Values-based interventions to facilitate self-determination and wellbeing in mental health workers following recovery training

Virginia Williams

University of Wollongong
Values-based interventions to facilitate self-determination and wellbeing in mental health workers following recovery training.

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

Doctor of Philosophy (Clinical Psychology)

from the

University of Wollongong

by

Virginia Williams

BSc (Psychology), Post Grad Dip Psyc, BPol

School of Psychology

Faculty of Social Sciences
Certification

I, Virginia Williams, declare that this thesis, submitted in partial fulfilment of the requirements of 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.

Virginia Carol Williams
Acknowledgments

This research has been supported by an Australian Research Council, partnership grant number LP09907808 in addition to cash and in-kind contributions from Industry Partners. The assistance of all involved from Neami Australia, Aftercare, SNAP Gippsland, Richmond Fellowship and Mission Australia NSW is acknowledged and was instrumental to the roll-out of this project. Foundational to this work, and most of the other valuable pursuits I have committed to in my life and career, is the desire to be part of research, practice, conversation and day to day actions that enable individuals to have full, rich and meaningful lives. Though this research focuses on the development of staff, I would like to acknowledge and thank the individuals whose experience, knowledge and generous sharing of personal journeys without which mental health recovery does not exist.

To my supervisors, in particular Professor Frank Deane “we did it!” I am grateful for the patience, wisdom, support, gentle and not-so-gentle prodding you gave me in order to make it here. Frank, you have taught me the critical importance of being a good finisher, of sticking it out when things are hard, and of going back to predictable and valuable small-steps especially when times are tough. These lessons have changed me as a person for the better and will continue to pay dividends beyond this thesis. Thanks also for teaching me about asparagus. Joseph, Lindsay and Trevor, thanks for believing in me and the valuable feedback, guidance and support learned from you throughout this project. To dearest Retta, thank you for all the “behind the scenes” you did in project coordination and publications related to those in this thesis. You were a delightful office buddy and I hope the things filling your life now are as wonderful as you are. Marie – your generous assistance and constant support has been a highlight of my PhD period.

To my boys- Mitch, Tim and Ben. Thanks for the times you went without due to my commitments over these past 5 years. You are and always will be my greatest achievement. Though you may not know it, the thought of being a mum you can look up to, one who “walks her own talk” about things like finishing what we start, believing in oneself, and making a difference has been a
source of inspiration and strength to me along the way. To my other family and loved ones (Mum, Ron, Brad, Katie, Lil, Michelle, WOne7 teamies) thank you for your inspirational comments, belief in me, trust that I can be the best version of me, and for putting up with my PhD related whingeing.

I would like to express my gratitude to the anonymous peer reviewers who made time to review and provide feedback that was instrumental to the development of this thesis (and the publications within). To Emma, for making time to review, provide comments and ask questions that needed to be asked – my heart is full of thanks that I have a colleague and friend like you.

On a final note: Dad – this one’s for you. You can tell me what you think of it when we meet again.
Publications from the Thesis

Chapter 1


Chapter 3


DOI: 10.1186/1748-5908-8-75

Chapter 4


DOI: 10.1186/s13012-015-0363-5

Chapter 5

Conference presentations:

- Williams, V., Oades, L.G., Ciarrochi, J., Deane, F.P., & Crowe, T.P (2010), Can a values focused staff development intervention increase delivery of recovery-oriented services? The Mental Health Services Conference Inc. of Australia and New Zealand, 8th Transcultural Mental Health Conference, UWS Mental Wellbeing Conference, Sydney, 14-17 September

- Williams, V., Deane, F.P., Oades, L.G., Ciarrochi, J., & Crowe, T.P. (2015) Values in the workplace – does supporting staff to connect with personal values have a dual positive effect on workplace commitment? ANZ Association for Contextual Behaviour Science Conference, Wellington, 24-28 November

This research has been registered as a clinical trial, registration ACTRN12613000353796
Abstract

Values can be described as verbal representations of desirable life states (Rokeach, 1973), that can influence moment to moment behaviour (Hayes, 2004). For individuals, values can act like a compass or set of guiding principles that shape and direct choices and actions, particularly in times of conflict or competing priorities. Organisationally, including within the mental health recovery field, the adoption of values statements as a set of guiding principles is common both at the service level and within policy (Farkas & Gagne, 2005). Though these high-level practices are aimed at shaping behaviour of individuals in organisations, research has not previously examined the specific and targeted use of interventions to promote autonomous uptake of desired behaviours by newly trained mental health workers. The motivation of individual staff is often overlooked when organisations attempt to create behavioural changes (Baldwin & Ford, 1998, Ferlie, Fitzgerald, Wood & Hawkins, 2005). The current research investigates the utility of values-based interventions as a means of fostering self-determined commitment to changed work practices. Within organisations, staff wellbeing is increasingly acknowledged as critical to effectiveness (e.g.,, Ramlall, 2013) and is highly relevant in the mental health context where employee “ill-being” is high (Maslach & Jackson, 1981; Russinova et al, 2011). Henceforth, the current research also seeks to clarify the link between autonomous motivation and increased employee wellbeing. The format of the thesis is as follows:

Chapter 1 introduces the bodies of literature underpinning this research, first providing a background to mental health recovery and the acknowledged challenges of operationalising a recovery vision into practice (Slade, 2012; Farkas & Gagne, 2005). Theory related to values and Self Determination Theory (SDT – Deci & Ryan, 1985b) is described, with a specific focus on the potential applicability of values interventions as a specific form of autonomy support, extending the current literature beyond a set of general principles.
Chapter 2 elaborates understanding of the concepts autonomy and autonomous motivation, in addition to detailing the continuum model of motivation acknowledged within SDT. Internalisation – the process through which low autonomy behaviours become more autonomously motivated according to SDT – is described with reference to the current understanding of autonomy supportive practices. Finally, the concept of values as a novel form of autonomy supportive practices to facilitate internalisation of socially determined behaviours and principles is expanded upon to aide deeper conceptual understanding of the processes being targeted in this research.

Chapter 3 outlines the full protocol of this research.

Chapter 4 details an investigation of the impact of a values-focused staff intervention as an adjunct to training in an evidence-based recovery framework (Collaborative Recovery Model - CRM Oades et al., 2005) and compares it to a more traditional method of implementation support. A total of 146 mental health workers from 5 community managed organisations delivering recovery services to individuals across 4 Australian states were randomised to either the values or implementation support condition according to their worksite. Results indicated that values clarification and commitment promoted increased autonomous commitment and plans to implement the newly trained CRM practices compared to implementation planning intervention. Additionally, a specific component of highly autonomous motivation (integrated motivation) was identified as relevant in this context where goals are socially controlled.

Chapter 5 details a longitudinal investigation comparing the impact of ongoing values versus implementation focused staff intervention on CRM related goal striving, and staff wellbeing. Contrary to hypotheses, there was no difference in successful striving towards CRM related goals or wellbeing of mental health workers across a range of measures between the experimental conditions after 6-months. In effort to extend the findings detailed in Chapter 4, this chapter examines the relationship between changes in integrated motivation (i.e., a highly relevant component of autonomous
motivation), successful striving toward the CRM principles, and mental health worker wellbeing. Results from the 116 participants who completed intervention components at 6 months indicated a significant positive correlation between increases in integrated motivation and increased successful striving toward CRM principles. Increases in integrated motivation were also significantly negatively correlated with one aspect of employee wellbeing, namely, burnout. The hypothesis that increases in integrated motivation mediates the relationship between changes in successful CRM goal striving and burnout was tested, with modest support for the unique influence of integrated motivation.

Chapter 6 outlines limitations in the coaching protocol, issues related to participant attrition and data loss, in addition to specific issues related to the measurement of key variables (e.g., self-reported rather than objectively rated goal striving). The chapter concludes with suggestions for further research.

Overall, the current research suggests purposeful targeting of values as an adjunct to traditional training may promote greater autonomous motivation within mental health workers. The motivational component “integrated motivation” seems to have particular relevance to optimising autonomous motivation in controlled contexts like the workplace. However, further research to strengthen the effectiveness and fully understand the relevance of values interventions as a method of autonomy supportive practices is required to support translation of increased planned implementation of the CRM principles into changed practice.
CHAPTER 1: INTRODUCTION

1.1 Background to Recovery and Recovery Oriented Service Provision p16
1.2 Transforming the recovery vision into practice p18
1.3 Training and its limitations as a means to staff development p19
1.4 The Role of Values in Recovery Oriented Service Provision p20
1.5 Staff, Values and Recovery Oriented Service Provision p21
1.6 Enhancing staff motivation for enhanced recovery-oriented practice p22
1.7 Fostering autonomy in a controlled context p24
1.8 Autonomy and wellbeing in organisations p25
1.9 Summary of reviewed literatures and rationale for current research p26
1.10 Chapter Summary p28
CHAPTER 2: Motivation, Autonomy Support, and Values: Current and future directions  p29

2.1 Staff motivation and behavior change  p29
2.2 Overview of Motivation in SDT  p30
2.3 Intrinsic motivation as the prototype of autonomy  p31
2.4 Extrinsic motivation as a continuum from less to more autonomous  p32
2.4.1 Degrees of internalisation: external, introjected and integrated motives  p32
2.5 Self-determination, autonomy and self-concordant goals  p32
2.6 Autonomy Supportive Practices (ASP): promoting integration and self-concordance  p33
2.7 Organisational limitations in specificity and applicability of ASPs  p34
2.8 Rationale for Values as a platform for internalization  p34
2.9 Values Defined  p35
2.10 Values in Organisations  p36
2.11 Values as an ASP to promote internalisation of work values  p37
2.12 Chapter Summary  p38

CHAPTER 3 – Protocol for Current Research  p39

3.1 Brief background and aims of current research  p39
3.2 Methods  p40
3.2.1 Study design and procedure
3.2.2 Participants
3.2.3 Values condition
3.2.4 Implementation condition
3.2.5 Data collection and handling
3.2.6 Measures

3.2.6.1 CRM Values Questionnaire (CRM-VQ)

3.2.6.2 Wellbeing

3.3 Data analysis

3.4 Discussion

3.4.1 Anticipated challenges

3.4.2 Chapter Summary

CHAPTER 4 – Fostering Autonomy for recovery values in mental health workers: A cluster-randomised investigation

4.1 Aims and hypotheses

4.2 Method (summarised)

4.2.1 Participants and Procedures

4.2.2 Measures

4.3 Results

4.4 Discussion

4.4.1 Limitations and future directions

4.4.2 Chapter summary

CHAPTER 5 – A quasi-experimental investigation of the impact of a six-month values-based staff intervention on autonomous goal striving and wellbeing of mental health recovery workers

5.1 Summary of literature related to goal self-concordance and wellbeing

5.2 Aims and hypotheses
5.3 Method (summarised)  
5.3.1 Participants and Procedures  
5.3.2 Measures  

5.4 Results  

5.5 Discussion  
5.5.1 Limitations and future directions  
5.5.2 Chapter summary  

CHAPTER 6 - Conclusion  

6.1 Summary of findings  
6.2 Contribution to the literature  
6.3 Contribution to application of SDT in controlled contexts  
6.4 Limitations and areas for further research  

REFERENCES  

APPENDICES  

Appendix 1: CRM Training and Tools  
Appendix 2: Intervention Measures  
Appendix 3: Values Protocol (day 3)  
Appendix 4: Implementation Protocol (day 3)  
Appendix 5: Coaching Protocol  
Appendix 6: Williams et al., (2016a)  
Appendix 7: Williams et al., (2013)  
Appendix 8: Williams et al., (2016b)
List of Figures and Tables

Figures

Figure 1: Process of internalisation and resultant shift in autonomous motivation and employee wellbeing following values intervention. p40

Figure 2: Hypothesised mediational effect of M (autonomous motivation) on relationship between (successful striving) and Y (wellbeing) p53

Figure 3: Consort Flow diagram of participant progress through intervention p59

Figure 4: Time x Condition interaction effect on integrated motivation p63

Figure 5: Time x Condition interaction effect on plans to implement CRM p64

Figure 6: Mediating effect of change in integrated motivation on relationship between change in successful goal striving (CRM) and change in mental health worker burnout p87

Tables

Table 1: Means and standard error (pre and post) for intervention completers by condition p65

Table 2: Correlations between motivation type and plans to implement pre training and pre-post changes p66

Table 3: Motivation types predicting plans to implement at time 2 (n = 130) p67

Table 4: Correlations between changes in major variables (pre training to 6 months) p84

Table 5: Means and Standard Errors (in parentheses) for Values and Implementation condition at T1, T2 and T3 for key variables p85
**List of Abbreviations**

**ASP / ASPs** – Autonomy Supportive Practice(s)

**CRM** – Collaborative Recovery Model

**CRMTP** – Collaborative Recovery Model Training Program

**SDT** – Self Determination Theory

**List of Appendices**

- Appendix 1: CRM Training and Tools
- Appendix 2 – Intervention Measures
- Appendix 3 – Values Protocol (Day 3)
- Appendix 4 – Implementation Protocol (Day 3)
- Appendix 5 – Coaching Protocol
- Appendix 6 – Williams et al., (2016) “Enhancing recovery orientation within mental health services: expanding the utility of values”.
- Appendix 8 – Williams et al., (2016) “A cluster-randomised controlled trial of values-based training to promote autonomously held recovery values in mental health workers”
CHAPTER 1: INTRODUCTION

The aim of this Chapter is to position the current research within the underpinning literatures of mental health recovery and challenges to its operationalisation, the limitations of training as a method of staff development, values, and employee motivation according to Self-Determination Theory.

The content of Chapter 1 has been extracted and elaborated from the published journal article: “Williams, V., Deane, F.P., Oades, L.G., Crowe, T. P., Ciarrochi, J., Andresen, R. (2016). Enhancing recovery orientation within mental health services: expanding the utility of values. Journal of Mental Health, Training, Education and Practice, 11(1), 23-32.

A copy of the PDF version of this article is located in Appendix 6.

1.1 Background to Recovery and Recovery Oriented Service Provision

“Recovery” is the journey of an individual with mental illness that reflects a life of purpose and meaning (Farkas & Anthony, 2010). As a movement, recovery grew out of consumer dissatisfaction with a psychiatric system that appeared to not hear the consumers’ voice, and at worst, was dehumanising in the use of restrictive treatments (Anthony, 2000; Trivedi, 2010). Three decades on, the possibility of recovery beyond the devastating effects of mental illness is now well accepted and in many countries formally acknowledged as an expectation and right within government policy and service guidelines (e.g., American Psychiatric Association and American Association of Community Psychiatrists, 2011; SAMSHA, 2011).

While recovery is the lived experience of an individual, it does not occur in a vacuum. Though some advocate that recovery should reflect only the consumers’ voice, mental health services are generally acknowledged to be an important component of the system of recovery, alongside the
individuals’ families, other personal support systems, their chosen community, culture and broader society.

Mental health services can impact negatively or positively on recovery. Organisations may believe in, and even intend to live-out the recovery vision, but it is another matter to actually offer services and programs that are recovery enhancing. The implementation of recovery-oriented practices at the service-delivery level has proved to be an enduring challenge (Jacobson & Greenley, 2001; Glover, 2005; Uppal, Oades, Crowe, Deane et al., 2010; Oh, Noordsy & Roberts, 2013).

One of the key factors identified as a potential barrier to the implementation of recovery-oriented service provision relates to ongoing difficulty identifying exactly how to best determine whether an organisation is delivering recovery-oriented service (Farkas & Anthony, 2010). Clarifying the principles that are considered to be “key ingredients” of recovery oriented service provision has received rightful attention from various stakeholders. Key to this pursuit is consensus building and explication of models of care based in the growing evidence base surrounding recovery. Foundational to this process is the establishment of benchmarks and perhaps “bottom lines” of what recovery oriented service provision is, and is not (Spaniol, 2008). The Substance Abuse and Mental Health Services Administration in the USA identified ten key principles of recovery-oriented service. These were; self-direction, individualised and person-centred, empowerment, holistic, non-linear, peer support, strengths-based, respect, responsibility, and hope (SAMHSA, 2005). Other research generated at the service-delivery level (e.g., Spaniol, 2008; Oh et al., 2013) has revealed related principles and concepts centred around involvement, choice, flexibility, sharing of information, education and support, and open dialogue, as central to practitioner provision of recovery consistent support.

While identification and clarification of core principles and key ingredients is undoubtedly helpful in translating the recovery vision, consensus building is a process that is by nature reductionist, involving the removal of variability. There is a real risk the essence of personal narratives and
individual needs at the heart of recovery become taken over and even lost in this process (Trivedi, 2010). Deegan (1996) emphasises the deeply human nature of recovery as an attitude or approach to living that involves dignity of hope, inevitable and growth-full risk, where through accessible choice, meaning and capacity are grown by an individual who is active, connected and involved. This perspective gives prominence to holism and individuality in recovery. Mental health policy makers and service providers attempt to balance tension between the need to qualify, quantify and structure translatable core principles of recovery, while at the same time honouring the principle of recovery as a variable, self-generated individual journey.

1.2 Transforming the recovery vision into practice

Over the past ten to fifteen years, there has been attention and progress in operationalising a “recovery vision” (Jacobson and Greenley, 2001; O’Connell, Tondora, Croog, Evans et al 2005; Glover, 2005; McGregor, Repper and Brown, 2014). This progress has been made in terms of policy, system and service guidelines, and models of care that explicate and guide what operationalised recovery should entail. While lack of clarity and consensus continues, a recent comprehensive qualitative analysis by key recovery researchers identified 30 international documents spanning Europe, US, and Australasia with common themes and practice domains aimed at operationalising recovery (Le Boutillier, Leamy, Bird, Davidson et al., 2011).

The Collaborative Recovery Model (CRM) is one example of a conceptual framework that draws together key principles of recovery as defined by the consumer voice and combines these principles with evidence-based practices that enable the translation of these into routine practice (Oades, Crowe, & Nguyen, 2009; Oades et al., 2005). The CRM has been applied within a number of government and community-managed mental health services as a framework for delivering recovery-oriented support in Australia and Canada (Crowe, Deane, Oades, Caputi et al., 2006; Oades, Crowe &
Nguyen, 2009; Jambrak, Deane, & Williams, 2014). Development of frameworks such as the CRM represent advances in this operationalisation process, however, translation into practice requires formal communication and uptake of the recovery-based model within services working with individuals. Interventions such as staff training and education are relevant to this pursuit.

1.3 Training and its limitations as a means to staff development

Training continues to be a prime method of staff development when knowledge and skill enhancement is required within the workplace (Noe, 1986; Burke & Baldwin, 1999; Burke & Hutchins, 2007). This is despite consistently disappointing results related to transfer and maintenance of newly trained knowledge and skills (Burke & Hutchins, 2007; Blume, Ford, Baldwin & Huang, 2010). In the recovery field, a follow-up study investigating transfer of CRM in Australia showed about 37% of staff demonstrated evidence of changed practice soon after training as determined from work samples (Uppal et al. 2010). This rate of transfer is similar to findings in other transfer of training research (e.g., Noe, 1986; Burke & Baldwin, 1999; Burke & Hutchins, 2007). Rates of sustained uptake of new knowledge and skills are consistently reported to be as low as 12% one year after training (e.g., Burke & Baldwin, 1999; Burke & Hutchins, 2007; Salas & Cannon-Bowers, 2001) indicating training on its own has limited merit as a means to changing workplace practice.

Extensive research related to training transfer identifies a range of barriers to uptake and maintenance of new knowledge and skills, including organisational climate factors, (Burke & Baldwin, 1999), unsupportive attitudes within the organisation (Baldwin and Ford, 1988), poor alignment of new skills and approaches with existing workplace practices (Uppal et al., 2010), and employee factors including motivation, skills and competence (Burke & Hutchins, 2007; Mathieu, Tannenbaum & Salas, 1992). A number of these factors can result in a lack of certainty about the organisational commitment for the newly trained practice. Initiatives may be thwarted or undermined by a perceived
lack of commitment and support (Burke & Hutchins, 2007). It is therefore important to create ways of demonstrating that key values driving the change are important to the organisation. One way organisations achieve this is by establishing a set of service-values.

1.4 The Role of Values in Recovery Oriented Service Provision

The “valuing” of key recovery principles can be seen in the actions of governments that mandate the adoption of a recovery orientation at the public-policy level (Slade, 2010). For example, the federal government of Australia has identified the first of its five priority areas to be “Social Inclusion and Recovery”, and has stipulated that mental health providers develop cultures that are founded on and reflective of a recovery orientation (Australian Health Ministers, 2009). Indeed, governments across much of the English speaking world have impressed upon service providers the need to operate in recovery enhancing ways. This has been reinforced by linking provision of funding for community-based organisations to this objective, and by mandating a recovery focus within publically funded health sites in many countries (Slade, Amering & Oades, 2008; Le Boutillier et al., 2011). The recovery values espoused at this public policy level are derived from and informed by the jointly determined consumer and evidence-based principles cited previously (SAMHSA, Australian Health Ministers, 2009). These high level strategies are important as they demonstrate overarching support of the recovery vision, and go some way to creating an opportunity and imperative for systems of mental health that incorporate key recovery principles and values.

While there is obvious merit in these high-level practices, there are significant limitations in the capacity of strategic initiatives to shape ground-level uptake of desired workplace practice. When values are espoused at the organisational level, or perhaps even more broadly at the policy-level, the
risk is that these become distant, generic statements that are “imposed” on services and their staff. These values statements are unlikely to be experienced as meaningful in terms of translating the “recovery vision” into practice.

Key recovery proponents further argue the point that it is not enough to simply espouse recovery values (e.g., Farkas, Gagne, Anthony & Chamberlain, 2005). Implementation of recovery-oriented service requires both explication of organisational values and beliefs that mirror core recovery principles, and the embodiment of these at all levels of operation. The notion of embodiment of recovery principles necessitates organisations to, “walk the talk” in not only the kinds of services offered to individuals, but also the way services are established, run and developed (McGregor, Repper & Brown, 2014). Values are necessarily linked to visions and directions, and they are also inherent in the day-to-day operations of services according to values-based practice. Importantly, in their depiction of values-based practice, Farkas and her colleagues acknowledge the distinct role of staff in the challenge of implementing recovery-oriented practices (Farkas et al., 2005; Ramon, 2011; Glover, 2005).

1.5 Staff, Values and Recovery Oriented Service Provision

The importance of individual relationships between mental health service users and the employed personnel supporting their journey has also been highlighted. Trivedi (2010) notes the core role of staff as the enactors of recovery-consistent practice from a service-user’s perspective. While high-level adherence to frameworks of service and espousal of recovery-consistent values set an organisational imperative, it is staff members at the coalface of service delivery who are arguably the ultimate gatekeepers of how recovery principles are operationalised. Although services, organisations and governments are definable entities in an operational and legal sense, they are derived from the interactions and relationships of the people within them (Stacy, 2005).
Individuals in recovery have identified the quality of their interactions to be the most crucial factor in supporting their recovery journeys (Deegan, 1990; Kramer & Gagne, 1995). Service user consultation following staff training in the CRM identified the central importance of individual interactions and relationships. Service users who were working with staff trained in the CRM rated relationship qualities such as encouragement to take responsibility, collaboration, and assistance in completing personal goals more highly than service users whose recovery worker had not attended training (Marshall, Crowe, Oades, Deane & Kavanagh, 2007). Interestingly, the managers of these same staff failed to report evidence of changed recovery-oriented practice following training (Marshall et al., 2007). These findings indicate that relational changes may be evident to service users even prior to detectable changes in practice. With staff members being so central to recovery operationalisation, the issue of mental health worker motivation for transfer of newly trained knowledge, skills and practices emerge as a critical factor in overcoming implementation challenges.

1.6 Enhancing staff motivation for enhanced recovery-oriented practice

Cross-disciplinary research related to transfer and uptake of newly trained practices acknowledges employee factors such as staff motivation and buy-in to the change are often overlooked (e.g., Locke, 1986; Noe, 1986). When attempting to bring about increased recovery-orientation in a workplace, in essence services are inviting individual staff into a process of behaviour change. Motivation emerges as an important factor in determining whether an individual will or will not enact the desired change. There is an extensive body of research related to the role of “autonomy” - the extent to which a behavior is experienced as self-determined, or internally caused - as a human need and driver of purposeful behavior (Deci, Eghrari, Patrick, & Leone, 1994; Ryan & Deci, 2002; Ryan & Connell, 1989; Deci & Ryan, 1985b). Within Self-Determination Theory (SDT; Deci & Ryan, 1985b; Ryan & Deci, 2000), it is well established that people are both more highly motivated, and more
successful in their strivings, when they feel autonomously motivated toward them (Sheldon & Elliot, 1998, 1999; Deci, Koestner & Ryan, 2000; Sheldon & Houser-Marko, 2001; Koestner, Otis, Powers, Pelletier et al., 2008). According to SDT, behaviour experienced by the individual as personally meaningful and self-determined is integrated with the individual’s values and sense of self.

Autonomous motivation, therefore, is the form of behavioural regulation that underpins an act that allows an individual to realise their actual self (Deci & Ryan, 1985). Autonomously motivated acts are more likely to be experienced as valued and self-chosen, resulting in greater purposeful and sustained action (Deci & Ryan, 1999).

Conversely, extensive SDT research indicates external regulators (such as managerial action, pressure and negative evaluation or judgment) can have an adverse impact on an individual’s motivation for change and purposeful action, particularly in the longer term (Sheldon & Elliott, 1999, Sheldon & Houser-Marko, 2001, Koestner et al., 2011). Behaviour that is externally driven is not integrated fully with the individual’s sense of values, and is experienced as controlled and imposed. In a meta-analysis of eleven studies investigating the impact of motivation on progress toward specified goals, Koestner and colleagues (2008) found that only autonomous motivation had an overall effect on goal progress, and that attempts to change the controlled motivators had little effect on outcome or purposeful striving. Even so-called positive external motivators for behaviour, such as rewards and bonuses, have shown mixed and sometimes counter-beneficial impacts, particularly in socially restricted contexts, such as the workplace (Joussemet, Koestner, Lekes &Houfort, 2004; Koestner et al., 2011; Reeve, 1998). Motivation for behaviour is understood along a continuum of causality within SDT, rather than an exact all-or-nothing concept (Ryan & Deci, 2006). This important conceptual point of difference makes SDT highly a highly relevant framework for the current study as it has been in previous applied research where motivation and behaviour of socially-connected groups is of interest (e.g., schools, families, sports teams, clinics) (Ryan & Deci, 2006).
Findings of previous research have considerable relevance to the current challenge of promoting recovery-oriented practices within mental health services. In order to increase the likelihood of individual staff members choosing to behave in recovery-enhancing ways in their interactions with individuals, the extent to which they experience the specific work practice as autonomous is likely to be important. In other words, SDT suggests that increased adherence to core recovery principles will occur when staff experience the desired work practice to be integrated with their sense of values, and “what matters” to them as a person.

1.7 Fostering autonomy in a controlled context

There is considerable research highlighting the importance of autonomous motivation but, it has focused primarily on the strivings of individuals in their personal life, where the desired behavioural change is not mandated as it might be as part of their job requirements (Gagne & Deci, 2005). A paradox emerges as we consider goal striving toward desired behaviours within a workplace setting, where specific goals are important but not necessarily “self-determined” by staff. According to SDT, recovery-consistent values that are experienced as more self-determined and autonomous are more likely to be put into practice. The question and challenge that emerges is, how do employers of mental health workers enable staff to experience key recovery principles as “personally meaningful” or integrated with their own sense of authentic self when the change has been externally imposed? Additionally, individual staff may feel connected and committed to the principles and practices within the recovery-training program, but perceive a clash with the dominant beliefs and priorities within the organisation (Uppal et al., 2010). The purposeful support of staff autonomy for change complements and extends considerable previous research highlighting the importance of beliefs and attitudes of staff in promoting recovery-oriented service delivery (O’Connell et al., 2005; Crowe et al., 2006).
Purposeful focus on values as a way of increasing autonomy and buy-in of mental health recovery workers appears particularly relevant as previous research related to job selection has indicated those in helping professions tend to be drawn to the work for values-based reasons (e.g., Thorpe & Loo, 2003; Lyons, Duxbury & Higgins, 2006). Specifically, altruism, benevolence and a call to support others have been highlighted as key within helping professions (Thorpe & Loo, 2003). These values also appear to align with the core principles identified as underpinnings of recovery (McGregor, Repper & Brown, 2014; Le Boutillier et al. 2011; Ramon, 2011).

There is also evidence to suggest that individuals in helping professions can lose sight of these core values over time (Floyd-Taylor & Bentley, 2008), and experience stress, distress and burnout from the demands of supporting others in need (Russinova, Rogers, Langer Ellison & Lyass; 2011). In addition to the risks and costs for individual staff, these cumulative demands may result in decreased ability for mental health workers to adopt hopeful and empowering approaches with clients that are acknowledged as central to recovery (Russinova et al., 2011). Key relationship competencies and attributes identified as critical by service users as outlined above would also seem to depend largely on staff being hopeful, enthusiastic and connected to their work (Russinova et al., 2011).

1.8 Autonomy and wellbeing in organisations

A direct link between the wellbeing of individuals and organisational effectiveness is commonly being cited in research (Faragher, Cass & Cooper, 2003; Robertson, Birch & Cooper, 2012). In addition to hopefulness and connection to work as identified by Russinova and colleagues (2011), factors including job retention and work performance have also been associated with levels of employee wellbeing (Harter et al., 2000; Warr, 1999). A study conducted by Sears and colleagues involving more than 11000 employees found wellbeing significantly predicted all measured organisational outcomes (intention to leave, job performance, presenteeism) up to one year later (Sears, Shi, Coberley, & Pope, 2013). Unsurprisingly, investigations to understand the contextual factors positively
influencing employee wellbeing are of increasing concern (Faragher, Cass & Cooper, 2003). The level of autonomy support within organisations has been identified as important in the correlation between higher levels of employee wellbeing and performance. (e.g., Baard, Deci & Ryan, 2004; Slemp, Kern & Vella-Brodrick, 2015). These investigations have focused on fostering autonomy-supportive contexts around employees through enhancement to work design, procedures and management style. Further research that explores the impact of autonomy-supportive interventions for front-line staff has received little attention, particularly in the context of mental health service provision.

1.9 Summary of reviewed literatures and rationale for current research

In addition to training in an evidence-based, consumer-informed model of recovery-oriented practice, providing a brief, structured opportunity for mental health workers to identify, connect and possibly re-align with personally held values is proposed as a means of fostering autonomous motivation for change. Previous research related to SDT indicates that autonomous motivation is predictive of increased implementation planning, purposeful striving and personal wellbeing (e.g., Koestner et al., 2011; Sheldon & Elliott, 1999). Extensive related research indicates individuals who are striving toward self-concordant goals are both more successful in striving and persisting in the face of adversity, and have higher levels of wellbeing than those striving towards the same end-point without the sense of personal connection. The wellbeing of staff is commonly cited as a key employee variable impacting organisational effectiveness broadly (De Cooman, Stynen, van den Broeck, Sels et al., 2013) and potentially influences the likelihood and extent to which new practices are successfully learned and implemented (Judge & Bono, 2004). Attending to employee wellbeing via promotion of staff autonomy and self-determination for the desired practice model is likely to having a compounding positive impact on successful implementation of new practices.
Values play a critical role in determining an imperative for recovery-oriented service provision at a strategic level, assisting systems, organisations and services in determining what recovery is, and is not (Farkas et al., 2005). In this sense, values that are often at the core of consensus-based recovery statements and guidelines become anchors, upon which frameworks and models of practice that seek to operationalise recovery have been built (Le Boutillier et al., 2011; Slade et al., 2008, Oades et al., 2005). The CRM is one such framework (Oades et al., 2005). These top-down interventions are an important part of the current approach to enhancing recovery-oriented service delivery, though may have limited utility in directly influencing the iterative interactions of frontline recovery staff, whose day-to-day relational experiences are commonly endorsed as the most critical element of the recovery journey by service-users (Deegan, 1995; Kramer & Gagne, 1995, McGregor, Repper & Brown, 2014). Here, SDT has been identified as a theory of motivation that highlights the importance of staff autonomy for a change in recovery-oriented practice, emphasising that autonomy is experienced by individuals when their actions feel connected to personally held values (Deci et al., 1999; Koestner et al., 2008).

The following are a list of proposed ways that values-focused interventions may impact positively on mental health worker autonomous motivation for the CRM principles and practices:

1. Increased sense of autonomy for the otherwise imposed change resulting in increased motivation to implement within individual staff flowing on to increased uptake of recovery oriented service delivery.

2. Connection and re-alignment of a “new” work practice with personally held values for recovery work, in addition to formalised opportunity to commit to and live-out personally rewarding recovery-consistent values in work
3. Increased acknowledgment of the centrality of individual relationships as the arena for recovery operationalisation, and purposeful shift of power from valuing at an organisational level to values-enactment by individual staff in day-to-day interactions with service users.

4. Mental health recovery workers gain personal experience of working with values and having their own individual experiences and needs acknowledged and worked with in this process. This provides an opportunity for experiential learning through a parallel process (as articulated by Crowe et al., 2011*) that staff are being encouraged to undertake with service users.

