Recovery goals: goal quality, goal content and the impact of goal attainment on outcome for consumers with enduring mental illness

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Recovery Goals

Goal quality, goal content and the impact of goal attainment on outcome for consumers with enduring mental illness.

A thesis submitted in partial fulfilment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY (CLINICAL PSYCHOLOGY)

from

UNIVERSITY OF WOLLONGONG

by

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School of Psychology, 2009

THESIS CERTIFICATION

I, Samantha Clarke, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy (Clinical Psychology), in the School of Psychology, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at any other academic institution.

Samantha Clarke

Date

ACKNOWLEDGEMENTS

There are a large number of people who have been invaluable in helping this thesis come to fruition. I would firstly like to thank my friends and family for your support over the last six years. To my parents who have helped me maintain my study and have always provided me with support in any way they can. I am particularly grateful for their love and nurturance over the last year which ultimately led to this thesis being completed. To my sisters who have always remained encouraging and optimistic and who believed in me throughout this process.

I would also like to acknowledge Lachlan Macnab and his amazing family for their continual support and enthusiasm regarding my thesis. I would like to thank Arkayla who has assisted me over the last six years more than words can describe. I am very grateful to my fantastic friends who have listened and supported me throughout this long process and helped maintain my sanity. In particular I would like to thank Geaty Hamid, Kate Leeds, Kristy Charlton, Erin Sharp, Ann Bailey and Jo Lunn. To my friend and room mate Peter Kelly, you have been extremely encouraging and have been an important presence in maintaining my motivation and optimism throughout this experience.

This thesis would not be in existence without the ongoing support and guidance of my two supervisors Dr Lindsay Oades and Dr Trevor Crowe. Lindsay's eternal optimism and extensive knowledge on goal setting and recovery has been invaluable. Lindsay really helped progress this research and has assisted me in developing as a researcher. Trevor, I have really appreciated your effort in making yourself available to discuss my research to help it evolve and develop. You have both helped in maintaining my interest and motivation and have been integral in helping me achieve this goal. I would also like to thank Professor Frank Deane who has been very committed to my research process and has always been available for feedback and discussion. I would also like to acknowledge Dr Peter Caputi for his assistance with the statistical analyses required.

Preparation of this thesis was supported by the Australian Integrated Mental Health Initiative (AIMhi) – High Support Stream funded by the National Health Medical Research Committee (NHMRC) Health Partnerships grant number 219327. I would also like to thank the team at the Illawarra Institute for Mental Health including Sarah Marshall and Retta Andresen, for your wonderful support and assistance. In particular I would like to thank Yvonne Peros, Marie Johnson and Tony Turner without which the AIMhi project would not have been successful. I would also like to thank all of the consumers and mental health workers who chose to participate in the research your contribution has been invaluable and I hope this research leads to some positive change for you.

ABSTRACT

Personal goals are an important foundation of recovery from enduring mental illness (EMI), providing a sense of meaning, identity and hope. Recovery goals, within a case-management setting, are developed in collaboration between the person in recovery from EMI and the mental health worker. Goals are a fundamental component of most rehabilitation programs and models of recovery emphasise the importance of the goal striving process, yet minimal research has examined goal setting and striving within the mental health case-management context. This thesis aimed to progress recovery research related to goal striving. Four studies are presented that examine aspects of recovery goal setting for consumers with EMI.

Study 1 and 2 examined aspects of goal setting quality. Study 1 investigated the quality of goal setting within Australian mental health services. Mental health consumer files (N = 122) were reviewed and goal records were assessed for quality. Seventy four percent of files contained a goal record and on average goal records included 50% of goal setting principles likely to enhance goal progress. Goal setting quality was examined after mental health workers were trained in the Collaborative Recovery Model (CRM), which includes goal setting protocols drawn from previous evidence from goal research. Mental health consumers' goal records (N = 78) both prior to and subsequent to the Collaborative Recovery Training Program (CRTP) were also reviewed. CRTP lead to an improvement in both the frequency and quality of goal setting and the use of a structured goal setting intervention also seemed to promote further goal quality.

To examine the relationship between goal quality and improvements in working alliance and treatment outcome, standardised residual gain scores for the Working Alliance Inventory (WAI-s) and mental health outcome measures were calculated and correlated with goal quality for 110 mental health consumers. Goal quality was also associated with the goal and task subscales of the consumer rated WAI-s, and there was a modest relationship between goal quality and improvements in symptom distress

Study 2 also examined goal quality by surveying mental health workers (*N* = 83) on the clinical utility of the Collaborative Goal Technology (CGT) - a structured goal setting protocol. Workers reported they were more likely to use skills to develop meaningful and manageable goals when compared to the skills required to review goal progress. Technical skills of the CGT (calculating the Collaborative Goal Index and different levels of goal attainment) were employed least. Insufficient time was often reported as impeding correct use of the CGT and consumer factors (i.e., not being interested, too unstable) was the most frequently reported reason for mental health workers not attempting the CGT.

Study 3 examined the content of case-management goals set within recovery and investigated whether the content of goals differed depending on the stage of psychological recovery. One hundred and forty four mental health consumers' CGT's were reviewed. Physical health goals were reported significantly more frequently than any other types of goal and were rated as most important by 23% of consumers. Goals focused on employment and developing and maintaining relationships were often identified as most important, suggesting these types of goals are often a source of meaning and purpose for consumers within recovery. Significantly more health goals were set within the first stage of psychological recovery and health goals were also associated with poorer scores on the Recovery Assessment Scale - short. This suggests that in the early phases of recovery a focus on basic health needs is a priority and may signify the lack of longer term more meaningful goals at this time. Themes in the data suggest that people further along in their recovery set a greater range of goals. Relationship goals were typically set within the middle stages of recovery followed by employment goals toward the later stages of recovery. There was also significantly more approach goals set within the last two stages of recovery indicating that within these final stages, goals are more likely to be focused on moving towards desirable outcomes rather than avoiding negative outcomes

Study 4 explored the relationship between case-management goal attainment and improvements in mental health outcome (*N* = 71). Path modelling indicated that when symptoms are perceived as less distressing consumers are better able to make progress towards their case-management goals, which in turn

promotes aspects of recovery such as; hope, self-confidence, sense of purpose and positive identity. This highlights the importance of a recovery framework of case-management, placing a focus on both alleviation of symptoms and promoting striving towards personally meaningful goals in order to promote recovery from EMI.

The present research provides insight into the quality and content of goals set within recovery from mental illness for consumers with EMI and also provides support that goal attainment is associated with enhanced psychological recovery. Longitudinal research is required to assess the direction of the relationships found between treatment outcome and goal quality and goal attainment and, goal content and psychological recovery.

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ABBREVIATIONS

EMI	Enduring Mental Illness
AIMhi	Australian Integrated Mental Health Initiative
CGT	Collaborative Goal Technology
CRTP	Collaborative Recovery Training Program
CGI	Collaborative Goal Index
Goal IQ	Goal Instrument for Quality
CRM	Collaborative Recovery Model
HoNOS	Health of a Nation Outcome Scales
K10	Kessler 10
LSP-16	Abbreviated Life Sills Profile
SRM	Stage of Recovery Measure
NHMRC	National Health Medical Research Council
RAS	Recovery Assessment Scale
BPRS	Brief Psychiatric Symptom Rating Scale
MANSA	Manchester Short Assessment for Quality of Life
ACT	Acceptance and Commitment Therapy
RGT	Recovery Goal Taxonomy

Chapter One

INTRODUCTION

This chapter provides a brief general outline of the goal setting and striving literature specific to consumers with enduring mental illness and outlines each of the four studies. This chapter also briefly describes the broader research programme from which the data for the current studies was drawn. Detailed literature reviews are included as an introduction to each of the studies.

1.1 IMPORTANCE OF GOALS WITHIN RECOVERY

Goals are an important foundation of recovery from enduring mental illness (EMI; Anthony, Cohen, Farkas, & Cohen, 2000; Andresen, Oades, & Caputi, 2003; Davidson, Stayner, Nickou, Styron, Rowe, & Chinman, 2001; Mueser, et al., 2002; Onken, Dunmont, Ridgeway, Dornan, & Ralph, 2003). Goals can provide a sense of meaning, identity and hope when they are freely chosen and reflect the mental health service consumer's[1] values and interests (Andresen et al., 2003; Anthony et al., 2000; Elliot, Sheldon, & Church, 1997; Singer & Salovey, 1993). As recovery can be characterised by the ability of the individual who has a mental illness to live a personally meaningful and fulfilling life (Anthony, 1993; New Freedom Commission on Mental Health, 2003) it is clear why goals are an important focus of most mental health services (Siegert & Taylor, 2004).

Personal goals are defined as "consciously articulated, personally important objectives that individuals pursue in their daily lives. They provide individuals with a sense of purpose, structure, and identity" (Elliot et al., 1997, p. 915). These personal goals organise behaviour and provide direction to everyday life (Sheldon & Elliot,

[1]For the purpose of consistency the term consumer was used throughout this thesis as referring to the individual accessing mental health services. There is contention around the term used to describe the consumer and terms such as; patient, client and service recipients are also used. Consumer was selected as this is most relevant to the Australian context and is a broadly accepted term within Australia (Lloyd & King, 2003).

1998). Recovery goals[2] as referred to within this thesis are conceptualised as personally meaningful case-management goals that developed through collaboration between the consumer in recovery from EMI and their mental health worker.

Recovery goals should be the foundation of all psychosocial rehabilitation interventions to ensure each intervention is relevant to the consumer and that their motivation to engage in interventions is optimal (Anthony & Liberman, 1992; Corrigan, McCracken, & Holmes, 2001). Incorporating personal goals within both physical and mental health rehabilitation settings has been linked with improvements in quality of life (Thornton & Hakim, 1997), the adoption of health promotion behaviours (Glasgow, LaChance, Toobert, Brown, Hampson, & Riddle, 1997) and management of mental illness (Bauer & McBride, 1996). Furthermore, consumers are more likely to maintain the gains made during rehabilitation when they actively identified and directed their own goals (Wade, 1998). This suggests that when case-management goals reflect the consumer's personal goals they are likely to experience greater improvements in mental health.

Consumer narratives have also stressed that goals are an important source of hope, meaning, and identity (Andresen et al., 2003; Resnick, Fontana, Lehman, & Rosenheck, 2005). Further, consumer advocates have emphasised the significance of goal setting in terms of promoting empowerment and assisting consumers to regain social status (Chamberlin, 1984; Deegan, 1992; Fisher, 1994).

Despite recovery research and consumer advocates agreeing that goal setting is important for facilitating recovery from mental illness, and goals being a fundamental component of most rehabilitation programs, little research has been conducted that explores goal setting within the mental health case-management context. Considering recovery concepts have been criticised for lacking empirical support and being highly subjective (i.e., based on consumer reflections; Mueser et al., 2002; Resnick et al., 2005), it is vital that empirically based studies are conducted

[2] There are differences of opinion regarding the term recovery goals within recovery from EMI. Some recovery advocates refer to 'recovery goals' as personal goals developed and owned solely by the consumer and are seen as separate to the goals developed in collaboration with the case-worker. It is also acknowledged that case-management can be a facilitative process in assisting consumers in identifying their personal goals.

in this area. Little research has explored the nature of goal setting for consumers with EMI within the recovery process. This thesis aims to progress recovery research related to goal striving.

Research into recovery goals is important for several reasons: (a) to increase mental health workers' awareness regarding goal setting practices, which in turn may enable them to assist mental health consumers to set goals more effectively; (b) to provide services with feedback regarding the strategies for optimal goal setting that clinicians have problems with and offer appropriate recommendations to address shortcomings; (c) to inform the allocation of resources to reflect the goals of consumers within recovery and; (d) to assess empirically some of the claims outlined within the recovery literature to add to this body of knowledge (i.e., goal attainment promotes recovery and mental health outcomes for consumers with EMI).

1.2 DEFINITIONS AND ASPECTS OF GOAL SETTING AND GOAL STRIVING

Goals can be defined as internal representations of desired end states (e.g., outcome, processes, events, Austin & Vancouver, 1996). Goals are a significant source of motivation and incentive for action (Cochrane & Tesser, 1996; Emmons, 1989). Goal setting typically refers to the cognitive process of identifying or generating the goal. Goal setting is thought to direct attention, stimulate goal planning and increase effort and persistence (Locke, 1996). Goal striving involves the behavioural steps required to progress toward or attain the goal (e.g., completing tasks, monitoring tasks, reviewing goal attainment, Gollwitzer, & Sheeran, 2006; Locke, 1996). Aspects of goal striving are also required to maintain and increase motivation for goal progress (Locke, 1996). Therefore both goal setting and striving need to be supported within mental health service provision to assist consumers in attaining their recovery goals.

Research has clarified the beneficial effects of goal progress on health and wellbeing within non-clinical populations (Brunstein, 1993; Carver & Scheier, 1990; Diener & Fujita, 1995; Emmons, 1986; Emmons & Diener, 1986; Ryan & Deci, 2001; Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1995; Sivaraman Nair,

2003). Not only has goal progress been found to improve psychological health but research has also found that by setting personal goals individuals' experienced an improvement in psychological health (Bernstein, 1993; Emmons & Diener, 1986; Omodei & Wearing, 1990; Hofer & Chasiotis, 2003; King, Richards & Stemmerich, 1998). This suggests that even the act of identifying a goal to strive towards can positively enhance subjective wellbeing for mental health consumers. Striving towards personal goals is thought to provide individuals with an important sense of meaning which results in these improvements in wellbeing (Emmons, 1986; Reker & Wong, 1988). Limited research has been conducted specifically exploring the impact of goal setting and attainment within mental health populations (Stackert & Bursik, 2006).

Two aspects of goal setting are goal quality and goal content. Goal setting quality as referred to within this thesis, is the number of goal setting principles, drawn from empirical literature, incorporated into the process of goal setting. Some of these principles are; goal difficulty, goal commitment, goal clarity, self efficacy, goal planning, monitoring and feedback (Locke, 1996; Locke & Latham, 1990). Greater goal setting quality is associated with greater goal attainment, which in turn promotes enhancement of overall wellbeing within non-clinical samples (Carver & Schneider, 1990; Koestner, Lekes, Power, & Chicone, 2002; Locke, 1991; 1996; Locke & Latham, 1990; Sivaraman Nair, 2003; Sheldon & Kasser, 1995). Research examining goal quality amongst consumers with EMI has not been carried out.

Goal content is what the goal refers to or what the goal is about (e.g.,, exercise, employment). In order to examine the content of goals, individual's goals are classified across categories and frequency counts for each of the categories are conducted (Schmuck & Sheldon 2001). Questions can then be raised to look at the types of goals people are striving for and the relationship with outcome measures (e.g.,, stage of recovery) and other variables (e.g.,, the level of goal ownership). Both goal quality and goal content relating to goals set within case-management by consumers with EMI will be examined within the current thesis. There will also be a focus on the impact of goal progress on mental health outcome for consumers with EMI accessing case-management within Australia.

1.3 CASE-MANAGEMENT WITHIN AUSTRALIA

In general, case-management refers the co-ordination of services for consumers living with serious psychiatric disability within the community (Marshall, Gray, Lockwood, & Green, 2004; Pennebaker, 2005). Within Australia, clinical case-management is the most common model of case-management directing service delivery (Issakidis, Sanderson, Teeson, Johnston, & Buhrich, 1999; Kanter, 1989). The clinical model often requires the case-manager to provide direct services to the consumer (e.g., supportive counselling, skills development, medication adherence, Mueser, Bond, Drake, & Resnick, 1998). Other models of case-management include the; brokerage/generalist model (Powell Stannard, 1999), the strengths model (Powell Stannard, 1999; Modrcin, Rapp & Poetner, 1988), and assertive community outreach (Solomon, 1992; Stein & Test, 1985). Despite differences across case-management models, each typically includes: (a) assessing the individuals' needs; (b) development of a care plan; (c) arranging and monitoring suitable care to be provided; and (d) maintaining contact with the individual (Marshall et al., 2004). The lack of consistency across mental health teams within Australia (Harmon, 2006), and poor fidelity to case-management models in mental health practice generally (Mueser et al., 1998), makes it difficult to determine the effectiveness of each of these models. To account for the variations in case-management delivery across Australia the term case-management will be used within this thesis to encapsulate each of the models and will refer broadly to the four skills noted above that are common across each of the models.

1.4 VARIATIONS IN THE DEFINITION OF RECOVERY AND THE IMPACT ON SERVICE PROVISION AND GOALS

Over the last 25 years there have been dramatic shifts in mental health treatment delivery moving from institutionalised care to predominately community-based care provided through case-management (Anthony et al., 2000; Mueser, Bond, Drake, & Resnick, 1998; Richards, 2002). There has also been movement away from the traditional medical definition of recovery towards a broader definition of psychological recovery. These changes in the conceptualisation of recovery also seem to have led to greater diversity in the types (content) of goals and potentially the level of ownership of case-management goals.

The medical model targets the amelioration and/or management of symptoms (Allott, Loganathan, & Fulford, 2002; Resnick et al., 2005; Resnick, Rosenheck, & Lehman, 2004) and emphasises restoration to normal or near normal levels of functioning (Andresen et al., 2003; Whitwell, 1999). The medical definition of recovery was the dominant ideology directing mental health service provision. Under this model, health care is predominately prescriptive, with the consumer having very little input in selecting the goals of care (Anthony et al., 2000; Richards, 2002). In line with the medical conceptualisation of recovery from mental illness the goals of service delivery were aimed at the reduction and/or management of symptoms.

Another type of mental health service delivery is provided through rehabilitation programs. Within skills-based rehabilitation models goals focus on addressing cognitive and skills deficits, and the consumers' unmet needs with the aim of improving the consumers' functioning (Holloway, 1998). The content of goals set within rehabilitation appear more diverse than those set within a purely medical model framework and goal content moved beyond just the illness towards areas of functioning that were seen as deficits (Anthony, 1993; Corry & Jewell, 2001). This included areas of need such as self care, company and accommodation (Phelan, Slade, Thorncroft, Dunn, & Holloway, 1995). Consumers also started to have greater input into the types of goals being set as they may have been asked to report on their own level of needs (Phelan et al, 1995). Despite the goals of skills-based rehabilitation moving beyond symptom management alone, skills-based rehabilitation still places an emphasis on problems/deficits rather than a movement towards wellbeing. Skills-based rehabilitation and the medical models definitions of recovery are both viewed as clinical models of recovery (Slade, Amering, & Oades, 2008).

Psychological recovery (Andresen et al., 2003) similar to personal recovery (Slade et al., 2008) emphasises recovery as an individual process, which incorporates the gamut of human experience and goal striving. There is an emphasis on personal growth, development beyond the mental illness and individual's subjective experience of their recovery process (Andresen et al., 2003; Slade et al., 2008). Anthony (1993, p.15) describes recovery from mental illness as:

> "*a deeply personal, unique process of changing one's attitudes, values, feelings, goals, skills and/or roles. It is a way of living a satisfying, hopeful and contributing life, even with limitations caused by the illness. Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of the mental illness".*

With this changing and expansive definition of recovery, service delivery has also evolved. The Australian National Mental Health Plan 2003-2008 recommends that a recovery philosophy should drive service delivery. Traditional services have needed to shift their model of care from a predominantly medical model to incorporate the recovery philosophy (Marshall, Crowe, Oades, Deane, & Kavanagh, 2007). Service delivery from this framework supports consumers' autonomy and focuses on the strengths of the consumer and the community, rather than just the person's illness and deficits. The aim of this model of care is to enhance self-determination to assist the consumers' quality of life and personal growth (Andresen et al., 2003; Anthony et al., 2000; Mueser et al., 2002).

This recovery-based model, consistent with principles of self-determination, has recently been elaborated by examination of consumer reports. From this, Andresen and colleagues (2003) developed a 'stages of recovery model'. This model identifies five stages that consumers may progress through and places a focus on the consumer finding hope and meaning in his/her life and working towards his or her preferred identity**.** This process of psychological recovery has been likened to the process of human development and focuses on the personal growth of the consumer despite their illness (Andresen et al., 2003; Andresen, 2007).

With this expansion in the conceptualisation of recovery and with the greater focus on the ideographic nature of recovery it might be expected that there would be a greater diversity in the types of goals established within case-management and the level of ownership and involvement in goal planning by the consumer (Mueser, Torrey, Lynde, Singer, & Drake, 2003). Psychological recovery is holistic, focusing on the person as a whole with a focus on strengths and capabilities rather than just focusing on illness and/or deficits. However, symptom management is still an

important component of care (Anthony et al., 2000; Mueser et al., 2003; Wykes & Holloway, 2000). Further, the recovery orientated service aims to not only provide consumers with less impairment/symptoms but also more meaning, purpose and life satisfaction (Anthony, 1993). Based on this it might be expected that case-management goals are more personally meaningful, in line with the person's ideals for the future and reflect a broader range of life domains.

1.5 IMPACT OF ENDURING MENTAL ILLNESS ON GOAL STRIVING

EMI as defined within the current research includes psychotic illnesses such as: Schizophrenia, Bipolar, Schizoaffective Disorder and Depression with psychotic features. Individuals with EMI often experience a diverse range of symptoms including positive symptoms (e.g., hallucinations, delusions, disorganised speech and behaviour) and negative symptoms (e.g., cognitive impairments, difficulties with language, mood and motivation; Childs & Griffiths, 2003).

Symptoms associated with EMI can have a significant impact on the goal setting and striving process. With the onset of mental illness individuals often experience an extreme sense of hopelessness and loss of identity (Andresen et al., 2003). Important life goals are also often lost signifying a loss of meaning, which impedes motivation to engage in everyday tasks (Andresen et al., 2003), impacting progress towards short-term goals.

People with EMI also often experience problems with cognitive functioning, which can hinder goal setting and striving (Hodges & Segal, 2002; Murray & Bairer, 1996; Scott & Haggarty, 1984). This includes impairments in attention, memory and the processing of verbal information (Buchanan & Carpenter, 2000). Executive functioning is also often impeded, which may lead to difficulties developing goals and goal pathways and linking goals to abstract visions or values (Buchanan & Carpenter, 2000). Problem solving may also be hampered making it difficult for the person to deal effectively with barriers that may arise when pursuing their goals (Buchanan & Carpenter, 2000; Cancro & Lehmann, 2000; Murray & Bairer, 1996; Scott & Haggarty, 1984).

Avolition, which is defined as problems initiating and engaging in goal related activities (Winograd-Gurich, Fitzgerald, Georgiou-Karistianis, Bradshaw, & White, 2006) is one of the diagnostic criteria of Schizophrenia. This illustrates that issues with goal setting and striving is a defining characteristic of this illness often impacting the individual. These cognitive and motivational factors are frequent presentations of Schizophrenia.

Although these cognitive and motivational factors hinder the goal setting process and reduce the rate of goal progress for consumers with EMI it is expected that the steps required to set and strive for goals (e.g., problem solving barriers, developing action plans) are the same as for individuals who do not have EMI. Further, despite the significant barriers impacting goal setting and striving for consumers with EMI, 91% (n = 284) of consumers accessing mental health self-help services within San Francisco reported having a goal (Hodges & Segal, 2002). Anthony and colleagues (2000) also note that when consumers with EMI are given the opportunity and assistance, most are able to set reasonable goals. Research that may assist the goal setting and striving processes and help individuals with EMI overcome these barriers is pertinent, as goal setting has been emphasised as central to psychological recovery. Research examining goal setting within a recovery framework for consumers with EMI is scarce. The role of mental health workers in goal setting is now described.

1.5.1 MENTAL HEALTH WORKERS' ROLE WITHIN THE GOAL SETTING AND STRIVING PROCESS.

Mental health workers can play an integral role in supporting consumers particularly when goal striving is impeded by factors associated with their mental illness. This may include: a) linking concrete goals to more abstract and longer term visions for the future to ensure short term goals are moving the consumer towards what they find personally meaningful (Little, 1989), b) problem solving barriers to goal attainment (Locke, 1996), c) protecting the consumer's goals by noting what is personally meaningful (Sheldon & Elliot, 1999; Sheldon & Kasser, 1995) at times when symptoms are florid and hope is low so that these can be re-presented to the consumer when appropriate, and d) by ensuring case-management goals reflect the

consumers' values and interests to promote personal recovery (Sheldon & Elliot, 1999; Sheldon & Kasser, 1995).

1.6 AIMS OF THE PRESENT STUDIES

The central aim of this research is to provide insight into the process of goal setting and the content of case-management goals within a mental health recovery framework for consumers with EMI. Secondly, these studies aim to examine whether making progress on these goals leads to improvements in mental health outcome for consumers. This thesis is comprised of four studies.

Both Study 1 and Study 2 examine aspects of goal setting quality (Chapters 2 to 5). Study 1 specifically aims to: (a) examine the current quality of goal setting within Australian case-management services, (b) to assess whether training in goal setting protocols leads to improved goal quality, and (c) to examine the relationship between goal quality and outcomes for mental health consumers. Study 2 aims to: (a) investigate mental health workers' perceived level of skills when using a structured goal setting intervention following training, (b) identify obstacles reported by mental health workers that impede correct use of the goal setting intervention, and (c) identify barriers that mental health workers perceive as preventing use of a structured goal setting protocol with mental health consumers.

Study 3 aims (Chapters 6 to 8) to: (a) investigate the content of goals set within Australian case-management practices, and (b) explore whether different types of goals are more frequent at different stages of psychological recovery from mental illness.

Study 4 (Chapters 9 to 10) aims to: (a) determine whether baseline measures of functioning and recovery are associated with greater goal progress, and (b) determine the association between improvements in mental health outcome and goal attainment.

1.7 MENTAL HEALTH WORKER AND CONSUMER SAMPLES FOR EACH OF THE FOUR STUDIES

Each of the four studies reported on within this thesis drew from mental health consumer and worker participants within the Australian Integrated Mental Health Initiative (AIMhi). AIMhi was funded by the National Health and Medical Research Council (NHMRC) and one aspect of AIMhi was to incorporate a recovery-based case-management program (Collaborative Recovery Model, CRM) into main stream government and non-government mental health services (see Oades et al., 2005).

The CRM was developed to operationalise recovery principles within case-management (Oades et al., 2005). The CRM aimed to provide mental health workers with generic skills that can be integrated into various types of mental health settings such as case-management and psychiatric rehabilitation. The components of the CRM aim to effectively assist consumers with EMI in progressing with their individualised recovery process and all components are evidence-based. There are two guiding principles of the CRM: (1) recovery is a unique and individual process, and (2) collaboration between mental health worker and consumer with an emphasis on supporting the consumer's autonomy. The four main skills incorporated in the model are: (1) enhancing change, (2) identifying needs, (3) collaborative goal setting and striving, (4) homework and monitoring. Refer to Figure 1 for a diagram of the CRM model. This thesis focuses on the goal setting component of the CRM and is conducted as an aspect of the broader AIMhi project.

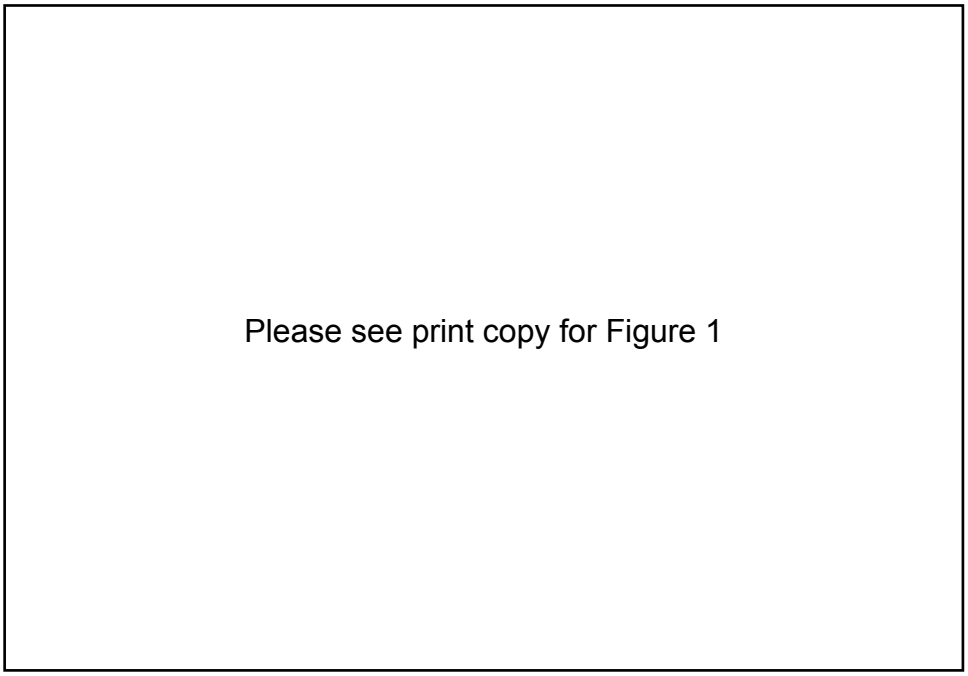


Figure 1. Diagram of the CRM detailing the two guiding principles and the four universal skills.

Participants were drawn from public mental health services and non-government organisations in the Australian states of Queensland, New South Wales and Victoria. A requirement of participation was that consumers satisfied criteria from the *Diagnostic and Statistical Manual of Mental Disorders* - 4th edition (DSM IV; American Psychiatric Association, 1994) for a diagnosis of a psychotic disorder of at least six months in duration, were over the age of 18 and were assessed as having greater than five total needs on the Camberwell Assessment of Needs Short Appraisal Schedule (CANSAS, Phelan et al., 1995). Individuals were excluded from the study if they had a brain injury or a significant cognitive impairment that would prevent them from giving informed consent or being able to complete questionnaires in the study even with the support of research assistants. Consumer participants were selected based on their mental health worker finding them eligible for the AIMhi program. Refer to Appendix 1 for mental health worker completed patient eligibility checklist.

Both consumer and mental health worker participants were drawn from public mental health services in the states of Queensland (QLD), New South Wales (NSW) and Victoria (Vic) and from non-government organisations including the Richmond Fellowship (QLD), Aftercare (NSW) and the Psychiatric Rehabilitation Association (NSW). The government organisations primarily provided intensive case-management services. The three non-government organisations provided a combination of residential care, supported housing and day programs utilising a case-management model.

Mental health workers employed by the services associated with AIMhi were trained in the CRM (N = 309). Following training 113 mental health workers volunteered to participate in the research component of the AIMhi project. Mental health worker participants included: nurses, psychologists, social workers, occupational therapists, support and welfare workers. This thesis will now provide a detailed literature review relating to goal quality to provide a context for studies 1 and 2.

Recovery Goal Quality

Study 1 and 2

Aspects of the recovery goal quality component of the thesis have been published and are located in Appendix 2 and 3.

Clarke, S. P., Oades, L. G., Crowe, T. P., & Deane, F. P. (2006). Collaborative Goal Technology: Theory and Practice. *Psychiatric Rehabilitation Journal*, *30,* 129-136.

Clarke, S. P., Crowe, T. P., Oades, L. G., & Deane, F. P. (in press). Do goal setting interventions improve the quality of goals in mental health settings? *Psychiatric Rehabilitation Journal.*

Chapter Two

GOAL SETTING QUALITY

This chapter outlines the literature on goal setting quality within non-clinical and with consumers with EMI to provide a context for Study 1.

2.1 THE QUALITY OF GOAL SETTING WITHIN AUSTRALIAN MENTAL HEALTH CASE-MANAGEMENT RECORDS

Goal setting is a vital component of recovery for individuals with EMI (Ades, 2003; Lecomte, Wallace, Perreault, & Caron, 2005; Oades et al., 2000) and has been linked with the promotion of hope and personal meaning (Ades, 2003; Andresen et al., 2003; Baumeister & Leary, 1995; Richards, 2002; Snyder, 2000). However, little is known about the degree to which goal setting is occurring within Australian mental health services or the quality of the goals that are being set within case-management.

Goal setting quality is defined here as the number of goal setting principles, drawn from empirical literature, incorporated into the process of goal setting. Greater goal setting quality is associated with greater goal attainment, which in turn promotes enhancement of overall wellbeing within non-clinical samples (Carver & Schneider, 1990; Koestner, Lekes, Power, & Chicone, 2002; Locke, 1991; 1996; Locke & Latham, 1990; Sivaraman Nair, 2003; Sheldon & Kasser, 1995). Consequently, it can be inferred that enhancing the quality of mental health service consumer case-management goals should promote goal attainment and health and wellbeing outcomes.

As well as improvements in mental health outcomes, it could also be expected that the working alliance would improve when goal quality is enhanced. Working alliance has been typically described as being comprised of three components: bond (the level of relational attachment and compatibility between the consumer and

therapist); agreement regarding the appropriateness of the selected goals; and agreement regarding the appropriateness of selected tasks (activities undertaken to achieve the goals; Bordin, 1994). Greater discussion and clarity around goals and goal pathways is likely through the use of skills that promote goal quality. This is likely to lead to greater agreement on goals and tasks.

2.2 GOAL QUALITY: FACTORS THAT ENHANCE GOAL ATTAINMENT

This chapter will now review research identifying factors enhancing goal progress within non-clinical populations. Many of these factors have also been incorporated into goal setting assessments and interventions developed for mental health populations (Clarke, Oades, Crowe, & Deane, 2006; Kiresuk & Sherman, 1968; Wallace et al., 2001). By incorporating these factors into the goal setting process with consumers with EMI the likelihood of goal progress is increased. Locke and Latham (e.g., Locke, 1991; 1996; Locke & Latham, 1990) conducted many studies investigating variables that impact on the process of goal setting and goal attainment and based on these findings they developed Goal Theory (Locke, 1996: Locke & Latham, 1990). Goal Theory outlines numerous goal setting principles found to promote goal attainment. These include: goal difficulty, goal commitment, goal clarity, self efficacy, goal planning, monitoring and feedback.

2.2.1 GOAL DIFFICULTY

A linear relationship between goal difficulty and level of goal achievement has been found, such that when goals are more difficult people achieve better results (Locke & Latham, 1990). By establishing higher levels of potential goal attainment, motivation is stimulated enabling greater energy to be put towards goal striving (Little, 1989; Locke, 1991; 1996). This conclusion is supported by various studies within organisational contexts (Bassett, 1979; Locke, Shaw, Saari, & Latham, 1991; Yukl & Latham, 1978) utilising a range of tasks (e.g., typing, coding, perceptual speed tasks, brain storming and addition, Locke et al., 1991). In order for goal difficulty to result in higher goal achievement requires the individual to be committed to the target goal (Locke, 1991; 1996; Locke and Latham, 1990).

Therefore, the motivational effect of goal difficulty is only expected when goals are personally meaningful and important to the individual (Locke, 1996).

Goal commitment is thought to moderate the relationship between goal difficulty and goal attainment (Klein, Wesson, Hollenbeck, & Alge, 1999). Goal attainment has been found when both high goal commitment and high goal difficulty are present. Peak performance is not likely when only goal commitment or goal difficulty alone is present (Klein et al., 1999).

2.2.2 GOAL COMMITMENT

Numerous studies suggest that goal commitment is essential for goal attainment (Locke et al., 1991). Goal commitment can be defined as the degree to which the person is attached to and determined to reach the set goal (Locke, 1991; 1996). High commitment to goals is attained when: a) the individual is convinced that the goal is important, and b) the individual believes that the goal is attainable (or at least progress can be made toward it; Locke, 1991; 1996). Goal commitment also influences goal choice. Making goals more explicit can also enhance goal commitment (Locke, 1991; 1996). Goal importance is pertinent when looking at identifying goals with mental health consumers (Corrigan et al., 2001; Hollenbeck & Williams, 1987). Being aware of the importance of the consumers case-management goals can enable greater resources to be allocated to the goals that consumers are more motivated to achieve. This is likely to maximise goal attainment/progress.

2.2.3 GOAL CLARITY

Goal attainment is also increased when goals are clearly specified (Carver & Scheier, 1998; Grant & Greene, 2001; Latham & Yukl, 1976; Locke, 1991; 1996; Locke & Latham, 1990). Goal specificity enhances awareness of the degree of variance between actual performance and required performance. This enables the individual to monitor his/her performance more closely and gain accurate feedback and adjust his/her performance accordingly (Locke et al., 1991; Locke, 1991). Higher achievement on difficult goals can also be exemplified if these difficult goals are made explicit (Locke et al., 1991; Locke & Latham, 1990). In other words, goal

progress is enhanced as a result of increasing the explicitness and difficulty of the goal, when commitment is also present.

2.2.4 SELF EFFICACY

Self-efficacy has a significant impact upon goal progress and the adoption of health related behaviours (Bandura, 1986; Borelli & Mermelstein, 1994; Janz, Champion, & Stretcher, 2002; Lippke, Ziegelmann, & Schwarzer, 2005; Winkleby, Flora, & Kraemer, 1994). Self-efficacy, when referred to within the goal setting literature, is seen as task specific confidence (Bandura, 1986). Not only has self-efficacy been found to directly affect performance toward the goal, people with high self-efficacy are also more inclined to select difficult goals, have a more positive response to set backs when goal striving, and are more inclined to develop successful strategies to assist task completion (Locke, 1991; 1996). Equipping an individual with skills to enhance mastery of the set task enhances self-efficacy. Self-efficacy can also be bolstered by effective role modelling and by promoting the individual's confidence in his/her ability to competently complete the set task through encouragement and support (Bandura, 1986). Snyder and colleagues (1991) also noted that for a sense of hope to exist, the person must believe that some progress towards the goal can be made.

2.2.5 STRATEGY DEVELOPMENT AND PLANNING

Goal attainment can also be enhanced by developing strategies and planning goal pathways. Health promotion behaviours were more likely to be adopted when strategy development and goal planning occurred (Bandura & Simon, 1977; Janz et al., 2002; Sniehotta, Schwarzer, Scholz, & Schuz, 2005; Sniehotta, Scholz, & Schwarzer, 2005). Strategy development and planning allows pathways for goals to be identified and as such promotes hope (Snyder, 2000) and self-efficacy (Bandura, 1986; Snyder, 2000). Planning takes into account the steps required to reach the target goal as well as evaluating the costs and benefits of varying goal pathways. Concrete steps are identified in order to meet the longer-term goal. Planning and attaining short-term tasks in order to meet longer-term goals is also likely to sustain motivation and promote self-efficacy. Both hope and self-efficacy have been noted as important proponents of successful goal striving and have been identified as

important when trying to adopt health promotion behaviours (Borrelli & Mermelstein, 1994; Winkleby et al., 1994; Lippke et al., 2005).

