about coping processes were found to be maintaining the pathological symptoms experienced with grief. The findings from this research suggest that conceptualisations/models of PGD should incorporate metacognitive beliefs and their role in maintaining maladaptive coping. It provides a model that can be used to guide future metacognitive interventions for grief. This thesis has also provided an evidence-base for the efficacy of using MCGT as an intervention for PGD. It attempted to address the call in the literature for psychological interventions that target the mechanisms underlying the development of PGD directly (Breen, Hall et al., 2017; Doering & Eisma, 2016; Hall, 2014; Jordan & Litz, 2014).

This study fills a void in the literature, by suggesting the modification of positive and negative metacognitive beliefs about coping processes may be helpful in impeding the development of PGD. The findings from this study provide support for the need to identify and modify unhelpful metacognitions involved in PGD before they lead to unhelpful coping strategies such as repetitive negative thinking and avoidance behaviours. The research is innovative because it provides much needed empirical evidence to guide future programs that target PGD. This research may lead to meaningful advancements in improving the recovery rate for a larger proportion of people with PGD. Group MCGT may offer psychologists an alternative therapy to current treatments for PGD that may be efficient and cost effective for the clients (APS, 2013). Thus, these findings contribute to literature by providing an alternative model of grief for treating clients with PGD.

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## **Appendix A**

### **Information Sheet and Consent Forms for Study One**

#### **Curtin University** **School of Psychology and Speech Pathology**

My name is Jenine Wenn and I am a Doctor of Philosophy (clinical psychology) student from Curtin University. I would like to take this opportunity to invite you to participate in a research study I am conducting as part of my PhD thesis.

#### **The Purpose of this Research**

Due to the overwhelming need for therapeutical support for prolonged grief, this research is investigating the thoughts experienced by bereaved people following the loss of a loved one. The information gleaned will then be used to help us tailor a therapeutic program specifically for prolonged grief.

#### **What Participation Involves**

Participation in the research study requires that you currently work with or experience prolonged grief/have been bereaved for 6 months or more and aged over 18 and are willing to consent to an interview.

#### **Confidentiality and Anonymity**

All information collected will remain confidential from anyone not directly involved in the study. Each person involved in the study will be allocated an ID number so that no-one is identifiable. You will **not** be required to provide your name and other identifiable information to ensure that all data collected and participants are anonymous.

#### **Withdrawal from the Study**

Participation in the study is completely voluntary. If you decide to participate and further change your mind, you may withdraw your participation at any time without any negative effects.

#### **Ethical Considerations**

The present research study has been reviewed and approved by the Curtin University Human Research Ethics Committee (Approval number HR 41/2013) and is being carried out in accordance with the National Statement on Ethical Conduct in Research Involving Humans (NHMRC). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person, you may contact Curtin University's Research Ethics Committee (Tel. 08 9266 2784 or e-mail [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au)). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome

#### **Further Information**

This study is being supervised by Associate Professor Clare Rees ([c.rees@curtin.edu.au](mailto:c.rees@curtin.edu.au)), Dr Moira O'Connor ([M.OConnor@curtin.edu.au](mailto:M.OConnor@curtin.edu.au)) and Dr Lauren Breen ([Lauren.Breen@curtin.edu.au](mailto:Lauren.Breen@curtin.edu.au)).

Thank you for taking the time to read the information provided. If you have read and understood all information and agree to participate in the current research study, please read and give your consent on the following page.



**Curtin University**  
**School of Psychology and Speech Pathology**

**CONSENT FORM**

I \_\_\_\_\_ have read the above information sheet and have been offered the opportunity to have any questions answered.

- I agree to take part in this study, however, I understand that my participation is completely voluntary, and that I can change my mind and withdraw at any time, or refuse to answer any question without reason.
- I understand that the purpose of this research is to investigate the psychological factors underlying Prolonged Grief to aid the development of an effective treatment for prolonged grief.
- I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law. I agree that research data for this study may be published provided my name or other information which might identify me is not used.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Participant)

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Researcher, Jenine Wenn)

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Supervisor, Moira O'Connor)

**Curtin University  
Psychology and Speech Pathology**

**Consent form for audio recording  
for research purposes**

Place of audio recording: \_\_\_\_\_

Participant's name: \_\_\_\_\_

Your interview session will be recorded for research purposes. The audio recording will be stored in a locked Curtin University cabinet when not in use following recording. You do not have to give consent to being audio recorded and your choice in this matter will not affect your participation in the program. You are able to withdraw your consent for audio recording at any time.

