## The Role of Physical Activity during Personal Recovery at a Voluntary Sector Mental Health Organisation

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#### **Abstract**

Research has shown that people who participate in regular physical activity (PA) can experience improved wellbeing and quality of life, including better physical health, cognitive function, positive affect, and self-esteem (Fox, 1999). Such benefits support the application of PA as a strategy to improve the general population's mental health and those recovering from mental illness. However, the contemporary understanding of PA and the recovery from mental illness is almost exclusively underpinned by the principles of clinical recovery (e.g. symptom remission), which can overlook the patient's values. Conversely, personal recovery may reconnect people with their inner resources, personal strengths, and offer opportunities for people to reconstruct hope, meaning, responsibility and a positive identity as part of recovery (Slade, 2009). These values also mark a shift in the UK Government's (2011a) mental health strategy, toward integrating personal recovery as part of people's mental health care. Yet, few studies have examined the role of PA within the context of personal recovery, including the impact of PA on the wider elements of personal recovery.

Accordingly, this thesis sets out to examine the role of PA during the personal recovery from mental illness, as a case study at a voluntary sector mental health organisation. The research methodology was guided by social constructivism, and data was collected between October 2010 and June 2014 using participant-observations, semi-structured interviews, focus groups and photo elicitation methods. Seven members of staff and twenty-two attendee's volunteered to participate in the research study, and their accounts were analysed thematically (Braun & Clarke, 2006) using NVivo to manage and aid the data analysis. Additionally, effort was made to satisfy the authenticity criteria throughout the research to maintain constructivist rigour (Lincoln & Guba, 2013).

The research findings identified six high-ordered themes that indicate a process of personal recovery through PA. These were (a) "Battles against the mind", (b) 'the centre as a place of refuge and support', (c) "exercise is one part of the whole package", (d) "the connection between body and mind", (e) "my gateway onto other things", and (f) "from small acorns to big oak trees". These findings were congruent with the existing literature, and added that PA participation can support people's meaningful engagement in their personal medicines and other life events (e.g. employment, being with family, and relationship with pets). The findings are discussed in relation to the delivery of PA in mental health services, the relationship of PA with meaningful activities during recovery, and the impact of PA on elements of hope, meaning, positive

identity, and personal responsibility. The thesis concludes with a guiding standpoint on the application of PA for personal recovery as a personal medicine or as an adjunct activity. This standpoint can be used to inform the general population, mental health and exercise professionals, multiagency mental health service staff and attendees, commissioning bodies and policymakers.

**Key words**: Personal recovery, physical activity, exercise, personal medicines, voluntary sector organisation, case study, qualitative research, social constructivism.

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'One repays a teacher badly if one remains only a pupil. And why, then, should you not pluck at my laurels?' Nietzsche (1961, p. 103).

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For Charlie and Evie: My two bright angels.
"All the ideas, perceptions, and values that characterise "I" or "me"; it includes the awareness of "what I am" and "what I can do" (Carl Rogers, 1951)

#### **Current thesis contributions**

Material embedded within this thesis has contributed to the following papers and presentations:

#### Articles

- Khalil, H. (2014). The Constructivist Credo. Book Review in *QMiP Bulletin*, 18, 41-44.
- Khalil, H. (2014). Making a difference, making ourselves known: Qualitative methods in psychology conference. Event review in *QMiP Bulletin*, 18, 52-55.
- Khalil, H. & Pack, S. (2014). Exercise, personal medicines + recovery from mental illness. PTmagazine for personal trainers and fitness enthusiasts, August, 25.

#### Conference presentations

- Khalil, H. (2013, September). *The beast upon the horizon: A poetic reflection from fieldwork*. Poster session at the Qualitative Methods in Psychology conference, Huddersfield.
- <sup>1</sup>Khalil, H., Ramon, S., & Pack, S. (2013, September). "Those are the things that give me a holiday from the mental illness": Photographic representations on the role of physical activity and personal medicines during recovery. Paper presented at the Qualitative Methods in Psychology Conference, Huddersfield.
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## Contents

1. Thesis	introduction	14
1.0	The context and contributions of the thesis	14
1.1	The thesis as a personal journey: 'The beast upon the horizon'	
1.2	Research aims	18
1.3	Research questions	18
1.4	Research objectives	19
1.5	Key definitions	20
1.6	Thesis outline	21
2. Literat	ture review	23
2.0	Introduction	23
2.1	The burden of mental illness	24
2.2	Recovery from mental illness	25
2.2.	.1 Clinical recovery	26
2.2.	2 The Biopsychosocial Model	27
2.2.	3 Personal recovery	28
2.2.	4 Recovery: A shift in the Government agenda	31
2.3	Physical activity promotion	35
2.4	Models of physical activity behaviour	37
2.4.	.1 The theory of planned behaviour	38
2.4.	2 The transtheoretical model	40
2.4.	The self-determination theory and intrinsic motivation	43
2.5	Improving wellbeing and quality of life	46
2.5.	.1 Physical improvements	47
2.5.	2 Positive affect	47
2.5.	3 Cognitive function	48
2.5.	4 Self-esteem	49
2.5.	.5 Negative or harmful effects	50
2.6	PA and personal recovery	52
2.6.	.1 Hope	52
2.6.	2 Positive identity	54
2.6.	3 Personal responsibility	55
2.6.	4 Personal meaning	57
2.7	Chapter summary	59
3. Theore	etical perspective	61
3.0	Introduction	61
3.1	Moving beyond postpositivist sport and exercise science	61
3.2	Postpositivism	64
3.2.	1 Critical Realism	65
3.2.	2 Modified Objectivism	67

3.2.3	Experimental methods	68
3.3	Constructivism	70
3.3.1	Relativism	72
3.3.2	2 Subjective-transactional	74
3.3.3	A dialectic and hermeneutical methodology	75
3.4	Axiological perspective	76
3.5	A sympathetic reflection on postpositivism	78
3.6	Chapter summary	80
4. Researc	ch Methodology: An emergent case study	82
4.0	Introduction	82
4.1	Research in action	82
4.2	Selecting a case study framework	83
4.2.1	Defining the 'case'	87
4.2.2	An exploratory and intrinsic case study	88
4.2.3	An interpretative and illustrative case study	88
4.2.4	The nested case and boundary	89
4.3	Procedure: A crystallisation of qualitative methods	91
4.3.1	University Ethics Approval	92
4.3.2	Participant selection strategy	92
4.3.3	Participants	96
4.3.4	Participant-observations	97
4.3.5	Staff interviews	98
4.3.6	Attendee focus groups	100
4.3.7	Attendee photo-elicitation	101
4.3.8	Thematic analysis	103
4.3.9	Resonance: Representing the case	104
4.4	Authenticity: Rigour in constructivist research	105
4.4.1	Fairness	106
4.	4.1.1 Subjective negotiation	107
4.	4.1.2 Inter-subjective negotiation	108
4.4.2	Ontological and educative authenticity	111
4.4.3	Catalytic and tactical authenticity	112
4.5	Chronology of data collection methods	114
4.6	Chapter summary	117
5. Reflecti	ions from the field	119
5.0	Introduction	119
5.1	The Rockwell Centre	119
5.2	Researcher-participant relationships	123
5.2.1	Initial storylines to ambivalent assimilation	124
5.2.2	Power relations: A two-way conflict	128

5.3	Chapter summary	130
6. Overv	iew of the findings	131
6.0	Introduction	131
6.1	Conceptual framework of the findings	131
6.2	Thematic definitions	133
6.3	Opening vignette	136
6.4	Chapter summary	137
7. How c	lo people experience physical activity at a voluntary sector mental health organisation?	138
7.0	Introduction	138
7.1	Theme A: "Battles against the mind"	138
7.2	Theme B: The centre as a place of 'refuge' and support	141
7.2	.1 Sub-theme B1: "There's always something to do at the centre"	144
7.2	.2 Sub-theme B2: "Knowing that there's some support around them"	147
7.2	.3 Sub-theme B3: "If we had more resourcesmore could be done"	151
7.3	Chapter summary	154
8. How i	s the physical activity and personal medicine relationship experienced?	155
8.0	Introduction	155
8.1	Theme C: "Exercise is one part of the whole package"	155
8.2	Theme D: "The connection between body and mind"	160
8.2	.1 Sub-theme D1: "That physical dimension"	162
8.2	.2 Sub-theme D2: "It's changed my mood"	165
8.2	.3 Sub-theme D3: "It gets you in the right frame of mind"	167
8.2	.4 Sub-theme D4: "Strong in the mind"	169
8.2	.5 Sub-theme D5: "Sometimes I don't feel that great when I'm doing it"	173
8.3	Theme E: "My gateway into the other things"	177
8.4	Chapter summary	181
9. How c	lo people experience personal recovery through participating in physical activity?	183
9.0	Introduction	183
9.1	Theme F: "From small acorns to big oak trees"	183
9.1	.1 Sub-theme F1: "A brighter future"	187
9.1	.2 Sub-theme F2: "Taking ownership of themselves"	189
9.1	.3 Sub-theme F3: "Being the true me"	193
9.2	Chapter summary	196
10. Disci	ussion	197
10.0	Introduction	197
10.1	How did people experience PA at a voluntary sector mental health organisation?	197
10.2	How was the physical activity and personal medicine relationship experienced?	203

10.3	How do people experience personal recovery through participating in physical activ	ity? 210
10.4	Implications for mental health practice and policy	215
10.4	4.1 Micro applications of the research findings	216
10.4	4.2 Macro applications of the research findings	218
10.5	Chapter summary	224
11. Conc	lusion	226
11.0	Introduction	226
11.1	Thesis summary	226
11.2	Thesis limitations	229
11.3	Thesis contributions	232
11.3	3.1 Contributions of originality	232
11.3	3.2 Contributions of impact	234
11.4	Future directions	235
11.5	Thesis reflections and closing thoughts	237
Appendic	ces	239
Appen	ndix A. Public guidance for the recommendations of physical activity (Department of I	Health,
2011a)	)	
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240
Appen		240
Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240 241 242
Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing
Appen Appen Appen self-re	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240 241 242 nancing 243
Appen Appen self-re Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243
Appen Appen self-re Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243244
Appen Appen self-re Appen Appen Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243244245
Appen Appen self-re Appen Appen Appen Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243244245247
Appen Appen Self-re Appen Appen Appen Appen Appen Appen Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243244245247251
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	240241242 nancing243245247251252
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	
Appen	ndix B. Processes of behaviour change (adapted from Lowther et al., 2007)	

## List of tables

Table 1.1 Thesis research questions	19
Table 1.2 Key thesis definitions	20
Table 2.1 Selected key Government policy for recovery-oriented services	32
Table 2.2 Selected key Government policy in physical activity promotion	36
Table 2.3 Facilitators and barriers of physical activity participation	36
Table 2.4 The stages of change (Prochaska et al., 1992)	38
Table 2.5 Motivational processes of behaviour regulation (Deci & Ryan, 2000)	44
Table 3.1 Key philosophical assumptions of six paradigms of social inquiry (Lincoln et al.,	63
2013; Mertens & Wilson, 2012)	
Table 4.1 Selecting a research methodology (Creswell, 2007; Starks & Trinidad, 2007)	85
Table 4.2 Research inclusion and exclusion criteria	95
Table 4.3 Participant information	96
Table 4.4 Chronology of data collection methods across four key stages	114
Table 6.1 Thematic definitions and exemplar quotes	133
Table 8.1 Types of personal medicine: Emergent definitions and examples	156
Table 8.2 Participant personal medicines: Clustered by activity type	157
Table 10.1 Key differences and similarities between PM-PA and non-PM PA	204
Table 10.2 Transferable PA benefits in the PA-PM relationship	207
Table 10.3 Suggested applications of the research findings to meet Government policy and	222
develop evidence-based practice	
The state of the s	
<b>TA</b>	
List of figures	
Figure 2.1 The Theory of Planned Behaviour (Armitage and Conner, 2001)	38
Figure 3.1 An overview of the thesis paradigm, standpoint, methodology, methods and	81
sources	
Figure 4.1 A schematic overview of the emergent research design	84
Figure 4.2 An overview of the case study methodology (adapted from Thomas, 2011a, 2011b)	87
Figure 4.3 A distinction of the subject and object of the case	87
Figure 4.4 The nested case and boundary (influenced by Layder, 1993, Yin, 2014, and the	91
emergent the research context)	
Figure 5.1 The badminton dilemma (Researcher field notes, 27.11.12)	128
Figure 6.1 A conceptual overview of the research findings	132
Figure 8.1 A three tier hierarchy of Jacob's personal medicines	158
List of pictures	
·	
Picture 4.1 A farewell thank you	95
Picture 4.2 The photo-elicitation interview	103
Picture 4.3 An evil robot, or is it?	108
Picture 5.1 The Rockwell centre: 'shop front'	120
Picture 5.2 The Rockwell main activity room	121
Picture 5.3 The Rockwell gym	122
Picture 7.1 Jacob: "It's been a real lifeline coming to the centre" (516).	144
Picture 7.2 Tom: "I cycled from London to Brighton, that's what I did, about five hours"	146
(687-688)	
Picture 7.3 Jacob: "The picture of the chairs that represents people really" (555)	149
Picture 8.1 Jacob: "I did quite a lot of walking, wore out quite a few pairs of shoes" (432)	168
Picture 8.2 Jacob: "Break everything down into tiny time bitsthat's how I operate in the	172
gym" (814-815)	· <del>-</del>
Picture 8.3 Jacob: "It might be not parallel with the other machineanother nail in the	174
pessimistic side" (568, 576)	
Picture 8.4 Jacob: "Another thing that had obviously gone wrong somewhere" (595)	175
Picture 8.5 Jacob's perception of weak and strong structures in the gym	175
Picture 8.6 Jacob: "It just represents weaknesssomething that's going to breakgo wrong	115
	176
(618-619)	176