*The potential of experiential learning and use of parallel processes as a means to enhance recovery-oriented service delivery (outlined in 4 above) has not been detailed thus far. Though outside the scope of this thesis, the broader research project investigated the potential utility of parallel processes as a method of mental health recovery worker development (reviewed in Crowe et al., 2011).

1.10 Chapter Summary

Concepts inherent within the diverse literatures relating to mental health recovery, staff implementation of training, motivation, self-determination theory and values demonstrate the synergies between these constructs and theory that suggest the potential for values based interventions to increase autonomous motivation, uptake of new skills and wellbeing. While contextual factors in organisations such as culture and structure are acknowledged as highly relevant, the overall aim of the proposed research is to provide an empirical test of these relationships at the service user-worker interactional level. Chapter 1 attempts to explicate the conceptual relevance and rationale for the current research. Chapter 2 elaborates on a key process within SDT referred to as “internalisation” which is thought to be the process enacted when increases in self-determination striving and autonomous motivation are achieved in controlled contexts such as the workplace (Ryan & Deci, 2000; Ryan & Grolnick, 1989).
CHAPTER 2 – Motivation, Autonomy Support and Values: Current State and Future Directions

The aim of this chapter is to elaborate on the motivational continuum proposed by SDT, clarifying the proposed links between the values-based approach central to the current research and the process of internalisation that underpins autonomy supportive practices that were overviewed in Chapter 1.

2.1 Staff motivation and behavior change

Research indicates having knowledge that something is ‘best practice’ is not adequately persuasive in directly influencing or changing the behaviour of individuals (Rycroft-Malone, Seers, Titchen, Harvey et al., 2004; M Cormack, Kitson, Harvey, Rycroft-Malone et al., 2002; Prochaska & DiClemente, 1982). Within health systems, recent enhancements to models of change acknowledge the key role of the staff among the numerous contextual and innovation-specific factors (Rycroft-Malone et al, 2002; Ferlie, Fitzgerald, Wood & Hawkins, 2005). Practitioners and managers are not passively persuaded by new practices even when the evidence to support them is sound. Instead, decisions made by managers and practitioners are based on a number of individual factors such as personal experience, clinical judgment, inference, intuition, and advice (Anthony, 2000). People do not implement because of a rational consideration of the evidence alone. Motivation emerges as a key factor (Baldwin & Ford, 1998).

2.2 Overview of Motivation in SDT

Motivation for change is not an ‘all or nothing’ attribute. Instead, motivation can be understood in terms of the degree to which the volition to act is self-determined (arising from within, not distinct from self) or externally driven (Ryan & Deci, 2002). According to Self-Determination Theory (SDT; Deci & Ryan, 1985b; Ryan & Deci, 2002) self-determined action is experienced as autonomously motivated, while externally regulated acts are experienced by the individual as controlled. Within SDT, “autonomy” is described as a basic human need and something innately pursued by individuals.
As previously defined, autonomy is the extent to which a behavior is experienced as self-determined, or internally caused (Deci, Eghrari, Patrick, Leone, 1994; Ryan & Deci, 2002; Ryan & Connell, 1989; Deci & Ryan, 1985). As a theory of motivation, SDT is particularly relevant to the current research as it acknowledges human needs and motivations as forces for both individuation (i.e., being unique and different to others) and interconnection (i.e., belonging and having a sense of connection to others) (Ryan, 1995). Workplaces are an example of a social context where both individuation and interconnection are likely to be important for effectiveness.

2.3 Intrinsic motivation as the prototype of autonomy

Intrinsically motivated behaviors are those done because they are inherently satisfying. In other words, the act itself brings pleasure or enjoyment in and of itself. Intrinsically motivated behaviors are therefore thought to reflect a relatively conflict-free expression of self (Deci & Ryan, 1985), and tend to be by the individual as internally caused (self-determined) (Ryan, Deci & Grolnick, 1994; Deci & Ryan, 2002). Intrinsically motivated behaviors are thought to represent the prototype of autonomous motivation (Ryan, 1995) and will tend to be exhibited by individuals irrespective of social or other contextual needs.

2.4 Extrinsic motivation as a continuum from less to more autonomous

Many human behaviors lead to the fulfilment of needs (described within SDT as “relatedness” and “mastery”) but are not done because they are inherently enjoyable, nor are they self-generated (Ryan, 1995; Deci & Ryan, 2002). An example of this are attempts by parents, teachers and other adults to develop a range of positive social behaviors in children (e.g., saying please and thank you, waiting in a line) as well as behaviours at school (e.g., staying in one’s seat, completing writing tasks) and home (e.g., sharing a favourite toy with a sibling, putting shoes in the cupboard). These behaviours are regulated by what is described as extrinsic motivation. The sense of autonomy for these behaviours is likely to be low and they are also unlikely to be enjoyable. However, there are obvious merits to the child who is able to exhibit these behaviours.
The challenge from a SDT perspective is to reduce the extent to which social behaviours are experienced as imposed and controlled by extrinsic (external and non-inherent) motivation by promoting the degree to which the desired behaviours fit with the individual’s sense of authentic self (Deci et al., 1994; Ryan, 1995, Deci & Ryan, 2002). Within SDT, extrinsic motivations can be classified by the degree to which they are autonomously motivating, based on this alignment with authentic self. The explication of extrinsic motivation as a continuous variable differentiates SDT from earlier motivational theories that represent extrinsic and intrinsic motivation as a dichotomy (e.g., de Charms, 1968; cited in Ryan & Deci, 2002).

2.4.1 Degrees of internalisation: External, introjected and integrated motives

SDT describes four forms of extrinsic motivation that vary in a continuum from more controlled (less autonomous) to less controlled (more autonomous) that reflects the relative degree to which the non-intrinsically motivated action has been internalised. Internalisation is the process of taking in and owning a behavior as consistent with one’s beliefs and values. (Deci et al., 1994). Internalisation has been described extensively within psychological and motivational literature (e.g., Bandura, 1996). Within SDT, internalisation is the process through which an extrinsic regulation can be made more autonomously motivating. Extrinsic motivation components exist on a continuum that reflect increased levels of internalisation with self, higher levels of experienced autonomy, and greater sense of perceived self-caused action (Ryan, 1995). The specific extrinsic motivations (from less to more internalised) are as follows:

External regulation is the least autonomous form of extrinsic motivation as regulation for behavior arises directly from external controls, such as rewards or punishment.

Introjected regulation is a partially internalised form of extrinsic motivation with reduced reliance on external punishment or reward, but where the internal volition to act has a similar control
or pressure-oriented regulation. For example, behaviours that are undertaken to avoid feeling a sense of shame or guilt.

Integrated regulation represents the optimal level of autonomous extrinsic motivation, and is the result of imposed regulations being brought into congruence with personally held values, beliefs and goals of the individual (Ryan & Deci, 2002; Deci & Ryan, 1985b, 2000). Integrated motivation underpins behaviours that are enacted with a sense of concordance with authentic self, and which tend to be experienced as self-chosen.

2.5 Self-determination, autonomy and self-concordant goals

Goals are one way individuals direct and organise action. A goal can be defined as the consciously determined aim of an action or task that a person desires to achieve or obtain (Locke & Latham, 2002; Locke & Latham, 2006). Goal setting is therefore a conscious process of defining specific levels or milestones of performance towards which individual actions are set (Locke & Latham, 2002; 2006). Goals can be set by an individual or by the group to which that individual belongs. SDT has provided the foundation for a body of applied research that seeks to understand the relationship of successful goal striving to the kinds of motivations behind goals made by individuals [e.g., Koestner, Otis, Power et al., 2008; Joussemet, Koestner, Lekes, Houlfort et al., 2004]. This SDT research has identified goals high in autonomous motivation lead to increased goal striving, perseverance and success (Elliott & Sheldon, 1998; Sheldon & Elliott, 1999; Sheldon & Houser-Marko, 2001). Goals high in autonomous motivation are described as self-concordant goals as they concord with the individual’s sense of authentic self.

Measurement of goal self-concordance was first developed by Ryan and Connell (1989), and has been used extensively in subsequent research concerned with understanding the importance of motivation types in goal setting, striving and attainment (e.g., Sheldon & Kasser, 1998; Elliott & Sheldon, 1999; Sheldon & Houser-Marko, 2001). Self-concordance measures directly tap the extent to which individuals are acting in purposeful ways for extrinsic and intrinsic reasons aligned with the types of
motivations outlined within the SDT continuum above. Therefore, highly self-concordant goals are highly autonomous and are likely to be experienced as self-determined. Non self-concordant goals are low in autonomous motivation, and are experienced by the individual as being pursued for external and controlled reasons. In addition to greater goal-success, striving toward self-concordant goals has been consistently associated with higher levels of wellbeing in research (e.g., Sheldon & Elliott, 1999; Sheldon & Kasser, 1998; Sheldon & Houser-Marko, 2001).

2.6 Autonomy Supportive Practices: promoting integration and self-concordance

Autonomy Supportive Practices (ASP/ASPs) refer to the kinds of practices undertaken within a controlled group context (e.g., school, workplaces, social collectives) to foster autonomous motivation of socially desirable but non-pleasurable actions and behaviors (Koestner et al., 2002; Reeve, 1999; Joussemet et al., 2004). The demonstration of newly trained, evidence-based work practices, central to the current research, parallels instances in which autonomy support has been utilised previously (e.g., Ryan, Bernieri & Holt, 1984; Grolnick & Ryan, 1989). The focus of ASP is to maximise the extent to which a desired behavior is experienced as self-determined, and reduce the extent to which it is experienced as controlled. Research related to ASPs highlight three specific principles central to these practices; a) providing a meaningful rationale for the behavior/goal, b) acknowledging the feelings and views of the individual; and c) conveying choice or alternatives in options by reducing the use of controlling language (Deci et al., 1994; Ryan, 1995; Ryan & Deci, 2002). To this end, ASPs attempt to bring about conditions that foster internalisation of the otherwise externally generated (extrinsically motivated) behavior, task or action.

Autonomy support has been found to be effective in promoting internalisation of socially desirable but non-interesting tasks, resulting in increased sense of self-chosen uptake of the behavior in a number of studies and higher levels of persistence in the face of adversity (e.g., Boggiano, Flink, Shields, Seelback et al., 1993; Koestner et al., 2008). Furthermore, research involving training medical students showed greater internalisation to predict deeper conceptual understanding of course material.
for those in an autonomy supportive environment compared to those who were not education need for the behavior (Grolnick & Ryan, 1989).

2.7 Organisational limitations in specificity and applicability of ASPs

Currently, ASPs are not reproducible, nor standardised beyond providing a set of principles outlining the conditions most suitable for the promotion of internalisation (Stone, Deci & Ryan, 2009). Research related to ASPs has been primarily conducted in educational contexts with very limited exploration within other organisations (Gagne & Deci, 2005). The need for empirically based and specific methods for promoting self-determination within workplace contexts has been emphasised as an imperative for further research (Gagne & Deci, 2005, Judge & Bono, 2004).

2.8 Rationale for Values as a platform for internalisation

One approach to elaborating on ASPs beyond the three principles outlined above would be to develop a more specific and targeted approach to fostering internalisation. As detailed above, internalisation involves the movement from a non-self-determined action to a motivation that is experienced as integrated with one’s authentic self, which for the individual includes their deeply held values and beliefs (Deci & Ryan, 2002; Grolnick & Ryan, 1985). Foundational to the success of ASPs seems to be the minimisation of control and pressure in favour of opportunity for the individual to understand and express their experiences (Ryan & Deci, 2000). Acknowledgment of the impact of the desired imposed behavior including any conflicts in needs and wants has been indicated as central to the facilitation process enabled by ASPs (Deci et al., 1994). A more direct approach to autonomy support may involve facilitation of direct clarification and connection to the individual’s values, hypothesised to be more stable, foundational organising mechanisms in comparison to feelings and beliefs (Hayes, 2004; Hayes, Gifford & Hayes, 1998). Internalisation as understood within SDT involves reduction in the discrepancy between an individual’s authentic self and their experience of an imposed behavioural regulation (Deci & Ryan, 1985). Directly attending to this discrepancy by
allowing consideration and clarification of values would seem to offer a targeted opportunity for internalisation. In order to further explore this possibility, the construct of values will now be defined.

2.9 Values Defined

Values can be defined as verbal representations of desirable life consequences or ways of behaving that are enduring and pervasive across situations and contexts (Rokeach, 1973). Values are widely viewed as important predictors and drivers of behavior (Williams, 1979; Roe & Ester, 1999), and can be enacted in moment-to-moment experience (Hayes, 2004). A more lay definition is that values are lasting beliefs or ideals that an individual believes are important and often provide them with direction and meaning in life. In this respect a compass is sometimes used as a metaphor with values being akin to points on the compass. Within this metaphor values are distinguished from goals in that points on a compass, such as “North” can never be obtained or reached. These points provide direction for continued pursuit. Values also provide direction and are aspirational. In contrast, goals can be reached or completed.

There is considerable cross-cultural research that indicates universality in the domains (or themes) that values can be classified within (Bardi & Schwartz, 2003; Schwartz & Boehnke, 2003; Schwartz & Bardi, 2001). The extensive research by Schwartz and colleagues has resulted in a model that identifies 10 universal values domains, as follows; universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, stimulation, self-direction (Schwartz & Boehnke, 2003). While the kinds of things individuals value share universality at the domain level, there is considerable variability in the relative priority of values domains and the expression of values individually and across groups (e.g., communities, collectives). For example, the value “benevolence” may be prioritised most highly by an individual, and expressed as “giving up my shirt” for someone else in need. Another person in this situation may value “tradition” most highly and express this as “paying respect to an elder by not making a comment that could be disrespectful or rude”. Individuals
can experience competition between their values and make moment to moment compromises and prioritisations (Sagiv & Schwartz, 2000), further confounding the issue of whether or not a desired behavior is or is not expressed.

2.10 Values in Organisations

As outlined in Chapter 1, values are common in the organisational context in the form of values statements and within policy and strategic directions (Le Boutillier et al., 2011). Through these processes, organisations attempt to set an imperative for specific principles and qualities, though it has been noted that high-level practices such as these have limited direct impact on motivation and behavior of staff (Trivedi, 2010; Slade, 2010). While the work-related goals or desired practices necessitated by a change initiative may be made explicit to staff, clarification of the values-base in which such goals are embedded is often overlooked in implementation efforts.

There is some evidence to suggest that people engaged in mental health and other helping professions are drawn to this work for values-based reasons (De Cooman, Geiter et al., 2008; Thorpe & Loo, 2006). For example, sampling and comparison of first year students entering studies in health were compared to results for students enrolling in a non-helping related professional degree and found those undertaking health studies had been drawn to the work for values-based (internal reasons) as distinct from achievement related motives (e.g., success, financial gains) held by those in the non-helping course (De Cooman et al., 2008, Duffy & Sedlacek, 2007). There is also evidence to suggest that although people can be drawn to work for value-based reasons they can lose sight of these values over time (Floyd-Taylor & Bentley, 2005). Values dissonance, that is, the experience of being conflicted or thwarted in one’s values, is associated with a range of adverse psychological and mental effects (Elliott & Sheldon, 1998; Sheldon & Kasser, 1998; Hayes, 2004) and stress-related physical health consequences (Bond & Bunce, 2001; Keogh, Bond, Hanmer & Tilston, 2004). Within mental health organisations, research has identified a deleterious impact both on the individuals’ work
performance and their personal wellbeing when personally held values are not being lived (Russinova et al., 2011).

2.11 Values as an ASP to promote internalisation of work values

Values are a platform underlying the beliefs and actions of individuals, and are a stable framework that organises how individuals view specific ways of living and behaving as more or less important in their lives (Schwartz et al., 1990; 2003). Values can play a similar role in organisations, particularly by clearly setting an agenda of what is important via a statement of values or code of conduct, and the like (Farkas & Gagne, 2006; Glover, 2005). However, organisational values statements may be little more than slogans and could have limited utility in shaping the moment-to-moment behaviours of individual staff, particularly within a broader organisational change initiative (Trivedi, 2010). Direct approaches that enable individual staff to consider, clarify and connect what they value personally alongside the values and principles embedded in a desired workplace change seems a promising approach to fostering internalisation. The significant body of research demonstrating increased successful striving by autonomously motivated individuals (who experience concordance between their goal and their authentic self) indicates that a staff-level values-based approach may lead to improvements in moment-to-moment demonstration of organisationally desired actions that high-level practices fail to bring about.

2.12 Chapter Summary

Previous applied SDT research has found merit in practices that attend to and support the development of autonomy of individuals for an otherwise imposed behavior (e.g., Ryan, Bernieri & Holt, 1984; Deci & Williams, 1999; Koestner et al., 2002; 2008). However, these Autonomy Supportive Practices have limited utility in wide-scale behavior change contexts as they do not have sufficiently specific protocols to make them reproducible. Autonomy support is a process posited to
facilitate internalisation of imposed behaviours, by allowing the individual to identify and reflect on personal beliefs and experiences, thereby integrating the motive with their values and self (Ryan & Deci, 2002). A more direct form of autonomy support is therefore proposed, whereby specific opportunities to identify, reflect on and clarify both personal values and the organisational values related to the desired change is provided.

Thus far, this thesis has focused on identifying and elaborating the rationale for values-focused approaches to supporting increased autonomous uptake of a newly trained recovery programme for staff (CRM). Chapter 3 will detail the protocol related to the application of this values-focused autonomy support within five community-based mental health organisations. Included in the following chapter is a visual summary of the proposed process of internalisation, and hypothesised changes in autonomous motivation and employee wellbeing following delivery of values-focused interventions.
CHAPTER 3 – Protocol for Current Research

The aim of this chapter is to detail the aims, procedures, participants, design, and anticipated challenges of the current research.

Content of this chapter has been extracted from the published journal article Williams, V., Oades, L.G., Deane, F.P., Crowe, T.P., Ciarrochi, J. & Andresen, R. (2013). Improving implementation of evidence-based practice in mental health service delivery: protocol for a cluster randomized quasi-experimental investigation of staff-focused values interventions. Implementation Science, 8(1), 75.

A copy of the PDF version of this article is provided in Appendix 7.

3.1 Brief background and aims of current research

Autonomy is widely understood as an important factor in the purposeful striving of humans. Autonomy supportive practices have been explored within education and developmental contexts (Reeve et al., 1999; Joussemet et al., 2004), but there is an absence of research regarding the specific interventions to enhance autonomy in work contexts (Gagne & Deci, 2005) and fewer still related to mental health service delivery. The autonomy supportive practices described in previous studies are not structured or standardised, and are therefore difficult to replicate or roll-out on a widespread basis (Deci & Gagne, 2005; Stone, Deci & Ryan, 2009). This proposed research offers a specific and structured set of interventions that actively promote clarification of and commitment to personally meaningful values of the mental health worker within the context of imposed organisational change. Current research related to SDT indicates autonomy supportive practices as a method of internalizing otherwise controlled extrinsically generated behavioural strivings.
The present research evaluates the impact of values clarification as a specific set of procedures to facilitate internalisation of newly trained (CRM) work practices. On the basis of theoretical underpinnings presented in previous chapters, Figure 1 illustrates the SDT continuum and proposed resultant shift in autonomous motivation, self-determined commitment to CRM practices and increased wellbeing via values-based internalisation that is being investigated in the current research:

**Proposed shift from controlled to autonomous motivation following values-based internalisation of CRM**

**Proposed resultant change in perceived locus of causality, commitment to act, and wellbeing**

<table>
<thead>
<tr>
<th>Non self-determined behaviour</th>
<th>Self-determined behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low autonomous motivation</td>
<td>High autonomous motivation</td>
</tr>
<tr>
<td>Low self-concordant striving</td>
<td>Higher self-concordant striving</td>
</tr>
<tr>
<td>Lower wellbeing</td>
<td>Higher wellbeing</td>
</tr>
</tbody>
</table>

Figure 1

*Process of internalisation and resultant shift in autonomous motivation and employee wellbeing following values intervention.* Adapted from Ryan & Deci, 2000.
3.2 Methods

3.2.1 Study design and procedure

This research is informed by two previous projects undertaken by this research team (Marshall et al., 1997; Uppal et al., 2010), and equivalent data collection time frames were used in part to enable comparisons of effectiveness of the revised CRM training program in the current study compared to prior versions. This project is supported by an Australian Research Council grant (LP09900708), with financial and in-kind contributions by the industry partners. Partner organisations were five well-established community-managed organisations involved in the direct provision of services to individuals living with severe and recurrent mental illnesses in the community. The partner organisations nominated a number of suitable worksites drawn from across their service base to participate in the intervention and research components. Research involved teams across a number of Australian states and government areas, allowing comparison and control for the effects of geographical variables. In total, approximately 200 mental health workers from across 22 sites were randomised and referred for intervention.

3.2.2 Participants

Participants were randomised by work-site to either the experimental (values) or control (implementation). Cluster-randomisation was adopted to increase the feasibility of roll out in the organisational setting (e.g., consistency across what ‘change’ for individuals within a single worksite will look like) and minimise contamination across conditions (i.e., individual randomisation would likely lead to decreased fidelity to condition due to inevitable interactions between individual staff within teams). A computerised random integer program was used to refer worksites to condition. Once randomised, staff from within sites were referred for training and invited to consent to participate in the research process. Blinding was not used at the participant or worksite level for pragmatic reasons (i.e., ongoing coaching required condition-specific protocol) and to maximise fidelity (i.e., workers consulted with colleagues from worksites in the alternate condition during the course of duties and
having an understanding of the need to stay within assigned protocol was deemed critical). Information about previous exposure to the training (i.e., staff who have participated in some CRM training before time one) was sought in questionnaire, enabling screening prior to inclusion in the final data set. Staff who did not consent to participation in research but were within randomised groups participated in all intervention components to maximise the benefit of this project for the partners, to promote intervention fidelity within the workplace, and to allow all mental health workers access to contemporary evidence-based practices and techniques.

The intervention was delivered and coordinated by the author and other members of the research team. Intervention delivery comprised both training (three days) and monthly coaching sessions running for up to 12 months. All participants received the same two days of training in the CRM (Oades et al., 2005). On the third day of training, varied training activities according to the condition (values or implementation) were delivered. For pragmatic reasons, in-service coaches (trained by the research team) conducted coaching. The in-service coaches were supported with monthly, group-based coaching-support sessions facilitated by the author or another appropriately skilled research team member. Features of each intervention condition are as follows.

3.2.3 Values condition

The values intervention was delivered as two components: Activities to support values clarification and commitment delivered on day three of training; and values-based coaching using CRM tools for up to 12 months within the workplace.

The aims of the values condition included:

1. Increased awareness of the values in which CRM is embedded.
2. Increased extent to which the personal and professional values of staff are explicit and expressed in the workplace.
3. Create opportunities for individual staff to identify the overlap or concordance of the CRM with their own values, and bring the imposed CRM values and personally held values into alignment.

4. Provision of regular and sustained investment in the professional and personal development of staff via clarification and commitment to values-based goal-setting using CRM tools as the framework.

3.2.3 i) Protocol for day three values intervention

The one-day values intervention was experiential in nature, using a structured values-clarification exercise with demonstrated utility in a range of clinical and non-clinical settings (Ciarrochi & Bailey, 2008). The purpose of this task is to help participants identify what values are most important to them, and to increase their awareness of the potential to actively pursue valued directions in both personal and professional domains of their life (i.e., increase the extent to which values are consciously used as a driver of purposeful behaviour). Staff members were exposed to the concept of values in the standard CRM training (days one and two), therefore holding a basic theoretical and operational understanding of both the merit and applicability of working with values generally. Additionally, a focus on related concepts of willingness and commitment (Hayes, Bond, Barnes-Holmes & Austin, 2006) emphasised as important to values work followed in day three.

The values identification and clarification process involved participants being given a set of 60 cards, each featuring a specific value or “principle of living” that is associated with a universal value-domain as outlined in Schwartz’ model (Schwartz, 1992; Ros, Schwartz, & Surkiss, 1999). Examples of values cards are provided below (see Appendix 3 for full list). Participants were facilitated through a structured sorting task that titrated values identified to the 15 valued directions each individual identifies as ‘most important to them in life generally”. This process comprised 3 stages, whereby participants sort the cards into 3 piles (most important, moderately important, and not important to me). Secondly, participants combined their most and moderately important cards. Finally, the participants were asked to review the combined pile and identify the 15 cards featuring principles that
are most important to them in their life. Following this, participants completed a second worksheet to rate the intent and self-reported success of recent striving (past 12 weeks) toward the work values identified as most important at work.

Following the card-sorting task, an additional intervention component was employed to foster intent and commitment to purposeful action toward valued areas of living. Firstly, the focus was on values relevant to ‘life in general,’ and participants are asked to rate the extent to which they have purposefully been trying to enact the 15 values self-identified as important in the past 12 weeks. Subjective success at moving toward each of the 15 specific valued directions identified as ‘most important’ was also measured. This process is structured around a worksheet based on the Personal Strivings methodology developed by Sheldon et al. that has been used extensively within the goal setting research (Sheldon & Kasser, 1995; Ryan & Connell, 1989).
Participants were facilitated through this process a second time after being requested to adopt a workplace focus. Participants were given the instruction; ‘conduct the card-sorting task again, this time focusing on what is most important to you in your current job.’ Following this, participants completed a second worksheet to rate the intent and self-reported success of recent striving (past 12 weeks) toward the work values identified as most important at work.

The components thereafter focus on increasing awareness of the potential concordance between personal and professional values through a facilitated discussion session. Participants are invited to discuss commonalities between their ‘life in general’ list and their ‘workplace’ list. They were then asked to identify ways they can bring their ‘life in general’ principles into their workplace before being facilitated through the completion of the specific CRM values tool (known as the ‘camera’ – Oades & Crowe, 2008) as an initial commitment to this process. Please refer to Appendix 1 for copy of this tool and an explanation of its use.

### 3.2.3 ii) Protocol for values coaching

Individual coaching sessions adopted a structure known as the GROW model structure in both conditions. GROW was made popular by Graham Alexandar and John Whitmore and it is widely used in organisational and coaching contexts as a method of setting a basic frame to a coaching session (Brown & Grant, 2010). The scholarly research related to coaching session models is limited despite the importance of using a structure in coaching (Grant, 2011). Survey-based research involving coaching psychologists identified GROW to be the most commonly-used structure (adopted by 41% of participating practitioners) (Palmer, 2010). The GROW model has been criticised for its simplicity, in particular the risk that individual sessions can become disjointed if there is no “higher plan” or framework that acknowledges the iterative nature of goal-achievement (Grant, 2011). The relevance of GROW in starting coaching conversations, ensuring consistent differentiated action steps, the capacity for it to be used in a sophisticated manner when practitioner competence increases (Grant,
2012), as well as its prominence within the limited coaching research underpin its suitability for use in the current project. It was particularly attractive in this case due its accessibility to those with little or no prior coaching experience. GROW is an acronym for the basic components of a coaching session—namely, Goal, Reality, Options, Wrap up/where to. The synergy between the acronym (GROW) and core concepts of “growing beyond” the symptoms and distress of serious mental illness further increase the relevance of this coaching session approach in the current research.

Individuals identified as suitable coaches within each partner organisations were referred to a further half-day of coaching training conducted by the research team. Potential coaches were identified by managers within each of the organisations and also through a call for expressions of interest. Trained coaches were assigned to mental health workers within the same experimental condition, but outside line management to increase role clarity. Coaching consisted of up to 12 hour-long monthly sessions scheduled and conducted in the course of paid working hours for both participants. Specific tools from with the CRM framework were used for structuring and recording the recipients’ development across the coaching period, such that the participating staff members were using the tools that are part of the organisational change initiative themselves (i.e., in relation to their own values-based goals). The particular focus within the values condition was on the establishment of work-related goals that fit with the values stated by the recipient in initial training, and clarified as the coaching process continues.

3.2.4. Implementation condition

The delivery of the implementation condition intervention components followed the same format as the values condition but differed in focus and content. The day three of training in the implementation group was also experiential in nature, but focused on addressing opportunities for and barriers to the implementation of the CRM within the workplace. The methodology used
to structure and support the implementation intervention was the ‘Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis’ developed by Albert Humphrey and used extensively in organisational contexts (Humphrey, 2005; Mann, McKenzie, Teitelbaum, Wright & Anderson, 2005).

Coaching in the control condition was consistent in format and overall structure to the values condition. Implementation coaching adopted an alternate focus on identification and resolution of issues related to implementation of CRM in the workplace as identified by participants. For example, pragmatic issues (e.g., addressing technical issues associated with new practices) or attitudinal issues (e.g., working through resistance to change from clients or colleagues).

The aims of the implementation condition were as follows:

1. Ongoing exposure to and skills-based practice with the CRM.
2. Opportunity to identify and develop strategies to address factors impeding implementation (e.g., resistance from clients or co-workers).
3. Regular and sustained investment (via monthly coaching sessions) in the professional and personal development of staff using CRM tools as the framework.

In both conditions, participants used the same protocol and model of practice being proferred for use with service participants upon implementation. Coaching therefore promoted experiential learning (Kolb, 1984) in both conditions. In comparison to previous research related to implementation of the CRM (e.g., Uppal et al., 2010), this component is seen as an enhancement. In the values condition there was an additional parallel process such that mental health staff will be actively encouraged to work with the CRM practices in relation to their own lives and values, just as their clients would. That is, they are applying both the practices and the underlying
processes ‘for real’ (values), rather than just practising in the use of the CRM (implementation). The value of parallel relationships in transferring knowledge from one dyad (e.g., supervisor and clinician) to another (e.g., clinician and client) has been elaborated within counselling literature (McNeill & Worthen, 1989). The effects of this additional parallel was of interest to the broader research project within which the current research sits, and was outlined in Crowe, Oades, Deane, Ciarrochi et al., 2011.

3.2.5 Data collection and handling

The overall study rolled out across an 18-month period, with commencement across individual worksites staggered to meet organisational and other pragmatic demands. Data collection and intervention period for the current study 6 months with data collection by way of questionnaire at three times points (Pre, post, 6 months). Data was also collected from coaches and recipients at each monthly coaching session to assess adherence to the GROW framework, integrity to experimental condition, and elements of the coaching alliance. In addition to self-reported measures of implementation, the broader study also utilised objective measures of transfer (file audit material) matching previous research related to CRM, which have been reported by this team elsewhere (see Deane, Andresen, Crowe, Oades et al., 2014).

Data collection handling was in accordance with the procedures specified in the ethics approval obtained from the Human Research Ethics Committee at the University of Wollongong (HE09/221). A prime focus on maintaining confidentiality of participants was promoted by the use of a unique self-generated identifier established at the first data collection point and re-used at subsequent collections. Additionally, because the research focused on work-related variables and is being conducted in a work setting, individual data was forwarded to the research team directly wherever possible (e.g., handed personally in sealed envelopes when on-site). These strategies were aimed at reducing possible biased responding and staff concerns that individual information may be sighted by superiors or other personnel within their organisation.
3.2.6 Measures

The measures utilised for this particular thesis were contained within a broader battery employed for the overall ARC Research project. Specific measures utilised in the current study were as follows:

3.2.6.1 CRM Values Questionnaire (CRM-VQ)

The CRM Values Questionnaire was developed as an integrated assessment of key measures related to motivation, plans to implement and successful striving based on methodology utilised in previous SDT research as indicated below. A copy of the CRM-VQ is included within Appendix 2. Variables measured by the CRM-VQ were as follows:

*Values concordance (motivation type)* - the Collaborative Recovery Model Values Questionnaire (CRM-VQ) is a modified version of the methodology developed first by Ryan & Connell (1989) and used extensively thereafter in research related to autonomous motivation and goal self-concordance (e.g., Sheldon et al., 1999; 2001; Koestner et al., 2008).

The modification involved the use of perceived locus of causation and resultant motivation forms (i.e., external, introjected, integrated and intrinsic) from the original protocol, applied to the six underpinning principles of the CRM (see Appendix 1 for overview of CRM training and related principles and modules). This measure examined the degree to which values embedded within the CRM are concordant with the personal values of participants at time 1 (pre training), time 2 (day 3; post training) and 6 months by asking the participant to indicate the degree to which the principle applied to them for extrinsic versus intrinsic reasons as indicated by the SDT continuum (detailed in Chapter 2). An example item;

“The second value related to recovery practice is: “collaborating to support the autonomy of consumers”. Now we would like to understand why you might put this value into play in the workplace”.


Participants rated each of the 6 items constructed around the 6 CRM core principles using a five-point Likert scale. The 6 principles underpinning the CRM are: 1) A life that is meaningful to the individual; 2) Collaborative relationships; 3) Change enhancement; 4) Strengths and values; 5) Life visioning and goal setting; 6) Action Planning and monitoring.

The five response options ranged from “not at all for this reason” to “entirely for this reason” in response to a statement aligned with each of the SDT motivations (external extrinsic, introjected, integrated, intrinsic). That is; a) “because somebody else wants me to value it or I’ll get something from somebody if I value it”; b) “because I would feel ashamed, guilty or anxious if I didn’t. I feel like I ought to value this”; c) “because I really believe it is an important value to have. I endorse it freely and wholeheartedly”; and d) “because of the fun and enjoyment this value brings me. My primary reason for living this value is simply my interest in the experience itself”.

This method has been used in previous research to understand value motivations in mental health workers previously (e.g., Jambrak, Deane & Williams, (2014), Williams, Deane, Oades, Crowe et al., in submission).