Please sign below if you consent to being audio recorded during your participation in the sessions.

I have read and understood the above information and give permission to be audio recorded in sessions.

\_\_\_\_\_  
Signed Participant

Date: \_\_\_\_\_

## **Appendix B Information Sheet**

My name is Jenine Wenn and I am a Doctor of Philosophy (clinical psychology) student from Curtin University. I would like to take this opportunity to invite you to participate in a research study I am conducting as part of my PhD thesis.

### **The Purpose of this Research**

This research is to investigate if a grief management workshop is more effective in reducing emotional distress and increasing the quality of life of an intensely bereaved individual, than being on a waitlist. Individuals who wish to participate in this research will be randomly assigned to either a grief management workshop or a short waitlist (6 weeks) prior to receiving the grief management program.

### **What Participation Involves**

To take part you need to be bereaved for 6 months or more and aged over 18. You will receive up to \$40 worth of Coles/Myer gift vouchers and your participation will contribute towards research aimed at helping people manage grief. You will need to be available to attend 6 sessions for approximately 2 hours a week. The sessions will be held at the Curtin University Psychology Clinic. We ask that whilst involved with this research study you do not undergo any other forms of psychological therapy. If you are currently taking medication such as antidepressants or other mood stabilisers, we ask that you only participate if you have been stable on this medication one month prior to this workshop and that you do not change your dosage throughout the workshop. Alternatively if you wish to have other treatment, you may withdraw from the study without any negative consequences.

### **The Research Study**

The grief workshop will be delivered by a therapist. You will be asked to complete a number of questionnaires prior to and following the workshop as well as 3 and 6 months after the workshop. You will also be asked to complete a clinical interview.

### **Potential Risks**

This program has been used for depression and anxiety, with very promising results. However, no guarantee can be given that you will benefit from this workshop.

### **Confidentiality and Anonymity**

All information collected will remain confidential from anyone not directly involved in the study. Each person involved in the study will be allocated an ID number so that no-one is identifiable.

### **Withdrawal from the Study**

Participation in the study is completely voluntary. If you decide to participate and further change your mind, you may withdraw your participation at any time without any negative effects. If you decide to withdraw from this research you will be provided with referral services that can provide you with other treatment options.

### **Ethical Considerations**

The present research study has been reviewed and approved by the Curtin University Human Research Ethics Committee (Approval number HR 41/2013) and is being carried out in accordance with the National Statement on Ethical Conduct in Research Involving Humans (NHMRC). If you have any reservation or complaint about the ethical conduct of this research, and wish to talk with an independent person, you may contact Curtin University's Research Ethics Committee (Tel. 08 9266 2784 or e-mail hrec@curtin.edu.au). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome. This study is being supervised by Associate Professor Clare Rees ([c.rees@curtin.edu.au](mailto:c.rees@curtin.edu.au)), Dr Moira O'Connor ([M.OConnor@curtin.edu.au](mailto:M.OConnor@curtin.edu.au)) and Dr Lauren Breen ([Lauren.Breen@curtin.edu.au](mailto:Lauren.Breen@curtin.edu.au)).

## CONSENT FORM

I \_\_\_\_\_ have read the above information sheet and have been offered the opportunity to have any questions answered.

- I agree to take part in this study, however, I understand that my participation is completely voluntary, and that I can change my mind and withdraw at any time, or refuse to answer any question without reason.
- I understand that the purpose of this research is to trial a grief workshop and that there is a chance I may not benefit from this workshop.
- I understand that I will be randomly allocated to either the grief workshop or a waitlist group (waiting until the completion of the grief workshop to receive the same program).
- If I am currently on anti-depressants, I agree that I have been on a stable dose for the past month. I also agree that I will not stop my current anti-depressants or change the type of dose of my anti-depressants from the time of my first interview until my interview six months after the group grief workshop.
- I understand that all information provided is treated as confidential and will not be released by the investigator unless required to do so by law. I agree that research data for this study may be published provided my name or other information which might identify me is not used.