2.2.6 MONITORING AND FEEDBACK

Monitoring of goal progress and providing feedback on performance has been shown to enhance goal progress (Frost & Mahoney, 1976; Locke, 1991; 1996; Locke et al., 1991). Feedback enhances an individual's awareness of the discrepancy between actual performance and ideal performance. Self-efficacy also plays a crucial role when an individual is receiving negative feedback about his/her performance and the way feedback is delivered is crucial to subsequent goal striving efforts. Feedback should be phrased constructively with a focus on what was done well, as well as a focus on barriers to attainment specific to the goal rather than global problems with the individual. Problem solving barriers to goal attainment is also important so the individual can develop new strategies to achieve the goals and maintain, if not increase self-efficacy (Sniehotta, Scholz, Schwarzer, 2005; Sniehotta, Schwarzer, Scholz, & Schuz, 2005). This is of particular importance within the mental health community as confidence, sense of self and hope are often negatively affected as the result of a mental health diagnosis (Andresen, 2007).

2.2.7 COLLABORATION

Collaboration is important in promoting goal attainment amongst mental health consumers and ensuring consumers are actively directing their recovery (Corrigan, Liberman, & Engle, 1990). By enabling individuals to participate in the goal setting process volition is increased, which enhances the individual's commitment towards the goal and enhances the likelihood for goal attainment (Hollenbeck & Williams, 1987). Agreement on goals between consumer and mental health worker has been associated with increased satisfaction, decreased distress, reduced symptomatology and improved treatment outcome (Michalak, Klappheck, & Kosfelder, 2004). Tryon and Winograd (2001) conducted a review of 25 studies to evaluate the impact of collaboration in goal setting within psychotherapy contexts. From their review they noted that 68% of the studies found a positive relationship between consumer involvement within the goal setting process and treatment outcomes (e.g., reductions in symptoms and complaints, lower levels of distress, greater satisfaction with

therapy). Further, when the consumers' autonomy is supported they are more inclined to adopt and maintain specific health behaviours (Sheldon, Williams, & Joiner, 2003). This supports the need to promote the consumer's role when identifying and developing case-management goals.

Psychological recovery may be further enhanced by selecting goals that are well aligned with their interests, values and self-identity (Emmons, 1991; Kasser & Ryan, 1993, 1996; Ryan & Deci, 2001; Sheldon & Elliot, 1999; Sheldon & Kasser, 1995; Sheldon et al., 2003). As outlined in Chapter 1, consumers with EMI are likely to have difficulties with the goal setting and striving process. Yet despite this process being slowed it is expected that the actual process for goal setting and striving are the same as those without a mental health diagnosis. Therefore the goal-setting principles drawn from non-clinical samples should also apply to consumers diagnosed with schizophrenia and other EMI.

2.4 FORMAL GOAL SETTING INTERVENTIONS TO IMPROVE THE QUALITY OF GOAL SETTING WITHIN MENTAL HEALTH SERVICES

Goal quality is enhanced by formalising interventions that systematically incorporate goal attainment principles (e.g., promote specificity, commitment, planning and monitoring). Three forms of goal striving interventions will now be described: Goal Attainment Scaling (GAS); Clients Assessment of Strengths, Interests and Goals (CASIG); and the Collaborative Goal Technology (CGT). Components and procedures for each will be reviewed and strengths and weaknesses will be discussed.

2.4.1 GOAL ATTAINMENT SCALING

Goal Attainment Scaling (GAS) is a tool to evaluate the effectiveness of mental health programs by measuring the degree to which individualised consumer goals are achieved at treatment completion (Kiresuk & Sherman, 1968). GAS requires mental health workers to identify at least three goals that are the focus of the mental health intervention and determine five levels of outcome for each goal (one expected level of outcome and two levels representing better than expected outcome, and two levels

representing less than expected outcome). Goal striving is monitored and goal attainment is reviewed. A standardised goal attainment score can be calculated for the individual for that goal striving period (Kiresuk, Smith, & Cardillo, 1994).

GAS has been used in a wide range of program evaluations including: inpatient and outpatient psychiatric services, special education programs, staff training programs in mental health settings and dentistry, nursing home care and summer camps (Cytrynbaum, Ginath, Birdwell, & Brandt, 1979). Strengths of GAS include the ability to ideographically measure consumer outcome and facilitate goal attainment when the consumer is included in the goal setting process. For instance, by identifying and negotiating goal progress levels with consumers, greater clarity, and specificity of goals can occur. GAS also contains ratings of goal importance and varying levels of goal attainment. When levels of goal attainment are developed with the consumer they provide an indication of self efficacy related to each specific goal. Encouraging the consumer to be an active participant in monitoring and reviewing progress can enhance motivation, particularly where awareness of the current level of attainment and discrepancy with desired level of attainment is explored (Locke, 1991; 1996; Locke et al., 1991).

A review of GAS research that included a range of mental health populations from community mental health to psychotherapy found that when independent raters assessed the level of goal attainment for GAS inter-rater reliability was moderate (.60; Cytrynbaum et al., 1979). Typically higher reliability (.71 - .92) was evident when research was based solely on a community mental health consumer population (Shefler, Canetti, & Wiseman, 2001). Content validity was assessed by comparing the consumer's target complaints scale at pre-therapy with the worker's verbal formulations of GAS therapy goals. Results showed that the consumer's first complaint was listed as a GAS goal in 76% of cases, the second complaint was listed in 56% of cases and the third compliant was listed in 44% of cases. These results indicate that generally GAS demonstrates good content validity (Shefler et al., 2001). Usually only low to moderate correlations between GAS scores for goal attainment and outcome measures have been evident (Cytrynbaum et al., 1979). This has been

largely explained by the idiosyncratic nature of the of mental health consumer goals (Shefler et al., 2001).

Problems have been identified with how the standardised scores were developed for GAS (MacKay & Lundie, 1998). One recommendation to overcome this weakness is to avoid the use of the standardised scores and rather report the data as frequencies in terms of levels of attainment, the types of goals being set and the grades of importance (MacKay & Lundie, 1998). For a comprehensive review of these issues, review MacKay and Lundie (1998), and Cytrynbaum and colleagues (1979).

2.4.2 THE CLIENTS' ASSESSMENT OF STRENGTHS, INTERESTS AND GOALS

The CASIG (Wallace, Lecomte, Wilde, & Liberman, 2001) was developed for use as a functional outcome measure for consumers with mental health problems (Wallace et al., 2001). It focuses on systematising the process of individualised treatment planning by using a structured interview to assess the consumer's goals in five broad categories: living arrangements, vocational resources, social and family relationships, religious activities, and physical and mental health. Open ended questions aim to elicit whether the consumer wants to improve each area of their life in the next year. If the consumer indicated that they would like to improve this aspect of their life, they are asked how they would like to do this and what amount and type of support they would need to make these changes. The structured interview also assesses social and independent living skills, medication practices, quality of life, and quality of treatment, symptoms and unacceptable community behaviours. Following each section, consumers are asked if they would like to focus on this area as a personal goal. The CASIG can be repeatedly administered to assess treatment progress (Lecomte et al., 2004). The 15 sections on the CASIG showed varying levels of test retest reliability ranging between .45 and .95, yet typically showed good reliability (r = .76). Internal consistency scores were between .51 and .93, yet typically show good reliability (r = .74; Lecomte et al., 2004).

One of the potential weaknesses of the CASIG is that it may not always ensure that what is personally meaningful to the consumer is incorporated into the treatment plan as the structured interview does not: (a) guide consumers to think beyond the

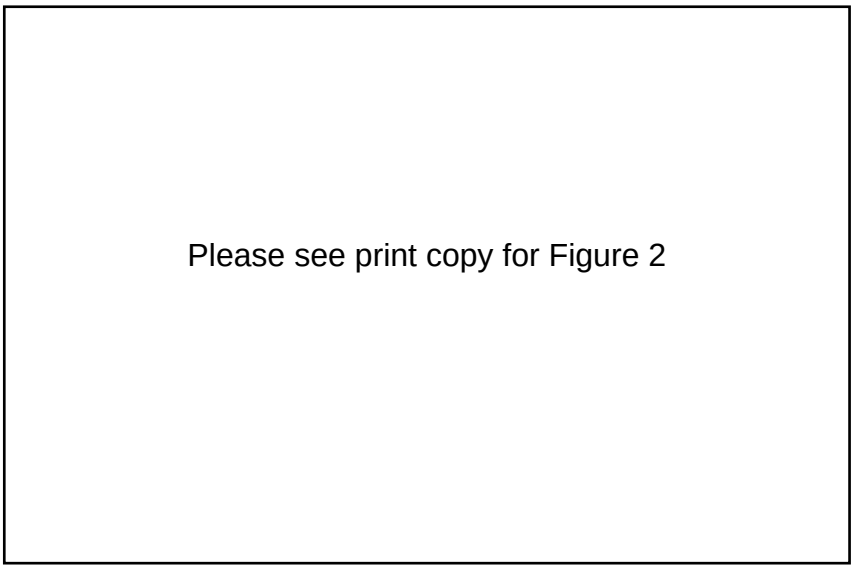
year period, and (b) does not encourage exploration of any lifestyle areas that fall outside the rehabilitation sections outlined. As the CASIG was developed as an outcome measure and a tool for treatment planning (Wallace et al., 2001), several goal-setting principles that promote goal attainment were not incorporated. For example, the CASIG does not include ratings of goal importance in each rehabilitation area that the consumer wants to work on. This could result in resources being divided across goals and spending resources on goals that are less pertinent to the consumer. This has been shown to impede motivation (Locke, 1991; 1996). In addition, the structured interview does not include ratings of confidence in achieving the goals outlined or various levels of goal attainment.

2.4.3 THE COLLABORATIVE GOAL TECHNOLOGY

The CGT (Clarke et al., 2006) is an individualised goal striving intervention aimed at promoting the mental health consumer's individual recovery process. The CGT was developed as part of this series of studies and is a significant focus across the studies presented in the thesis; hence the CGT will be described in detail and the individual elements of the CGT will now be discussed. An example of the CGT is provided in Figure 2.

2.4.3.1 Components of the CGT

The CGT incorporates several procedures. These include: (a) familiarising the person to the concept of recovery and helping him/her identify and create his/her personal recovery vision; (b) developing time-framed goals with three levels of goal progress; (c) prioritising goals in terms of relative importance; (d) negotiating goal progress indicators in relation to goal attainment confidence; (e) systematically reviewing goal progress; and (f) generating the overall goal attainment index to measure goal attainment.


Please see print copy for Figure 2

2.4.3.2. Personal Recovery Vision

Anthony (1991) discussed the 'recovery vision' as a way of tying together the principles of self-determination, adjustment to disability, empowerment, and self-esteem into existing conceptions of recovery from mental illness. The personal 'recovery vision' within the CGT aims to identify the individual's aspirations and hopes for the future by incorporating values that are important to the individual and eliciting aspects of the person's preferred self to which they practice and aspire. Once the recovery vision is developed it acts as guide for more concrete goals to ensure short-term goals are enabling progress towards what the person finds personally meaningful. It is important that once the recovery vision is identified, manageable short-term goals are also developed to ensure that meaning and manageability (i.e., the goals are achievable) are incorporated into the goal setting process to promote motivation. Little (1989) noted that both concepts; meaning and manageability are important to promote goal attainment.

A recovery vision can be elicited by respectfully asking the individual 'why' they have selected certain goals. For example, "Why would you like to get a job?" "What would it mean for you to be employed?" One possible response to these questions is, "to be able to stand on my own two feet," (as seen in the example in Figure 2) which reflects the importance of feeling independent. Recovery visions may also be identified by focusing on the individual's role models and exploring the attributes of the role model. This may help extract qualities or values that the consumer finds important that may then help shape his/her personal recovery vision. Focusing on a role model can also help make these values and qualities more tangible helping the consumer to overcome problems with abstraction associated with executive function deficits. Regardless of how the recovery vision is identified the exploration should always be conducted within a supportive therapeutic relationship so the individual feels respected and safe enough to explore what is personally meaningful to them.

Problems with cognitive and executive functioning can often make it difficult to elicit abstract visions (Buchanan & Carpenter, 2000; Cancro & Lehmann, 2000). The CGT protocol for eliciting the recovery vision aims at accessing these more abstract values and visions, the mental health worker aims to personify the

individual's recovery vision in an attempt to make the vision more accessible and concrete to help overcome potential problems with abstraction.

2.4.3.3 Three-Monthly Goals

The CGT allows a maximum of three goals to be pursued over a three-month review period. Limiting the number of goals allows adequate motivational and resources to be committed to each of the goals. The three month time frame for goals was selected to ensure goals were manageable (within a near enough time frame) yet also maintained their meaningfulness (Little, 1989) so the consumer can see how attaining this goal will help them make progress towards their recovery vision. Disengagement in tasks may be likely if they are not viewed by the individual as being linked to his/her longer term goals (Bandura & Simon, 1977). To promote the attainment of recovery goals homework tasks are used. This involves breaking down the three-monthly recovery goals into biweekly homework tasks that the consumer works on in between their case-management appointments (Kelly & Deane 2008; Oades et al., 2005). These homework tasks are small action steps that help the individual in recovery progress towards their goal.

Mental health workers can assist the consumer in identifying goals that align with their recovery vision by asking questions such as "what could you do in the next 3 months that will help you move towards… (Recovery Vision)?" This practice increases the likelihood that the selected goals align with the person's values, interests and preferred identity, which assists with maintaining motivation and goal attainment (Sheldon & Elliot, 1998, 1999; Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1995). The three goals identified in the example (Figure 2) were: 1). to do my own shopping, 2). to find a job, and 3). to improve medication taking. These were three goals that the individual believed he could work on over the next three months to assist him in working toward his recovery vision, "to stand on my own two feet".

2.4.3.4 Relative Importance System

The more important a goal is to the individual, the more an individual will commit and strive toward it (Hollenbeck & Williams, 1987). Unless the consumer is

working toward goals they are motivated towards achieving, engagement in strategies to change will have limited impact (Corrigan et al., 2001). Therefore, identifying the person's goal priorities can be vital to ensure sustained motivation. To determine how to allocate resources within case-management the consumer is asked how she/he would distribute ten points across the maximum three goals selected. As seen in the example (See Figure 2) the individual allotted five points to goal one, three points to goal two, and two points to goal three. This indicates that the person's motivation is more likely to be directed toward doing his own shopping (goal one which has been allocated 5 points).

2.4.3.5 Levels of Goal Progress

For each goal, three levels (low to high) of goal progress are identified and clearly defined. As noted previously, making goals explicit with indicators of goal progress increases the likelihood of goal attainment (Locke & Latham, 1990). Self efficacy can be enhanced by identifying progress made towards goals, be it small or substantial (Bandura, 1982). Self-efficacy helps maintain motivation during the goal striving process (Locke & Latham, 1990) and can promote future goal striving efforts (Ades, 2003; Locke, 1996).

The descriptors 'Awesome', 'Success' and 'Keep going' were chosen to represent different levels of goal progress. The 'Success' level represents what the person believes would be an indicator of successful goal progress over the three month period, and that he/she is adequately confident that he/she could achieve it. Workers are advised to clarify the 'Success' level first to provide an anchor for the other levels of goal progress. Sometimes people achieve more than expected, so the 'Awesome' level allows review and reinforcement of exceptional progress. The 'Keep going' level represents little or no relative progress towards attaining the goal. The 'Keep going' level is a necessary inclusion to allow minimal progress to be tracked without deflating the person's motivation while encouraging further effort. The labels of these different levels of goal progress can be amended to reflect language that is meaningful for the person (e.g., goal attainment, better than expected, less than expected).

2.4.3.6 Confidence Rating

Individuals have to have sufficient belief that they are able to attain or progress toward goals (Snyder, 2000). The adoption of preferred health behaviours is influenced by the individual's belief regarding his/her ability to achieve specific goals (Borelli & Mermelstein, 1994; Winkleby et al., 1994). When establishing the "success" level of goal progress for each goal, the individual is asked, "On a scale of 1 to 100 how confident are you that you will achieve this level of goal progress?" If the individual reported being less than 70% confident then that level of goal progress is adjusted until the person feels at least 70% confident. This is to ensure goals are tailored to the individual and commitment to goals is enhanced. If confidence is high and the individual views the goal as important she/he is more likely to maintain motivation and achieve the set goal (Bandura & Simon, 1977; Locke et al., 1991). By ensuring that the person is confident about achieving the goals being established the likelihood that the person will be successful increases. This in turn is reinforcing, increasing the probability that the person will set new goals and persist with the goal striving process.

2.4.3.7 Feedback and Monitoring

Feedback and monitoring of performance also enhances goal progress (Frost & Mahoney, 1976; Locke, 1991; 1996). As part of the review process an index of goal progress across the three goals can be calculated, which is referred to as the Collaborative Goal Index (CGI). The CGI can be calculated by multiplying the level of attainment (Awesome 2, Success 1, Keep going 0) by the number of points allocated for importance for each goal selected. These three scores are then summed and divided by the maximum possible score of 20. This score is then multiplied by 100, to yield the percentage of goal attainment. CGT = Σ (Attainment x Importance)/20 x 100. In the example provided in Figure 2, the CGT index score would be (5x2 + 3x1 + 2x0) = 13/20 x 100 = 65%. Similar to GAS, the index indicates the level of attainment, but in this case is weighted by the importance of the goal for which the tasks were performed. The optimal score on the CGI is 50. Very high scores or very low scores may indicate that the tasks that were set were either too easy or too difficult respectively. The index score enables idiosyncratic goals and goal progress to be calculated into a percentage that can then be compared with other

goal progress regardless of the content of those goals. This enables comparison of an individual's goal attainment over time and enables comparison of goal attainment across consumer groups.

Monitoring goal and task achievement increases awareness of obstacles that have arisen, so problem solving can take place (Buchanan & Carpenter, 2000; Cancro & Lehmann, 2000). The CGT provides fifteen common difficulties (and an 'other' option) to prompt identification and discussion regarding common issues that may have impacted on goal attainment (e.g.,, not enough support).

2.4.3.8 Using the CGT to Support Recovery with EMI

The guiding tenet of the CGT is to promote collaboration between the mental health consumer and worker and to support the autonomy of the consumer as this has been associated with improved outcome (Michalak et al., 2004; Tryon & Winograd, 2001). The CGT has been designed to emphasise the individual's freedom to determine her/his own life plan and the pathways to get there. The following example demonstrates collaboration and supporting the person's autonomy. The person indicated he wanted to become a doctor, yet had not completed high school. Rather than immediately dismissing this goal as unrealistic, the support worker assisted the individual to identify manageable steps (shorter-term goals) with which to progress towards his longer-term vision. The worker supported the individual's autonomy by providing options through which he could complete high school (e.g.,, attending adult learning institutions or supported education on a full or part-time basis). Furthermore, the worker helped the person explore what it was about being a doctor that was important to him. Subsequent short-term goals and related tasks consistent with this vision were set. Although the recovery vision may change over time, the reasons for wanting to be a doctor are likely to remain relatively stable and provide ongoing motivation. In this way, autonomy was supported and both the meaning and manageability of specific goals were maintained.

2.4.3.9 CGT as an Adaptation of GAS

The CGT is an adaptation of GAS and places greater emphasis than GAS on collaboration and goal ownership by the person in recovery and involves four major

revisions of GAS: (1) Incorporation of an overall recovery vision aimed at clarifying the person's life dreams or key values, which are linked to the consumer's shorter-term goals; (2) The inclusion of a goal progress review protocol that requires the consumer to explore, discuss and problem solve a range of difficulties experienced when pursuing his/her goals. This permits both social reinforcement and facilitation of problem solving to address barriers to goal progress; (3) Motivation enhancement practices are further incorporated into the goal setting and monitoring process by including a quantitative rating of the consumer's confidence regarding his/her ability to attain the desired level of goal progress over the review period and; (4) The CGT reduces the number of goal progress levels from five to three and removes the negative ratings of goal progress.

2.4.3.10 Potential Weaknesses of the CGT

Although the CGT is primarily developed as an intervention to assist goal attainment for mental health consumers and incorporates many of the elements that promote goal progress, some weaknesses are also evident. The CGT was developed for use within the larger CRM (Oades et al., 2005) to be used in conjunction with homework setting (Kelly, Deane, Kazantzis, Crowe, & Oades, 2006). As a result monitoring of steps that make up the goal pathways has not been included in the layout of the CGT intervention. Monitoring goal progress is central to assisting goal attainment and mental health workers are encouraged to use systematic homework administration (Kelly et al., 2006) to monitor goal setting effectively and as such promote attainment.

The CGT form also does not include adequate prompts to guide both the worker and consumer to plan and develop pathways to the goals developed. Snyder (2000) noted that the development of goal pathways is central to the promotion of hope and goal progress. It is also important to note that although the CGT protocol promotes the inclusion of many goal quality aspects unless the support worker implements the skills effectively goal quality will be impeded and as such it is expected that goal progress will suffer. Research conducted by Uppal, Oades, Crowe, and Deane (In Press) demonstrated that despite training in the overall CRM only 37% of mental health workers trained produced documented evidence of their

implementation of aspects of the CRM in case-management practice. This suggests that most mental health workers probably do not implement systematic goal-setting activities even after training. Although the number of mental health workers showing evidence of using CRM principles is low these figures are representative of other didactic style training and workshops where long term implementation strategies (i.e. use of a champions, monthly supervision, reviews, interactive staff training with line level staff etc) are not included (Corrigan, 1995; Smith & Velleman, 2002). One means of assessing the quality of goal setting within case-management practice is by conducting an audit of consumer case-management goal records.

Chapter Three

UTILISING AN AUDIT METHODOLOGY TO ASSESS SERVICE PROVISION WITHIN MENTAL HEALTH SETTINGS

This chapter reviews the literature on audit processes conducted within mental health settings and provides a context for the goal audit carried out within Study 1.

Goal setting is central to case-management and can be challenging for consumers with EMI. It is widely acknowledged that when certain goal setting principles, such as those mentioned in Chapter 2 (e.g., identifying different levels of possible goal progress) are incorporated into the goal setting process the likelihood of goal attainment is enhanced for individuals without a mental health diagnosis (Bandura, 1986; Locke, 1991; 1996; Locke & Latham, 1990; Sniehotta, Scholz et al., 2005; Sniehotta, Schwarzer et al., 2005; Snyder, 2000). There is also evidence to suggest that by enhancing collaboration between consumer and mental health worker goal progress is also enhanced (Corrigan et al., 2001; Hollenbeck & Williams, 1987; Tryon & Winograd, 2001). Therefore, there is an implied association between enhanced case-management goal quality and goal attainment for consumers with EMI. As such it is important to assess the quality of goal setting within mental health settings. It is also important to assess how the training of mental health staff to systematically implement specific principles of goal setting impacts goal-setting quality. One way to determine the quality of goal setting being conducted within mental health case-management is to conduct an audit of consumer goal records. This chapter will review various attempts to audit aspects of treatment provision within mental health settings.

3.1 AUDITING THE QUALITY OF HEALTH CARE SERVICE PROVISION

Clinical audits are now seen as a necessary part of evidence based practice and are recognised globally as a method of evaluating the quality of health care service provision (Berk, Callaly, & Hyland, 2003). Over the last few years there has been increasing demand for services to undertake auditing procedures in an attempt to assess quality of care being provided (Berk et al., 2003; Callaly, Arya, & Minas, 2005). An audit within a mental health context is a systematic review of the procedures used to diagnose, treat and care for consumers. Audits often aim at determining whether the services provided led to some form of enhanced outcome for the consumer (Dogra, 2003; Thomas, 1996). An audit within this study will be defined as an examination and verification of records.

3.1.1 WHY ARE AUDITS CONDUCTED?

Audits are often conducted to assess the quality of a specific aspect of service provision and to determine the type of service intervention required to enhance quality of care (Adelman, Ward, & Davison, 2003; Dogra, 2003). Audits are sometimes used as a pre-post intervention measure to assess the impact of the intervention (Adelman et al., 2003; Dogra; Thomas, 1996). Within mental health settings audits can inform resource allocation, service development and can also be effective in enhancing communication between and within services, amongst staff, consumers and stakeholders (Dogra). Research recommendations are not often adopted by services as they are seen as too far removed from real life clinical practice (Thomas). This suggests that for research to prove effective in improving service provision individually tailored feedback and recommendations are required. In contrast, recommendations based on clinical audits tend to be more readily adopted by service providers.

3.1.2 TYPES OF FILE AUDIT METHODS

Various methods can be used to conduct an effective clinical audit. Two of these methods are the use of audit tools and outcome data. Some audits incorporate more than one of these methods to increase the types and quality of information they are able to access. These two methods will be described briefly.

3.1.2.1 Auditing Tool

Auditing tools are also a common method of service evaluation within mental health contexts. Tools are typically developed to reflect a set of quality standards of relevance to that specific service (e.g., Dennis, Evans, Wakefield, & Chakrabarti, 2001; White & Marriot, 2004). Using auditing tools can be time consuming and an appropriate method of participant selection is required (random sampling, or accessing the entire pool of subjects) to ensure reliable and valid information is being accessed. Auditing tools can be used to assess information located within a consumer's file (Perkins & Fischer, 1996).

One disadvantage of a file review as a means of auditing is that it may underestimate service provision when interventions have not been recorded in the consumer file (Gorrell, et al., 2004). The detail of the review can also be compromised when an auditing tool is selected. For example, most instruments do not include room for quality or frequency of service, preventing differentiation between cases to be determined.

3.1.2.2 Using Outcome Data as a Means of Auditing

Many studies take a baseline measure of outcome, introduce an intervention aimed at service improvement and then readminister the outcome measures to determine whether a significant change has occurred (Rees, Richards, & Shapiro, 2004). Government mental health services in Australia are now required to administer routine outcome measurements (Callaly et al., 2005; Coombs & Meehan, 2003; NSW Health, 2003) and private and non-government mental health services are also starting to incorporate these measures in Australia (Callaly et al., 2005). This has enabled this type of audit to be more accessible as the outcome measures are already being measured. An advantage of utilising data as a means of auditing is that typically the measures being utilised are reliable and valid (e.g., Health of the Nation Outcome Scale, Abbreviated Life Skills Profile). However, if services are measuring change on instruments that have not met some psychometric standards the value of the audit is questionable (Dogra, 2003). Another problem with utilising routine outcome measures is the lack of compliance by mental health staff and consumers in completing these measures as noted within Australian government mental health

services (Pirkis, Burgess, Coombs, Clarke, Jones-Ellis, & Dickson, 2005). This reduces the number of participants that can be included within the audit creating problems with sampling.

3.1.3. TYPICAL PROBLEMS ENCOUNTERED IN THE AUDITING PROCESS

Although file audits are now seen as central to ensure quality of clinical care, certain flaws in the aims and designs of audits have devalued their usefulness. Often audits were conducted without clear objectives, preventing effective quality assessment. Also, at times recommendations for service enhancement were not provided (Dogra, 2003). Furthermore, unless the audit instrument has been validated its usefulness is questionable (Dogra).

Further auditing issues include staff typically finding the process threatening (Johnston, Crombie, Davies, Alder, & Millard, 2000). An appropriate audit introduction that outlines the aims and objectives of the audit is important for staff members. Also, unless adequate resources (i.e., financial commitment, time) are allocated towards the auditing process it is not effective (Berk et al., 2003). Careful planning should precede any audit so an accurate assessment of the needs and resources can be gauged prior to the audit being commenced.

3.2 AUDITING OF CARE PLANS TO ACCESS TREATMENT PLANNING AND GOAL SETTING WITHIN MENTAL HEALTH CONTEXTS

Care plans within mental health services typically outline the goals of treatment. It is expected that all consumers have a care plan to direct their course of treatment as part of Mental Health Outcome for Assessment and Treatment (MH-OAT) in New South Wales, regardless of whether the consumer is accessing crisis services, short term or long term support (NSW Health, 2002). MH-OAT was introduced across all government mental health services within NSW to enhance the quality of care provided to consumers by strengthening the mental health assessment skills of clinical staff and promoting routine procedures and outcome measures (NSW, Health 2005). The MH-OAT initiative incorporates training of staff in the use of routine assessment protocols and outcome measures (NSW Health, 2002). As care plans were introduced to promote quality of care within mental health services and

act as a record of the consumer's goals and treatment plan, it is understandable that they are often the target of in-service reviews and file audits (Perkins & Fischer, 1996). Although care plans are often the focus of quality audits, typically these audits only assess whether care plans have been completed or not, and whether certain items are completed (e.g., the care plan been signed and dated, the consumer's and mental health worker's names are recorded - Perkins & Fischer, 1996). This does not provide a measure of the quality of the care plan being provided (Perkins & Fischer, 1996).

In an attempt to evaluate the effectiveness of care plans being developed for individuals with schizophrenia within London mental health services, Perkins and Fischer (1996) conducted an audit of the care plans. The auditing process required the reviewer to: 1) compare the number of goals and tasks included in the care plan that were identified by staff and consumers, and 2) identify goals and tasks in the care plans that were not identified within the assessment process. Consumers participating in the review were drawn from inpatient services, supported accommodation services or independent services. Staff identified problems were most frequently addressed (43% of target goals), whilst consumer identified problems were least likely to be addressed (19% of care plan targets). There was also an average of 1.92 care plan targets per care plan that was not identified as a strength or problem at the assessment phase. Recommendations were provided and implemented and a second review was then conducted. Results from the second audit found a higher frequency of goals were identified by consumers and there was an increase in the ratio of consumer to staff nominated goals. This indicates that care plans had become more reflective of the consumers goals. The frequency of goals set within the care plan which were not identified within the assessment period was halved. This shows that subsequent to the audit and recommendations, mental health service provision was more likely to be focused on addressing the care plan goals rather than aiming to address areas not outlined within the care plan.

The audit conducted by Perkins and Fischer (1996) was not a research study; rather it was part of an initiative aimed at developing multidisciplinary audits within a clinical setting. As such the audit lacks appropriate statistical analysis such as the examination of whether a significant difference was evident between the initial and

subsequent audit processes. The paper also does not clarify whether the auditor is independent from the service as this can raise issues around bias. Furthermore the paper does not provide much background information regarding audits previously conducted therefore failing to place the audit within an appropriate context. Despite some of these limitations the audit adds important information about the quality of care planning that extends beyond whether certain details are completed on the form. The audit seems effective in providing appropriate recommendations and leading to improved service provision. Also, as many audits are typically conducted on an in-service basis, published results are rare and this prevents vital knowledge about service provision being accessible and also prevents some important recommendations from being implemented within other services. Publication of the audit not only allows the results and recommendations to be accessible but also the method of the audit, to assist quality improvement beyond the local service level.

3.3 DEVELOPMENT OF THE GOAL INSTRUMENT FOR QUALITY

The Goal Instrument for Quality (Goal-IQ) was developed for the purpose of this study to assess the quality of goal setting within mental health case-management. The Goal-IQ drew from principles outlined in the literature that were shown to assist recovery and also enhance goal attainment generally (as outlined in Chapter 2). Refer to Table 1 for a list of item variables included within the Goal-IQ and the applicable references drawn from recovery, health behaviour, goal setting and motivation literature that have identified these factors as promoting goal attainment. To assess inter-rater reliability and ease of use the instrument was piloted as part of an internal audit in a public sector community mental health team in the Illawarra region (South Eastern Area Health Service, Northern and Southern Illawarra teams) in June 2006. The results from this pilot will be discussed when describing the Goal-IQ within the method section (Chapter 4, section: 4.4.2.4). A copy of the Goal-IQ is located in Appendix 4.

Table 1

Item Variables Included Within the Goal-IQ and Corresponding References.

Goal –IQ items	Brief description of item and references identifying principals that assist goal attainment.
1. Vision	Written record that hopes, dreams and values have been discussed and linked with three monthly goals. • Yalom (1980) • Andresen et al. (2003) • Little (1989) • Skantze (1998)
2. Collaboration	Language indicated that the person in recovery and worker have developed the goals together. • Anthony (1993) • Anthony et al., (2000) • Michalak et al. (2004) • Tryon, & Winograd (2001) • Emmons (1992; 1996) • Corrigan et al. (1990)
3. Behaviourally defined goals	Goals are recorded and defined so a clear outcome is measurable. • Locke & Latham (1990) • Kiresuk et al. (1994) • Austin & Vancouver (1996) • Grant & Greene (2001) • Carver & Schneider (1998)

Table 1

Item Variables Included Within the Goal-IQ and Corresponding References (Cont)

Goal –IQ Items	References identifying principals that assist goal attainment.
4. Goal importance	A written record of the perceived importance for each goal according to the person in recovery with resources allocated accordingly. • Hollenbeck & Williams (1987) • Corrigan et al. (2001) • Kiresuk & Sherman (1968) • Little (1989) • Locke & Latham (1990)
5. Confidence/ self efficacy	A written record that confidence was asked in relation to each goal and goals were adjusted to enhance the confidence. • Snyder (2000) • Bandura (1982) • Borrelli & Mermelstein (1994) • Locke et al., (1991) • Locke & Latham (1990) • Winkleby et al. (1994) • Lippke et al. (2005) • Sniehotta, Scholz et al. (2005) • Janz et al. (2002)
6. Time frame for goals	Written record of an established time frame and date set for review. • Bandura & Simon (1977) • Kiresuk, & Sherman (1968) • Locke & Latham (1990)

Table 1

Item Variables Included Within the Goal-IQ and Corresponding References (Cont)

Goal –IQ Items	References identifying principals that assist goal attainment.
7. Levels of goals	Levels for each of the case-management goals are specified and are behaviourally defined. • Locke (1991; 1996) • Locke & Latham (1990) • Kiresuk et al. (1994) • McGregor & Little (1998)
8. Action plans for goals	A written record that a clear pathway for each goal is detailed. • Snyder (2000) • Bandura & Simon (1977) • Sniehotta, Schwarzer et al. (2005) • Sniehotta, Scholz et al. (2005) • Janz et al. (2002)
9. Problem solving barriers	A written record that barriers and potential solutions for each goal have been discussed. • Sniehotta, Scholz et al. (2005) • Sniehotta, Schwarzer et al. (2005) • Janz et al., (2002) • Ajzen (1991)
10. Social support	Written record that social support was identified to assist with goal attainment, both at a personal and service level. • Locke & Latham (1990 • Blondiaux et al. (1988) • Christensen & Ehlers (2002) • Fiore et al. (1996; 2000)

Table 1

Item Variables Included Within the Goal-IQ and Corresponding References (Cont)

Goal –IQ Items	References identifying principals that assist goal attainment.
11. Monitoring of goals	Record of how progress of behaviours will be monitored. • Frost & Mahoney (1976) • Locke et al. (1991) • Locke (1991; 1996) • Locke & Latham (1990)

3.4 SUMMARY OF THE GOAL QUALITY LITERATURE

Goal setting quality is referred to here as the number of goal setting principles, supported by evidence, incorporated into the process of goal setting. Research drawn from goal setting, motivation and recovery literature has noted the following factors as increasing goal quality: a) setting clearly defined and measurable goals, b) setting goals that are difficult enough to stimulate motivation, c) setting goals that are important to the individual and that the individual believes they can progress toward, d) incorporating planning, problem solving and strategy development into the goal setting process, e) setting a time frame for goal completion and monitoring goal progress regularly, and f) promoting goals that are personally meaningful yet manageable.

Greater goal quality is associated with greater goal attainment, which in turn promotes enhancement of overall wellbeing within non-clinical samples. These findings suggest that enhancing the quality of case-management goals should also promote goal attainment and subsequent health and wellbeing outcomes for consumers with EMI. Research investigating the quality of goal setting within mental health case-management is limited. Various goal-setting interventions such as GAS, the CASIG and the CGT have been developed for mental health contexts and can be used to promote goal quality.

Assessment of quality can be achieved through clinical audits. Two methods include the use of an auditing tool based on appropriate literature or recommendations, and outcome data. Care plans are often the focus of internal clinical audits. A comprehensive review of care plans is yet to be carried out within Australia to provide an indication of the quality of goal setting within case-management contexts. In order to carry out an effective audit of goal setting practices within mental health services the Goal-IQ was developed.

Chapter Four

STUDY 1

EVALUATION OF GOAL SETTING RECORDS WITHIN AUSTRALIAN CASE-MANAGEMENT CONTEXTS

This chapter outlines the aims, methodology, results, discussion and research limitations for Study 1.

4.1 AIMS FOR STUDY 1

The aims of the first study are to investigate the quality of goal setting within Australian case-management services and to determine whether training in goal setting interventions such as the Collaborative Recovery Training Program (CRTP) and the use of the CGT leads to enhanced goal quality. Mental health consumers' goal setting records both prior to and subsequent to CRTP will be reviewed using the Goal-IQ. Firstly, an investigation of the current quality of goal setting was assessed for all participants. Secondly, goal quality was compared for participants both before and after training to determine whether CRTP and the incorporation of the CGT lead to improved goal setting quality. Finally, goal setting quality will be compared with outcome data to determine whether consumers whose goal records incorporated greater goal setting principles also demonstrated greater improvement on functional and recovery outcome measures.

4.2 RESEARCH QUESTIONS AND HYPOTHESES

1. What is the quality of goal setting currently being utilised within Australian case-management services?

2. To what degree does current goal setting practice reflect best practice goal setting principles?

H1. There will be a significantly higher frequency of goal records evident in consumer files following CRTP.

H2. Care plans of mental health workers who have participated in CRTP will demonstrate a significantly higher quality of goal setting than those who have not received training.

H3. There will be a positive relationship between the frequency of goal setting principles incorporated into the care plan and working alliance as rated by the mental health worker and consumer.

H4. There will be positive relationships between the number of principles incorporated into goal setting and improvements in: a) functional, and b) recovery measures of consumer outcome.

4.3. METHOD

4.3.1 PARTICIPANTS

Participants were recruited as part of the Australian Integrated Mental Health Initiative (AIMhi) and were receiving case-management support from non-government or public sector mental health providers. Refer to Chapter 1, section 1.7 for patient eligibility criteria for AIMhi. All mental health workers identified as the consumer participant's primary health care worker were included within this aspect of the research. No mental health workers refused to participate.

4.3.1.1 Mental Health Worker Participants

Sixty-eight mental health workers (51.5% females) were involved in this study. The mean age for workers was 41.5 years (*SD* = 10.19, Range 23 to 60 years) and included Nurses (40%), Support Workers (31%), Psychologists (13%), Welfare workers (8%), Social workers (4%) and Occupational Therapists (4%). Mental health workers reported working within adult community mental health setting (49%), rehabilitation (38%), crisis services (6%) and assertive community treatment teams (6%).