Picture 8.7 Jacob: "The negative side of the gym" (626)	176
Picture 9.1 Heidi: "That's in recognition of how far I've come" (39)	178
Picture 9.2 Stacy: "Looking at those photos I can see that I've achieved a lot" (431-432)	188
Picture 9.3 Heidi: "I've started cycling again, which I enjoy because I know it's good for	192
you" (705)	
Picture 9.4 Derek: "Getting a higher belt in karatethat's all I care about really" (746-474)	195

#### **CHAPTER 1**

#### Thesis introduction

#### 1.0 The context and contributions of the thesis

This thesis explores the role of physical activity (PA) during people's personal recovery from mental illness, as a case study in the context of voluntary sector service provision. Contemporary studies have suggested numerous process and outcome benefits of PA, which may facilitate people's recovery from mental illness (e.g. Carless & Douglas, 2010). Process benefits occur during PA and can include experiences of perceived social inclusion, positive affect or a distraction from ill-health. Outcome benefits arise immediately or longer-term following PA, such as weight loss, improved cognitive function, confidence, or self-esteem. Subsequently, PA has become a popular adjunct therapy for mental health professionals to promote (e.g. Happell, Platania-Phung & Scott, 2011) or for individuals to self-prescribe (e.g. Dykstra, 1997).

In recent years, mental health professionals and researchers have explained the benefits of PA in terms of physiological, social and psychological mechanisms in relation to clinical recovery. However, people's values, beliefs, attitudes and experiences are unique; one mechanism of effect (e.g. increased confidence following PA) might be useful to one person, but irrelevant to another. Many authors have criticised clinical recovery for prioritising pathological experiences of ill-health, which can overlook individual meanings of recovery (e.g. Barker, 2003, Ramon et al., 2007; Slade, 2009). Typically, clinical recovery focuses on treatment methods, symptomatic remission and creates practitioner-as-expert and patient-sick roles (Thomas & Bracken, 2004). Consequently, this model may hamper people's recovery through contributing to self and social stigma, unwanted medication side-effects, practitioner-patient power imbalances, and feelings of abnormality, weakness, oppression and entrapment within the mental health system (Deegan, 2007; Wade & Halligan, 2004).

In contrast, a personal recovery perspective aims to engage people in activities that enable them to reconnect with their inner resources and personal strengths; (re)construct hope, meaning, responsibility and positive identity (Andersen et al., 2006). Subsequently, mental health professionals may seek to explore the patients' values and personal understanding of recovery (Slade, 2009). Moreover, engaging in activities that are inherently valued, foster self-empowerment and resilience during recovery have been suggested to encourage active living, beyond the constraints of ill-health (Mancini,

2008). Here, 'personal medicines' (PMs) seem relevant, as these are non-pharmaceutical strategies that afford meaning and purpose in life or are self-care strategies during recovery (Deegan, 2005). For some PMs include being a good parent, doing grocery shopping, listening to music, doing art or exercise. However, few studies have sought to understand the role of PA during personal recovery (e.g. Carless & Douglas, 2010, Crone, 2007), and no studies have explored the role of PA as a PM. As such, the process and outcome benefits, or negative effects of PA are unknown in relation to PMs.

Much of the current literature examining the effects of PA and recovery has focused almost exclusively on studies that are guided by the principles of clinical recovery. Whilst the literature has shown promising effects of PA participation to control symptoms (e.g. Beebe et al., 2005; Van Citters et al., 2010), little is known of the personal meaning and significance of PA according to an individual's values. However, the evidence-base to support PA as a treatment for clinical recovery remains controversial (Blumenthal & Ong, 2009), causing some debate among mental health professionals on their role to promote PA to patients (Faulkner & Biddle, 2001, 2002). The equivocal evidence is likely due to the underdetermination of numerous contextual factors influencing PA and mental health relationship (Crone et al., 2006; Fox, 1999). Additionally, studies investigating the effects of PA during clinical recovery are often guided by postpositivist principles, which may mask incidences of individual success, personal strengths and meanings that are important to personal recovery (Faulkner & Carless, 2006).

Furthermore, majority of studies investigating the role of PA during recovery are situated in the statutory sector, where PA is often delivered through referral schemes (e.g. Faulkner & Biddle, 2004). However, the role of PA in the voluntary sector is currently lacking, and such shortfall is concerning given the recent shift in the HM Government (2011a) policy toward the increased involvement of the voluntary sector providing mental health services. Notably, some voluntary organisations have reported to support 'hard to reach groups,' and marginalised individuals who may avoid the mainstream health services (Davis et al., 2009; Flanagan & Hancock, 2010). Thus, voluntary organisations can be effective in delivering integrated care in the community, yet are often under-resourced in comparison to the independent, private or statutory sectors (Ramon, 2008).

Therefore, the thesis is novel in exploring the role of PA in relation to personal recovery, PMs and voluntary sector service provision. Originality is drawn here

through examining the PA and PM relationship: The experience of PA as a PM, and how PA might facilitate PMs. Moreover, the thesis contributed to a journey of personal growth and development where I acknowledge my role in the research and the epistemic implications that this may have in co-construction of knowledge (see Chapter 3). Hence, 'a lot of me' embedded within the thesis.

#### 1.1 The thesis as a personal journey: 'The beast upon the horizon'

Upon my land
mountainous and black,
A silhouette approaches,
Cast from the stormy red skies.
On the horizon it encroaches

Beside the last black tree,
The beast stands.....before me.
He is dark and looming.
He calls from the distance:
His calls are dooming.

At me,
he grunts,
he beckons,
his stance,
it threatens.

Head low, horns pointing

I flee -

No way!

Chains are thrust upon me.

In my punishment I am a prisoner

By choice and free to walk

But around my neck

# I bear the burden, I have become.....the beast's wreck

It burns as he cracks the chains

Night and day

I wear the horse's collar.

As I plough the black fields,

I work in squalor

As the darkness surrounds,

two bright angels

have come to see

this beast

that's tormenting me

They lift,
They feed
They warm,
They heal:
I reform.

From their kindness and beauty,

I will RISE

I will CONQUER,

This beast! -

And I will grow forever STRONGER.

There are many stories that underlie this thesis: The poem above is my own representation of the challenges faced during the Ph.D. journey (Khalil, 2013). I wrote the poem in my reflexive journal in November 2012 when encountering a time of uncertainty and apprehension toward myself as a researcher. However, writing the poem empowered me to regain control of the Ph.D. For me, the poem illustrates the thesis as a personal journey, which, epistemologically, I believe that my personal values, life experiences, tensions and beliefs, intertwine with the thesis. The thesis has spanned seven years of my life, and many personal life experiences have occurred

during the Ph.D. journey. Experiencing joy and pain in my life has led me to recognise the importance of my own PMs, and subjective meaning of participating in PA. Through the reflexive exploration of my personal domain, I empathised and understood the lives of others, and aimed to prevent undermining their standpoint values (Harding, 1991). For me, this thesis is more than a theoretical and methodological contribution: The thesis continually defined and redefined me. Subsequently, I believe that such transformations influenced the socially constructed nature of the thesis, which I detail in Chapter 3.

#### 1.2 Research aims

This thesis aims to explore and understand the role of PA during people's personal recovery journey, and in relation to other contexts of people's lives (such as PMs), at a voluntary sector mental health organisation.

#### 1.3 Research questions

Three primary research questions direct the thesis (Table 1.1, p.19). Table 1.1 also presents secondary 'issue' questions that were created to focus and guide each primary question (Stake, 1995). Following the literature review (Chapter 2), I constructed Q3, as it became apparent that few studies have examined the role of PA during the process of personal recovery, such as aspects of hope, identity, responsibility and meaning. This question also comprised my initial and ongoing intrinsic interest of the research. Additionally, during the research investigation, new understandings of the research context, research literature, and my theoretical perspective became apparent to me. Following Stake's (1995) recommendations, I constructed Q1 and Q2 as my assumptions emerged. During the sample selection strategy (see Section 4.3.2), I found that voluntary sector mental health services were under-researched, relied heavily on public funding, and few studies have examined the role of PA during recovery within this sector. Subsequently, I constructed Q1 to understand the implications of a PA programme within this service. Similarly, my experience in the 'field' led me to empathise with the inherent value of PA, and the processes of PA that led to facilitating other meaningful pursuits. As such, I constructed Q2 to examine the meaningful and adjunctive roles of PA during personal recovery, including the PA-PM relationship.

Table 1.1 Thesis research questions.

Primary research questions	Secondary research questions
Q1. How do people experience	Q1a. What, if any, are the benefits of participating in PA at a
PA at a voluntary sector	voluntary sector organisation?
mental health organisation?	Q1b. What, if any, are the limitations of participating in PA at a
	voluntary sector organisation?
	Q1c. In what ways, if any, does the environment of a voluntary
	sector organisation influence people's experiences of PA?
Q2. How is the PA and PM	Q2a. How are PMs experienced during personal recovery?
relationship experienced?	Q2b. How is PA experienced as a PM?
	Q2c. How is PA experienced as a non-PM?
	Q2d. In what ways, if any, might the PA and PM relationship
	benefit personal recovery?
Q3. How do people experience	Q3a. How do people experience hope through participating in PA?
personal recovery through	Q3b. How do people experience a positive identity through
participating in PA?	participating in PA?
	Q3c. How do people experience meaning through participating in
	PA?
	Q3d. How do people experience personal responsibility through
	participating in PA?

#### 1.4 Research objectives

The following objectives were developed to investigate the research aims and questions:

- To design and implement a programme of research that combines my theoretical orientation as a researcher with the localised and situated context of a voluntary sector mental health organisation.
- Use qualitative methods to co-construct subjective experiences of PA and PMs during personal recovery at a voluntary sector organisation.
- Analyse the participant's accounts to generate a collective understanding of the thematic patterns relating to people's experiences of PA during personal recovery.
- Examine the potential implications of the findings for the participants, others with mental illness, mental health professionals, exercise practitioners, mental health services, and Government policy.

#### 1.5 Key definitions

Four concepts relevant to the focus of the thesis include: (a) Physical activity, (b) personal recovery, (c) voluntary sector service provision, and (d) personal medicines. These terms are defined in Table 1.2, below. As PA and exercise are used interchangeably throughout this thesis, to differentiate these terms, exercise (including sporting activity) is also defined in Table 1.2. Each definition informed all phases of the Ph.D., the participants and my understanding of the key concepts in this thesis<sup>2</sup>.

Table 1.2 Key thesis definitions

Term	Definition
Physical activity	Physical activity is any form of light, moderate or heavy physical exertion; performed
	as part of people's daily living, functioning and routines, so it may be unplanned and
	habitual. Examples include walking to the shops, lifting boxes, carrying shopping,
	doing housework, light gardening (Caspersen, Powell, & Christenson, 1985).
Exercise	Exercise (including sports) is a subcategory of PA that is structured, planned,
	repetitive, and intentional, which typically involves moderate to heavy exertion.
	Exercising may increase people's breathing rate, perspiration, and blood circulation.
	Examples include power walking, running, cycling, tennis, weight lifting (Caspersen
	et al., 1985).
Personal	Personal recovery is often a non-linear journey, wherein the outcomes and processes
recovery	of recovery are partly defined by the individual. Personal recovery is likely to entail
	reconstructing hope, positive identity, reframing meaning and personal responsibility.
	This moves an understanding of recovery beyond a deficit model towards one that is
	transformative and strengths-based, to live well within and beyond the constraints of
	illness (Ramon et al., 2007; Slade, 2009).
Voluntary	Voluntary sector organisations are non-statutory and non-profitable charitable
sector	organisation that can provide mental health support services on a voluntary drop-in
organisation	basis. These organisations often aim to empower people, campaign to improve mental
	health services, raise awareness and understanding to tackle stigma and discrimination
	associated with mental illness.
Personal	Personal medicines are individualised non-pharmaceutical methods that give people
medicines	meaning and purpose in life, or include self-care strategies to aid people's personal

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<sup>&</sup>lt;sup>2</sup>The definitions in table 1 were provided to the research participants in the current thesis, to ensure discussions about PA and recovery was consistent. On reflection, I later recognised that this was potentially flooding the participant's discussion with academic definitions, rather than eliciting an understanding grounded in their own worldviews and values. This philosophical contradiction occurred as my understanding of my theoretical perspective shifted during the thesis (discussed in Chapter 3).

recovery. Examples might include being a good parent, having a career, doing something in the community, solving math problems, exercising, grocery shopping, or personal hygiene (Deegan, 2005).