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Participant)

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Researcher, Jenine Wenn)

Signed \_\_\_\_\_ Date \_\_\_\_\_  
(Supervisor, Dr. Clare Rees)

**Consent form for video recording  
for supervision and research purposes**

Place of video recording: \_\_\_\_\_

Participant's name: \_\_\_\_\_

There is a possibility that some of your sessions will be recorded for research and supervision purposes. This is to ensure the facilitators are meeting the program requirements, and for educational and teaching purposes.

The video will be stored in a locked Curtin University cabinet when not in use following recording. You do not have to give consent to being video recorded and your choice in this matter will not affect your participation in the program. You are able to withdraw your consent for video recording at any time.

Please sign below if you consent to being video recorded during your participation in the sessions.

I have read and understood the above information and give permission to be video recorded in sessions.

\_\_\_\_\_  
Signature of Participant:

Date: \_\_\_\_\_

## Appendix C Demographic Form

Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Name of deceased: \_\_\_\_\_

Date of birth: \_\_\_\_\_ Year deceased: \_\_\_\_\_

Relationship to deceased: \_\_\_\_\_ Cause of death: \_\_\_\_\_

Are you: (Please tick one box)

- Male  
 Female

How old are you?

years

Which of the following best describes your current marital status? (Please tick one box)

- Single or never married  
 Widowed  
 Divorced/Separated  
 Married/De facto

What is your cultural background? (Please tick one box)

- Australian:  
 Aboriginal  
 Non-Aboriginal
- Other English-speaking:  
 United Kingdom  
 New Zealand  
 Other (Please specify)
- Non-English speaking:  
 Italian  
 Malaysian  
 Other (Please specify)

\_\_\_\_\_

Which one of the following best describes your current situation? (Please tick one box)

- Paid employment  
 Pensioner  
 Self-funded retiree  
 Other (Please specify)

\_\_\_\_\_

History of intervention and therapy services:

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Are you currently receiving any intervention/therapy? If so, what type:

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---

Are you currently on medication? If so, what type:

---

Length of time that you have been stable on medication (such as antidepressants or other mood stabilisers)

---

Diagnosis/Diagnoses:

---

Is there any other information that may be useful for the researchers of the study to know?

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**Appendix D**  
**Session Attendance**

Session	Attended (Y/N)	Extent of engagement in session	Definition of ratings
1.	Y N	0    1    2    3	<p><b>0 = No or little participation</b> Behaviour may be actively disruptive. Essentially no engagement.</p> <p><b>1 = Mild participation</b> May be disruptive or distracting or passively attentive (i.e. nods, smiles responsively). Overall shows only mild level of engagement</p> <p><b>2 = Moderate participation</b> evidenced by clearly paying attention, answering questions etc.</p> <p>Although receptive, there is little evidence of Active participation (e.g. initiating discussions suggesting solutions to problems, active involvement in activities)</p> <p><b>3 = High</b> Evidence of taking initiative in raising issues for discussion.</p>
2.	Y N	0    1    2    3	
3.	Y N	0    1    2    3	
4.	Y N	0    1    2    3	
5.	Y N	0    1    2    3	
6.	Y N	0    1    2    3	





**Section B**

	<b>Not at all</b>			<b>Very Much</b>	
1. Learning about prolonged grief was useful	1	2	3	4	5
2. Learning about worry/rumination was useful	1	2	3	4	5
3. Learning how to control attention was useful	1	2	3	4	5
4. Learning detached mindfulness was useful	1	2	3	4	5
5. Learning about positive beliefs was useful	1	2	3	4	5
6. Learning about negative beliefs was useful	1	2	3	4	5

**Section C**

The activities I enjoyed most were:

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The activities I did not enjoy were:

---



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The skills I use most from the program are:

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The program would be improved by:

---



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What other areas should we include in the program:

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We would particularly welcome any other comments you have about the program. Please write any other comments in the space below:

---



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**Thank you for your support and cooperation in conducting the Metacognitive Therapy Program**

## Appendix F Facilitator Questionnaire

Please rate the following questions about the Metacognitive Grief Management Program to provide information regarding delivery problems for the module and suggestions for improvement that may help with future program delivery.