*Plans to Implement* – participants were asked to rate the extent to which they had “made specific plans about when, where and how to put” the identified CRM value into play. Responses were made using a 5-point Likert scale ranging from “not at all” to “very much so”.

*Successful Goal Striving* - participants were asked to rate the extent to which they had been successful in striving toward each of the CRM work principles over the past 12 weeks using a 5-point Likert scale (ranging from “not at all successful” to “very successful”).

In addition to its extensive use within applied SDT research (e.g., Ryan & Connell, 1989; Sheldon & Elliott, 1999; Koestner et al., 2008), this method has been recently used in mental health research by this team (Jambrak, Deane & Williams, 2014).

3.2.6.2 Employee wellbeing
Measures of wellbeing identified as relevant in prior mental health research (e.g., Maslach & Jackson, 1981; Russinova et al., 2011) or hypothesised to be related to the processes targeted by the interventions (e.g., intrinsic job satisfaction) were included in the overall assessment battery. A multi-dimensional approach to measurement of wellbeing was utilised to reflect varied conceptualisations of this construct including from presence / absence of ill-health, perceived workplace satisfaction and initiative, and employee commitment / engagement. Wellbeing measures utilised are detailed hereafter, and are included in Appendix 2.

**The Intrinsic Job Satisfaction Scale (ISJS)** The Intrinsic Job Satisfaction Scale (Warr, Cook & Wall, 1979) contains 7 items used to rate employee satisfaction with a variety of workplace issues. Examples of these items include “your opportunity to use your ability” and “The freedom to choose your own method of working”. Responses are made using a 7-point Likert scale ranging from 1) extremely dissatisfied to 7) extremely satisfied. Previous research has reported the Intrinsic Job Satisfaction Scale to have good internal reliability (Cronbach’s alpha = .90)

**Maslach Burnout Inventory (MBI)** The Maslach Burnout Inventory (Maslach & Jackson, 1981) is a well-known and widely utilised measure most often used to assess the wellbeing of employees in helping professions and human services. The measure comprises 22 items categorized as 3 subscales; depersonalization, emotional exhaustion and personal accomplishment. Sample items include “I worry this job is hardening me emotionally”, and “in my work, I deal with emotional problems very calmly”. Responses are gathered using a 7-point Likert scale, ranging from “Never” (0) to “everyday” (6) to indicate how frequently the statement applies to respondent. The MBI has demonstrated good convergent validity and moderate to high internal reliability ranging from .57 - .86 across all subscales in previous research (Maslach & Jackson, 1981).

**General Health Questionnaire (GHQ)** The General Health Questionnaire is a widely used scale comprising 12 items designed to assess changes to normal psychological function typically indicating the presence of mild psychological distress or disorder. Each item consists of a question
beginning with “Have you recently” to which respondents reply by identifying one of four possible options (more so than usual, same as usual, less so than usual, much less than usual). An example statement is “Have you recently been able to enjoy your normal day-to-day activities?” Previous research reports good internal consistency (alpha = .88) and re-test reliability (r=.73) (Hardy, Shapiro, Haynes & Rick, 1999).

**Intention to Leave (ITL)** The Intention to Leave Scale (Wayne, Shore & Liden, 1997) is a 5-item measure designed to assess how likely it is that the respondent will leave their current position of employment. An example item is “I often think of quitting my job at my organization” and respondents rate their agreement from 1) strongly disagree to 5) strongly agree. The ITL scale has been assessed as having good internal reliability (alpha = .90) (Villaneuva & Djurkovic, 2009).

### 3.3 Data analysis

#### 3.3.1 Focus of data analysis

The intervention analyses focused on two major questions: What aspects of autonomous uptake does the values intervention positively influence? By what processes does the intervention work? We were primarily interested in investigating effects at the cluster-level in this arm of the study with a view to informing future research that may target participant-level effects.

Figure 2 below presents a model of the analyses. Model A represents the total effect of values intervention on successful striving (X) and employee wellbeing (Y). Model B represents the direct effect of X on Y, and the indirect effect through the mediator (M), our psychological process variable (autonomous motivation).
Contemporary research in the area of autonomous motivation has begun to challenge the utility of aggregated measures as outlined above [e.g., Koestner et al., 2008]. Rather than being mutually exclusive ‘either or’ constructs, the degree to which purposeful striving or planned striving occur in line with participant endorsement of varied motivations as depicted in Diagram 1 (Section 3.1) is increasingly acknowledged as relevant (Koestner et al., 2008; Sheldon & Houser-Marko, 2001). This seems especially relevant in the current research given the desired goal striving is toward controlled organisational goals, which are not necessarily self-generated or intrinsically enjoyable. Intrinsic motivation, or aggregated methods of measuring increased overall autonomous motivation, may not therefore be amenable or in fact desirable targets of change in this and other research within controlled contexts. The effects of various regulators (i.e., punishment, guilt, importance, fun) on outcome variables were tested. The bootstrapping method described by Preacher and Hayes (2008) was used to test the meditational model proposed.
3.3.2 Limitations of data

Traditional approaches to missing data (e.g., list-wise or pair-wise deletion) can lead to considerable bias in parameter estimates. In contrast the Full Information Maximum Likelihood procedure provides a superior approach to dealing with missing data that uses all the available information for parameter estimation (Howell, 2008), and was planned as the approach within this project.

3.4 Discussion

3.4.1 Anticipated challenges

A number of challenges to carrying out the project were foreseen due to the applied and organisational nature of the research. Intervention scheduling was required to meet standards of feasibility and pragmatism for the partner organisations that had contributed significantly in terms of in-kind and cash contributions. Challenges included the need to roll-out intervention components at a rate enabling partners to equip and up-skill staff existent and newly employed staff, which was foreseen to pressure the capacity of the research team to deliver the intervention across its various components. Additionally, the need for interventions (particularly coaching) to be practical and manageable influenced the choice of methodology to be employed (e.g., GROW method to structure coaching interactions). A prime focus for both partner organisations and the research team was sustainability of the interventions beyond the formal support of this project. This necessitated the interventions be amenable to being ‘passed on’ to in-service champions in a train-the-trainer model, for example.

Data loss across the somewhat extended collection time-points (6 months), and risk of loss via participant attrition are acknowledged specifically due to staff turnover rates within the mental health field, typically experienced as 26% per annum (Chisholm, Russell & Humphreys, 2011). In order to
address this foreseeable challenge, a dedicated liaison officer within each partner organisation had the responsibility of maintaining carriage of the coordination and scheduling responsibilities. A designated project coordinator was allocated within the research team, who provided day-to-day liaison with each of the industry partners via the designated liaison officer.

A further challenge in this research related to the maximisation of fidelity to condition. As outlined above, cluster randomisation by worksite was adopted as a primary means of reducing contamination between condition at the same time enhancing utility and effectiveness of the rollout within the organisations. Blinding staff to condition was not possible, therefore, the likelihood of staff discussions regarding alternate conditions and practices undertaken by colleagues from other sites during routine workplace communication (e.g., at training days or meetings) was identified as a risk. Participants in each condition were aware of alternate conditions and related components. To address commitment to condition, both groups received a strong rationale for the training and coaching approach being delivered and were informed of the importance of fidelity to condition during initial explanations related to research participation. Consistency to condition was monitored specifically via the coaching record forms completed alongside monthly coaching sessions (detailed in related published research; Deane et al., 2014). A data collection monitoring process was undertaken by each industry liaison officer and the research team coordinator to monitor such challenges, enable reporting of research limitations and to inform the development of future research.

3.4.2 Chapter Summary

This chapter has detailed research protocol for a cluster-randomised controlled trial comparing the effect of values-focused staff interventions with more traditional implementation support extending over 6 months within 5 community mental organisations involved in recovery-oriented service provision has been outlined. The central premise of this thesis is as follows: Mental health workers who are provided specific opportunity to foster their autonomous motivation for the newly trained,
evidence-based recovery practices via a series of values-focused interventions will demonstrate greater goal commitment and striving, as well as higher wellbeing, compared to participating workers in a more traditional implementation support condition. A number of challenges related to the applied nature of this research have been acknowledged in this chapter.

This thesis will now focus on the research question “can values intervention positively influence autonomous motivation for the CRM?” A further question “which aspect(s) of motivation as described within SDT does the values intervention positively impact?” will be investigated. Specific aims and hypotheses related to these questions will be specified in Chapter 4.
CHAPTER 4 – Fostering Autonomy for recovery values in mental health workers: A cluster-randomised investigation

This chapter outlines the aims, methodology (summarised), results, discussion and limitations related to the question: “What aspect of autonomous motivation does the intervention positively impact?”

DOI: 10.1186/s13012-015-0363-5

4.1 Aims and hypotheses

A search of the Bio-Med Central database of journals using variants of the terms “values”, “autonomy support”, “staff” and “organisations” in a variety of combinations returned no matches. To the best of our knowledge, the merit of targeted values-focused work as a way of operationalizing autonomy support has not been investigated. This study investigates a structured, purposeful values-clarification intervention where personal values and workplace values are both explored and prioritised as an additional component to an evidence-based 2-day employee development training program (Collaborative Recovery Model Training; CRMT) (Crowe et al., 2006).

Hypothesis 1: Mental health worker teams receiving the values-based training will show a greater increase in their integrated motivation for the new workplace practice following training than those in the control group teams.

Hypothesis 2: Those receiving the values intervention will show a greater increase in plans to implement the new CRM practices following training than those in the control group.

It is also useful to explore the impacts of this intervention on other forms of motivation that have been explicated in the SDT model as there is limited research at this component-level particularly...
in organisations (Gagne & Deci, 2005). The potential changes to introjected and external forms of extrinsic motivation following a values-based intervention will be assessed. Given the recent return of focus on individual motivation components in understanding research relating to autonomy, there is insufficient theoretical and empirical justification for specific hypotheses regarding the direction of changes in introjected or external regulation.

4.2 Methods

4.2.1 Participants and procedures

Full details of the methods and procedures are outlined in Chapter 3. Details of the protocol that are relevant to aims and hypotheses of this component of the study will be re-iterated and elaborated below.

A total of 146 staff members recruited from the five partner organisations provided data at time 1. Recruitment to and progression through this portion of the study is illustrated in the CONSORT Flowchart below (Figure 3), indicating a total of 130 participants received all components of intervention (i.e., Time 1 data collection, standard 2 day CRM, condition specific Day 3 intervention, Time 2 data collection). The training was rolled out over an eleven-month period across a total of 22 sites.*

From the 146 participants participating in data collection and analyses, 79 were randomised to the values condition and 67 to the implementation condition. Most participants were female (69%). Participating mental health workers were all 18 years and older, with 29 percent aged 18-30, 27 percent aged 31-40, 18 percent aged 41-50, and 22 percent aged 51-60+ years. The modal period of service as a mental health worker was 1.5 years, with mean 4-years service. There were no significant differences between participants in each condition for baseline characteristics (age, gender, years of experience) or on key variables (e.g., motivation for CRM, plans to implement).

* Data and results generated via Time 3 (6-month measure) (described in Chapter 3) are presented in the following chapter.
The standard component of the intervention involved delivery of the Collaborative Recovery Model Training (CRMT) (Oades et al., 2005) (see Appendix 1). The CRM training intervention is an evidence-based framework of mental health delivery that seeks to operationalise six core recovery principles related to empowerment and actuation of personally meaningful goals. The central message in each of the six principles is outlined as: 1) A life that is meaningful to the individual; 2)
Collaborative relationships; 3) Change enhancement; 4) Strengths and values; 5) Life visioning and goal setting; 6) Action Planning and monitoring. Each principle embodies a core element embedded within the CRM, identified as foundational to mental health recovery. The knowledge, practices and skills trained within the standard CRMT program are aligned with these principles.

Participants assigned to the values group received a third day of training that comprised a structured values clarification card sorting process developed by (Ciarrochi & Bailey, 2008) as detailed in section 3.2.3 of this thesis. The purpose of the task is to help individuals identify 15 principles or valued-directions that are most important to them from sixty values cards firstly through a “life in general” focus, then from the perspective of “important to me at work”. The mental health workers were instructed through a 3-stage sorting process to identify values most important to them in general prior to recompleting this 3-staged process again in relation to most important values at work (see section 3.2.3). Further reflection was facilitated through group discussion, completion of the Principles Success Recording process, and commitment to specific values via the “Camera” CRM tool (see Appendix 1).

The mental health workers in the control condition (implementation group) also received a third day of training, instead focused on identifying organisational barriers and other challenges likely to exist in their workplaces as implementation of the newly acquired skills and practices occurred, as detailed in section 3.2.4 of this thesis. They were also provided the opportunity to problem-solve the identified barriers under the facilitation of the university trainer. This process was structured around a “SWOT Analysis” protocol (Strengths, Weaknesses, Opportunities, Threats), and is a methodology that has been used extensively in organisations (Humphrey, 2005).

The three days of intervention were run successively with data collected at the commencement of Day 1 (Time 1) and the completion of Day 3 (Time 2) via the following measures.

4.2.2 Measures

4.2.2.1 Autonomous Motivation – CRM VQ
The measure of “autonomy” for the six workplace principles that underpin the CRM was developed using the methodology developed first by Ryan and Connell (1989), and then used extensively in research targeting autonomous goal striving (e.g., Sheldon & Kasser, 1998; Elliott & Sheldon, 1999; Koestner et al., 2008; Jambrak, Deane and Williams, 2014). Respondents were asked to rate the extent to which external, introjected, integrated and intrinsic motivators contributed to their goal-directed efforts aligned with the newly trained work practices. Full details of this measure and its application were outlined in Chapter 3, section 3.2.6.1 and are briefly summarized in the paragraph below. External motivation was measured by endorsement of the statement, “I put this into play because somebody else me to value it or because I’ll get something from somebody if I value it”, introjected motivation by, “because I would feel ashamed, guilty or anxious if I didn’t…”; integrated motivation by, “because I really believe it is an important value to have. I endorse it wholeheartedly”, and intrinsic motivation by “because of the fun and enjoyment this value brings me…”. Participants rated each item using a 5-point Likert scale that ranged from “not at all for this reason” to “entirely for this reason”. This approach has been used by our team to understand value motivations in mental health workers previously (e.g., Jambrak, Deane & Williams, 2014; Glajz, Deane & Williams, in press).

Previous SDT research (e.g., Sheldon & Houser-Marko, 2001; Sheldon & Kasser, 1998) has used an aggregated autonomy score calculated by subtracting the total “controlled” motivation for the specific workplace principle from the total “autonomous” motivation for the same principle, such that: Autonomy = (intrinsic+integrated) – (introjected+ external). Recent research has identified potential limitations in this aggregated method, e.g., (Koestner et al., 2008) and has instead analysed each of the four motivations separately, e.g., (Jambrak, Deane & Williams, 2014). In this research, we were specifically interested in understanding changes in the different components of motivation identified by SDT, particularly integrated motivation due its alignment with values. Thus, for each participant, a
total of four motivation scores on each of the six underpinning CRM principles were attained both prior to intervention (Time 1) and at the conclusion of condition-specific intervention (Time 2).

4.2.2.2 Plans to implement – CRM VQ

Participants were asked to rate the degree to which they were planning purposeful action aligned to CRM across its 6 principles. Using a 5-point Likert scale, respondents indicated the extent to which they had made specific plans to implement the particular CRM principle, from “not at all” to “very much so”. This methodology has been validated in previous research (Koestner, Horberg, Gaudreau, Powers et al., 2006) and is compatible with the process utilised by (Sheldon & Kasser, 1998). Section 3.2.6.1 provides full information related to the use of the CRM-VQ.

4.2.3 Analyses

As indicated in the CONSORT participant flowchart above (Figure 2), there was data loss due to attrition. Baseline checks for differences between those who completed data at time 2 and non-completers found no differences in demographic variables (e.g., age, gender, length of experience) or on experimental variables (i.e., aggregated autonomous motivation, external motivation, introjected motivation, integrated motivation, intrinsic motivation).

Repeated measures analysis of variance examined main and interaction effects for Time (pre training Day 1 and post training Day 3) and Condition (Values versus Implementation). Analyses focused on those who completed all condition-specific intervention components and measures. A series of correlations between the four levels of autonomous motivation with plans to implement pre-training, and for pre-post training changes in motivation and implementations plans were carried out to better understand the relationships between variables. Multiple regression analyses were conducted to determine the degree of variance in outcome variables related to motivation and plans to implement that was predicted by condition.

4.3 Results
Data relating to autonomous motivation and plans to implement was collected for each respondent in line with the six CRM principles. Exploratory analyses were conducted to better understand the co-relations between principles, and between principles and outcome variables. Correlations and subsequent factor analyses revealed that the six core principles represented a unitary construct: All six principles were strongly correlated (r’s = .54 to .74). Cronbach's alpha for the six items was 0.88 indicating high internal consistency. This result was not unexpected as each of the principles is theoretically linked to the others as a key element of “recovery”. Further, the high inter-correlations serve to validate the evidence-based, conceptual model of mental health recovery that underpins the CRMT. To simplify further analyses, aggregated autonomy scores were utilised. Based on this, an overall score for CRM for each outcome variable (i.e., 4 motivations, plans to implement) at Time 1 (pre) and Time 2 (post) were calculated and used for subsequent analyses.

4.3.1 Effect of Condition

Repeated measures Analysis of Variance (ANOVA) for all participants who completed the intervention and provided data (T1 and T2) were conducted to examine the effect of time and condition on motivation, and plans to implement training. No significant interactions were identified for External, Introjected or Intrinsic motivation. A significant positive Time by Condition interaction effect for Integrated motivation was revealed, F[1,129] = 6.67, p < .05, as depicted in Figure 4 below:

![Figure 4: Time x Condition interaction effect on integrated motivation](image_url)
Repeated measures Analysis of Variance were conducted to examine the effect of time and condition on plans to implement the newly trained practice. Results for participants who completed the intervention (including data at T1 and T2) revealed a significant positive interaction for Time and Condition on Plans to Implement newly trained practices, with those in the values condition endorsing more highly than those in the implementation condition following intervention, $F[1, 129] = 4.80$, $p < 0.05$. This interaction is depicted in Figure 5 below:

![Figure 5](image.png)

Time x Condition interaction effect on plans to implement CRM

Table 1 depicts all pre and post training means and standard errors for each motivation component and plans to implement the CRMT by condition.
Table 1: Means and standard error (pre and post) for intervention completers by condition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>Time</th>
<th>Mean</th>
<th>St E</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrated Motivation</strong>*</td>
<td>Values</td>
<td>1</td>
<td>4.35</td>
<td>.06</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4.53</td>
<td>.06</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>4.35</td>
<td>.06</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4.35</td>
<td>.07</td>
<td>60</td>
</tr>
<tr>
<td><strong>Intrinsic Motivation</strong></td>
<td>Values</td>
<td>1</td>
<td>3.42</td>
<td>.12</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.32</td>
<td>.14</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>2.96</td>
<td>.13</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2.95</td>
<td>.15</td>
<td>60</td>
</tr>
<tr>
<td><strong>Introjected Motivation</strong></td>
<td>Values</td>
<td>1</td>
<td>1.48</td>
<td>.09</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.42</td>
<td>.10</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>1.53</td>
<td>.10</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.50</td>
<td>.10</td>
<td>60</td>
</tr>
<tr>
<td><strong>External Motivation</strong></td>
<td>Values</td>
<td>1</td>
<td>1.48</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.34</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>1.57</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.43</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td><strong>Plans to Implement</strong>*</td>
<td>Values</td>
<td>1</td>
<td>3.67</td>
<td>.09</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.77</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>3.64</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.52</td>
<td>.09</td>
<td>60</td>
</tr>
</tbody>
</table>

* p < .05
4.3.2 Correlation and Regression Analyses

Correlations between the forms of motivation and plans to implement were conducted to better understand the relationships both prior to training and after intervention using Pearson Correlation Coefficient. At baseline, external motivation was significantly negatively correlated with plans to implement, $r = -.21$, $p < .05$. Plans to implement were positively correlated with integrated motivation $r = .49$, $p < .01$ and intrinsic motivation, $r = .33$, $p < .01$. Change scores were calculated for each motivation component by subtracting T1 from T2, as were change scores for plans to implement. A significant relationship was found between change in plans to implement and change in integrated motivation ($r = .26$, $p < .01$). Additionally, there was a significant negative relationship between change in introjected motivation and change in plans to implement ($r = -.26$, $p < .01$); change in external motivation was also negatively correlated with change in plans to implement ($r = -.20$, $p < .05$). The findings are summarised in Table 2 below:

Table 2

<table>
<thead>
<tr>
<th>Motivation Type</th>
<th>Correlations between motivation type and plans to implement pre training</th>
<th>Correlations between pre-post changes in plans to implement and motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plans to implement (n=144)</td>
<td>Change in Plans to Implement (n=130)</td>
</tr>
<tr>
<td>External</td>
<td>-.21*</td>
<td>-.20*</td>
</tr>
<tr>
<td>Introjected</td>
<td>-.16</td>
<td>-.26**</td>
</tr>
<tr>
<td>Integrated</td>
<td>.49**</td>
<td>.26**</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.33**</td>
<td>-.02</td>
</tr>
</tbody>
</table>

Note. * $p < .05$, **$p < .01$
Regression analyses were conducted to further explore the relationships described in Table 2. A hierarchical regression was conducted with variables entered stepwise based on previous research and the strength of the interrelations we identified. Integrated motivation entered in Step 1, Intrinsic motivation at Step 2, Introjected motivation at Step 3, and finally External motivation at Step 4. The model was set with \( p \) at .05. Controlling for baseline Plans to Implement, integrated motivation was the only variable that uniquely predicted plans to implement at Time 2.

| Table 3 Motivation types predicting plans to implement at time 2 (\( n = 130 \)) |
|---------------------------------|----------------|----------------|
|                                 | B       | Std. Error | Beta  |
| **Step 1**                      |         |             |       |
| Plans to Implement (T2)         | 1.91    | .51         |       |
| Integrated                      | .41     | .11         | .26** |
| **Step 2**                      |         |             |       |
| Plans to Implement (T2)         | 1.88    | .51         |       |
| Integrated                      | .38     | .12         | .25** |
| Intrinsic                       | .04     | .06         | .05   |
| **Step 3**                      |         |             |       |
| Plans to Implement (T2)         | 2.04    | .55         |       |
| Integrated                      | .37     | .12         | .23*  |
| Intrinsic                       | .04     | .06         | .06   |
| Introjected                     | -.05    | .06         | -.06  |
| **Step 4**                      |         |             |       |
| Plans to Implement (T2)         | 1.99    | .56         |       |
| Integrated                      | .38     | .12         | .24*  |
| Intrinsic                       | .04     | .06         | .05   |
| Introjected                     | -.08    | .09         | -.10  |
| External                        | .04     | .09         | -.05  |

Note: \( R \) squared = .07 for step 1, change \( R \) squared = .00 for step 2, .00 for step 3, .00 for step 4

\(* p < .05, ** p < .01\)
4.4 Discussion

Development of employee skills within the mental health field is challenging. Workplace training programs continue to be a prime method of organisational change (Peebles, Mabe, Fenley, Buckley et al., 2009), despite somewhat disappointing impacts on implementation in general, and specifically in the mental health field. Enhancement of employee autonomous motivation to change is an area of inquiry that has received relatively little empirical attention (Gagne & Deci, 2005). In particular, the identification of structured, reproducible approaches to supporting worker autonomy for change has been highlighted as a specific need. Within socially controlled environments such as the workplace, integrated motivation represents the optimal level of internalisation of an otherwise imposed behavioural regulation (Deci et al., 1994). The use of a structured values clarification process as an intervention to follow training in a new set of evidence-based mental health recovery practices was tested for its applicability as a means of supporting autonomy, specifically integrated motivation for change.

Aligned with our main hypothesis, a significant increase in integrated motivation for a newly trained work practice was found for staff that participated in a structured values clarification intervention compared to those who participated in structured problem solving. These results lend support for values clarification as means to promoting employee internalisation of an otherwise imposed workplace change. Additionally, staff in the values condition also evidenced a significant increase in plans to implement the workplace initiative compared to those in the implementation (problem solving) condition. Implementation planning is associated with increased purposeful goal attainment and striving (Koestner et al., 2002). This suggests enabling staff to identify and clarify personal and workplace values embedded within a newly trained workplace initiative may lead to increased personal ownership, and planned transfer.

We envisage the utility of this kind of intervention as an adjunct to the “to be learned” knowledge, practices and skills as it was here, within any context where transfer of training is a
specific concern or target. Gaining the buy in from staff is anecdotally acknowledged as an important factor in bringing about behaviour change, though receives less research attention than other workplace initiatives like bonuses, rewards, or opportunities (Fernet, Gagne & Austin, 2010).

These findings indicate that it is possible to provide a brief, reproducible intervention that enables staff to identify and work with “intangibles” such as their personally meaningful values and beliefs, and such an intervention can have positive effects on motivation for change. The results did not identify significant effects for aggregated autonomous motivation (i.e., integrated + intrinsic – introjected + external), which aligns with the contemporary SDT research (Deci, Koestner & Ryan, 1999) and also fits with expectations of motivation for change in a controlled environment, such as the workplace. Furthermore, there was no significant effect of condition on intrinsic motivation (i.e., “I would put this value into play because of the fun and enjoyment…”), introjected motivation (i.e., “I would put this value into play because I would feel ashamed, guilty or anxious if I didn’t”) or external extrinsic motivation (i.e., I would put this value into play because somebody else wants me to value it or because I’ll get something from somebody…”) when they were reviewed separately. The findings suggest that future work centred on promoting autonomy and uptake in controlled environments may do well to focus on integrated motivation specifically as both the measure and target of internalisation of new desired behaviours in organisations and other socially controlled contexts.

Correlation analyses between motivation types and plans to implement were conducted to better understand these relationships across the intervention period. Increases in integrated motivation from time 1 to time 2 were positively correlated with increases in plans to implement the new workplace practice from pre to post. Regression analyses indicated integrated motivation at time 1 uniquely predicted plans to implement at time 2 for our sample when other forms of motivation were included in the model. These findings further suggest that integrated motivation is a construct relevant to implementation planning, and worthy of further research as a mechanism of bringing about workplace change.
4.4.1 Limitations and directions for future research

Our research investigates changes in motivation and planning following a brief intervention, across a period of 3 days. While the results are positive, the improvements in motivation and planning are anticipatory and may not lead to changed practice or sustained uptake. Moreover, research relating to values has indicated personal value systems to be a stable construct, changing relatively little over time (Rokeach, 1973; Schwartz & Bilsky, 1990). The results of the present study highlight the need within organisational behavior change research broadly, and specifically within mental health recovery, for longitudinal research that acknowledges the stable nature of the values allows for investigation of changes to ongoing implementation of a new workplace practice.

Data loss due to attrition was an issue in this project, and is acknowledged as a practical and statistical concern for applied research generally (Schafer & Graham, 2002). Comparison of pre-training variables for mental health workers who completed all elements of the intervention (i.e., pre data collection, 2 days standard training, Day 3 of condition-specific intervention and post-training data) with those who did not complete all elements indicate there were no differences in baseline data (e.g., demographics) or on pre-training experimental variables (e.g., integrated motivation). While feedback from the industry liaison personnel enabled some understanding of the factors associated with attrition (e.g., workload, unforeseen changes in plans commonplace to mental health work) further efforts to understand and enhance completion levels in training-based research projects is suggested. This intervention did not focus on the pre-training organisational context or in any way seek to actively increase the extent to which the training was experienced as “owned” by those who participated. For example, assessing for and understanding readiness for change, allowing individuals to have a say in some elements of the training (even if this is practical in nature), or eliciting some pre-training discussion about the individual’s experience of their workplace may help to reduce the sense that the new practices were “forced upon” and increase involvement in the change.
Readiness for change, and understanding the pre-change environment seems to represent a step toward the creation of an autonomy supportive work climate, is a key factors acknowledged in behaviour change research (Prochaska & DiClemente, 1982). Talking about change prior to it happening may actually undermine the extent to which it is perceived as forced or imposed, thereby aligning with key priorities identified by Gagne and Deci (2005).

In terms of operationalizing Autonomy Support and enhancing its relevance to organisational contexts, our research has emphasised the second element of three identified underpinning components, namely providing a meaningful rationale for the change. The values-clarification intervention facilitated awareness and clarification of personal and work values, but did not go so far as to elicit and explore the affective responses of staff to the change process itself (component 1 of Autonomy Support). The third component (minimising controlling language and emphasising choice) was arguably targeted in the values-clarification process, but consideration to a more transparent discussion about implementation may be warranted in future applications.

Further interventions may do well to build in a structured opportunity for staff to identify and express feelings related to the workplace change, and to talk directly about the how, why and when of implementing the newly learned skills. This would represent a morphing of our two interventions to some degree (i.e., allowing some implementation planning and problem solving as per the control group) but with continued and primary emphasis on facilitating internalisation of the imposed change through identifying the alignment with deeply held values and beliefs. This may lead to further positive impacts on self-determined commitment to and uptake of the values embedded within a workplace change over and above the significant findings realised in this study, which are viewed as a promising first step toward increased implementation.
4.4.2 Chapter summary

The research described in this chapter investigated the impact of a structured values clarification and commitment process as an adjunct to evidence-based mental health recovery training, suggesting this method appears to provide autonomy support that fosters internalisation of values embedded within the CRM training. Increased internalisation was suggested by significant increases in integrated motivation for the CRM in the values group over and above changes evident for those participating in the implementation planning group.

Additionally, a significant interaction effect was found for plans to implement the CRM for the values group in comparison to the implementation group, suggesting that the values clarification appears to have merit over and above traditional implementation planning involving a problem solving approach. These findings extend applied organisational SDT research by supporting the specific relevance of integrated motivation as both a measure and potential target in future research aimed at fostering autonomy and self-concordance of otherwise imposed goals.

As highlighted in Chapter 2, self-concordant goal striving has been found to predict both increased goal success and wellbeing (Sheldon & Elliott, 1998). The focus of Chapter 5 is to determine whether changes in autonomous motivation (integrated motivation) and by those in the values condition are maintained over 6 months of post-training intervention, and whether the increased levels of planned implementation translate into higher levels of CRM application. Additionally, test of the proposed mediational model described in Section 3.2.1, with specific focus on integrated motivation as the proposed mechanisms of change will be detailed in Chapter 5.
CHAPTER 5: A quasi-experimental investigation of the impact of a six-month values-based staff intervention on autonomous goal striving and wellbeing of mental health recovery workers.

The purpose of this chapter is to briefly review the literature relating to self-concordant goal striving and its impacts on wellbeing and success. Additionally, Chapter 5 details the aims and hypotheses, methodology (summarised), results, and discussion of findings after 6 months of intervention.

Content of this chapter has been extracted and elaborated from the manuscript Williams et al., (in preparation) “A quasi-experimental investigation of the impact of a six-months values-based staff intervention on autonomous goal striving and wellbeing of mental health recovery workers”. A copy of the PDF version of this article is provided in Appendix 8.

5.1 Summary of literature related to goal self-concordance and wellbeing

Goal setting is widely acknowledged as important to human effectiveness (Locke; 1969; Koestner, Horberg, Gaudrea, Powers et al., 2006; Sheldon & Elliott, 1999). Goals relate to motivation in that they can provide direction and structure motives in humans’ attempts to meet their needs (McLelland, 1988). Goal setting and striving enables individuals to move from current to desired life states in terms of key needs and desires (Carver & Scheier, 1990; Locke & Latham, 1990; 2002). Reducing the discrepancy between unmet - met needs results in improvements to the individual goal striver’s wellbeing (Locke & Latham, 2002; 2006).

While goal progress is important (e.g., Bandura, 2001; Diener, 1984), goal striving that is accompanied by a sense of personal connection to the goal results in increased benefits to the individual. Chapter 2 explained that goals integrated with an individual’s sense of self (and for which autonomous motivation is high) are known as self-concordant goals. Highly self-concordant goals are experienced as aligned with the authentic self, which in turn is posited to cause a greater sense that the
goal is self-chosen and autonomously motivated (Sheldon & Elliott, 1999; Sheldon & Houser-Marko, 2001). Highly self-concordant goals are pursued with greater persistence and are more often successfully attained even in the face of adversity (Sheldon et al., 1999; 2001; Koestner et al., 2008). This suggests that autonomous motivation may exert a bolstering effect on goal striving for the long haul. Sustained goal striving even in the face of challenges would seem to be of central importance to the issue of training transfer and implementation within organisations.

Research has also consistently identified increased benefits to wellbeing associated with self-concordant goal striving versus non self-concordant striving (Emmons & King, 1988; Sheldon & Kasser, 1998). There is higher wellbeing for individuals striving toward self-concordant goals compared to individuals striving toward non-concordant goals, even when goal progress in both groups is equivalent (Emmons & King, 1988; Sheldon & Kasser, 1998; Koestner et al., 2008). Sheldon and colleagues have identified a moderating effect of goal self-concordance on the relationship between goal success and wellbeing that extends the basic discrepancy-reduction theory of goal-setting and attainment outlined above (e.g., Sheldon & Kasser, 1998; Sheldon & Houser-Marko, 2001). As outlined in Chapter 4, worker wellbeing is an important issue for several reasons including employee effectiveness when providing mental health support where the relationship between worker and service-participant is highly valued and dependent on employee enthusiasm, hopefulness and buoyancy (Russinova et al., 2011). Key factors related to employee wellbeing will now be explored in further detail.