Mental health workers had typically been working in their profession for 11.28 years (*SD* = 11.24 range .50 to 40 years) and had typically completed their training in

Australia (78%). When asked about their highest level of education approximately 36% of workers reported undergraduate degree, 30% technical college degree or a diploma, 28% postgraduate degree, 4% high school certificate and 2% school certificate.

Mental health workers reported working an average of 29.61 hours per week (*SD* = 8.95, range 10 to 40 hours a week) within their current position and typically worked 20.49 hours a week (*SD* = 10.05, range 1 to 40 hours a week) within a case-management role. They reported a mean caseload of 18.17 mental health consumers (*SD* = 10.05, range 1 to 25) and 73% typically have weekly face-to-face contact with each person on their caseload. On average mental health workers spend 64.82 minutes with each consumer during face-to-face visits (*SD* = 40.80, range = 15 to 240 minutes).

4.3.1.2 Mental Health Consumer Participants

A total of 159 consumer participants (93 males, 66 females) with EMI were involved in Study 1. Sixty three percent of participants were drawn from non-government mental health services. At intake into the AIMhi project 66% of consumer participants had a diagnosis of Schizophrenia, 12% had a diagnosis of Schizoaffective Disorder, 11% had a diagnosis of Bipolar Disorder and the remaining 11% had a diagnosis of Major Depressive Disorder with psychotic features. The average age of consumer participants was 41.3 years (*SD* = 12.08) with an age range of 18 to 69 years.

Based on their mental health workers' responses regarding their relationship status, 57% were single, 12% were married, 8% were in a significant relationship that had progressed longer than six months, 8% were divorced, 6% has never been in a long term relationship, 3% were widowed, 2% were currently in a significant relationship that was less than six months in duration, 1% were living in a de facto relationship, and 3% of mental health workers responded that the relationship status of the participant was unknown to them.

On average consumers had been seen by their worker for 1.74 years (*SD* = 1.79, range 2 weeks to 10 years) prior to intake into the AIMhi project. Sixty four percent of participants had been diagnosed with their mental health disorder at least five or more years prior to commencement in the AIMhi project. Mental health workers reported seeing mental health consumers 6.36 times per month (*SD* = 5.00, range 0 to 30) and 70 % reported themselves to be the mental health consumers' primary case-manager. Workers reported that consumers had an average of 4.60 (*SD* = 23.87, range 0 to 260) hospital admissions over the past three years and indicated that the most recent hospital admission had taken place 2.68 years ago (*SD* = 224.19, range = 0 to 24 years) prior to initial intake into the AIMhi or associated project. During this most recent hospital admission the average number of days in hospital was 41.87 days (*SD* = 59.17, range = 0 to 365 days). The mean rating provided for mental health consumers' adherence to their prescribed psychotropic medication was 4.69 *(SD* = 1.48 range = 0 to 6) indicating that participants moderately participated in adhering with their prescribed medication regime. This suggests that participants typically had some knowledge and interest in their treatment and prompting is not typically required to ensure adherence to medication. The most commonly reported therapeutic activity undertaken with mental health consumers was 'social activities' followed by 'assistance with meeting lifestyle needs' and then 'psycho-education'. The most commonly reported support services that were also noted as being accessed by the participants in respective order were Psychiatrists, Mental Health workers and Rehabilitation workers.

4.3.2 MEASURES

4.3.2.1 Collaborative Goal Technology

The CGT (Clarke et al., 2006) is a goal setting intervention developed for use within case-management contexts, which promotes recovery as an individualised process and supports autonomy and collaboration between mental health consumer and workers. Refer to Chapter 2, section 2.4.3 for a detailed description of the CGT.

4.3.2.2 Care Plans

Care plans as referred to in section 3.2 provide a record of the goals and strategies that were developed between mental health consumer and worker (MH-OAT, NSW Health, 2002). MH-OAT care plans include the identified goals/issues as well as the intervention and person responsible to manage these goals. Goals can be prioritised and a date for review should be set for each goal. At each review a scale of 0 (No progress) to 4 (Achieved) can be allocated to each goal that is set. People involved in the care planning process are listed and should typically involve the mental health consumer and carer if applicable (NSW Health, 2002).

4.3.2.3 Individual Support Plans (ISPs)

Within each of the non-government services accessed for the file review, some type of goal record was available. These were typically named Individual Support Plans. The content required for each plan differed depending on the service, however goals for support were always a central feature of the plan. Other elements that were included in most of the plans were: support to assist with goal attainment, pathways/tasks to achieve set goals, and date of review. Some of the forms also included: ratings of importance, barriers that may arise, and longer-term visions.

4.3.2.4 Goal Instrument for Quality

The Goal-IQ was developed for the purpose of this thesis and was based on principles drawn from goal striving literature. From the literature, 11 items were developed to measure the central components identified as influencing goal attainment. Each item was rated on a three point scale where two was given to items that were completed, a score of one was given when items were partially completed (at least attempted but insufficient detail provided) or a score of zero was given when there was no attempt to address the item within the care plan or CGT. To guide auditors a detailed description for each of the three possible ratings for each item are included within the audit tool. For example: item three which focuses on the way goals are recorded a ‘No’ response (a score of 0) is defined as ‘no case-management goals are recorded’. A rating of a ‘Partial’ response (a score of 1) is defined as ‘some

goals are recorded – yet they are not clearly defined making measurement difficult (e.g., to feel better, to be happier)'. A rating of 'Complete' (a score of 2) was defined as 'Goals are recorded and defined so that a clear outcome is measurable (e.g., to do my own shopping, improve my medication taking, to find a job)'. Refer to Appendix 4 for the Goal-IQ.

To assist in reviewing the ease of use of the instrument and provide an indication of inter-rater reliability, a pilot study of the Goal-IQ was conducted within one of the area health services involved in the AIMhi study (South Eastern Sydney Area Health Service, Northern and Southern Illawarra Teams). Inter-rater reliability is important where more than one rater is required. If there is a significant discrepancy between the raters this suggests the item may be unreliable. Typically items are removed if they fail to meet adequate reliability (correlaton co-efficient of .60, Gorrell, et al., 2004). Further, it is important that the audit tool can be used easily and guides the rater to gather accurate information.

An independent research assistant was trained in using the audit tool and was then asked to rate 40 care plans/CGT's using the Goal-IQ. The research assistant was provided with feedback regarding the accuracy in which they had rated the goal quality within the care plans and CGTs and was also asked to comment on the ease of use of the Goal-IQ. In audits used by other researchers (Gorrell, et al., 2004; Perkins & Fisher, 1996; White & Marriot, 2004) co-ratings using newly developed audit tools were conducted using between 10 to 20 files. Average-measure intra-class correlations from the ratings of the CGTs/care plans were calculated to examine inter-rater reliabilities. The average intra-class correlation across all 11 items was $\alpha = .93$ (range .64 to 1.0). The reliability correlations were high across 10 of the 11 items (range .80 to 1.0), yet reliability for the item measuring action plans was moderate ($\alpha = .64$). Gorrell and colleagues (2004) noted that an intra class correlation of 0.6 is adequate for items to remain within auditing tools. Therefore, based on the intra-class correlations obtained from the pilot study all items remained within the audit tool.

The Goal-IQ was easy to use and the criteria outlined for each item in the Goal-IQ enabled accurate scoring. The Goal-IQ typically took only between 10 and 15 minutes to complete for each goal record.

Fifty-three consumer files were randomly selected from all consumers with a diagnosis of Schizophrenia or Bipolar Disorder accessing care from the area health service. Care plans for these consumers were reviewed for the period extending six months prior to the care plan audit. Forty-one percent of the files reviewed were drawn from consumers whose mental health worker had not been trained in CRTP. Results showed that 13% of all files reviewed contained a care plan and typically 35% of the criteria outlined in the Goal-IQ were met (range 7% - 57%). This low score on the GOAL-IQ could be due to 41% of the goals being developed with mental health workers who had not received training in the CRTP. Further details regarding the results of this review could not be documented within this thesis as requested by the area health service involved. However, based on this pilot study the Goal-IQ typically demonstrated good inter-rater reliability and showed relative ease of use.

4.3.2.5 The Working Alliance Inventory- Short Form (WAI - S)

The 12-item version (Tracey & Kokotovic, 1989) of the WAI was used in the current research. An overall general alliance score can be obtained as well as three separate subscales scores that provide ratings for the three components of alliance; Bond (e.g., “I feel that my clinician appreciates me”), Task (“My clinician and I agree about the things I will need to do in therapy to help improve my situation”) and Goals (“My clinician and I are working toward mutually agreed upon goals”). The WAI is rated on a 7-point scale (1 = Never to 7 = Always), with different versions available for mental health consumers and workers. The original 36 item scale has been found to have adequate reliability and validity (Horvath & Greenberg, 1986). In a study conducted by Knaevelsrud and Maercker (2006) using the 12 item version of the WAI found reliability between the 12 item version and the original 36 item version for the overall alliance scores was calculated at .83 (goals = .79, tasks =. 70, bond=. 75) demonstrating good reliability when used amongst consumers who had

experienced a traumatic event. In the current study both mental health workers and consumers completed the WAI at three monthly intervals.

4.3.2.6. Outcome Measures Utilised in the Study

Mental health consumer self report measures of outcome used in the current study were the Recovery Assessment Scale (RAS) and the Kessler-10 (K10). Mental health worker rated measures were the Health of the National Outcome Scale (HoNOS) and the abbreviated Life Skills Profile (LSP-16). Refer to Appendix 5 for the three monthly assessment batteries for mental health consumers and mental health workers.

4.3.2.6.1 The Kessler 10

The Kessler 10 (K10) is a 10-item mental health measure used to assess non-specific psychological symptom distress (Kessler et al., 2002) and includes items measuring symptoms of depression (e.g., how often did you feel worthless?") and anxiety (e.g., "how often did you feel nervous?"). It is rated on a five-point scale from 1 (none of the time) to 5 (all of the time) for the period four weeks prior to questionnaire completion. The K10 can be used as both a screening tool (Kessler et al., 2003) and outcome measure (Crockett, Taylor, Grabham, & Stanford, 2006) and is recommended for use in the Australian mental health system (NSW Health, 2003). One significant advantage of the K10 is its brevity and relative ease of completion. The results of the K10 do not appear to be influenced by gender or the consumer's educational level, increasing its utility in general mental health settings (Baillie, 2005). Lower scores on the K10 indicate better functioning. A strong association has been identified between a high score on the K10 and a concurrent diagnosis of anxiety and affective disorders (Andrews & Slade, 2001). The K10 has been found to have moderate reliability with weighted Kappa scores ranging between .42 and .74. Within the AIMhi study the K10 demonstrated good internal consistency (α= .89, Kelly, 2007).

4.3.2.6.2 The Recovery Assessment Scale

The RAS (Giffort, Schmook, Woody, Vollendorf & Gervin, 1995) is a 41-item scale that attempts to measure aspects of recovery in mental illness. The RAS has five subscales; 'Personal Confidence and Hope', 'Willingness to Ask for Help', 'Goal and Success Orientation', 'Reliance on Others' and, 'Not Dominated by Symptoms' (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004). The RAS is rated on a five-point scale from 0 (strongly disagree) to 4 (strongly agree). Example items are, "I believe I can meet my current personal goals", "I am a better person than before my experience with mental illness" and "It is important to have fun". Higher scores on the RAS indicate further progression in the recovery process.

The RAS shows good internal consistency (cronbach $\alpha = .93$; Corrigan et al., 1999). The RAS demonstrated good internal consistency when used within the AIMhi project (cronbach $\alpha = .85$, Kelly, 2007). Test-retest reliability between two administrations that were conducted 14 days apart was acceptable $r = .88$ (Corrigan et al., 1999). Ralph, Kidder & Phillips (2000) found the RAS to have concurrent validity with measures such as the Empowerment Scale (Rogers, Chamberlin, Ellison, & Crean, 1997), the subjective component of Lehman's Quality of Life Interview (Lehman, Ward, & Linn, 1982); the short version of the Social Support Questionnaire (Sarason, Sarason, Shearin, & Pierce, 1987) and the Rosenberg Self-Esteem Scale (Rosenberg, 1965).

4.3.2.6.3 The Health of the Nation Outcome Scales

The HoNOS (Wing, Lelliot, & Beever, 2000) provides a measure of mental health consumer behaviour, impairment, psychological symptoms and social functioning. It is a 12-scale measure that can be used to assess mental health outcome and has been recommended for use in the Australian mental health system (NSW Health, 2003) and has also been used internationally (Andreas, Harfst, Dirmaier, Kawski, Koch, & Schulz, 2007; Rees et al., 2004). Items are rated from 0 (No problem) to 4 (Severe/ Very severe). If the mental health worker does not feel that they have the appropriate information to answer any of the items appropriately they

can opt for the "not known" response. Items on the HoNOS include "non-accidental self injury", "problems with hallucinations and delusions" and "problems with activities of daily living". Lower scores on the HoNOS indicate better functioning.

Concerns have been raised regarding the use of the HoNOS. These include poor completion of certain items on the HoNOS (Eager, Trauer, & Mellsop, 2005) and mental health workers using limited sources of information to make ratings (Lambert, Caputi, & Deane, 2002). Although it has limitations, the HoNOS is used by the majority of Australian mental health services and has been demonstrated to have suitable reliability for use as a mental heath outcome measure (Eager et al., 2005; Parker, O'Donnell, Hadzi-Pavlovic, & Proberts, 2002; Rees et al., 2004; Slade, Beck, Bindman, Thornicroft, & Wright, 1999). Within the AIMhi Project the internal consistency of the HoNOS was calculated at .72 (Kelly, 2007), indicating acceptable internal consistency.

4.3.2.6.4 The Abbreviated Life Skills Profile

The LSP-16 (Rosen, Trauer. Hadzi-Pavlovic, & Parker, 2001) is a measure of disability and general functioning for individuals diagnosed with mental health concerns. This 16-item scale assesses the consumers' general functioning over the previous three-month period. It covers domains of withdrawal, antisocial behaviour, self-care and compliance. The LSP-16 is rated on a 4-point scale, although the anchors vary depending on the particular survey question. For example for item three "Does this person generally show warmth to others?" the response is rated from 0 (considerable warmth) to 3 (no warmth at all). Whereas for item 12 "Does this person co-operate with health services?", scores are rated from 0 (always) to 3 (never). Higher scores on the LSP-16 indicate poorer levels of functioning. When used with consumers in the AIMhi study the LSP-16 demonstrated good internal consistency (cronbach alpha = .89, Kelly, 2007).

4.3.3 PROCEDURE

4.3.3.1 Collaborative Recovery Goal Setting/Striving Training

Mental health workers participated in the 2-day CRTP (Crowe, Deane, Oades, Caputi, Morland, 2006; Refer to Chapter 1, section 1.4). One of the central

components of the training is on formalised goal setting and striving principles and training in use of the CGT. The goal setting workshop was developed by Oades and colleagues (2005). The training package consisted of didactic seminars that: (a) reviewed the empirical and theoretical support for goal setting and striving, (b) provided detailed instructions regarding a comprehensive approach to goal setting, goal monitoring, and using the CGT, and (c) case-managers completed structured role play exercises to demonstrate sufficient skill in goal setting and review procedures (Refer to Appendix 6 for CRTP goal setting/striving training).

Following training, mental health workers were asked to participate in the study, which involved using the CRM (Oades et al., 2005) in their case-management practices. Mental health workers participants recruited consumers from their current case loads who agreed to participate in the study. Outcome data was set to be completed at three month intervals (i.e., baseline, 3 months, 6 months, 9 months and 12 months) by both the mental health worker and consumer.

4.3.3.2 Access to Participants and Audit Review Period Selection.

A list of mental health consumer codes for each service involved in the AIMhi project was drawn from the AIMhi database. Available outcome data was identified for each participant within the study. Where outcome data was available at two consecutive time points within a three-month period (e.g., 0-3 months, or 3-6 months, or 6-9 months or 9-12 months) this was the time period selected for review (see Figure 3).

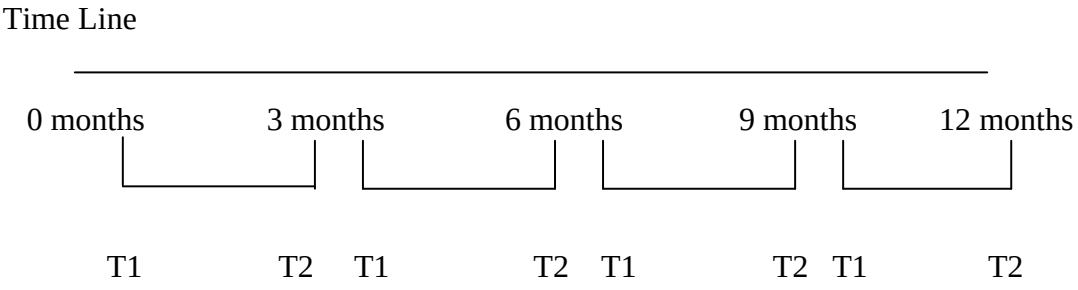


Figure 3. Outcome data time periods for Study 1. T1 refers to the Time 1 scores and T2 refers to the T2 scores.

The first time point in the three month period identified served as a Time 1 score before the goal record was implemented and the second time point (three months later) served as a Time 2 score following the implementation of the goal record (refer to Figure 3). For example, one consumer had outcome data available at baseline and at three months after the CRM was introduced. However, another consumer only had outcome data available for the six and nine-month time points following the introduction of the CRM. If a consumer had outcome measures for more than one time period (e.g., 0-3 months and 6-9 months) the first time period (0-3 months) was selected for review.

This process was conducted for each participant and where possible one time period was selected prior to the introduction of the CRM and one period was selected following the introduction of the CRM so that a within group comparison to examine the impact of CRM on goal records could be conducted (refer to Figure 4).

Some participants did not have any outcome data available. This indicates that both the consumer and their mental health worker did not complete any outcome data over this period. Possible reasons for the lack of outcome data may be due to; poor adherence to MHOAT (government services), failure to complete questionnaires (non-government services) and poor return of outcome measures to research office. Files for participants who did not have any outcome data were still reviewed in order to test hypotheses one and two regarding the quality of goal records, although these participants could not be included in the analyses examining the relationship between goal records and outcome data. When no outcome data was available following training in CRM, files were reviewed for the first 0-3 month period following the introduction of the CRM. When looking at the period before the CRM was introduced the first three-month period of the year prior to the CRM being introduced was used as the comparison period for all consumers (refer to Figure 4).

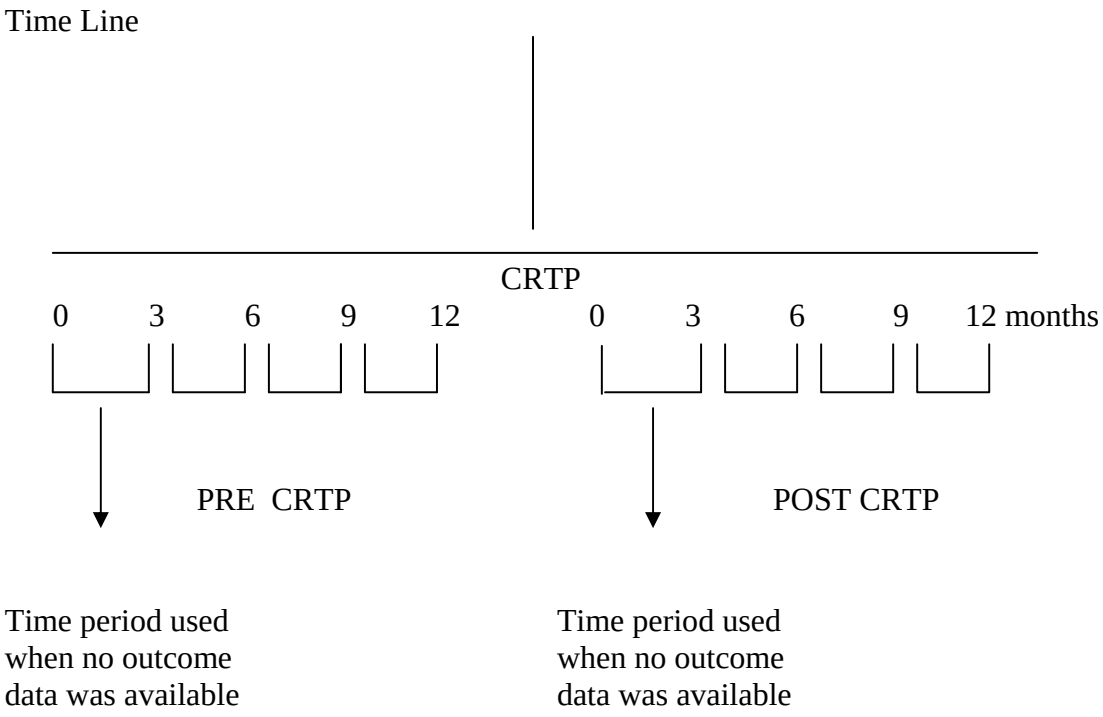


Figure 4. Outcome data time periods for both before and after CRTP

One time frame (e.g., 0-3 months or 3-6 months) is taken for before CRTP was delivered and for one time frame after CRTP where possible.

4.3.3.3 Procedure for Accessing Files

Managers and research assistants from each service were contacted and provided with information about the nature of the goal audit. They were also provided with a brief handout that outlined the aims of the study and a list of the mental health consumers from their service who were participating within the AIMhi study (Refer to Appendix 7 for staff handout for goal audit).

Managers and research assistants were asked to review the list of mental health consumers from their service who had agreed to participate in AIMhi so they were aware of which consumer files would be accessed as part of the goal audit. As consent to review goal records was contained within the original consent to participate in the AIMhi project further consent was not mandatory, but two services chose to handout another consent form to AIMhi consumers.

4.3.3.4 Mental Health Consumer Files that were Not Accessible for the Goal Review

Consumer files for three of the services involved in the AIMhi project were not accessible for the goal quality audit. One reason that some of these files (14 consumers) were not accessible was due to files being stored off site and lack of ability to access these files (e.g. there was only one key for the storage unit which was held by management who was not available during the period of the audit). This may indicate some resistance from this particular service in participating in the audit. There was also difficulty negotiating days to access files from all of the Queensland sites due to the number of days the researcher was available to do the audit, the number of consumers from this state and the distance between service locations to collect the data. This led to 21 consumer files from Queensland not being included in the goal quality audit. In total this included 35 participants who were part of the larger AIMhi project yet were not involved in the goal audit study. Of the services accessed some consumer files were also not accessible as the consumers chose to not be included in this aspect of the research (n = 7). In total 42 (20%) AIMhi consumer files could not be accessed. It should be noted that although certain files and services were not accessible, the files reviewed were representative of participants in the larger AIMhi project such as in the type of service offered and whether the organisation was government or non-government.

Each service was visited between the months of August and December of 2006. Each mental health consumer's file was reviewed for the specific period that had been established based on the availability of outcome data. All files were reviewed for the period within one year prior to training and following training. Refer to Table 2 for number of participants within each aspect of the study.

Table 2

Number of Participants in Each Component of Study 1

Research question/hypothesis	Design	N
A. Does Goal setting reflect best practice?	Presence and quality of goal records following training in CRM.	122
B. Training in CRTP will increase the frequency of goal records.	Comparing the number of goal records present before and after CRTP. Within subjects design.	78
C. Training will lead to an improvement in the quality of goal records.	Comparing the audit score for goal records before and after training in CRTP. This reduction in *n* is due to the large majority of the sample (*n* = 78) not having a goal record either before or after CRTP - Within subjects design.	33
D. The greater number of goal setting principles incorporated into goal records will be associated with better treatment outcomes	One goal review for each participant and standardised residual gain score between pre and post outcome scores (RAS, K10, LSP-16, HoNOS, WAI)	107-117

Note. N = number of participants in each part of Study 1.

4.4 RESULTS

4.4.1 TO WHAT DEGREE DO GOAL RECORDS REFLECT BEST PRACTICE GOAL SETTING PRINCIPLES?

All 122 goal records for consumers participating in the AIMhi study in the year following CRTP were reviewed to investigate the current quality of goal setting within Australian mental health services (Refer to Table 2, A). This included all participants who had remained in the study at the time of review and who had given consent for their goal record to be included within the review.

Seventy four percent (n = 90) of the files had some form of goal setting plan. Of the 74% of participants who had some form of goal setting record, 60% (n =73) had a CGT and 14% (n =17) had a care plan located within their file for the period selected for review. Where there was a goal record form available the mean goal quality score was 11.91 (SD = 3.84, range 0 to18) out of a maximum of 22. This shows that on average 54% of the nominated goal setting principles measured by the GOAL-IQ were included in the care plans reviewed. Refer to Table 3 for frequencies of scores for each item on the Goal-IQ measured following CRTP. As can be seen from the frequencies of scores for each item presented in Table 3, 70% of goal records reviewed obtained ‘Complete’ scores on the item measuring collaboration, indicating that this item was typically included within the goal record. Fifty seven percent of goal records also scored ‘Complete’ scores on the item measuring goal specificity. Other items more likely to receive ‘Complete’ scores than either ‘Partial’ or ‘No Evidence’ of inclusion scores were; goal importance (53%), goal confidence (49%), time frames for goals (47%) and, levels of goals (47%). Only one goal record showed evidence of goal monitoring procedures (item 11) within the goal record. The following items were also more likely to not be included within the goal records; social support (83%), problem solving barriers (77%), action planning (60%) and recovery vision (49%).

Table 3

Frequencies for Goal-IQ Items for all Service Participants after Staff Training in CRM.

Item	Frequency (n = 90)					
	No evidence		Partial completion		Complete	
	%	*n*	%	*n*	%	*n*
1. Recovery vision	49	(44)	12	(11)	39	(35)
2. Collaboration	29	(26)	N/A		71	(64)
3. Goal specificity	29	(26)	15	(14)	57	(50)
4. Importance	44	(39)	3	(3)	53	(48)
5. Confidence	45	(41)	6	(5)	49	(44)
6. Time frame	46	(41)	7	(6)	47	(43)
7. Levels	44	(40)	9	(8)	47	(42)
8. Action plan	60	(54)	37	(33)	3	(3)
9. Barriers	77	(69)	21	(19)	2	(2)
10. Social support	83	(75)	7	(6)	10	(9)
11. Monitoring	99	(89)	1	(1)	0	(0)

Note. Frequencies are reported in percentages, numbers in brackets represent the number of service participants. n = 90 of the 122 files where a goal record was available. Item 2 is scored on a two-item scale; no partial score rating is available for this item.

4.4.2 PRE-POST TRAINING DIFFERENCES IN GOAL RECORDS

4.4.2.1 Frequency of Goal Records

McNemars test (a non parametric test for matched pairs) was conducted to determine whether there was a difference between the number of goal records before the CRTP compared with after the CRTP. Only participants where both before and after training goal records were available were included in the analysis. This resulted is a sample of 78 participant files (see B on Table 2). Results showed that prior to the

CRTP only 53% (n = 41) of files had a care plan for the period reviewed. This was significantly improved following CRTP where 69% (n = 54) had some form of care plan [54%, n = 42 had a CGT and 15%, n = 12 had another form of care plan, χ^2 (2, N = 78) = 5.14, p = .02]. This suggests that the CRTP led to a significant improvement in the presence of a care plan within mental health consumer files.

4.4.2.2 Goal Quality

To determine whether the quality of goal records improved following the CRTP, the mean of the audit scores were calculated for before (M = 8.48, SD = 1.97) and after (M = 12.39, SD = 3.72) CRTP (See C on Table 2). A t-test was conducted to determine whether the difference in the means before and after CRTP was significant. The assumptions of random selection, normality (Kolmogorov-Smirvov and Shapiro-Wilk, $p < .05$*)* and homogeneity were met. Results showed there was a significant main effect for CRTP on improvement in audit score for both care plan and CGT's, (t (32) = - 6.99, $p < .01$). This indicated that following CRTP the quality of goal setting within goal records was enhanced.

4.4.2.3 Using the CGT with the CRM

A mixed 2 X 2 model was conducted to determine whether there was an interaction between audit score before and after CRTP and whether the mental health worker's used a CGT compared to other forms of goal records (e.g., care plan or ISP). As there was a difference between participants with a care plan and those with a CGT at time one an analysis of covariance was conducted and the assumption of homogeneity was supported. Results showed goal quality was significantly higher when a CGT (M = 13.59, SD = 2.68) was utilised when compared to a care plan/ISP (M = 7.00, SD = 2.97), (F (1, 31) = 28.69, $p < .01$). However, based on the very limited sample size this analysis should be viewed only as a preliminary investigation.

4.4.2.3 Impact of the CRTP on Specific Items of the Goal-IQ.

For closer examination of the impact of the CRTP on goal setting a Wilcoxon signed rank test was conducted for each item of the goal setting audit tool for the participants that had a goal record available for both before and after the CRM was introduced. The assumption of variability across distributions was met. Results

showed there was a significant improvement on items measuring recovery vision, ratings of both importance and confidence and varying levels of goal attainment. Results also showed that goal records were more likely to include action plans and social support prior to the introduction of the CRM. Refer to Table 4 for means, standard deviations, and Z scores for specific items on the Goal-IQ before and after implementation of the CRM.

Table 4

Comparing Specific Items on the Goal-IQ for Goal Records Before and After Training

Item	Before CRM		After CRM		Z scores	*p*-value
	M	*SD*	*M*	*SD*		
1. Recovery vision	.06	.35	1.30	.88	-4.46[a]***	.000
2. Collaboration	1.85	.44	2.00	.00	-1.89[a]	.059
3. Goal specificity	1.70	.47	1.85	.36	- 1.67[a]	.096
4. Importance	.06	.24	1.45	.87	-4.79[a]***	.000
5. Confidence	.21	.42	1.30	.95	-4.20[a]***	.000
6. Time frame	1.39	.83	1.67	.74	-2.07[a]*	.038
7. Levels of attainment	.06	.24	1.34	.89	-4.56[a]***	.000
8. Action plan	1.30	.73	.58	.56	-3.66[b]***	.000
9. Problem solving	.19	.46	.46	.62	-2.06[a]*	.039
10. Social support	1.60	.70	.42	.71	-4.35[b]***	.000
11. Monitoring	.06	.24	.00	.00	-1.41[b]	.157

Note. Only service participants where a goal record was available for both before and after training in CRM were included in this analysis (N = 33, refer to C on Table 2). [a] = improvement following CRM training, [b] = higher scores on items prior to CRM training. * $p < .05$. ** $p < .01$. *** $p < .001$.

4.4.3 AUDIT SCORE, WORKING ALLIANCE AND MENTAL HEALTH OUTCOME

It was hypothesised that there would be a positive relationship between (1) the number of goal quality principles and working alliance and (2) the number of goal principles and mental health consumer outcome (refer to D on Table 2). The first file review audit score was selected for each participant. Where participants did not have a care plan or CGT an audit score of 0 was allocated to indicate that there was no evidence of any of the goal setting principles being used.

Standardised residual gain scores were determined using regression analyses, with the dependant variable comprising the termination scores, and the independent variables the intake scores. These standardised residual gain scores were used as the outcome measure, thereby controlling for differences in severity prior to the goal-setting period selected for review (Steketee & Chambless, 1992). As the assumption of normality was not met, Spearman's correlations were used and all analyses were one tailed.

4.4.3.1 Relationship between Audit Score and Working Alliance

A significant positive correlation was evident between the number of goal principles and mental health consumer ratings on the WAI (r = .21, p < .05). On closer examination of the subscales positive correlations were found for the Goal and Task subscales of the consumers WAI (r = .16, p < .05 and r = .25, p < .01), whereas no relationship with the Bond subscale was found. No relationship between audit scores and mental health worker ratings of the WAI were found. Refer to Table 5 for correlation coefficients between audit score and ratings of alliance. This suggests when more goal striving principles are incorporated into goal setting consumers report improvements in working alliance, although this relationship is weak in magnitude.

4.4.3.2 Relationship between Audit Score and Measures of Outcome.

There was a significant inverse relationship between the number of goal principles and residual gain scores on the K10 (r = - .19, p < .05). Although small in magnitude, this supported the hypothesis that as goal setting quality increased perceived psychological distress decreased. No significant relationship was found between audit score and the RAS or HoNOS. In opposition to the hypothesis, scores

on the LSP-16 were positively correlated with audit scores (r = .20, p < .05) indicating a decline in consumer functioning was associated with the use of more goal setting principles being implemented. To enable further exploration of this finding a correlational analysis was also conducted between audit score and the subscales on the LSP-16. Audit scores were only significantly correlated with compliance (r = .21, p < .01) and self care (r = .21, p < .01). This indicates there was a weak relationship between implementing greater goal setting principles and a decline in functioning in self-care (hygiene and physical health), compliance with medication adherence and service co-operation as reported by the worker. No significant relationship was evident between audit score and the remaining two subscales of the LSP-16 (antisocial behaviour and social withdrawal). Refer to Table 5 for correlation coefficients between the number of goal principles evident and measures of outcome.

Table 5.

Spearman's Correlation Coefficients between the Number of Goal Principles and Measures of Working Alliance and Outcome

Measures		*R*	*P*	*N*
WAI consumer	Total score	0.21	0.02*	110
	Goal agreement	0.16	0.05*	110
	Task agreement	0.25	0.01**	110
	Bond	0.11	0.13	110
WAI- worker	Total score	0.05	0.32	108
	Goal agreement	0.05	0.32	117
	Task agreement	0.09	0.17	108
	Bond	0.08	0.22	108
K10		-0.19	0.03*	111
HoNOS		0.12	0.10	111
RAS		0.07	0.22	111
LSP-16	Total score	0.20	0.02*	111
	Social withdrawal	0.09	0.18	111
	Antisocial behaviour	0.03	0.39	111
	Self care	0.21	0.01**	111
	Compliance	0.21	0.01**	110

Note. All outcome measures used for correlation analysis are standardised residual gain scores. * $p < .05$, ** $p < .01$. All correlations are one tailed.

4.5 DISCUSSION

4.5.1 CURRENT QUALITY OF GOAL SETTING WITHIN AUSTRALIAN MENTAL HEALTH SERVICES

Seventy four percent of consumers had some form of goal setting record included within their file. Sixty percent had a CGT and 14% had a care plan for the period selected for review. Approximately half the goal setting principles measured by the Goal-IQ were typically included within goal records. This indicates an average standard of goal quality within case-management at least in instances where services have implemented the CRM. When compared to the results of the pilot study (N = 53) there appears to be significantly higher frequency (13% of consumers in pilot study had a care plan located in their file) and quality of goal records (35% of Goal-IQ criteria completed). However, it should be noted that the pilot study only reviewed goals of one government area health site and the low frequency of goal records is likely to have been exacerbated by 41% of the mental health workers included had not received training in CRTP.

There were also differences between the results of the current study (60% of consumer files contained a CGT for the review period) and the study by Uppal and colleagues (In Press, 37% of all clinicians trained showed evidence of using documented aspects of the CRM). This is likely to be explained by the Uppal et al. study including all mental health workers who had received training in CRTP, whereas the current study only included mental health workers who had volunteered as part of the research. Therefore, we may expect those who had chosen to participant in the research to be more motivated to use CRTP interventions such as the CGT.

When identifying specific items measured by the Goal-IQ, 70% of goal records included language that showed collaboration between the consumer and worker (e.g., written in first person: to improve my diet) and goals were recorded in lay person terms rather than mental health jargon. This suggests that collaboration is often used during the goal setting process. Collaboration has been identified as a central process in the development of a positive working alliance (Bordin, 1979), which has been seen as moderate and consistent predictor of treatment outcome in case-management

(Howgego, Yellowlees, Owen, Meldrum, & Dark, 2003) and psychotherapy (Horvath & Symonds, 1991; Martin et al., 2000). Collaboration has also been linked with autonomy support within the recovery literature, which stresses the importance of the mental health consumer and worker, working together to ensure the individual is shaping his or her own recovery process (Andresen et al., 2003; Anthony, 1993; Anthony et al., 2000; Oades et al., 2000).

More than half the goal records reviewed had clearly defined goals with measurable outcomes. Goal specificity enhances the likelihood that goals will be attained allowing greater awareness between the status quo and the outcome the person is striving toward (Latham & Yukl, 1976; Locke & Latham, 1990). In accordance with Snyder's (2000) Hope Theory enhancing goal specificity would enhance an individual's sense of hope, which is an important element of recovery from mental illness (Andresen et al., 2003). The finding that both collaboration and goal specificity are frequently implemented within the goal setting process is encouraging as both processes are likely to promote recovery for mental health consumers. Principles such as goal importance, goal confidence, establishing a time frame for goals and developing goal levels were also typically included in the goal setting process yet there is room for improvement in how these skills are utilised to maximise goal striving.

Only one goal record included how goal progress will be monitored. Also goal records were more likely to show 'No Evidence' of including social support, problem solving barriers to goal attainment and including an action plan to map out how goals will be attained. Each of these factors is important in assisting goal planning and enhancing self efficacy (Sniehotta, Schwarzer et al., 2005) and as such is linked to the facilitation of hope as viewed by Snyder (2000). Addressing potential barriers to goal progress may be of particular importance for individuals diagnosed with schizophrenia as they often experience difficulties with problem solving (Buchanan & Carpenter, 2000; Cancro & Lehmann, 2000) which is likely to significantly impede goal progress if obstacles are not identified and addressed.

The failure of goal records to incorporate these four principles (social support, planning for barriers to attainment, action planning and monitoring of goals) might

be explained by the majority of the files utilising the CGT as the goal record form. The CGT does not include specific prompts to include social support to aid goal attainment, although this can be included within the varying level of goal attainment. These aspects of goal setting may have been included elsewhere in the file.

Barriers to goal attainment are included within the review section of the CGT. It may be more beneficial to include a prompt for potential barriers specific to each goal at the time of goal setting to facilitate planning and pathways to those goals. It may be helpful to slightly restructure some aspects of the CGT to encourage greater prompting in these areas, an issue that will be discussed in further detail shortly.

Recovery visions were also more likely to not be included at all within goal setting. Linking goals with a person's values and aspirations aims to promote hope and meaning. However, its importance within the goal setting and striving process is relatively novel. Over time we may expect an increase in goal records incorporating this important concept. This will be enhanced if formalised goal setting forms prompt mental health workers to explore the consumer recovery vision.

4.5.2 PRE-POST TRAINING DIFFERENCES IN GOAL RECORDS

There was a significant increase in the number of files containing some form of goal record and the quality of the goal record reviewed following CRTP. This suggests CRTP led to a significant improvement in the both the frequency and quality of goal records provided for mental health consumers. It is unlikely that improvements in goal setting were related to workers' awareness of the aims of the current study as the goal reviews were conducted for retrospective time periods when mental health workers were unaware of this element of the research. These results highlight the importance of mental health services implementing formal training in goal setting to enhance goal setting/care planning for consumers. Results also suggest that goal quality can be further enhanced when the CGT is used alongside CRTP. Future research is needed to confirm this preliminary finding.