1. The **overall success** of the lesson:

---

1      2      3      4      5      6      7      8      9      10

Comments:

2. Your **preparation** – knowledge of materials, organisation of resources, etc...

---

1      2      3      4      5      6      7      8      9      10

Comments:

3. Your **presentation** – clarity, pacing, thoroughness, etc...

---

1      2      3      4      5      6      7      8      9      10

Comments:

4. Your **rappport** with the client – friendliness, use of name, etc...

---

1      2      3      4      5      6      7      8      9      10

Comments:

## Appendix G

### Bereavement Scale

(adapted from Wells, 2009)

1. Please circle a number that represents the severity of your distress/grief over the past week?

0	1	2	3	4	5	6	7	8
<b>None</b>				<b>Moderate</b>				<b>Extreme</b>

2. In the past week how often have you responded to your thoughts about the death of your loved one by analysing what happened and why?

0	1	2	3	4	5	6	7	8
<b>None</b>				<b>Moderate amount</b>				<b>Always</b>

3. In the last week how often have you worried about things to do with the future?

0	1	2	3	4	5	6	7	8
<b>None</b>				<b>Moderate amount</b>				<b>Always</b>

4. How often have you done the following to cope in the past week? (Please write a number next to each item)

0	1	2	3	4	5	6	7	8
<b>None</b>				<b>Moderate amount</b>				<b>Always</b>

Rested more	___	Became angry at myself	___
Reduced activities	___	Became angry at others	___
Assessed my feelings	___	Tried to 'make sense' of the death	___
Distracted myself	___	Spoke to myself	___
Controlled my thoughts	___	Used alcohol/drugs	___
Controlled my emotions	___		
Slept more	___		

5. In the last week how often did you avoid the items below? (Write a number next to each)

0	1	2	3	4	5	6	7	8
<b>None</b>				<b>Moderate amount</b>				<b>Always</b>

Leisure activities	___	Decisions	___
Social events	___	Future planning	___
Work	___	Reminders of the loss	___

6. In the last week how often have you found yourself doing the following in remembrance of your loved one? (Write a number next to each)

0	1	2	3	4	5	6	7	8
<b>None of the time</b>				<b>Half of the time</b>				<b>All of the time</b>
Spent time with things to feel connected with the loved one (e.g. possessions/objects/photos)						___		
Did something in their memory (e.g. light a candle)						___		
Looked for a sign or message from the loved one						___		
Visited a place to feel connected with the loved one						___		

7. Please write a number indicating how much you believe each of the beliefs below.

0	10	20	30	40	50	60	70	80	90	100
<b>Not at all</b>										<b>Completely</b>
My grief-related thoughts/rumination are uncontrollable										___
I must be crazy to think this way										___
My grief controls me										___
It is not normal to be grieving like this										___
Rumination/worry helps me prepare/cope										___
Analysing helps me find answers										___
I must go over the details of the death to make sense of it										___
It need to think to fill the gaps in my memory										___
I should stop thinking about them/their death										___
I'm always going to be this grief stricken										___
I must think about my loved one or I will forget them										___

## Appendix H Facilitator Session Outline

### Session 1 Outline

- **Normalise grief symptoms**
- **Formulate metacognitive model of grief**
- **Enhancing awareness of metacognitions**
- **Self-monitoring metacognitions**

<b>Time</b>	<b>Content</b>	<b>Details</b>
5 mins 10 mins 5 mins	Complete Bereavement Scale (BS) Introductions Set group rules	- Handout bereavement scale
5 mins	<b>Session/program agenda setting:</b> Program Overview (6 x 2 hour weekly sessions)	Structure of each session: - homework review - session content - set homework
10 mins 25 mins	<b>What is grief?</b> <b>What complicates grief?</b>	- Collaboratively brainstorm symptoms - Read out example and identify beliefs
5 mins	<b>Break</b>	
20 mins	<b>What are metacognitions and how can they disrupt your journey through grief?</b> <b>Formulation &amp; Socialise to Model</b>	- Hand out copies of the Metacognitive Model of Grief - Draw the conceptualisation on white board
30 mins	<b>Negative and positive metacognitive beliefs:</b> Emphasise importance of self-monitoring your thoughts and becoming aware of your thoughts about your thoughts	- Worksheet 1.1 to be completed individually or with assistance if required
10 mins	<b>Homework assignment:</b> <ul style="list-style-type: none"> <li>- Complete session summary (worksheet 1.2)</li> <li>- Pros/cons of not taking a break from the grief cycle or avoiding grief altogether.</li> <li>- Self-monitoring metacognitive beliefs identified throughout the week.</li> </ul>	