5.1.1 How is wellbeing conceptualised and measured?

The construct of “wellbeing” is understood from three main standpoints; eudaimonic views, hedonic views, and illness / adjustment based perspectives. Eudaimonic perspectives hypothesise wellbeing to be related to purpose, meaning and engagement in life, while hedonic views espouse experiencing positive emotions and satisfaction of wants as central to wellbeing (Diener, Suh, Lucas &

Individual wellbeing is increasingly acknowledged as both a right for employees (Faragher, Cass & Cooper, 2005; Villaneuva & Djurkovic, 2009) and a priority for organisations due to performance (Harter, Schmidt, & Keyes, 2002a; Ramllal, 2003; Samuel & Chipunza, 2009). Eudaimonic and illness / adjustment conceptualisations of wellbeing have particular merit in understanding wellbeing in the workplace and can be evidenced in commonly used measures (Warr, 1990; 1999; Maslach & Jackson, 1981).

Hedonic perspectives, based in experiencing positive emotional states and satisfaction of needs, seem to relate closely to intrinsic motivation, which we have suggested is not necessarily an expectation or requisite of a workplace that promotes the wellbeing of individuals. In the current study, measures frequently used within the helping professions fit within the eudaimonic model of wellbeing (e.g., job satisfaction, innovativeness) have been adopted. Additionally, other commonly used measures that approach the continuous variable of mental health worker functioning from the perspective of eudaimonic “ill-being” have been utilised (e.g., burnout, intention to leave). Finally, a measure of general mental health and wellbeing indicative of a more general, medical view of wellbeing has been utilised (For further detail review Chapter 3, section 3.2.6.2).

Results detailed in Chapter 4 of this thesis indicate that autonomous motivation for a new set of work practices can be fostered via specific, values focused ASP. A specific component of motivation, namely integrated motivation, was identified as reflective of increased autonomous motivation in a controlled context (e.g., the workplace) (Williams et al., 2016). This finding supports the acknowledged need to move beyond aggregated measurement of autonomous motivation as identified by SDT researchers (e.g., Koestner, et al. 2008) particularly in controlled contexts where behaviour is imposed (Judge, Bono, Erez and Locke., 2005; Slemp et al., 2015). Goal-striving for intrinsic reasons
(“I do this for the fun and enjoyment it brings me”) may be infrequent even for those who feel highly satisfied in their work (Page & Vella-Brodrick, 2009). Successful implementation of workplace practices is most likely to require sustained purposeful goal striving toward behaviours and targets that are self-concordant. The previous component of this research project identified integrated motivation to be most relevant to understand planned implementation (Williams et al., 2016). This aligns with SDT’s conceptualisation of integrated motivation as the most optimal form of motivation for an externally determined behavior (Deci & Ryan, 1985; Ryan & Deci, 2000). Sustained goal striving in the workplace in the absence of changes to intrinsic motivation when individuals are working toward workplace goals that are self-concordant is hypothesised as the ideal.

5.2 Aims and hypotheses

Results of the current project (reported in Chapter 4) showed increased planned implementation of the CRM by mental health workers in the values condition in comparison to those in the implementation condition (Williams et al., 2016). The following study seeks to test whether the superior effect of the initial values intervention on planned implementation results in increased successful striving toward the CRM by that group compared to the implementation control group when condition specific coaching is provided. We are also interested in further exploring whether the values group continues to show higher levels of integrated motivation for CRM in comparison to the implementation group after 6 months of coaching support. This project has highlighted integrated motivation as the component of autonomous motivation with specific relevance to the workplace context, positioning integrated motivation as the ideal form of internalisation.

Previous research highlights a moderating role of integrated motivation on the relationship between successful goal striving and wellbeing (Sheldon et al., 1998; 1999; 2001; Koestner et al., 2002; 2006). Based on results outlined in Chapter 4, we are interested in understanding whether integrated motivation is the mechanism of change in the process of internalisation – that is, to what
extent is the relationship between successful striving and wellbeing uniquely influenced by integrated motivation?

The hypotheses are as follows:

Hypothesis 1: Changes in integrated motivation will be positively associated with improvements in wellbeing and successful goal striving.

Hypothesis 2: Those in the values-focused autonomy supportive group will report greater increases in successful goal striving and improvements in wellbeing than those in the control group.

Hypothesis 3: Changes in integrated motivation over time (6 months) will mediate the relationship between changes in successful goal striving toward the workplace practices and employee wellbeing.

5.3 Method (summarised)

5.3.1 Participants and procedures

Participants were 116 staff members recruited from four community-managed organisations providing support programs to individuals with severe and recurrent mental health challenges. Participants supplying data for this phase of the research were derived from the same sample as those involved in the earlier study (Chapter 4). Reduced participant numbers resulted from an unanticipated withdrawal from the study by one of the smaller partner agencies due to internal logistical problems (loss of funding and organizational restructure) (n=22). Data from participants completing all parts of the initial intervention (days 1 -3) and for whom there was evidence of coaching participation (i.e., data from at least one coaching session) was utilised in the final sample. The remaining data loss from the original sample was most commonly due to staff transfer from involved worksite, exit from organisation, or failure to attend components of intervention when data was collected due to competing workload pressures. While not statistically enumerated, these challenges and the rate of subject loss due to attrition are viewed as consistent with challenges experienced within the mental health field (Aarons & Sawitzky, 2006). Other procedures related to randomisation, data collection and handling,
and methods are consistent with details provided in Chapter 3. A brief version of the procedures specific to this phase of research will be outlined below.

Accredited trainers from the research team attended sites within each partner organisation and delivered the “standard” workplace-training program (Days 1 and 2) in addition to the appropriate condition-specific intervention (Day 3). The longitudinal component of this research involved a third data collection at the commencement of a 6-month “booster” session conducted by trainers from the research team (time 3). Included data was collected at time 1 (pre-training, Day 1), time 2 (post-training, Day 3) and then at 6 months follow-up.

5.3.1.1 Coaching format and Support - In order to promote uptake and maintenance of CRM related goal striving and attainment, a monthly condition-specific coaching component followed the training phase. Coaching is acknowledged as useful in supporting purposeful goal setting and striving of individuals (Green, Oades & Grant, 2006). Individual coaching adopted a structure known as the “GROW” model in both conditions. GROW was made popular by Graham Alexandar and John Whitmore and it is widely used in organisational and coaching contexts as a method of setting a basic frame in a coaching session (Whitmore, 2002). It is particularly attractive in the context of the current research program due to its accessibility and ease of use for those with little or no prior coaching experience. “GROW” is an acronym for the following components of a coaching session; namely Goal, Reality, Options, Wrap up / where to (Deane, Crowe, Oades, Ciarrochi et al., 2010). Copies of the protocol used to support coaching in both conditions is located in Appendix 5.

Individuals were identified as suitable coaches within each partner organisation based on factors including role, availability, accessibility and personal suitability. Identification of coaches was facilitated by managers within each of the organisations and also through a call for expressions of interest. Coaches received a further day of training related to the GROW model, and in the condition-specific coaching protocols (i.e., values clarification for autonomy supportive group, SWOT protocol for the Implementation group). A copy of this coaching record sheet was completed by the coach for
each coaching session and submitted to the research team. Coaching was scheduled during a mutually agreed time within a rostered work day.

The in-service coaches were provided with monthly group-based coaching support sessions by a trained member of the research team. These sessions aimed to support the coaches and to maximize integrity and fidelity of the intervention. Coaching support sessions were conducted in person, or via telephone or Skype, depending on proximity and staff availability. Coaches in both conditions received the coaching support according to this general framework. Trained coaches were assigned to mental health workers within the same experimental condition. Coaches were not line managers for those for whom they provided coaching in order to reduce any concerns about organizational performance management amongst coachees.

Coaching consisted of up to six one-hour sessions scheduled once per month, conducted in the course of paid working hours for both participants. The CRM strategies and practices were used within the session to structure and record coaching in both conditions. Specifically, participating staff members were asked to use the tools that are part of the organisational change initiative to guide their own coaching processes (i.e., apply CRM LifeJET tools to promote values-based goal planning for themselves).

5.3.1.2 Autonomy-supportive Values Intervention - Staff members assigned to the values group received a third day of training that comprised a structured values clarification card sorting process developed by Ciarrochi and Bailey (2008) detailed previously in this thesis (sections 3.2.3, 4.2.1). The values group participated in values-focused coaching for a period of 6 months after training. The particular focus within the values condition related to the establishment of work-related goals that fit with the values identified by the employee during Day 3 of initial training and these were further clarified over successive coaching sessions.

5.3.1.3 Implementation Support Intervention - The delivery of the Implementation condition intervention components followed the same format as in the values condition but differed in focus and
content. The Day 3 of training in the implementation group focused on addressing opportunities for and barriers to the implementation of the newly trained CRM practices within the workplace. The methodology used to structure and support the implementation intervention is the “SWOT Analysis” developed by Albert Humphrey and used extensively in organisational contexts (Humphrey, 2002; as detailed previously in sections 3.2.4 and 4.2.1). This promoted an alternate focus on the identification and resolution of issues related to goal setting and attainment of CRM in the workplace as identified by the coachee (i.e., mental health worker being coached). For example, pragmatic issues (e.g., addressing technical issues associated with new practices) or attitudinal issues (e.g., working through resistance to change from clients or colleagues) were targeted. As in the autonomy supportive values condition, participants in the implementation group also used the CRM strategies and practices to structure and record the coaching sessions.

5.3.2 Measures

5.3.2.1 CRM-VQ - Autonomous Motivation - the CRM-VQ items were related to forms of motivation explicated within the SDT model that has been described previously in this thesis (sections 3.2.6, 4.2.2). This measure was administered at times 1, 2 and 3.

5.3.2.2 CRM-VQ - Successful Goal Striving - the CRM-VQ successful striving items asked participants to rate the extent to which they had been successful in striving toward each of the CRM work 6 principles over the past 12 weeks. A total of 6 items were rated using a 5-point Likert scale (ranging from “not at all successful” to “very successful”). This methodology is compatible with the process utilised by Sheldon and Kasser, (1998), and previous research in mental health (Jambrak, Deane & Williams, 2014; Williams et al., 2016). As per analyses described in Chapter 4, a mean score for successful striving across the 6 principles at various time-points was calculated for each participant due to the highly correlation between individual items (Cronbach alpha = .88).
5.3.2.3 Employee Wellbeing - Employee wellbeing measures as detailed in Chapter 3, section 3.2.6.2 were utilised in this phase of the research and are described below. Participant responses from times 1, 2 and 3 were used for analyses. The wellbeing measures utilised were as follows:

5.3.2.3.i) The Intrinsic Job Satisfaction Scale (ISJS) - the Intrinsic Job Satisfaction Scale (Warr, Cook & Wall, 1979) contains 7 items used to rate employee satisfaction with a variety of workplace issues. Examples of these items include “your opportunity to use your ability” and “The freedom to choose your own method of working”. Responses are made using a 7-point Likert scale ranging from 1) extremely dissatisfied to 7) extremely satisfied. Previous research has reported the Intrinsic Job Satisfaction Scale to have good internal reliability (alpha = .90). In the current study Cronbach alpha was .99.

5.3.2.3.ii) Maslach Burnout Inventory (MBI) - the Maslach Burnout Inventory (Maslach & Jackson, 1981) is a widely utilised measure used to assess the burnout of employees in helping professions and human services. The measure comprises 22 items categorized as 3 subscales; depersonalisation, emotional exhaustion and personal accomplishment. Sample items include, “I worry this job is hardening me emotionally”, and “in my work, I deal with emotional problems very calmly”. Responses are gathered using a 7-point Likert scale, ranging from “Never” (0) to “everyday” (6) to indicate how frequently the statement applies to respondent. The MBI has demonstrated good convergent validity and moderate to high Cronbach’s alpha ranging from .57 - .86 across all subscales in previous research (Maslach & Jackson, 1981). In the current study Cronbach alpha for the total scale was .84. The MBI has been extensively used in human services-based organisational research as a measure of wellbeing (e.g., Rothman, 2008; Pillay, Goddard & Wilss, 2005).

5.3.2.3.iii) General Health Questionnaire (GHQ) - the General Health Questionnaire is a widely used scale comprising 12 items designed to assess changes to normal psychological function typically indicating the presence of mild psychological distress or disorder. Each item consists of a question beginning with “Have you recently” to which respondents reply by identifying one of four possible
options (more so than usual, same as usual, less so than usual, much less than usual). An example statement is “Have you recently been able to enjoy your normal day-to-day activities?” Previous research reports good internal consistency (alpha = .88) and re-test reliability \((r=.73)\) (Hardy, Shapiro, Haynes, Rick, 1999). In the current study Cronbach alpha was \(\alpha = .85\).

5.3.2.3.iv) Intention to Leave (ITL)- the Intention to Leave Scale (Wayne, Shore & Liden, 1997) is a 5-item measure designed to assess how likely it is that the respondent will leave their current position of employment. An example item is, “I often think of quitting my job at my organization” and respondents rate their agreement from 1) strongly disagree to 5) strongly agree. The ITL scale has been assessed as having good internal reliability (alpha = .90) (Villaneuva & Djurkovic, 2009). In the current study Cronbach alpha was \(\alpha = 88\).

5.3.3 Design and analyses

Change scores for integrated motivation, successful goal striving and all of the wellbeing measures will be calculated (T3-T1). Correlation analyses will be undertaken to explore relationships between change in integrated motivation, successful striving toward the principles embedded within the CRM, and measures of employee wellbeing.

Repeated measures analysis of variance to test between groups effects on variables integrated motivation, successful goal striving, and employee wellbeing across the three time points (Time 1: pre training, Time 2: post training Day 3, Time 3: 6 months).

The logical causal order of X, M, Y will be tested, with Change in Integrated Motivation as M, mediating the direct effect of successful striving on various measures of mental health worker wellbeing described above. The PROCESS macro (Hayes, 2013) was used for meditational analyses. This method utilises bootstrapping, which involves the process of random re-sampling of the actual sample to a set number (in this case 5000 bootstrap samples) to create an empirical representation of the distribution of the indirect effect of X on Y (via M). This indirect (or meditational) effect is considered to be present if the bias-corrected 95% confidence interval does not include zero (Hayes,
2013). Process is considered superior to previous approaches as it does not impose the assumption of
normality on the data, and tests with higher power due to the repeated random re-sampling (Hayes,
2013). Based on recommendations by Hayes (2013) the indirect effect size was determined using
Preacher and Kelly’s (2011) kappa-squared. Values closer to 1 indicate a greater indirect effect.
Change in key variables from Time 1 (pre-training) to Time 3 (6 months) and Time 2 (Day 3) to Time
3 (6 months) were utilised in the mediation analyses.

5.4 Results

5.4.1 Correlation Analyses
Correlations were conducted to better understand the relationships between T1 to T3 changes in the
variables; Integrated motivation, successful goal strving and measures of employee wellbeing. Time
1 to Time 3 change in Integrated motivation was positively correlated with change in successful goal
striving toward the CRM, $r = .36, p < .01$, and negatively correlated with change in burnout, $r = .45, p
< .01$. Change in successful goal striving was also positively related to change in intrinsic job
satisfaction, $r = .28, p < .04$, and further significant relationships between changes in employee
wellbeing variables were revealed as depicted in Table 4 below:
Table 4

**Correlations between changes in major variables (pre training to 6 months)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integrated Motivation for CRM</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Successful Striving CRM</td>
<td>.36**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Intrinsic Job Satisfaction</td>
<td>.18</td>
<td>.28**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Burnout</td>
<td>-.45**</td>
<td>-.33**</td>
<td>-.43**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Intention to Leave</td>
<td>.01</td>
<td>-.02</td>
<td>-.31**</td>
<td>.40**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. General Health Wellbeing</td>
<td>.02</td>
<td>-.06</td>
<td>-.12</td>
<td>-.30**</td>
<td>.03</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Propensity to Innovate</td>
<td>.09</td>
<td>.16</td>
<td>.23*</td>
<td>.03</td>
<td>-.01</td>
<td>.08</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. * p<.05, ** p <.01, n=115

5.4.2 Effect of Condition

Post hoc mixed design analyses of variance (ANOVA) were completed to examine whether there were differences between the two conditions on experimental variables integrated motivation, successful striving, burnout and intrinsic job satisfaction across the three time points (T1 - pre training, T2 - end of initial training, T3 - 6 months following coaching). Burnout was further investigated due to the significant correlations with both key experimental variables – integrated motivation and successful striving toward CRM. Further analysis of a possible between groups interaction for Intrinsic Job Satisfaction was carried out due to the significant findings reported above.

No significant interaction effect was found for change in integrated motivation for the CRM practices, $F(2,212) = 1.94$, $p = .20$. Similarly, no interaction effect was detected for change in successful goal striving toward CRM practices, $F(2,208) = 2.89$, $p = .06$. No interaction effect was detected for change in burnout, $F(2, 95) = 2.72$, $p = .07$, or Intrinsic Job Satisfaction, $F(1,94) = 1.52$, $p = .22$. Comparison of means for the values and implementation groups for each variable across the three time points are presented in Table 5 below:
Table 5

*Means and Standard Errors (in parentheses) for Values and Implementation condition at T1, T2 and T3 for key variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>T1 Pre training</th>
<th>T2 Day 3</th>
<th>T3 6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Condition</td>
<td>Condition</td>
<td>Condition</td>
</tr>
<tr>
<td>Integrated Motivation CRM</td>
<td>4.40 (.07)</td>
<td>4.59 (.07)</td>
<td>4.36 (.09)</td>
</tr>
<tr>
<td>Successful Striving CRM</td>
<td>3.51 (.11)</td>
<td>3.70 (.13)</td>
<td>3.67 (.11)</td>
</tr>
<tr>
<td>Burnout Intrinsic Job Satisfaction</td>
<td>.99 (.09)</td>
<td>1.00 (.08)</td>
<td>1.23 (.09)</td>
</tr>
<tr>
<td>Satisfaction Intrinsic Job</td>
<td>5.62 (.14)</td>
<td>5.51 (.18)</td>
<td>5.46 (.17)</td>
</tr>
</tbody>
</table>
Further analysis of coaching records was undertaken in light of the unexpected absence of interaction effects. Coaching record sheets were obtained from a total of 82 participants. The mean number of coaching sessions that occurred between Time 2 and Time 3 was 2.54 sessions (SD = 1.34). A Mann-Whitney U-test found no significant differences between conditions in the number of coaching records returned, \( p > .05 \). This suggests that differential non-completion of coaching is unlikely to account for the lack of between group interaction effects.

### 5.4.3 Mediation Analyses

The core mediation model, based on SDT and the finding in the current research highlighting the importance of integrated motivation, is that integrated motivation leads to greater successful striving toward the CRM, which in turn should lead to greater wellbeing within participating mental health workers. Specifically, the wellbeing construct of burnout was investigated due to the significant relationship between this variable, successful striving and integrated motivation presented above. Change in integrated motivation (T2-T1) was entered as variable X, with change in burnout from T2 to T3 entered as Y. Change in successful striving toward CRM from T2 to T3 was entered as M. An insignificant effect of integrated motivation on successful striving was identified \((a = -.25, p=.20)\). However, the effect of successful striving on burnout was significant \((b=-.21, p<.01)\). The total effect of integrated motivation on burnout was insignificant \((c = .05, p=.68)\), with a non-significant indirect effect \((ab=.05, 95\% \text{ CI } [-.02, .18])\).

In accordance with Hayes (2013), an alternate model that sought to partition possible effects of changes in integrated motivation on the relationship between successful striving toward CRM and burnout was investigated. Change from T1-T3 on successful striving was entered as variable X, while change in burnout from T1 to T3 was entered as variable Y. Change in integrated motivation (T1-T3) was entered as M. Increased successful striving predicted greater change in integrated motivation for the CRM practices \((a = .29, p<.01)\), and greater change in integrated motivation predicted greater reduction in burnout \((b = -.39, p<.01)\). Bootstrapping revealed a significant indirect effect of
successful striving on burnout in the mental health workers ($ab = -.11, 95\% CI [-.30, .00^*]$). When the mediator was entered into the model the total effect of successful striving on burnout ($c = -.27, p<.01$) decreased but remained significant ($c' = -.16, p<.04$) indicating that integrated motivation partially mediated the relationship between successful striving and worker burnout. Kappa squared was equal to .14 meaning the observed indirect effect was about 14\% as large as its maximum possible value of 1. Figure 6 (below) depicts the mediating effect of integrated motivation on the relationship between successful goal striving and burnout:

(*NB: Result equates to .00 when rounded to 2 decimal places. The upper confidence interval is -.0001 when rounded to 4 decimal places therefore does not technically include a zero result).

5.5 Discussion

The current research sought to expand on previous findings that indicated that integrated motivation can be fostered for an imposed set of practices, and that values focused ASP are a useful method in the workplace (Williams et al., 2016). Aligned with the first hypothesis, change in
integrated motivation across the six month intervention period was positively associated with improvements in successful striving toward the CRM and one element of wellbeing, namely burnout. Somewhat unexpectedly given the theoretical conceptualisation of motivation adopted in this component of the study, a positive relationship between changes in intrinsic job satisfaction and successful striving toward CRM was revealed. This significant finding tends to support the basic discrepancy-reduction theory of goal striving (i.e., succeeding at goals is inherently enjoyable). The absence of a significant association between integrated motivation and intrinsic job satisfaction aligns with the central premise of this thesis that, according to SDT, integrated motivation and intrinsic motivation are distinct forms of motivation with varied relevance in the workplace context. The relationship between changes in integrated motivation and successful striving were not significantly related to changes in changes in the mental health workers’ propensity to innovate, intention to leave or general mental health and wellbeing.

A number of significant findings in the expected direction were identified between the various measures of wellbeing. The results depicted in Table 4 indicate changes in burnout to be significantly associated with changes in general health and wellbeing, intention to leave and intrinsic job satisfaction within mental health workers. Reductions in the levels of reported burnout in mental health workers is positively associated with improvements in general mental health and wellbeing and increases in intrinsic satisfaction with their work over the 6-month period align with previous research identifying the positive association between these constructs (e.g., Faragher, Cass & Cooper, 2005). Additionally, changes in intrinsic job satisfaction over the 6 months of intervention were significantly related to changes in employee propensity to innovate and intention to leave. Being intrinsically satisfied with one’s employment has also been identified as critical to employee effectiveness in previous research (Slemp et al., 2015; Page & Vella-Brodrick, 2009).

Contrary to the second hypothesis, there was no significant effect of condition on successful striving toward the CRM goals, integrated motivation for the CRM changes, or the measures of
wellbeing that were further investigated (burnout, intrinsic job satisfaction). Mean scores over time indicate changes from Time 1 to Time 2 were generally in the hypothesised direction but were not from Time 2 to Time 3 which was during the coaching period. These findings indicate that the initial positive response to the training phase of values-focused interventions (i.e., increased integrated motivation toward the CRM and plans to implement for those in the values condition) were not translated into more lasting impacts when mental health workers were receiving coaching in their workplace. The coaching records indicate that the amount of coaching received was inadequate, with information from in-service coordinators indicating competing work-pressures and potential coach-coachee resistance being barriers. In addition to an insufficiently potent coaching component, relatively high mean pre-intervention scores for the overall participant group on both successful-striving (3.4/5) and integrated motivation (4.3/5) suggest it was likely to be difficult to attain the hypothesised interaction effect even with the adequate sample size (n greater than 100).

The results of mediation analyses lend support for the relevance of integrated motivation when the relationship between longitudinal changes in this variable, successful striving toward the CRM and burnout was examined. Specifically, an indirect effect of integrated motivation on the significant relationship between successful striving toward CRM and burnout was identified. Approximately 14% of the variance in this relationship could be apportioned to integrated motivation. Causal-steps analysis using changes in integrated motivation across the initial training phase (T1-T2) as the constant revealed a non-significant relationship between this factor and changes in successful striving toward CRM from T2 to T3. This model revealed a significant effect of successful striving toward CRM on reduced burnout in the mental health workers from T2 to T3, lending support for the previously acknowledged assertion that successful goal-striving leads to improvements in wellbeing (Locke & Latham, 2002; 2006; Carver & Scheier, 1990).
Taken together, these results suggest that while integrated motivation at the end of training did
not predict longitudinal successful striving or improvements in burnout for the mental health workers,
this specific component of motivation does have a unique role in understanding the relationship
between increased successful striving and reduced burnout when overall changes across the
intervention period (T1-T3) are explored. This suggests that a focus on enhancing opportunities for
employees to internalise an otherwise imposed set of practices and goals has potential benefits,
particularly reductions in burnout. These results also expand conceptualisation of the self-concordant
goal striving model by highlighting integrated motivation as a possible mechanism by which
successful striving and wellbeing are associated. ASP’s that enable internalisation and in turn foster
greater integrated motivation for otherwise imposed goals and behaviours seem to be potential
methods capable of enhancing self-concordant (and therefore autonomous) goal striving within
controlled contexts like the workplace.

5.5.1 Limitations and Implications for Further Research

While integrated motivation has been shown to have a unique indirect effect on the relationship
between increases in successful goal striving toward the imposed CRM practices and decreases in staff
burnout, the values based intervention for staff has not demonstrated specific utility over and above an
implementation support as a specific means of fostering integrated motivation for the change. The
lower than planned number of coaching sessions (mean 2.54 instead of 6) across the 6-month period in
both conditions likely decreased the potency of coaching. For the values group, insufficient
participation in coaching seems to have resulted in a gradual “erosion” of the gains evident at the end
of initial training in terms of both integrated motivation and their plans to implement the new CRM
practices. At 6 months, mean scores on key variables show results for the values group had plateaued
or dropped slightly below the mean scores for the implementation group on integrated motivation,
successful striving, intrinsic job satisfaction and burnout. This further highlights the need to ensure the
amount of intervention (i.e., number of received coaching sessions) reaches optimal levels to promote optimal levels of condition-specific components are received. Future research that addresses the dosage issues would benefit from the inclusion of a non-intervention control group to further discern whether any changes in purposeful striving, autonomous motivation or wellbeing occur naturally following workplace training.

In addition to an insufficient number of coaching sessions, issues related to adherence to the coaching protocols are also likely to have adversely effected coaching. For example, it was possible for individuals and coaches within the same organisation but different team (and hence condition) to communicate with one another (e.g., at regular managerial meetings), which may have reduced the differences between intervention components. Possible cross-pollination of intervention components (contamination) between conditions due to these infrequent interactions between individuals within the partner organisation may have been a confound. Although the cluster-randomisation by teams was utilised to reduce potential contamination between conditions within team, it was difficult to totally prevent communication between individuals in different teams even when they are geographically separated.

Finally, lack of prioritisation of coaching within the competing demands of the workplace for both mental health support workers (coachees) and their assigned coaches was suggested to be a hindering factor as identified via consultation with the in service liaison officers. Understanding the factors that resulted in the insufficiency of the coaching component of this intervention is an important consideration for future research. Further research to examine organisational factors (e.g., readiness for change, managing competing workloads / demands) that foster top-down prioritisation of implementation-related issues of workplace change initiatives such as this is suggested as a first step to increasing participation and effectiveness of future interventions.

This research has utilised self-reported measures of successful striving and employee burnout, which may not accurately reflect changes in behaviour or objective measures of workplace attendance
and wellbeing. Further research incorporating objective measures (e.g., changes in observed behaviours consistent with the CRM practice, attendance records and sick leave, staff member participation in role-extra activies / opportunities) and development of more comprehensive systems of assessment in organisational contexts (i.e., taking into account self-report and observable measured change including the service user/ participant experience) is an area in need of further attention.

5.5.2 Chapter summary

Chapter 5 has detailed the findings of longitudinal findings of 6 months of coaching support following initial training in CRM. The research sought to test whether the superior benefits of the values-focused intervention compared to the standard implementation group found immediately after training persisted over the 6 month on-the-job coaching period. Aligned with previous research related to self-concordant goal striving, superior effects of intervention on mental health worker wellbeing were also predicted for the values group in comparison to their colleagues in the implementation control. No significant between-groups effects were revealed for self-reported successful striving toward CRM related goals at 6 months, nor were there significant findings for any of the measures of wellbeing for those in the values group. The results tend to support the central relevance of the motivation component integrated motivation in the relationship between successful striving and one facet of wellbeing (i.e., burnout) for the sample of mental health workers overall. Issues with coaching adherence, dosage and prioritisation within the workplace have been highlighted as impediments to coaching in the current research. This research has added to current understanding of the specific importance of integrated motivation as relevant in assessing autonomous motivation in a controlled context, and as a mechanism that can be purposefully targeted to enhance individual motivation for changes that would otherwise be experienced as imposed. The implications for future research, in
addition to a summary of findings and limitations of the current research, will now be undertaken in the concluding chapter to this thesis.
CHAPTER 6 – CONCLUSION

This chapter summarises the findings of the current research, discuss limitations and elaborates on opportunities for further research.

6.1 Summary of findings

The current research focused on two primary questions. The first question was “what aspect of autonomous motivation is changed in response to the training intervention?” The intervention involved structured values clarification and commitment activities as an adjunct to standard 2-day CRM training as a means to facilitate employee autonomy for newly trained practices. According to the SDT model of motivation, behaviours are undertaken for intrinsic and / or extrinsic reasons (Deci & Ryan, 2000; Ryan & Deci, 1985). SDT extends upon other models of motivation by acknowledging three forms of extrinsic motivation that reflect the degree to which an externally determined behaviour is integrated with the individual’s sense of authentic self. These are known as external, introjected or integrated extrinsic motivation respectively (Deci & Ryan, 2002).

Autonomy supportive practices are those practices aimed at fostering autonomous motivation for otherwise imposed behaviours (Deci et al., 1994). Internalisation is the process by which autonomy support is hypothesised to operate, and involves increased congruence of the imposed behavioural regulation with the individual’s personally held values and beliefs (Ryan & Deci, 2002). Previous studies have measured changes in aggregated motivation scores (external and introjected subtracted from ratings on integrated and intrinsic motivation statements) (e.g., Sheldon & Houser Marko, 2001) or more recently have compared changes in autonomous motivation composite scores (sum of ratings for integrated and intrinsic motivation statements) (e.g., Koestner et al., 2008). These variations in measurement highlight the changing conceptualisation of how autonomy is best measured. Previous conceptualisations included intrinsic motivation (“I do this for fun and enjoyment”), when it is increasingly acknowledged that this kind of motivation may rarely apply for
the kinds of important, desirable and valued behaviours undertaken in social contexts like the workplace. Integrated motivation is described as the “most optimal form of autonomous motivation for an imposed regulation” (e.g., a workplace practice) (Deci & Ryan, 2002). Therefore, in the current research, we sought to understand the specific relevance of integrated motivation to employee autonomy for the newly trained CRM principles and practices.

The current research applied a structured values clarification and commitment process to support autonomy, and found it to have significant benefits in fostering integrated motivation for the CRM compared to the implementation condition. No significant results were found for pre-post training changes in external, introjected or intrinsic motivation. Furthermore, the aggregated autonomy change score was also non-significant. The values intervention also had a superior effect on enhancing employee plans to implement the CRM principles compared to the more conventional implementation intervention.

The second question central to the current research was “by what processes does the intervention primarily work?” The current research sought to understand the mechanisms of change that might lead to improved well-being amongst mental health workers. Hypothesised processes were based on SDT and self-concordance research (Elliott & Sheldon, 1998; Sheldon et al., 1998, 1999; 2002). The self-concordance of goals has been associated with both successful goal striving and increased well-being, such that higher levels of goal self-concordance lead to greater goal success and higher levels of wellbeing (Sheldon et al., 1998; 1999; 2002). Self-concordance has been aligned to the motivation component referred to as “integrated motivation” (Deci & Ryan, 1985), and was positively influenced by values-clarification and commitment in the first phase of the current project (Williams et al., 2016).

Based on this, it was expected that mental health workers who received values-focused coaching and support for 6-months would show increased successful striving toward the work-related CRM principles, in addition to experiencing increased improvements to wellbeing. However, no
between group differences were evident between the employees participating in the values intervention and those in the implementation group after 6 months of condition specific coaching. A number of issues related to coaching adherence and potency have been identified and detailed in Chapter 5 and, it was suggested there is a need for greater simultaneous top-down support for what is primarily a bottom-up approach to fostering autonomous uptake of a desired workplace change.

The research also examined whether integrated motivation had a unique mediating effect on the relationship between goal attainment and wellbeing. It was predicted that changes in integrated motivation for CRM would mediate the relationship between changes in successful goal striving and employee wellbeing. Changes in integrated motivation were found to exert a unique mediating effect on successful striving toward CRM and burnout of mental health workers. Overall, these results suggest integrated motivation is one mechanism likely to facilitate the process of internalisation. Despite promising pre-post findings related to planned implementation of the CRM, the longitudinal results did not demonstrate values focused staff intervention to be efficacious over and above more conventional implementation intervention support.