Following CRTP goal records were more likely to include recovery visions. It is believed that the inclusion of the recovery vision promotes motivation toward the goals being developed within the goal record and therefore is a crucial element of the

goal setting process. Although CRTP led to an increase in the inclusion of recovery visions, more work is needed in order to increase the focus of the personal recovery vision directing the goal setting process as evident from 49% of all files reviewed showing no evidence of a recovery vision.

Subsequent to training goal records were also more likely to include ratings of goal importance and confidence, two indicators of the consumer's self-efficacy and motivation towards striving for the goals being set. It is the interaction between confidence and importance that together make up a person's commitment to the goal and is ultimately linked to the person's motivation to attain the goal (Locke, 1996). By mental health workers increasing exploration of these elements within the goal setting process, goal progress is likely to be enhanced. Prior to training, mental health workers tended to set only one level of attainment, whereas post training they set more than one level of attainment. This enabled varying degrees of goal progress to be measured and can assist in the maintenance of motivation by the acknowledgment of even small successes. Specifying levels of attainment can actually assist people in reaching these higher levels of goal attainment (Locke, 1991; 1996).

Some aspects of goal setting were less frequently observed post training. This included less social support being directly identified within the goal records as a means for assisting with goal progress. There was also significantly less evidence of action plans being included post training. One explanation for these differences could be the prevalence of the types of goal forms used before compared with after training. Prior to training, care plans and ISP's were the means of recording goals. All care plans and most ISP's had specific sections identifying the person responsible for the goals listed and also typically had a section listing the actions required to meet each goal. These elements were not included within the design of the CGT form. The CGT was just one component of the CRM and is used in combination with structured homework procedures that constitute action planning (e.g.,, Kelly et al., 2006). It is possible that lower evidence of action planning in goal records after training was a function of these activities being documented in the homework records. This may also account for the lack of improvement in goal monitoring

following training. The CRM places a significant emphasis on goal monitoring through systematic review of homework. The behavioural steps that constitute the goal are broken down into fortnightly homework tasks which are monitored and reviewed (Oades et al., 2005).

This result may also be due to a limitation in the study design, which only accessed goal forms and did not incorporate homework forms or the like within the review process. However, one way to enhance the likelihood that mental health staff members are incorporating social support and action planning within the goal setting process is by including specific prompts within the CGT form and protocol.

4.5.3 RELATIONSHIP BETWEEN THE NUMBER OF GOAL SETTING PRINCIPLES, WORKING ALLIANCE AND TREATMENT OUTCOME

Consumer improvements in ratings on the task and goal subscales of the WAI-s were associated with higher goal audit scores. This suggests that when greater principles are incorporated into the goal setting process, consumers perceive greater agreement on both tasks and goals. This suggests that by enhancing goal quality consumer perceptions of agreement on goals and tasks may also increase, which ultimately could positively affect treatment outcome.

Another possibility is that when there is greater agreement on goals and tasks more goal setting principles can be used to develop these goals as both worker and consumer are open to discuss the goals that have been decided upon. It could also be possible that there is an interactive effect between these variables (goal quality and consumer perceptions of goal/task agreement). As only a correlation analysis was conducted a cause and effect relationship cannot be concluded.

The quality of goal setting was not associated with therapists' ratings of alliance. Alliance has been found to be a significant and robust predictor of outcome within mental health contexts (Alexander & Luborsky, 1986; Frank & Gunderson, 1990; Howgego et al., 2003; Martin et al., 2000; Truant, 1999) and typically consumer ratings of alliance tend to be more closely linked with outcome than therapist ratings of alliance (Horvath & Greenberg, 1994).

In accordance with the hypothesis there was a weak positive relationship between goal quality and improvements in symptom severity as noted by the consumer (K10). Three possible interpretations for this finding are presented. One, when greater goal setting principles are included goal attainment is promoted which may lead to a reduction in symptom distress. Goal attainment/progress has been linked with improvements in wellbeing (Carver & Schneider, 1990; Hollenbeck & Williams, 1987; Koestner, et al., 2002; Sheldon & Kasser, 1995). Two, as consumers started to experience fewer symptoms they were able to engage more fully within the goal setting process, enabling greater quality of goals. Three, both these factors positively impacted each other. For example, experiencing less symptom distress enabled the consumer to engage more fully within the goal setting process, promoting goal progress which further promoted the reduction in symptoms as experienced by the consumer. Regardless of the nature of the relationship between goal quality and reductions in symptom distress, this relationship is only weak in magnitude indicating that other factors impact consumer symptom distress.

In opposition to the hypothesis, mental health consumers whose goal records included greater goal setting principles were rated by their worker as declining in self care (hygiene and physical health), compliance with medication adherence and service co-operation over the three-month period following goal setting. This result is difficult to explain. One possible explanation is that as mental health workers are having more contact and exploring more issues with the consumer they may become more aware of problems in areas outlined by these subscales of the LSP-16; such as medication adherence, physical health problems, co-operation with health care services etc. It is also possible that greater goal setting principles are incorporated into practice when consumers present with increases in issues associated with poor self care and compliance with treatment. Longer-term analysis of these variables would help determine the direction of this association to clarify these results.

4.5.4 LIMITATIONS OF THE STUDY

One limitation of the audit is that only files for consumers and mental health workers involved in the AIMhi study were included. This was due to ethical parameters and consent only being obtained from consumers and workers in the

AIMhi project. These findings may not be representative of goal setting within typical mental health services. However, one may speculate that the level of goal quality evident within the current study may be higher than expected of services not actively evaluating their goal setting or case-management practices. This is indicated by the findings of the pilot study. Each of the mental health workers included within the current study had received two days of the CRTP, which specifically aimed to develop skills in goal setting with consumers. However, due to the inability to access results from internal audits conducted within mental health services there was no comparison data from those who did not received training in CRTP. Also it is evident from the results that CRTP leads to an improvement in goal setting ability. Therefore, we may expect that mental health workers who have not undergone CRTP or some other form of goal setting training may show even weaker skills in goal setting than observed within the AIMhi population within this study.

It should also be noted that this review only examines whether the goal setting principles were observable from the goal records reviewed. Therefore principles may have been used yet were not recorded on the care plan, ISP or CGT. Therefore the study could be under estimating the quality of goal setting used within mental health services.

Another significant limitation of the study is the inability to access data that indicated level of goal progress/attainment. It is expected that goal progress/attainment would be the mediating variable between goal setting and mental health consumer outcome. However, as there was very limited data reviewing goal progress and/or measuring goal attainment this was not included within the audit and therefore this pathway could not be tested. This lack of written documentation of goal reviews suggests that the review process may in fact not be occurring regularly within the mental health services. Reviewing goal progress is a central element in promoting goal attainment as it provides individuals with clarification about where they are currently and where they wish to be, promoting self-awareness (Locke, 1991; 1996; Locke et al., 1991). Reviewing goals also boosts self efficacy not only by outlining progress made, but by identifying and problem solving barriers to attainment so future goal striving can be promoted (Locke, 1991; 1996; Locke et al., 1991). Therefore the review process is integral to maintaining motivation toward

goal striving. Future studies should examine if goal attainment is the mediating factor between goal setting quality and outcome within mental health. Research examining clinicians' perceived competency related to specific goal setting skills would also be useful to determine whether lack of confidence is one reason impeding goal quality. This will assist in identifying appropriate recommendations to assist goal quality within mental health. This will be carried out in Study 2.

Another limitation of the study was the lack of routine outcome data available for many of the mental health consumer participants. This led to unsystematic selection of time periods for different participants depending on when two outcome data points were available within a three month period. For instance, some mental health consumer files were reviewed within the first three months after receiving CRM whereas others were conducted between the six to nine months following training.

Also due to the lack of outcome data available for participants the ability to use a within groups comparison of goal quality and treatment outcome before and after training was limited. Due to the small sample size only a correlational design investigating the relationship between audit score and changes in outcome measures were possible. Further research would be useful to investigate whether differences in outcome scores is evident when a goal striving intervention is incorporated into treatment compared to when it is not by having a between groups experimental design.

The sample size for matched pre-post training comparisons of goal record quality were relatively small (n = 33). This was due to the lack of goal records completed prior to training (n = 41) and some of these participants not having a goal record after training (n = 8). However, even when total quality ratings of all (unmatched) service participant files from before (n = 41, M = 7.68, SD = 2.59) and after training (n = 90, M = 11.91, SD =3.84) are compared to the matched data, the mean difference ($Mdiff$ = 4.23) is highly consistent with that obtained with matched pre-post data ($Mdiff$ = 3.91). This provides some reassurance that improvements are not just due to sampling bias.

Despite these limitations the present study found that formalised goal setting is occurring within mental health services and generally half of the best practice goal setting principles were included in the goal plans. Training in goal setting appears to be associated with improvements in the quality of goal records in most domains. Future training should emphasise those goal setting activities that did not improve and research should include a control group to rule out the possibility that improvements are a function of other variables (e.g.,, attention). Future research should investigate the association between goal quality and both functional and recovery outcome measures for individuals with psychiatric disability outside of the AIMhi program. The development of the Goal-IQ provides a useful resource to facilitate such research and can also assist services in evaluating goal setting practices.

Chapter Five

Study 2

CLINICAL UTILITY OF THE COLLABORATIVE GOAL TECHNOLOGY

This chapter reviews the aims, methodology, results, discussion, and research limitations for Study 2.

A central aim of Study 1 was to examine the current quality of goal setting within mental health services and the impact of goal setting training on goal quality. Although many goal setting skills improved following CRTP, some principles were still not frequently included within goals records (e.g., recovery vision). When conducting the goal audit there was evidence suggesting the goal review process was not being conducted with many of the mental health consumers, making the goal striving process incomplete. In response to these findings Study 2 aimed to determine whether part of the reason for this lack of transfer of training was staff confidence in the specific skills required to use the CGT. Further, the study aimed to identify staff perceived barriers to effective use of the CGT with consumers and factors that prevented them from attempting to use the CGT with consumers they work with.

The CGT is a relatively new goal setting tool and minimal research has been conducted into its utility. However, when reviewing the CGTs used in clinical practice for this research, only 69% (209 from 299 CGT's) had evidence of having been reviewed for goal progress and attainment. This suggests that aspects of the CGT protocol, particularly the goal review skills, are not being transferred as readily to clinical practice as desired. This is consistent with a wider problem with transfer of training within mental health settings (Baldwin & Ford, 1988; Milne, Gorenski, Westerman, & Leck, 2000; Uppal et al., In Press). Identifying issues that impact the transfer of the CGT protocol into case-management practice is important so that interventions to promote the transfer of these skills can be developed and

implemented. This may improve services provided to consumers as well as ensuring resources are used efficiently as training is often costly, demanding time and money from mental health services. This research will now explore mental health workers' perceptions of their skills in using the CGT protocol and barriers that impact upon transfer of training of the CGT.

5.1 AIMS FOR STUDY 2

Mental health workers attending booster sessions in the CRM were asked to complete a survey regarding the clinical utility of the CGT. The aims of Study 2 were to: 1) investigate the level of skills used within the goal setting process by workers trained in using the CGT, 2) to identify obstacles impeding correct implementation of the CGT protocol and, 3) to identify barriers preventing use of the CGT with consumers.

5.2 METHOD

5.2.1 PARTICIPANTS

Eighty three mental health workers from government and non-government organisations participating within the AIMhi program completed the booster session survey. All participants were taking part in a six month booster session aimed at reinforcing training in the CRM. Seventy percent of the participants were female with a mean age of 40.91 years (*SD* = 9.92, range 22 to 60 years of age). On average they had been working within their profession for 12.01 years (*SD* = 9.87, range 1 month to 38 years).

5.2.2. MEASURES

5.2.2.1 Collaborative Goal Technology Booster Session Survey

This is a self-report questionnaire specifically designed for the present study, to measure mental health workers' application of the CGT with consumers. The survey was also used to guide booster session training to promote mental health worker skills in using the CGT. The first section of the survey contains 20 items measuring specific skills required to effectively use the CGT. The 20 items measure each of the three stages of the CGT goal striving process; development of a meaningful recovery

vision and goals, setting manageable goals and reviewing goal progress (the full measure is provided in Appendix 8). Items are scored across a five-point scale ranging from 0 (Not at all) to 4 (Very much). Examples of items include; '*I explained the concept of a personal recovery vision'* and '*I explained the connection between goals and homework tasks'*. The second section of the survey focused on whether the mental health worker had difficulty completing the CGT with consumers on their caseload and if so what were the reasons for the difficulty. Participants were asked to rate nine possible reasons on the same five-point scale used in the first section of the survey. Items included; 'insufficient time', 'forgot to administer', 'consumer refused', 'consumer was too unwell', 'CGT would overload the consumer', 'consumer could not set goals', 'CGT was too complex', and 'lack of appropriateness', which then asked participants to specify this response. The survey also included four open ended questions; 1) *'Where the CGT sheet was not used, describe the factors that prevented its use with this client?'*, 2) *'What were the difficulties that you experienced in implementing Collaborative Goal Setting with the client?'*, 3) *'What techniques, skills or approaches did you use to overcome these difficulties?'*, and 4) *'What comments or suggestions do you have about improving the CGT?'*

5.2.3 PROCEDURE

The one day booster session was provided to all mental health workers six months after they had completed the initial two day training in CRTP. The booster was designed to review the case-manager's experiences with utilising the CRM model. Approximately two hours of the booster session was focused on the clinical utility of the CGT and mental health workers were required to practice goal setting and review skills in a role play exercise. Participants were asked to complete the CGT Booster Session Survey at the commencement of their six month booster session. The aim of the survey was to encourage participants to think about the skills used within the CGT protocol and think about any difficulties they may have been having when using the CGT. This also allowed training for the day to be tailored to their needs.

Eighty three mental health workers from a total of 309 who received training in CRM took part in this aspect of the research. One hundred and fifty mental health workers had been trained prior to booster session survey being developed and the remaining 76 mental health workers chose not to complete the survey and/or had not used the CGT with any consumers on their caseload at the time that their six month booster session was conducted. This left 83 mental health worker participants.

5.3 RESULTS

5.3.1 THREE STAGES OF GOAL SETTING USING THE CGT

Means for each of the three stages within the goal striving process were calculated. The mean score for items measuring meaningful recovery vision and goals was 2.72 (*SD* = 1.01, range 0 to 4) indicating participants reported using these skills between 'Somewhat' and 'Moderately' when setting goals with mental health consumers. The mean scores for items measuring the ability to set manageable goals and review goal attainment were 2.41 (*SD* = 1.21, range 0 to 4) and 2.33 (*SD* = 1.28, range 0 to 4) respectively. Therefore, typically participants felt they 'Somewhat' used these skills when setting and reviewing goals with consumers. It should also be noted that fewer participants responded to the items examining the review skills (*M* = 77, 92% of participants) when compared to the meaningful (*M* = 82, 99% of participants) and manageable skills items (*M* = 81, 98% of participants).

5.3.2 USE OF THE SPECIFIC CGT SKILLS BY MENTAL HEALTH WORKERS

Upon closer examination of items within each of the three goal striving stages, mental health workers reported higher mean scores on the item asking if they showed empathy through the goal setting process (*M* = 3.24, *SD* = 1.22), indicating they believed they showed slightly more than 'Moderate' levels of empathy. Mental health workers also reported higher scores on items explaining the concept of a recovery vision (*M* = 2.95, *SD* = 1.05), setting meaningful (*M* = 2.95, *SD* = 1.21) and collaborative (*M* = 2.89, *SD* = 1.15) goals with consumers. Lower scores were also identified for two items. Scores on the item "I checked that the attainment levels did not overlap" showed participants typically incorporated this skill only a 'Little' to 'Somewhat' of the time (*M* = 1.59, *SD* =1.55). On the item asking mental health

workers whether they calculated CGI, they typically noted that this was done only a ‘Little’ within the goal review process (*M* = 1.31, *SD* = 1.54).

Table 6

Means and Standard Deviations for Items on the CGT Booster Session Survey

Items	*M*	*SD*	*N*
Meaningful			
Total	2.72	1.01	83
1. I explained the concept of a personal recovery vision	2.95	1.05	82
2. I helped the consumer shape his/her recovery vision	2.44	1.31	82
3. We identified collaborative goals	2.89	1.15	83
4. I checked the goal meaningfulness with the consumer	2.95	1.21	83
5. I related the goals to the recovery vision	2.63	1.40	81
6. Allocation of importance points to goals	2.36	1.46	80
Manageable			
Total	2.41	1.21	83
7. I explained the rationale for levels of goal attainment	2.11	1.60	76
8. We discussed and recorded levels of attainment	2.31	1.46	81
9. I checked the confidence levels (>70%)	2.41	1.53	83
10. I checked that the attainment levels did not overlap	1.59	1.55	81
11. I displayed empathy through the goal setting process	3.24	1.22	82
12. Checked understanding of monitoring	2.20	1.31	82
13. Explained connection between goals and homework	2.52	1.52	82
14. I gave a copy of the CGT to the consumer	2.38	1.82	80
Review			
Total	2.33	1.28	79
15. We collaboratively rated goal attainment	2.19	1.53	78
16. I calculated the CGI	1.31	1.54	75
17. I appeared positive regardless of goal attainment	2.83	1.50	77
18. I emphasised the goal striving process	2.50	1.44	76
19. We reviewed the consumer personal recovery vision	2.41	1.55	79
20. We reviewed the consumers collaborative goals	2.63	1.50	78

Note. On average less participants completed the items associated with the review skills (*M* = 77 mental health workers, 92% of sample) when compared to the meaningful (*M* = 82 mental health workers, 99% of sample) and manageable skills (*M* = 81 mental health workers, 98% of sample) items.

5.3.3 FACTORS NOTED AS MAKING THE CGT DIFFICULT TO COMPLETE

To identify obstacles for correct utility of the CGT protocol, mean scores for each of the eight reasons listed in the survey were calculated. Mental health workers reported the largest factor that contributed to the CGT not being completed was lack of time. This was followed by the belief that the CGT would overload the consumer. Refer to Table 7 for mean scores of factors reported as impacting completion of the CGT.

Table 7

Factors Impacting Completion of the CGT as Reported by Mental Health Workers

Reason for incompletion of CGT	*M*	*SD*	*N*
Insufficient time	1.83	1.41	63
Would overload the consumer	1.49	1.48	59
Thought the consumer was too unwell	1.37	1.53	62
Forgot to administer	1.16	1.33	60
Consumer refused	1.03	1.44	62
CGT was too complex	.98	1.23	64
Did not think the consumer could set goals	.49	.98	61
Did not think it was appropriate	.48	1.06	56

5.3.4 FACTORS NOTED AS PREVENTING THE USE OF THE CGT WITH CONSUMERS

To identify barriers to using the CGT with consumers on their caseload, reasons reported by participants were categorised into one of nine categories so the results could be described meaningfully. Categories were drawn from those developed by Uppal and colleagues (In Press) that were used to group barriers identified in the transfer of CRM training into routine practice.

Mental health workers reported 90 reasons for not using the CGT with consumers on their caseload. The most commonly reported reasons were perceived consumer factors, either mental health workers felt consumers were too unstable or were unresponsive to the CGT procedure. The second most frequently reported category was mental health workers' unfamiliarity and lack of confidence with using the CGT (Refer to Table 8).

Table 8

Percentage Frequency of Reasons Why CGT's Were Not Completed.

Category	Current research *N* = 83	Uppal et al., In Press *N* = 173
Lack of consumer responsiveness	30	20
Consumer stability	27	16
Lack of confidence & unfamiliarity	16	8
Institutional constraints	10	22
Workers self management skills	6	10
Consumer access or appropriateness	7	6
Philosophical opposition	1	9
Insufficient collegial support	3	7
Collateral interference	0	2

Note. All figures in the table are percentages.

5.4 DISCUSSION

5.4.1 PERCEIVED CLINICAL UTILITY

Mental health workers reported they were more inclined to use skills to develop meaningful and manageable goals than they were to use the skills to review goal progress. This finding is consistent with the CGT forms being returned as part of the AIMhi project where only two-thirds were reviewed in terms of goal progress/attainment. This suggests that despite goals being set, feedback of goal progress is not happening as frequently as desirable. Some possible reasons why

mental health workers are more likely to set goals than review the goals could be 1) that although the primary mental health worker set the goals with the consumer they are not directly involved in the steps required to achieve the goal so they fail to remember the goals set, or 2) perhaps clinicians feel that reviewing goal progress may reflect poorly on them if they have not been able to assist the consumer in achieving their goals. Research exploring this with mental health workers would be useful to clarify reasons why goal reviews were not conducted as readily as goals setting.

Reviewing goal progress is a vital element of the goal striving process as it allows feedback between actual and desired performance providing reinforcement, motivation and clarification about what needs to be done in order to progress toward the set goals (Locke, 1991; 1996; Locke & Latham, 1990; Snyder, 2000). It can also provide the opportunity to problem solve barriers that were encountered along the way so that these can be managed in future goal striving attempts (Sniehotta, Schwarzer, et al., 2005; Sniehotta, Scholz, et al., 2005). This suggests that training should place a specific focus on the importance of reviewing goals and in developing mental health workers review skills. Reducing the time frame between goal setting and the goal review from three months to either one or two months may also make the reviews more likely to occur as goals are more likely to be remembered over a shorter time frame. Further, implementation strategies, which have been found to assist the uptake of rehabilitation initiatives, may also help with the uptake of the CGT into clinical practice (Corrigan, 1995; Smith & Velleman, 2002). For example the use of Champions to help line level staff to adopt the CGT as 'their own' tool may be one way to promote use of the CGT. Champions are defined by Corrigan (1995, p.514) as "yeoman clinicians who exhibit sufficient excitement and knowledge to shepherd rehabilitation innovations through implementation and maintenance phases of program development". Also ongoing supervision and training have been identified as the two elements required for a successful intervention (Fadden, 1998). This highlights the need for continued supervision and further booster sessions to be provided to clinicians to enhance use of the CGT.

5.4.2 SPECIFIC SKILLS WITHIN THE CGT PROTOCOL

A strength typically reported was the display of empathy throughout the goal setting process. Empathy is linked with developing and maintaining the bond component of the therapeutic alliance (Bordin, 1979; Horvath & Greenberg, 1989; Saunders, 2000). Clinicians also reported they were likely to use the skills required for setting meaningful and collaborative goals and explaining to consumers the concept of a recovery vision. These skills in particular promote the recovery philosophy by ensuring the consumer is directing their own personalised recovery process (Andresen et al., 2003; Anthony, 1993; Clarke et al., 2006; Tryon & Winograd, 2001).

Weaknesses were reported in skills ensuring goal levels did not overlap and calculating the CGI. This is somewhat expected as these skills are the more technical of the CGT protocol. Mental health workers are likely to be less familiar with these skills as they are fairly unique to formalised goal setting interventions like the CGT or GAS. This is in comparison to other skills such as displaying empathy (Anthony, 1993; 1998; Mueser et al., 2006) which are more typically promoted within mental health, particularly services with some recovery orientation.

5.4.3 FACTORS CONTRIBUTING TO FAILURE TO COMPLETE CGT

Insufficient time was the most frequently reported factor impeding completion of the CGT. This reflects findings by Uppal and colleagues (In Press) and Milne and colleagues (2000) where lack of time or institutional constraints was the most common reason for the lack of transfer of training identified by mental health staff. Mental health workers were also concerned that the CGT would overload the consumer. Consumers within the AIMhi program are identified as high need (a score of five or more unmet needs identified by the CAN) and are recovering from EMI. It is likely that at times the CGT may not be appropriate when symptoms are florid. It seems good practice for the consumer's current mental health concerns to direct the type of intervention that is appropriate at that time. Mental health workers should be mindful that illness symptoms fluctuate and should continue to look for opportunities where the CGT can be used to assist the consumer in finding meaningful goals. It is also important to note that perhaps as responses were not anonymous workers may

not have wanted to disclose that they were resistant to implementing this new intervention, rather providing responses they felt were more acceptable to the training facilitators (e.g. insufficient time). Future research enabling workers to provide anonymous responses may help to determine the factors for poor implementation of the CGT more clearly.

5.4.4 FACTORS PREVENTING USE OF THE CGT WITH CONSUMERS

The most commonly reported reasons for not to using the CGT were consumer factors, such as consumer unresponsive to the CGT or the consumer being seen as too unstable. These results reflect those of Uppal and colleagues (In Press) who found that mental health workers reported these two consumer factors as the second and third most significant factors preventing implementation of the CRM. Within the current study workers' unfamiliarity and lack of confidence with using the CGT was the third most frequently reported factor by mental health workers. Lack of confidence and unfamiliarity was more frequently reported by mental health workers when using CGT intervention than when the CRM was reported on as a whole intervention (Uppal et al., In Press). This may be due to the CGT being a fairly comprehensive protocol that requires several steps to be mastered to ensure effective utility. Only 22% of the factors described for lack of CGT use were directly attributed to the mental health worker themselves. This again reflected the study by Uppal and colleagues (In Press) that noted 18% of responses given by participants for failure to implement training were internal attributes. This may reflect a lack of willingness on the part of the mental health worker to accept responsibility for implementing aspects of the CRM. Training may need to focus on inspiring workers and further enhancing their confidence in using the CGT principles to promote responsibility in using the CGT with consumers. Training using specific examples of consumer presentations and role-playing ways to respond may be one way to do this.

5.4.5 LIMITATIONS OF THE STUDY

There are several limitations to the study that should be noted. The sample size is relatively small (N = 83) in comparison to the number of mental health workers trained in the CRM (total of 309 mental health workers), therefore the sample may not be representative of the larger group of workers trained in CRM. However,

participants included in this study were drawn from a combination of both non-government and government services and were also drawn from various sites across Australia, straddling metropolitan, regional and rural locations. Also results associated with barriers to the implementation of the CGT reflect findings from Uppal and colleagues (In Press) suggesting results are reflective of the larger sample. It should also be noted that as data was collected via survey, results reflect mental health workers' perception of their skills, which may differ from their actual skill level.

5.5 CONCLUSION: GENERAL DISCUSSION OF THE FINDINGS FROM STUDY 1 AND 2 FOCUSED ON GOAL QUALITY

Study 1 and 2 aimed to assess goal quality within case-management services. The CRTP was associated with a significant improvement not only in the number of goal records completed but also the quality of the goals being developed with mental health consumers. Mental health workers reported they were more inclined to use skills associated with setting meaningful and manageable goals rather than the skills used to review goal progress when completing the booster session survey. This finding was also reflected in the observations of CGT forms being reviewed where only two thirds of goal sheets were reviewed. Reviewing goal attainment seems to be the aspect of the goal striving process that requires attention. One of the criticisms with using an audit instrument as a measure of service provision is that it may under-estimate the actual skills being used due to a lack of documentation. By reflecting on findings from the survey as well as the audit it appears more likely that a lack of reviewing of goals is an accurate reflection of practice rather than a problem with documentation.

Mental health workers perceived that they typically worked collaboratively with consumers when setting goals and this was also reflected in the audit results, which showed that most goals were phrased in the consumer's words. The survey also allowed insight into the issues that were raised by the worker as impeding correct use of the CGT as well as preventing its use altogether. A lack of time was noted as the most significant factor to impede correct use of the CGT, which has often been noted in other studies as the main reason provided for the poor transfer of

training. Consumer factors were also frequently reported as to why the CGT was not completed effectively as well as the reason why the CGT was not selected for certain consumers. Workers felt the consumer would be overloaded by the CGT due to unstable mental health or that they felt the consumer was unwilling to participate in the goal setting process. Lack of confidence and familiarity with the CGT was also noted as a significant barrier for the mental health worker who completed the survey. By being aware of these perceptions steps can be taken at an organisational level to address these concerns. Based on the findings from both studies a brief list of recommendations was developed to assist with managing these obstacles.

5.6 RECOMMENDATIONS

5.6.1 TO INCREASE THE NUMBER OF MENTAL HEALTH WORKERS COMPLETING GOAL RECORDS WITH CONSUMERS

1. Reviewing consumer goals within team meetings could be set as a permanent agenda item on a monthly basis. Over a three-month period each consumer should have his/her goals discussed (first month), monitored (second month), and reviewed (third month) with the team. This is to ensure each aspect of the goal setting and striving process are adequately addressed.
2. Formalised goal sheets could be taken to team meetings and case reviews to ensure all goals being set with consumers are being recorded.
3. Goal sheets could also be brought to individual and group supervision where cases are discussed to ensure the goals selected are driving case-management planning.
4. Within team meetings the importance of the goal setting and striving process in promoting recovery for consumers could be emphasised. Further, there should be a focus on promoting mental health worker empowerment in facilitating the goals setting and striving process, despite some organisational barriers.
5. Identifying line level mental health workers who would make opportune champions to assist line level staff in adopting the CGT.

5.6.2 TO IMPROVE THE QUALITY OF GOALS SET WITHIN CASE-MANAGEMENT

1. Three monthly booster sessions for workers aimed at promoting goal-setting skills could be conducted. This should be part of an ongoing training program to ensure better transfer of training and enable workers to ask questions and address issues associated with the goal setting process.
2. Ongoing supervision and support to aid use of the CGT
3. There could be a specific focus on the review skills and the importance of this phase in the striving process should be emphasised to mental health workers.
4. The incorporation of goal setting interventions such as the CGT or developing forms that incorporate the goal setting principles that are designed for the specific service needs.
5. The revision of goal setting forms used and incorporating sections to include goal-setting principles identified within the literature.
6. The use of case studies at clinical meetings to review the goal setting principles with mental health workers. There should be a particular focus on how to protect the goal striving process for consumers when symptoms are florid.
7. The incorporation of a goal setting checklist when setting goals with consumers to ensure more goal setting principles are being applied.
8. The examination of non-traditional methods of goal setting and monitoring such as a buddy systems to assist consumers in maintaining commitment to their goals and focusing on enhancing peer social support and monitoring of goal progress.

Note: Please refer to CRM training protocol for further recommendations on how to promote individual goal striving components (Oades, Lambert, Deane, & Crowe, 2003).

RECOVERY GOAL CONTENT

STUDY 3

Aspects of the recovery goal content component of the thesis have been submitted for publication.

Clarke, S. P., Oades, L. G., & Crowe, T. P., (Submitted Jan 2009). Recovery goals: What are the types of goals being established and at what stage within the recovery process. *Acta Psychiatrica Scandinavica.*

Chapter Six

RECOVERY GOAL CONTENT

This chapter reviews literature on goal content within mental health case-management and reviews the stages of recovery and two theories of human development to provide a context for Study 3.

Study 1 and 2 provides insight into the quality of goal setting within mental health practice, but what is the content of these goals being established within case-management? More specifically, the question remains, as people progress with their recovery does the content of goals they pursue change? That is, do they set goals aimed at achieving different things? Goal setting within case-management settings is often a forum where hopes for the future can be identified and explored. Research examining the content of goals being developed by individuals diagnosed with EMI (Stein, Mann, & Hunt, 2007) and whether differences in types of goals are set during different phases of the recovery process is limited. Goal content is defined here as what the goal refers to or what the goal is about (e.g., exercise, employment; Austin & Vancouver, 1996; Schmuck & Sheldon, 2001).

Recovery has been aligned with the process of human development (Andresen, 2007). Therefore, we may expect that as people progress in recovery and their more basic needs are met (health and safety) they may then start to pursue goals that are stimulated by higher order human needs such as connection with others, competency in vocational role and striving toward self actualisation (Maslow, 1954; 1968; 1987). They may also be more likely to engage in goals which satisfy the basic human needs of competence, autonomy, and relatedness (Deci & Ryan, 1985).

Despite the increasing interest and research into the concept of recovery, little research has been conducted exploring the content of case-management goals set

within a recovery paradigm or how goal content may change with the process of recovery.

6.1 CASE-MANAGEMENT GOALS ESTABLISHED BY CONSUMERS WITH ENDURING MENTAL ILLNESS

Research conducted by Lecomte and colleagues (2005) has provided some information on the types of goals individuals with EMI have identified as important. One hundred and sixty five individuals living in Canada with EMI (typically schizophrenia and schizoaffective disorder) were interviewed using the Client Assessment of Strengths, Interests, and Goals (CASIG, Wallace et al., 2001 – refer to Chapter 2, section 2.4.2). This structured interview addresses a large number of psychiatric rehabilitation domains and also elicits goals related to life domains that participants wanted to improve within a 12-month period. The CASIG assesses goals in five broad areas: residence (living conditions), finances (includes goals associated with employment and education), relationships (family and friends), religion/spirituality, and physical health/mental health. Consumers can nominate goals in each of the five domains if they choose. Results showed the highest frequency of goals were in the financial (predominately education and employment goals) domain (75% of consumers), followed by physical health (67% of consumers), interpersonal relationships (59% of consumers), mental health (58% of consumers), living conditions (32% of consumers), and spiritual or religious (22%). Refer to Table 9.

Table 9

Previous Studies Examining the Content of Consumer Goals.

Author & sample	Frequency of goals	Limitations
Lecomte et al. (2005) Canada (*N* = 165) • Schizophrenia/ schizoaffective	1. Financial (75%) 2. Physical health (67%) 3. Relationships (59%) 4. Mental Heath (58%) 5. Living cond (32%) 6. Spirituality (22%)	• Did not assess actual case-management goals • Consumers were asked about all domains and could nominate goals in each of the domains.
Kisthardt (1993) – Kansas (*N* = 66) • 68% Schizophrenia • 4 outpatient services • Strengths based case-management • Social work students	1. Health (27%) 2. Daily Living (21%) 3. Voc/Educ (19%) 4. Social support (16%) 5. Leisure (9%) 6. Financial (8%)	• Tasks and goals not separated • Significantly large number of goals/tasks. • Retrospective recording of goals • Many social support goals appear to be health goals
Fakhoury et al., (2005) – UK (*N* = 41) • Schizophrenia • New to housing • < 5 years inpatient	1. Indep Housing (22%) 2. Work/education (20%) 3. Health (17%) 4. Living skills (17%)	• Limited sample size • Exclusion criterion of patients

Although this research looked at life domains consumers would like to address, it did not specifically identify the actual case management goals set between the consumer and case-manager. Research has shown there is often a discrepancy between the goals the mental health consumer wished to address and the actual case-management goals established. Individuals presenting to mental health services are rarely (3% of consumer participants involved) solely responsible for developing their case-management goals (Kent & Read, 1998). Poor goal agreement has also been

found between mental health consumers and mental health workers (Middleboe, Mackeprang, Thalsgaard, & Christainsen, 1998; Fakhoury, Priebe, & Quarishi, 2005). Thus, although the research by Lecomte and colleagues (2005) provides us with insight into the goals consumers would like to address actual case-management goals may not reflect the domains noted by consumers. Research is needed to determine the content of goals being developed and addressed within case-management so accurate information can be available when planning resource provision for mental health services.

Furthermore, the study by Lecomte et al (2005) enabled consumers to nominate goals in each of the five life domains for treatment planning. Understanding which goals are a priority and most important to the consumer is pertinent when identifying goals to work towards within case-management (Corrigan et al., 2001). By identifying goals that are most important, planning and motivation are stimulated, promoting goal attainment. Therefore it is valuable to determine what types of goals are most likely to motivate a person within his/her recovery so resources can be allocated toward these pursuits.

Kisthardt (1993) also provided some insight into the content of goals established within case-management for consumers with EMI. The study was conducted across four outpatient mental health services in Kansas, USA. Students from the University of Kansas School of Social Work were trained in a strengths based model of case management. Sixty eight percent (N = 66) of participating consumers (53% female) had a diagnosis of schizophrenia, 14% affective disorder, 17% personality disorder and 1% was reported as having a diagnosis of ‘other’. Participants were aged between 18 and 68 years (M = 37 years). Short-term goals and tasks were reviewed across an eight-month period. At the end of each month, consumers and mental health workers recorded the goals and tasks set and whether they were achieved. Goals and tasks were categorised across six life domains: health, daily living, vocational/education, leisure, social support and financial/insurance.

The highest frequency of goals and tasks were in the health domain (27% of goals) which included physical and mental health goals such as: ‘going to the doctor’, ‘to exercise more’, ‘to be less depressed’ and ‘quit smoking’. The second

most frequently reported goal domain was daily living (21% of goals), which were goals and tasks aimed at identifying and securing a residential setting of their choice. Goals included: 'to stay out of hospital', 'to keep my apartment', 'to pay bills on time',' to find a room mate' and 'keep my apartment clean'. The third most frequently reported goals were vocational and educational (19% of goals). These included goals such as preparing a resume, visiting social security about employment options and buying the newspaper to review jobs advertised. Kisthardt (1993) noted that vocational goals were typically developed in the last few months of the eight-month research period. He believed this was reflective of the nature of setting vocational goals required a trusting relationship between case-manager and consumer. Social support goals were also frequently set (16% of goals), which focused on developing or maintaining a connection between the consumer and either their case-manager, their peers or the larger community. These included goals such as 'having coffee with their case-manager to talk about psychotropic medication', 'going for a drive with their case-manager to talk about fears of going back to hospital' and 'contacting family members and friends'. Consumers were less likely to report goals in the final two goal domains, leisure (9% of goals) and financial/insurance (8% of goals). Kisthardt did not provide examples of goals belonging to these domains. Refer to Table 9 for a summary of the study by Kisthardt.

The study by Kisthardt (1993) provides us with insight into the types of case-management goals set with consumers with EMI, however, there are some limitations that should be noted. A total of 4880 goals and tasks were recorded for the eight-month period for the 66 consumers, this equates to an average of 74 goals per consumer, a large number of goals to be addressed over a relatively short period of time (eight months). In addition there is no distinction between tasks and goals in the frequencies provided for each goal domain. This may have skewed the frequencies in each goal domain. For instance, a goal to walk more may have included the task of walking each day. If each task was counted as one unit this would have dramatically increased the frequency of goals in the health domain. Goals that were comprised of multiple tasks would lead to an over estimation of their representative goal domain, in contrast to goals that are made up of only a few tasks.

As the distinction between goals and tasks is not delineated it is not clear whether the frequency of goals within each domain is skewed.

Another limitation might be seen in the categorisation process of many of the interpersonal goals mentioned as examples by Kisthardt (1993) seemed to focus on the management of the mental illness (e.g., “having coffee with case-manager to talk about psychotropic medication’ and ‘going for a drive with case-manager to talk about fears of going back to hospital”). It may have been more appropriate to categorise these types of goals within the health domain. Goals and tasks also seemed to be recorded in retrospect (i.e., at the end of the month), which may have also affected the accuracy in which the frequency of goal content was recorded. The research by Kisthardt (1993) focused on a specific model of case-management (strengths based) and utilised students as case-managers. Research within Australian case-management services would help determine whether the findings obtained in the study by Kisthardt can be generalised.