#### 1.6 Thesis outline

In Chapter 2, I outline the current literature regarding the role of PA during the recovery from mental illness. The literature review examines the effects of clinical recovery, and compares this to a contemporary understanding of personal recovery. The shortfalls of clinical recovery highlight the necessity to position personal recovery within the shifting Governmental reform of the mental health services. However, there is a paucity of studies examining the role of PA during personal recovery. Subsequently the literature review provides a background understanding of the determinants of PA behaviour, and examines the potential role of PA during personal recovery. It is against such backdrop that informs the thesis research design.

Chapter 3 outlines my theoretical orientation as social constructivism. Specifically, I detail a transition from postpositivism to social constructivism that occurred during the course of the Ph.D. As such, I discuss the ontological, epistemological and methodological assumptions that led to such paradigm shift. Notably, the shift towards social constructivism was a reflexive and iterative process, which had implications on the research design.

In Chapter 4, I discuss the research design as a 'key,' 'nested' case study. A crystallisation of qualitative methods was selected to understand the subjective experiences of PA during personal recovery. Chapter 4 also details the participant selection strategy, participants, data analysis approach and the strategies taken to create a robust research design. In effort to part-satisfy the thesis rigour, Chapter 5 presents critical reflections from the fieldwork activities, where my social role, positioning and self-presentation is scrutinised. Additionally, a thick description of the research setting is offered to contextualise the research study and thesis findings.

Chapters 6, 7, 8 and 9, illustrate the research findings using 'realist tales' and participant quotes. Specifically, Chapters 7, 8 and 9 correspond to the three primary research questions, and Chapter 6 presents an overview of the findings. Key findings revealed, experiences of PA as a PM, and the transferable role of PA influencing other activities valuable to the participants PMs and recovery journey. The research findings are discussed in Chapter 10, wherein I further analyse and interpret the findings in relation to the current literature. Applications of the research findings are also

discussed, to consider the implications for evidence-based practice, the mental health services, and policy. Finally, Chapter 11 concludes the thesis, and suggests the impact, contributions, limitations and future directions of the thesis.

#### **CHAPTER 2**

#### Literature review

#### 2.0 Introduction

This chapter reviews the PA and mental health literature to examine the contemporary issues that surround the role of PA during the personal recovery from mental illness. Green, Johnson & Adams (2006) claim that meta-analyses provide a systematic and hypothesis-testing approach to a literature review; however, as few studies have jointly explored PA and personal recovery (e.g. Carless & Douglas, 2010) a meta-analysis and meta-synthesis review was difficult. Therefore, a narrative review was selected to link a variety of studies and broad research areas, to identify interconnecting concepts, capture valuable insights and integrations surrounding PA and personal recovery (Baumeister & Leary, 1997). The sources of evidence used in this chapter include randomised controlled trials, quasi-experimental, qualitative, literature reviews and commentary articles. Most of the evidence reviewed is qualitative, whereby the inductive nature of this method presented key insights into the potential role of personal recovery and PA.

One key issue addressed in this chapter debates the clinical recovery perspective, which often underpins PA research within this area. Few studies have explored the role of PA in relation to constructs pertinent to personal recovery, such as hope, meaning, positive identity and personal responsibility. Some qualitative studies (e.g. Carless & Sparkes, 2008; Crone, 2007) on PA and recovery have conceptualised an understanding of these constructs, thereby corroborating with consumer accounts of personal recovery. Given that many people may experience good mental health despite being diagnosed with mental illness (Anthony, 1993), the influence of PA on psychological wellness is important to experiencing recovery (Fox, 1999). Subsequently, the possible positive and negative effects of PA on psychological wellness are also reviewed in this chapter.

To investigate PA behaviour in relation to personal recovery, three theoretical perspectives are reviewed, to understand the processes, determinants, stages, and motivations of PA regulation. These perspectives include: (a) The Theory of Planned Behaviour (TPB) (Ajzen, 1991), (b) Transtheoretical Model of change (TTM) (Prochaska & DiClemente, 1983), and (c) Self-Determination Theory (SDT) (Deci & Ryan, 1985). Few studies have examined these theories in the context of PA and personal recovery, although some authors have backed the SDT and stages of change of

the TTM as perspectives that support personal recovery (Leamy, Bird, Le Boutillier, Williams & Slade, 2011; Mancini, 2008). The concepts presented in this chapter also addresses recent shifts in Government policy (Section 2.2.4), which may result in repositioning the delivery of PA in the mental health services. Accordingly, this chapters aims to provide a synthesised account of the current perspectives that are relevant to PA and personal recovery, as one possible strategy to alleviate mental illness.

#### 2.1 The burden of mental illness

Mental illness is a complex construct to define, and differs to mental health or mental wellbeing (HM Government, 2011a). Mental wellbeing is related to positive or negative mental health irrespective of a diagnosed disorder (HM Government, 2011a). A person diagnosed with mental illness may experience positive wellbeing despite enduring mental ill health. In contrast, mental illness may encompass a broad range of diagnosable mental disorders deemed a "disability of mind" (HM Government, 2011b, p. 87). According to Butcher, Mineka & Hooley (2010), abnormal psychology concerns the study of mental illness. They suggest that mental illness may include suffering, maladaptive behaviours, deviancy, violating societal standards, social discomfort, irrationality and unpredictability. However, the experience of mental illness may also be an abstract construct, not easily defined:

Mental health problems may be more or less common and acute or longer lasting, and may vary in severity. They manifest themselves in different ways at different ages and may present as behavioural problems (HM Government, 2011b, p. 88).

The Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) and International Classification of Disease for mental and behavioural disorders (World Health Organization, 1992) provide a nomenclature to structure information and aid the diagnosis of mental illness (Butcher, Mineka & Hooley, 2010). However, such system may incur stigma and stereotyping (Ben-Zeev, Young & Corrigan, 2010), escalating the burden of mental illness.

The global burden of mental illness has been approximated as affecting 14% of the world population (Prince et al., 2007; World Health Organisation, 2009). In the UK, this figure is higher; the prevalence of mental illness is often reported as affecting approximately 25% of the population (Alonso et al., 2004; McManus, Meltzer, Brugha, Bebbington, & Jenkins, 2007). Typically, mental illness can affect people's lives in the years lost due to disability and reduced quality of life when living with mental illness

(World Health Organisation, 2009). The incidence of mental illness is reported to contribute the increased risks of communicable and non-communicable diseases, and intentional and unintentional injuries (Prince et al., 2007). For instance, Sokal et al., (2004) found that people diagnosed with mental illness were more likely to exhibit comorbidity risk factors, particularly the odds of diabetes, lung disease and liver problems. One possible explanation for this is due to poor lifestyle choices (e.g. inactivity and unhealthy diet) often associated with this population group, which may exacerbate additional physiological and mental health risk factors (Brown, Birtwistle, Roe, & Thompson, 1999; Crone et al., 2004). Consequently, a greater risk of premature mortality is prevalent in populations diagnosed with mental illness (World Health Organisation, 2009).

The social and economic burden of mental illness has also been reported to incur approximately £100 billion of annual losses in the UK, due to treatment, social care, housing, educational or criminal justice systems, hindered business productivity and sickness costs (HM Government, 2011b). The HM Government (2011b) suggest that such costs are preventable and can be reduced through identifying and treating the causes of ill health. Participating in regular PA may impact lifelong physical and psychological wellness (Fox, 1999; Paffenbarger et al., 1993), which can be a cost-effective approach compared to other treatment methods (Foster, Thompson, & Harkin, 2012). Suitably, the next section addresses current perspectives on the treatment of mental illness to explore how people may experience recovery.

#### 2.2 Recovery from mental illness

Recovery from mental illness is a complex concept, which has led to numerous interpretations of the term recovery (Davidson et al., 2005). Three contemporary perspectives include: (a) Clinical recovery, (b) the biopsychosocial model, and (c) personal recovery. These standpoints differ in the historical foundations and principles that guide the treatment and care of people with mental illness (Frese, Stanley, Kress, & Vogel-Schibilia, 2001; Slade, 2009). Clinical recovery maintains positivist and postpositivist roots, whereas personal recovery emerged from constructivist, social constructionism, postmodernism, phenomenological, and critical theorist understandings<sup>3</sup> (Cohen, 2008; Roberts, 2000; Thomas & Bracken, 2004). These philosophical differences have presented conflicting issues in the delivery of mental health care (Roberts, 2000). Accordingly, the following sub-sections address critical

<sup>3</sup> See Chapter 3 for a discussion on postpositivism and constructivism.

issues between the clinical, biopsychosocial and personal recovery perspectives of mental health care.

#### 2.2.1 Clinical recovery

It is widely documented that the origin of clinical recovery stems from the 'Age of Enlightenment' (Cohen, 2008). Authorities of this time housed individuals in asylums to assist those deemed 'lunatics', 'mad', or 'insane.' Psychiatry developed as a profession to 'cure' people from their misfortune (Foucault, 1961). Mental health care was practised deductively from the physical sciences to diagnose, explain and treat mental illness (Engel, 1977; Walker, 2006). Such reasoning led to the claim that biochemical mechanisms cause mental illness, including: (a) Genetic factors (b) hormone imbalance, (c) physical infection, (d) brain disease, or (e) chemical imbalances (Booth & Lees, 2007; Esch & Stefano, 2004; Jellinger, 2007). To control and stabilise such factors, typical treatment methods include electro-shock therapy, brain surgery, pharmaceutical medications and PA (e.g. Burns, 2006; Takahashi et al., 2010). For example, medications and exercise are often prescribed to control and improve neurotransmitter imbalances (Abi-Dargham & Laruelle, 2005; Kapur, 2003). particular, some authors proposed that exercise can stimulate the release of neurotransmitters and thereby enhance brain activity (Lechin et al., 1995; Takahashi et al., 2010). Such improved functioning has been suggested to compensate the negative effects of mental illness; buffer stressful life experiences, increase positive affect, and improve cognitive functioning (Cotman & Berchtold, 2002; Esch & Stefano, 2004; Kashihara et al., 2009). Once symptom remission occurs, clinicians practicing the biochemical model are likley to define patients as 'healthy' and mentally well (Bonney & Stickley, 2008; Wunderink, Sytema, Nienhuis, & Wiersma, 2009).

However, the biochemical mechanisms of PA and mental health recovery are tentative, as precise mechanisms of action are unclear and most studies in this area have examined this relationship in animal samples (Crone et al., 2006). In addition, many authors have criticised the philosophical principles of clinical recovery as being harmful to the individual (e.g. Slade, 2009; Thomas & Bracken, 2004). The biochemical model emphasises the pathology of ill health, whereby positive notions of the self (e.g. strength, purpose, pleasure, freedom) are overshadowed by negative associations, such as death, helplessness, meaninglessness, pain and isolation (Moore & Goldner-Vukov, 2009; Ventegodt et al., 2005). Such negativity can become internalised, leading to a lifetime of vulnerability, weakness, and abnormality (Rapp & Goscha, 2006; Ridgway,

2001). Consequently, experiences of marginalisation, self and social stigmatisation, oppression, passivity and dehumanisation have been reported to occur (Deegan, 2007; Noiseux & Ricard, 2008). Moreover, the Westernised origin of the biochemical model exposes a discrepancy in the experience of illness and recovery when practitioners apply this model to other cultures (Rogler, 1999). Specifically, the social norms and values of other cultures may differ in Westernised countries (Saravanan et al., 2007), and risk further marginalisation (Cohen, 2008). Such disparity underdetermines the content validity of the biochemical model (Rogler, 1999). Equally, the application of the biochemical model may overlook socioeconomic factors important to mental health care and recovery (Plante, 2005; Richter, 1999). As such, treatment guided by the this model may fail to resolve issues such as social expectations, relationship breakdowns, unemployment, bereavement, or poverty; continuing to incur or exacerbate ill health (Cohen, 2008; Johns et al., 2004; Ventegodt et al., 2005). Therefore, divergence in the meaning and conceptualisation of clinical recovery can neglect the individual's values and subjective experience of mental illness (Moore & Goldner-Vukov, 2009; Slade, 2009).