6.2 Contribution to the literature

Taken together, the findings arising from current research suggest integrated motivation is relevant to understanding and supporting autonomy for imposed changes in controlled contexts such as the workplace. In terms of the literature related to training transfer, the current research provides support for the importance of individual factors such as motivation, which have been highlighted previously (Burke & Baldwin, 1999). The current investigation furthers this research by positioning a relatively cost and time effective values intervention as a means to enhancing the degree of participant “buy in” (as measured by integration with their sense of values and beliefs) and plans to implement a newly trained initiative. With training costs cited as $50 million per annum in larger economies (Industry Report, 2000), and transfer rates as low as 12% after one year (Burke & Hutchins, 2007), the possible benefits that may arise from the relatively small costs associated with an additional
component at the conclusion of “standard” training intervention would seem meritorious. Alternately, use of a similar values intervention as an adjunct to standard training, or possibly as part of recruitment, for the purpose of “values-fit” assessment may also be a valuable alternate use of the protocol explicated in this study.

The coaching component of this research project was limited at least in part by issues related to workload and competing priorities, which tends to indicate the opportunity-cost of participation in ongoing coaching may be hard to justify and expend within organisations. Qualitative data from coaches and coachees within this study indicate a number of highly valuable experiences that are likely to have contributed to increased autonomous CRM goal striving in addition to enhanced wellbeing for the involved staff member. One example of this qualitative feedback is as follows:

“As far as epiphany’s go I can say that having a co-worker do the Camera with me (during CRM coaching) was definitely one of these moments. The exercise made me realise that my life was extremely goal directed. Whilst many of my goals reflected values that were important to me, I found that there was an extremely significant value that I was almost completely neglecting. The value was around ‘being in touch with nature’. Importantly, this was a value that would most likely sustain my well-being and enjoyment of life. I immediately started thinking of ways I could ensure I could incorporate living by this value more. I was excited and energised and set goals in relation to his. Six months down the track, my focus has shifted and I find I am more mindful of including the things that keep me feeling satisfied with life within my daily plans and longer term goals”.

(Information provided from a Neami staff member in the values-focused coaching condition).

This feedback indicates that coaching involved both direct application of CRM principles during sessions, in addition to changed “real world” practice by this particular staff member aligned with the CRM principles even beyond the confines of the workplace. Such case-based feedback
highlights how powerful coaching can be. However, it is clear that further efforts to quantify a value of staff development initiatives such as coaching in a way that increase the salience and raise priority / importance within the organisational context. Commitment to research projects that identify and attempt to strengthen reproducible methods of effective training transfer are of paramount importance in the mental health field given the desired outcome is increased evidence-based service delivery to mental health consumers. The challenges particularly in the coaching component of the current research provide experiential learnings for further important research in this area.

The current study focuses on the utility of values-based interventions as a workforce development strategy. While the value construct seems to have common sense relevance, there is a surprising lack of clarity about the definition and use of values within the organisational context. For example, Parks and Guay note that organisational research has tended to “shy away from studying values” (2009; p 677) identifying much of the behaviour of individuals in social groups to be dominated by social norms rather than consciously chosen actions that can be attributed to chosen values. For these authors, studying the influence of values is therefore difficult if not unachievable given the coercive power of these dominant social norms. Other authors (e.g., Paarlberg & Perry, 2006) point to an increased interest in values within organisations and other social structures focused on a perceived need for “values management”, perhaps in response to this awareness of dominant normative forces in social groups. Such research seems to originate primarily from the perceived need to curb and manage unhelpful or errant employee behaviours by “retraining” in line with so-called core values (Peterson, 2002). Here, the source of motivation for values-consistent behaviour are externally driven factors such as social acceptance, fear of punishment, self-deprecation, guilt or shame (Meglino & Ravlin, 1998; Peterson, 2002). According to SDT, such controls represent either introjected or external intrinsic motivation, which has demonstrated limited capacity for sustained change in behaviour over the longer term (Deci, Koestner & Ryan 1999). Additionally, research indicates resultant behaviour change tends to occur with limited change in conceptual understanding about the
need for specific behaviour (Boggiano et al., 1993), which would be less than desirable in the case of mental health workers and others involved in complex client-centred roles.

The current research aligns the organisational relevance of values with autonomous motivation and self-determined (rather than controlled) uptake of socially desired principles and behaviours. An opportunity is presented, through targeted values intervention for staff, to weave the robust evidence base for SDT and self-concordant goal striving more fully into the organisational domain (Gagne & Deci, 2005). This is the first study to the best of our knowledge to empirically test the ability of a specific values protocol to promote autonomous motivation and self-concordant goal setting within an organisational context.

The challenge of synergising desired organisational behaviours with the motivations of the individuals working within them continues to be an area of significant interest (e.g., Paarlberg & Perry, 2006; Pinder, 1998; Judge & Bono, 2004). The use of rewards, incentives, audits and managerial compliance checks continue to feature as frontline methods of bringing about this synergy despite considerable evidence of their potential deleterious impacts on sustained motivation (Koestner et al., 1984; 2008; Flink et al., 1992). The current research lends further support for the relevance of organisational interventions that facilitate personal acceptance and commitment to workplace principles that allow employees to integrate organisational and personal values embedded within desired practices as an alternative to control-oriented approaches (Gagne, Koestner & Zuckerman, 2000). Despite the deliberate and significant commitment to nurturance of values-congruent motivation in the current research, elements of control and restricted choice are evident within our protocol (e.g., assignment of worksite to condition, assignment of coachee to coach, coach to coaching condition). Inherent within the mental health recovery field is a foundational assumption that individuals have the right to choose their journeys and ultimately whether the journey is being lived-well (Bond, Evan, Salyers, Williams et al., 2000). Fidelity measures are tools designed to measure how adequately a program is adhering to the foundational model (Bond et al., 2000). Recent work in
the area of fidelity assessment within recovery organisations has focused on the use of evaluation approaches focused on highlighting consistency with key philosophies of recovery via inductive processes (Armstrong & Steffen, 2008). Within such fidelity assessment approaches, there exists room for organisations to demonstrate philosophies “lived out” at various levels, in varied ways and with unique meaningful impacts for individuals including service-users in addition to staff (Armstrong & Steffen, 2008). The current research has treated congruence between personal values and workplace values as the mechanism of change in promoting self-motivated uptake of key recovery practices. The importance of valued-action in fostering autonomous motivation is well-established (Deci & Ryan, 1985; Ryan & Deci, 2000). It is possible that fidelity to set values (i.e., congruence between stated organisational values and my lived experience as a worker) is the mechanism of change, and values-congruence is an outcome when recovery values are embodied fully.

6.3 Contribution to application of SDT in controlled contexts

The current research is novel in its focus on the singular motivation components outlined in the SDT model. The investigation of motivation at the component level seemed particularly relevant in the workplace where the desired outcome of a motivation enhancement initiative is workers increasing the degree to which they act consistently with standards of practice because they “wholly believe it is important” rather than “because it brings me fun and enjoyment”. Human resources research is increasingly noting the expectation from employees that work brings purpose and meaning (Warr, 2007). The component of motivation represented by integrated motivation within the SDT is highly relevant to understanding how concordant various aspects of the workplace are with individual’s sense of meaning (De Cooman et al., 2013).

The values clarification and commitment process that was used as an adjunct to the initial CRM training represents an example of a reproducible, standardised method of autonomy support with broad relevance to organisations. This directly addresses a key research objective highlighted by Gagne and Deci (2005) identifying an absence of empirically validated approaches to autonomy support in
organisational research. Recent studies related to autonomous motivation for employees (e.g., Vansteenkiste, Neyrink, Niemiec, Soenens et al., 2007; Slemp et al., 2015; Stone, Deci & Ryan, 2009) indicate that applied SDT research in the organisational domain continues to focus primarily on fostering autonomy supportive climates. That is, interventions or support targeted at managers or leaders in an attempt to promote autonomy supportive leadership styles, result in contexts with more acknowledgment of worker’s feelings, desire for choice over how roles and undertaken and craft, in addition to reduced use of coercive control (Bono & Judge, 2003; De Cooman, Stynen, Broeck, Sels et al., 2015; Stone et al., 2009). In the current research the autonomy support intervention was targeted and implemented with staff members at the coal-face of the organisation, providing a direct opportunity for increased personal commitment and buy in to the externally generated change.

6.4 Limitations and areas for further research

While a point of difference and a noted strength of the current research, the targeting of “grass roots” employees as the point of intervention without greater focus on complementary top-down autonomy supportive initiative can also be viewed as a limitation. Anecdotal information from in-service liaison personnel indicated competing work demands and a lack of full understanding by more senior managers of the need for continuing participation in intervention components (i.e., condition-specific coaching) presented as a challenge to both participating employees and in-service coaches in this study. The actual versus possible coaching dose (2.54 versus 6) achieved reflects this reported difficulty. While high-level support for the study was clearly evident given the participation in a jointly-funded grant, anecdotal feedback from services indicated a lack of understanding and awareness from those managers with more direct influence on the workload and workplace environment (e.g., worksite managers). The key role of middle level management in the spread of innovations has been highlighted in previous research (Ferlie, Fitzgerald, Wood & Hawkins, 2005). Greater information and awareness of the requirements and needs of research participants at mid-upper management levels and possibly the complementary roll-out of a “top down” intervention to foster an
autonomy supportive climate as outlined above (e.g., Stone et al., 2009) presents as an opportunity for improvement in future research.

Other limitations in the coaching protocol which may have reduced the effective “strength” of condition-specific components in the 6-month post-training intervention phase have been highlighted in the discussion section of Chapter 5. Increased support to coaches and greater consistency in method of delivery of coaching support (e.g., all conducted in person, or via skype rather than varied methods), and increased structuring of the post-training coaching schedule may lead to greater consistency and a higher condition-specific coaching dose. Further attention to coach recruitment, including assessment of capacities such as workload, previous coach-related skills / experience and attitudinal factors including the degree to which coaching is being undertaken for autonomous reasons is also suggested as an improvement to the current protocol, and are likely to increase coaching dose and fidelity. As stated in Chapter 5, inclusion of a non-intervention control group in future research would also help determine efficacy of coaching overall, and potentially enable further understanding of the processes targeted in each approach to coaching (Deane et al., 2014).

Prominent researchers interested in understanding the science of implementation of evidence-based interventions have more recently proposed staged models that acknowledge varied levels and phases in the process of implementation (e.g., Aarons, Hurlburt & Horowitz, 2011). These models indicate that successful implementation requires attention to these multiple levels across different phases of implementation, and should include a focus on both the inner and outer context of the organisation being changed (Aarons et al, 2011). Models such as this may be helpful in understanding, for example, why the positive impacts of the values training intervention were not sustained across the coaching phase to the 6-month follow-up. For example, the mean results for mental health worker burnout in the period from end of coaching to 6-months showed a general trend upward for those in both intervention conditions and intervention sites (Table 5, Chapter 5). This may indicate specific elements of this phase of intervention (i.e., doing rather than just planning to do) to be particularly or
evenly inherently stressful. Implementing and maintaining action towards even those changes that are self-initiated has been acknowledged in staged-based models of change as a time of high ambiguity (e.g., Prochaska & DiClemente, 1982). Understanding the process of organisational change with more sensitivity and precision via the use of a staged model may allow greater attention and responsivity to issues of ambiguity and stress for involved staff members, and presents as an opportunity for extension of the protocol utilised in this implementation-focused research.

The findings attained in the current research rely on self-reported measures on all key variables. While there is utility in self-report particularly in this case given the project’s focus on participant experiences of self-determination and autonomy, objective measures and specifically 360-degree assessment that directly involves feedback from service users is likely to be a fruitful area of further research. This is particularly important for further research related to CRM implementation due to the centrality of service user involvement in mental health recovery (Deegan, 1995; Trivedi, 2010). Previous research methods utilised by this team to elicit service user feedback (e.g., Marshall, 2007) could be integrated in the post-intervention phase to determine impacts of the values intervention and ongoing coaching on recovery operationalisation from the perspective of the service user.

Additionally, more objective changes to employee wellbeing could be considered in future research (for example, attendance data or participation in professional development). However, the potential deleterious effects of compliance-oriented methods has been consistently highlighted in this thesis due to the potential negative “undermining” effects on staff autonomous motivation (Koestner et al., 2008). Over-reliance on “accountabalism” in the form of short-term performance pressures is highlighted by key SDT researchers as an impediment to sustainable motivation for organisational initiatives (Stone, Deci & Ryan, 2009). Therefore, balancing the need for short-term objective measures and targets (e.g., reduced absenteeism) and longer-term approaches that motivate employees from within is acknowledged as an ongoing challenge in attempts to manage the competing needs of organisations and the individuals that work in them (Pinder, 1998; Stacy, 2005).
This research has focused on data provided by participants who completed all training, onsite data collection and the minimum requisite participation in coaching (i.e., at least one session). Greater access to data and control for potential bias is emphasised in statistical modelling techniques and other sophisticated approaches to missing data (Schafer & Graham, 2002; Yuan, 2000). Further analyses of data, and testing of multiple mediation models in addition to the single mediation hypothesis investigated in the current research are acknowledged as limitations and opportunities for further research.

Cultural diversity is a core concept underpinning recovery-oriented service provision in Australia as it is in other nations (Multicultural Mental Health Australia, 2010; National Mental Health Consumer & Carer Forum, 2014). It is estimated that 40% of the Australian population are immigrants and 15% speak a language other than English at home (National Mental Consumer & Carer Forum, 2014). Cultural competence as a concept and set of practices is relatively new in Australia, amidst acknowledgment that “one approach fits all” is unfortunately the prevailing reality in mental health service provision (Rezaho, 2008). While purposeful commitment to key elements of cultural competency (including involvement of persons from culturally and linguistically diverse backgrounds) is evident in mental health strategy, evidence of workforce participation rates within community mental health organisations is difficult to collate and access (AIHW, 2016). Limited focus on this critically important issue within the current research is acknowledged and prevents specific comment about the cultural relevance of findings related to values-interventions for employees working within mental health. Cultural relevance and applicability of mental health interventions and specifically staff-focused values interventions is raised as an area worthy of future focus.

While there are limitations in the current research design that have likely impeded the ability to clearly position value-based approaches to increasing autonomous implementation of a training intervention, supporting internalisation of an otherwise imposed workplace change and the use of
values-based approaches in the organisational context continues to have both theoretical and applied merit as areas for further study.
REFERENCES


Multicultural Mental Health Australia. National Cultural Competency Tool for mental health services. Parramatta MMHA; 2010


Appendix 1: CRM Training and Tools
Collaborative Recovery Training Program

2009-2012

Standard 2 day

Overview

- Housekeeping
- 6 Modules (3 days)
- Roleplays
- Copy of slides
- Copy of LifeJET sheets (from pads)
- Book of readings - with 3 min presentations from each of you over first two days
- Monthly individual coaching for 12 months
- 6 mth booster day
- Part of 5 organisation research project headed by UOW
Thank you for your contribution to practice based evidence.

Please ask your facilitator about the questionnaire items if you have questions.

<table>
<thead>
<tr>
<th>Work to enhance and base?</th>
<th>Experience and Reflection</th>
<th>Work to enhance and base?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaningful life (recovery)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Collaborative Relationships</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Change-enhancement</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Strengths and values</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Life visioning and goal setting</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Action planning and monitoring</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Thank you for your contribution to practice based evidence.

Please ask your facilitator about the questionnaire items if you have questions.
What is the Collaborative Recovery Model?

- The Collaborative Recovery Model (CRM) is a practice model designed to incorporate evidence of practices that have previously assisted people living within enduring mental illness, designed to be consistent with the values of the recovery movement.
- The model has two guiding principles and four components.
- The Collaborative Recovery Training Program, based on the model is designed to assist mental health workers assist those living with illness.
- The CRM has relevance to the broader “system of recovery” ie carers, self-help and whole organisations in addition to training mental health workers.
Advantages of CRM

- The CRM has been designed to have the following advantages:
  - Generic skills that can be used flexibly
  - Approaches that are relevant across case management and psychosocial rehabilitation contexts
  - Emphasis on issues of autonomy, hope, and individual experience central to the recovery movement within mental health
  - Skills based components that have an evidence base
  - An emphasis on measurement, consistent with the need for mental health services to generate evidence.

The six Collaborative Recovery questions for a consumer to ask him or herself:

1. Who can I be now?
2. Who can help me to be who I want to be?
3. What am I ready to do?
4. What are my strengths and values?
5. What do I want to achieve?
6. To achieve what I want, what will I do, when, where and for how long?

The six Collaborative Recovery questions for a clinician to ask him or herself:

1. How can I help this person have more meaning in his/her life?
2. How can I support this person’s autonomy?
3. How can I help move this person to take make a start?
4. What are the strengths and values of this person?
5. What does this person really want to achieve?
6. What does this person need to do, when, where and for how long - to achieve what they want?

Evidence from Australian team

- Recovery not just as an ideal, but a practice which is evaluated
- 12 sites government and non-government
- Summary of evidence for people with enduring mental illness includes:
  - Collaborative Recovery Model (CRM) training improves staff attitudes to recovery
  - CRM training improves the quality of care plan/goal setting documentation
  - Training transfer is low unless supported
    - As measured by practice audits
Evidence from Australian team

- Consumers/patients can identify (blindly) differences between services training in CRM and those that are not.
- Goals set by consumers vary across the stage of psychological recovery in mental illness.
- Stages of psychological recovery can be measured (just like symptoms).
- Homework completed by consumers is related to mental health outcome.
- Positive approaches (e.g., goals, strengths, gratitude) are popular with consumers.

As indicated in consumer focus groups and interviews.
Module 1- Recovery as an individual process

Employs the principle, in all interactions and across all protocols, that psychological recovery from mental illness is an individualised process.

Module 1- Recovery as an individual process

- Psychological recovery as a staged individual process involving: (i) hope (ii) meaning (iii) identity (iv) responsibility
- The “system of recovery” concept
- The “focus of recovery” concept

Module 1- Recovery as an individual process

- Protocol: Self-Identified Stage of Recovery (A and B)
- Skill: Use the SISR-A and B as a precursor to discussing change with a consumer (unless they are at growth stage already)
- Attitude: A “growth mindset” - hopefulness towards consumers’ ability to set, pursue and attain personally valued life goals

<table>
<thead>
<tr>
<th>Rehabilitation Approach</th>
<th>Recovery Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
<td>Meaningful, fulfilling life.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Consumer engagement of personally meaningful issues.</td>
</tr>
<tr>
<td></td>
<td>Professional assessment of history, interests, abilities.</td>
</tr>
<tr>
<td></td>
<td>Eliciting capacity and disability, individual’s sense of ownership.</td>
</tr>
<tr>
<td>Approach</td>
<td>Increase strengths.</td>
</tr>
<tr>
<td>Role of Family</td>
<td>Possible peer, role model.</td>
</tr>
<tr>
<td></td>
<td>Mobiling empowerment.</td>
</tr>
<tr>
<td></td>
<td>Positive role models.</td>
</tr>
</tbody>
</table>

Redefining experience.

Positive role models in recovery.
“System of Recovery”

“Focus of Recovery”

Materials for each part of the ecological system of recovery:

- Consumer
- Carer
- Staff
- Organisation
Psychological Recovery

• Recovery as lived experience
• Recovery from four perspectives
  – Medical
  – Rehabilitation
  – Psychological
  – Empowerment
• Slade, Amering, Oades (2008) clinical versus personal recovery

Clinical Recovery

<table>
<thead>
<tr>
<th>Study</th>
<th>Location</th>
<th>Size</th>
<th>Mean age of onset (years)</th>
<th>% Decrease in symptom severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allesie et al.</td>
<td>Ireland</td>
<td>184</td>
<td>29</td>
<td>5</td>
</tr>
<tr>
<td>Campb &amp; Millar</td>
<td>Ireland</td>
<td>200</td>
<td>37</td>
<td>13</td>
</tr>
<tr>
<td>Boyle et al.</td>
<td>Ireland</td>
<td>200</td>
<td>39</td>
<td>6</td>
</tr>
<tr>
<td>King &amp; Kelly</td>
<td>Ireland</td>
<td>166</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td>Mendelsohn et al.</td>
<td>Ireland</td>
<td>200</td>
<td>39</td>
<td>65.6</td>
</tr>
<tr>
<td>Opere et al.</td>
<td>Ireland</td>
<td>140</td>
<td>29</td>
<td>35</td>
</tr>
<tr>
<td>Morris et al.</td>
<td>Ireland</td>
<td>200</td>
<td>36</td>
<td>58</td>
</tr>
<tr>
<td>De Siena et al.</td>
<td>Ireland</td>
<td>200</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Elseman et al.</td>
<td>Ireland</td>
<td>100</td>
<td>76</td>
<td>5</td>
</tr>
</tbody>
</table>

Top 10 concerns – recovery & MH

1. Recovery (R) is old news
2. RO care devalues professional interventions
3. RO care is neither reimbursable nor evidence based
4. RO care requires new resources
5. RO care adds more burden
6. R involves cure
7. R happens for a few
8. R involves cure
9. RO care adds more burden
10. Recovery (R) is old news

“Stages of psychological recovery”

1. MORATORIUM Absence of hope for recovery or having a better life.
2. AWARENESS Realisation of the possibility of a more fulfilling life.
3. PREPARATION Tentatively looking out for ways to make changes.
4. REBUILDING Actively pursuing goals.
5. GROWTH Optimistic about the future, contentment with the present.
PILOT STUDY FOR Structured Interview
Keren Wolstencroft, University of Wollongong

PARTICIPANTS
12 females and 6 males, aged 21-60, involved in mental health recovery program – Flourish Diagnosis: Schizophrenia (2), Bipolar (3), Depression (13), PTSD (3), OCD (1), Anxiety (1), Schizoaffective Disorder (2), and Dissociative Disorder (1).

MEASURES
K-10  50 item self-report Stage of Recovery instrument
K-10 Anxiety & Depression Scale
RAS  Recovery assessment subscales for Goal Orientation

Key indicators of Stage of Psychological Recovery

<table>
<thead>
<tr>
<th>Monorium</th>
<th>Awareness</th>
<th>Preparation</th>
<th>Rebuilding</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apathy</td>
<td>Taking Notice</td>
<td>Tentative</td>
<td>Achieving</td>
<td>Optimism</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>Considering</td>
<td>Developing Resource Networks</td>
<td>Fear</td>
<td>Strong Sense</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>Aspiration without Direction</td>
<td>Reliance on Others</td>
<td>Determination</td>
<td>Contentment</td>
</tr>
</tbody>
</table>

COMPARING STAGE OF RECOVERY & K-10

K-10 Scale Score
Please read all five statements (A-E) before answering the question that follows.

A) "I don’t think people can recover from mental illness. I feel that my life is out of my control, and there is nothing I can do to help myself."

B) "I have just recently realised that people can recover from serious mental illness. I am just starting to think it may be possible for me to help myself."

C) "I am starting to learn how I can overcome the illness. I’ve decided I’m going to start getting on with my life."

D) "I can manage the illness reasonably well now. I am doing OK, and feel fairly positive about the future."

E) "I feel I am in control of my health and my life now. I am doing very well and the future looks bright."

Of the five statements above, which one would you say most closely describes how you have been feeling over the past month about life?
Competency Exercise
Practitioner- Recovery as an individual process

- Role play in pairs involving:
- Explanation and clarification to consumer and carer in understandable language of:
  - stages of psychological recovery
  - focus of recovery
  - system of recovery

Reflection Point 1

- Choose 3 consumers with whom you have worked in the past 12 months
- In your opinion what stage of recovery are they at? How are they tracking in terms of hope, meaning, identity and responsibility?

Module 2- Collaboration and Autonomy Support

- Employs the principle, in all interactions and across all protocols, of maximum collaboration and support of consumer autonomy
Module 2: Collaboration and Autonomy Support

• Working alliance
• Power and empowerment
• Relationship rupture
• Autonomy support
• Barriers to collaboration
• Working with relationship dynamics

Module 2: Collaboration and Autonomy Support

• Skill: Develop and maintain a working alliance
• Attitude: Positive towards genuine collaboration

Components of the collaborative relationship

• **Working Alliance** – collaboration between therapist and clients in relation to:
  - establishment of the therapy **GOALS**,
  - agreement on the appropriateness and efficacy of the therapy **TASKS**,
  - and the **BONDS** between the therapist and client.

Components of Working Alliance

• Goals – the target of the intervention, or what is wanted as a result of rehabilitation/therapy.

• Tasks – the in-counselling behaviours and cognitions that form the substance of the counselling process.

• Bonds – embraces the network of positive personal attachments between client and therapist that includes issues such as mutual trust, acceptance and confidence.
Evidence supporting the link between alliance and outcome

- Meta-analysis of relationship between alliance and outcome (Horvath & Symonds, 1991)
- Quality of the alliance is a robust predictor of therapy outcome.
- The relationship between alliance and outcome is apparent as early as the third session (particularly important in brief therapy).
- This correlation holds reasonably constant across various treatments, clinical diagnosis and client populations.
- See Prescribed Reading Module 2- Deane & Crowe (2007)

Fluctuations in the Alliance

- Alliance ruptures
  - Common
  - Always Interpersonal
  - Vary in intensity, duration & frequency
  - Confrontation
  - Withdrawal (avoidance, compliant, passive aggression)
  - Potential potent change events
- Resolution principles
  - Attending to ruptures
  - Interpersonal reflection
  - Awareness of own feelings
  - Accepting responsibility
  - Empathizing with client's experience
  - Participating observer space

What is autonomy?

- The basic right of the individual to self-determination or self-rule
- Freedom of choice in selecting a life plan as well as the steps involved in carrying out that plan.
- Limits include: the rights of society, autonomy of the mental health worker, internal constraints such as serious mental illness and dependency

What is paternalism?

- When mental health worker acts contrary to an individual's choices in order to achieve a 'technically correct' outcome, or one which most benefits the individual.
- Generally justified when benefits of course of action are considered greater than the costs of client's autonomy, Risk/benefit & harm principle.
- Mental competence is generally regarded as a prerequisite for autonomous patient decision-making. Competence is viewed along a continuum and therefore may be specific to a situation, and involves demonstrated rational understanding and reasoning with an appreciation of consequences in terms of risks and benefits in the decision making process.
What is positive and negative liberty?

- Understanding consumer defined recovery includes understanding issues of power and freedom.

- The distinction between negative and positive liberty was drawn by *Isaiah Berlin* in his lecture "Two Concepts of Liberty."

  - Negative liberty: *freedom from*
  - Positive liberty: *freedom to*

Reflection Point 3

- What relevance does negative liberty (*freedom from*) and positive liberty (*freedom to*) have to understanding mental health recovery?

Competency Exercise

Practice: Collaboration and Autonomy Support

- Role play in pairs involving
- the explanation and clarification to consumer and carer in understandable language the meaning of
  - a collaborative relationship
  - overcoming relationship ruptures

Reflection Point 2

- What are the barriers to genuine collaboration and supporting of consumer autonomy within this service?
Module 3:- Enhancing Change

• Enhances consumer change by skilful and use of motivational enhancement appropriate to the stage of recovery of the consumer
Module 3: Enhancing Change

- Stage of psychological recovery
- Decisional balance
- Motivational readiness and resistance
- Psychological and basic needs
- Negotiated needs
- Importance and confidence
- Fixed versus Growth Mindset

Module 3: Enhancing Change

- Protocol: Motivational interviewing, particularly decisional balance
- Skill: Use decisional balance techniques appropriate to assist consumer to clarify ambivalence regarding change
- Attitude: To take partial responsibility for role in interactional aspects of motivation

Stage of Change and Ambivalence

Ready to change?

- Clinicians generate resistance unwittingly because they are unsure about the decisions the consumer has or has not already made about certain behaviour change.
- If the clinician makes the assumption that the consumer is ready to change their behaviour and acts as if this were true, when indeed it is not, then it is likely that the consumer will resist.
- Rollnick and colleagues have identified a number of key strategies to minimise or overcome the effect of resistance:
  - Roll with resistance
  - Develop discrepancy
  - Avoid argumentation
**Decisional Balance**

- Costs of status quo
- Costs of change
- Operation

**Importance and Confidence**

- Assess the consumer’s readiness/motivation to change
- Motivation to change is often influenced by:
  - Importance: degree to which the goal/task is aligned with the consumer’s personal values or the change is seen to lead to an improvement in their lives
  - Confidence: perceived mastery of all the associated tasks with goal
- The distinction between confidence and importance is relevant in terms of engagement. For example, a clinician may judge the focus of the consumer’s concerns providing information related to a certain issue (importance) when in fact the consumer lacks confidence to change the behavior/completing the task.

**Exploring Importance**

(adapted by Gray et al., 2002 from Rollnick et al. 2000)

- What would have to change/be different for it to become much more important for you to shower? (e.g., feel better, be more attractive to opposite sex)
- Why have you placed yourself at that particular point on the importance scale?
- What would have to change/be different for your importance score to move up from x to y?
- What concerns do you have about showering?
- If you were to take your shower what would you be like?
- How does this compare with how you are now?
Building Confidence
(Adapted from Byrne, Deane, Lambert, Coombs, 2003)

- What would make you more confident about being able to shower regularly?
- Why have you placed yourself at that particular point on the confidence scale? (e.g., because I keep forgetting)
- How could you move up higher from x to y?
- How can I help you succeed?
- What are some of the practical things that you would need to do to help you be better at taking medication?

Dealing with Resistance

Resistance to change in behaviour (such as self-care behaviour) is a clear indication that motivation may be an issue.

- What is resistance?
- How is resistance shown?
- Where does resistance come from?

Motivation is Malleable

- Consumers may:
  - Argue with you, change the subject, interrupt when you are talking; deny that they have a problem, miss appointments
- The reason for an individual’s resistance is usually to be found in the individual’s circumstances and should not be attributed as a trait of the person.
- The origins of the consumer’s resistance may be due to
  - the way the consumer’s family is relating to them
  - their partner’s reactions
  - the way that the clinician approaches the consumer

You must resist someone

- Resistance can arise when the consumer brings previous conflict (such as the experience of being told they must shower) to the discussion about self-care, or when the clinician elicits resistance by the approach adopted, or perhaps as a combination of the two,
- Because resistance exists within this interpersonal context, the clinician has the opportunity to lower the level of resistance.
**Resistance can be an asset!**

- The consumer must be able to feel their freedom and personal choice is respected and rolling with resistance supports that freedom.
- It's important to remember that having the consumer agree with you does not necessarily mean that they are motivated to change their behaviour. Similarly, disagreeing does not mean they are not motivated to change.
- Dealing with resistance is simply one part of building an alliance with the consumer.

**Contrasts between Confrontation of Denial and Motivational interviewing**

**Confrontation of Denial**
- Resistance is seen as "denial", a trait characteristic requiring confrontation and correction.
- Goals of treatment and strategies for change are prescribed for the client by the therapist; client seen as "in denial" and incapable of making sound decisions.

**Motivational Interviewing**
- Resistance seen as an interpersonal behaviour pattern influenced by the therapist's behaviour.
- Treatment goals and change strategies are negotiated between client and therapist, based on respect and acceptability, client's involvement in, and an acceptance of goals is seen as vital.

**Contrasts between Skills Training**

**Skills Training**
- Motivated; no direct strategies are used for building motivation
  - Seeking to identify and modify maladaptive cognitions
  - Prescribes specific coping strategies
  - Teaches coping behaviours through instruction, modelling, directed practice, and feedback
  - Specific problem-solving

**Motivational Interviewing**
- Employs specific principles and strategies for building client confidence, involves client in forming client perceptions without labelling or correcting them
  - Elicits possible change strategies from client and significant others
  - Responsibility for change methods is left with the client; no training, modelling, or practice
  - Natural problem-solving processes are elicited from the client, and significant others

**Motivational Interviewing Worksheet**

<table>
<thead>
<tr>
<th>Benefits of</th>
<th>Benefits of continuing (present behaviour)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs of continuing (present behaviour)</th>
<th>Cost of (change)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Gender (social/kinship), high (eg, friends) and financial (eg, making benefits or cash in exchange, support and confidence of making the change. |
Motivational Enhancement and Stage of Psychological Recovery

<table>
<thead>
<tr>
<th>Awareness</th>
<th>Preparation</th>
<th>Decisional Balance Possible Behaviours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking Notice</td>
<td>Intuitive Goals</td>
<td>Setting a goal</td>
</tr>
<tr>
<td>Considering Alternatives</td>
<td>Developing Resource Networks</td>
<td>Ringing people to seek information (e.g. info about goal)</td>
</tr>
<tr>
<td>Aspiration without Direction</td>
<td>Reliance on Others</td>
<td>Asking for assistance</td>
</tr>
</tbody>
</table>

Competency Exercise

Practitioner Change Enhancement

- Consider behaviours required to move from awareness stage of psychological recovery to preparation stage

Reflection Point 3

- What are your real-life examples of working with change enhancement?
- How does it differ across areas within this service?
- Does adding the stages of psychological recovery change how you think about the change process?
The root metaphor:

- Recovery/life is a journey: people often take a camera, a compass and a map on a journey.
- Together the outputs of these tools (e.g., photos) forms a personal album of the journey: the good life album.
- The title of the album is the life vision.

**Objective:**
- To develop an attractive and feasible striving protocol for use in mental health contexts, based on evidence-based, established literatures and recent feedback, based on CRT, homework and implementing the CRM and congruence with values of recovery movement and consistent with the developing evidence within coaching psychology.

**Feasibility:**
- Briefly, relevance, attractiveness to client, worker, managers and researchers, ease of use, trainability, addition of value to current practice.

**Tenets:**
- To be seen as three modular instruments which can be used consecutively or on an as needs basis. There is an additional reflective and integrative exercise.