**Handouts: Joan's Grief, Metacognitive Model of Grief**  
**Worksheets: 1.1, 1.2, 1.3, 1.4**

## Session 2 Outline

- **Homework review**
- **Metacognitions, emotions & behaviour**
- **Use healing metaphor**
- **Introduce and practice detached mindfulness (DM).**
- **Run suppression experiment**

<b>Time</b>	<b>Content</b>	<b>Details</b>
30 mins	<b>Homework review</b> Ask group to complete B-S and then ask if they have noticed any changes from the week before. What were the key concepts from last week? Was anything unclear?	- Complete B-S - Homework review - Any problems self-monitoring
30 mins	<b>The link between metacognitions, emotions and behaviour</b>	- Establish the connection between metacognitions, feelings, and behaviour
5 mins	<b>Break</b>	
15 mins	<b>Changing Unhelpful Metacognitions into Helpful Metacognitions</b>	- Collaboratively brainstorm unhelpful/helpful metacognitions on the whiteboard
10 mins	<b>What are thoughts?</b>	- Suppression experiment
30 mins	<b>Introduce Detached Mindfulness (DM)</b> <i>Emphasise it's ok to feel sad, anxious or worry about the future</i>	- Practice DM
5 mins	<b>Rumination/worry postponement</b>	
5 mins	<b>Homework assignment:</b> <ul style="list-style-type: none"> <li>- Complete session summary</li> <li>- Practice DM and challenging unhelpful metacognitions</li> </ul>	

**Worksheets: 2.1**

**Information sheets: Detached Mindfulness**

### Session 3 Outline

- **Homework review**
- **Introduce and practice attention training.**

<b>Time</b>	<b>Content</b>	<b>Details</b>
40 mins	<b>Homework review</b> What were the key concepts from last week? Was anything unclear?	- Complete B-S - Discuss how they went with DM & rumination postponement
20 mins	<b>Practice Detached Mindfulness</b>	- Check how they went and ask questions to challenge negative beliefs
5 mins	<b>Break</b>	
25 mins	<b>Introduce Attention Training</b>	- Credibility check
30 mins	Practice Attention Training	- Complete worksheet 3.1
5 mins	<b>Homework assignment:</b> <ul style="list-style-type: none"> <li>- Complete session summary (worksheet 3.3)</li> <li>- Practice DM</li> <li>- Practice Attention Training and complete worksheet 3.2</li> </ul>	

**Worksheets: 3.1 & 3.2**



### Session 4 Outline

- **Homework review**
- **Challenge uncontrollability metacognitions and positive beliefs about rumination**
- **Explore avoidant coping**
- **Introduce situational attentional refocusing**
- **Introduce Pleasant Activity scheduling**

<b>Time</b>	<b>Content</b>	<b>Details</b>
30 mins	<b>Homework review</b> What were the key concepts from last week? Was anything unclear?	<ul style="list-style-type: none"> <li>- Complete B-S</li> <li>- Discuss DM &amp; ATT practice</li> <li>- Review worry/rumination time during week</li> </ul>
20 mins	<b>Challenge uncontrollability metacognitions and positive beliefs about rumination</b> (refer to item 4 on BS)	<ul style="list-style-type: none"> <li>- Run rumination suspension exercise</li> </ul>
10 mins	<b>Practice Attention Training</b> <ul style="list-style-type: none"> <li>- Encourage the use of detached mindfulness for intrusive thoughts</li> </ul>	<ul style="list-style-type: none"> <li>- Refer to notes from session three</li> </ul>
5 mins	<b>Break</b>	
40 mins	<b>Explore avoidant coping</b> <ul style="list-style-type: none"> <li>- Explore and challenge unhelpful beliefs about grief (anxiety/depression)</li> <li>- The link between activities, energy &amp; mood</li> <li>- Situational attentional refocusing</li> </ul>	<ul style="list-style-type: none"> <li>- Brainstorm on whiteboard maladaptive behaviours</li> <li>- Brainstorm ways to do situational attentional refocusing</li> </ul>
20 mins	<b>Pleasant Activity Scheduling</b>	<ul style="list-style-type: none"> <li>- Complete worksheet 4.2</li> <li>- Refer to worksheet 4.1 for ideas</li> </ul>
5 mins	<b>Homework assignment:</b> <ul style="list-style-type: none"> <li>- Complete session summary</li> <li>- Practice DM &amp; ATT</li> <li>- Continue rumination/worry postponement</li> <li>- Complete worksheet 4.2 and 4.3</li> </ul>	