Fakhoury and colleagues (2005) also conducted a study investigating the types of goals set within a specific mental health population. Forty-one consumers diagnosed with Schizophrenia or a related psychotic disorder that had recently entered supported housing in London and Essex, UK, participated in the study. To be eligible for the study, consumers could not have been inpatients within a mental health facility for more than five years at any one time. Consumers were interviewed regarding their goals and also completed the Brief Psychiatric Rating Scale (BPRS, Overall & Gorham, 1962) and Manchester Short Assessment of Quality of Life (MANSA, Priebe, Huxley, Knight, & Evan, 1999). Eight goal categories were developed based on consumers’ responses: study, daily structure, living skills, social contact, work skills, independent housing, reducing dependence and staying healthy. Goals nominated by consumers as most important were independent housing goals (22%), followed by work and educational goals (20%). Health goals and improvement in living skills were also frequently reported (17%). Seventeen percent of the consumers interviewed did not report any goals. Refer to Table 9 for a summary of the research by Fakhoury and colleagues.

In reviewing the study by Fakhoury et al. (2005) it is important to consider the limited sample size and the exclusion criterion used to select the participants. Fakhoury and colleagues were specifically wanting to investigate goals of new residents accessing supported housing so caution needs to be taken when trying to generalise these results to other consumers with EMI (i.e., consumers accessing acute care, consumers living in independent housing or with carers, consumers who have been hospitalised for periods greater than five years).

Despite some differences in methodology, sample and categorisation, the results from Lecomte et al. (2005), Kisthardt (1993) and Fakhoury et al. (2005) suggest that health goals (physical and mental) are frequently reported by consumers with EMI. It is expected that goals associated with health will be a significant focus within case-management for consumers with EMI, not only due to their mental health condition, but also their higher frequency of high risk lifestyle choices (e.g., obesity, smoking) and the physical health issues evident amongst this group (Coghlan, Lawrence, Holman, & Jablensky, 2001; Richardson, Faulkner, McDevitt, Skrinar, Hutchinson, & Piette, 2005). Consumers also frequently reported goals associated with employment across the three studies. Goals associated with employment are often a significant source of meaning for consumers (Andresen, 2007).

Some differences were evident between the studies reviewed. Accommodation and housing goals were frequently set within the samples by Kisthardt (1993) and Fakhoury et al. (2005), yet were reported relatively less frequently within the Lecomte et al., (2005) study. This may reflect differences in the samples, or in the methodology.

6.2 CASE-MANAGEMENT GOAL RECORDS

The three studies reviewed above call into question the accuracy of the findings based on the data collection strategies used (interview or retrospective recording of goals). One way to enhance the validity of answering the question ‘what is the content of case-management goals for people with EMI?’ is by categorising goals documented in case-management goal records.

6.3 STAGES OF RECOVERY AND GOAL CONTENT

Although research examining the frequency of goals set by consumers with EMI has been limited, there has been even less attention placed on the differences in goal content along different stages of the recovery process. Considering a range of recovery needs alongside stages of recovery models and examining these with data from case management goal records would be helpful in closing these research gaps. This thesis will proceed to (1) define goals and needs as viewed within the study sample, (2) describe the stages of recovery model and Maslow's hierarchy of needs and (3) review one study exploring the relationship between goal content, consumer symptomotology and quality of life.

6.3.1 GOALS AND NEEDS WITH A RECOVERY FRAMEWORK

Within positive and humanistic psychology, 'needs' are viewed as the motivational drive underlying people's goal pursuits and are seen as giving goals their psychological potence. Needs determine what types of goals are pursued and when (Deci & Ryan, 2000; Emmons, Colby, & Kaiser, 1998). In the study of human motivation both goals and needs are viewed as motives that direct behaviour. Therefore goals and needs are closely interlinked when viewed from this paradigm and needs are viewed as innate physiological and psychological drives (Chulet, Read, & Walsh, 2001; Emmons et al., 1998; Omodei & Wearing, 1990). From this perspective needs are seen as essential for psychological growth, integrity and wellbeing and as one continues to meet their needs they continue to grow and develop (Deci & Ryan, 2000).

In contrast, within a traditional mental health framework, 'need' has been defined quite differently and as such seems more conceptually distinct from goals. Needs within mental health are typically viewed from a deficit perspective with a focus on addressing disability. That is, the individual's functioning is compared with a professionally defined standard and if the consumer is lacking, then they are seen as having a need that requires intervention (Brewin, Wing, Mangen, Brugha, & MacCarthy, 1987; Brewin & Wing, 1993; Oades, et al., 2005; Phelan et al., 1995). The focus on the type of deficit is different whether viewed from the medical model, disability model or rehabilitation model. However, each framework still places a

focus on deficit. This concept of needs focuses on deficits in functioning and implicitly suggests a focus on achieving a minimum acceptable level of functioning, rather than maximising quality of life and fulfilment. This definition of need does not seem to fit with the ideology of recovery from mental illness.

The concept of recovery from mental illness encompasses the dimensions of self-esteem, empowerment and self-determination. This seems to resonate more closely with the positive psychology/humanistic definition of need that is a movement towards growth rather than a focus on deficit (Resnick & Rosenheck, 2006). Furthermore, the measures employed to assess needs within mental health often do not correlate with consumer-identified needs and therefore do not reflect the goals of the consumer (Issakidis & Teeson, 1999). This seems to suggest that the way needs are currently defined and measured within mental health service provision is missing what is essentially important to the consumer and what drives goal directed behaviours.

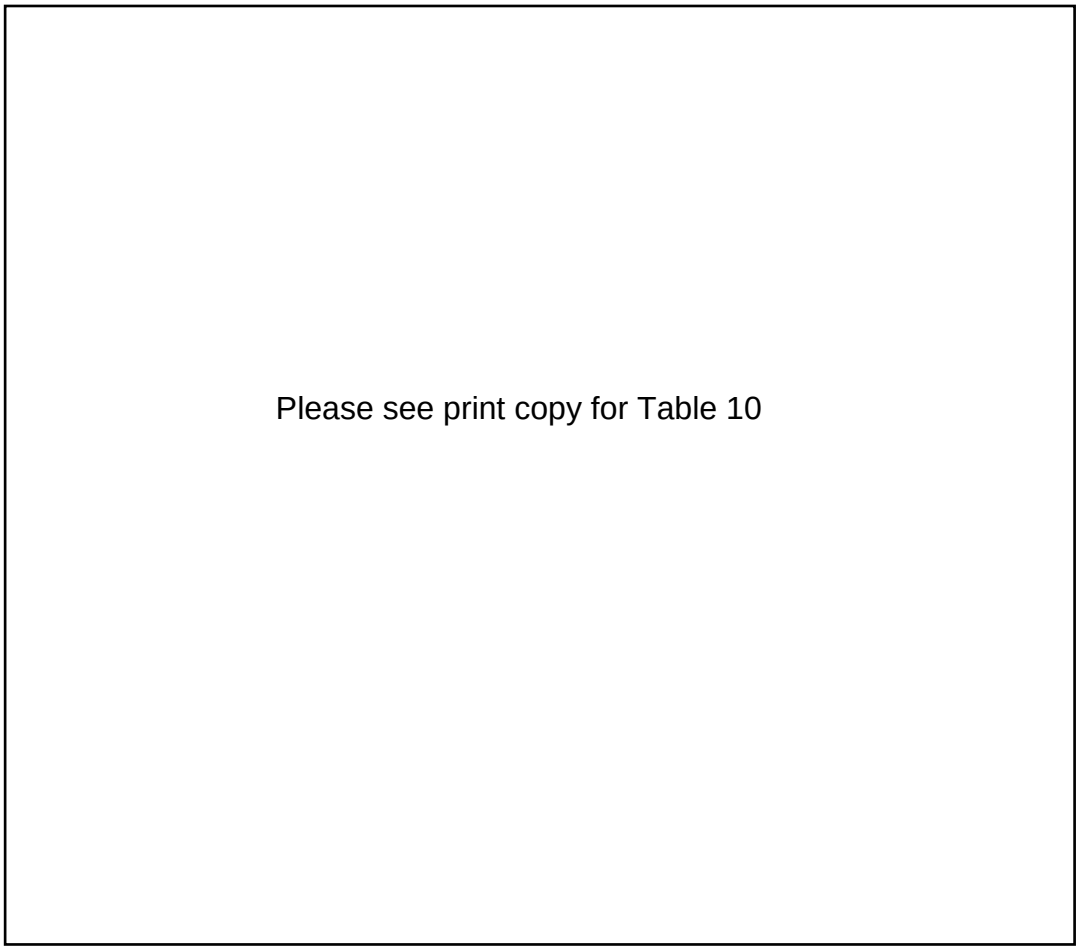
Therefore, within the current study need will be defined in line with the humanistic/positive psychology perspective in order to capture a broader perspective and to place an emphasis on movement towards growth and development. Two theories of humanistic/positive psychology will be reviewed in relation to the stages of recovery. These include Maslow's hierarchy of need (1954; 1968; 1987) and Self Determination Theory (Deci & Ryan, 1985).

6.3.2 STAGES OF RECOVERY AND CONTENT OF CASE-MANAGEMENT GOALS

A comprehensive literature review was conducted by Andresen and colleagues (2003), which drew on consumer accounts of their experiences and conceptualisations of recovery from mental illness. From the synthesis of this information a preliminary five-stage model of psychological recovery was described. The five stages are outlined in Table 10.

Table 10

A Stage Model of Recovery (Andresen et al., 2003)



Based on themes identified throughout the literature it may be expected that certain goal domains may be more frequent within different stages of the recovery process. This stage of recovery process has been likened to the process of human psychological growth (Andresen, 2007). Other models of human growth and development are Maslow's (1954; 1968; 1987) Hierarchy of Needs and Self Determination Theory (Deci & Ryan, 1985). Maslow proposed that human behaviour is motivated to satisfy a hierarchy of needs moving from the lowest order need from the physiological (thirst, hunger), to safety (security and dependence), belongingness (connection with family and friends), esteem (competency and achievement) to the highest order need of self actualisation (reaching one's potential). As a person has more of these needs met the more psychologically healthy they are (Maslow; 1954;

1968; 1987). Self Determination Theory also sees human growth as occurring through the attainment of three psychological needs: competence (being effective), relatedness (feeling connected to and supported by others) and autonomy (regulation of the self by the self, Deci & Ryan, 1985). Deci and Ryan propose that as one selects goals that are freely chosen and reflect their values and interests this will lead to satisfaction of these psychological needs promoting growth and development. It should be noted that just as the process of human development differs for individuals, recovery is also not a standardised or linear process. Individuals don't all systematically follow each stage and do not progress at the same pace. Individuals often experience set backs within recovery which can lead to a few steps back before progressing forwards again, perhaps at a quicker pace.

The *approach* versus *avoidance* distinction in motivation can be applied to reasons behind a goal. *Avoidance* goals aim to move or stay away from a negative or undesirable outcome. Examples of mental health *avoidance* goals might be "to stop hearing voices" and "to stay out of hospital". *Approach* goals aim to move towards or maintain a positive or desirable outcome (Carver & Scheier, 1990). Examples of *approach* mental health goals are "to accept support from my family" and "to engage with people more". Just as the content of case-management goals may differ depending on stage of recovery so might the frequency of *approach* and *avoidance* goals. No research examining *avoidance* and *approach* goals with consumers with EMI has been conducted thus far. However, research amongst non-clinical samples has found that setting *avoidance* goals has been correlated with numerous negative outcomes such as reduced: goal attainment, task performance, learning and motivation (Church & Elliot, 2002). *Avoidance* goals have also been associated with poorer psychological functioning (e.g., higher degree of depression, anxiety, negative self evaluations, lower self esteem and poorer interpersonal relationships) and reduced physical wellbeing (Church & Elliot, 2002). As the Moratorium phase of recovery is associated with factors that reflect poorer psychological functioning (hopelessness, powerless, lack of meaning and identity) and Andresen (2007) also noted that goals are often focused on managing illness, we may expect that greater *avoidance* goals are set at this stage within recovery when compared to the later stages.

In contrast, the setting of *approach* goals has been linked with gains in subjective wellbeing (e.g., increased positive emotions, less anxiety and depression, greater self esteem and more favourable self evaluations; Coats, Janoff-Bulman, & Alpert, 1996; Dickson, 2006; Dickson & MacLeod, 2004; Sheldon & Elliot, 1998; Elliot et al., 1997). As the Growth stage is characterised by similar gains in wellbeing (self confidence, self efficacy, hopefulness) we may expect a greater number of *approach* goals to be set at this stage, than in the earlier stages of psychological recovery.

The stages of recovery and the types of goals that may be expected within these different stages are now described with reference to the hierarchy of needs noted by Maslow (1954; 1968; 1987) and the three psychological needs within Self Determination Theory (Deci & Ryan, 1985) as these theories may also assist in predicting the types of goals likely to be expected at different stages within recovery.

6.3.2.1 Goal Setting within Each Stage of Psychological Recovery

6.3.2.1.1 Moratorium

The Moratorium stage is characterised by hopelessness (Andresen et al., 2003). Snyder (2000) noted that goals are vital for hope. Hope is the positive motivational state that results from having a goal that is worthy of pursuing, a pathway to achieve the goal and the belief that progress can be made toward this goal (Snyder, Irving, & Andersen, 1991). As the Moratorium stage is largely characterised by hopelessness (Andresen et al., 2003) and when keeping Snyder's definition of hope in mind, it is unlikely that the individual has goals they deem as worthy and it is also unlikely that they will believe they are capable of making progress toward such goals. People in this stage often feel powerless and experience a sense of loss of identity and sense of self (Andresen et al., 2003). This is largely due to the loss of important life goals, such as social relationships, occupational and educational goals as well as a sense of autonomy and competence (Andresen, 2007). This suggests that when people are within the Moratorium stage the satisfaction of their three basic psychological needs as defined in Self Determination Theory (Deci & Ryan, 1985) is very poor.

Andresen (2007) noted research by King (1998) stating that when life goals become unattainable the shift to day-to-day goals is a common coping strategy. Andresen (2007) indicated that within the early stages of recovery not only are prior life goals lost there is often also an inability to identify new goals, leading to a lack of meaning and impeding motivation to engage in daily life tasks. Research examining the concurrent validity of the RAS-s and a structured interview to measure stage of psychological recovery (Structured Interview for Stages of Recovery, SIST-R, Wolstencroft, 2008) was carried out with 18 consumers with EMI. There was a significant positive linear relationship between stage of recovery and the 'Goal and Success Orientation' subscale (r = .67, p < .01). This subscale measures whether the consumer has a goal, whether they feel optimistic about achieving their goals and whether they feel they have a purpose in life. The positive relationship between this subscale and stage of recovery supports the lack of specific goals within the Moratorium stage.

Based on the reviews conducted by Andresen (2007) and the way the Moratorium stage has been characterised, people in this stage of recovery experience a lack of hope, meaning, purpose, identity and control over their life. Therefore, it seems likely that goals will not be reflective of life roles such as work, relationships, education, or identity development. Rather goals may be focused more on managing illness and focusing on short-term goals or goals associated with basic needs such as health, shelter, and basic functioning. This may be reflective of Maslow's (1954; 1968; 1987) need for safety and security and a sense of dependence in the world and a freedom from anxiety and fear. It may also be expected that goals within this early stage of recovery are less reflective of the consumer's sense of self (since in these early stages this is characterised by loss of identity) and may be largely driven by the mental health worker's desire to assist the individual to increase motivation and improve functioning on a day to day basis.

6.3.2.1.2 Awareness

The Awareness stage is when the individual realises there is the possibility for a life beyond that of the mental illness (Andresen et al., 2003). This stage is characterised by the awareness of a goal, the goal to recover. The person realises

there are aspects of his/her self not affected by the illness and they are capable of taking action to improve their future (Andresen, 2007). This seems to suggest that there is a movement to satisfy the needs for competence and autonomy at this time. Andresen (2007) noted for some consumers clear concrete goals emerge whereas for others a vague goal associated with a 'better life' becomes evident. The Awareness stage was also associated with lower scores on the Goal and Success Orientation Subscale from the RAS-s (Wolstencroft, 2008) which also suggest that people are less inclined toward setting goals and striving within this stage of recovery from EMI.

Based on Andresen's conceptualisation of the Awareness stage it is unlikely that during this stage many goals would reflect life roles such as occupation and social relationships. It may be expected that consumers start to develop personal skills to help manage their lives more effectively such as goals to improve self-management skills (i.e., organising time effectively, budgeting money). There may also be an emphasis on improving physical health and managing their mental illness.

6.3.2.1.3 Preparation

This stage is characterised by the person laying the foundations for recovery (Andresen, 2007). This may include introspective work such as developing and promoting internal resources as well as practical steps towards utilising external resources (e.g., social support and mental health treatment). This stage is where both personal and external resources are engaged to work towards the goals of psychological recovery (Andresen). This might involve gathering information and knowledge and incorporating rehabilitation services and peer support. Within the Preparation stage the person may still not have a clearly defined goal about what they want for their future or they may have highly motivating long-term goals or short-term incremental goals. Wolstencroft (2008) noted that consumers within the Preparation stages were actively setting goals and were exploring what they found personally meaningful. Consumer reflections reviewed by Andresen seem to suggest that within the preparation stage goals may include learning about one's illness and appropriate management, developing psychological skills, adapting one's lifestyle to better cope with the illness (Andresen).

Building on personal strengths and testing out one's resources (e.g. risk taking and trying new activities) often occurs at this stage in an attempt to re-establish a sense of self that is not limited by beliefs about the illness (Andresen, 2007). The person rediscovers old aspects of self that they feared they had lost and may also rediscover new aspects of self, which are then incorporated into a new sense of self (Andresen). Andresen also noted that learning from others' experiences and connecting with others was also a frequent reflection made by consumers within this stage. This may be reflective of the need for belonging, described by Maslow (1954; 1968; 1987) as the need to connect with others. The Preparation stage again seems to reflect an increased movement to satisfy the basic needs of autonomy, competence and now relatedness (Deci & Ryan, 1985).

From Andresen's (2007) conceptualisation of the Preparation stage we may expect to see a movement toward goals that focus on developing personal skills as well as incorporating external supports and resources to assist the movement towards a more meaningful and purposeful life and sense of self. Therefore self-management goals and personal development goals may be expected as well as goals focusing on promoting social supports. It may also be that goals associated with illness management (physical and psychological health goals) are again evident at this stage within recovery as Andresen noted consumer reflections indicating engagement with rehabilitation services and a desire to learn about their illness.

6.3.2.1.4 Rebuilding

At this stage the person starts to take action toward their goals. The Rebuilding stage is often marked with encountering barriers to goal pursuits and perseverance is required for progress to be made (Andresen, 2007). The person is likely to experience a sense of hope, control, and enhanced self-efficacy as they make small gains toward their goals. This reflects the psychological needs of competence noted by Deci and Ryan (1985). Reflections on some first and third person consumer accounts seem to indicate that certain goal types were more likely to be set whilst in the rebuilding stage of recovery. These included: recreation, physical fitness, relationship, creative expression and vocational pursuits (Andresen, 2007). These

accounts suggest that within this stage goals appear more diverse and are more likely to reflect life roles the person was previously engaged in prior to their diagnosis. Andresen noted that this often leads to the promotion of hope and therefore a promotion of wellness and recovery. It is also likely that goals in this stage of the recovery process are autonomous and reflect the individual's core values, which is in contrast to the goals set within the Moratorium stage, therefore indicating a greater satisfaction of the need of autonomy (Deci & Ryan, 2000).

6.3.2.1.5 Growth

Within the Growth stage of recovery the consumer is confident and has a sense of control over his/her life. A positive sense of self has been established and there is optimism about the future (Andresen et al., 2003). The skills that have been developed within the Rebuilding stage are now confidently applied. Through the attainment of goals and enhanced self-efficacy, psychological health and improvements in wellbeing are likely to be expected (Andresen, 2007). Consumers within the growth stage have been noted as being more optimistic about their future and feel optimistic that they can achieve their goals (Wolstencroft, 2008). Based on the consumer reviews Andresen (2007) proposed that individuals who have reached the Growth stage of recovery are more likely to strive for ideas associated with psychological wellbeing and self-actualisation. Based on this it may be expected that people within this final stage of recovery might set goals associated with personal development.

Andresen (2007) also noted that occupational goals were reflected as an important source of meaning for some consumers and some consumers reported shifting to occupations that were more personally meaningful (e.g., working within an advocacy or peer support roles). Some consumer reports also mentioned goals associated with the transcendence of self in spiritual and philosophical ways when in the Growth stage of recovery. These types of goals are thought to promote meaning and assist with recovery from mental illness (Andresen). Again, greater satisfaction of the three psychological needs identified by (Deci & Ryan, 1985) appears to be occurring within the Growth stage and as such the improvements in psychological health and wellbeing are expected. From Andresen's reviews and the

conceptualisation of the Growth stage it may be expected that consumers set a higher frequency of occupational goals and personal development goals when in this stage of recovery. Spiritual goals may also be more prevalent within this stage than in the earlier stages of recovery.

6.3.3 RESEARCH INVESTIGATING THE LINK BETWEEN GOAL CONTENT, SYMPTOM SEVERITY AND QUALITY OF LIFE

Fakhoury and colleagues (2005) also investigated whether goal content varied depending on consumers' scores on the BPRS and MANSA (N = 41). A hierarchical cluster analysis produced two groups of consumers within the research sample (group A and group B) based on scores on the BPRS and MANSA. Group A (n = 23) included all consumers who reported not having a goal to strive towards (n = 7). Whereas, group B (n = 18) included all consumers who reported social and educational goals, and were also more likely to have goals associated with employment and seeking independent accommodation. No differences were identified between the frequency of health, independence and living skills goals between groups A and B. Group A reported significantly higher symptom severity (BPRS) and a significantly poorer quality of life generally and specifically in the areas of housing, physical health, mental health and life in general (MANSA). Refer to Table 11 for frequencies of goals for each goal domain for groups A and B.

Results from this study suggest that consumers with greater symptom severity and poorer quality of life are less likely to have a goal to strive toward than consumers with lower symptom severity and greater quality of life. When these consumers do have a goal they are more likely to be focused on meeting health goals and improving self-management (living skills and independence). These findings reflect themes drawn from Andresen (2007) where people identifying within the earlier stages of recovery (Moratorium and Awareness stages) noted they were unlikely to have a clear goal to work towards and when they did have a goal they tended to be concrete and more reflective of day-to-day tasks and functioning. The consumers in the study by Fakhoury et al. (2005) who had higher levels of functioning and reported greater quality of life were more likely to set goals relating to more diverse life roles such as: social relationships, vocational pursuits and

independent living situations. Psychological recovery from mental illness in part seems to reflect concepts associated with quality of life and wellbeing (Keyes, 2003) and, as people move through recovery the focus on symptoms seems to be reduced (Corrigan et al., 2004; Andresen, Caputi, & Oades, 2006). It may be speculated that the study by Fakhoury may reflect consumers within different stages of psychological recovery, with group A being within the earlier stages and group B being more advanced within their recovery process. However, as no recovery measures were used this can only be speculated.

Table 11

Frequencies of Goals Related to Symptoms and Quality of Life (Fakhoury et al., 2005).

	Study	Structure	Living skills	Social	Work	Indep housing	Reduce depend	Health	No goal
Total	5%	2%	17%	0%	15%	22%	5%	17%	17%
A	0	3	7	0	5	2	2	6	6
B	2	1	5	2	11	10	2	5	0

Note. Total includes only the main goals reported by the 41 consumers. 'A' represents all goals nominated by consumers in group A and 'B' represents all goals nominated by consumers in cluster B.

The content of goals noted across groups A and B seems to reflect narratives reviewed by Andresen (2007) as well as the stages of recovery and also seems to reflect the developmental process proposed by Maslow (1954; 1968; 1987), where lower order needs are a priority and need to be met in part before working towards higher order needs. Although the direction of the relationship between goal content, symptom severity and quality of life is not determined two possibilities may be: 1) as symptoms decline consumers are more able to set goals regarding greater pursuits and therefore quality of life improves, or 2) perhaps as goals around basic needs are identified and then met (health, living skills, independence) functioning improves and goals can then be set around higher order needs leading to an improved quality of life. Both explanations are plausible and the research by Fakhoury et al. (2005) provides insight into how goal content may differ depending on a person's stage of psychological recovery. As the study by Fakhoury and colleagues focused on a

specific sample of consumers, it would be interesting to see whether a similar pattern emerges using recovery measures with a larger sample of consumers drawn from Australian case-management services.

6.4 SUMMARY OF THE GOAL CONTENT LITERATURE

Andresen (2007) and colleagues (2003; 2006) have recently proposed a stage model of psychological recovery based on a wide review of consumer literature and qualitative research. Five stages of psychological recovery have been identified and based on consumer accounts it may be expected that certain types of case-management goals may be more likely at different stages of recovery. It may be expected that within the early stages of psychological recovery, goals associated with physical health and basic day-to-day functioning are frequently set. Whereas, as the person progresses within their recovery, goals may start to become more diverse and reflect life roles such as connectedness with others, then move towards occupational pursuits and spiritual and personal development. This increase with diversity of goals with the process of recovery seems to reflect Maslow's (1954; 1968; 1987) hierarchy of human needs, where lower levels needs, in part need to be met before moving on towards setting goals to meet higher order needs.

Avoidance goals have been associated with poor psychological wellbeing and greater psychopathological symptoms in non-clinical samples, whereas *approach* goals have been associated with gains in psychological wellbeing. With this in mind we may expect that people within the earlier stages of recovery have a greater number of *avoidance* goals, whereas people in the later stages of recovery have a greater number of *approach* goals.

One study conducted by Fakhoury et al. (2005) provides some support that mental health consumers may set different goal content at different stages of recovery. Are these patterns replicable with a more diverse Australian case-management population and when recovery measures are utilised? In order to examine goal content and examine these questions, goals needs to be effectively categorised.

Chapter Seven

DEVELOPING THE RECOVERY GOAL TAXONOMY

This chapter reviews literature on previous goal taxonomies and outlines the development and rationale for the taxonomy developed to classify goal content for Study 3.

7.1 GOAL TAXONOMIES

Goal taxonomy refers to a classification system that enables different types/content of goals to be categorised in a meaningful way (Chulef et al., 2001). Goal taxonomies aid communication between researchers and help integrate findings (Chulef et al). Grouping the case-management goal data in the current study enables empirical assessment of the stages model proposed by Andresen (2007) and Andresen and colleagues (2003) that are based on 1st and 3rd person consumer reflections. Goal categorisation enables actual case-management goal data to be used to assess the assumptions drawn by Andresen and colleagues.

The goal taxonomies used by Kisthardt (1993), Lecomte (2005) and Fakhoury et al. (2005) were reviewed to categorise the consumer goals within the current study. However, some of the goals reported were not adequately accounted for when using these systems, leaving many of the goals uncategorised. Various goal domains that were developed based on goals set by clinical (Psychotherapy; Faller, & Gossler, 1998; Grosse Haltforth & Grawe, 2002) and non-clinical samples were also reviewed (Beach & Mitchell, 1990; Ford & Nichols, 1992; Wicker, Lambert, Richardson, & Kahler, 1984) and attempts were made to place the case-management goals within these domains. Again, many of the case-management goals were difficult to place in any one of the taxonomies leaving many of the goals uncategorized. Furthermore, many of the domains reviewed also required the coder to make an assumption about the motivational drive behind the consumer's case-management goal choice. It seemed safer to only look at the content of the case-management goal as reported by

the consumer and case-manager. The Acceptance and Commitment Therapy (ACT) value domains (Hayes & Strosahl, 2004) seemed most appropriate as they enabled case-management goals to be categorised without making an assumption about the motivational drive behind the types of goals selected. Also as values are superordinate to goals these value domains enabled goals set at various levels of abstraction to be classified and coded relatively easily (Hayes & Strosahl, 2004).

7.2 UTILISING THE VALUE DOMAINS FROM ACCEPTANCE AND COMMITMENT THERAPY

The Acceptance and Commitment Therapy (ACT) value domains (Eifert, Forsyth, & Hayes 2005) were initially selected to start the categorisation processes. Values are superordinate to goals and enable goals to be grouped as they reflect specific value domains (Hayes & Strosahl, 2004). The ACT values domains are currently being used within mental health (Hayes & Strosahl, 2004) and ACT has been trialled with consumers with EMI to help manage psychosis (Bach & Hayes, 2002; Gaudiano & Herbert, 2006). The ACT value domains are: 'couples and romantic relationships'; 'parenting'; 'family relationships'; 'friendships and social relationships'; 'work, career and employment'; 'education and schooling'; 'recreation, leisure, and sport'; 'spirituality and religion'; 'community and citizenship'; 'physical health and wellbeing'. The ACT value domains were extremely useful as a classification of case-management goals within the current study as goals appeared to be set at different levels of abstraction although they were targeting the same life domain. For example one consumer's goal as recorded on the CGT was 'to become physically fit', whereas another consumer's goal was to 'walk everyday'. Although these goals reflect different levels of abstraction (one more abstract and the other more concrete) they are both physical health goals. Little (1989) noted that goals regardless of the level of abstraction can reflect the same goal content which is evident in the example provided.

7.3 CRITERIA FOR DEVELOPING A GOAL TAXONOMY

Criterion for developing an effective goal taxonomy are reported by Grosse Holtforth and Grawe (2002). The Recovery Goal Taxonomy (RGT) developed for

the current study seemed to be in line with the principles outlined by Grosse Holtforth and Grawe (2002).

Criteria 1: Precision requires that the categories of the taxonomy be exactly and clearly defined.

In the current study each goal category with the RGT has a clearly formulated category label and category description. Prototypical examples of each category are also provided in Appendix 10.

Criteria 2: Exclusivity means that the categories of the taxonomy do not overlap (i.e., the same object could not be categorised into two different categories).

Time was taken to ensure goals could not be placed in more than one category, this was done through repeated trials of classifying the goal data and rules were developed to guide goal classification. Grosse Holtforth and Grawe (2002) also used this method when developing their goal taxonomy.

Criteria 3: Exhaustivity requires that the categories of the taxonomy are sufficient to describe the material fully. Consequently residual categories should be used minimally.

A content analytical method of categorising goals was used. Goals that could not be classified under the original ten ACT value domains (Refer to Chapter 7, section 7.2) were set aside and the further four domains were derived in attempt an to classify these categories accurately. The additional four domains developed classified a significant proportion of goals in each domain.

Criteria 4: Empirical foundation – the material used to construct the taxonomy must be taken from actual case-management goals. Also the structure of the categories should be based on the structural perceptions of the current working psychotherapies.

The RGT goal domains were developed to categorise data drawn from case-management goals recorded on the CGT and personal strivings listed by consumers (personal strivings are not reported on in the current thesis). The goal domains were

selected (10 ACT domains) and developed (four additional domains) and categorised by Psychologists. Both Psychologists were trained in mental health case-management, had significant research experience and were familiar with the goal literature.

Criterion 5: Ease of application of the taxonomy should be easily understandable to patients, therapists and researchers ensuring flexible and valid use. For instance, everyday language should be used and the taxonomy should be able to classify treatment goals at different levels of abstraction so that goals can be easily classified.

The RGT is phrased in everyday language to enable ease of use and the goal domains enable goals to be categorised at different levels of abstraction. This was ensured so the goal taxonomy could be used to classify goals and strivings for consumers with EMI.

Criterion 5: The goal taxonomy needs to be reliable (agreement of independent raters on the categorisation of the same goals).

Inter-rater reliability of the RGT was assessed by an independent researcher at a Doctoral level in clinical psychology co-rating 300 of the case-management goals across the 14 goal domains. Average-measure intra-class correlations were high (α = .93), indicating the case-management goals could be reliably categorised using the 14 goal domains.

Criterion 6: Validity - where the category membership of treatment goals stands in meaningful relationship to other clinically relevant measures and allows for clinically relevant predictions to be made.

This criterion was not met within the current research. This was due to the outcome measures used within the AIMhi study not reflecting the constructs of the RGT domains. As the research was part of the larger AIMhi study new outcome measures could not be introduced, as this would have placed increased burden on the consumer participants involved in the study. Future research may assess construct

validity of the RGT. This may in part be achieved by using the CASIG (Lecomte et al., 2001) or the MANSA (Priebe et al., 1999).

Refer to Table 11 for a summary of the RGT and a prototypical example of goals for each domain. For a detailed description of each goal domain and further prototypical examples of goals refer to Appendix 9.

Table 12

Recovery Goal Taxonomy

Domain title	Prototypical example
Couples and romantic relationships	To give feelings of love to my wife
Parenting	Meet the needs of my toddler
Family relationships	To visit my sister regularly
Friendships and social relationships	Reconnect with old friends
Work, career and employment	Do some volunteer work
Education and schooling	To complete my degree
Recreation, leisure and sport	Save for my holiday
Spirituality and religion	Attend church group every week
Community and citizenship	Educate people about the environment
Physical health and wellbeing	Exercise
Psychological and emotional health	Get rid of panic attacks
Self management	Balance priorities
House and home	Keep a tidy garden and home
Self image and personal growth	Seek to grow personally

Chapter Eight

Study 3

THE CONTENT OF RECOVERY GOALS RELATING TO STAGE OF PSYCHOLOGICAL RECOVERY FROM ENDURING MENTAL ILLNESS.

This chapter presents the aims, research methodology, results, discussion and limitations for Study 3.

Despite the increasing interest and research into the concept of psychological recovery, little research has been conducted exploring the content of case-management goals or how goal content may change with the process of recovery. Although some research has provided some insight into the content of goals set by consumers with EMI, there has not been a study within Australian case-management services. Furthermore, some of the limitations of previous research such as how goals were elicited (e.g., retrospective, consumer interview), small sample sizes and the specificity of the participants included (e.g., only consumers new to supported housing, strength based case-management) also raises questions as to whether these findings can be generalised to an Australian case-management context.

The current study reports on case-management goals drawn directly from the consumers' goal records. Goals that consumers perceive as most important are also examined to determine the types of goals consumers are most motivated to achieve. Although limited research has looked at the frequency of goals set by consumers with EMI generally, even less focus has been placed on looking at the process of recovery and whether different goal content is set at different points during recovery.

8.1 AIMS

The research aims to provide greater understanding and insight into the goals that are set within case-management and how this links to the process of recovery.

Increasing awareness of the goals set within the recovery process may help inform service development and may lead to an improvement in the resources available to assist consumers within their recovery. For example, being aware that vocational goals are extremely important to consumers may help to increase the availability of work placements for people with EMI. Examining the content of goals set by consumers may act as a needs analysis to guide service development; better enabling services to respond to the consumers' desired goals.

The research does not aim to promote a model of case-management goals by suggesting that every person within the same stage of recovery will have the same goal content. To the contrary, it aims to expand clinicians', researchers', services' and the broader community's awareness of recovery goals so that we can better aid the consumer in their individual recovery. For example, a clinician may be alerted to the types of goals within different stages and may be less inclined to push goals that are not reflective of the consumer's present stage of readiness. It may also promote dialogue between the consumer and clinician to increase reflection of the consumer's experience by drawing on the research examples. The study also aims to empirically test the stages of recovery model proposed by Andresen (2007), which is based on 1st and 3rd person consumer reflections of their recovery experience. By analysing current case-management goal data we are able to determine whether these reflections on goal types are characteristic of the psychological recovery process.

8.2 RESEARCH QUESTIONS

1. What are the types of goals set within case-management in Australia?
2. What are the types of goals rated by consumers as most important within case-management?

8.3 HYPOTHESES

Based on the Moratorium stage being characterised by a lack of hope and previous life goals, coupled with Maslow's (1954; 1968; 1987) hierarchy of needs which suggests that lower order needs (health, shelter, basic functioning) will need to be in some part met prior to moving toward higher order needs it is expected that:

H1. Within the Moratorium stage of recovery there will be a higher frequency of health goals when compared to occupational, social, educational, self-management/personal development goals.

Based on the conceptualisation of Preparation and Rebuilding stages focusing on developing both internal resources, building personal strengths as well as connecting and promoting social support we may expect:

H2: There will be a greater frequency of self-management and relationship goals developed within case-management in the middle stage of recovery (Preparation and Rebuilding stage) when compared to the earlier stages of recovery (Moratorium and Awareness).

The growth stage is largely characterised by the consumer having a sense of meaning, positive identity and a sense of control over their life. Occupational and educational goals are often a source of meaning and consumer reflections suggest occupational goals are especially important when within the growth stage. As people fulfil aspects of their basic needs they strive towards higher order needs, such as employment. Therefore, it may be expected that:

H4: In the later stages of recovery (Rebuilding and Growth) we will see a higher frequency of occupational and educational goals developed within case-management.

Approach goals aim to move towards or maintain a positive or desirable outcome. *Approach* goals are associated with gains in subjective wellbeing and self identity. Both subjective wellbeing and self-identity have been noted as important aspects of psychological recovery and are thought to develop as people progress in recovery. Therefore, it may be expected:

H5: There will be a positive linear relationship between progression in psychological recovery and the frequency of approach goals.

Avoidance goals aim to move away from or avoid a negative or undesirable outcome. *Avoidance* goals have been associated with reduced goal attainment, poorer motivation and poorer psychological functioning (depression, anxiety, poor self

esteem and self identity). These outcomes reflect consumer experiences noted within the earlier stages of recovery, particularly the Moratorium stage. Based on this it may be expected:

H6: There will be a negative linear relationship between progression in stage of recovery and avoidance goals.

As people progress within their recovery they appear to satisfy lower order needs and progress towards higher order needs such as relationships and employment whereas within the earlier stages of recovery there is a need to ensure health and safety needs are met and there is a focus on concrete and day-to-day goals (e.g., health goals). Based on this it is expected that

H7: There will be a positive relationship between the level of self-rated recovery and a greater number of goals associated with employment and social relationships.

And

H8: There will be a negative relationship between the level of self-rated recovery and the frequency of physical health goals.

8.4 METHOD

8.4.1 PARTICIPANTS

Participants were recruited as part of the Australian Integrated Mental Health Initiative (AIMhi, Oades et al., 2005) and were receiving case-management support from both non-government (60% of consumer participants) and public sector mental health providers. Refer to Chapter 1, section 1.7 for AIMhi participant criteria.