---

**Purpose of the 3 journey tools:**

**The Camera:**
- To bring into focus important values and strengths.
- Bring in values important for recovery.

**The Compass:**
- To identify one's ultimate destination (true north) in terms of a life vision and life plan.

**The Map:**
- To identify one's ultimate destination, (true north) in terms of a life vision and life plan.
Definitons

Life Vision = A verbally stated description of where one calls their envisioned life that containing their identified values and strengths, overall purpose and why you have a Life Vision album of your values and strengths, what would you call your Life Vision album?

Preferred Identity = How you would like others to see you, and how you would like to see yourself, Preferred relationship with self and the world, trying to orient yourself in your daily life, not specific, not time framed, ongoing alignment e.g., To improve my relationships with others

Values Direction = Life directions towards which you are typically trying to orient yourself in your daily life, not specific, not time framed, ongoing alignment e.g., To improve my relationships with others

Goals = Specific, measurable, desired endpoint, with a timeframe (focused target - narrow lens)

Actions = A value that has been dependably demonstrated or a plan that has been developed

Goal = A plan actions to take to reach the target level of goal

Prefered Identity = The Collaborative goal below, provides a person with a numerical

Action = A tangible behaviour in a specific context

How the journey fits together

- A person, by use of the Camera becomes clear on their personal values and strengths. Using the Compass they are enabled to identify a future oriented life vision - a collection of their values and strengths, recorded separately as valued directions that one uses to orient themselves. The person can set personal goals consistent with these important valued directions.

- Using the MAP the person can develop action plans to achieved the goals. Over time they can gain feedback on their progress in their level of progress (referred to as coordinates). The reflective exercise of the Good Life Album enables people to put it all together.
### Module 4- Using strengths and enacting values

- Assisting consumers to clarify values and strengths and then utilise them in the here and now

| Protocol: “Camera” values and strengths clarification method
| Skill: Assist a consumer to elicit personal values and strengths and assess how well they have been implemented recently
| Attitude: To value reflective exercises notwithstanding current difficulties or symptoms

### The importance of strengths

“...one cannot build on weakness. To achieve results, one has to use all available strengths... These strengths are the true opportunities”

Peter Drucker, 1967 (Linky & Harrington, 2008)
What is a strength?

- **Performance**
  - “the ability to provide consistent, near perfect performance in a given activity” (Clifton & Anderson, 2002) (ie use a natural talent)
- **Virtue ethics**
  - “distinguishable routes to displaying one or another of the virtues” (ie values in action, morally imbued- towards the “good life”. (Peterson & Seligman, 2004)

A pragmatic approach to strengths

Linley & Harrington (2002)

"a natural capacity for behaving, thinking or feeling in a way that allows optimal functioning and performance in the pursuit of valued outcomes"

Strengths, values and an alternative to the DSM

- Petersen & Seligman’s (2004) “Character strengths and virtues: A handbook and classification” is referred to as a “manual of the sanities”
- It represents the classification of values in action- ie when people use their values yielding character strengths

Values

*Values are verbally construed global desired life consequences, while valuing is an action (Hayes et al, 2004)*

While goals may change, values are likely to remain stable over the long term (Hayes, et al 2004).

Intrinsically motivated goals – those that stem from a person’s core values – lead to greater commitment better goal performance (Duck & Ryan. 2002).
Camera steps

1. Why should I clarify my values and strengths?
2. What are my values and strengths?
3. How well am I living in alignment with my values and strengths?
4. What do I notice when looking through my camera lens?
5. How can I use this to develop a life vision?

Competency Exercise

Role play in pairs, assisting a consumer to identify their strengths and values through the use of the Camera – following all steps.

Use Camera worksheet and steps
Assume consumer is ready for this process
Reflection Point 4

• Values and strengths may be seen as too abstract for consumers, and sometimes even task oriented staff.
• How can you help staff and consumers see the value of values?
• How do you know when you are at your best?

Competency Exercise

Consistent with the parallel process philosophy, complete a Camera for your own life.

This is private— and only to discuss with colleagues if you wish.

Module 5- Collaborative life visioning and goal striving

• Persists flexibly and collaboratively with the components within the Compass to assist recovery by way of the development of an integrated meaningful live vision, valued directions, manageable goals, which provide a broader purpose for actions.
Module 5- Collaborative life visioning and goal striving

- Personal life vision
- Valued directions
- Goal identification, setting and striving
- Meaning/manageability trade-off
- Autonomous Goals
- Prevention and Promotion Goals
- Proximal and distal goals

Module 5- Collaborative life visioning and goal striving

- Protocol: “Compass”
- vision and goal striving method
- Skill: Elicit meaningful vision and manageable goals
- Attitude: To be persistent within the face of obstacles
The compass vision-values-goals

1. Why should I develop a life vision and set goals?
2. Have I completed the Camera exercise?
3. What are my three most important directions? Do I need three?
4. How important are each of these directions?
5. Can I refine my life vision?
6. How would I know if I had succeeded?
7. When will I review and with whom?
8. How well have I done? What are my “coordinates” on my compass?
9. Do I need a MAP or a more Camera work?

Calculating your success coordinates

• Multiply attainments level (2, 1, 3) by perceived importance for Valued Direction 1, p get Coordinate 1, repeat for Valued Direction 2 and 3, Sum the three coordinates. Multiply this number by 5. This is your success coordinate out of 100.
• The success coordinate includes a measure of progress on goals that are valuable to you. For optimal performance you should aim at a success coordinate of between 50-70. If less than 50 your goals may be too difficult for now. If more than 70 consider a more challenging goal next time.
• Explain to the person that they “need to go in the right direction at a maintainable pace” hence 100 is not necessarily the best; it is “speeding”.

Good Life Album

The reflective exercise to document your vision of a good life

The purpose of the Good Life Album is to bring together the output of the Camera, Compass and MAP e.g. photos to form a personal album of the journey. This may be used as a metaphor or done literally. That is, the personal album is the record of values in action (strengths, valued directions, goals and achievements along the journey. The title of the personal album is the “life vision” or a statement about the purpose in this life.

The Good Life Album is a means to include past examples of when a person used their strengths, lived by their values, worked towards and achieved some goals. However, perhaps more importantly it can serve as a helpful for how the person chooses to live with examples of themselves bring out their preferred identity (i.e. how they would like to see themselves and how they would like others to see them). The Good Life Album is not just a “book of dreams” as it includes the values, goals and actions and possible barriers. It is a life with purpose, an engaged life, a meaningful life and a life with some achievements (Gellman & Csikszentmihaly, 2000).

The verbal articulation of the name of such an album can be used as a shorthand verbal tag for a life vision.

Competency Exercise

Practitioner: Life Visioning and Goal Setting

• Role play in pairs assisting a consumer to set specific and meaningful goals through the use the Compass- following all steps.

Assume that the consumer is ready to set goals (eg previous work has been done on relationship, strengths, values, motivation)

Beware of your own non-hopeful thoughts and behaviours that may arise
Reflection Point 5

- Goals are often set prematurely and poorly?
- Will your team be able to “give itself permission” to go slow with goals, without using it “as an implicit excuse to revert back to a solely symptom focus of recovery?”

Module 6- Collaborative Action Planning and Monitoring

- Systematically and collaboratively assigns actions, and monitors progress toward action completion and goals, to enhance self-efficacy of consumer

Module 6- Collaborative Action Planning and Monitoring

- Health behaviour change
- Action planning
- Homework
- Self-efficacy
- Monitoring
- Self-management
Module 6- Collaborative Action Planning and Monitoring

- Protocol: “MAP” action planning method
- Skill: To assist with the development of comprehensive action plans
- Attitude: To value “small actions” between the meetings of staff and consumers (between session activity)

What is Homework?

- Any purposeful and meaningful activity that a client may complete outside of meetings eg.
  - Walk around the park
  - It provides an opportunity for consumers to transfer skills developed with the case manager to other environments
  - The use of homework (as a procedure by itself) receives little emphasis in clinical training, it is often assumed practitioners know how to use homework
  - Homework is very consistent with a “coaching style of relationship”
  - Consumer feedback is that they do not like the term “homework,” we use “action” or whatever is meaningful to the consumer

Is Homework Effective?

Meta-analysis
- Examined 28 studies reported between 1980 and 1998 looking at the effects of homework and homework compliance therapeutic outcome.

Findings
- Homework assignments produced a positive mean effect size in the medium range (r = .36).
- 66% of clients would improve when therapy involved HW compared to only 32% when therapy involved not HW
- Correlational research shows that homework compliance is associated with positive treatment outcome

The Homework Cycle

- Review
- Assign
- Design
Review
- Always discuss homework completion with the person
- Reinforce/praise all attempts
- Examine reasons for any homework not completed
- Problem solve barriers to homework completion (relates to use of MAP)

Design
- Discuss goals
- Consider the person’s ability and potential barriers
- Negotiate relevant actions
- Present rationale and how homework will help attain goals
- Provide a choice of homework activities

Assign
- Complete the MAP and repeat for new actions (written down!!!)
- Consider alternatives for potential barriers
- Ask how confident the client is about completing the homework

If the person’s confidence is less than 70% collaboratively modify or adjust the action

Quality action planning
Beyond the failure of new year’s resolutions...
- A good action plan contains the specific actions the person will take to make the desired behaviour change (to achieve the goal)
- The plan should include:
  - A listing of each of the specific actions
  - The environmental modifications
  - The sources of social support
  - How the person will monitor the progress (ie the behaviours)
  - A specific date to implement the action plan
The MAP steps

1. What are the benefits of planning?
2. Have I used the Compass?
3. What actions do I need to do?
4. Who can help me?
5. What date will I start?
6. How confident am I?
7. How will I monitor my actions?
8. What are some barriers and possible solutions?
9. When do I review this plan with someone?
10. Who can keep me accountable?
11. Should I keep repeating this process?

Competency Exercise

• Role play in pairs assisting a consumer to develop a comprehensive action plan through the use of the MAP. Following all steps. Assume that the consumer is ready for action (eg previous work has been done on relationship, strengths, values, motivation, visioning and goal setting)

Comprehensive action planning includes consideration of barriers, confidence, social support and monitoring.
Competency Exercise

Principles, Strengths, and Values

Complete a MAP for your own life- using one of the goals on your Compass

This is private- and only to discuss with colleagues if you wish.
Appendix 2 – Intervention Measures
CRTP MEASURES

On the following pages, you will be asked to respond to a series of questions that focus on aspects of your work. The information you provide will be used to evaluate the effectiveness of the Collaborative Recovery staff development program.

We will need to be able to match and compare your responses to the following questions with your responses to similar questions after training and at future time points. Some people are happy to use their name as an identifier whereas others prefer to use a code or unique identifier to increase confidentiality of their questionnaire responses. You will have the choice, but we ask that once you have chosen you stay with one or the other.

To generate your identification code, use the first three letters of your mother’s maiden name, followed by the last two digits of your birth month.

(e.g., if your mother’s maiden name is Jones and you were born in March your code would be JON03)

If you are happy to just use your name, please just enter your first and last names here.

<table>
<thead>
<tr>
<th>Put your code or name here</th>
</tr>
</thead>
</table>

Today’s Date: ________________________________
Background Information

1. Which service and team do you work for? ____________________________

2. Your role/position: ____________________________

3. Please tick the age group you belong to:

<table>
<thead>
<tr>
<th>18-24</th>
<th>25-30</th>
<th>31-34</th>
<th>35-40</th>
<th>41-44</th>
<th>45-50</th>
<th>51-54</th>
<th>55-60</th>
<th>&gt;60</th>
</tr>
</thead>
</table>

4. Gender (please circle): Female / Male

5. How long have you worked for the current service? ____________ (years).

6. How long have you worked in the mental health field? ____________ (years).

7. What is your highest qualification? ____________________________

8. What is your professional affiliation?
   a) Nurse
   b) Psychologist
   c) Social Worker
   d) Occupational Therapist
   e) Welfare Worker
   f) Other ____________________________ (please specify)

9. Based on the case management definition below, on average how many hours of your employee’s responsibilities are allocated to case management? ______ (hours) or N.A.
   - For the purposes of this study we are using the following definition of case management. Case management is a means of coordinating services for mentally ill people, where each individual is assigned at least one mental health worker who is expected to (1) assess the individual’s needs (2) develop a care plan (3) arrange and monitor suitable care to be provided (4) maintain contact with the individual (Marshall et al, 2000).
   - Case Management may include:
     a. Any person that you see on a one to one basis for clinical matters
     b. Persons who are co-case managed by you
     c. Persons that you conduct discipline specific activities with
   - Case management does not include: Groups, intake or crisis only contact.

10. How many clients are you typically case manager for? ________ (total clients)

11. On average how often do you have contact with your clients face to face? (please circle)

<table>
<thead>
<tr>
<th>Less than monthly contact</th>
<th>Fortnightly to monthly contact</th>
<th>One to two weekly contact</th>
<th>Weekly contact</th>
<th>Twice or more weekly contact</th>
</tr>
</thead>
</table>

12. On average how long are you expected to spend with a client at each contact (mins)? ______
The following is a value related to a recovery practice.

**“UNDERSTANDING RECOVERY AS A STAGED AND INDIVIDUAL PROCESS FOR THE CLIENTS YOU WORK WITH”**

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a guiding principle in your work. There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

   (a) …because somebody else wants me to value it, or because I’ll get something from somebody if I value it

   - Not at all for this reason
   - Mostly not for this reason
   - Unsure of reason
   - Mostly for this reason
   - Entirely for this reason

   (b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.

   - Not at all for this reason
   - Mostly not for this reason
   - Unsure of reason
   - Mostly for this reason
   - Entirely for this reason

   (c)… because I really believe it is an important value to have. I endorse it freely and wholeheartedly.

   - Not at all for this reason
   - Mostly not for this reason
   - Unsure of reason
   - Mostly for this reason
   - Entirely for this reason

   (d)… because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.

   - Not at all for this reason
   - Mostly not for this reason
   - Unsure of reason
   - Mostly for this reason
   - Entirely for this reason

2. To what extent have you made specific plans about when, where, and how to put this value into play

   - Not at all
   - A little bit
   - Moderately so
   - Quite a bit
   - Very much so

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play

   - Not at all
   - A little bit
   - Moderately so
   - Quite a bit
   - Very much so

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

   - 0-20% successful
   - 21-40% successful
   - 41-60% successful
   - 61-80% successful
   - 81-100% successful

5. Right now, would you like to improve your progress on this value?

   - Not at all
   - A little bit
   - Moderately so
   - Quite a bit
   - Very much so
The second value related to a recovery practice is:

“COLLABORATING TO SUPPORT THE AUTONOMY OF YOUR CLIENTS”

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a guiding principle in your work. There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

How important is this value to you?

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slightly important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quite important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

   (a) …because somebody else wants me to value it, or because I’ll get something from somebody if I value it

   1 Not at all for this reason
   2 Mostly not for this reason
   3 Unsure of this reason
   4 Mostly for this reason
   5 Entirely for this reason

   (b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.

   1 Not at all for this reason
   2 Mostly not for this reason
   3 Unsure of this reason
   4 Mostly for this reason
   5 Entirely for this reason

   (c) … because I really believe it is an important value to have. I endorse it freely and wholeheartedly.

   1 Not at all for this reason
   2 Mostly not for this reason
   3 Unsure of this reason
   4 Mostly for this reason
   5 Entirely for this reason

   (d) … because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.

   1 Not at all for this reason
   2 Mostly not for this reason
   3 Unsure of this reason
   4 Mostly for this reason
   5 Entirely for this reason

2. To what extent have you made specific plans about when, where, and how to put this value into play

   1 Not at all
   2 A little bit
   3 Moderately so
   4 Quite a bit
   5 Very much so

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play

   1 Not at all
   2 A little bit
   3 Moderately so
   4 Quite a bit
   5 Very much so

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

   1 0-20% successful
   2 21-40% successful
   3 41-60% successful
   4 61-80% successful
   5 81-100% successful

5. Right now, would you like to improve your progress on this value?

   1 Not at all
   2 A little bit
   3 Moderately so
   4 Quite a bit
   5 Very much so
The third value related to a recovery practice is:

“ENHANCING THE MOTIVATION OF YOUR CLIENTS”

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a **guiding principle in your work.** There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Moderately important</td>
<td>Quite important</td>
<td>Extremely important</td>
<td></td>
</tr>
</tbody>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

   (a) …because somebody else wants me to value it, or because I’ll get something from somebody if I value it

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all for this reason</td>
<td>Mostly not for this reason</td>
<td>Unsure of reason</td>
<td>Mostly for this reason</td>
<td>Entirely for this reason</td>
</tr>
</tbody>
</table>

   (b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all for this reason</td>
<td>Mostly not for this reason</td>
<td>Unsure of reason</td>
<td>Mostly for this reason</td>
<td>Entirely for this reason</td>
</tr>
</tbody>
</table>

   (c)… because I really believe it is an important value to have. I endorse it freely and wholeheartedly.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all for this reason</td>
<td>Mostly not for this reason</td>
<td>Unsure of reason</td>
<td>Mostly for this reason</td>
<td>Entirely for this reason</td>
</tr>
</tbody>
</table>

   (d)… because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all for this reason</td>
<td>Mostly not for this reason</td>
<td>Unsure of reason</td>
<td>Mostly for this reason</td>
<td>Entirely for this reason</td>
</tr>
</tbody>
</table>

2. To what extent have you made specific plans about when, where, and how to put this value into play

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>A little bit</td>
<td>Moderately so</td>
<td>Quite a bit</td>
<td>Very much so</td>
</tr>
</tbody>
</table>

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>A little bit</td>
<td>Moderately so</td>
<td>Quite a bit</td>
<td>Very much so</td>
</tr>
</tbody>
</table>

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20% successful</td>
<td>21-40% successful</td>
<td>41-60% successful</td>
<td>61-80% successful</td>
<td>81-100% successful</td>
</tr>
</tbody>
</table>

5. Right now, would you like to improve your progress on this value?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>A little bit</td>
<td>Moderately so</td>
<td>Quite a bit</td>
<td>Very much so</td>
</tr>
</tbody>
</table>
The fourth value related to a recovery practice is:

“ENGAGING IN VALUES CLARIFICATION AND STRENGTHS ASSESSMENT WITH YOUR CLIENTS”

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a guiding principle in your work. There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Moderately important</td>
<td>Quite important</td>
<td>Extremely Important</td>
</tr>
</tbody>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

(a) … because somebody else wants me to value it, or because I’ll get something from somebody if I value it

<table>
<thead>
<tr>
<th>Not at all for this reason</th>
<th>Mostly not for this reason</th>
<th>Unsure of this reason</th>
<th>Mostly for this reason</th>
<th>Entirely for this reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.

(c)… because I really believe it is an important value to have. I endorse it freely and wholeheartedly.

(d)… because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.

2. To what extent have you made specific plans about when, where, and how to put this value into play

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little</th>
<th>Moderately so</th>
<th>Quite a bit</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little</th>
<th>Moderately so</th>
<th>Quite a bit</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

<table>
<thead>
<tr>
<th>0-20% successful</th>
<th>21-40% successful</th>
<th>41-60% successful</th>
<th>61-80% successful</th>
<th>81-100% successful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Right now, would you like to improve your progress on this value?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little</th>
<th>Moderately so</th>
<th>Quite a bit</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The fifth value related to a recovery practice is:

**“COLLABORATIVE GOAL SETTING WITH YOUR CLIENTS”**

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a guiding principle in your work. There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1 Not at all important</th>
<th>2 Slightly important</th>
<th>3 Moderately important</th>
<th>4 Quite important</th>
<th>5 Extremely Important</th>
</tr>
</thead>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

<table>
<thead>
<tr>
<th>Reason</th>
<th>1 Not at all for this reason</th>
<th>2 Mostly not for this reason</th>
<th>3 Unsure of reason</th>
<th>4 Mostly for this reason</th>
<th>5 Entirely for this reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) … because somebody else wants me to value it, or because I’ll get something from somebody if I value it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) … because I really believe it is an important value to have. I endorse it freely and wholeheartedly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) … because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. To what extent have you made specific plans about when, where, and how to put this value into play:

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 A little bit</th>
<th>3 Moderately so</th>
<th>4 Quite a bit</th>
<th>5 Very much so</th>
</tr>
</thead>
</table>

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play:

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 A little bit</th>
<th>3 Moderately so</th>
<th>4 Quite a bit</th>
<th>5 Very much so</th>
</tr>
</thead>
</table>

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

<table>
<thead>
<tr>
<th>1 0-20% successful</th>
<th>2 21-40% successful</th>
<th>3 41-60% successful</th>
<th>4 61-80% successful</th>
<th>5 81-100% successful</th>
</tr>
</thead>
</table>

5. Right now, would you like to improve your progress on this value?

<table>
<thead>
<tr>
<th>1 Not at all</th>
<th>2 A little bit</th>
<th>3 Moderately so</th>
<th>4 Quite a bit</th>
<th>5 Very much so</th>
</tr>
</thead>
</table>
The sixth value related to a recovery practice is:

“COLLABORATIVE & SYSTEMATIC ACTION PLANNING WITH YOUR CLIENTS”

We all hold different values. Some values mean more to us than others. Using the following five point scale, indicate the degree to which the following values serve as a guiding principle in your work. There are no correct or incorrect answers. Circle the number that corresponds with your chosen response.

<table>
<thead>
<tr>
<th>How important is this value to you?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Moderately important</td>
<td>Quite important</td>
<td>Extremely Important</td>
</tr>
</tbody>
</table>

Now we would like to understand why you might put this value into play in the workplace.

1. I would put this value into play:

   (a) …because somebody else wants me to value it, or because I’ll get something from somebody if I value it

   (b) … because I would feel ashamed, guilty, or anxious if I didn’t. I feel like I ought to value this.

   (c)… because I really believe it is an important value to have. I endorse it freely and wholeheartedly.

   (d)… because of the fun and enjoyment this value brings me. My primary reason for “living” this value is simply my interest in the experience itself.

2. To what extent have you made specific plans about when, where, and how to put this value into play

3. To what extent have you anticipated possible distractions and obstacles to putting this value into play

4. In the last 12 weeks, I have been this successful in living this value (to acting consistently with this value):

5. Right now, would you like to improve your progress on this value?
**PTIS**

Please rate your level of agreement with the following statements (circle the appropriate response).

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I try to introduce improved methods of doing things at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I have ideas which would significantly improve the way the job is done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I suggest new working methods to the people I work with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I contribute to changes in the way my department works.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I am receptive to new ideas which I can use to improve things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**ISJS**

Please rate your level of satisfaction with the following work related conditions using the scale below:

1. Extremely dissatisfied
2. Very dissatisfied
3. Moderately dissatisfied
4. Not sure
5. Moderately satisfied
6. Very satisfied
7. Extremely satisfied

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The physical work conditions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. The freedom to choose your own method of working</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Your fellow workers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. The amount of responsibility you are given</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Your opportunity to use your ability</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The attention paid to suggestions you make</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. The amount of variety in your job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the term recipients to refer to the people for whom you provide your service, care, treatment, or instruction. When answering this survey please think of these people's recipients of the service you provide, even though you may use another term in your work.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a “0” (zero) before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th>HOW OFTEN:</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Never</td>
</tr>
<tr>
<td>1</td>
<td>Once a month or less</td>
</tr>
<tr>
<td>2</td>
<td>A few times a month</td>
</tr>
<tr>
<td>3</td>
<td>Once a week</td>
</tr>
<tr>
<td>4</td>
<td>A few times a week</td>
</tr>
<tr>
<td>5</td>
<td>Every day</td>
</tr>
<tr>
<td>6</td>
<td>(write below)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How often 0-6 (write below)</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I feel emotionally drained from my work</td>
<td></td>
</tr>
<tr>
<td>2 I feel used up at the end of the workday</td>
<td></td>
</tr>
<tr>
<td>3 I feel fatigued when I get up in the morning and have to face another day on the job</td>
<td></td>
</tr>
<tr>
<td>4 I can easily understand how my recipients feel about things</td>
<td></td>
</tr>
<tr>
<td>5 I feel I treat some recipients as they were impersonal objects</td>
<td></td>
</tr>
<tr>
<td>6 Working with people all day is really a strain on me</td>
<td></td>
</tr>
<tr>
<td>7 I deal effectively with the problems of my recipients</td>
<td></td>
</tr>
<tr>
<td>8 I feel burned out from my work</td>
<td></td>
</tr>
<tr>
<td>9 I feel I’m positively influencing other people’s lives through my work</td>
<td></td>
</tr>
<tr>
<td>10 I’ve become more callous toward people since I took this job</td>
<td></td>
</tr>
<tr>
<td>11 I worry this job is hardening me emotionally</td>
<td></td>
</tr>
<tr>
<td>12 I feel very energetic</td>
<td></td>
</tr>
<tr>
<td>13 I feel frustrated by my job</td>
<td></td>
</tr>
<tr>
<td>14 I feel I’m working too hard on my job</td>
<td></td>
</tr>
<tr>
<td>15 I don’t really care what happens to some recipients</td>
<td></td>
</tr>
<tr>
<td>16 Working with people directly puts too much stress on me</td>
<td></td>
</tr>
<tr>
<td>17 I can easily create a relaxed atmosphere with my recipients</td>
<td></td>
</tr>
<tr>
<td>18 I feel exhilarated after working closely with my recipients</td>
<td></td>
</tr>
<tr>
<td>19 I have accomplished many worthwhile things in this job</td>
<td></td>
</tr>
<tr>
<td>20 I feel like I’m at the end of my rope</td>
<td></td>
</tr>
<tr>
<td>21 In my work, I deal with emotional problems very calmly</td>
<td></td>
</tr>
<tr>
<td>22 I feel recipients blame me for some of their problems</td>
<td></td>
</tr>
</tbody>
</table>
Please read this carefully.

We would like to know if you have had any medical complaints and how your health has been in general, over the last few weeks. Please answer ALL the questions simply by circling the answer on each line that most nearly applies to you. Remember that we want to know about present and recent complaints, not those you had in the past.

It is important to that you try to answer ALL the questions.

Have you recently….

<table>
<thead>
<tr>
<th></th>
<th>Better than usual</th>
<th>Same as usual</th>
<th>Less than usual</th>
<th>Much less than usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>been able to concentrate on whatever you’re doing?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lost much sleep over worry?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>felt that you are playing a useful part in things?</td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less useful than usual</td>
<td>Much less useful</td>
</tr>
<tr>
<td>felt capable of making decisions about things?</td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less so than usual</td>
<td>Much less than usual</td>
</tr>
<tr>
<td>felt constantly under strain?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>felt you couldn’t overcome your difficulties?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>been able to enjoy your normal day-to-day activities?</td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less so than usual</td>
<td>Much less than usual</td>
</tr>
<tr>
<td>been able to face up to your problems?</td>
<td>More so than usual</td>
<td>Same as usual</td>
<td>Less so than usual</td>
<td>Much less than usual</td>
</tr>
<tr>
<td>been feeling unhappy and depressed?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>been losing confidence in yourself?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>been thinking of yourself as a worthless person?</td>
<td>Not at all</td>
<td>No more than usual</td>
<td>Rather more than usual</td>
<td>Much more than usual</td>
</tr>
<tr>
<td>been feeling reasonably happy, all things considered?</td>
<td>More so than usual</td>
<td>About same as usual</td>
<td>Less so than usual</td>
<td>Much less than usual</td>
</tr>
</tbody>
</table>
Using this scale, please rate the following items:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. As soon as I can find a better job, I’ll leave my organization.
2. I am actively looking for a job outside my place of employment.
3. I am seriously thinking about quitting my job.
4. I often think of quitting my job at my organization.
5. I think I’ll still be working at my place of employment 5 years from now.

Thank you! You have completed the questionnaire.
Appendix 3 – Values Protocol (Day 3)
Collaborative Recovery Training Program

2009-2012

Day 3
• The purpose of this task is to help you to identify what principles are most important in your life
Card Sorting Task

**Step 1: Initial Sort**

*Relating to your life in general*

Sort the cards into 3 piles:
- Pile 1: These principles are not very important to me.
- Pile 2: These principles are of moderate importance to me.
- Pile 3: These principles are of highest importance to me.

**Step 2: Reducing to 15 principles**

Remove Pile 1: These principles are not very important to me.
Go through the remaining two piles, and pick out your top 15 principles.
Then

Please complete the worksheet entitled

“Principle success rating sheet: Life in general”

Discussion

• Anyone willing to share what they found important?
• Anyone surprised at how unimportant some principles were compared to others?
A value is a process rather than an outcome.

Goal = “ski to bottom of the slope”

Value = process
Welcome to your workplace
Card Sorting Task

**Step 2: Reducing to 15 principles**

Remove Pile 1- These principles are not very important to me in my current job.

Go through the remaining two piles, and pick out your top 15 principles.

Then

Please complete the worksheet entitled

“Principle success rating sheet: workplace focus”

Discussion

- Anyone willing to share what they found important to them at work?
- How much was there in common with life in general and the workplace?
- Can you find ways to bring your life in general principles into your workplace?
LifeJET with yourself at work

(1) Take some of the important principles at work and place them on the CAMERA. Complete a Camera on how well you have been using them in the past month at work.

(2) Complete a Compass on your personal goals regarding implementation of CRM at work

(3) Complete a MAP to achieve the above goals regarding implementation of CRM at work
Discussion

• Any comments on respective completion of the three tools?
• How well were they integrated for you (vertical integration)?

The role of coaching

• You now have the opportunity of individual coaching each month for 60mins for 12 months with a designated coach.
• The coaching will continue the values emphasis in your work and in your life.
• You will be assisted to continue the use of the LifeJET tools to discuss issues (a) at work regarding implementation eg set goals to do CRM with clients and (b) in your general life eg review whether you have been living your values.
• You will be asked to do homework between coaching sessions.
• Coaching is confidential.
• Triplicate pads are used in the same way as with clients.

Other implementation issues

Please discuss any other issues/planning regarding implementation.

Thankyou for your contribution to practice based evidence.

Please ask your facilitator about the questionnaire items if you have questions.
Identifying important principles: The card sorting task (approximately 3 hours)


The purpose of this task is to help clients to identify what principles are most important to them. You may want to photocopy the pages below onto a solid paper type, and then cut the paper into cards for your client. You can also laminate the cards.

Instructions (perhaps put this up on a powerpoint)

Step 1: Initial sort. Ask your client to sort the cards into three piles.

Pile 1: These principles are not very important to me

Pile 2: These principles are of moderate importance to me

Pile 3: These principles are of the highest importance to me.

Step 2: Reducing to 15. After clients have completed the initial sort, you ask them to go through the cards again, and this time picks out their top 15 principles.

Step 3: Have clients complete the worksheet titled:” Principle success rating sheet: Life in general” (see appendix)

Step 4. Debrief. Ask the clients if they are willing to share what they found to be important. As they talk about different principles, look for the vitality and enthusiasm in their eyes, gestures, and tone of voice. You want to identify what the client really wants from life and is likely to work towards.

You might also ask clients if they were surprised at how unimportant some principles were compared to others. Many of us spend a great deal of time pursuing things that are truly unimportant.

Step 5: Introduce workplace focus. Now as the clients to put all the cards together again. Tell them that you would now like them to redo the card sorting task, but this time you want them to sort the cards according to what principles are most important to them in their current job.

Step 6. First sort (powerpoint)

Pile 1: These principles are not very important to me in my current job

Pile 2: These principles are of moderate importance to me in my current job

Pile 3: These principles are of the highest importance to me in my current job

Step 7: Reducing to 15. After clients have completed the initial sort, you ask them to go through the cards again, and this time picks out their top 15 principles.

Step 8: Have clients complete the worksheet titled:” Principle success rating sheet: workplace focus” (see appendix)
Step 9: Debrief. Ask clients what was important to them at work. Have clients discuss how much was in common with their “life in general” list and their “workplace” list. Ask them if they can find ways to bring their life in general principles into the workplace.

General instructions for two debriefing steps. Go slowly. Try to elicit examples of what it meant to live their principles. Look for signs of vital engagement. Reinforce people for showing up and discussing their principles. Really try to get why this principle is important. In the below exercises, elicit the clients own experiences in relation to the metaphors and concepts. Go slowly and keep it experiential. Relate to recovery values.

- Introduce the distinction between values and goals. The principles could be either a value or goal. Only you can decide which is which. Values are things that you strive for but never permanently achieve.

  Metaphor: values are like the lighthouse. Sailors use the lighthouse as a guide but their goal is not to obtain the lighthouse.

  Goals are are in the service of values. Concrete goals can be achieved.

  Example value to concrete goal hierarchy

  Value: Having relationships involving love and affection

  Concrete goal: tell my wife how I feel about something important

- Discuss the notion that failing at a goal does not cancel out a value. Thus, you can fail to “be honest” in a particular instance, but still value honesty. This is critical, because people often feel that if they fail at the goal, they can not have the value.

- Talk about valuing as a process rather than an outcome.

  Metaphor: let’s say you what to ski to the bottom of a mountain. So you go up the lift and get to the top of the mountain. Now, I know what your goal is (to ski to the bottom of the slope), and so I decide to help you. I fly up to the top of the mountain in a helicopter. I offer you a lift. Do you accept? Why? Is this really about getting to the bottom, or is it about the journey, the process

- Talk about the need to keep making commitments and the importance of persistence. People often do not have a choice about whether or not they achieve their goals. For example, a client may simply fail to comply with something, or may fail to achieve the goals you set for him. The key thing is to be prepared for this and to recognize that the only real power you have is to keep choosing to commit to your values. You can’t choose to succeed, but you can choose to commit.