Nevertheless, some consumers have reported valuing clinical recovery, finding salvation and understanding in a diagnosis (e.g. Anonymous, 1983; Nettleton, 2006; Scotti, 2009). It can signify the requirement for personal change, professional help, ignite hope, create relational understandings with others, evoke self-acceptance and personal responsibility for recovery (Deegan, 1988; Nettleton, 2006; Ridgway, 2001). Hence, some authors have advocated for a multi-disciplinary approach to psychiatric care, particularly given the effectiveness of combining biochemical and psychosocial treatment methods (e.g. Gabbard & Kay, 2001; Maneesakorn et al., 2007).

#### 2.2.2 The Biopsychosocial Model

The biopsychosocial model is a multifaceted perspective of mental health care, contrasting the emphasis of linear cause-effect mechanisms in clinical recovery. Engel (1977) proposed that biological, psychological and social systems are interconnected, and the change of one system catalytically affects each system-counterpart. Utilising these systems as part of mental health care may incorporate some contexts relevant to the individual's perspective and worldviews (Adler, 2009). Moreover, the broadness of the biopsychosocial approach is relevant to the application of PA in mental health settings, given the multifaceted benefits, mechanisms, and individual specificity of PA participation (Carless & Faulkner, 2006). For instance, Fox (1999) outlined possible

biochemical, physiological and psychosocial mechanisms that may explain the PA and mental health relationship. However, as numerous mechanisms may occur within the same context, Fox suggested that it would be difficult to examine the effectiveness of one mechanism compared to another. Particularly, regular PA participation can benefit the biological system by mediating medication side-effects, improve biochemical activity, physical fitness, and reduce diabetes, obesity, cardiovascular risk factors (Faulkner, Soundy, & Lloyd, 2003; Hoffman et al., 2009; Takahashi et al., 2010). Improvements in the psychological system have also been documented, including in psychological wellness, quality of life, self-efficacy, self-esteem, empowerment, autonomy, and positive affect (Craft, 2005; Foley et al., 2008; Hasson-Ohayon, Kravetez, Roe, Rozencwiag, & Weiser, 2006). Moreover, PA has been associated with positive social outcomes, including perceptions of social inclusion, creating social support networks, and a sense of connection to community and nature settings (Carless & Douglas, 2008c; Crone, 2007; Raine, Truman, & Southerst, 2002). Hence, Craft (2005) proposed that the biopsychosocial model is a useful framework for investigating PA and recovery, as each dimension of the model may depict the many benefits of PA.

However, some authors have cautioned that successfully satisfying each dimension of the biopsychosocial model is challenging, difficult or impractical (McLaren, 1998; Moore & Goldner-Vukov, 2009). One challenge includes ensuring the continuity of care across multidisciplinary teams, wherein poor communication, lack of resources (i.e. time and costs), varying practitioner perspectives, and patient inconvenience have been reported (Gabbard & Kay, 2001; Suls & Rothman, 2004). In practice, many authors have claimed that the biopsychosocial model prioritises a biomedical framework (e.g. Baker, 2003; Weston, 2005). Consequently, symptomatic remission is often emphasised in mental health settings, deflecting the promotion of PA as a treatment modality (Faulkner & Biddle, 2001, 2002). Likewise, the biological, psychological and social benefits of PA are often reported with a focus on the biological domain i.e. biochemical symptom remission (e.g. Paluska & Schwenk, 2000; Statopoulou et al., 2006). Given the criticisms of clinical recovery in the previous section, some authors have called for a model of recovery prioritising the individual perspective in mental health care (Barker, 2003; Slade, 2009).

#### 2.2.3 Personal recovery

Since the 1990s, an emergent and new meaning of recovery has become apparent in the literature (Anthony, 1993), contributing to a rediscovery of the concept

(Ramon et al., 2007). Several factors are suggested to influence the contemporary meaning of mental illness and personal recovery (Ramon et al., 2007). One influence was the deinstitutionalisation period (circa 1950s) that initiated the abandonment of asylum care to community-based treatment and support (Thornicroft & Tansella, 2008). Supporting this move was the 'pharmaceutical revolution,' which meant patients could control their symptoms and regain independence in the community (Bentall, 2009). Subsequently, this move dispersed the responsibility of mental health care across local authorities, which invited possibilities for new conceptualisations of recovery to emerge (Anthony, 1993; Ramon et al., 2007). Recovery movements surfaced, such as the antipsychiatry (Cooper, 2001), post-psychiatry (Thomas & Bracken, 2001, 2004), and consumer movement (Frese & Davis, 1997). Healthcare frameworks also developed, including the social model of disability (Oliver, 1986), tidal model (Baker, 2003), the strengths-based model (Rapp & Goscha, 2006), rehabilitation/recovery model (Anthony, 1993), and the recovery framework (Slade, 2009). These movements and frameworks were supported by the findings of prospective research, which concurrently demonstrated that community-based care was more effective than hospital care (DeSisto, Harding, McCormick, Ashikaga & Brooks, 1995; Harding, Brooks, Ashikaga, Strauss, & Breier, 1987). These studies further showed that mental illness was not degenerative, and that it could be episodic rather than lifelong (Drake et al., 2006; Mueller et al., 1999). Such studies also found that many people lived a satisfactory life during and after recovery (Harding et al., 1987), consistent with many first-person narratives (e.g. Deegan, 1988; Roman, 2006).

First-person narratives have contributed to an experiential understanding of the diverse meanings associated with recovery. Some consumer accounts exposed coercive care and treatments methods, adversity, marginalisation, and stigma of mental illness (Cohen, 2008). Other stories have celebrated the success of clinical recovery, individual strengths and capabilities, motivations, competencies, actions, values, interests, relationships, and achievements during recovery (e.g. Carless & Sparkes, 2008; Deegan, 2007; Ridge, 2009). Through such storytelling, a relational understanding of such narratives may empower others, counter stigma, de-emphasise illness labels, afford hope, support, and enlighten new coping strategies for recovery (Dykstra, 1997; Ridgway, 2001). First person accounts have contributed toward developing the consumer movements and voluntary sector support services (e.g. MIND, Rethink), which have lobbied for political change to protect the human rights of those affected by mental illness (e.g. the Mental Health Act, 2007 and Human rights Act,

1998). In many services, consumers are active stakeholders and representatives in the planning, implementation and guidance of mental health care (Cook et al., 2009; Druss et al., 2010). However, while the multifaceted meanings of the term may account for individual flexibility, one person will invariably experience mental illness differently to another (Brown, 1995; Estroff, Lachicotte, Illingworth, & Johnston, 1991). Thus, rendering personal recovery an elusive term to define and implement in the mental health services (Ramon, et al., 2007).

Some authors (Davidson et al., 2005; Slade, 2009) have attempted to define personal recovery. A conceptual definition of the term may guide the continuity of care and deliver effective practice across multi-disciplinary teams (Davidson et al., 2005; Liberman & Kopelowicz, 2005). Davidson & Roe (2007) suggest that this is necessary to define recovery, otherwise: "If recovery can be taken to mean anything, then it comes to mean nothing at all" (p. 466). Other authors (e.g. Ridgeway, 2001) have examined first-person accounts of recovery to understand the meaning of personal recovery thematically. Such studies have identified commonalties of personal recovery (e.g. hope, identity, meaning, responsibility), which has helped develop recovery-oriented frameworks (Andersen et al., 2006; Slade, 2009).

For many people, recovery means living better with mental illness, but also living a meaningful life beyond it (Markowitz, 2001; Young & Ensing, 1999). However, such outcome may involve progressing through numerous stages of recovery (Leamy et al., 2011; Noiseux & Ricard, 2008). For instance, Andresen et al., (2006) identified four processes of personal recovery that correspond to five stages of recovery. These include: (a) Moratorium, (b) awareness, (c) preparation, (d) rebuilding and (e) growth. Additionally, the four processes of personal recovery comprised: (a) Finding and maintaining hope, (b) (re)constructing a positive identity, (c) finding meaning in life, and (d) taking responsibility for one's life. These processes of personal recovery are consistent elsewhere in the literature (e.g. Jacobson & Greenley, 2001; Noordsy et al., 2002; Wisdom, Bruce, Saedi, Weis, & Green, 2008).

Similarly, Slade (2009) developed the personal recovery framework, incorporating constructs of hope, meaning, positive identity and responsibility as personal recovery tasks that could be integrated into the mental health services. To achieve personal recovery, Slade maintained that it is important to: (a) Develop a positive identity, (b) frame the 'mental illness', (c) self-manage mental illness, and (d) develop valued social roles. These perspectives of personal recovery indicate the importance of developing internal resources, and viewing recovery as a process and an

outcome. Nevertheless, for people's internal resources to thrive and flourish, external conditions equally encompass the personal recovery perspective. Given the dominance of clinical recovery, societal, political and environmental change is required: To establish better human rights, a positive culture of healing and recovery-oriented services (Jacobson & Greenley, 2001). Therefore, as Ramon, (2011) advocated, organisational change in the mental health services is a necessary shift towards better personal recovery-oriented services.

#### 2.2.4 Recovery: A shift in the Government agenda

Recently, the UK Government created a cross-governmental strategy to improve the general population's wellbeing, mental health and recovery from mental illness (Centre for Mental Health et al., 2012). The policy paper, No health without mental health (HM Government, 2011b) prioritised six objectives as part of the Government's commitment for promoting better mental health care (see Table 2.1, p.32). These objectives were underpinned by the Government's three guiding values: (a) Freedom, (b) fairness, and (c) responsibility. These values influenced policy decision-making, to empower personalisation and control of people's own health, deliver services that promote accessibility and equality, and build social relationships in a cohesive and caring community (HM Government, 2011b). Subsequently, to progress this strategy, the mental health services is currently a changing landscape of mixed modes of service delivery. Greater emphasis is now placed on primary care and GP-led commissioning to provide front-line mental health care to the UK population (Joint Commissioning Panel for Mental Health, 2012). Thus, the decision-making behind people's mental health care has been repositioned closer to community settings, to enhance continuity of care alongside physical health, improve people's wellbeing, prevent mental ill-health, and reduce secondary care referrals (Bennett, Appleton & Jackson, 2011; Joint Commissioning Panel for Mental Health, 2012). Therefore, GPs enact gatekeepers to promoting PA within the primary care settings, which may offset costly secondary mental health care referrals, given the evidence indicating PA as an effective strategy to reduce physical health risks (Section 2.3).

Table 2.1 Selected key Government policy for recovery-oriented services

Policy	Brief description and implications for practice
Making mental	The policy sets out the Government agenda to improve the mental health services,
health services	focus on enhancing mental health and wellbeing, including physical and
more effective and	psychosocial aspects of care. The mental health strategy for England includes 6
accessible	objectives (Centre for Mental Health et al., 2012):
	More people will have good mental health.
	<ul> <li>More people with mental health problems will recover.</li> </ul>
	More people with mental health problems will have good physical health.
	<ul> <li>More people will have a positive experience of care and support.</li> </ul>
	Fewer people will suffer avoidable harm.
	Fewer people will experience stigma and discrimination.

Another change following the mental health services reform was the introduction of clinical commissioning groups to select NHS, private, voluntary or local authorities to provide health care services as part of the NHS (Centre for Mental Health et al., 2012). Providers are selected on the basis of outcome performance indicators, while also meeting NHS standards and costs; thereby, creating a diverse and competitive market of independent service providers to the NHS (Bennett et al., 2011). This multiagency approach may boost the independent sector: Delivering more NHS funded health care from non-NHS providers (i.e. private or voluntary services). Subsequently, while private services have dominated the independent market (Ryan, Hatfield, Sharma, Simpson & McIntyre, 2007), the new reform may create additional opportunities for voluntary organisations and local authorities to provide public health care services. Commissioning independent agencies may benefit the mental health objectives, more people with have good mental health, and, more people will have a positive experience of care and support, by tackling the wider determinants of ill-health in statutory care. Specifically, local agencies can provide a range of services that support social care, drug and alcohol dependence, citizen advice, victim support, occupational therapy, criminal justice, refugee and asylum seeking support, psychological interventions, or physical activity services. To provide these services, however, interventions for health care in the NHS are guided by evidence-based practice: Integrating research evidence, clinical expertise and patient values into service delivery (HM Government, 2011b). Suitable research evidence is typically selected on the basis that it informs the effectiveness, process of service delivery, salience, safety, acceptability, cost-effectiveness, appropriateness, or satisfaction of health care interventions (Petticrew & Roberts, 2003).

Thus, to deliver PA services in primary mental health care settings, evidence-based practice and commissioning guidance (e.g. Foster et al., 2012) are necessary.