8.4.1.1 Mental Health Worker Participants

Eighty-three mental health workers (75% female) were involved in this study. The mean age for workers was 40.12 years (*SD* = 10.56, Range 23 to 61 years). Mental health worker participants reported their professional roles as: Nurse (34%), Support workers (25%), Psychologists (21%), Social workers (11%), Welfare workers (8%), and Occupational Therapists (5%).

Mental health workers on average had been working in their profession for 10.81 years (*SD* = 10.43 range .50 to 40 years) and had typically completed their training in Australia (77%). When asked about their highest level of education

approximately 42% of workers reported undergraduate degree, 28% post graduate degree, 20% technical college qualification or a diploma, 8% School Certificate and 2% High School Certificate.

When asked to report their current work setting, 44% of mental health workers reported working within an adult community mental health setting, 44% reported working within rehabilitation, 10% reported working within an assertive community treatment team and the remaining 2% reported working within crisis services. Mental health workers reported working an average of 29.34 hours per week (*SD* = 11.07, range 1 to 40 hours a week) within their current position and typically worked 21.70 hours a week (*SD* = 9.80, range 1 to 40 hours a week) within a case-management role. They reported a mean caseload of 11.26 mental health consumers each (*SD* = 10.05, range 1to 25) and typically had weekly face-to-face contact with each person on their caseload (*M* = 4.59, *SD* = 3.64 days per month). On average, mental health workers spend 73 minutes with each consumer during face-to-face visits (*SD* = 39.55, range 1 to 180 minutes).

8.4.1.2 Mental Health Consumer Participants

A total of 144 consumer participants (52% male) with EMI were involved in the study. At intake into the AIMhi project 69% of participants had a diagnosis of Schizophrenia, 12% had a diagnosis of Schizoaffective Disorder, 13% had a diagnosis of Bipolar Disorder and the remaining 6% had a diagnosis of Major Depressive Disorder with Psychotic features. The average age of participants was 39.34 years (*SD* = 11.68) with an age range of 18 to 69 years.

Based on their mental health workers' responses regarding their relationship status, 64% were single, 11% were married, 9% were divorced, 6% were in a significant relationship that had progressed longer than six months, 3% were living in a de facto relationship, 2% were widowed, 1% were currently in a significant relationship that was less than six months in duration, 1% has never been in a long term relationship and 3% of mental health workers responded that the relationship status of the participant was unknown to them.

On average consumers had been seen by their worker for 1.74 years (*SD* = 1.79, range 2 weeks to 10 years) prior to intake into the AIMhi project. Sixty five

percent of participants had been diagnosed with their mental health disorder at least five or more years prior to commencement in the AIMhi project. Mental health workers reported seeing mental health consumers 6.58 times per month (*SD* = 5.13, range 1 to 30) and 66 % of the mental health workers who completed the background information regarding the consumer participants were their primary case-manager. Workers reported that consumers had an average of 3.58 (*SD* = 6.10, range 0 to 47) admissions over the past three years and indicated that the most recent admission had taken place 2.27 years (*SD* =195.80, range 0 to 20 years) prior to initial intake into the AIMhi project. The mean rating provided for mental health consumers' adherence to their prescribed psychotropic medication was 5.02 *(SD* =1.48 range 0 to 6). This suggests participants typically had some knowledge and interest in their treatment and prompting was not typically required to ensure adherence to medication. The two most commonly reported therapeutic activities undertaken with mental health consumers were 'social activities' and 'assistance with lifestyle needs', followed by 'psycho-education' and 'stress management'. The most commonly reported support services that were also noted as being accessed by the participants in respective order were Psychiatrist, Caseworker and General Practitioner.

8.4.3 MEASURES

8.4.3.1 The Recovery Goal Taxonomy

The RGT system is described in detail in Chapter 7 and a complete description of the taxonomy is located in Appendix 9. The 14 domains include; 'couples and romantic relationships', 'parenting', 'family relationships', 'friendship and social relationships', 'work, career and employment', 'education and schooling', 'recreation, leisure and sport', 'spirituality and religion', community and citizenship', physical health and wellbeing', 'psychological and emotional health', 'self management', 'house and home', 'personal growth' and 'physical attractiveness' (See Table 12 for goal domains and a prototypical example of a goal within each domain).

8.4.3.2 The Self-Identified Stage of Recovery

The Self Identified Stage of Recovery (SISR, Andresen, et al., 2003) was developed to enable individuals with EMI to identify the stage they currently believe they are in within the five-stage model of psychological recovery (Andresen et al.,

2003). The scale also aims to increase health professionals' awareness of where the person is within recovery to assist with treatment planning and delivery. This single item measure of recovery requires participants to select one statement out of the five provided that best describes his or her experience of recovery over the past month. Each statement represents one of the five stages of psychological recovery. This measure has been shown to correlate with other measures of recovery such as the Recovery Assessment Scale (Corrigan, Giffort, Rashid, Leary, & Okeke, 1999; r = . 26, p < .01) and the Mental Health Recovery Measure (Young, Ensing, & Bullock, 1999; r = . 28, p < .01, Andresen, Caputi & Oades, 2006). Correlations have also been evident between the SISR and measures of symptoms and functioning such as the K10 (Kessler, et al 2002) (r = - .32, p < .05) and the HoNOS (Wing et al., 2000) (r = .39, p < .05, Andresen et al., 2006). These results lend support to the validity of the SISR as a stage measure for psychological recovery.

8.4.3.3 Recovery Assessment Scale - short

The RAS-s (Corrigan, Salzer, Ralph, Sangster, & Keck, 2004) provides a measure of self rated recovery and is an abbreviated version of the 41-item scale (RAS, Giffort et al., 1995). The RAS-s is a 24-item continuous measure of psychological recovery that is completed by the mental health consumer. Items are responded to on a five point likert scale from 0 (Strongly disagree) to 4 (Strongly agree). The RAS-s has five subscales; 'personal confidence and hope', 'willingness to ask for help', 'goals and success orientated', 'willingness to rely on others', and 'not dominated by symptoms'. Mental health consumers are asked to rate the extent to which they agree or disagree with a series of statements (e.g., "I believe I can meet my current personal goals", "I am a better person than before my experience with mental illness" and "It is important to have fun"). Higher scores on the RAS-s indicate further progression in the recovery process. Internal consistencies for each of the five subscales were adequate (cronbach alphas ranging from .74 to .87, Corrigan et al., 2004). Also convergent validity of the five subscales with measures such as the Herth Hope Index (Herth, 1991), the subjective component of the Lehman's Quality of Life Scale (Lehman et al., 1982), Meaning of Life Subscale from the Life Regard Index (Battista & Almond, 1973), Total Empowerment Scale (Rogers et al., 1997) and the Total Hopkins Symptoms Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) ranged from moderate (R^2 = 27.7% to fairly high

(R^2 = 68.9%, Corrigan et al., 2004). Research examining the convergent validity of the RAS-s concluded that each of the five subscales measured aspects of recovery and were measuring aspects of recovery that were distinct from the other subscales (Corrigan et al., 2004).

8.4.4 PROCEDURE

For each participant a data point was selected based on the presence of a CGT and recovery measure (SISR and/or RAS-s) that was available for the same three-month time frame. One hundred and five consumers had completed a CGT and the SISR and 111 participants had completed a CGT and a RAS-s at the same time point. For the remaining participants where there was no data point that contained both a CGT and a recovery measure (RAS-s and/or SISR), the first CGT was used to assess the content of goals being set by consumers and their mental health workers within case-management. Only one data point was selected for each participant. A total of 386 (N = 144) goals were categorised into one of the 14 case-management goal domains and were entered into Statistical Package for Social Sciences (SPSS).

To assess inter-rater reliability of the goal categories, an independent research assistant co-rated three hundred of the goals across the fourteen goal domains. Average-measure intra-class correlations from this data were calculated to examine inter-rater reliabilities. The Kappa co-efficient was high (.93), indicating the case-management goals could be reliably categorised using the 14 goals domains that had been developed.

8.5 RESULTS

8.5.1 MOST FREQUENTLY REPORTED CASE-MANAGEMENT GOALS

The frequencies of goals belonging to each of the 14 value domains were calculated. The most frequent case-management goals were physical health goals (21% of all goals), which included goals such as: exercise, ceasing smoking, abstaining from alcohol, improving physical fitness and medication adherence. The second most frequently recorded case-management goals were those associated with housing and home care (14%), such as moving into own house, keeping house clean and buying furniture.

Many of the other goal domains showed similar frequencies; these include goals associated with psychological and emotional wellbeing, recreation and leisure, work, career and employment and self-management (this refers to management and balance in day to day functioning, not illness management). When goals associated with developing, maintaining or improving relationships are combined (family relationships, couples and romantic relationships, parenting, and friendships and social relationships) they comprised 13% of all case-management goals indicating that goals that focus on connectedness with others are frequently a focus within case-management. Refer to Table 13 for frequencies of each goal domain.

8.5.2. MOST IMPORTANT CASE-MANAGEMENT GOALS

An analysis of the goals that consumers rated as 'most important' on the CGT were also reviewed for the 144 participants and were coded across the 14 value domains. Physical health goals were rated as most important case-management goal by 23% of the sample. Again when combining goals associated with the development or maintenance of relationships (social, parenting, intimate relationships and family relationship) this was rated by 15% of the individuals' as their most important case-management goal. Employment and career goals were also noted as the most important case-management goals by 14% of participants. Frequencies for several of the other goal domains were similar. Refer to Table 13 for details. None of the participants included within the study rated goals associated with couples and romantic relationships or personal growth as most important.

Table 13

Content of Goals Established in Case-management

Goal domain	Frequency % *n*	Most important % *n*	Examples of goals
Physical health	21 (82)	23 (33)	Take medication as prescribed
House and home	14 (53)	11 (16)	Purchase new furnishings
Work/career/employment	11 (44)	14 (20)	Get paid employment
Psychological health	10 (39)	12 (17)	Manage my panic attacks
Recreation/leisure/ sport	10 (39)	9 (13)	Explore hobbies
Self management	10 (39)	9 (13)	Get into a routine day to day
Education /schooling	8 (29)	12 (17)	Completing literacy course
Friendships and social	7 (28)	7 (10)	More involved in social activitie
Parenting	3 (12)	3 (5)	House ready for son's birthday
Personal growth	2 (7)	0 (0)	To develop my creative skill
Family relationships	2 (6)	3 (5)	Making the most of my parents
Couples and romantic	1 (3)	0 (0)	To get a girlfriend
Spirituality and religion	1 (3)	1 (1)	Go to church weekly
Community	.2 (1)	0 (0)	Tell others about mental health

Note. Frequency of all goals includes all case-management goals set within the three-month period selected for each consumer. This is between one to three goals per consumer participant. Most important goal relates to the one goal that consumers rated as most important. Some of the goal domain titles have been abbreviated slightly; refer to Appendix 9 for full labels and further examples of goals recorded for each goal domain.

8.5.3 GOAL CONTENT AT DIFFERENT STAGES OF RECOVERY

To investigate whether different types of goals are established within different stages of recovery as measured by the SISR, each participant's most important goal was included. Only participants most important goals was selected to assist ease of statistical analysis and to ensure goals included were those the consumer felt motivated to achieve. Some goals rated as second and third most important were only allocated one or two importance points suggesting the consumer is not very motivated to achieve these goals when compared to their other goal/s. Most important goal was The value domains were grouped into larger overarching

domains[3] to enable a Cross Tabs analysis and Chi Square analysis to be conducted. The physical and psychological and emotional health value domains were grouped under the category of health and goals falling within the parenting, family and friendships/social domains were combined into one relationship domain. The spiritual and religious goal domain was excluded from the analyses due to only one consumer noting there most important goal as falling within this domain. The community and citizenship, couples and romantic relationships and personal growth and self image goal domains were not included as no participants nominated their most important goal coming from these domains. This left seven overarching value domains to be used in the statistical analysis. These included; 'relationships', 'employment', 'health', 'education', self management', 'recreation', house and homecare'.

Fifty-six percent (n = 10) of all goals set within the Moratorium stage were health goals. A chi square analysis revealed that the number of health goals within the Moratorium stage was significantly greater than when the frequency of other goals set within the Moratorium stage of recovery (X^2 (6, N = 18) = 25.56, p < .01). This finding supported the hypothesis that 'There will be a higher frequency of health goals set within the Moratorium stage of recovery when compared to the other goal domains (employment, relationship, educational, self-management, recreational, house and home domains).

Within the Preparation stage there was also a significantly greater number of health goals (46% of all goals set, n = 11) than goals falling within the other overarching value domains (X^2 (6, N = 26) = 19.23, p < .01). This suggests that goals established when consumers are the Preparation stage of recovery are more likely to be associated with improving their health (physical and psychological) than striving toward other types of goals.

Although no other statistically significant differences between the types of goals set within the different stages of recovery were noted, it is still of benefit to

[3] Although the RGT value domains were reduced to enable chi square analyses examining goal content and stage of recovery, the original 14 domains were used to describe the goals set. This was to provide greater detail about the types of goals consumers with EMI were setting within case-management to better inform services and guide resource allocation.

notice some of the patterns that emerged from the data. Fifty-nine percent (n = 10) of all relationship case-management goals were set within the Preparation and Rebuilding stages of recovery. Also 58% (n = 8) of all employment goals were established within the final two stages of recovery (Rebuilding and Growth). Furthermore 83% (n = 10) of self-management goals were developed over the final three stages within the recovery model and 75% (n = 9) of house and home goals were established within the final two stages of recovery the Rebuilding and Growth stages. Refer to Table 14 for frequencies of the types of goals within each of the five stages of recovery and refer to Figure 5 for a line graph demonstrating the types of goals set within different stages within the recovery process. For the purposes of clarity, only overarching value categories that demonstrated a shift in the frequency of goals across the various stages of recovery were included in the line graph (e.g., relationship, health, employment, house and home, and self management).

Table 14

Content of Goals Set Across the Five Stages of Recovery

Overarching value domains	Moratorium %	*n*	Awareness %	*n*	Preparation %	*n*	Rebuilding %	*n*	Growth %	*n*
Relationships	12	(2)	12	(2)	24	(4)	35	(6)	18	(3)
Employment	7	(1)	21	(3)	14	(2)	29	(4)	29	(4)
Education	25	(1)	25	(1)	25	(1)	25	(1)	0	(0)
Health	28	(10)	6	(2)	31	(11)	14	(5)	23	(8)
Recreation	11	(1)	11	(1)	33	(3)	11	(1)	33	(3)
House & Home	17	(2)	0	(0)	8	(1)	25	(3)	50	(6)
Self-Management	8	(1)	8	(1)	33	(4)	25	(3)	25	(3)

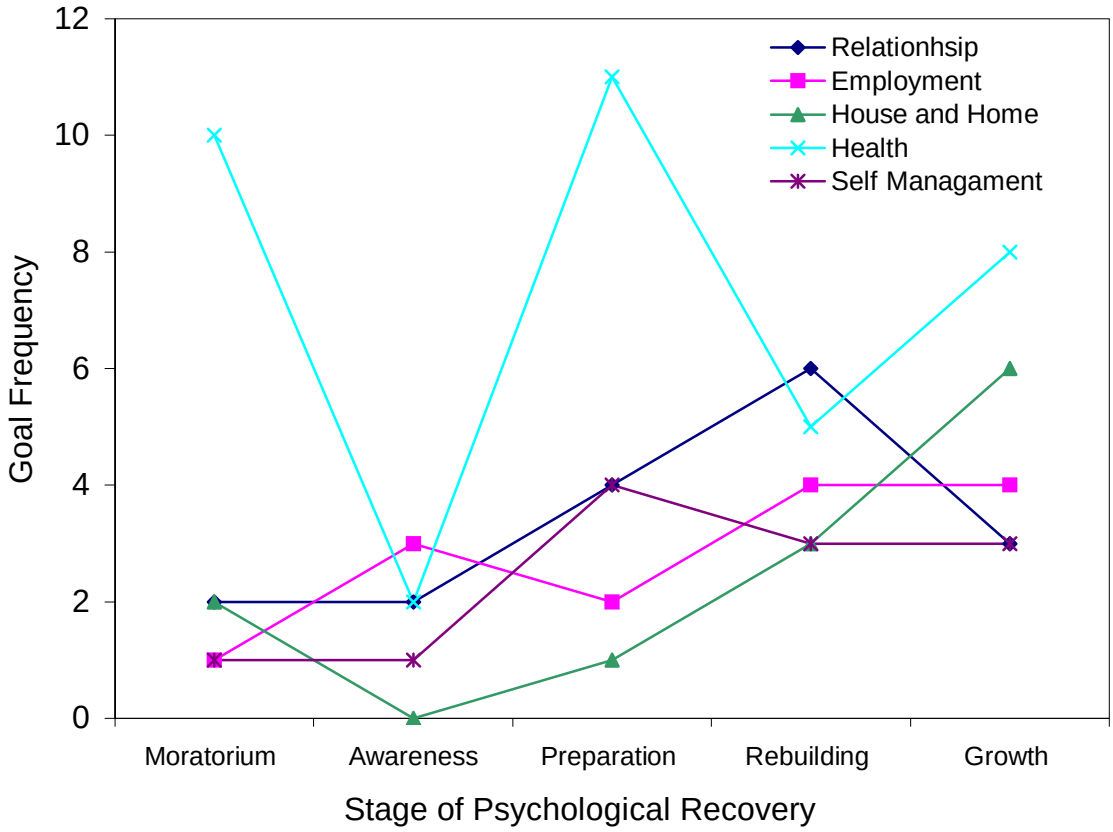


Figure 5. Frequency of goal types within different stages of the psychological recovery process.

8.5.3.1 Approach and Avoidance Health goals

Large fluctuations in the frequency of health goals across the stages of recovery were apparent. To examine the data more thoroughly health domain goals were coded into either *approach* or *avoidance* goals and were split back into their original domain of physical health or psychological/emotional health. *Approach* goals were classified as goals where the consumer wants to move towards a positive health experience. This included goals such as: become physically healthy and eat healthier meals. *Avoidance* health goals were classified as goals set to reduce or avoid negative or unpleasant health behaviour. Examples of *avoidance* health goals are: to reduce smoking and adhere to medication. Refer to Table 15 for frequencies of *approach* and *avoidance* health (physical and psychological/emotional wellbeing) goals across each of the five stages of psychological recovery. Due to the small number of goals across each stage of psychological recovery, no statistical analysis can be conducted however some trends in the data can be observed (refer to Figure 6). There was a negative linear relationship between stage of psychological recovery

and *avoidance* physical health goals. There also appears to be a positive linear relationship between stage of recovery and *approach* physical health goals. Psychological goals showed a somewhat different pattern, although there appeared to be a positive relationship between *approach* psychological health goals and stage of recovery, this is not evident until the last two stages of recovery. The psychological *avoidance* goals show a non-linear relationship illustrating a significant peak during the Preparation stage.

Table 15

Frequency of Approach and Avoidance Health Goals Across the Stages of Psychological Recovery

Domain	Approach/ Avoidance	Moratorium % *n*	Awareness % *n*	Preparation % *n*	Rebuilding % *n*	Growth % *n*
Health	Avoidance	36 (9)	8 (2)	36 (9)	8 (2)	12 (3)
	Approach	9 (1)	0 (0)	18 (2)	27 (3)	46 (5)
Physical health	Avoidance	43 (6)	21 (2)	21 (3)	7 (1)	7 (1)
	Approach	7 (1)	0 (0)	21 (2)	21 (2)	38 (3)
Psych health	Avoidance	20 (3)	0 (0)	40 (6)	7 (1)	13 (2)
	Approach	0 (0)	0 (0)	0 (0)	7 (1)	13 (2)

Note. The Health domain is comprised of goals belonging to both the Physical and Psychological/Emotional wellbeing goal domains.

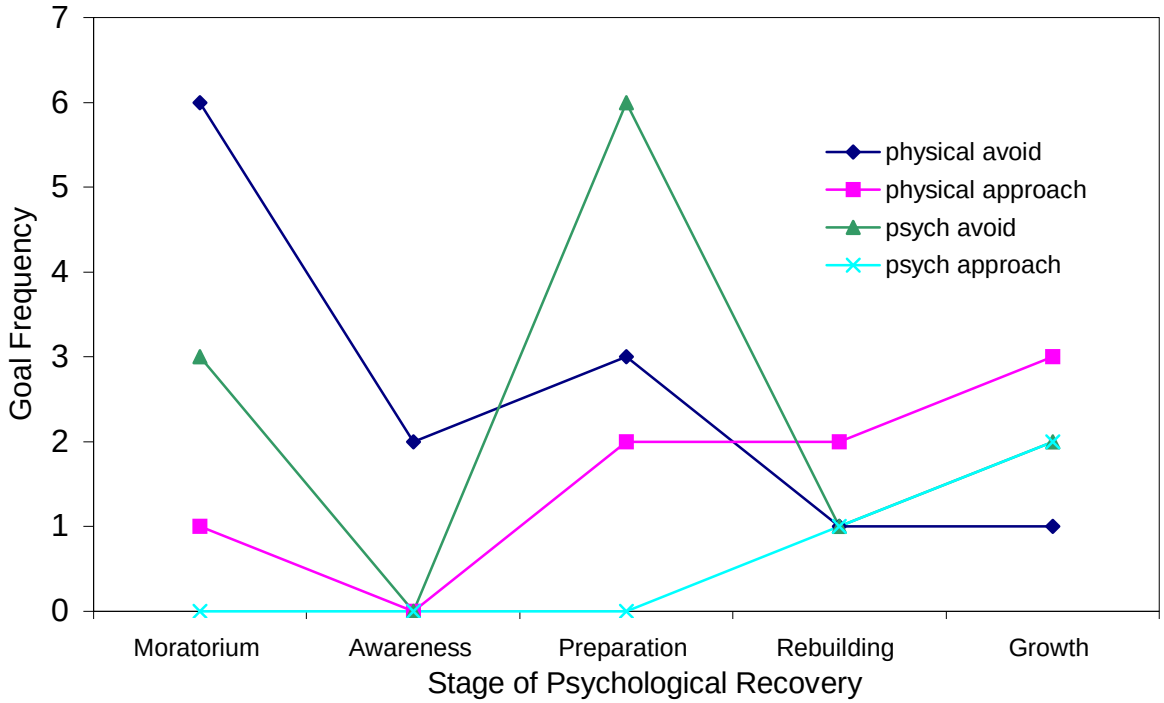


Figure 6. Frequency of approach and avoidance goals within the overarching health value domain. Goals are split into physical and psychological health domains.

8.5.4 APPROACH AND AVOIDANCE GOALS ACROSS STAGES OF RECOVERY

In order to examine the relationship between *approach-avoidance* motivation and stage of recovery, consumers most important goal was also coded into either *approach* or *avoidance* goals. Refer to Table 16 for frequencies of *approach* and *avoidance* goals for each stage of psychological recovery. Cross Tabs analysis revealed a significant difference between the frequency of *approach* and *avoidance* goals across the stages of psychological recovery (X^2 (4, N = 106) = 10.21, p < .05). Closer examination shows that there were significantly more *approach* goals set within the Rebuilding (X^2 (1, N =, 22) = 4.54, p < .05) and Growth (X^2 (1, N = 27) = 6.26, p < .05) stages of recovery. Significant differences between the frequency of *approach* and *avoidance* goals were not found across the first three stages of the psychological recovery. As can be seen in Figure 7 there is a decline in the number of *avoidance* goals and an increase in the number of *approach* goals in the later stages of psychological recovery progresses. There is a linear positive relationship between *approach* goals and stage of recovery. However, the relationship between *avoidance* goals and stage of recovery did not appear to be linear disconfirming the hypothesis.

Table 16

Frequency of Approach and Avoidance Goals for Each Stage of Psychological Recovery

Approach/ Avoidance	Moratorium %	*n*	Awareness %	*n*	Preparation %	*n*	Rebuilding %	*n*	Growth %	*n*
Avoidance	12	(13)	5	(5)	10	(11)	6	(6)	7	(7)
Approach	6	(6)	7	(7)	14	(15)	16	(15)	19	(20)

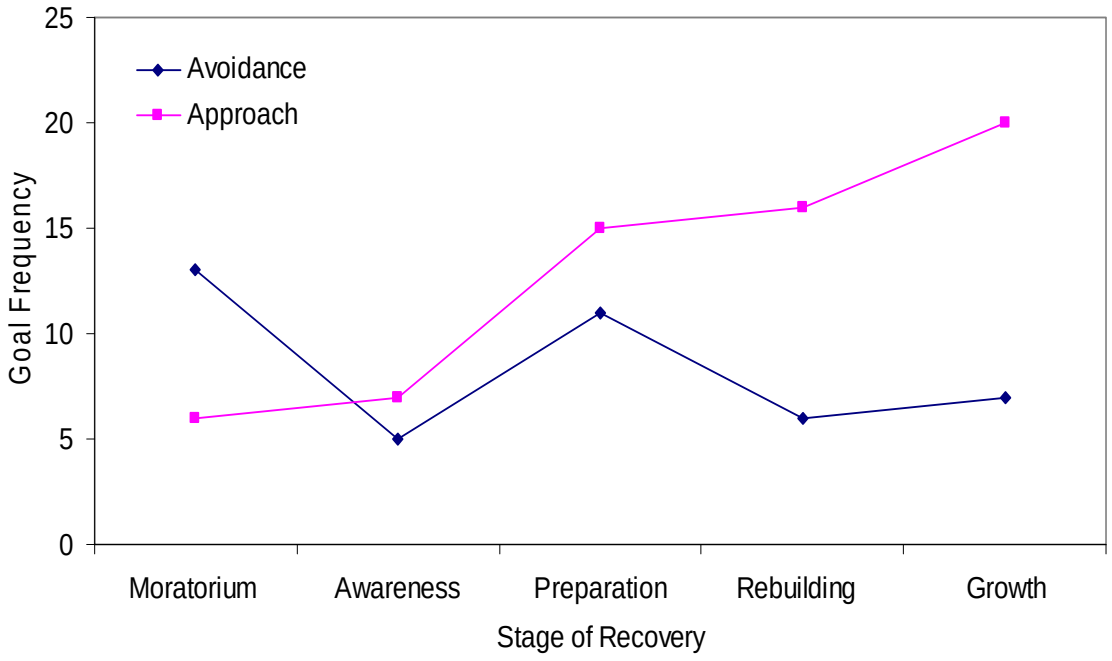


Figure 7. Frequency of approach and avoidance goals across the five stages of psychological recovery.

8.5.5 GOAL CONTENT AND SCORES ON THE RAS-S

To determine whether there was a relationship between the frequency of types of goals set within case-management and scores on the RAS-s, a Spearman's correlation was conducted using the consumer's most important case-management goal categorised within the seven overarching goal domains. The assumption of

normality was not met, so a Spearman's correlation was selected as means of analysis, and the test was one-tailed. The correlation coefficients are presented in

Table 17.

Spearman's Correlation Coefficients of the types of goal domains with the RAS-s total score and RAS-s subscales

Goal Domain	RAS-s Total	PC	WH	GSO	RO	NDS
Relationship	.20*	.20*	-.02	.11	.17	.16
Employment	.09	.16	.03	.06	- .02	- .01
Health	-.22*	- .33**	- .13	- .23*	- .01	.01
Education	-.05	- .03	.01	- .03	.03	- .08
Recreation	.01	.03	.04	.02	- .06	- .05
House and home	-.09	- .07	.01	- .07	- .05	- .04

Note. RAS subscale abbreviations PC = Personal Confidence, WH = Willingness to ask for help, GSO = Goal and Success Orientation, RO = Rely on others, NDS = Not Dominated by Symptoms. N = 111. No participant who completed the RAS-s set goals that fell within the self-management goal domain. * $p < .05$.

Significant positive correlations were found between the RAS-s score and the frequency of relationship goals (r (109) = .20, $p < .05$), indicating an association between people scoring higher on the RAS-s setting more relationship goals than low scorers. This suggests that people who are more advanced in their journey of recovery are setting more relationship goals. A significant negative correlation was also evident between health case-management goals and RAS-s total scores (r (109) = -.22, $p < .05$). This suggests people who reported lower self rated levels of recovery are more inclined to set health goals within case-management. This is consistent with the hypotheses proposed. No significant relationship was found

between level of self rated recovery and employment goals as hypothesised (r (109) = .09, $p > .05$).

To investigate these relationships further, a Spearman's correlation using the subscales of the RAS-s and seven overarching goal domains was conducted and results are also presented in Table 17. A significant positive correlation was evident between the relationship goal domain and the personal confidence subscale (r (109) = .20, $p < .05$), suggesting an association between greater personal confidence and setting relationship goals in case-management. Negative correlations were evident between health goals and two of the RAS-s subscales; Personal confidence (r (109) = - .33, $p < .01$) and success and goal orientation (r (109) = - .23, $p < .05$). This indicates that people who reported having lower level of confidence and/or who were also less likely to have goals were more inclined to set health goals.

8.6 DISCUSSION

8.6.1 MOST FREQUENT AND MOST IMPORTANT CASE-MANAGEMENT GOALS

Physical health goals were recorded on the CGT significantly more frequently than any other type of case-management goals. These goals were also rated as the most important case-management goal by nearly a quarter of all participants. Physical health goals included goals focusing on weight loss, increased exercise and improved nutrition as well as management of physical illnesses, such as diabetes. This domain also incorporated goals associated with mental health medication management. As all of the consumers within the study were diagnosed with an EMI and were typically receiving medication as one means of managing their illness it may be expected that medication adherence and review is often the focus within case-management, perhaps increasing the frequency that this type of case-management goal is set. Kisthardt (1993) also identified physical health goals as the most frequently reported type of case-management goal when using strengths based case-management with consumers in Kansa, USA. Lecomte and colleagues (2005) and Fakhoury and colleagues (2005) also noted physical health goals as frequently reported by consumers with EMI.

The high frequency of physical health goals also reflects research conducted by Kelly and colleagues (2006) where physical health tasks were reported by mental health case-managers to be the most frequent homework task for consumers with EMI within Australia. Homework tasks typically aim to reflect the case-management goals established (Kelly et al., 2006). Physical health concerns are noted as being much more prevalent within the mental health population (Coghlan et al., 2001; Richardson et al., 2005). People with EMI are two and a half times more likely to die from serious physical illnesses (Coghlan et al., 2001), are more likely to die 10 -15 years earlier (Richardson et al., 2005) and engage in more risky health behaviours (e.g., smoking) (Coghlan et al., 2001; Dickerson et al., 2006; Richardson et al., 2005) than individuals who do not have EMI. Further, physical activity has been shown to promote both physical and psychological health for people with EMI (Richardson et al., 2005). With this in mind it may be expected that physical health goals not only focusing on management of the psychiatric illness but also promoting health

behaviours are an important focus within case-management for consumers with EMI as reflected in the current findings.

Housing and home care goals were the second most frequently recorded case-management goals (14%). This included goals such as moving into own house, keeping house clean and buying furniture. These findings reflect those of Fakhoury and colleagues (2005) and Kisthardt (1993). Housing and home care goals appear to be more reflective of traditional case-management goals and are also concrete in nature, making these goals easier to plan and work toward. Although problems with accommodation and appropriate residency for consumers with EMI are well documented (Hadley, McCurrin, & Fye, 1993; Moxham & Pegg, 2000; Pyke & Lowe, 1996) when reviewing the case-management goals falling within this domain many appeared to be general goals associated with improving cleanliness and acquiring furnishings. Very few goals appeared to be associated with seeking housing and they did not appear to be immediate or a crisis need. This may explain why although goals associated with housing and home care were frequently nominated, they were rarely rated at the most important case-management goal by consumers in the current study. The lack of immediate or crisis need for housing may be due to the consumers involved within the current study having been within case-management for an average of 1.74 years. Therefore, these types of accommodation needs may have been addressed previously.

When goals associated with social, family, parenting relationships were combined as relationship goals they were the second most important case-management goal. This reflects research by Corrigan and Phelan (2004) where social support was a significant factor in predicting quality of life for consumers with EMI. Research by Kopelwicz et al., (2006) and Lecomte and colleagues (2005), also note the importance of consumers with EMI in making friends and their desire for social and intimate relationships just like anyone else.

Work, employment and career goals also seemed to be of high importance to consumers as this goal was rated as most important by 14% (rated as third most important goal) of participants. This reflects the findings from Lecomte et al., (2005) and Fakhoury et al. (2005). Employment has been noted as an important goal for

many consumers with EMI (Mueser, Salyers, & Mueser, 2001). Andresen (2007) noted that goals associated with employment were an important source of meaning for consumers with EMI and often provided the consumer with a sense of competency and sense of self. The rate of consumer employment within Australia is only 34% compared to 80% of general population (Engage, 2005). Therefore, it seems that despite many consumers striving for employment goals the actual rate of employment amongst this group is relatively low. This highlights the importance of state and local government initiatives aimed at assisting consumers in finding appropriate employment and being able to access appropriate training. Supported employment programs could be more widely disseminated given that they have been found to be an effective way to assist consumers with EMI in gaining employment (Bond, Drake, Mueser, & Becker, 1997).

Many of the other goal domains were reported at similar frequencies and importance (psychological and emotional health, recreation & leisure, self management, education & schooling). This implies that goals set within case-management are often diverse and reflect various needs, supporting the individual nature of the recovery process (Anthony et al., 2000) and the diversity of life goals of people generally (Emmons, 1992; 1996).

8.6.2 GOAL CONTENT AND PSYCHOLOGICAL RECOVERY

There were significantly more health goals (physical health and wellbeing goals and psychological and emotional health goals) set at the Moratorium stage, than other types of goal, supporting the first hypothesis proposed. From Andresen's review (2007) the Moratorium stage is characterised by a lack of hope, disrupted identity and sense of powerlessness and loss over the goals associated with various areas of the individual's life (e.g., social, occupation, education). This was supported by the lack of consumer's most important goal being set within these domains. As the Moratorium stage is typically the first stage encountered following the mental health diagnosis we may expect the mental illness to be a significant focus for case-management, which includes goals within this 'health' domain. Results from the RAS also found that health goals were significantly more likely to be set in the earlier stages of recovery.

This high number of health goals may be set as these types of goals are typically practical and concrete. King (1998) noted that when life goals become unattainable day to day goals may buffer against depression and may also provide the individual with a sense of agency. Health goals may also be more prevalent at this time as they may be more reflective of goals promoted by the mental health worker rather than reflecting consumers' goals.

Another possible interpretation of the high prevalence of health goals is by reflecting on Maslow's hierarchy of needs (1954; 1968; 1987). Maslow noted that an individual typically requires a sense of security in the world and to be free from anxiety prior to moving towards needs associated with connection with others and self esteem. The experience of mental illness is often frightening and the individual may experience a sense of powerlessness over his/her life and experience. This may suggest that health goals that in part focus on management of mental health issues need to be at least somewhat met prior to establishing goals associated with relationships, employment and personal development.

The health goals set within the Moratorium stage were typically *avoidance* physical health goals. This supports previous research findings, which has noted a link between poor physical health and *avoidance* goals (Ellliot & Church, 2002).

It is important to note that although research has shown that when consumers are unwell or within the early stage of recovery, they are likely to be focusing on immediate needs. However, the current findings show that they are also setting goals and planning for the future, not just focusing on immediate needs.

Consumers were also significantly more likely to set health goals than other types of goals within the Preparation stage of recovery. This reflects some of the narratives reviewed by Andresen (2007) where consumers identifying within the Preparation stage reported learning about managing their illness (Andresen). This is reflected in the high number of health goals noted in the Preparation stage within the current findings. Within this stage many of the health goals set appeared to be goals focused on improving negative psychological or emotional wellbeing experiences (e.g., gain more control over my moods; collect information to improve my mental illness). This is in line with Andresen's conceptualisation of the Preparation stage

where the focus is on managing mental illness and developing psychological skills. Findings from the current research provide quantitative support for the characterisation of the Preparation stage by Andresen.

Although within the Moratorium stage most of the goals set were physical health goals, consumers who reported being further along in their recovery demonstrated more diverse recovery goals, which reflected greater life roles. Some patterns in the data showed that across the middle stage of recovery (Rebuilding and Preparation), relationship goals were frequently set. This seems to reflect aspects of the Preparation stage as described by Andresen 2007, where consumers are more likely to work towards goals aimed at develop relationships and connect with others (family, friends and mental health services). Andresen also noted that within the Rebuilding stage consumers' start to strive towards goals that are important to them; social support was noted as one of these pursuits. Higher levels of self-rated recovery as measured by the RAS-s were also associated with setting relationship goals. The need for relatedness and connection with others has been noted as a significant human need (Deci & Ryan, 1985) and a good social network has been found to correlate significantly with greater progression in recovery (Corrigan & Phelan, 2004).

The majority of employment goals were established across the final two stages of recovery. This reflected the consumer reports reviewed by Andresen (2007). Consumers have noted that employment goals provide meaning and purpose and a sense of competency. Competency is also noted as a basic human need and a significant motivator for action (Deci & Ryan, 1985). Andresen's review of consumers' experiences showed employment goals were more common within the Rebuilding and Growth stages than in the earlier stages of recovery. This may also be reflected in the findings by Kisthardt (1993) who found that employment goals were typically only established toward of the end of the eight-month case-management period set within his study. This was interpreted as being due to the need for a trusting alliance to be developed in order to set these types of goals. It may also be that employment goals were more frequent at the end of the eight-month period as people had progressed further within their recovery process, making them more ready to address employment goals.

Three quarters of house and home goals were established over the final two stages of the recovery process. When perusing these types of house and home goals set they appeared to be goals involving general maintenance of the house (keep kitchen tidy, clean the house, tidy garden) or goals set towards long-term future goals (e.g.,, buying my own house, buying a car). The nature of these goals does not seem to be an immediate or crisis need (i.e., finding somewhere to live). Therefore, perhaps these types of goals are set towards the later stages of recovery after basic needs have been met (i.e., health, social relationships). Many of these goals also seemed to reflect a theme of seeking greater independence and autonomy. Autonomy has been noted as a basic human need often driving goal pursuits (Deci & Ryan, 1985). However, as underlying motivation was not assessed this is only speculation.

The trend over all is increased diversity in the types of goals set as recovery progresses, which is reflected in Andresen's (2007) conceptualisation and Maslow's hierarchy (1954; 1968; 1987). The movement towards self actualisation reflects that as a person progresses in personal growth, their goals become more individualised and unique as to reflect what the individual finds as personally meaningful. This appears to be reflected in the current research findings.