- Values and the all-or-none quality of willingness. Fear and desire are two sides of the same coin. If you really desire something and value it, you will often be afraid of losing it. When you go to do something
you value, you will often experience distress, anxiety, anger, self-doubt, etc. So each time you decide to act, you are faced with a question: The willingness question: Are you willing to have your unpleasant feelings and thoughts show up, in order to do what you value? Your answer can only be "yes" or "no". This is because willingness has an all-or-nothing quality. Willingness is like jumping. You can jump off of lots of things. However, there is a Zen saying that goes, "you can not jump a canyon in two steps."

The key is that you can choose the size of the jump. You don’t have to make a big jump. You can make a small commitment, that is relatively easy for you to keep.
Cards

1. Connecting with Nature
2. Gaining wisdom
3. Creating beauty (in any domain, including arts, dancing, gardening)
4. Promoting justice and caring for the weak
5. Being loyal to friends, family, and/or my group
6. Being Honest
7. Helping others
8. Being sexually desirable
<table>
<thead>
<tr>
<th>Having genuine and close friends</th>
<th>Having relationships involving love and affection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being ambitious and hard working</td>
<td>Being competent and effective</td>
</tr>
<tr>
<td>Having a sense of accomplishment and making a lasting contribution</td>
<td>Having an exciting life</td>
</tr>
<tr>
<td>Having a life filled with adventure</td>
<td>Having a life filled with novelty and change</td>
</tr>
</tbody>
</table>
Being physically fit

Eating healthy food

Engaging in sporting activities

Acting consistently with my religious faith and beliefs

Being at one with god

Showing respect for tradition

Being self-disciplined and resisting temptation

Showing respect to parents and elders
Meeting my obligations

Maintaining the safety and security of my loved ones

Making sure to repay favours and not be indebted to people

Being safe from danger

Being wealthy

Having authority, being in charge

Having influence over people

Having an enjoyable, leisurely life

Enjoying food and drink

Being sexually active
Being creative

Being self-sufficient

Being curious, discovering new things

Figuring things out, solving problems

Striving to be a better person

Experiencing positive mood states

Feeling good about myself

Leading a stress-free life
Enjoying music, art, and/or drama

Designing things

Teaching others

Resolving disputes

Building and repairing things

Working with my hands

Organizing things

Engaging in clearly defined work

Researching things

Competing with others
Avoiding self-doubt

Being admired by many people

Acting with courage

Caring for others

Accepting others as they are

Working on practical tasks

Seeking pleasure

Avoiding distress

Avoiding self-doubt
Appendix 4 – Implementation Protocol (Day 3)
Collaborative Recovery Training Program

2009-2012

Day 3

SWOT ANALYSIS

Strengths
Weaknesses
Opportunities
Threats
Getting more specific

- List barriers to implementing (ie literally think of all of your clients)
  - Working in a recovery framework
  - Collaborative relationship
  - Motivational interviewing
  - Using CAMERA
  - Using COMPASS
  - Using MAP
  - Getting data to designated person

Role of coaching

- You now have the opportunity of individual coaching each month for 60mins for 12 months with a designated coach
- The coaching will assist you to solve problems of implementation and further develop skills in the protocols of CRM
- You will be asked to do homework between coaching sessions
- Coaching is confidential
- Triplicate pads are used in the same way as with clients
Thankyou for your contribution to practice based evidence.

Please ask your facilitator about the questionnaire items if you have questions.
Appendix 5 – Coaching Protocol
Collaborative Recovery Model

Values Coaching Coaching
Record for Coach
This is a record of coaching quality to be completed by the coach after each session

<table>
<thead>
<tr>
<th>Coach Name:</th>
<th>Coachee ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Service unit:</td>
<td></td>
</tr>
<tr>
<td>Length of session in minutes.</td>
<td></td>
</tr>
</tbody>
</table>

- □ Face to Face
- □ Phone
- □ Teleconference

Review of actions completed since last session (See MAP)

Key issues covered in session (brief description using GROW model structure)

- Goals of this session:
  - exploring current Reality:
  - examining Options:
  - Wrap up - Where to next & Actions set in this session (See MAP):

Checklist to complete by coach

- □ Personal values explicitly discussed
- □ MAP used/discussed in relation to self
- □ Camera used/discussed in relation to self
- □ Compass used/discussed in relation to self
- □ Coachee encouraged to explore how personal issues influence work issues
- □ Feedback received from coachee about what is useful/not useful in session

Reflections on improving session next time (including alliance with coachee).

Please rate the following on the basis of this session

| Goal agreement (how much do you believe you and your coachee worked on mutually agreed upon goals) |
| No agreement 0---1----2----3----4----5----6----7----8----9----10 Total agreement |

| Task agreement (how much do you believe you and your coachee agreed that the way you worked on the goals of the session were appropriate) |
| No agreement 0---1----2----3----4----5----6----7----8----9----10 Total agreement |

| Relational bond (how well do you believe you and your coachee got along this session) Poor relationship 0---1----2----3----4----5----6----7----8----9----10 Very strong relationship |
| No agreement 0---1----2----3----4----5----6----7----8----9----10 Total agreement |
Collaborative Recovery Model

# Implementation Coaching

Coaching Record for Coach  
This is a record of coaching quality to be completed by the coach after each session

<table>
<thead>
<tr>
<th>Coach Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Coachee ID:</td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Service unit:</td>
<td></td>
</tr>
</tbody>
</table>

**Length of session in minutes.**
- □ Face to Face
- □ Phone
- □ Teleconference

**Review of actions completed since last session (See MAP)**

**Key issues covered in session (brief description using GROW model structure)**

- **Goals of this session:**
  - exploring current Reality:
  - examining Options:

**Wrap up - Where to next & Actions set in this session (See MAP):**

**Checklist to complete by coach**

- □ Problem solving for implementation explicitly discussed
- □ MAP implementation discussed
- □ Camera implementation discussed
- □ Compass implementation discussed
- □ Feedback received from coachee about what was useful/not useful in session

**Reflections on improving session next time (including alliance with coachee).**

*Please rate the following on the basis of this session*

**Goal agreement** *(how much do you believe you and your coachee worked on mutually agreed upon goals)*

- No agreement 0---1----2----3----4----5----6----7----8----9----10 Total agreement

**Task agreement** *(how much do you believe you and your coachee agreed that the way you worked on the goals of the session were appropriate)*

- No agreement 0---1----2----3----4----5----6----7----8----9----10 Total agreement

**Relational bond** *(how well do you believe you and your coachee got along this session)*

- Poor relationship 0---1----2----3----4----5----6----7----8----9----10 Very strong relationship
Appendix 6 – Williams et al., (2016) “Enhancing recovery orientation within mental health services: expanding the utility of values”.
Appendix 7 – Williams et al., (2013) “Improving implementation of evidence-based practice in mental health service delivery: protocol for a cluster-randomised quasi-experimental investigation of staff-focused values intervention”
Improving implementation of evidence-based practice in mental health service delivery: protocol for a cluster randomised quasi-experimental investigation of staff-focused values interventions

Virginia Williams¹, Lindsay G Oades², Frank P Deane³, Trevor P Crowe⁴, Joseph Ciarrochi⁵ and Retta Andresen⁶

Abstract

Background: There is growing acceptance that optimal service provision for individuals with severe and recurrent mental illness requires a complementary focus on medical recovery (i.e., symptom management and general functioning) and personal recovery (i.e., having a ‘life worth living’). Despite significant research attention and policy-level support, the translation of this vision of healthcare into changed workplace practice continues to elude. Over the past decade, evidence-based training interventions that seek to enhance the knowledge, attitudes, and skills of staff working in the mental health field have been implemented as a primary redress strategy. However, a large body of multi-disciplinary research indicates disappointing rates of training transfer. There is an absence of empirical research that investigates the importance of worker-motivation in the uptake of desired workplace change initiatives. ‘Autonomy’ is acknowledged as important to human effectiveness and as a correlate of workplace variables like productivity, and wellbeing. To our knowledge, there have been no studies that investigate purposeful and structured use of values-based interventions to facilitate increased autonomy as a means of promoting enhanced implementation of workplace change.

Methods: This study involves 200 mental health workers across 22 worksites within five community-managed organisations in three Australian states. It involves cluster-randomisation of participants within organisation, by work site, to the experimental (values) condition, or the control (implementation). Both conditions receive two days of training focusing on an evidence-based framework of mental health service delivery. The experimental group receives a third day of values-focused intervention and 12 months of values-focused coaching. Well-validated self-report measures are used to explore variables related to values concordance, autonomy, and self-reported implementation success. Audits of work files and staff work samples are reviewed for each condition to determine the impact of implementation. Self-determination theory and theories of organisational change are used to interpret the data.

Discussion: The research adds to the current knowledge base related to worker motivation and uptake of workplace practice. It describes a structured protocol that aims to enhance worker autonomy for imposed workplace practices.
The research will inform how best to measure and conceptualise transfer. These findings will apply particularly to contexts where individuals are not 'volunteers' in requisite change processes.

Trial registration: ACTRN: ACTRN12613000353796.

Keywords: Values clarification, Autonomous motivation, Transfer of training

* Correspondence: vcw961@uow.edu.au
1School of Psychology, University of Wollongong, Wollongong, Australia
Full list of author information is available at the end of the article

© 2013 Williams et al.; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
Background
Provision of evidence-based services has been a priority in mental health systems in English speaking mental health services for over a decade. This has been driven by a growing awareness and concern that service delivery does not always reflect what is known to be best practice [1]. In response, policy makers have sought ways to narrow this gap and support the translation of research into practice. Within the mental health field, this has included explication of ‘recovery’ as a specific priority both at the policy level and within charters that encompass mental health organisations [2-4]. Recovery can be defined as ‘a way of living a satisfying, hopeful and contributing life’ beyond the limiting effects of mental illness [5].

Worldwide, health systems and the service providers have made significant efforts to redefine programmes and develop staff in alignment with the recovery philosophy and evidence base in order to enhance capacity and further decrease the research-practice gap [6]. The Collaborative Recovery Model (CRM) [7] is one approach that includes evidence-based intervention components, including those that focus on strengths, values, and goal striving [5,8,9]. Despite this, the literature contains numerous examples of disappointing attempts to implement evidence into mental healthcare e.g., [3,10] and healthcare more broadly [11,12].

Scientific evidence that something is ‘best practice’ is not adequately persuasive in changing the behaviour of staff [13,14]. Translating and using research in practice is a complex process impacting at various organisational levels, including individual staff. Recent enhancements to models of health system change acknowledge the key role of the staff or ‘local actors’ among the numerous contextual and innovation-specific factors [15,16]. Practitioners and managers are not passively persuaded by new practices even when the evidence to support them is sound. Instead, decisions made by managers and practitioners are based on a number of individual factors such as personal experience, clinical judgment, inference, intuition, and advice [6]. People do not implement because of a rational consideration of the evidence alone. Motivation emerges as a key factor [17].

More specifically, the literature on health behaviour change provides a foundation for understanding how to change work behaviours. It is well established within the health behaviour change literature that knowing there is ‘good evidence’ for the benefits of a specific change is a poor predictor of changed behaviour [18]. People are most highly motivated to change when the desired behaviour is something that aligns with their beliefs and values [19]. While this is true for individuals generally, it is likely to be even more salient in professions where individuals are drawn to the work for values-based reasons [20,21]. In a profession where values are central, connecting staff to the ethos in which the change is embedded is likely to be
highly important to the promotion of uptake. We argue that values are persuasive in motivating staff to change their practice. In this context, we now discuss values as a key aspect of motivation.

Motivation for change is not an ‘all or nothing’ attribute. Instead, motivation can be understood in terms of the degree to which it is experienced as autonomous (arising from within the individual) or controlled (imposed on the individual by an external regulator) [22]. Within Self-Determination Theory (SDT) [22,23], striving to be self-regulated or ‘autonomous’ is described as a basic human need and something pursued by individuals. Autonomy is defined as the extent to which a behaviour is experienced as internally generated, or self-determined [24]. SDT is a well-supported theory that has underpinned a body of research related to the purposeful goal striving of individuals in a range of contexts e.g., [25,26]. Goals and behaviours that are experienced as aligned to the values and beliefs of an individual are referred to as ‘self-concordant’ [25]. The self-concordance of goals has also been shown to predict goal success, commitment to the striving process and various aspects of wellbeing [27,28].

**Autonomy in controlled contexts**

The human need for autonomy, and feeling that one is choosing to change behaviour, presents a specific challenge for implementation of evidence-based practices in the mental health field. Indeed, this issue emerges in any social context where there is a need to change the behaviour of individuals to comply with an overarching standard or set of social expectations [26,29,30]. There is evidence to suggest that socially controlling contexts are counter-productive to bringing about change, and can forestall implementation [26]. A central question is: How do we create autonomy for specific new practices (a sense that the change has come from within) when the change is imposed as part of the social context? We propose a structured, ongoing values-focused intervention for staff as one approach to enhancing autonomous motivation and therefore implementation of desired workplace change.

Values are defined here as verbal representations of desirable life consequences or ways of behaving that are enduring and pervasive across situations and contexts, [31] which can be enacted in moment-to-moment experience [32]. Values are widely viewed as important predictors and drivers of behaviour [33,34]. While the work-related goals or desired practices necessitated by a change initiative may be made explicit to staff, clarification of the values-base in which such goals are embedded is often overlooked in implementation efforts. By allowing mental health staff to connect with the values and intent of the change to practice, they are also able to identify how these overlay and potentially overlap with their own values as an individual and professional.
In such instances, though the change was not self-generated, it is possible that it will become more fully 'owned' as something that fits with the values and beliefs of individual staff members. This process is referred to as 'integration' [24], which has been described extensively within psychological and motivational literature [24,26]. Integration represents a shift from a controlled or imposed motivation for behaviour, to a more highly autonomous motivator for change [35]. When integrated, the motivation to act toward a specific goal or end-state is experienced as 'arising from within' due to its alignment with personally held values and beliefs. By attending explicitly to the values of staff, we propose an increased autonomous motivation for the desired workplace change and enhanced concordance between the 'imposed' practices and the values of individual staff, which will flow through to increased implementation.

Figure 1 demonstrates this proposed shift from low autonomy to a highly autonomous motivation for a key recovery practice, and the anticipated change in implementation:

Aims and current research gaps

Autonomy is widely understood as an important factor in the purposeful striving of humans. Autonomy supportive practices are explored within education and developmental contexts [26,30], however there is an absence of research regarding the specific interventions to enhance autonomy in work contexts generally, and none that we are aware of in relation to mental health service delivery. Additionally, the autonomy supportive practices described in previous studies are not structured or standardised, and are
therefore difficult to replicate or roll-out on a widespread basis. We propose a specific and structured set of interventions that actively promote clarification of and commitment to personally meaningful values of the mental health worker within the context of imposed organisational change.

**Methods**

**Study design and procedure**

This research is informed by two previous projects undertaken by this research team, and parallels data collection time frames to enable comparisons of implementation following the addition of the new intervention component. This project is supported by an Australian Research Council grant (LP09900708), with financial and in-kind contributions by the industry partners. Partner organisations are five well-established community-managed organisations involved in the direct provision of services to individuals living with severe and recurrent mental illnesses in the community. The partner organisations will nominate a number of suitable worksites drawn from across their service base to participate in the intervention and research components. We anticipate access to teams across anumber of Australian states and government areas, allowing us to compare and control for the effects of geographical variables. In total, approximately 200 mental health workers from across 22 sites will be randomised and referred for intervention.

**Participants**

Participants will be randomised by work-site to either the experimental (values) or control (implementation). Cluster-
randomisation will be adopted to increase the feasibility of roll out in the organisational setting (e.g., consistency across what ‘change’ for individuals within a single worksite will look like) and minimise contamination across conditions (i.e., individual randomisation would likely lead to decreased fidelity to condition due to inevitable interactions between individual staff within teams). A computerised random integer program will be used to refer worksites to condition. Once randomised, staff from within sites will be referred for training and invited to consent to participate in the research process. Blinding will not be used at the participant or worksite level for pragmatic reasons (i.e., ongoing coaching will require condition-specific protocol) and to maximise fidelity (i.e., workers will consult with colleagues from worksites in the alternate condition during the course of duties and need to understand the importance of staying within assigned protocol). Information about previous exposure to the training (i.e., staff who have participated in some CRM training before time one) will be sought to allow screening prior to inclusion in the final data set. Staff who do not consent to participation in research but are within randomised sites will still participate in all intervention components to maximise the benefit of this project for the partners, to promote intervention fidelity within the workplace, and to allow all mental health workers access to contemporary evidence-based practices and techniques.

The intervention will be facilitated by our team and comprises both training (three days) and a 12-month coaching intervention. All teams will receive the same two days of training in the CRM [10]. On the third day of training, they will receive different training activities, according to the condition (values or implementation). In-service coaches (to be trained by our team) will conduct coaching. The in-service coaches will be supported with monthly, group-based coaching-support sessions facilitated by an appropriately skilled project member. Features of each intervention condition are as follows.

Values condition

The values intervention is delivered as two components: Activities to support values clarification and commitment delivered on day three of training; and values-based coaching using CRM tools for 12 months within the workplace.

The aims of the values condition include:

1. Increase awareness of the values in which CRM is embedded.
2. Increase the extent to which the personal and professional values of the staff are explicit and expressed in the workplace.
3. Create opportunities for individual staff to identify the overlap or concordance of the CRM with their own values.
4. Regular and sustained (12 one-hour sessions each month) investment in the professional and personal development of staff via clarification and commitment to values-based goal-setting using CRM tools as the framework.

Protocol for day three values intervention

The one-day values intervention is experiential in nature, using a structured values-clarification exercise with demonstrated utility in a range of clinical and non-clinical settings [36]. The purpose of this task is to help participants identify what values are most important to them, and to increase their awareness of the potential to actively pursue valued directions in both personal and professional domains of their life (i.e., increase the extent to which values are consciously used as a driver of purposeful behaviour). Staff members will be exposed to the concept of values in the standard CRM training (days one and two), and will have a basic theoretical and operational understanding of both the merit and applicability of working with values generally. Additionally, a focus on related concepts of willingness and commitment [37] that have been emphasised as important to values work will follow in day three.

Participants are given a set of 60 cards, each featuring a specific principle of living that is associated with a universal value-domain as outlined in Schwartz’ model [38,39]. They are then facilitated through a structured sorting task that titrates their focus down to the 15 valued directions each individual identifies as ‘most important.’

Following the card-sorting task, an additional intervention component is employed to foster intent and commitment to take purposeful steps toward valued areas of living. In this stage, the focus is on ‘life in general,’ and participants are asked to rate the extent to which they have purposefully been trying to enact a variety of values in the past 12 weeks. They rate their subjective success at moving toward each of the 15 specific valued directions identified as ‘most important.’ This process is structured around a worksheet based on the Personal Strivings methodology developed by Sheldon et al. that has been used extensively within the goal setting research [35,40].

Participants are facilitated through this process a second time, adopting a workplace focus. Participants are given the instruction; ‘conduct the card-sorting task again, this time focusing on what is most important to you in your current job.’ Following this, participants complete a second worksheet to rate the intent and self-reported success of recent striving toward the work values they have identified as most important at work.

The components thereafter focus on increasing awareness of the potential concordance between personal and professional values through a facilitated discussion session. Participants are invited to discuss commonalities between
their 'life in general' list and their 'workplace' list. They are then asked to identify ways they can bring their 'life in general' principles into their workplace before being facilitated through the completion of the specific CRM values tool (known as the 'camera' [41]) as an initial commitment to this process.

Protocol for values coaching

Individual coaching sessions adopt a structure known as the GROW model structure in both conditions. GROW was made popular by Graham Alexandar and John Whitmore and it is widely used in organisational and coaching contexts as a method of setting a basic frame to a coaching session [42]. It is particularly attractive in this case due its accessibility to those with little or no prior coaching experience. GROW is an acronym for the basic components of a coaching session—namely, goal, reality, options, wrap up/where to.

Individuals identified as suitable coaches within each partner organisations will be referred to a further half-day of coaching training conducted by the research team. Potential coaches are identified by managers within each of the organisations and also through a call for expressions of interest. Trained coaches are assigned to mental health workers within the same experimental condition, but outside line management to increase role clarity. Coaching consists of 12 hour-long sessions scheduled once per month and conducted in the course of paid working hours for both participants. The CRM tools are used as the framework for recording and structuring the recipients’ development across the coaching period, such that the participating staff members are using the tools that are part of the organisational change initiative themselves (i.e., in relation to their own values-based goals). The particular focus within the values condition is on the establishment of work-related goals that fit with the values stated by the recipient in initial training, and clarified as the coaching process continues.

Implementation condition

The delivery of the implementation condition intervention components follow the same format as in the values condition but differ in focus and content. The day three of training in the implementation group is experiential in nature, but focuses on addressing opportunities for and barriers to the implementation of the CRM intopractice within the workplace. The methodology used to structure and support the implementation intervention is the ‘Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis’ developed by Albert Humphrey and used extensively in organisational contexts [43,44].

Coaching in the control condition is consistent in format and overall structure to the values condition. Implementation coaching adopts an alternate focus on identification
and resolution of issues related to implementation of CRM in the workplace as identified by participants. For example, pragmatic issues (e.g., addressing technical issues associated with new practices) or attitudinal issues (e.g., working through resistance to change from clients or colleagues).

The aims of the implementation condition are as follows:

1. Ongoing exposure to and skills-based practice with the CRM.
2. Opportunity to identify and develop strategies to address factors that are impeding implementation (e.g., resistance from clients or co-workers).
3. Regular and sustained investment (12 x 1 month coaching sessions) in the professional and personal development of staff using CRM tools as the framework.

In both conditions, participants are using the same protocol and model of practice they are to use with their clients upon implementation. Coaching therefore promotes experiential learning [45] in both conditions. We expect this will result in increased transfer of CRM into practice compared to our previous research. In the values condition there is an additional parallel process such that mental health staff will be actively encouraged to work with the CRM practices in relation to their own lives and values, just as their clients would. That is, they are applying both the practices and the underlying processes ‘for real’ (values), rather than just practising in the use of the CRM (implementation). The value of parallel relationships in transferring knowledge from one dyad (e.g., supervisor and clinician) to another (e.g., clinician and client) has been elaborated within counselling literature [46]. We hypothesise this additional parallel relationship will increase implementation as a result of enhanced sense of meaning and connection with the CRM such that it becomes more internalised [47].

Data collection and handling

The study will last 18 months with data collection at multiple times points. Primary data comprises a questionnaire battery completed by participants at five time points throughout the intervention (specific measures are outlined below). Data is also collected from coaches and recipients’ at each monthly coaching session to assess adherence to the GROW framework, integrity to experimental condition, and elements of the coaching alliance. In addition to self-reported measures of implementation, the study uses objective measures of transfer (also outlined below).

Data collection handling is in accordance with the procedures specified in the ethics approval obtained from the Human Research Ethics Committee at the University of Wollongong (HE09/221). A prime focus is on maintaining
confidentiality of participants, which is promoted by the use of a unique self-generated identifier established at the first data collection point and re-used at subsequent collections. Additionally, because the research focuses on work-related variables and is being conducted in a work setting, individual data is forwarded to the research team directly (i.e., handed personally in sealed envelopes when on-site). This is to reduce possible biased responding and staff concerns that their individual information could be seen by superiors or other personnel within their organisation.

Measures and data

The battery of measures will also include measures of intention to leave [48] job satisfaction [49], and burnout [50]. This additional data will be utilised by the research team to explore another set of hypotheses distinct from those being investigated here. Questionnaires pertaining to the outlined hypotheses are as follows.

Staff knowledge and attitudes toward recovery

A range of questionnaires will be used to determine the knowledge, attitudes, and beliefs of participants related to the concept of recovery. These measures will be compared with previous research conducted by this team [51].

The Recovery Knowledge Inventory (RKI) [51] is a 20-item instrument that assesses mental health staff knowledge and attitudes about recovery using a five-point Likert scale. It has been used in previous research to assess pre-post change following intervention and has satisfactory psychometric properties [51].

The Staff Attitudes Towards Recovery Scale (STARS) is a 19-item measure developed and evaluated as part of the Crowe et al. study [52] and assesses attitudes and hopefulness related to the goal striving and recovery possibilities for clients. It has a five-point Likert response scale (strongly disagree to strongly agree) and higher scores reflect more hopeful attitudes. The STARS has satisfactory psychometric properties (α = .81) as established in previous work [52].

Autonomy and values concordance

The Collaborative Recovery Model Values Questionnaire (CRM-VQ) is a modified version of the Personal Strivings questionnaire developed by Sheldon et al. [40]. The modification involves the use of perceived locus of causation from Sheldon’s strivings questionnaire, applied to the six components of CRM. This measure will examine the degree to which values embedded within the CRM are concordant with the personal values of participants. It will also assess the extent to which strivings toward the CRM practices are done for autonomous versus controlled (externally regulated) reasons.
Self-reported transfer

CRM-VQ

This measure also includes items that assess the implementation intentions and self-reported success of acting purposefully toward the valued directions encompassed within the CRM. Items include ‘to what extent have you made specific plans about when, where, and how to put this value into play?’ and ‘In the last 12 weeks, I have been this successful in living this value,’ to which responses will be elicited on a five-point Likert scale. An additional item relating to anticipation of implementation barriers (‘to what extent have you anticipated possible distractions and obstacles to putting this value into play?’) has been included and will be rated in the same manner. This item will allow us to investigate the impact of deliberately addressing implementation barriers (control condition).

Evidence of transfer within the workplace

Transfer indicators include time to implementation and maintenance of change. Transfer indicators will replicate those used previously by the research team [51]. We will seek direct evidence of implementation of any of the specific tools with the CRM (known as LifeJET) that are used to structure and record the recovery-focused practice of mental health workers. That is, examples of completed LifeJET documents within participant files. Time to implementation is calculated by determining the number of days lapsed between the date of training and the first date an example of completed LifeJET protocols was identified for participants. Maintenance of change is calculated by determining the proportion of staff work samples that are evidencing transfer (i.e., completed examples of CRM) after 12 months in comparison to time periods shortly after training (e.g., one month, six months).

Objective audit of participant work samples for quality and overall transfer

A further objective audit is undertaken using an enhanced version of the Goal Instrument for Quality to determine whether principles of effective goal setting that underpin the CRM have transferred into practice following intervention. That is, the former transfer indicators ask ‘is the new practice being done, and to what extent?’ while this measure will enable exploration of the question ‘is there improvement in the quality of what is being done?’ This audit is conducted on-site by trained in-service assessors, and will allow investigation of the overall work practices of staff for evidence of changed practice. Client files will be randomly selected from three time-periods (i.e., zero to six months pre-intervention, zero to six months post-intervention, and six to twelve months post-intervention) from participants in each organisation. The care plans within files will be assessed on 17 elements of effective recovery-based goal setting by two in-service auditors. A
copy of the de-identified file material is forwarded to the research team, who will also conduct the 17-point assessment of the care plan, enabling inter-rater reliability testing.

Qualitative assessment of concordance between work samples and CRM values

A novel aspect of this research is the utilisation of a process-oriented protocol to assess worker adherence to the principles embedded within CRM. For example, the principle of personalisation (i.e., evidence of unique and person-centred approach to service delivery) is acknowledged as important in recovery [3]. Personalisation will be assessed across two dimensions (the content in the sample reflects unique expression of ideas; the language/presentation of content reflects individuality) using a three-point scale (0 = no, 1 = partially, 2 = yes). De-identified research copies of work samples are to be forwarded by participating mental health workers on a monthly basis by an on-site coordinator. Following power calculations, an online number generator will be used to facilitate random identification of an appropriate number of staff whose work-samples are to be reviewed. The samples of randomly identified staff will be reviewed using the six-point rating system at three time points (one month post-training, six months post-training, and 12 months post-training). Two trained assessors from within the research team will independently review the work samples for worker process and satisfactory inter-rater reliability will be established. We will compare observed adherence to CRM principles with the self-reported transfer and measures of autonomy obtained via the CRM-VQ (described above) at matching time periods (i.e., six and 12 months) during booster sessions to explore these differing elements of implementation.

Data analysis

The intervention analyses will focus on two major questions: What aspects of Transfer does the values intervention positively influence? By what processes does the intervention work? We are primarily interested in investigating effects at the cluster-level, though will explore overall effects of the addition coaching-component on the entire sample and participant-level data in the qualitative processes described. The figure below presents a model of the analyses. Model A represents the total effect of values intervention versus control condition (implementation) (X) on Transfer (Y). Model B represents the direct effect of X on Y, and the indirect effect through the mediator (M), our psychological process variable (autonomy).

Model C is a multiple mediation model, and will allow us to test the extent that our intervention targets multiple process variables (e.g., value importance, value success,
value commitment). Contemporary research in the area of autonomous motivation has begun to challenge the utility of aggregated measures as outlined above [e.g., 25]. Rather than being mutually exclusive or ‘either or’ constructs, it may be more relevant to investigate the particular elements of motivation as described on the continuum outlined above (Figure 2). This seems especially relevant in this case given the specific goals individuals are striving toward are not self-generated and occur in the workplace where ‘enjoyment’ is not necessarily a motivational force that is amenable or desirable as a target for change. So, we will also be able to test effects of various regulators (i.e., guilt, enjoyment, importance, fun) on the outcome variable. We will use the bootstrapping method described by Preacher and Hayes [53] to test the meditational models.

We will deal with missing data using full-information- maximum-likelihood estimation (FIML). Traditional approaches to missing data (e.g., list-wise or pair-wise deletion) can lead to considerable bias in parameter estimates. In contrast FIML provides a superior approach to dealing with missing data that uses all the available information for parameter estimation [54].

Standard multiple regression analysis will test for predictors of transfer. In terms of knowledge transfer related to the new workplace practices, we will compare current findings with the pre-post effect sizes extracted from the
previous work conducted by the research team [51]. In that study, effect sizes were moderate based on Cohen's criteria (STARS = 0.25, RKI = 0.52) with a sample size of 75. Given the additional components of this intervention we are expecting slightly higher effect sizes. Data collected in the CRM-VQ will enable comparison of these predictors with participant self-reported implementation of the new work practices.

Work-sampling audits will also be used as an objective measure of transfer. We are anticipating a sample size of 200 at time point one, but have allowed for a more modest sample size of 100 in calculating power analyses. In our previous study, we found 37% of people transferred training. With this information we are able to estimate the percentage of people who need to demonstrate transferred practices in work samples in order to show a significant increase in the proportions between the former and present studies. Using Z test for proportions we have calculated that we need at least 48 out of the 100 participants to obtain a significant difference at p<0.01 to detect a 10% increase in transfer. We believe this difference is very achievable with the addition of the values-focused interventions.

**Discussion**

**Anticipated challenges**

There are a number of challenges to carrying out this project due to the applied and organisational nature of this research. The schedule of intervention needs to meet standards of feasibility and pragmatism for the partner organisations, which are contributing significantly in terms of in-kind and cash contributions. Such challenges include the need to roll-out intervention components at a rate that enables partners (who are service providers) to equip and up-skill staff and accommodate the needs of new staff, which will at times put pressure on the capacity of the research team to deliver the intervention. Additionally, the need for interventions (particularly coaching) be practical and manageable has influenced the choice of methodology to be employed (e.g., GROW method to structure coaching interactions). A prime focus for the partner organisations and the research team has been ongoing sustainability of the interventions beyond the formal support of this project. This has necessitated the interventions be amenable to being ‘passed on’ to in-service champions in a train-the-trainer model, for example.

There is risk of data loss due to the multiple time points and staff turnover rates within the mental health field. Turnover of staff in mental health service organisations is up to 26% per annum [55]. These risks are being managed by allocation of a designated project coordinator within the research team, who will provide day-to-day liaison with the industry partners and take oversight of the intervention schedules and data collection. Each industry partner will
identify a liaison officer who will have carriage of the co-ordination and scheduling responsibilities within their or- ganisation. Our relatively large sample size anticipated for time point one has been estimated with consideration given to the aforementioned industry attrition rate.

A further challenge in this research is to maximise fidelity to condition in this project. As stated above, cluster randomisation by worksite was adopted as a primary means of reducing contamination and enhancing utility and effectiveness of the rollout within the workplace. It is not possible to blind staff to condition, and it is likely there will be a degree of contamination as staff discuss the changes to work practice with colleagues from other sites (e.g., at training days or meetings). Participants in each condition will be aware that their colleagues may be receiving different components of training in the other condition. To address commitment to condition, both groups receive a strong rationale for the training and coaching approach they receive. Consistency to condition will be monitored specifically via the coaching record form completed alongside monthly coaching sessions. A ‘lessons learned’ and ‘risk register’ will be kept to manage these challenges, and are important to the ongoing development of the implementation literature.