Elsewhere, patients may seek private or voluntary sector services that are not commissioned by the NHS. People may access private services, including doctors, nurses, therapists, personal trainers or gym memberships; in addition to, alongside or instead of NHS statutory care. Several studies have indicated that patients are motivated to pay for private services to: (a) Experience a sense of self-empowerment, control, choice and autonomy in one's healthcare decision-making; (b) access additional support and holistic care to supplement NHS treatment; and (c) the perceived quality of service and value for money compared to statutory services, such long waiting lists for healthcare (Bishop, Barlow, Coghlan, Lee, & Lewith, 2011; Harley et al., 2011). However, private healthcare can be expensive, potentially marginalising individuals from low socioeconomic backgrounds (Propper, 2000). Instead, voluntary sector organisations provide support services that are free or low cost; including information about ill-health and recovery, promote consumer advocacy, offer social activities, counselling, housing and employment projects (Ramon, 2008). Voluntary organisations also promote non-clinical environments, provide personalised care, support individuals who have unmet needs, or those who do not engage with public or private sector services (Flanagan & Hancock, 2010; Hutchinson, Gilvarry & Fahy, 2000). Conversely, drawbacks of voluntary sector services include financial instability to maintain service provision and accommodate staff training and development, which may hinder the role of voluntary organisations in policy implementation and further development (Baggott & Jones, 2014; Ramon, 2008). Nevertheless, voluntary, private, statutory and independent sector services each play key roles in delivering the current mental health strategy, and invite a multiagency approach to promote and provide PA in mental health care settings.

Another aspect of the current mental health reform is integrating the personal recovery principles to guide mental health prevention, treatment and care in the UK (Joint Commissioning Panel for Mental Health, 2012). To highlight the personal recovery perspective within the current policy, Perkins & Slade (2012) noted how the second objective calls for strategies promoting holistic wellbeing:

More people who develop mental health problems will have a good quality of life – greater ability to manage their own lives, stronger social relationships, a greater sense of purpose, the skills they need for living and working, improved chances in education, better employment rates, and a suitable and stable place to live (p.31).

Nevertheless, some authors have remained sceptical of the rhetoric of personal recovery in mental health policy, versus the actual implementation of such perspective in practice (Perkins & Slade, 2012; Spandler & Stickley, 2011). For example, Perkins & Slade (2012) pointed that despite the implementation of personalised budgets, some clinicians have challenged this move as a threat to their training and professional knowledge (The NHS Confederation, 2012). Such attitudes are likely to undermine the patient's role during shared-decision making; neglect their subjective knowledge, definition of recovery, and personal value during a consultation (Deegan, 2005; Perkins & Slade, 2012). As such, there is the risk that some GPs and commissioning groups may favour the medical model and pharmaceutical treatment above PA opportunities (e.g. Faulkner & Biddle, 2001). Equally, a shift to the personal recovery perspective may challenge the patient's standpoint; particularly for individuals with an internalised 'sick role' identity and those dependent on state benefits (Ramon, 2008). Additionally, given the landscape of mixed modes of service delivery, discrepancies in the continuity of care, quality of care, patient and staff satisfaction may surface following alternative line management structures within NHS services (Dickens, Sugarman, & Rogers, 2005; Thomson et al., 2004).

Accordingly, some authors have called for organisational and cultural change to integrate personal recovery within the mental health services (Ramon, 2011; Shepherd, Boardman, & Burns, 2010). Shepherd, Boardman, & Burns (2010) outlined ten challenges, including redefining user involvement, transforming the workforce, establishing recovery education centres, and increasing user autonomy. To address such challenges time, commitment and financial resources are required to implement, develop and transform the statutory and non-statutory services toward recovery-oriented care (Centre for Mental Health et al., 2012; Shepherd, Boardman, & Burns, 2010). These challenges could restrict the voluntary sector from further developing (e.g. Ramon, 2008), which is concerning given the Government's reliance on voluntary sector services (e.g. patient knowledge and anti-discrimination campaigns) (Centre for Mental Health et al., 2012). Moreover, voluntary organisations are under constant funding review and renewal, and the distribution of public funds often favours wellbeing projects that are easily quantifiable or clinically-based (Martikke & Moxham, 2010; Ramon, 2008). Since quantitative evidence may neglect exemplifying the successes of such projects (see Section 3.2.3), the sustainability and development of voluntary organisations is often under threat (Flanagan & Hancock, 2010; Martikke & Moxham, 2010).

Such political and economic challenges equally influence the delivery of PA programmes in mental health settings (Carless & Douglas, 2010; Crone & Guy, 2008). Despite the HM Government's (2011b) call for better physical and mental health in the mental health services; little reference was made to envisaging the implementation, development and transformation of PA services in the climate of organisational change. One possible reason for this is the overreliance of psychological approaches and therapies (e.g. counselling, peer-support or educational programmes) in recovery-oriented services (e.g. Mueser et al., 2002). Nevertheless, Crone et al., (2009) reviewed the relevance of PA in national guidance documents (2001-2006) for clinical practice, and found that PA promotion was evidenced-based and supported by the Government's agenda. They further suggested that numerous opportunities to engage in PA in mental health settings are abundant and increasing. Suitably, PA promotion in mental health settings is discussed next.

### 2.3 Physical activity promotion

Promoting PA among the general population is a key governmental strategy (e.g. Table 2.2, p.36) (HM Government 2010). Currently, majority of the UK population are reported as being inactive (Health and Social Care Information Centre, 2013), particularly those diagnosed with mental illness (Scott & Happell, 2011; Ussher, Stanbury, Cheeseman, & Faulkner, 2007). Consequently, physical inactivity may contribute to the development of morbidity risks and premature mortality (Kohl et al., 2012; Lim et al., 2013). However, regular PA has shown to reduce physiological health risks, improve mental wellbeing (Gulsvik et al., 2012; Lee et al., 2012), sustain economic benefits (e.g. reduced NHS costs, Jarrett et al., 2012), reduce absenteeism and increase productivity in local businesses (Mills, Kessler, Cooper, & Sullivan, 2007). Other benefits include alleviating medication side-effects (Hoffman et al., 2009), reduced illness symptoms (Beebe et al., 2005), reconstructing a positive identity (Carless & Douglas, 2008a), or facilitate meaningful experiences (Crone, 2007). Notably, such benefits address the Government's objectives for better mental health care (e.g. "more people with mental health problems will have good physical health") (HM Government, 2011b, p. 23). Subsequently, mental health professionals often promote exercise as an adjunct therapy for recovery (Crone, Heaney, & Owens, 2009). Thus, projects such as 'Moving on up' (Mental Health Foundation, 2009a) and 'Ecotherapy' (Mind, 2007) are increasingly being funded in mental health services.

Table 2.2 Selected key Government policy for physical activity promotion

Policy	Brief description and implications for practice
Reducing obesity and	This policy sets out the Government agenda to prevent and reduce obesity health
improving diet	risks, by encouraging the population to eat more healthily and engage in regular
	PA. Therefore, as addressed in the public health white paper (HM Government,
	2010), the Government aimed to:
	Help people make healthier choices by providing guidance on PA and
	healthy living (e.g. Department of Health, 2011a).
	• Encourage local organisations and businesses to take responsibility for the
	promotion of PA (Department of Health, 2011b).

Nevertheless, commonly reported issues with PA referral programmes include low adherence rates and the non-uptake of PA referral (Crone, Johnston, Gidlow, Henley, & James, 2008; James et al., 2008). High dropout rates may question the feasibility of PA schemes, especially where public funding and evidence-based practices are concerned. Typically, non-engagement is owed to people's perceived barriers, who are also burdened by symptoms, medication side-effects, and stigma relating to ill-health (Roberts & Bailey, 2013; Ussher et al., 2007). Table 2.3 summarises findings from qualitative research identifying further barriers and facilitators affecting PA promotion in mental health settings (Carless & Douglas, 2004; Crone & Guy, 2008; Hodgson, McCulloch, & Fox, 2011; Soundy, Faulkner, & Taylor, 2007; Tetile et al., 2009).

Table 2.3 Facilitators and barriers of physical activity

Table 2.3 Facilitators and barriers of physical activity		
Facilitators of PA	Barriers of PA	
Anticipating outcome benefits e.g. Weight	• Lack of knowledge or understanding	
management or increased energy	<ul> <li>Social anxiety, self-consciousness,</li> </ul>	
A comfortable and socially supportive	perceptions of places unsafe to exercise	
environment (i.e. staff and peers)	• Lack of time, interest and resources	
Prospect of social inclusion/interaction	Symptoms and medication side-effects	
and relating to others	<ul> <li>Lack of social support</li> </ul>	
Having a purpose and routine structure	Positive departure from mental health	
• To experience a sense of intrinsic value,	setting	
achievement, autonomy		
• A requirement of the mental health service		

Combinations of cultural, behavioural or societal changes are often required to avert people's PA barriers (Cavill, 2009; Jarrett et al., 2012). At the macro level, the government is often responsible for infrastructural changes, such as making PA more accessible (i.e. develop cycle paths, urban gyms) and safe (i.e. street lighting) (Heath et al., 2012; Jarrett et al., 2012). Additionally, owing to the public health responsibility deal (Department of Health, 2011b); PA promotion is urged to occur within local organisations and businesses. Here, PA environments offer non-clinical, supportive and comfortable settings to promote PA (Carless & Douglas, 2004; Raine et al., 2002). Interpersonal support from staff and peers, and the application of psychological techniques (e.g. motivational interviewing) may further encourage PA uptake and adherence (Crone et al., 2004; Carless & Douglas, 2008c). Health professionals may also implement behaviour change initiatives to encourage people's daily PA participation in line with government recommendations (Department of Health, 2011a) (see Appendix A, p.240). However, an emphasis on the dose-response prescription of PA to achieve Government recommendations (e.g. Dunn, Trivedi, Kampert, Clark, & Chambliss, 2005) may neglect the intrinsic value of PA (Ekkekakis, Backhouse, Gray, & Lind, 2008). Rather, smaller amounts of PA can equally benefit personal recovery (e.g. developing social relations from one exercise session) (Carless, 2007). Moreover, people's diverse preferences and values create difficulty for health professionals to implement a prescriptive approach to PA promotion. For instance, people's PA preferences can be associated with specific contexts, previous experience, subjective competencies and expectancies of PA, numerous PA mechanisms, and alternative outcome and process benefits of PA (Biddle & Faulkner, 2004; Carless & Faulkner, 2006). Therefore, individually tailored PA is advocated, especially to promote the intrinsic value of PA (Richardson et al., 2005; Sørensen, 2006). To understand how and why people might engage in PA, next I review three psychological theories to identify key correlates of PA behaviour. These theories may provide insight to the experience of PA during the process of personal recovery.

## 2.4 Models of physical activity behaviour

Given the complexity of recovery, it is necessary to understand the correlates of PA participation, in order to comprehend the PA mental health relationship more sophisticatedly. The correlates of PA may illuminate the personal, psychological, social, cultural and environmental processes that contribute to PA behaviour (Biddle & Mutrie, 2008). This section reviews four psychological theories: (a) The Theory of

Planned Behaviour (TPB) (Ajzen, 1991), (b) the Transtheoretical Model (TTM) (Prochaska & DiClemente, 1983), and (c) the Self-Determination Theory (SDT) (Deci & Ryan, 1985). Additionally, Self-Efficacy Theory (Bandura, 1977) is discussed as part of the TTM. Therefore, this section adds a theoretical understanding to the diverse ways in which PA might be experienced.

## 2.4.1 The theory of planned behaviour

The TPB is an extension of the Theory of Reasoned Action (Fishbein & Ajzen, 1975), which initially aimed to predict behaviour from cognitive or social influences. However, the Theory of Reasoned Action was criticised for failing to predict behaviour during situations perceived as uncontrollable (Schifter & Ajzen, 1985). Subsequently, the TPB indicates that social, cognitive and perceived control correlates can explain and predict volitional behaviour, as illustrated below.

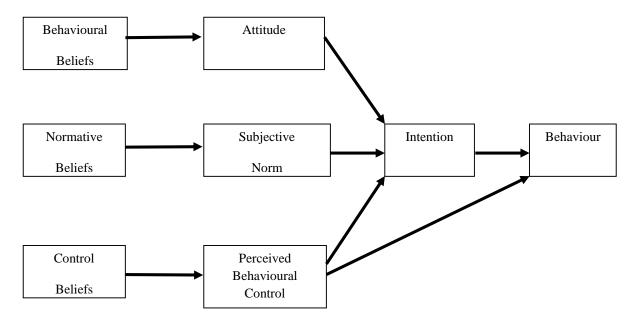


Figure 2.1 The Theory of Planned Behaviour (Armitage and Conner, 2001).

The predictive capacity of the TPB has been supported in PA research; a metaanalytic review by Hagger, Chatzisarantis, & Biddle (2002) showed significant predictions of PA intentions moderating actual PA behaviour ( $\beta = 0.51$ ). Elsewhere, findings have shown that the intention-behaviour predictive capacity of PA is similar to other health-related behaviour choices (e.g. nutrition, smoking, alcohol, and condom use) (Godin & Kok, 1996). However, the findings from Chatzisarantis & Hagger (2007) showed that the PA intention-behaviour relationship was augmented by the participant's conscious awareness and their perceived control and ability to perform a task (i.e. mindfulness of the activity). Consequently, activities that are habitual or regulated with low self-awareness may not provide strong predictors of PA behaviour (Verplanken & Melkevik, 2008). Therefore, raising PA awareness may increase the predictability of PA intentional-behaviour.