**Worksheets: 4.1, 4.2 & 4.3**

### Session 5 Outline

- **Homework review**
- **Program review**
- **Maintenance Planning**

<b>Time</b>	<b>Content</b>	<b>Details</b>
45 mins	<p><b>Homework review</b></p> <p>What were the key concepts from last week? Was anything unclear? Spend quite a bit of time discussing the results from the pleasant activity experiments. What metacognitive beliefs and behaviours did they experience during their application?</p>	<ul style="list-style-type: none"> <li>- Complete B-S</li> <li>- Review: worry/rumination time, pleasant activities</li> </ul>
15 mins	<b>Attention Training Practice</b>	<ul style="list-style-type: none"> <li>- Refer to previous notes</li> </ul>
5 mins	<b>Break</b>	
20 mins	<p><b>Program review</b></p> <ul style="list-style-type: none"> <li>- Metacognitions (unhelpful &amp; helpful)</li> <li>- Detached Mindfulness</li> <li>- Attention training</li> <li>- Importance of pleasant activities</li> </ul>	<ul style="list-style-type: none"> <li>- Discuss the grief formulation handout and ask where the new strategies could be implemented to break the old cycle</li> </ul>
25 mins	<b>Maintenance Plan</b>	<ul style="list-style-type: none"> <li>- Complete worksheet 5.1</li> </ul>
5 mins	<b>Preparation for workshop completion</b>	
5 mins	<p><b>Homework assignment:</b></p> <ul style="list-style-type: none"> <li>- Complete session summary</li> <li>- Practice DM &amp; ATT</li> <li>- Continue rumination/worry postponement</li> <li>- Continue pleasant activity scheduling</li> </ul>	

**Handouts: Metacognitive Model of Grief**  
**Worksheets: 5.1**

### Session 6 Outline

- **Homework review**
- **Action Plan**

<b>Time</b>	<b>Content</b>	<b>Details</b>
30 mins	<b>Homework review</b> What were the key concepts from last week? Was anything unclear?	- Complete B-S - Discuss DM & ATT - Review: worry/rumination time pleasant activities
10 mins	<b>Attention Training</b>	
10 mins	<b>Celebrating Achievement</b>	- Each person shares with the group something they have achieved
10 mins	<b>Losing your footing</b>	- Discuss issues that may impede progress and strategies for their management
5 mins	<b>Break</b>	
30 mins	<b>Action Plan</b>	- Complete worksheet 6.1 and review in pairs - Then discuss as a group
5 mins	<b>Homework assignment:</b> - Complete session summary - Continue practicing strategies learnt	
20 mins	<b>Assessment</b> - Hand out assessment forms for individual completion	- Complete assessment forms

**Handouts:**

**Worksheets: 6.1**

**Appendix I**  
**Ethics Approval**

**Curtin University**

**Memorandum**

<b>To</b>	Dr Moira O'Connor, The Western Australian Centre for Cancer and Palliative Care, WA Centre for Cancer and Palliative Care	Office of Research and Development
<b>From</b>	Professor Stephan Millett, Chair, Human Research Ethics Committee	Human Research Ethics Committee
<b>Subject</b>	Protocol Approval HR 41/2013	TELEPHONE 9266 2784 FACSIMILE 9266 3793
<b>Date</b>	19 March 2013	
<b>Copy</b>	Mrs Jenine Wenn, School of Psychology and Speech Pathology WA Centre for Cancer and Palliative Care Dr Lauren Breen, School of Psychology and Speech Pathology WA Centre for Cancer and Palliative Care Associate Professor Clare Rees, Clinical School of Psychology and Speech Pathology	EMAIL <a href="mailto:hrec@curtin.edu.au">hrec@curtin.edu.au</a>

Thank you for providing the additional information for the project titled "Efficacy of Metacognitive Therapy for Prolonged Grief Disorder: A Randomised Control Trial". The information you have provided has satisfactorily addressed the queries raised by the Committee.