Conclusion
Training continues to be a popular method used in workforce development, yet the problem of inadequate transfer continues [56]. With reported annual training investments exceeding $50 billion in large economies like the United States [57], even modest increases in the return on investment is highly desirable. This research has wider significance to all workforces in terms of understanding the factors that influence and promote uptake of organisational change initiatives. To our knowledge, there are no other research studies in the organisational context that employ specific values-based protocol as a means to enhancing worker autonomy for and uptake of desired practices. Indeed, in the area of mental health, ‘effective transfer’ has benefits, including optimal provision of services to those within a vulnerable population, that may be argued as more important than the significant fiscal advantages outlined above. A key priority of many recent policy statements of governments across Europe and English-speaking economies is delivery of recovery-oriented service [58,59]. This research aims to directly address this priority area. While not elaborated here, we foresee cumulative benefits to mental health service participants, staff, and organisations as a result of the impacts of this specific intervention on employee satisfaction and wellbeing. These results have been demonstrated in previous studies investigating self-concordance of goals [27,28].
While problems of implementation are being acknowledged more widely, there is still uncertainty as to how to operationalise and measure successful transfer [60,61]. In particular, the role of values as a means to promoting uptake and a construct to be measured within the science of implementation requires elaboration. A range of models and measures exist to explain and capture uptake of new practices, ranging from attitudinal [62] to supervisor-rated [63], objective measures of observed performance on the job [64], and composite measures that combine multiple elements [65]. While the latter of these allow a snapshot of whether a desired practice is being carried out within the workplace, they do not allow us to make any assertions about ‘how’ the work is being done.

Our study explores the relevance of values in promoting ‘role-extra’ behaviours that represent enactment of embedded principles within implementation initiatives. The relevance of working from a values base and enabling staff involved in a change-initiative to connect with the principles embedded within it, is emphasised in the field of mental health recovery [66]. The important and little-explored issue of measuring adherence to the values in which a desired practice is embedded will be investigated further in this research.

Competing interests: The authors declare there are no competing interests.

Authors’ contributions
VW developed and prepared this manuscript as part of her PhD and has a figural role in the implementation of intervention components. VW will be primarily responsible for analysis and reporting of research findings. She has contributed to conceptual development of this project particularly in relation to the measurement of value-congruent implementation. LO is a chief investigator in this project, primary supervisor of the PhD candidate and contributed to the writing of this manuscript. FD is lead researcher on this project and was responsible for the coordination of the grant application and other key elements of project development. FD will maintain responsibility for coordination for overall project, data and publications. FD has inputted and commented on this manuscript. TC will act as coordinator of the intervention roll out and is also a chief investigator on this project. TC has commented on this manuscript. JC is a chief investigator on this project and will provide specific input regarding the analysis plan. He provided comment on the manuscript. RA will be responsible for data management and logistical oversight of the project. All authors read and approved the final manuscript.

Acknowledgments
This research has been supported by an Australian Research Council, partnership grant number LP09907808 in addition to cash and in-kind contributions from Industry Partners.

Author details
1 School of Psychology, University of Wollongong, Wollongong, Australia. 2 Australian Institute of Business Wellbeing, Sydney Business School, University of Wollongong, Wollongong, Australia. 3 Illawarra Institute for Mental Health, University of Wollongong, Wollongong, Australia. 4 School of Psychology, University of Wollongong, Wollongong, Australia. 5 School of Social Sciences and Psychology, University of Western Sydney, Sydney, Australia. 6 Illawarra Institute for Mental Health, University of Wollongong, Wollongong, Australia.

Received: 17 April 2013 Accepted: 24 June 2013
Published: 2 July 2013
References


doi:10.1186/1748-5908-8-75

Cite this article as: Williams et al: Improving implementation of evidence-based practice in mental health service delivery: protocol for a cluster randomised quasi-experimental investigation of staff-focused values interventions. *Implementation Science* 2013 8:75.
Appendix 8 – Williams et al., (2016) “A cluster-randomised controlled trial of values-based training to promote autonomously held recovery values in mental health workers”
A cluster-randomised controlled trial of values-based training to promote autonomously held recovery values in mental health workers

Virginia Williams1*, Frank P. Deane2, Lindsay G. Oades3, Trevor P. Crowe1, Joseph Ciarrochi4 and Retta Andresen2

Abstract

Background: The implementation and use of evidence-based practices is a key priority for recovery-oriented mental health service provision. Training and development programmes for employees continue to be a key method of knowledge and skill development, despite acknowledged difficulties with uptake and maintenance of behaviour change. Self-determination theory suggests that autonomy, or a sense that behaviour is self-generated, is a key motivator to sustained behaviour change, in this case practices in mental health services. This study examined the utility of values-focused staff intervention as a specific, reproducible method of autonomy support.

Methods: Mental health workers (n = 146) were assigned via cluster randomisation to either a values clarification condition or an active problem-solving control condition.

Results: Results demonstrated that a structured values clarification exercise was useful in promoting integrated motivation for the changed practice and resulted in increased implementation planning.

Conclusions: Structured values clarification intervention demonstrates utility as a reproducible means of autonomy support within the workplace. We discuss future directions for the study of autonomous motivation in the field of implementation science.

Background

Implementation of evidence-based practice is a key priority of mental health service delivery [1, 2]. This priority arises out of a need to maximise efficiency within health systems and also out of a responsibility to provide efficacious services to mental health consumers in order to promote positive health outcomes. The challenge of translating research into practice is well acknowledged particularly in the mental health recovery field [3, 4]. Training and education programmes continue to be a primary approach to developing skills, knowledge and practices within workplace environments, including the mental health field. Training occurs despite limited uptake and maintenance of new, evidence-based methods of practice [5–7].

Previous research attempting to understand the barriers to uptake of newly learned work practices identifies factors ranging from organisational (e.g., lack of time, duplicitous paperwork, ill-equipped administrative and support systems) [8] and managerial issues (e.g., lack of management support and understanding of new practices, pressure for immediate results) [9] to individuals factors (e.g., employee skills, self-perceived competence to adopt new practices and motivation to adopt change) [10, 11]. Within mental health services, little objective support for the organisational, managerial and skill-related barriers cited most often by mental health workers as...
factors impeding transfer has been identified in previous research [12]. In contrast, lack of personal belief and commitment to the change appears to be a key practitioner barrier to implementation. Motivation for change has been identified as central to successful transfer and implementation in numerous studies e.g., [10, 11]. Motivation can be described as the force that energises an individual towards a specific goal or end-state [13, 14]. Whilst organisational factors continue to be a focus of workplace change studies, there is evidence to suggest that the degree of autonomous motivation for change at the level of individual staff has been somewhat neglected in organisational research [15]. Autonomous motivation can be described as the extent to which a perceived cause to action is experienced as self-determined, or regulated by oneself [16, 17]. Autonomy has been described as a basic human need [18] and predicts both purposeful striving towards desired end-states and continued performance in the face of adversity [19]. At the level of individual employees, wide-scale organisational development such as a change in work practices is likely to be experienced as imposed or externally regulated at least to some degree. The motivation to act has not been self-determined, or arisen from within the individual. Imposed change can create conditions of conformity and commitment to doing ‘what my employer says’, at the same time restricting an individual’s sense of autonomy and desire to personally express commitment to the change [20, 21]. The effects of imposed change have been widely studied in other contexts where communal needs (e.g., to comply with pro-social benchmarks or standards) at times reasonably restrict the individual’s right to autonomy and personal expression in order to promote the overall priorities of the group (e.g., [21–23]). Research over the past 20 years has led to the conclusion that individuals who experience their behaviour to be externally controlled, and motivated by a need to conform or keep an external party happy, are significantly less likely to spontaneously strive towards the set-standard, or to persist once the perceived controls cease [20, 23, 24]. This research has implications for how to best promote uptake of a newly learned, evidence-based practice. In most workplace settings, employees will be required to participate and complete tasks that relate to organisational priorities. The tasks are not self-selected, and at times, may be uninteresting. The challenge for change-agents and managers in organisations is similar to that faced by leaders in other contexts where there is a need for consistency and standardisation, that is, how is autonomy fostered for practices that are externally regulated, or ‘imposed’ upon individuals. Autonomy support has been described and researched extensively in educational and developmental contexts e.g., [17, 21, 25].

Autonomy support refers to practices that actively encourage initiative and provide a meaningful rationale for the task, in addition to minimising control and conformity-oriented language [19]. Autonomy supportive practices are thought to work by promoting the individual’s right to personal expression and facilitating internalisation of the values and approach being forwarded [21, 26]. In other words, rather than doing something because of pressure from somebody else (e.g., manager, supervisor) or to avoid an adverse consequence, an individual acts purposefully out of a sense that they wish to do so as the behaviour aligns with what they believe and value. To this end, the initially imposed practice or task is experienced as more self-determined, and autonomous motivation for striving is maximised. Autonomy support has been found to promote greater competence and mastery [27] higher performance [28] and higher achievement [29] when compared to other common approaches to motivating behavioural change (e.g., use of reward or punishment). Autonomy support has been operationalised in terms of three elements: (1) acknowledging participant feelings, (2) offering a meaningful rationale for the task and (3) emphasising choice rather than using controlling language [30]. There is evidence to suggest that autonomy supportive practices are both teachable [22, 26] and that managerial influence is a significant factor in determining whether a workplace will be autonomous or control-oriented [31]. Autonomy support and related literature sit within an extensive body of research regarding Self-Determination Theory (SDT) [17, 19, 32]. However, concerns have been raised about the relative absence of applied SDT research in organisational contexts [16]. Whilst SDT and autonomy support are both validated within behaviour change and personality literatures, explanation of how autonomy support looks in practice, beyond a set of general principles, is an area requiring further research. The need to identify empirically validated approaches to operationalising autonomy support in organisations is highlighted in [16]. The present study focuses on a values-focused training component that complements a 2-day employee development training intervention, as an example of a structured and reproducible autonomy supportive methodology.

Values-based approaches to autonomy support

The process of internalisation has been indicated as the mechanism by which an imposed (or externally regulated) task or behaviour becomes more autonomously motivated (and self-regulated) [17, 19, 32, 33]. Internalisation as a construct has been figurative within personality and behaviour-change literature over several decades and is understood to be an important adaptive and
transformational process [34, 35]. Internalisation takes two forms according to the SDT and results in different types of behavioural regulation. SDT conceptualises motivation on a continuum, ranging from intrinsic and self-determined (autonomous) to extrinsic and externally regulated (controlled) at each end. Intrinsically and integrated motivation is between these poles, with the former being closer to extrinsic and the latter closer to intrinsic motivation [19, 32]. In a socially controlled environment such as the workplace, there is often limited scope for actual free choice and low frequency of tasks that are done for pure pleasure and enjoyment (intrinsic motivation). Autonomy supportive practices in socially controlled environments (e.g., workplaces) are therefore aiming to foster increased internalisation as evidenced by increased integrated motivation within individuals [35, 36].

One approach to the promotion of internalisation is to provide an opportunity for individual values to be clarified, discussed and validated, and then 'matched' against the values in which the externally driven change is embedded. To date, autonomy support has identified the need to validate individual feelings, offer a meaningful rationale, and minimise controlling language. A search of the BioMed Central database of journals using the terms 'values', 'autonomy support', 'staff' and 'organisations' in a variety of combinations returned no positive matches. To the best of our knowledge, the merit of ‘targeted values-focused work as a way of operationalising autonomy support has not been investigated. This study investigates a structured, purposeful values-clarification intervention where personal values and workplace values are both explored and prioritised as an additional component to an evidence-based 2-day employee development training programme (Collaborative Recovery Model Training (CRMT)) [37]. Values have been identified as important predictors of behaviour [38, 39], whilst implementation plans have been highlighted as key to goal attainment [40]. As such, impacts of values clarification on plans to implement the new workplace practices will also be investigated as an early indicator of planned behaviour change.

We will explore these impacts in comparison to a control condition that will combine structured problem-solving and implementation planning with the CRMT programme. It is hypothesised that the mental health worker teams receiving the additional values-based training will show a greater increase in their integrated motivation for the new workplace practices following training than those in the control group teams. It is also expected that those receiving the values intervention will show a greater increase in plans to implement the new CRM practices following training than those in the control group. It is also useful to explore the impacts of this intervention on other forms of motivation that have been explicated in the SDT model as there is limited research at this component-level particularly in organisations [16]. Whilst intrinsic motivation is not expected to change, the potential changes to introjected and extrinsic motivation following a values-based intervention for staff are worthy of exploration.

**Methods**

**Participants and procedures**

Participants were 146 staff members recruited from four community-managed organisations that provide programmes to support individuals with severe and recurrent mental health challenges. Each organisation was a partner in an Australian Research Council grant project with the University (LP0990708). Using a computer-generated randomisation list, the research team randomly assigned mental health workers by work site to the experimental condition (values group) or the control condition (implementation group). Equal numbers of sites from within each partner organisation were randomly assigned to either the values or implementation group. Cluster randomisation was adopted due to the highly interdependent nature of mental health workers within workplaces and also to ensure fidelity to condition. For these reasons, it was not possible to blind participants to condition. All participants were aware of the alternate experimental condition, the hypotheses and perceived merits of each experimental group. Accredited trainers from the research team attended sites within each partner organisation and delivered the ‘standard’ training programme in addition to the appropriate condition-specific intervention. Responsibility for intervention delivery was maintained by the accredited trainers within the research team to promote fidelity to condition and integrity of intervention.

The standard component of the intervention involved delivery of the Collaborative Recovery Model training, which is an evidence-based staff development programme structured around six core principles or workplace values [41]. Participants assigned to the values group received a third day of training that comprised a structured values clarification card sorting process developed by Ciarrochi and Bailey [42]. The purpose of the task is to help individuals identify 15 principles or valued-directions that are most important to them from 60 values cards. The values were derived from the 10 universal values identified by Schwartz and colleagues, which have been validated in cross-cultural research [43, 44]. Example values include ‘Caring for others’ (derived from Ben-evolence value) and ‘showing respect for tradition’ (derived from Tradition value). The mental health workers were instructed through a three-stage sorting.
Following this, each individual was guided through a process that involved them evaluating whether they had 'principle (past 3 months) extensively e.g., [20, 24]. To conclude this process, a facilitation of the university trainer. This process was through the values-clarification process again, but on this occasion, they were asked to adopt a workplace focus. At the end of the three-step sort, each individual identified the 15 principles from within the 60 cards that mattered most to them at work. Following this, each individual was guided through a process that involved them evaluating whether they had a current desire to take action in relation to each principle ('Do you want to put this principle into play?') and their recent success in living each out ('How successful have you been in living this value over the past 3 months'). This evaluative process was developed by Sheldon and colleagues and has been used extensively e.g., [20, 24]. To conclude this process, a group discussion was facilitated around the following questions: 'Is anyone willing to share what they found important? Is anyone surprised at how unimportant some principles were compared to others?' The individuals in the values group were then guided through the values-clarification process again, but on this second occasion, they were asked to adopt a workplace focus. At the end of the three-step sort, each individual identified the 15 principles from within the 60 cards that mattered most to them at work. Following this, each individual was guided through a process that involved them evaluating whether they had a current desire to take action in relation to each principle ('Do you want to put this principle into play?') and their recent success in living each out ('How successful have you been in living this value over the past 3 months'). This evaluative process was developed by Sheldon and colleagues and has been used extensively e.g., [20, 24]. To conclude this process, a group discussion was facilitated around the following questions: 'Is anyone willing to share what they found important to them at work?', 'How much is there in common with life in general and the workplace?', 'Can you find ways to bring your life in general principles into your workplace?'

The mental health workers in the control condition (implementation group) also received a third day of training, instead focused on identifying organisational barriers and other challenges likely to exist in their workplaces as implementation of the newly acquired skills and practices occurred. They were also provided the opportunity to problem-solve the identified barriers under the facilitation of the university trainer. This process was structured around a 'SWOT Analysis' protocol (Strengths, Weaknesses, Opportunities, Threats) and is a methodology that has been used extensively in organisations [45].

The 3 days of intervention were run successively with data collected at the commencement of day 1 (time 1) and the completion of day 3 (time 2). All individuals who attended the training were given both written and verbal information clearly indicating that whilst participation in the training was part of their workplace requirements, participation in the research component was voluntary. Data collection and management was undertaken in accordance with conditions stipulated to and authorised by the Human Research Ethics Committee at the University (HE09/221). The training intervention was rolled out over an 11-month period across a total of 22 sites.

Measures

Autonomous motivation

The measure of 'autonomy' for the six workplace principles that underpin the CRM was developed using the methodology devised by [24]. Respondents were asked to rate the extent to which controlled (extrinsic), introjected, integrated and intrinsic motivators contributed to their goal-directed efforts aligned with the newly trained work practices. Extrinsic motivation was measured by endorsement of the statement, 'somebody else wants me to do it'; introjected motivation by, 'I do this for approval or I will feel guilty if I don't'; integrated motivation by, 'I wholly endorse it as important' and intrinsic motivation by, 'I do this for fun and enjoyment'. The participants rated each item using a five-point Likert scale that ranged from 'not at all for this reason' to 'entirely for this reason'. This measure has been used to understand value motivations in mental health workers previously e.g., [46]. Previous SDT research [20, 24] has used an aggregated autonomy score calculated by subtracting the total 'controlled' motivation for the specific workplace principle from the total 'autonomous' motivation for the same principle, such that Autonomy = (intrinsic + integrated) - (introjected + extrinsic). Recent research has identified potential limitations in this aggregated method, e.g., [23], and instead analysed each of the four motivations separately, e.g., [46]. Moreover, we were specifically interested in understanding changes in the different components of motivation identified by SDT, particularly integrated motivation. Thus, for each participant, a total of four motivation scores on each of the six underpinning CRM principles were attained both prior to intervention (time 1) and at the conclusion of condition-specific intervention (time 2).

Plans to implement

Participants were asked to rate the degree to which they were planning purposeful action aligned to CRM across its six principles. Using a five-point Likert scale, respondents indicated the extent to which they had made specific plans to implement the particular CRM principle, from 'not at all' to 'very much so'. This methodology has been validated in previous research [47] and is compatible with the process utilised by [24].

Analyses

As indicated in the participant flow chart (Fig. 2), there was data loss due to attrition. Baseline checks for differences between those who completed data at time 2, and non-completers found no differences in demographic variables (e.g., age, gender, length of experience) or on experimental variables (e.g., T1 integrated motivation). Repeated measures analysis of variance examined main and interaction effects for time (pre-training day 1 and
post-training day 3) and condition (values versus implementation). Our analyses focused on those who completed measures at the different time points. A series of correlations between the four levels of autonomous motivation with plans to implement pre-training, and for pre-post training, changes in motivation and implementations plans were carried out to better understand the relationships between variables. Multiple regression analyses were conducted to determine the degree of variance in outcome variables related to motivation and plans to implement that was predicted by condition.

**Results**

Figure 1 indicates, a total of 146 participants were recruited, of whom 79 were randomised to the values condition and 67 to the implementation condition. Most participants were female (69%). Participating mental health workers ranged in age from 18–60 and over, with 29% aged 18–30, 27% aged 31–40, 18% aged 41–50 and 22% aged 51–60 and 4% were aged above 6 years. The modal period of service as a mental health worker was 1.5 years, with mean 4 years service. There were no significant differences between participants in each condition for baseline characteristics.

The CRM training intervention is based on a framework of mental health delivery that seeks to operationalise six core principles related to empowerment and actuation of personally meaningful goals. The central message in each of the six principles is outlined hereafter. Recovery involves and necessitates (1) a life that is meaningful to the individual, (2) collaborative relationships, (3) change enhancement, (4) strengths and values, (5) life visioning and goal setting, and (6) action planning and monitoring. Each principle embodies a core element embedded within the CRM, identified as foundational to mental health recovery. The knowledge, practices and skills trained within the standard CRMT programme are aligned with these principles.

Data relating to autonomous motivation and plans to implement was collected for each respondent in line with these six CRM principles. Exploratory analyses were conducted to better understand the co-relations between principles and between principles and outcome variables. Correlations and subsequent factor analyses revealed that the six core principles represented a unitary construct: All six principles were strongly correlated ($r^2$s = .54 to .74). Cronbach’s alpha for the six items was .88 indicating high consistency. This result was not unexpected as each of the principles is theoretically linked.
to the others as a key element of ‘recovery’. Further, the high intercorrelations serve to validate the evidence-based, conceptual model of mental health recovery that underpins the CRMT. To simplify further analyses, aggregated autonomy scores were utilised. Based on this, an overall score for CRM for each outcome variable (i.e., four motivations, plans to implement) at time 1 (pre) and time 2 (post) were calculated and used for subsequence analyses.

Effect of condition
Repeated measures analysis of variance (ANOVA) for all participants who completed the intervention and provided data (T1 and T2) was conducted to examine the effect of time and condition on motivation and plans to implement training. No significant interactions were identified for extrinsic, introjected or intrinsic motivation. A significant positive time by condition interaction effect for integrated motivation was revealed, $F[1,129] = 6.67, p < .05$. Figure 2 depicts the significant interaction effect of time and condition on integrated motivation.

Repeated measures analysis of variance was conducted to examine the effect of time and condition on plans to implement the newly trained practice. Results for participants who completed the intervention (including data at T1 and T2) revealed a significant positive interaction for time and condition on plans to implement newly trained practices, with those in the values condition endorsing more highly than those in the implementation condition following intervention, $F[1,129] = 4.80, p < .05$. Figure 3 depicts the significant interaction effect of time and condition on plans to implement newly trained CRM practices.

Table 1 depicts all pre- and post-training means and standard errors for each motivation component and plans to implement the CRMT by condition.

Correlational analyses
Correlations between the forms of motivation and plans to implement were conducted to better understand the relationships both prior to training and after intervention using Pearson correlation coefficient. At baseline, extrinsic motivation negatively correlated with plans to implement, $r = -.21, p < .05$. Plans to implement were positively correlated with integrated motivation $r = .49, p < .01$ and intrinsic motivation, $r = .33, p < .01$. Change scores were calculated for each motivation component by subtracting T1 from T2, as were change scores for plans to implement. A significant relationship was found between change in plans to implement and change in integrated motivation ($r = .26, p < .01$). Additionally, there was a significant negative relationship between change in introjected motivation and change in plans to implement ($r = -.26, p < .01$); change in extrinsic motivation was also negatively correlated with change in plans to implement ($r = -.20, p < .05$). The findings are summarised in Table 2 below.

Regression analyses were conducted to further explore the relationships described in Table 2. A hierarchical regression was conducted with variables entered stepwise based on previous research and the strength of the interrelations we identified, with integrated motivation entered in step 1, intrinsic motivation at step 2, introjected motivation at step 3 and finally extrinsic motivation at step 4. The model was set with $p$ value at .05. Controlling for baseline plans to implement, integrated motivation was the only variable that uniquely predicted plans to implement at time 2. Results are presented in Table 3.
Discussion
Development of employee skills within the mental health field is challenging. Workplace training programmes continue to be a prime method of organisational change, despite somewhat disappointing impacts on implementation in general and specifically in the mental health field. Enhancement of employee autonomous motivation to change is an area of inquiry that has received relatively little empirical attention [16]. In particular, the identification of structured, reproducible approaches to supporting worker autonomy for change has been highlighted as a specific need. Within socially controlled environments such as the workplace, integrated motivation represents the optimal level of internalisation of an otherwise imposed behavioural regulation [35]. The use of a structured values clarification process as an intervention to follow training in a new set of evidence-based mental health recovery practices was tested for its applicability as a means of supporting integrated motivation for change.

Aligned with our main hypothesis, a significant increase in integrated motivation for a newly trained work practice was found for staff that participated in a structured values clarification intervention compared to those who participated in structured problem-solving. These results lend support for values clarification as a means to promoting employee internalisation of an otherwise imposed workplace change. Additionally, staff in the values condition also evidenced a significant increase in plans to implement to the workplace initiative compared to those in the implementation (problem-solving) condition. Implementation planning is associated with increased purposeful goal attainment and striving [48]. This suggests enabling staff to identify and clarify personal and workplace values embedded within a newly trained workplace initiative may lead to increased personal ownership and planned transfer.

We envisage this kind of intervention, as an adjunct to standard knowledge and skills training, would have utility in any context where transfer of training is a specific

Table 1 Means and standard error (pre and post) for intervention completers by condition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Condition</th>
<th>Time</th>
<th>Mean</th>
<th>SE</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated motivation</td>
<td>Values</td>
<td>1</td>
<td>4.35</td>
<td>.06</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4.53</td>
<td>.06</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>4.35</td>
<td>.06</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>4.35</td>
<td>.07</td>
<td>60</td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>Values</td>
<td>1</td>
<td>3.42</td>
<td>.12</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.32</td>
<td>.14</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>2.96</td>
<td>.13</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2.95</td>
<td>.15</td>
<td>60</td>
</tr>
<tr>
<td>Introjected motivation</td>
<td>Values</td>
<td>1</td>
<td>1.48</td>
<td>.09</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.42</td>
<td>.10</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>1.53</td>
<td>.10</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.50</td>
<td>.10</td>
<td>60</td>
</tr>
<tr>
<td>Extrinsic motivation</td>
<td>Values</td>
<td>1</td>
<td>1.48</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.34</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>1.57</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>1.43</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td>Plans to implement</td>
<td>Values</td>
<td>1</td>
<td>3.67</td>
<td>.09</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.77</td>
<td>.08</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td>1</td>
<td>3.64</td>
<td>.09</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3.52</td>
<td>.09</td>
<td>60</td>
</tr>
</tbody>
</table>
Table 2: Interrelations between plans to implement and motivation type at time 1 and for pre- to post changes

<table>
<thead>
<tr>
<th>Motivation type</th>
<th>Plans to implement (n=144)</th>
<th>Change in plans to implement (n=130)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic</td>
<td>-.21*</td>
<td>-.20*</td>
</tr>
<tr>
<td>Introjected</td>
<td>-.16</td>
<td>-.26**</td>
</tr>
<tr>
<td>Integrated</td>
<td>.49**</td>
<td>.26**</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.33**</td>
<td>-.02 NS</td>
</tr>
</tbody>
</table>

NS not significant (p > .05)
*Significant, p < .05; **Significant, p < .01

Table 3: Time 1 motivation types predicting variance in plans to implement at time 2

<table>
<thead>
<tr>
<th>Step 1</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to implement (T2)</td>
<td>1.91</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>.41</td>
<td>.11</td>
<td>.26**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to implement (T2)</td>
<td>1.88</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>.38</td>
<td>.12</td>
<td>.25**</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.04</td>
<td>.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to implement (T2)</td>
<td>2.04</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>.37</td>
<td>.12</td>
<td>.23*</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.04</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Introjected</td>
<td>-.05</td>
<td>.06</td>
<td>-.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 4</th>
<th>B</th>
<th>Std. error</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans to implement (T2)</td>
<td>1.99</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>.38</td>
<td>.12</td>
<td>.24*</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>.04</td>
<td>.06</td>
<td>.05</td>
</tr>
<tr>
<td>Introjected</td>
<td>-.08</td>
<td>.09</td>
<td>-.10</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>.04</td>
<td>.09</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Note: R squared = .07 for step 1, change R squared = .00 for step 2, .00 for step 3, .00 for step 4
* significant, p <.05; ** significant, p <.01

Concern or target. Gaining the buy in from staff is anecdotally acknowledged as an important factor in bringing about behaviour change, though receives less research attention than other workplace initiatives like bonuses, rewards and opportunities [49]. These findings indicate that it is possible to provide a brief, reproducible intervention that enables staff to identify and work with ‘intangibles’ such as their personally meaningful values and beliefs, and such an intervention can have positive effects on motivation for change. The results did not indicate significant effects for aggregated autonomous motivation (i.e., integrated + intrinsic + introjected + controlled), which aligns with the contemporary SDT research [25] and also fits with expectations of motivation for change in a controlled environment, such as the workplace. Furthermore, there was no significant effect of condition on intrinsic motivation (e.g., I do this for fun or enjoyment), introjected motivation (e.g., I do this because I would feel guilty otherwise) or controlled motivation (e.g., do this because somebody else wants me to) when they were reviewed separately. This finding suggests that future work centred on promoting autonomy and uptake in controlled environments may do well to focus on integrated motivation specifically as a means to bringing about internalisation and self-directed implementation of the new practice. It also adds to the increasing understanding about the motivation continuum explicated within SDT.

Correlation analyses between motivation types and plans to implement were conducted to better understand the relationship between motivation and plans to implement across the intervention period (Table 3). Increases in integrated motivation from time 1 to time 2 were positively correlated with increases in plans to implement the new workplace practice from pre to post. Regression analyses indicated integrated motivation at time 1 uniquely predicted plans to implement at time 2 for our sample when compared with the other forms of motivation. These findings further suggest that integrated motivation is a construct highly relevant to implementation planning and worthy of further research as a mechanism of bringing about workplace change.

Limitations and future directions
Our research investigates changes in motivation and planning following a brief intervention, across a period of 3 days. Whilst the results are positive, the improvements in motivation and planning are anticipatory and may not lead to changed practice or sustained uptake. Moreover, research relating to values has indicated personal value systems to be a stable construct, changing relatively little over time [38, 44]. Longitudinal research
acknowledging the relatively stable nature of the values construct and allowing investigation of changes to ongoing implementation is highlighted as a need within the field of organisational behaviour change broadly and specifically in mental health recovery.

Data loss due to attrition was an issue in this project and is acknowledged as a practical and statistical concern for applied research generally [50]. Comparison of pre-training variables for mental health workers who completed all elements of the intervention (i.e., pre-data collection, 2 days standard training, day 3 of condition-specific intervention and post-training data) with those who did not complete all elements indicate that there were no differences in baseline data (e.g., demographics) or on pre-training experimental variables (e.g., integrated motivation). This intervention did not focus on the pre-training organisational context or in any way seek to actively increase the extent to which the training was experienced as ‘owned’ by those who participated. For example, assessing for and understanding readiness for change, allowing individuals to have a say in some elements of the training (even if this is practical in nature) or eliciting some pre-training discussion about the individual’s experience of their workplace may help to reduce the sense that the new practices were ‘forced upon’ and increase involvement in the change. Readiness for change, and understanding the pre-change environment, seems to represent a step towards the creation of an autonomy supportive work climate and is well supported in behaviour change research [51]. Talking about change prior to it happening may actually undermine the extent to which it is perceived as forced or imposed, thereby aligning with key priorities identified by [16].

In terms of operationalising autonomy support and enhancing its relevance to organisational contexts, our research has emphasised the second element of three identified underpinning components, namely providing a meaningful rationale for the change. The values-clarification intervention facilitated awareness and clarification of personal and work values but did not go so far as to elicit and explore the affective responses of staff to the change process itself (component 1 of autonomy support). The third component (minimising controlling language and emphasising choice) was arguably targeted in the values-clarification process, but consideration of a more transparent discussion about implementation may be warranted in future applications.

Further interventions may do well to build in a structured opportunity for staff to identify and express feelings related to the workplace change and to talk directly about the how, why and when of implementing the newly learned skills. This would represent a morphing of our two interventions to some degree (i.e., allowing some implementation planning and problem-solving as per the control group) but with continued and primary emphasis on allowing mental health workers to internalise the imposed change through identifying the alignment with deeply held values and beliefs. This may lead to further positive impacts on internalisation of the values embedded within a workplace change over and above the significant findings realised in this study. Given the relevance of values concordant goal-setting and striving to personal wellbeing [20, 24], the present research also highlights the need to better understand possible dual impacts of value-based interventions on effective goal striving and employee well-being in an era where organisational effectiveness and responsibility to personnel are increasingly emphasised [52, 53].

Conclusions

This research has implications for mental health services and other organisations wishing to promote transfer of workplace change through staff training programmes. The results indicate that provision of opportunity for staff to identify and clarify personal and work values after training in the to-be-adopted practices positively impacted the extent to which individuals wholly endorsed and internalised the practice as well as their plans to implement the change.

This study has highlighted integrated motivation as important to change and the potential for structured values intervention as an explicit approach to autonomy support in socially controlled environments, such as the workplace. We believe this study provides promising indication that such intervention can be both replicable and brief and still have a positive impact on the degree to individual workers ‘buy in’ to an otherwise imposed workplace change. From this perspective, this study adds to the current knowledge and application of SDT as a theory of work motivation and identifies a brief and relatively cost-effective method that potentially enhances the uptake of evidence into practice. The current findings are relevant to any context where the research-practice gap pervades. Further work is required to determine the relevance of values intervention on employee motivation for change in the longer term, in addition to transfer and maintenance of skills and practice.

Competing interests

The authors declare that they have no competing interests.

Authors’ contributions

VW developed and prepared this manuscript as part of her PhD and has been responsible for the design and analysis. FD is the lead researcher on this project, supervises the PhD candidate and contributed to the writing and design of this manuscript. LO is the primary supervisor of the PhD candidate, is a chief investigator on the project and provided input to the manuscript. TC is a chief investigator, coordinated the intervention roll-out and provided comments on this manuscript. JC is a lead researcher and has provided guidance in particular to the design analysis and methods.
in addition to the general comment. RA has provided the input to this manuscript and is part of the research team. All authors read and approved the final manuscript.

Acknowledgements
Australian Research Council partnership grant number LP09907808, in addition to cash and in-kind contributions by partner organisations, has supported this research. Valuable feedback and guidance provided by the anonymous reviewers is acknowledged in the development of this article.

Protocol
Full trial protocol can be accessed at http://www.implementationscience.com/content/8/1/75 [54].

References
45. Mann NC, Mackenzie E, Tettebaum SD, Wright D, Anderson C. Trauma system structure and viability in the current healthcare environment: a