The results also showed a general increase in the number of *approach* goals as stage of psychological recovery progressed. This signified that people within the early stages of recovery showed greater *avoidance* goals and less *approach* goals than people in the later stages of recovery. There were significantly more *approach* goals in the final two stages of recovery, Rebuilding and Growth than *avoidance* goals. This reflects previous research that shows that *approach* goals are associated with improved psychological wellbeing. As characterised by Andresen (2007) these later stages of recovery are reflective of greater self-development, improved psychological wellbeing and greater sense of self-identity. The current findings also seem to reflect the findings of Wolstencroft (2008) who found that as people progressed within their recovery, they were more inclined to set goals that provided them with purpose in life and they felt optimistic about achieving these goals and succeeding in the future.

8.6.3 LIMITATIONS OF THE STUDY

One limitation of the study is the number of participants involved when looking at the relationship between goal content and recovery. As investigating this relationship requires participants to be grouped according to goal content, this led to small numbers within each of the goal domains, therefore reducing the power of the analysis. Results should be viewed with this in mind, and further research would assist in determining whether these results are robust and if they can be generalised. Further, only participants' most important goal was included in this analysis to assist ease of analysis and to ensure goals included reflected those that consumers felt most motivated to achieve (e.g. high importance points). Results may have differed if all three of the consumers' goals had been included.

Also the SISR is a relatively new measure of recovery and like any self-report measure requires participants to be able to accurately reflect on their experience over the past week. Also, as it is only one item, the chances of error are greater. However, as some of the themes of the results were also observable, when looking at findings from the RAS-s (e.g., health goals associated with lower RAS-s scores and relationship goals associated with higher scores) and, when contrasting with research conducted by Fakhoury et al., (2005) this helps in supporting that the results are an accurate reflection of what is occurring for consumers within case-management. A more comprehensive measure to assess stage of psychological recovery is still in development (Andresen, 2007; Wolstencroft, 2008). Future research could employ this measure to determine whether the results found within the current study are supported.

It should be noted that as the participants were drawn from the AIMhi project, which emphasises service delivery that promotes psychological recovery, this data might not be entirely representative of goals developed within psychosocial rehabilitation where a more traditional model of treatment delivery is prominent. Furthermore, content of goals and stage of recovery was only examined using cross sectional data. Future longitudinal research would also be beneficial to examine whether consumers' goal content changes over time as they move through the stages of psychological recovery. However, despite these limitations the current research

provides insight into how goal content differs across stages of psychological recovery from EMI.

8.6.4 SUMMARY OF STUDY 3

The most frequent and important case-management goals identified by individuals with EMI were those relating to physical health. Housing and homecare goals were the second most frequently reported goal, although they were rarely reported as the most important case-management goal. Employment goals and goals associated with developing, improving and maintaining relationships were also frequently noted as important case-management goals.

Significantly more health goals were set within the Moratorium stage of recovery and health goals were also associated with lower levels of self rated recovery (RAS-s). This suggests that in the early phases of recovery a focus on basic health needs is a priority and may signify the lack of longer term more meaningful goals at this time. Themes in the data suggest that people further along in their recovery seemed more likely to set a greater diversity of goals reflecting greater movement towards self actualisation (Maslow, 1954; 1968; 1987) and their own unique conceptualisation of recovery (Andresen, 2007). Relationship goals were typically set within the middle stages of recovery followed by employment goals toward the later stages of recovery. Significantly more *approach* goals were evident within the final two stages of recovery. This reflects past research, which has identified a link between improved psychological wellbeing and *approach* goals.

Recovery Goal Attainment and Mental Health Outcome Study 4

Aspects of the recovery goal attainment and mental health outcome component of the thesis have been published and are located in Appendix 10

Clarke, S. P., Oades, L. G., Crowe, T. P., Deane, F. P., & Caputi, P. (In Press).The Role of Symptom Distress and Goal Attainment in Assisting the Psychological Recovery in Consumers with Enduring Mental Illness. *Journal of Mental Health.*

Chapter Nine

THE RELATIONSHIP BETWEEN CASE-MANAGEMENT GOAL ATTAINMENT AND MENTAL HEALTH OUTCOME

This chapter reviews the literature on goal attainment and wellbeing within non-clinical and mental health populations providing a context for Study 4.

After examining both the quality and content of these recovery goals this thesis aimed to determine whether case-management goal attainment was related to treatment outcomes for mental health consumers. As discussed in Chapter 1, conceptualisations of recovery and consumer narratives emphasise the importance of goals in the process of psychological recovery from EMI. Research has not yet measured the relationship between case-management goal attainment and recovery measures. Within non-clinical populations goal progress has been a consistent predictor of wellbeing. Research has not investigated whether case-management goal progress/attainment lead to improvements in mental health outcome for consumers with EMI (Hodges & Segal, 2002; Stackert & Bursik, 2006). This chapter will review research based on non-clinical populations demonstrating the relationship between goal attainment and wellbeing within non-clinical populations.

9.1 GOAL ATTAINMENT AND WELLBEING WITHIN THE NON-CLINICAL POPULATION

Goal attainment promotes wellbeing within non-clinical samples. Specifically personal goal attainment predicts greater positive affect (Brunstein, 1993; Carver & Scheier, 1990; Koestner et al.,2002; Ryan & Deci, 2001; Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1995; 1998), enhanced life satisfaction, (Brunstein, 1993; Ryan & Deci, 2001; Sheldon & Kasser, 1995; 1998), reduced negative affect (Carver & Scheier, 1990; Koestner et al., 2002) and promotes social, academic, institutional

and emotional adjustment (Sheldon & Houser Marko, 2001). Goal attainment also promotes mastery, vitality, purpose and meaning in life (Sheldon, Kasser, Smith, & Share, 2002), identity development and personal growth (Sheldon & Houser Marko, 2001; Sheldon et al., 2002). These types of outcomes reflect constructs of emotional and psychological wellbeing (Keyes, 2003).

Many of these wellbeing outcomes reflect constructs noted by consumers as central for psychological recovery from mental illness such as; self-identity, self esteem, agency, self-determination, meaning and purpose in life (Andresen et al. 2003; Andresen et al., 2006; Anthony, 1993; Davidson & Strauss, 1992; Sullivan, 1994; Young & Ensing, 2000). It may then be speculated that by assisting consumers in achieving their goals, wellbeing and therefore recovery will be promoted. Consumer narratives denote the importance of goal setting within recovery (Ades, 2003; Andresen et al., 2003), yet a quantitative study measuring the impact of goal attainment on improvements in recovery and functional measures of outcome could not be located.

Although factors such as goal ownership have been found to influence the relationship between goal attainment and wellbeing within non-clinical populations (Sheldon & Kasser, 1998; Sheldon & Elliot, 1999), generally as an individual makes progress towards the goals they have set wellbeing is enhanced (Brunstein, 1993; Sheldon & Kasser, 1998; Elliot, Sheldon, & Church, 1997; Elliot et al., 1997). Based on this research, it is presumed that goal attainment will be positively associated with treatment outcome for mental health consumers.

9.2 MEASURES OF MENTAL HEALTH OUTCOME

Over the last decade in mental health services there has been a focus on incorporating routine outcome measurement to evaluate service delivery (Gilbody, House, & Sheldon, 2002; Slade, 2002). Outcome within mental health is difficult to assess and relies on valid and reliable measures (Holloway, 2002). Outcome measures that are more inline with the traditional medical conceptualisation of recovery included those that focus on symptoms, disability and functioning (e.g., K10, HoNOS, LSP-16).

Although traditional mental heath outcome measures provide some information about improvement, they do not provide adequate measurement of quality of life or wellness (Becker, 1998). Evidence shows that these measures do not predict a consumer's wellbeing or how they feel about their lives (Becker, 1998). Mental health is viewed as the presence of positive feelings and psychosocial functioning rather than the absence of illness (Keyes, 2003; Resnick & Rosenheck, 2006), which is typically not gauged by traditional mental health outcome measures. The introduction of formalised recovery measures adds another dimension to outcome within mental health although they are still in the early stages of development (Anthony, Rogers, & Farkas, 2003). Recovery measures aim to capture the concepts noted as important for psychological recovery such as hope, self-identity, and meaning (Andresen et al., 2006; Corrigan et al., 2004). The measurement of these concepts seems to provide greater insight into the consumer's quality of life than traditional mental health outcome measures.

Case-management goals developed in collaboration with the consumer and the mental health worker also provide a measure of recovery and service delivery at an individual level (Anthony et al., 2000; Oades et al., 2003). Case-management goals should reflect the consumer's recovery vision, personal hopes and dreams for the future and as such goal progress/attainment provides an indication of the consumer's progress towards their own individual idea of recovery. The Collaborative Goal Index (CGI) can provide both consumers and their clinician's with an idea of individual progress within recovery.

Each of these measures (traditional measures, recovery measures and goal attainment/progress) provides different information about the consumer. An investigation of the impact of goal attainment on functional and recovery measures should provide insight into the interrelationship of these processes.

9.3 GOAL ATTAINMENT AND MENTAL HEALTH OUTCOME

Although research specifically measuring the relationship between case-management goal attainment and mental health has not yet been carried out, previous

research findings suggest a positive relationship would be expected (Higgins, 1997; Kelly & Deane 2008; McGrath & Adams, 1999; Michalak et al., 2004; Pyszcynski & Greenberg, 1987).

For example, brain injury patients demonstrated a range of distressing emotions when the goal striving process was hampered (McGrath & Adams, 1999). Patients experienced significant sadness and depression when goals were not attained; frustration and fear when the rate of goal progress was slowed due to cognitive impairments and worry and confusion when goal monitoring was interrupted. This emotional distress experienced by brain injury patients was due to problems in attaining or progressing towards their goals. As discussed in Chapter 1 (section 1.3) goal progress and attainment are significantly impeded by symptoms associated with Schizophrenia and psychotic illness. For example, motivational difficulties and cognitive impairments (e.g. memory, executive functioning, attention, and the processing of verbal information) associated with EMI impact one's ability to identify, plan and attain their goals. Therefore, we may expect consumers with EMI to experience similar emotional distress as observed in brain injury patients when they are having difficulties progressing toward their recovery goals.

Research has also looked at the impact of goal progress on depression and unpleasant emotions. People are less inclined to experience depression if they perceive they are making progress toward their goals (Pyszcynski & Greenberg, 1987). This was also supported by Higgins (1987) who found that when individuals showed discrepancies between their ideal (how they would like to be) and actual self (how they are) they experienced feelings of sadness, disappointment and dissatisfaction. Further when individuals perceived a discrepancy between actual self and ought self (how they believe others/society expect them to be) they felt threatened and experienced fear and unease. Based on this we may infer that when a consumer perceives a significant discrepancy between their current state and their recovery goals they are likely to experience these types of unpleasant emotions making them vulnerable to both depression and anxiety (Michalak et al., 2004).

Findings by Michalak and colleagues (2004) also imply an association between goal attainment and mental health outcome. Seventy two participants with either a diagnosis of anxiety or depression were receiving outpatient cognitive behavioural treatment (15 sessions). Consumers completed measures of psychopathology (Symptom Checklist -90 Revised; Derogatis, 1993) and measures of functioning (PERI Demoralisation Scale; Dohrenwend, Shrout, Egri, & Mendelson, 1980, Interpersonal Inventory for Personal Problems; Horwitz, Strauss, & Kordy, 1994, and Sense of Coherence Scale; Antonovsky, 1987) and rated importance and expectation of achieving their goals (personal and therapy goals). Participants who reported higher expected goal attainment and greater goal importance were significantly more likely to report greater sense of coherence and less psychopathology, demoralisation, and interpersonal problems. Expected goal attainment is associated with actual goal attainment (Affleck, Tennen, Zautra, Urrows, Abeles, & Karolyn, 2001). With this in mind the findings by Michalak and colleagues (2004) also suggest a positive relationship between goal attainment and treatment outcome within mental health. The direction of the relationship between expected goal attainment and outcome variables measured by Michalak and colleagues was not determined. It may be that participants with greater psychopathology may be less optimistic about goal attainment and may be less focused on meaningful goals. Based on Andresen and colleagues (2003) conceptualisation of recovery this is also likely. Longitudinal research needs to be conducted to clarify this relationship.

Kelly & Deane (2008) also found an association between homework tasks and functioning and symptom distress for consumers with EMI accessing case-management services. Homework typically involves tasks aimed to assist goal progress (Kelly & Deane, 2008). Two hundred and forty two consumers with EMI (74% Schizophrenia) were included in the study. Participants were also drawn from the AIMhi project sample and included participants who had consented to participate in the project during the first 12 months. Of the 242 participants, 129 consumers had at least been assigned one homework task, and 113 consumers had not been assigned homework within the 12 month period. Homework tasks were typically behavioural and addressed activities of daily living (26%, e.g., to clean room, reduce coffee

intake), physical health (20%, e.g., exercise, see the dentist), and psychotic symptoms and psychological distress (14% manage medication, reduce anxiety). Results demonstrated that when at least one homework task was given there was improvement in scores on symptom distress (K10) and functioning (HoNOS). Further, the more homework tasks allocated the greater improvements in functioning (HoNOS) were noted. Both Kelly and Deane's (2008) and Michalak and colleagues' (2004) research specifically focused on mental health consumers and findings support the likely association between goal attainment and mental heath outcome.

Chapter Ten

Study 4

THE RELATIONSHIP BETWEEN CASE-MANAGEMENT GOAL ATTAINMENT AND MENTAL HEALTH OUTCOME FOR CONSUMERS WITH ENDURING MENTAL ILLNESS

This chapter presents the aims, research methodology, results, discussion and limitations for Study 4.

10.1 AIMS

The present study aims to: 1) determine whether Time 1 (baseline) measures of functioning and recovery are associated with greater goal progress; 2) determine the association between improvements in mental health outcome and goal attainment, and 3) investigate whether there are inter-relationships between Time 1 recovery/functioning measures, goal attainment and improvements in mental health outcome.

10.2 HYPOTHESES

It is hypothesised that: 1) there will be a positive relationship between Time 1 (baseline) measures of functioning and recovery and consumer goal progress, and 2) there will be a positive relationship between goal attainment and improvements in both functional and recovery measures of outcome for consumers with EMI.

10.3 METHOD

10.3.1 PARTICIPANTS

10.3.1.1 Mental Health Consumer Participants

Seventy-one consumer participants (31 male and 40 females) were recruited as part of AIMhi (Oades et al., 2005). Refer to Chapter 1 (section 1.4) for AIMhi consumer participant eligibility. Of the 242 service participants who agreed to

participate in the larger AIMhi study, 71 service participants provided data related to the current research.

Of the 71 service participants involved 58% were receiving case-management support from non-government providers and 32% from public sector mental health providers. Service participants had a diagnosis of Schizophrenia (69%), Major Depressive Disorder with psychotic features (14%), Schizoaffective Disorder (10%), and Bipolar Disorder (7%). Seventy two percent of service participants had been diagnosed for more than five years. The average age of service participants was 40.72 years (*SD* = 11.30, range 18 to 69 years).

Based on their mental health workers' responses regarding their relationship status, 71% were single, 9% were divorced, 5% were married, 5% were living in a de facto relationship, 3% were widowed, 3% were in a significant relationship that had progressed longer than six months, 2% were currently in a significant relationship that was less than six months in duration, and 2% had never been in a long term relationship.

On average consumers had been seen by their worker for 1.68 years (*SD* = 1.72, range 2 weeks to 10 years) prior to intake into the AIMhi project. Seventy two percent of participants had been diagnosed with their mental health disorder at least five or more years prior to commencement in the AIMhi project. Mental health workers reported seeing mental health consumers 7.90 times per month (*SD* = 5.37, range 1 to 25) and 70 % reported themselves to be the mental health consumers' primary case-manager.

Workers reported that consumers had an average of 2.94 (*SD* = 3.91, range 0 to 20) admissions over the past three years and indicated that the most recent admission had taken place 2.42 years ago (*SD* = 215.36, range = 0 to 20 years) prior to initial intake into the AIMhi project. During this most recent admission the average number of days of admission was 50.74 days (*SD* =10.77, range 0 to 400 days). The mean rating provided for mental health consumers' adherence to their prescribed psychotropic medication was 4.87 *(SD* =1.49 range 0 to 6) indicating that participants moderately participated in adhering with their prescribed medication regime. This suggests that participants typically had some knowledge and interest in

their treatment and prompting is not typically required to ensure adherence to medication.

The most commonly reported therapeutic activity undertaken with mental health consumers was 'social activities' followed by 'assistance with meeting lifestyle needs' and then 'psycho-education'. The most commonly reported support services that were also noted as being accessed by the participants in respective order were Psychiatrists, mental health workers and Rehabilitation workers.

10.3.1.2 Mental Health Worker Participants

Sixty-eight mental health workers (58% females) were also involved in the study. The mean age for workers was 41.34 years (*SD* = 9.73, Range 26 to 60 years of age) and included Nurses (40%), Support Workers (31%), Psychologists (13%), Welfare workers (8%), Social workers (4%), and Occupational Therapists (4%). Mental health workers had typically been working in their profession for 11.51 years (*SD* = 10.65, range .50 to 40 years) and had typically completed their training in Australia (79%). Mental health workers reported working within rehabilitation (61%), adult community mental health (31%), and assertive community treatment teams (8%). When asked about their highest level of education approximately 43% of workers reported undergraduate degree, 30% technical college degree or a diploma, 24% postgraduate degree, 3% high school certificate.

Sixty one percent of mental health workers reported working within rehabilitation, 31% within an adult community mental health setting, and the remaining 8% reported working within an assertive community treatment team. Mental health workers reported working an average of 32.00 hours per week (*SD* = 6.53, range 19 to 40 hours a week) within their current position and typically worked 21.45 hours a week (*SD* = 10.29, range 1 to 40 hours a week) within a case-management role. They reported a mean caseload of 6.32 mental health consumers (*SD* = 4.72, range 1 to 22) and typically have weekly face-to-face contact with each person on their caseload (*M* = 4.44 contacts per month, *SD* = .88). On average mental health workers spend around 80.14 minutes with each consumer during face to face visits (*SD* = 38.70, range 40 to 180 minutes).

10.3.2 MEASURES

10.3.2.1 Collaborative Goal Technology

For a detailed description of the CGT (Clarke et al., 2006) please refer to Chapter 2 section 2.4.3.

10.3.2.2 Outcome Measures

Both mental health worker (HoNOS and LSP-16) and consumer (RAS and K10) measures were included within the study. For a description of each outcome measures please refer to Chapter 4, section 4.4.2.6.

10.3.3 PROCEDURE

For each consumer participant one CGT that had been reviewed for progress by the clinician and consumer (i.e., a CGI could be calculated) was selected. The CGT was then linked with corresponding outcome data from the same time frame, which measured both the pre and post CGT period (i.e., the CGT was developed and reviewed within this time period). For example one consumer had a CGT for the period of baseline to three months of being within the AIMhi project, outcome data was taken for this time period at both baseline (Before the CGT was completed, Time 1) and at three months (after the CGT had been completed, Time 2). For another consumer a CGT was available within the six to nine month period following the commencement of AIMhi, outcome data was taken for both the six and nine month period. The first time point in the three month period identified served as a Time 1 score before the goal record was implemented and the second time point (three months later) served as a Time 2 score following the review of the CGT (refer to Figure 8). The first reviewed CGT where outcome data was available was selected for each participant.

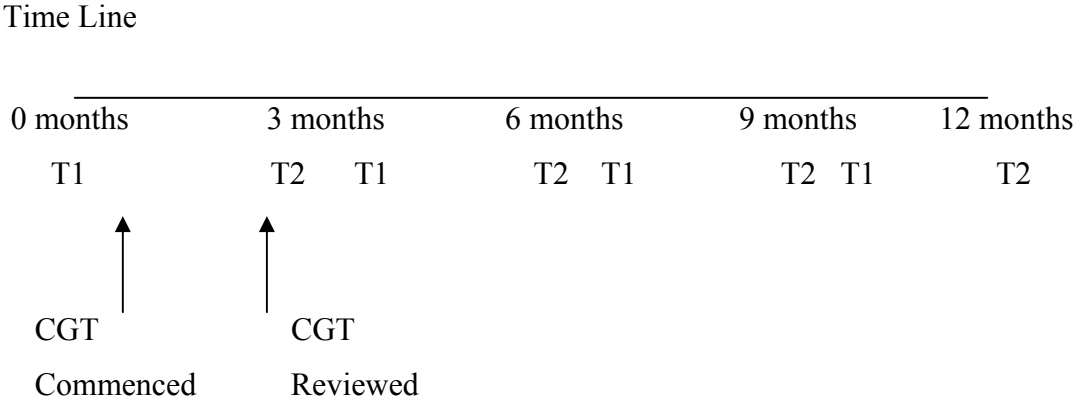


Figure 8. Outcome data and CGT time periods selected for analysis. Pre-scores are referred to as T1 (Time 1) and Post-scores are referred to as T2 (Time 2).

Goal attainment (CGI) was calculated for each participant (refer to Chapter 2, section 2.4.3.7 for CGI formula) and standardised residual gain scores for outcome were determined using regression analyses, with the dependant variable comprising the Time 2 scores, and the independent variable the Time 1 scores. Full-scale and subscale scores for each outcome measure was calculated. The assumption of normality was not met, so Spearman's correlation analysis was conducted. All correlations were one tailed and were conducted using SPSS.

10.4 RESULTS

10.4.1 LEVEL OF GOAL ATTAINMENT

The average percentage of goal attainment as calculated using the CGI was 48.18 (*SD* = 29.52 and ranged from 0 to100). The target score on the CGT is 50, which indicates the consumer attained a successful level of goal attainment. The minimum possible score on the CGI is 0 and the maximum possible score is 100. The standard deviation indicates significant variation between consumers in their level of goal attainment.

10.4.2 RELATIONSHIP BETWEEN TIME 1 SCORES AND GOAL ATTAINMENT AT THREE MONTHS

To examine whether certain factors assessed by the outcome measures were related to goal attainment, correlations were conducted between the Time 1 (baseline) score and CGI. A significant negative correlation was evident between scores on the baseline measure of the K10 and CGI (r = -.41, $p < .01$). This indicated

that consumers who reported less symptom distress at the start of the three-month goal striving period obtained greater goal progress, supporting the first hypothesis. Refer to Table 18 for correlations between outcome measures at baseline and CGI.

Table 18

Spearman's Correlation Coefficients between Goal Attainment and Baseline Outcome Scores and Residual Gain Outcome Scores

Outcome measures	Baseline			Residual Gain		
	R	*P*	*n*	*r*	*P*	*N*
K10	-.41**	.00	64	-.03	.41	62
RAS	-.02	.46	61	.20	.06	60
Goal & success orientation	-.01	.46	61	.22*	.05	60
Rely on others	-.12	.46	61	.15	.12	60
Personal confidence & hope	-.03	.42	61	.28*	.02	60
Willingness to ask for help	-.04	.38	61	.20	.06	60
Not dominated by symptoms	.19	.08	61	.11	.20	59
HoNOS	-.19	.07	65	-.19	.07	61
Behaviour	-.04	.38	65	-.22*	.05	61
Impairment	-.05	.36	65	-.05	.34	61
Symptoms	-.07	.28	65	-.17	.09	61
Social	-.08	.22	65	-.20	.06	60
LSP-16	.02	.43	65	.02	.44	61
Social withdrawal	-.07	.29	65	-.20	.06	61
Antisocial	-.03	.40	65	-.04	.39	61
Self care	.03	.41	65	.09	.25	61
Compliance	-.04	.37	65	.05	.35	61

Note. All outcome measures used for the baseline correlation analysis are the outcome scores taken at baseline prior to goal setting commencing. All outcome measures used for the residual gain correlations are standardised residual gain scores. * $p < .05$. ** $p < .01$. All correlations are one-tailed Spearman correlations. Subscales are listed directly below their measure and are indented.

10.4.3 RELATIONSHIP BETWEEN GOAL ATTAINMENT AND OUTCOME MEASURES

A significant positive relationship was found between goal attainment and residual gains in two subscales of the RAS, 'personal confidence and hope' (r = .28, p < .05) and, 'goal and success orientation' (r = .22, p < .05). This indicates that consumers, who reported greater gains in confidence, hope and their goal progress over the three months examined, were more inclined to have greater levels of goal attainment for this goal-setting period.

A significant inverse relationship was also found between the HoNOS 'behaviour' subscale and goal attainment (r = -. 22, p < .05). This implies that consumers who appeared to show greater improvements in their level of aggressive behaviour, drug and alcohol use and self harming behaviour, over the three-month goal-setting period were more likely to have higher levels of goal attainment. Refer to Table 18 for the correlation coefficients between goal attainment and the outcome measures.

No other significant relationships were found between goal attainment and the outcome measures; however some trends in the data can be seen. The relationship between the RAS full-scale score and goal attainment was in the expected direction (r = . 20, p = . 06) suggesting that generally people who made greater progress towards their goals also reported greater progress in their recovery over the three-month period. When reviewing the remaining subscales of the RAS, 'willingness to ask for help' was also positively correlated with goal attainment (r = .20, p = .06) although again not reaching significance. However, greater residual gains on the RAS subscales 'not dominated by symptoms' and 'willingness to rely on others' was not associated with goal attainment (r =. 11, p = .20; r = .15, p = .12).

The relationship between the HoNOS full-scale score and goal attainment was also in the expected direction, although not reaching significance level (r = - . 19, p = .07). When examining the HoNOS subscale scores, goal attainment appeared to be related to declines in HoNOS subscale scores for 'behaviour' (as noted previously), 'symptoms' (r = -.17, p = .09) and 'social withdrawal' (r = -. 20, p = .06), although the latter two subscales did not reach statistical significance. Only the subscale

measuring improvements in impairments did not appear to be related to goal attainment (r = - .05, p = .34). An inverse association between goal attainment and the LSP –16 'withdrawal' subscale was noted, although this did not reach significance (r = .20, p = .06). This suggests that consumers who made greater progress towards their goals also showed greater improvement in engagement and communication with others.

10.4.4 PATH ANALYSIS

Partially Squares Analysis was used to test a path model examining the relationship between the symptom distress prior to goal setting (Time 1 K10 score), goal attainment (CGI) and the two RAS sub-scales 'personal confidence and hope' (R1) and goal and success orientation' (R2) that were significantly correlated with goal attainment. PLS-graph (Chin, 1998) was used to conduct the analyses. A latent variable composite was created from these two RAS subscales, this was called 'recovery outcome'. Refer to Figure 9 for pathway model.

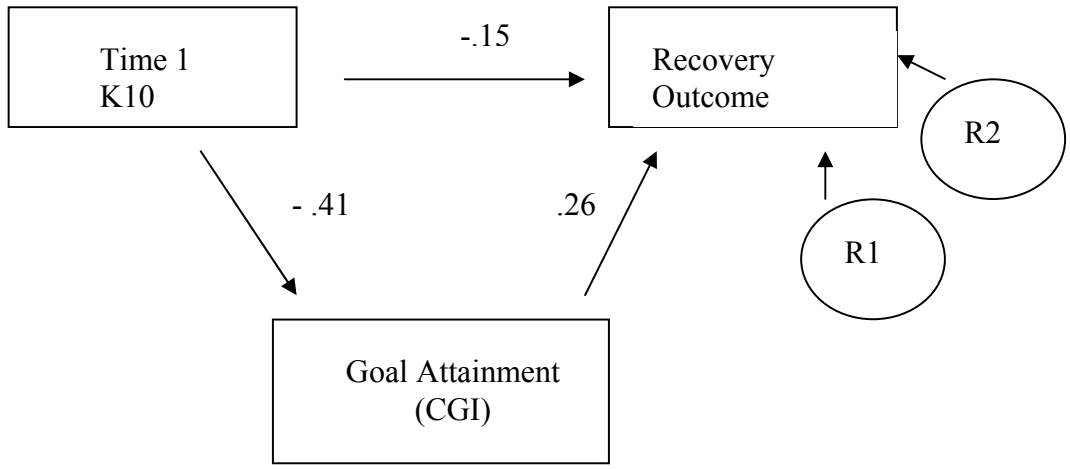


Figure 9. Path analysis model indicating the relationship between consumer symptom distress, goal attainment and recovery outcome. Arrows indicate the correlation co-efficient for each relationship. R1: RAS personal confidence and hope subscale. R2: RAS Goal and success orientation.

Pre-K10 scores predicted goal attainment ($[\beta = -.41], t = 3.12, p = .00$) accounting for 17% of the variance. There was a significant correlation between pre-

K10 score and 'Recovery Outcome'; however, this relationship was not significant when goal attainment was included. Goal attainment was found to predict 'Recovery Outcome' ([$\beta = .26$], $t = 2.68$, $p = .04$), with 12% of the variance in the 'Recovery Outcome' composite being accounted for by the interaction between Time 1 K10 and goal attainment. This indicates that goal attainment mediates the relationship between symptom distress and aspects of recovery (i.e., self confidence, hope, greater sense of identity and purpose in life).

10.5 DISCUSSION

10.5.1 LEVEL OF GOAL ATTAINMENT

The average level of goal attainment was very close to the target score of 50, indicating that generally mental health workers and consumers are setting goals that reflect the consumer's confidence and ability level. However, like Liberman and Koplewicz (2002), this study found significant variability between the consumers in their level of goal attainment. Consumer goal attainment may be affected by several factors such as an increase in illness, lack of interest or ownership in the goals set and other life factors arising. Goal attainment variability in the current study may also be related to differences in application of the goal setting protocol (CGT). Goals should be tailored to optimise consumer confidence, challenging them without being too difficult. Case-managers may need to develop this skill further to ensure consumers are making progress on goals and boosting self efficacy (Bandura, 1986) and sense of hope (Snyder, 2000).

10.5.2 RELATIONSHIP BETWEEN TIME ONE SCORES AND GOAL ATTAINMENT AT THREE MONTHS

This study found that when consumers experienced less symptom distress (K10) prior to goal setting they had higher goal attainment. In fact, self-perceived symptom distress was the only variable measured that was associated with goal attainment. This finding is consistent with results of Michalak and colleagues (2004) who noted a relationship between symptom level (Symptom Checklist -90 revised) and expected goal attainment, although the direction of this relationship was not determined.

Psychiatric symptoms are thought to impede the individual's ability to mobilise the cognitive resources required to commence and maintain the goal setting and striving process (Murray & Baier, 1996; Scott & Haggerty, 1984). The K10 targets some of the symptoms of: depression (hopelessness, sad, worthlessness, and apathy) and anxiety (restlessness, nervousness and fidgety). These types of psychiatric symptoms impede the individual's ability to mobilise the cognitive resources required to commence and maintain the goal setting and striving process (Murray & Baier, 1996; Scott & Haggerty, 1984). Establishing and working towards goals is largely a cognitive task that constantly requires the individual to reflect on their goal, their current progress, and to then discern the steps that are required to continue to move towards the set goal.

These findings suggest that typically when a consumer's experience of symptom distress is high, goal progress may be more difficult and/or may be slowed. It is likely that when symptoms are severe the consumers' focus will be on alleviating present symptoms to ease the distress, rather than working towards future orientated goals. However, consistent with the growth and goal focus of the recovery orientation identifying and striving for personally meaningful goals should still be a focus of case-management as goal are an important source of hope and meaning for consumers in recovery from EMI. The tension between meeting immediate needs, in particular lower order needs, and striving towards higher order needs (Maslow, 1954; 1968; 1987), should be managed sensitively by mental health staff and consumer alike, so that symptoms are still given appropriate attention within a forward moving recovery framework.

By being aware of the impact of the consumer experience of symptoms, mental health workers can assist recovery by: 1) understanding that depression, anxiety and negative symptoms can impede motivation and hence work with the consumer where they are currently within their recovery and protecting meaningful goals at times when motivation is low and/or symptoms are high, 2) when the consumer is experiencing greater symptoms the clinician should adjust goals making them easier yet still reflective of the person's longer term recovery vision. This will help attainment, boost self efficacy and promote hope, 3) assistance with managing symptoms by offering appropriate interventions (e.g., medication management,

exercise, etc., Allott et al., 2002) with the aim of assisting consumer self determination and recovery.

The current results are inconsistent with previous findings. For example, Hodges and Segal (2002) did not find a significant association between goal attainment and scores on the BPRS (Overall & Gorham, 1962) and Centre for Epidemiological Studies' Depression Scale (Radloff, 1997) for mental heath consumers accessing self-help services ($\beta = -.17, p = .08; \beta = .53, p = .10$ respectively). Similarly Tischler and Vostanis (2006) also found no significant relationship between mental health as measured by the General Health Questionnaire (Goldberg, 1978) and goal attainment amongst homeless mothers (statistics were not provided by the researchers). However the consumer samples in both studies did not have a high proportion of consumers with EMI, which may have led to differences in the results. For instance in the study by Hodges and Segal only 13% of consumers had a diagnosis of a psychotic illness and the study by Tischler and Vostanis did not include any consumers with a psychotic illness. Perhaps the types of symptoms experienced as part of schizophrenia/psychosis are more likely to impede the goal striving process. Another possible reason for the difference in the results related to psychiatric symptoms and goal attainment may have been linked to differences in how goal attainment was measured. Tischler and Vostanis only noted whether the goal was achieved or not, and Hodges and Segal only scored goal advancement across a 3-point scale (1 – did not achieve the goal and no longer interested in the goal, 2 – did not achieve the goal yet still interested in the goal, and 3 – achieved the goal). This type of categorical analysis may not have been able to identify differences between levels of goal attainment and symptom severity when both are measured as continuous constructs. Lastly another difference noted between these studies is that within the current research outcome focused on level of symptom distress rather than just symptoms per se.

The current findings highlight the need for case-management to assist consumers in managing their psychiatric symptoms through medication management and/or rehabilitation skills and emphasises the need for management of psychiatric symptoms within a consumer focused recovery case-management practice.

10.5.3 RELATIONSHIP BETWEEN GOAL ATTAINMENT AND OUTCOME MEASURES

10.5.3.1 RAS and Goal Attainment

Goal setting and striving has been noted as a central component within recovery from mental illness and goal setting when using the CGT aims to promote collaboration and goal ownership. Consumers who made greater progress on their case-management goals also reported greater gains in self confidence and confidence in achieving their future goals, were more hopeful about their future generally and reported a greater sense of identity and meaning in life over the three month goal striving period examined. This finding is consistent with the established hypotheses and reflects the outcomes (mastery, vitality, purpose, meaning in life, identity development and personal growth) noted within non-clinical samples (Sheldon & Houser-Marko, 2001; Sheldon, et al., 2002).

The findings from the current research are consistent with theories associated with recovery and goal striving. Hope has been defined as having a goal, a pathway to achieve the goal and confidence that one can progress toward this (Snyder, 2000). With this in mind it is expected that greater goal progress would be associated with a greater sense of hope. Self-efficacy is also bolstered through goal progress (Bandura, 1986) therefore; greater self-confidence within the group that made greater progress is expected. Goals are also a significant source of meaning when they reflect one's values and sense of self (Little 1989). Again it is expected that as people progress towards their goals they will experience a sense of meaning. Ideally case-management goals established with the CGT reflect the individual's recovery vision to ensure goals are representative of the individual's hopes and aspirations for the future, promoting meaning and purpose in life.

10.5.3.2 HoNOS and Goal Attainment

Consumers who made greater progress on their goals also showed significant reductions in aggressive behaviour, self-harm and drug and alcohol use as reported by the consumers' mental health worker. Only three of the goals listed on the CGT's directly focused on reductions in alcohol consumption and no goals identified self-

harm and aggressive behaviours as the target. This suggests that reductions in these behaviours were not the direct result of these behaviours being targeted.

Although the direction of this relationship between goal progress and reductions in these behaviours cannot be determined, one hypothesis is that as individuals have started to make greater progress on their goals they are less inclined to display these types of behaviours. Each of these behaviours could be viewed as inappropriate coping strategies employed to manage negative affect or distressing feelings (Linehan, 1993). Goal attainment has been linked with improvements in affect and psychological health and wellbeing (Koestner et al., 2002). Therefore as the consumer progresses in their goals they are likely to experience less negative affect and greater positive affect and wellbeing. As such they may be less inclined to act aggressively to others or harm themselves and may also be less inclined to consume drugs and alcohol.

An alternative hypothesis may be that as consumers reduced these types of behaviours they were better able to work towards achieving their goals as these behaviours are often associated with further negative consequences and negative affect, which is likely to further impede goal progress. Research conducted by Hodges and Segal (2002) supports this interpretation as they found higher levels of anger and impulsivity at baseline was associated with poorer goal attainment (β = .16, $p <$. 05) amongst mental heath consumers accessing self help services in San Francisco. Anger and impulsivity undermine goal progress as impulsive and/or aggressive acts derail the consumer from steadily progressing in the steps that are required to reach the goal (Hodges & Segal, 2002). Future research would be useful to clarify the direction of this relationship.

It is of interest to note that there was no relationship found between goal attainment and improvements on the RAS subscale 'not dominated by symptoms' or self-reported symptom distress (K10). This suggests that despite greater goal progress consumers do not necessarily experience substantial reductions in their perceived symptoms. Therefore although the experience of severe symptoms impedes goal progress, when goal progress is made there is not necessarily a decline in the individual's experience of symptoms. This may imply that case-management

goal progress does not lead to improvements in symptoms per se. Thus goal progress may support the enhancement of recovery processes like meaning and identity development despite the perception of on-going symptoms (Andresen et al, 2003).

10.5.4 PATH ANALYSIS

The path analysis indicates that symptom distress affects goal progress, which in turn determines progression in recovery concepts (self confidence, hope, greater sense of identity and purpose in life). It appears that lower levels of symptom distress enable consumers to progress towards their case-management goals. Further, case-management goal progress appears to be the catalyst for recovery, which confirms the themes identified within the recovery literature (Andresen et al., 2003). These findings highlight the importance of a recovery framework of case-management targeting both the alleviation of symptoms and encouraging and monitoring personally meaningful goals in order to promote recovery from severe mental illness.

10.5.5 LIMITATIONS AND IMPLICATIONS

Although relationships were found between goal attainment and two subscales of the RAS and the HoNOS behaviour subscale, these relationships are modest. The magnitude of the relationships may be related to the level of ownership over the case-management goals established. Goals that reflect the individual's values and are freely chosen are associated with gains in wellbeing whereas goals that were not owned by the individual did not promote wellbeing (Sheldon & Kasser, 1998). Although collaboration is promoted within the CGT protocol, consumers may not have always felt ownership over their goals particularly within the earlier stages of recovery (Andresen et al., 2003).