In further support of the TPB, Hagger et al., (2002) found significant associations of attitudes ( $\beta$  = 0.56) and social norms ( $\beta$  = 0.12) predicting PA intentions. As illustrated in Figure 2.1, behavioural and normative beliefs are assumed to influence attitudinal and social norm constructs. These belief concepts are formed from the self-evaluations of positive or negative cognitions and expectations (Ajzen, 1991). Behavioural beliefs include: (a) Positive cognitions, i.e. "exercise will help me lose weight;" (b) negative cognitions, i.e. "I do not have time to exercise;" (c) positive affect, i.e. "walking makes me feel good;" or (d) negative affect, i.e. "I feel anxious at the gym." These beliefs illustrate the complexity of attitudes, as behavioural beliefs are multifaceted, vary in magnitude, value or multiple beliefs can be associated with the same behaviour (Lavine, Thomsen, Zanna, & Borgida, 1998). The multiplicity of behavioural beliefs can also incur ambivalence (i.e. combined positive and negative evaluations), which consequently weakens the intention-behavioural predictive capacity (Crano & Prislin, 2006). Hence, interventions that influence positive affect and cognitions may encourage PA participation, in contrast to ambivalent attitudes.

Normative beliefs are formed from positive or negative social pressures (e.g. from family members, friends, doctor or the media) wherein self-evaluations determine the nature of perceived social acceptance or disapproval (Ajzen, 1991). Social pressures influence behavioural outcomes when: (a) Internal values are consistent with social pressures (Heider, 1958); (b) social pressures are rejected as reactance to demonstrate personal autonomy and choice (Miller, Lane, Deatrick, Young, & Potts, 2007); (c) social pressures conflict with personal values and evoke ambivalence (Jonas Broemer, & Diehl, 2000), or (d) social pressures are forced, and incur passivity, oppression or learned helplessness (Garber & Seligman, 1975). Given the disparity of social influences, subjective norms are weak correlations of PA intentional-behaviour (Hagger et al., 2002). Thus, promoting personal control and internal value through social support may develop positive social norms and foster PA involvement.

Nevertheless, positive intentions, attitudes and social norms may not predict behavioural outcomes entirely (Thatcher, Day, & Rahman, 2011). Ajzen (1991) proposed that the magnitude of perceived behavioural control, also predicts behavioural intentions and outcomes. Specifically, control beliefs (e.g. perceived available

resources and opportunities, past behaviours and vicarious experience) may influence high perceptions of volitional control (i.e. autonomy, confidence, effort, expectations, and ability toward the behaviour) or low volitional control (Ajzen, 1991). Subsequently, Ajzen suggested that high perceptions of control augment actual and intended behaviour participation. In support of the model, Hagger et al., (2002) found that perceived behavioural control significantly predicted PA intentions ( $\beta$  = 0.33) and actual outcomes ( $\beta$  = 0.15). Hence, this construct highlights the importance of developing self-efficacy, to overcome PA barriers and increase participation.

However, few studies have applied the TPB to predict the behaviours of people diagnosed with mental illness (e.g. Mo & Mak, 2009), and none could be found on predicting PA behaviour and recovery. Given the adversity faced by many people diagnosed with mental illness, the correlates of the TPB may be differ among this population group. Additionally, the practical utility of the TPB has been criticised; it has been considered a linear model that may not holistically account for other variances of PA behaviour (e.g. environmental factors) (Biddle & Mutrie, 2008; Johnston, Breckon, & Hutchison, 2009). Nonetheless, the TPB is also a flexible framework, and integrating other constructs have been encouraged (Ajzen, 1991). For example, researchers have combined constructs of the TPB with the SDT and TTM (e.g. Hagger, Chatzisarantis, & Harris, 2006). Thus, although the TPB has shown that intentions, attitudes, social norms and perceptions of control can predict behavioural outcomes, additional variables may also determine PA behaviour (Thatcher et al., 2011). Accordingly, the TTM is discussed next.

## 2.4.2 The transtheoretical model

The TTM is a popular model that researchers use to guide and evaluate PA interventions across a wide range of settings (e.g. healthcare, workplace, or school based PA) (Johnston et al., 2009). The TTM comprises four components: (a) The stages of change, (b) processes of change, c) decisional balance, and d) self-efficacy (Marcus & Simkin, 1994). The stages of change provide a tool for researchers to evaluate behaviour change across five stages of progression (see table 2.4, p.41) (Prochaska, DiClemente & Norcross, 1992). Lowther, Mutrie, Loughlan, & McFarlane, (1999) demonstrated construct validity of the stages of change, wherein self-reported PA positively correlated with progression through the stages. Notably, individuals in the precontemplation stage are reported to hold amotivation perceptions toward PA (Matsumoto & Takenaka, 2004), whereas those in the maintenance stage have been

associated with self-determined and autonomous behaviour regulation (Mullan, Markland, & Ingledew, 1997). However, non-linear stage progression may occur due to relapse of behaviour change (e.g. due to inquiry) (Prochaska et al., 1992). Additionally, Gorczynski, Faulkner, Greening, & Cohn (2010) findings support the construct validity of the stages of change in a sample diagnosed with mental illness. They concluded that the stages of change could tailor PA promotion in mental health settings, according to the individual's self-reported stage. Notably, the stages of change has been used to 'map' the various stages of recovery (Onken, Craig, Ridgway, Ralph, & Cook, 2007; Williams et al., 2012), perhaps indicating theoretical links between personal recovery and PA promotion.

Table 2.4 The stages of change (Prochaska et al., 1992).

Stage	Definition	
Precontemplation	A person has little or no awareness of a potential health risk, does not perceive	
	any need to engage in healthy behaviours, and has no intention to change their	
	current behaviour within six months.	
Contemplation	The individual is aware of a potential health risk and contemplates changing	
	their behaviour within six months. However, they may be uncertain of how to	
	achieve change, hold negative expectations and ambivalence toward change.	
Preparation	The individual intends to change their behaviour within one month; positive	
	expectations of change may increase the decisional balance of change (Daley	
	& Duda, 2006).	
Action	The individual successfully performs the changed behaviour for up to six	
	months. Their self-efficacy is likely to increase and perceived barriers	
	decrease (Plotnikoff, Blanchard, Hotz, & Rhodes, 2001).	
Maintenance	The changed behaviour has been continuously regulated for more than 6	
	months, and the need for change is terminated after 5 years, as the behaviour	
	is habitually regulated.	

Prochaska et al., (1992) suggest that the stages of change characterise a temporal dimension of behaviour change, indicating when change occurs. They further proposed that certain processes of change could understand how change happens (see Appendix B, p.241). Specifically, they claimed that experiential processes influence behaviour change during earlier stage transitions, and behavioural processes arise in the latter stages. However, in a meta-analysis review of the TTM, Marshall & Biddle (2001) revealed that all ten processes of change influenced transitions in all stages, thereby partially supporting Prochaska et al., (1992) assumptions. It is possible that as the TTM was designed for smoking cessation, different processes of change will mediate stage

transitions due to the complexity and multifaceted nature of PA (Adams & White, 2005). For instance, environmental processes may also influence stage transitions (Biddle & Mutrie, 2008).

Similarly, the decisional balance construct has been suggested to influence transitions in the stages of change (Prochaska et al., 1992). Applying the decisional balance construct of the model can identify positive and negative perceptions toward current behaviours and anticipated change (Miller & Rollnick, 2002). Subsequently, decisional balance may create cognitive dissonance to initiate behaviour change, and resolve ambivalent behaviours (Miller & Rollnick, 2002; Prochaska et al., 1994). In PA research, Marshall & Biddle (2001) found fewer positive evaluations of PA were associated in the earlier stages of change, compared to the higher stages. Also, this finding was observed in reverse i.e. more negative evaluations of PA in earlier stages, compared to the higher stages. Hausenblas, Nigg, Downs, Fleming, & Connaughton, (2002) suggest that positive perceptions of PA may indicate facilitators of participation, whereas negative perceptions may highlight PA barriers. Thus, supporting the development of positive PA attitudes seems pertinent to PA promotion and behaviour change.

Lastly, Prochaska et al., (1992) proposed that stage progressions coincide with improvements of self-efficacy, which has been supported in PA research elsewhere (e.g. Marcus, Rossi, Selby, Niaura, & Abrams, 1992; Plotnikoff, Hotz, et al., 2001). Bandura (1982) proposed that self-efficacy indicates the subjective perception of competency associated with the exertion of behaviour. These perceptions are judged and directed by: (a) Efficacy expectations and, b) outcome expectancies (Bandura, 1977). Efficacy expectations represent self-perceptions of ability and control to perform successful behaviours, whereas outcome expectancies indicate the anticipated outcome consequences of behaviours (Bandura, 1986).

Accordingly, research studies have shown that participating in regular PA can increase self-efficacy in people diagnosed with mental illness, and increase stage progression (Gorczynski, et al, 2010; White, Kendrick, & Yardley, 2009). In the general population, increased self-efficacy has been associated with improvements in perceived control, competency, autonomy, a greater sense of achievement, internal locus of control, and intrinsic motivation (McAuley, Courneya, Rudolph, & Lox, 1994; Schunk, 1990; Trost, Owen, Bauman, Sallis, & Brown, 2002). Such features may contribute to self-regulated behaviour (Deci & Ryan, 2000; Schunk, 1990), and thereby

influence maintaining stage progression. Hence, Plotnikoff et al., (2001) claimed that self-efficacy was the strongest predictor of stage progression in the TTM.

However, some criticisms of the TTM have been raised. Given the popularity of the stages of change, as an evaluation tool or to foster individually tailored PA interventions (Ashworth, 1997), often researchers have implemented the stages of change and neglected the other TTM constructs (e.g. Stovitz, Van Wormer, Center, Bremer, & VanWormer, 2005). Consequently, overreliance of the stages of change limits the efficacy of the TTM and understanding how behaviour changes across each stage (Biddle & Mutrie, 2008). Furthermore, Adams & White (2005) criticised the TTM for overlooking environmental, social and economic factors, and suggested that the model may fail to account for individual motivations. They also contended that the TTM simplifies the complex nature of PA as a linear model, without accounting for wider global, situational or contextual factors of PA behaviour. Accordingly, to examine the motivational processes of PA behaviour, the SDT is discussed next.

## 2.4.3 The self-determination theory and intrinsic motivation

The SDT is a framework indicating the motivational processes of behaviour regulation toward fulfilling three innate psychological needs: (a) Autonomy, (b) competence, and (c) relatedness (Deci & Ryan, 1985). Fulfilling these needs have been associated with positive adaptive behaviours and improved wellbeing, whereas when neglected, maladaptive experiences are suggested to occur (Deci & Ryan, 2000; Edmunds, Ntoumanis, & Duda, 2007). According to Deci & Ryan (2000), the psychological needs are fulfilled through activities that are self-determined and internally satisfying. They further asserted that some self-determined behaviours exist on a continuum, reflecting a degree of internalised value and environmental pressure to regulate the activity. Moreover, they acknowledged that some activities may hold little or no internal value and thus are non-regulated and non-self-determined. These regulatory processes are defined in Table 2.5 (p.44).

Table 2.5 Motivational processes of behaviour regulation (Deci & Ryan, 2000).

Motivation	Behaviour	Description		
	regulation			
Amotivation	Non-	A state of no or negative value is perceived towards a behaviour, and		
	regulation	avoidance behaviour is likely.		
Extrinsic	External	Behaviours are performed to satisfy social pressures and environment		
expectations.		expectations.		
Introjected Behaviou		Behaviours are regulated for internal and environmental purposes, which		
		may cause internal and external values to conflict.		
	Identified	Performing behaviours with more internal value, but the outcomes of		
activity are externally val		activity are externally valued to satisfy social norms.		
	Integrated Behaviour regulations become internalised with the			
		but behaviours continue to be performed for the outcomes achievements.		
Intrinsic Behaviours are performed for the inherent interest, enjoymer and value in the process of performing that activity.		Behaviours are performed for the inherent interest, enjoyment, satisfaction		
		and value in the process of performing that activity.		