Your application is now a-P-er-gy.e-d•

- You have ethics clearance to undertake the research as stated in your proposal.
- The approval number for your project is HR 41/2013. Please quote this number in any future correspondence.
- Approval of this project is for a period of four years 19-03-2013 to 19-03-2017.
- Please register this study as a clinical trial and provide the ANZCTR registration number. • Your approval has the following conditions:
  - i) Annual progress reports on the project must be submitted to the Ethics Office.
- It is your responsibility, as the researcher, to meet the conditions outlined above and to retain the necessary records demonstrating that these have been completed.

Applicants should note the following:

It is the policy of the HREC to conduct random audits on a percentage of approved projects. These audits may be conducted at any time after the project starts. In cases where the HREC considers that there may be a risk of adverse events, or where participants may be especially vulnerable, the HREC may request the chief investigator to provide an outcomes report, including information on follow-up of participants.

The attached FORM B should be completed and returned to the Secretary, HREC, C/- Office of Research &

Development:

When the project has finished, or

- If at any time changes/amendments occur, or
- If a serious or unexpected adverse event occurs.

Yours sincerely



Professor Stephan Millett  
Chair Human Research Ethics Committee

### Standard conditions of ethics approval

These standard conditions apply to all research approved by the Curtin University Human Research Ethics

Committee. It is the responsibility of each researcher named on the application to ensure these conditions are met.

1. Compliance. Conduct your research in accordance with the application as it has been approved and keep appropriate records.
  - a. Monitoring - Assist the Committee to monitor the conduct of the approved research by completing promptly and returning all project review forms that are sent to you.
  - b. Annual report - Submit an annual report on or before the anniversary of the approval.
  - c. Extensions - If you are likely to need more time to conduct your research than is already approved, complete a new application six weeks before the current approval expires.
  - d. Changes to protocol Any changes to the protocol are to be approved by the Committee before being implemented.
  - e. Changes to researcher details - Advise the Committee of any changes in the contact details of the researchers involved in the approved study.
  - f. Discontinuation - You must inform the Committee, giving reasons, if the research is not conducted or is discontinued before the expected completion date.
  - g. Closure - Submit a final report when the research is completed. Include details of when data will be destroyed, and how, or if any future use is planned for the data.
  - h. Candidacy If you are a Higher Degree by Research student, data collection must not begin before your Application for Candidacy is approved by your Faculty Graduate Studies Committee.
2. Adverse events. Consider what might constitute an adverse event and what actions may be needed if an adverse event occurs. Follow the procedures for reporting and addressing adverse events (<http://research.curtin.edu.au/guides/adverse.cfm>). Where appropriate, provide an adverse events protocol. The following are examples of adverse events:
  - a. Complaints
  - b. Harm to participants. This includes physical, emotional, psychological economic, legal, social and cultural harm (NS Section 2)
  - c. Loss of data or breaches of data security
  - d. Legal challenges to the research

3. Data management plan. Have a Data Management Plan consistent with the University's recordkeeping policy, This will include such things as how the data are to be stored, for how long, and who has authorised access.
4. Publication. Where practicable, ensure the results of the research are made available to participants in a way that is timely and clear (NS 1.5). Unless prohibited from doing so by contractual obligations, ensure the results of the research are published in a manner that will allow public scrutiny (NS 1.3, d), Inform the Committee of any constraints on publication.
5. Police checks and other clearances. All necessary clearances, such as Working with Children Checks, first aid certificates and vaccination certificates, must be obtained before entering a site to conduct research.
6. Participant information. All information for participants must be approved by the H REC before being given to the participants or made available to the public.
  - a. University logo. All participant information and consent forms must contain the Curtin University logo and University contact details for the researchers. Private contact details should not be used.
  - b. Standard statement. All participant information forms must contain the HREC standard statement.

This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 41/2013). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers, If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing [hrec@curtin.edu.au](mailto:hrec@curtin.edu.au)

- c. Plain language. All participant information must be in plain language that will be easily understood by the participants.


Please direct all communication through the Research Ethics Office

## Appendix J

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