Limitations of the current research were: (a) the inability to measure other factors identified within the literature as impacting the relationship between goal attainment and outcome (e.g., level of goal ownership, *approach* and *avoidance* goals); (b) the relatively small sample size ($N = 71$) due to the lack of data provided by consumers and case-managers. This requires results to be viewed with appropriate caution; (c) the selection of goal striving periods for consumers was pragmatic as it was based on the availability of outcome data. However, as consumers were all long term service users the particular time period selected is unlikely to have altered the

findings. Despite these limitations a particular strength of the study was that it was effectiveness based research which drew on actual case-management goal data established within main stream mental heath services and goal progress was regularly monitored and reviewed by both the case-worker and consumer. This coupled with the levels of goal attainment being behaviourally defined when the goals were being set provide a more objective measure of goal attainment.

Future research examining goal ownership and outcome within clinical populations is needed. Other potential mediating factors such as whether the motivation of the goal was to move away from an unpleasant experience/state or to move towards a positive experience or state. It would be useful to incorporate different functional and recovery outcome measures and also include traditional measures of wellbeing (i.e., MANSA, Priebe et al., 1999) as seen within the non-clinical research. Also the Psychological Well Being Scale and The Emotional Wellbeing Scale may also be useful as proving a measure of wellbeing within mental health populations (Keyes, 2000).

10.5.6 SUMMARY OF STUDY 4

The findings from the current study suggest that goal attainment is affected by the consumer's level of symptom distress. When symptoms are less distressing consumers are better able to make progress on their case-management goals, which in turn enables progress in aspects of their psychological recovery. Within a recovery framework assisting individuals with EMI to gain mastery over their symptoms can facilitate goal attainment which in turn can facilitate aspects of psychological recovery. Longitudinal research would be able to determine whether these effects continue across time and whether continued goal attainment can lead to even further progression within recovery.

Chapter Eleven

DISCUSSION AND CONCLUSION

This chapter briefly summarises the main findings for each study and presents a general discussion and conclusion integrating the research findings.

11.1 SUMMARY OF MAIN RESEARCH FINDINGS

The central aim of this research was to provide insight into the process of goal setting and the content of case-management goals within a mental health recovery framework. Secondly, these studies aim to examine whether making progress on these goals leads to improvements in mental health outcome for consumers.

Studies 1 and 2 examined aspects of goal setting quality. Seventy four percent of files contained a goal record and on average goal records included 50% of goal setting principles. The CRTP led to an improvement in both the frequency and quality of goal setting and the use of a structured goal setting intervention also seemed to promote further goal quality. Better goal quality was also associated with greater improvements in consumer perceptions of agreement on the goals and tasks set in case-management and better goal quality was also related to modest improvements in symptom distress.

Study 2 found that mental health workers reported they were more likely to use skills to develop meaningful and manageable goals when compared to the skills required to review goal progress. Technical skills of the CGT (Calculating CGI and different levels of goal attainment) were employed least. Insufficient time was often reported as impeding correct use of the CGT and consumer factors (i.e., not being interested, too unstable) was the most frequently reported reason for mental health workers not attempting the CGT.

Study 3 found physical health goals were reported significantly more frequently than any other types of goal and were rated as most important by 23% of consumers. Employment and relationship goals were often identified as most

important to consumers. Significantly more health goals were set within the first stage of psychological recovery and when consumers reported lower levels of self rated recovery. This suggests that in the early phases of recovery a focus on basic health needs is a priority and may signify the lack of longer term more meaningful goals at this time. Themes in the data suggest that people further along in their recovery set a greater range of goals (e.g., employment, relationship).

Study 4 indicated that when symptoms are perceived as less distressing consumers are better able to make progress towards their case-management goals, which in turn promotes aspects of recovery such as; hope, self-confidence, sense of purpose and positive identity. This highlights the importance of a recovery framework of case-management placing a focus on both alleviation of symptoms and promoting striving towards personally meaningful goals in order to promote recovery from EMI.

11.2 GENERAL DISCUSSION & CONCLUSION

11.2.1 INTEGRATION OF RESEARCH FINDINGS

The findings from this research suggest that the goal setting and striving process is in fact important for consumers with EMI. The goal setting and striving process does seem to promote aspects of psychological recovery, such as; self confidence, confidence in achieving future goals, hopefulness about the future generally, and a greater sense of purpose in life. This finding supports the consumer narratives emphasising the importance of goals (Andresen et al., 2003; Chamberlin, 1984; Deegan, 1992; Fisher, 1994; Resnick et al., 2005) and the inclusion of goals as a foundation within the recovery process (Anthony et al., 2000; Andresen et al. 2003; Davidson et al., 2001; Mueser, et al., 2002; Onken et al., 2003).

Formalised goal setting training and interventions such as the CGT can aid mental health workers in supporting the consumers' goal setting and striving process. These types of interventions not only lead to an improvement in the frequency that goal records are completed, but also significantly enhance the quality of these goals records. It is vital that mental health workers are also supported from a service level and systems are in place so goal interventions are part of routine mental health practice. This may include: regular review of goal records at team meetings or

supervision, access to ongoing booster sessions and structured goal setting interventions being part of standard protocol.

The findings from Study 1 suggest that goal setting records are not always being completed with consumers with EMI and often the quality of goal records is poor. A parallel process needs to occur between the mental health worker and management so that barriers to implementing goal setting/striving intervention experienced by clinicians are addressed. Collaboration and a supportive relationship is therefore not only necessary between consumer and mental health worker but also between mental health worker and supervisors/managers.

Goal quality was associated with improvements in symptom distress, suggesting that goal quality may promote goal attainment and therefore lead to psychological benefits as seen within the non-clinical population. However, future research is required to determine whether there is a direct link between goal quality and goal attainment for consumers with EMI accessing case-management services.

The content of recovery goals being set by consumers with EMI also appears to be diverse with goals being set in various life domains (e.g., relationships, recreation, employment). The diversity of goals appears to be greater as people are within the later stages of the recovery process. Mental health services need to be equipped to best assist consumers in progressing towards these goals and appropriate resources need to be available to facilitate goal attainment. This reiterates the need for case-managers to 'think outside the square' and outside the parameters of the medical model to facilitate psychological recovery.

Not only are goals more diverse but also significantly more *approach* goals were set at the later stages of the recovery process whereas more *avoidance* goals were set within the earlier stages of psychological recovery. This suggests that as consumers are in the later stages of recovery they are moving towards 'mental health' rather than moving away from illness and deficits. This may also have been seen as supporting the expansion in recovery definition to move towards psychological recovery.

It is essential to note that symptom distress is still an important factor within the recovery process. Symptom distress was the only factor measured that appeared to impede the goal attainment process. This stresses the importance of skilled mental health workers working with consumers to ensure symptoms are well managed by appropriate medication and/or psychological interventions.

It is important that the process of goal setting is collaborative. That is, for clinicians to really facilitate the exploration of what is meaningful to the consumer and also identifying barriers to the goal striving process. This is essential as poor goal attainment was associated with a lack of progression in aspects of psychological recovery. Further the working alliance needs to be strong so that consumers can discuss their levels of symptom distress openly with their mental health worker, as again this can impede goal advancement and therefore hinder psychological recovery. This stresses the importance of the clinician's role and highlights their facilitation of psychological recovery. Not to direct the recovery process or to choose the goals they feel are appropriate, but to support and protect the goal setting and striving process and really facilitate psychological recovery by promoting self determination.

11.2.2 EFFECTIVENESS RESEARCH

The studies presented are effectiveness research which examined the relatively naturalistic use of goal setting between mental health consumers and workers within a recovery-based model of case-management. This is a significant strength of the research presented as effectiveness research has high external validity and provides a rich source of information about what is actually occurring within mental health settings within Australia (Hahlweg, Fiegenbaum, Frank, Schroeder, & Von Witzleben, 2001). This type of research enables practical recommendations to be identified that are appropriate for services as they are currently operating. However, it is important to note that there are limitations with this approach

Some limitations often associated with effectiveness research should also be mentioned as were evident within the current studies. This included relatively small samples and problems with attrition. This was largely the result of the research requiring case-managers and consumers not aligned with the research to complete

questionnaires and engage in specific aspects of treatment delivery (e.g., use of the CGT; Deane, Crowe, King, Kavanagh, & Oades, 2006; Kavanagh et al., 1993). This places extra time demands on both consumers and workers which can lead to drop out (Deane et al., 2006).

Studies 3 and 4 solely relied on the CGTs being completed as the goal records within case-management. The CGT was introduced as one aspect of CRM. Mental health workers often report that factors such as lack of perceived organisational support and not working with consumers in the long term often impact whether a mental health model of care is implemented or not (Deane et al., 2006). Other factors that are likely to have impacted the sample size include: loss of clinician or consumer motivation, staff turnover and movement to different roles within the organisation, consumer periods of increased illness, and consumer movement to different services.

There are also difficulties when implementing a model of specific intervention such as goal setting from a research context into main stream mental health services. The ethical requirements that accompany research stress the importance of participant autonomy and prevent the use of directive management approaches requiring all mental health workers to participate in the research intervention (Deane et al., 2006). Deane and colleagues state that this can lead to the perception by participants that the intervention is optional and may not be perceived as a core aspect of service delivery. The limited return of outcome data and goal records also limited the research design (e.g. cross sectional) and the types of statistical analysis that could be conducted (e.g. correlational analysis). Despite these limitations the research presented enabled naturalistic research to truly examine goal setting as it is occurring within recovery to promote insight into how this is occurring within mental health service delivery.

Future research in the area of recovery goals is needed generally. This may include a focus on assessing the level of goal ownership within the goal setting/striving process and to determine whether goals that more self determined lead to greater treatment gains and also greater gains in wellbeing generally. This could be done by using a measure of goal ownership such as the Personal Goal Assessment (Sheldon & Elliot, 1998). This measure has not yet been used in EMI

research. Further research examining recovery goals within mental health services that are not part of AIMhi is also important to determine whether the CRM program influenced the findings. Results from Study 1 signify that the CRM training program did promote both the frequency and quality of care planning. It will be important to see whether these results are replicable across wider mental health service provision. It should be noted however that the AIMhi High Support Stream project spanned four Australian states and included 17 service units both government and non-government located within urban, rural and regional areas suggesting it is representative of Australian mental health services.

The results from the current research support theoretical conceptualisations of recovery (Anthony et al., 2000; Andresen et al., 2003; Davidson et al., 2001; Mueser, et al., 2002; Onken et al., 2003 and consumer narratives (Chamberlin, 1984; Deegan, 1992; Fisher, 1994), which identify personal goals as an important foundation in the process of psychological recovery from EMI. Recovery goals seem to reflect a greater range of life domains as the individual progresses within their recovery process. The results also suggest that as one progresses within their recovery process, their goals are more likely to be focused on movement toward a positive outcome (e.g. mental health), rather than being aimed at the avoidance of negative outcomes (e.g. reduce symptoms). The quality of the recovery goals set within case-management can be improved by providing mental health workers with appropriate training and formalised goal setting interventions. This may further aid the consumer in attaining their goals and promoting recovery.

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Appendix 1

MENTAL HEALTH WORKER COMPLETED PATIENT ELIGIBILITY CHECKLIST

Please see print copy for Appendix 1

Appendix 2

Clarke, S. P., Oades, L. G., Crowe, T. P., & Deane, F. P. (2006). Collaborative Goal Technology: Theory and Practice. *Psychiatric Rehabilitation Journal*, *30,* 129-136.

Please see print copy for Appendix 2

Appendix 3

Clarke, S. P., L. G., Crowe, T. P., Oades, L. P., & Deane, F. P. (2008). Do goal setting interventions improve the quality of goals in mental health settings? *Psychiatric Rehabilitation Journal*, .

Please see print copy for Appendix 3

Appendix 4

GOAL-IQ

Goal IQ

Individualised Care Plan Reviews – File Audits

Note: Reviews to be conducted on the Care Plans for the 6 months preceding the date of the file audit.

1. Is there an overall recovery vision	No	No written record that meaning, hopes, dreams, values and/or preferred identity that the person wishes to head towards or practice including in his/her life were discussed with the consumer.
	Partial	Written record that hopes, dreams and values for the future has been discussed, but the goals selected do not appears to be in line with the client's values or there is no record that the client has been asked "why" they would like to achieve their set goals.
	Yes	Written record that hopes, dreams and values for the future has been discussed. There is a direct link between meaning, hopes and dreams the individual holds for their future and goals selected within case-management and these are documented (e.g. " Client reported that getting his own shopping (goal) would lead him to feel more independent (recovery vision)).
2. Collaboration between client and clinician	No	Language in the care plan does not suggest that collaboration between consumer and clinician occurred when identifying care plan goals (e.g. "client was instructed to work on medication adherence", "client was provided with goals set out by his mental health team") Or there is language in the file that describes the client or their goals in negative terms (e.g. insight less, unrealistic, unmotivated).
	Yes	Language in the care plan indicated that collaboration between clinician and consumer occurred when developing goals. Goals are recorded in layperson's terms void of technical jargon.

3. Goals	No	No case-management goals are recorded.
	Partial	Some goals are recorded– yet they are not clearly defined making measurement difficult (e.g. to feel better, to be happier)
	Yes	Goals are recorded and defined so that a clear outcome is measurable (e.g. to do my own shopping, improve my medication taking, to find a job).
4. Goal Importance	No	No record that the consumer's perceived importance of goals selected or prioritisation of the care plan goals.
	Partial	A written record that the consumer's perceived importance for each goal has been considered and resources allocated accordingly (e.g. client stated that ___ goal was most important for them, so the session was spent working toward this").
	Yes	A record that goal importance has been ranked numerically or ordered and resources allocated accordingly (e.g. Client placed goals in order of importance (1, 2, 3) so session time and tasks were allocated with this in mind).
5. Confidence	No	No written record that consumer's level of confidence was rated for the goals selected
	Partial	Written record that confidence was asked (e.g a statement or rating) in relation to one of the goals but not others. A written record that client confidence was assessed, yet goals were not adjusted to enhance the clients self efficacy related to goal attainment
	Yes	A written record that confidence was asked in relation to each case-management goal and goals were adjusted to enhance the consumer's confidence for goals attainment.

6. Time frame for Goals	No	No time frame established for goals.
	Partial	Some record of a time frame for goal completion, but this is vague (e.g. end of the year, rather than a specific date). Or the timeframe seems unrealistic for the type of goal selected? (e.g. to commence and complete a TAFE course within 3 months).
	Yes	Written record of an established time frame and a date set for the review period.
7. Levels of goal attainment	No	No varying levels of goal attainment defined for the treatment goals recorded.
	Partial	Some but not all of the case-management goals have different levels of goal attainment defined and recorded. Levels for goals are defined, yet they are not behaviourally defined making outcome difficult to measure. (E.g. lacks specifications such as; frequency, what, where and with whom).
	Yes	Levels for each of the case-management goals are specified and are behaviourally defined (e.g. frequency, what, where, with whom) so outcome can be clearly measured.
8. Action Plans for goals	No	No record that discussions about pathways or strategies for any of the goals has taken place (e.g. steps to the goals),
	Partial	A written record that some of the case-management goals have plans developed outlining how the goal will be achieved. Or a written record that the treatment goals have plans developed, yet these are not defined or specified clearly.
	Yes	A written record that all goals selected have clear pathways of how to attain the goal and the specific details about when, where and how the goal will be carried out.

9. Identifying and problem solving barriers to goal attainment (coping planning)	No	No written record that barriers to goal attainment are identified in the care plan. OR if no barriers are described, there is also no evidence that potential barriers were discussed and solutions to address these identified.
	Partial	A written record that some potential barriers were discussed, however no problem solving around these is evident. (E.g. lack of money may be problems yet attempts to assist budgeting or identify alternative solutions are not evident). Only some of the treatment goals were recorded as being the focus of coping planning.
	Yes	A written record that barriers and potential solutions for each of the treatment goals have been discussed.
10. Social Support	No	No written record that social support was enlisted to assist with goal attainment.
	Partial	Written record that some social support was identified - either only at a service level (case- manager) or personal level (family member).
	Yes	Written record that social support was identified to assist with goal attainment, both at a personal and service level. Roles for different members have been discussed and outlined. This can include practical (e.g. transportation), emotional (e.g. to hear the other persons concerns) or informational support (e.g. Information on harm minimisation or side effects of medication etc.)
11. Monitoring	No	No written record regarding how goal progress will be monitored.
	Partial	General written reference made to monitoring progress (e.g. will check progress with consumer).
	Yes	Specific written record of how progress of behaviours in specific settings will be monitored (e.g. In addition to homework tasks, consumer has agreed to keep a graph of his number of walks at the oval or mood diary)

Appendix 5

THREE MONTHLY ASSESSMENT BATTERY FOR MENTAL HEALTH CONSUMERS AND MENTAL HEALTH WORKERS

Three monthly assessment battery for Consumers

K10

Instructions

The following ten questions ask about how you have been feeling in the last four weeks. For each question, circle the number under the option that best describes the amount of time you felt that way.

	None of the time	A little of the time	Some of the time	Most of the time	All of the time
1. In the last four weeks how often did you feel tired out for no good reason	1	2	3	4	5
2. In the last four weeks, about how often did you feel nervous?	1	2	3	4	5
3. In the last four weeks, about how often did you feel so nervous that nothing could calm you down?	1	2	3	4	5
4. In the last four weeks, about how often did you feel hopeless?	1	2	3	4	5
5. In the last four weeks, about how often did you feel restless or fidgety?	1	2	3	4	5
6. In the last four weeks, about how often did you feel so restless you could not sit still?	1	2	3	4	5
7. In the last four weeks, about how often did you feel depressed?	1	2	3	4	5
8. In the last four weeks, about how often did you feel that everything was an effort?	1	2	3	4	5
9. In the last four weeks, about how often did you feel so sad that nothing could cheer you up?	1	2	3	4	5
10. In the last four weeks, about how often did you feel worthless?	1	2	3	4	5

WORKING ALLIANCE INVENTORY (WAI) – CLIENT VERSION

Instructions

There are sentences that describe some of the different ways a person might feel about his or her clinician. Next to each statement is a seven number point scale. If the statement describes the way you always feel (or think) circle the number '7'; if it never applies to you circle the number '1'. Use the numbers in between to describe the variations between the extremes. Your first impressions are the ones we would like to see. Please don't forget to respond to *every item.*

	Never	Rarely	Occasionally	Sometimes	Often	Very Often	Always
1. My clinician and I agree about the things I will need to do in therapy to help improve my situation.	1	2	3	4	5	6	7
2. What I am doing in therapy gives me new ways of looking at my problem.	1	2	3	4	5	6	7
3. I believe my clinician likes me.	1	2	3	4	5	6	7
4. My clinician does not understand what I am trying to accomplish in therapy.	1	2	3	4	5	6	7
5. I am confident in my clinician's ability to help me.	1	2	3	4	5	6	7
6. My clinician and I are working toward mutually agreed upon goals.	1	2	3	4	5	6	7
7. I feel that my clinician appreciates me.	1	2	3	4	5	6	7
8. We agree on what is important for me to work on.	1	2	3	4	5	6	7
9. My clinician and I trust one another.	1	2	3	4	5	6	7
10. My clinician and I have different ideas on what my problems are.	1	2	3	4	5	6	7
11. We have established a good understanding of the kind of changes that would be good for me.	1	2	3	4	5	6	7
12. I believe the way we are working with my problem is correct	1	2	3	4	5	6	7

RECOVERY ASSESSMENT SCALE (RAS)

Instructions

Below is a list of statements that describe how people sometimes feel about themselves and their lives. Please read each one carefully and circle the number that best describes the extent to which you agree or disagree with the statement. Circle only one number for each statement and no not skip any items.

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1. I have a desire to succeed	0	1	2	3	4
2. I have my own plan for how to stay or become well.	0	1	2	3	4
3. I have goals in life that I want to reach.	0	1	2	3	4
4. I believe I can meet my current personal goals.	0	1	2	3	4
5. I have a purpose in life.	0	1	2	3	4
6. Even when I don't care about myself, other people do.	0	1	2	3	4
7. I understand how to control the symptoms of my mental illness.	0	1	2	3	4
8. I can handle it if I get sick again.	0	1	2	3	4
9. I can identify what triggers the symptoms of my mental illness.	0	1	2	3	4
10. I can help myself become better.	0	1	2	3	4
11. Fear doesn't stop me from living the way I want to.	0	1	2	3	4

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
12. I know that there are mental health services that do help me.	0	1	2	3	4
13. There are things that I can do that help me deal with unwanted symptoms.	0	1	2	3	4
14. I can handle what happens in my life.	0	1	2	3	4
15. I like myself.	0	1	2	3	4
16. If people really knew me, they would like me.	0	1	2	3	4
17. I am a better person than before my experience with mental illness.	0	1	2	3	4
18. Although my symptoms may get worse, I know I can handle it.	0	1	2	3	4
19. If I keep trying, I will continue to get better.	0	1	2	3	4
20. I have an idea of who I want to become.	0	1	2	3	4
21. Things happen for a reason.	0	1	2	3	4
22. Something good will eventually happen.	0	1	2	3	4
23. I am the person most responsible for my own improvement.	0	1	2	3	4
24. I'm hopeful about my future.	0	1	2	3	4
25. I continue to have new interests.	0	1	2	3	4

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
26. It is important to have fun.	0	1	2	3	4
27. Coping with my mental illness is no longer the main focus of my life.	0	1	2	3	4
28. My symptoms interfere less and less with my life.	0	1	2	3	4
29. My symptoms seem to be a problem for shorter periods of time each time they occur.	0	1	2	3	4
30. I know when to ask for help.	0	1	2	3	4
31. I am willing to ask for help.	0	1	2	3	4
32. I ask for help, when I need it.	0	1	2	3	4
33. Being able to work is important to me.	0	1	2	3	4
34. I know what helps me get better.	0	1	2	3	4
35. I can learn from my mistakes.	0	1	2	3	4
36. I can handle stress.	0	1	2	3	4
37. I have people I can count on.	0	1	2	3	4
38. I can identify the early warning signs of becoming sick.	0	1	2	3	4
39. Even when I don't believe in myself, other people do.	0	1	2	3	4
40. It is important to have a variety of friends.	0	1	2	3	4

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
41. It is important to have healthy habits.	0	1	2	3	4

Three Monthly Assessment Battery for clinicians

CLIENT BACKGROUND INFORMATION (CBI)

Please complete for each participating client

Client ID Code _____Sex: Male / Female Date of Birth: _____

1. Relationship Status (circle only one):
    a. Single
    b. Married
    c. Defacto
    d. Divorced
    e. Widowed
    f. Significant relationship: > 6 months/
    g. < 6 months
    h. Never had a long-term relationship

2. How long have you been seeing this client for their mental health condition?
_____ weeks/months/years (please circle which of these applies)

3. When was this consumer first diagnosed with mental illness? _____

4. On average how frequently do you see this client each month? _____

5. Do you view yourself as this patient's primary case manager? Yes / No

6. How many hospitalizations due to their mental health condition has this client had in the past 3 years?
_____

7. How long ago was the client's most recent hospitalization for their mental health condition? _____
weeks/months/years (please circle which of these applies).

8. How long was the client hospitalized during their last inpatient stay?

_____ days/weeks/months (please circle which of these applies)

9. How well does this patient adhere with their prescribed psychotropic medication?

a. Complete refusal
b. Partial refusal (refusing depot drugs or accepting only a minimum dose)
c. Reluctant acceptance (accepts only because treatment is compulsory or questions the need for treatment often e.g. every two days)
d. Occasional reluctance about treatment
e. Passive acceptance
f. Moderate participation (some knowledge of and interest in treatment and no prompting needed to take drugs)
g. Active participation (ready acceptance and taking some responsibility for treatment)

10. Please describe the main therapeutic activities that you provide for this client.

_____

_____

_____

11. Please describe the other support services that this client currently accesses to support his/her mental health needs.

_____

_____

_____

HEALTH OF A NATION OUTCOME SCALE (HoNOS)

Instructions
Enter the severity rating for each item in the corresponding item box to the right of the item. Rate 9 if Not Known or Not Applicable.

	No Problem	Minor Problem	Mild Problem	Mod /severe	Severe/ Very severe	Not known/ N.A.
1. Overactive, aggressive, disruptive	0	1	2	3	4	7
2. Non-accidental self-injury	0	1	2	3	4	7
3. Problem drinking or drug-taking	0	1	2	3	4	7
4. Cognitive problems	0	1	2	3	4	7
5. Physical illness or disability problems	0	1	2	3	4	7
6. Problems with hallucinations and delusions	0	1	2	3	4	7
7. Problems with depressed mood	0	1	2	3	4	7
8. Other mental and behavioural problems **(specify problem by ticking relevant box)** ☐ **A**- Phobias ☐ **B**- Anxiety and panic ☐ **C**- Obsessive compulsive problems ☐ **D**- Reactions to severely stressful events ☐ **E**- Dissociative (conversion) problems ☐ **F**- Somatoform ☐ **G**- Problems with appetite, over or under eating ☐ **H**- Sleep problems ☐ **I**-Sexual problems ☐ **J**- Problems not specified elsewhere	0	1	2	3	4	7
9. Problems with relationships	0	1	2	3	4	7
10. Problems with activities of daily living	0	1	2	3	4	7
11. Problems with living conditions	0	1	2	3	4	7
12. Problems with occupation and activities	0	1	2	3	4	7

This last scale asks you to rate how typical the ratings you have given the patient are of their usual behaviour and clinical status over the preceding 3 months or since you first had contact, whichever is the shorter period. Complete this scale after you have made all the other ratings. The question and alternatives for this rating are as follows (tick the appropriate box).

Over the preceding period the patient's state has been:	
Generally much better	☐
Generally better	☐
Generally the same	☐
Sometimes better, sometimes worse	☐
Sometimes better, sometimes much worse	☐
Sometimes worse or much worse	☐
Generally worse	☐
Generally much worse	☐
Not enough information available to rate	☐

LIFE SKILLS PROFILE – 16 (LSP)

1. Does this person generally have any difficulty with initiating and responding to conversation?		**9. Does this person generally maintain an adequate diet?**	
No difficulty with conversation	0	No problem	0
Slight difficulty with conversation	1	Slight problem	1
Moderate difficulty with conversation	2	Moderate problem	2
Extreme difficulty with conversation	3	Extreme problem	3
2. Does this person generally withdraw from social contact?		**10. Does this person generally look after and take their own prescribed medication (or attend for prescribed injections) on time?**	
Does not withdraw at all	0	Reliable with medication	0
Withdraws slightly	1	Slightly unreliable	1
Withdraws moderately	2	Moderately unreliable	2
Withdraws totally or near totally	3	Extremely unreliable	3
3. Does this person generally show warmth to others?		**11. Is the person willing to take psychiatric medication when prescribed by a doctor?**	
Considerable warmth	0	Always	0
Moderate warmth	1	Usually	1
Slight warmth	2	Rarely	2
No warmth at all	3	Never	3
4. Is this person generally well groomed (e.g. neatly dressed, hair combed)?		**12. Does this person co-operate with health services (e.g. doctors and/or other health workers)?**	
Well groomed	0	Always	0
Moderately well groomed	1	Usually	1
Poorly groomed	2	Rarely	2
Extremely poorly groomed	3	Never	3
5. Does this person wear clean clothes generally, or ensure that they are cleaned if dirty?		**13. Does this person generally have problems (e.g. friction, avoidance) living with others in the household?**	
Maintains cleanliness of clothes	0	No obvious problem	0
Moderate cleanliness of clothes	1	Slight problems	1
Poor cleanliness of clothes	2	Moderate problems	2
Very poor cleanliness of clothes	3	Extreme problems	3
6. Does this person generally neglect their physical health?		**14. Does this person behave offensively (includes sexual behaviour)?**	
No neglect	0	Not at all	0
Slight neglect of physical problems	1	Rarely	1
Moderate neglect of physical problems	2	Occasionally	2
Extreme neglect of physical problems	3	Often	3
7. Is this person violent to others?		**15. Does this person behave irresponsibly?**	
Not at all	0	Not at all	0
Rarely	1	Rarely	1
Occasionally	2	Occasionally	2
Often	3	Often	3
8. Does this person make and/or keep up friendships?		**16. What sort of work is this person capable of (even if unemployed, retired or doing unpaid domestic duties)?**	
Friendships made or kept well	0	Capable of full-time work	0
Friendships made or kept with slight difficulty	1	Capable of part-time work	1
Friendships made or kept with considerable difficulty	2	Capable of sheltered work	2
No friendships made or none kept	3	Totally incapable of work	3

Appendix 6

GOAL SETTING TRAINING SLIDES

Please see print copy for Appendix 6

Appendix 7

STAFF HANDOUT FOR FILE AUDIT

Goal setting within case-management & disability support

Review of existing care plans

There is evidence that making progress with individual goals is important particularly for people accessing case-management and support services. Goal setting has been found to enhance motivation and stimulate further planning. Goal setting has also been linked to the promotion of hope for consumers and can assist with psychological recovery. Goal setting is also useful for meaning development, identity exploration and the promotion of personal responsibility for developing and pursuing recovery plans. Several goal setting characteristics and practices and have been found to assist with goal progress including goal importance, levels of attainment, reviewing goal progress and monitoring.

Typically consumers and workers work toward a shared goal, yet how this is defined and developed varies. Furthermore goals setting practices should be a significant feature in care planning. The aim of this care plan review is to reflect on the quality of goal setting within different case-management and support contexts and to see whether care plans incorporating more of the goal setting principles are associated with better outcomes for the consumer and also whether this is associated with the strength of the working alliance between the consumer and the worker. We are also hoping to be able to contrast care planning that has incorporated a goal setting intervention (CGT) with those that have not to determine whether using a more structured goal setting intervention assists people in incorporating these goal setting principles into care planning.

It is expected that this review will assist with identifying the elements that promote goal setting within mental health and ultimately provide recommendations to services in how to incorporate these factors into everyday care planning and provision. Please note, this review is not a performance appraisal for individual staff or services. It is purely an attempt to identify goal setting practices used within different care provision contexts.

Method

A review of the motivation, recovery and goals setting literature identified, principles associated with improved goal progress. These principles were incorporated into a care plan audit instrument. Eleven items in total were included.

How will this work at a service level

As we are aiming to gather a representative perspective of case-management and support services in Australia we are hoping to include all the services that are involved in the AIMhi project. We will only be reviewing care plans of consumers who are or have been part of the AIMhi project as they have already provided consent for us to review their care plans. We plan to select files randomly with consultation with key service staff to identify the best way to do this to protect consumer privacy and confidentiality. Any information collected will be recoded using the AIMhi code system to protect the identities of the consumers and workers. Specific service feedback will be made available if required as this may be helpful for service planning and quality assurance.

We are aware that your services are all very different and all extremely busy. It would be great if we can make this process flexible so that it suits your service and does not cause any extra stress on resources.

To make the process as streamlined as possible it would be helpful if we could find out the following information prior to visiting your service

1. Have any clients in the project (as on the list) dropped out recently?
2. Does your service have client files?
3. Where are the files located?
4. What would be the best way to access these files?
5. Does your service have a process for recording goals setting? If so what is it?
6. Is there a confidentiality clause that your service would require signature?

The aim is to complete all the files audits for each service in one day. To make things flow a little easier your service will be provided with a list of the files that will be reviewed the day prior to the review date. It would be very helpful if the files were made accessible upon arrival of the reviewer. It would also be great to organise a date with you to conduct this process as soon as convenient or if you could nominate a staff member with whom this process could organised.

After the data is collected and analysed, each service will be provided with a summary of the overall care plan review findings. This will occur approximately 1-2 months after the file audits are completed.

Thank you so much for your time in reading this proposal, we hope we can work together in a way that is suitable for your service.

Appendix 8

CGT BOOSTER SESSION SURVEY

Collaborative Goal Technology Booster Session

Client Name: _____ Case-manager Name:_____ Date: _____

Please complete this form for each client you are working with as a participant in the AIMhi Project

This is a brief survey regarding the last 3 months that you have spent working with this client.					
a) In relation to your use of the Collaborative Goal Technology (CGT) protocols with this client, please indicate how much of the following CGT steps were completed over the last 3 months. **0 = not at all 1 = a little 2 = some what 3 = moderately 4 = very much**					
Stage 1 Meaningful Vision and Goals					
I explained the concept of a personal recovery vision	0	1	2	3	4
I helped the client shape his/her personal recovery vision	0	1	2	3	4
We identified collaborative goals	0	1	2	3	4
I checked the goal meaningfulness with the client	0	1	2	3	4
I related the goals to the recovery vision	0	1	2	3	4
I facilitated the allocation of 'importance' points to goals	0	1	2	3	4
Stage 2 Manageable Goals					
I explained the rationale for the 3 levels of goal attainment (i.e. "success", "awesome" and "keep going" levels)	0	1	2	3	4
We discussed and recorded the levels of attainment	0	1	2	3	4
I checked the confidence level (> 70%)	0	1	2	3	4
I checked that the attainment levels did not overlap – **not sure about this one**	0	1	2	3	4
I displayed empathy throughout the goal setting process	0	1	2	3	4
I checked the client understood what we were trying to achieve and how we would monitor this process	0	1	2	3	4
I explained the connection between goals and homework tasks	0	1	2	3	4
I gave a copy of the CGT sheet to client	0	1	2	3	4
Stage 3 Goal Attainment Review					
We collaboratively rated level of goal attainment	0	1	2	3	4
I calculated the CGI	0	1	2	3	4
I appeared positive regardless of the goal attainment level	0	1	2	3	4
I emphasised the goal striving process	0	1	2	3	4
We reviewed the client's personal recovery vision	0	1	2	3	4
We reviewed the client's collaborative goals	0	1	2	3	4

b) If you have had difficulty completing the CGT sheet and steps with this client what was the reason?
Please rate how much each of the following reasons contributed to the incompletion of the CGT, by circling the appropriate number.

0 = not at all 1 = a little 2 = some what 3 = moderately 4 = very much

I had Insufficient time	0	1	2	3	4
I forgot to administer	0	1	2	3	4
The client refused	0	1	2	3	4
I thought the Client was too 'unwell'	0	1	2	3	4
I thought it would overload the client	0	1	2	3	4
I did not think the client could set goals	0	1	2	3	4
It was too complex	0	1	2	3	4
I did not think it would be appropriate (describe)	0	1	2	3	4
Other (describe)	0	1	2	3	4

c) Where the CGT sheet was not used, describe the factors that prevented its use with this client.

1.
2.

d) What were the difficulties that you experienced in implementing Collaborative Goal Setting with the client?

Client Factors	Case Manager Factors
1.	1.
2.	2.
3.	3.

e) What techniques, skills or approaches did you use to overcome these difficulties?

Client Factors	Case Manager Factors
1.	1.
2.	2.
3.	3.

f) What comments or suggests do you have about improving the CGT?

Collaborative Recovery Model Booster Session

Client Name: _____ Clinician Name: _____ Date: _____

Please complete this form for each client you are working with as a participant in the AIMhi Project

A. Please consider how often you worked with this client in the following ways over the past 3 months. Please circle the most appropriate answer for each item.

1. I allowed my client to guide their own recovery process

0	1	2	3	4
Not at all				All the time

2. I involved my client in decisions that affected them

0	1	2	3	4
Not at all				All the time

3. I respected my client's right not to take my advice

0	1	2	3	4
Not at all				All the time

4. I worked at my client's pace

0	1	2	3	4
Not at all				All the time

5. I helped motivate my client

0	1	2	3	4
Not at all				All the time

6. I understood my client's range of needs

0	1	2	3	4
Not at all				All the time

7. I encouraged my client to set goals that were meaningful for them

0	1	2	3	4
Not at all				All the time

8. I helped my client to set homework tasks to achieve their own goals

0	1	2	3	4
Not at all				All the time

B.

Below is a list of ways that case managers may work with consumers. Each way of working has been identified by some consumers as potentially helpful in assisting them with their recovery processes.

Please order the areas listed below from 1 to 7 in terms of how important <u>YOU</u> perceive each to be in assisting your client's recovery process (you may or may not have worked in these ways over the past 3 months). For instance for the area that you consider to be most helpful write the number 1 next to it, for the area that you consider to be the second most helpful write the number 2 next to it. Continue in this way until you have numbered every area from 1 to 7, in order of how helpful you perceive them to be.

	Number each area from 1 to 7 in order of importance
Allowing my client to guide their own recovery process	
Involving my client in decisions that affect them	
Respecting my client's right not to take my advice	
Helping motivate my client	
Understanding my clients range of needs	
Encouraging my client to set goals that are meaningful for them	
Helping my client to set homework tasks to achieve their goals	

Appendix 9

RECOVERY GOAL TAXONOMY

Frequency and Examples of the Types of Goals that Established in case-management

Goal Domain	**Frequency**	**Most important**	**Examples of goals**
Physical Health	21 (82)	23 (33)	• Take medication as prescribed • Start walking regularly • Abstain from alcohol
House and Home	14 (53)	11 (16)	• Purchase new furnishings for unit • Finish renovations • To move into my own housing
Work, Career and Employment	11 (44)	14 (20)	• Do a getting ready for work program • Be a hairdresser • Get paid employment
Psychological and Emotional Health	10 (39)	12 (17)	• Managing anxiety • Cope with depression • To cope better with my voices
Recreation, Leisure and Sport	10 (39)	9 (13)	• To go to movie world • Saving money for a new camera • Explore hobbies
Self Management	10. (39)	9 (13)	• Save money • Get into a routine day to day • Improve cooking skill
Education and Schooling	8 (29)	12 (17)	• Learning internet • Completing literacy course • Complete the course I am doing
Friendships and Social Relationships	7 (28)	7 (10)	• More involved in social activities • Have more contact with people • Make new friends
Parenting	3 (12)	3 (5)	• Have a house ready for son's b'day • Get children back, • Trying to be a good father
Personal Growth and Self Image	2 (7)	0 (0)	• To develop my creative skills • Be patient, caring and understanding • Complete GROW course or other personal development task
Family	2 (6)	3 (5)	• Making the most of my parents

Goal Domain	**Frequency**	**Most important**	**Examples of goals**
Relationships			• Continue to maintain ties with mother • Meet my half brother
Couples and Romantic Relationships	1 (3)	0 (0)	• To get a girlfriend • To maintain marital relationship • Express love to my wife
Spirituality and Religion	1 (3)	1 (1)	• Go to church weekly • Regular prayers and meditation • Gain spiritual enlightenment

Note: Frequencies are reported in percentages, number is brackets represent the actual number of case-management goals within each of the goal domains. Frequency of all goals includes all case-management goals set within the three-month period selected for each client this is between one to three goals per consumer participant. Most important goal includes the one goal that consumers rated as most important.

Appendix 10

Clarke, S. P., Crowe, T. P., Oades, L. G., Deane, F. P., & Caputi, P. (In Press*).* The Role of Symptom Distress and Goal Attainment in Assisting the Psychological Recovery in Consumers with Enduring Mental Illness. *Journal of Mental Health*.

Please see print copy for Appendix 10