Intrinsic motivation has been linked to hedonic and eudemonic experiences of well-being (Ryan, Huta & Deci, 2008). Hedonic experiences include affective encounters, such as pleasure or happiness, although these may equally account for extrinsic outcomes (i.e. happiness derived from wealth) (Lyubomirsky, King, & Diener, 2005; Ryan, et al., 2008). Eudemonic experiences are suggested to foster selfrealisation (Ryan et al., 2008), the self-concept (Waterman, 2004) and self-concordant goals (Kashdan, Biswas-Diener, & King, 2008). Notably, the achievement of selfconcordant goals may narrow the discrepancy between the perceived current self and ideal self (Sheldon & Elliot, 1999), fulfil one's aspirations and satisfy the psychological needs (Judge, Bono, Erez, & Locke, 2005; Sheldon, Elliot, Kim, & Kasser, 2001). In contrast, perceptions of amotivation toward PA can incur feelings of little personal control, self-efficacy, competence and social physical anxiety (Pelletier, Dion, Tuson, & Green-Demers, 1999; Thøgersen-Ntoumani & Ntoumanis, 2006). Unsurprisingly, amotivation is negatively associated with the intention-behaviour relationship toward PA, whereas intrinsic motivation has shown to predict PA participation (Edmunds, Ntoumanis, & Duda, 2008). Elsewhere, Mullan & Markland (1997) found a linear increase of internalisation according to PA stage-based progression. Their findings suggest that higher levels of self-reported PA participation correspond to greater extrinsic and intrinsic self-determined behaviour. Other research has shown that participants in earlier, extrinsic stages, associate more barriers, ambivalence and anxiety toward PA (Thøgersen-Ntoumani & Ntoumanis (2006). In contrast, those in the latter stages of self-determined behaviour have reported greater attainment of the psychological needs (McDonough & Crocker, 2007; Wilson, Rodgers, Blanchard, & Gessell, 2003). Subsequently, while intrinsic motivation appears a significant construct of PA promotion, Deci, Koestner, & Ryan (1999) caution that extrinsic motivation can undermine intrinsic motivation. Conversely, Daley & Duda (2006) found that selfreported identified regulation was more likely to predict PA compared to intrinsic Their findings suggest that promoting valuable PA outcomes may motivation. encourage PA participation. Moreover, other authors have advised that creating a selfdetermined PA environment can encourage PA participation and internalisation (Edmunds et al., 2007; Wilson et al., 2003). For example, offering personal choice of when and how to regulate PA can evoke autonomy (Hagger et al., 2002); setting mastery-oriented goals to foster perceptions of competence (Elliot & Harackiewicz, 1996); and participating in PA groups may encourage a sense of relatedness to others (Vierling, Standage, & Treasure, 2007). Mancini (2008) advocated the significance of fulfilling the psychological needs in mental healthcare, as doing so might evoke client self-regulation and empower consumers to take control of their recovery journey. Noticeably, some studies have shown that PA in mental health settings can foster the psychological needs (e.g. Carless & Douglas, 2004; Raine et al., 2002; Tetlie et al., 2009). Hence, intrinsic motivation is considered a valuable construct of supporting personal recovery (Lloyd, King, McCarthy & Scanlan, 2007; Mancini, 2008) and PA participation (Faulkner & Carless, 2006).

However, one limitation of the SDT is the linear application of understanding motivated behaviour, which may overlook individual processes, salient beliefs, and attitudes (Chatzisarantis et al., 2002). Vallerand (2000) proposed a hierarchical model of motivation that may account for the motivational processes across global, contextual and situational motivations. For instance, global motivation represents a general motivation orientation; contextual motivation refers to certain domains in life, such as work, home, or exercise; and situational motivation are situation specific (Vallerand, 2000). Vallerand's model suggests that motivation can be mediated across multiple dimensions, adding complexity to the motivational orientations of one's life. Nevertheless, longitudinal evidence of the SDT and Vallerand's hierarchical model is lacking, and causality of these models remains unclear (Hagger & Chatzisarantis, 2008). This limitation is akin to the criticisms of TPB and TTM, while also failing to account for a holistic understanding of PA participation (Adams & White, 2005). Taken together, these models have presented a broad understanding of key correlates that may

explain how and why people experience PA. This section has also indicated the requirement of theoretical growth in the domain of PA promotion and personal recovery. Next, I consider several domains of wellbeing and possible outcomes and processes of PA participation relevant to personal recovery.

# 2.5 Improving wellbeing and quality of life

Participating in regular PA is often associated with experiencing better quality of life, and improved physical and mental wellbeing (Brown et al., 2007; Kerr et al., 2008). Saxena and Orley (1997) suggest that quality of life is a broad and complex construct, context specific to an individual (i.e. their culture, aspirations, beliefs, values, expectations). Six variables are used to indicate quality of life across domains of: (a) Global self-esteem, (b) physical function, (c) physical symptoms, (d) emotional function, (e) social function, and (f) cognitive function (Biddle & Mutrie, 2008; Rejeski & Mihalko, 2001). Other factors indicating good quality of life during personal recovery, also include financial stability, housing status, hope, engagement in meaningful activities, socialisation, and employment (Hasson-Ohayon, Kravetz, Meir, & Rozencwaig, 2009; Markowitz, 2001).

Research has shown that overall life satisfaction during recovery is significantly correlated with participating in meaningful activities ( $R^2 = 0.28$ ), but not having a diagnosis ( $R^2 = 0.04$ ) (Eklund, 2009). Similarly, Hasson-Ohayon, Kravetz, Roe, David, & Weiser (2006) determined that illness experience and insight were related to lower quality of life. Elsewhere, Drake et al., (2006) found that better quality of life was associated with fewer mental ill-health symptoms. They also observed that, during a ten-year period, reduced symptoms, improved independent living and satisfaction with leisure activities were maintained. These studies indicate that improvements in quality of life may be associated with reduced symptoms and participating in meaningful activities. In Section 2.6, I describe how PA may influence people's quality of life during personal recovery in the domains of hope, identity, meaning and responsibility. First, the following sub-sections briefly address the effect that PA can have on general quality of life, including areas of physiological benefit, positive affect, better cognitive function, self-esteem, or negative experiences (Biddle & Mutrie, 2008; Faulkner & Tayler, 2005).

### 2.5.1 Physical improvements

The physiological benefits of PA have been widely recognised as reducing cardiovascular, diabetes, obesity, cancer, muscle, bone and joint disease risk factors (Pedersen & Saltin, 2006; Roberts & Barnard, 2005). Conversely, inactivity has been associated with a greater likelihood of chronic illness (Mokdad, Marks, Stroup, & Gerberding, 2004). Some studies have shown that many people diagnosed with mental illness are inactive, have poor nutrition and suffer from medication side-effects; exacerbating the likelihood of co-morbidities in the development of other chronic illnesses (Daumit et al., 2005; de Hert et al., 2011). Such risk factors can be averted, as for many individuals participating in PA is a lifestyle choice and thus a modifiable risk factor (Stolk et al., 2008). However, lifestyle factors and physical parameters of mental health care are often neglected in practice (de Hert et al., 2011).

Integrating PA in the mental health services may achieve a parity of esteem (i.e. holistic wellness), relevant to the Government's objectives (HM Government, 2011b). Increased PA has shown to reduce many risk factors of chronic illness, including improved weight management, artery endothelium function, glucose regulation and uptake, reduced insulin resistance, hypertension, oxidative stress and regulate hormones to reduce cancerous cell growth (Pedersen & Saltin, 2006; Roberts, Chen & Barnard, 2007). Currently, in mental health settings, studies have shown participants to experience improved physical fitness, physical adaptations and weight management (Beebe et al., 2005; Fogarty & Happell, 2005; Smith et al., 2007). Given the mind-body dualism benefits of PA, such improvements in the physical domain are likely to enhance psychological wellness (Faulkner & Biddle, 2001). Suitably, several psychological benefits are discussed next.

### 2.5.2 Positive affect

Affect is an attitudinal construct that concerns experiences of human emotion, feelings, or mood (Edwards, 1990). Affective experiences may be positive or negative encounters of low or high arousal, and positioned on a circumplex model (e.g. Appendix C, p.242) (Carr, 2004; Russell, 1980). It is well documented that participating in PA can elicit positive affect during and after PA (e.g. Rhodes, de Bruijn & Matheson, 2010; Williams et al., 2008). Equally, negative affect can be experienced during PA, which has been suggested to occur when exercising at intensities above lactate threshold (Ekkekakis et al., 2008). Elsewhere, some studies have reported that PA participation improves and regulates positive affect during recovery (e.g. Crone &

Guy, 2008; Wright, Armstrong, Taylor, & Dean, 2012). Morrison, & Ciccolo, (2005) reported that one session of PA improved positive affect and reduced negative affect among patients diagnosed with major depression. Such immediate positive affect, experienced during PA, may be desirable particularly since other treatments may not elicit comparable instant benefits (Wright Everson-Hock & Taylor., 2009). Additionally, Bodin & Martinsen (2004) found that people diagnosed with clinical depression reported significant improvements in positive affect and self-efficacy following martial arts. Their results indicated that a greater change in mood was observed among participants reporting low self-efficacy initially; suggesting that selfefficacy augmented positive affect. This finding was supported by Wright et al., (2009), who proposed self-efficacy as a mechanism that mediates changes in depression due to positive affect. Another psychosocial mechanism is the experience of mastery achievement and intrinsic goals that may evoke feelings of positive affect (Fox, 1999). Elsewhere, Esch & Stefano, (2004) proposed a biochemical explanation of positive affect occurring due to the release of adrenaline, dopamine, serotonin and endorphin. These factors are hypothesised to be released during exercise, and offer a biochemical mechanism of positive affect (Crone et al., 2006). Thus, while precise mechanisms of the PA and positive affect relationship remain unclear, there is strong evidence to suggest that PA can afford a 'feel good effect,' and aid people's recovery (Fox, 1999). Notably, improvements of positive affect appear to correspond with cognitive function, which is discussed next.

## 2.5.3 Cognitive function

Cognitive function concerns the management and information processes of external stimulus (i.e. social environment) being interpreted and understood by the subjective mind. A meta-analysis by Etnier et al., (1997) found a small to moderate effect size (0.25) supporting the overall benefit of PA on cognitive ability. Larger effect sizes were indicated by Colcombe & Kramer (2003), who reported that PA improved cognitive speed (i.e. reaction) (0.27), visuospatial processing (i.e. perception) (0.43), controlled processing (i.e. skill acquisition, learning) (0.46) and executive control processing (i.e. coordination, inhibition, planning or memory) (0.68). Additionally, Weuve et al., (2004) established that regular PA was associated with less cognitive decline over a two-year period. Although these findings are based on older adults among the general population, comparable findings of cognitive function are evident in PA and recovery literature. Commonly reported cognitive benefits include,

experiencing a distraction from illness symptoms, reduced thought rumination and improved coping efficacy (e.g. Craft, 2005; Faulkner & Sparkes, 1999). Additionally, Crone (2007) revealed that some participants reported an appreciation of developing their knowledge of plants during a walking group activity. Elsewhere, McElroy, Evans, & Pringle (2008) observed service user perceptions of self-confidence to improve following their participation in a football scheme. Such benefits indicate that cognitive function is mediated by improvements of self-efficacy and mastery. Brown et al., (2007) proposed that mastery experiences of PA-related skills might generalise coping efficacy to self-manage obsessive-compulsive disorder (OCD). It is possible that such mastery experiences may evoke feelings of success, independence and a sense of control that contributes to developing generalised efficacy and facilitate coping in everyday life (Crone et al., 2006). Another cognitive mechanism was mentioned by Ploughman (2008), who claimed that PA regulates neurotrophins (proteins that mediate neural activity of the brain), having a catalytic effect on releasing neurotransmitters and improving the synaptic function of the brain. Accordingly, improving cognitive function through PA can mediate some of the cognitive deficits associated with mental illness, and afford benefits that may transfer into other contexts (Crone et al., 2006; Crone, Tyson, & Holley, 2010). As indicated by Fox (1999), improvements of selfefficacy may generalise to self-esteem, which is discussed next.

#### 2.5.4 Self-esteem

Self-esteem refers to the self-perceptions, evaluations, values or attitudes that a person attaches to the self (Cashmore, 2002). It is a multidimensional construct wherein the global view of the self may be encompassed by specific domains of everyday life (e.g. academic, social, physical) that are abstracted at the general (i.e. global) level (Biddle & Mutrie, 2008). Regarding the physical domain (i.e. physical self-worth), Fox & Cobin (1989) proposed a hierarchal model of physical self-perceptions that influence global self-esteem. They identified sport competence, body attractiveness, perceived strength, and physical condition as subordinate constructs of physical self-worth. Subsequently, they suggested that any changing in these subordinates would alter one's self-perceptions. As such, participating in PA can benefit these subordinate constructs and thereby develop the formation of positive self-perceptions, identity and self-worth (e.g. Haugen, Säfvenbom, & Ommundsen, 2011; Sonstroem, Harlow, & Josephs, 1994). Doing so can then transpose into global self-esteem (Fox, 1999). Consistent with such research, White et al., (2009) found improvements in depression, positive affect and

self-efficacy occurred before observing a significant increase in self-esteem. Thus, positive adaptations of physical self-worth may influence, buffer, or reduce possible negative self-perceptions experienced from anxiety or depression (Knapen et al., 2005; McPhie & Rawana, 2012). Elsewhere, Ryan (2000) suggested that the benefits of PA on global self-esteem are mediated by the domain of self-esteem that is mostly affected by ill-health. For example, PA may be less effective if academic self-esteem is more valuable, and ill-health is more cumbersome within this domain. Hence, negative physical self-perceptions may be more easily adapted through PA, whereas global self-esteem is a relatively stable construct, and improvements are often small (Fox, 1999).

Interestingly, several subordinate domains as suggested by Fox and Corbin (1989) may transpose as extrinsically regulated (e.g. physical attractiveness). Tafarodi & Swann (2001) suggest that self-esteem is a two-dimensional construct, comprised by instrumental or intrinsic value. Thøgersen-Ntoumani & Ntoumanis (2006) established that intrinsic motivation predicted physical self-worth, indicating the importance of supporting a self-determined PA environment. Equally, instrumental fulfilment may afford experiences of social worth (Tafarodi & Swann, 2001), and counter low self-esteem incurred by stigma (Link et al., 2001). However, an exploration of the contingent constructs and intrinsic motivation remains unexplored (Thøgersen-Ntoumani & Ntoumanis, 2006). Nevertheless, the PA experiences that alter self-perceptions may yield positive outcomes for recovery, particularly since many people diagnosed with mental illness may have low self-esteem (Fox, 1999). Despite this, some negative effects of PA have been documented, which is discussed next.

#### 2.5.5 Negative or harmful effects

Thatcher et al., (2011) suggest that some negative effects of PA include: (a) Poor body image, (b) social physique anxiety, or (c) negative affect. Although PA has a positive influence on body image (e.g. Campbell & Hausenblas, 2009), some individuals report negative self-perceptions of body image that are associated with PA (i.e. body dissatisfaction) (Furnham, Badmin, & Sneade, 2002). Negative self-perceptions can form through internalising social and cultural pressures (Cafri, Yamamiya, Brannick, & Thompson, 2005), and incur social physique anxiety and negative affect during PA (Cashmore, 2002; Thatcher et al., 2011). Research have identified three predictors of body dissatisfaction to include, body mass index (Hausenblas et al., 2002), extrinsic motivation (Thøgersen-Ntoumani & Ntoumanis, 2006), and increased exercise frequency (i.e. raised awareness of dissatisfaction)

(Brudzynski & Ebben, 2010). Such negative experiences can develop protective selfpresentational behaviours, influence PA decision-making (e.g. clothing choice, positioning in PA environment) (Brewer, Diehl, Cornelius, Joshua, & Van Raalte, 2004), and undermine enjoyment of PA (e.g. feelings of guilt) (Thøgersen-Ntoumani & Ntoumanis, 2006). Moreover, these negative experiences can develop into clinically harmful effects of: (a) Muscle dysmorphia, (b) eating disorders, and (c) exercise dependence (Thatcher et al., 2011). Muscle dysmorphia is the preoccupation of exercising toward a bigger, muscular physique (Pope, Gruber, Choi, Olivardia, & Phillips, 1997), whereas, individuals diagnosed with eating disorders may exercise to construct or maintain a thin, smaller self (Davis et al., 1997). Both conditions indicate a cognitive distortion of the body, and an instrumental compulsion to exercise or engage in maladaptive behaviours (e.g. substance abuse) to reshape the body (Thatcher et al., 2011). In contrast, Hausenblas & Downs (2000) suggest that individuals who are dependent on exercising can experience clinically significant distress or impairment. Namely, some manifestations include: (a) Loss of control to continue exercising, (b) spending more time exercising than planned, (c) exercising conflicts with important social, occupational or recreational activities, or (d) experiencing withdrawal symptoms (Hausenblas & Downs, 2000). These negative and harmful effects of PA indicate some caveats relevant to PA and mental health promotion. However, there is currently no evidence to suggest that people diagnosed with mental illness are more likely to develop these conditions as side-effects of PA (Daley 2002).

Salmon (2001) claimed that the lack of evidence indicating a negative experience of exercise is due to selection bias, as people with negative perceptions of PA are less likely to participate in PA research. This limitation is likely to affect quantitative studies compared to qualitative research due to methodological differences in the participant-researcher relationship (see Chapter 3). For example, Faulkner & Sparkes (1999) noted that several participants had reoccurring mental health symptoms following the completion of an exercise programme. The authors explained that the attachment to a PA instructor and possible exercise dependency, incurred the sudden removal of positive experiences that related to PA. Such findings present an ethical dilemma in the researcher-participant relationship, and the impact this has on social change within the research and on the participants (see Chapter 5). Elsewhere, Wright et al., (2012) noted that one participant mentioned an unfavourable experience of PA, which related to energy depletion to engage in other activities. Additionally, Sørensen (2006) revealed that 12% of (total n = 101) participants reported increased illness

symptoms following PA, whereas 31% of the participants recalled unchanged effects of alleviating symptoms of ill health. Carless & Douglas (2004) mentioned an adverse experience of one participant in a peer-group minibus, whose fears of crossing a bridge subsequently led to their departure from a golf programme. Therefore, such qualitative insights have afforded a better understanding of the negative effects of PA during recovery.

Yet, as Daley (2002) pointed, the negative effects of PA may not be as severe compared to medication side-effects. She suggested that PA participation is an active and internal aspect of the rehabilitation process, whereas medication compliance involves passive and external treatment regulation. Hence, PA may evoke self-empowerment due to the required effort and commitment to regulate PA (Carless & Douglas, 2008b). Experiencing self-empowerment is an important construct of personal recovery (Slade, 2009), and the findings of Carless & Douglas (2008b) have shown that participating in PA can contribute to adopting an active role in people's recovery journey. Further considerations of the potential role that PA can have during personal recovery are discussed next.

## 2.6 PA and personal recovery

Current evidence supporting the application of PA during recovery has relied heavily on the clinical approach to recovery (e.g. Lawlor & Hopker, 2001; Marzolini, Jensen, & Melville, 2009). Little attention has been paid to the constructs of personal recovery, exposing such research to criticisms levelled at clinical approaches (Section 2.2.1) (Faulkner & Carless, 2006). While there is some evidence suggesting that PA can benefit personal recovery, this stems from qualitative studies that have explored subjective perceptions of PA and recovery (e.g. Carless & Sparkes, 2008; Faulkner & Biddle, 2004). Plausible inferences from this literature indicate that PA can support the constructs of personal recovery (e.g. hope, identity, responsibility, and meaning). The following sub-sections address the current understanding of the processes of personal recovery in relation to PA.

#### **2.6.1** Hope

Snyder (2002) defined hope as, "the perceived capability to derive pathways to desired goals, and motivate oneself via agency thinking to use those pathways" (p. 249). Snyder developed hope theory to understand the positive motivational state and examine the constructs that comprise hope. He applied the premise that human action is

goal-directed toward positive, or the avoidance of negative outcomes. Furthermore, he proposed that hopeful thinking concurrently utilises pathway and agency thoughts. Specifically, pathway thoughts indicate possible routes of achieving a goal (including overcoming barriers), whereas agency thoughts are the capacity to initiate and sustain goal-directed movement<sup>4</sup>. Consequently, the effects of mental illness often present barriers that suppress pathways toward one's desired aspirations, hopes and dreams and impede agency in the attainment of goal pursuits (Noiseux & Ricard, 2008). Ridgeway (2001) and Wisdom et al., (2008) found that the loss of hope during recovery led to negative expectations, loss of identity and apathy.

To restore hope, Repper & Perkins (2003) recommend that meaningful relationships can sustain agency and support individuals to overcome barriers of hoperelated goal pursuits. Likewise, Slade (2009) advised that mental health professionals can develop hope through promoting identity enhancing relationships, such as a higher being (i.e. religious of faith beliefs), personal, peer and professional relationships. Such identity-enhancing relationships are often observed in PA studies where experiences of social inclusion and social support are recollected (e.g. Crone & Guy, 2008; Hasson-Ohayon et al., 2006). Carless & Douglas (2008c) suggest that PA programmes may contribute to four types of social support: (a) Informational, (b) tangible, (c) esteem and (d) emotional.

First, informational support can be provided through mental health professionals imparting their knowledge of the possible PA benefits, and support the development of PA-specific skills (Carless & Douglas, 2008c; Raine et al., 2002). Second, tangible support may avert possible financial barriers, by providing the necessary resources for PA participation (e.g. equipment, staff and transportation costs) (Carless & Douglas, 2008c; Tetlie et al., 2009). Third, positive staff and peer feedback are conducive to esteem support as this can elevate perceptions of competency, coping-efficacy, self-esteem and personal strengths, which can improve PA performance and overcome barriers (Carless & Douglas, 2008c; Craft, 2005). Lastly, emotional support is often provided within the everyday context of PA, by comforting or empathising with individuals during distressing or difficult situations (Carless & Douglas, 2008c; Lloyd et al., 2007). These examples of social support may afford alternate pathways of fostering hopeful-goal pursuits within PA situations.

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<sup>&</sup>lt;sup>4</sup> Snyder 2000 noted parallels in hope theory with self-efficacy theory, wherein pathway thoughts resemble outcome expectancies and agency thoughts are akin to efficacy expectancies.

Additionally, Repper & Perkins (2003) asserted that experiencing success, taking control and finding meaning could restore hope. These features are apparent in the PA literature (e.g. Carless, 2007), as for instance, McElroy et al., (2008) learnt that participating in a football programme afforded many service users a purpose in life, which for one person, gave then a reason to live: "Had it not been for football – I would have committed suicide" (p. 56). Alternatively, Fieldhouse (2003) found that participating in an allotment activity led some clients to establish meaningful value to the structure and routine of the activity, which promoted hopefulness for recovery. Carless & Douglas (2008a) revealed that some respondents had recalled achievement narratives when describing their PA experiences; offering testimonies of individual success, strengths and competencies associated with PA. Moreover, the self-regulatory nature of PA can evoke feelings of control, which may transpose perceptions of control in other areas of life (Carless, 2007). Such encounters may further sustain agency thoughts via the self-efficacy mechanism (e.g. Craft, 2005; Ryan, 2008), supporting thought pathways of hope during recovery. Subsequently, increased hope can initiate rediscovery of the self (Wisdom et al., 2008).

## 2.6.2 Positive identity

Many consumer accounts indicate that mental illness can incur a loss of self, a 'damaged' identity, or experience divergence from the self (Wisdom et al., 2008). Some authors have claimed that the medical model is partly accountable for imposing such effect (e.g. internalising an illness identity) (Estroff et al., 1991; Slade, 2009). Nevertheless, reclaiming or creating a new sense of self is a common goal for many people in recovery (e.g. Noiseux & Ricard, 2008; Ridgeway, 2001). Subsequently, to progress in recovery, Repper & Perkins (2003) recommend consumers engage in opportunities that facilitate personal adaptation, develop internal resources, insight and autonomy. They proposed that doing so could facilitate self-understanding, acceptance and control, to foster rebuilding the self. Similarly, Slade (2009) suggested that mental health professionals should promote opportunities for clients to experience wellbeing outcomes to encourage personal growth, development and to 'frame' the illness so a personal and social identity can flourish.

Accordingly, Carless & Douglas (2008a; 2008b) suggest that a positive identity occurs when participants tell action, relationship and achievement narratives relating to their PA experiences. They maintained the premise that people (re)construct their identity through the retelling of stories (Carless & Douglas, 2008b). Specifically, their

findings illustrated that the positive and constructive engagement in PA (i.e. keeping busy or experiencing pride) allowed participants to displace themselves from telling a harmful or problematic illness narrative (Carless & Douglas (2008a). Carless (2008) added that people might tell three narratives types when describing their PA participation in relation to recovery. Carless revealed that a runner told chaos, restitution and quest narratives in relation to PA at different periods of his recovery journey. He mentioned that retelling of a restitution narrative places faith in the medical model of recovery (i.e. cure, return to previous self), whereas the quest narrative may indicate an intrinsic, adventurous and meaningful engagement in PA (Carless, 2008). Moreover, this study pointed to the critical role of PA as creating a positive athletic identity, which seemed central to the participants' recovery.

Some authors have proposed that PA can facilitate a positive social identity, by implementing projects in community settings (e.g. Pringle, 2009). For instance, some programmes have been conducted in the countryside (Crone, 2007), allotment grounds (Fieldhouse, 2003), golf course (Carless & Douglas, 2004) or football pitch (McElroy et al., 2008). Raine et al., (2002) noted that the non-clinical appearance of a community gym appeared to create a relaxed, safe and comfortable environment, reduced perceptions of stigma and supported self-expression. Additionally, Crone (2007) observed that walking group attendees reported shared experiences, including a sense of unity, value and interest with others. Similarly, Pringle (2009) suggested that football enables people to re-establish a social identity through wearing football-specific garments and use of football specific terminology. Accordingly, such positive experiences of PA in the community can foster a sense of normalisation (Faulkner & Sparkes, 1999) and self-acceptance (Crone et al., 2006). Therefore, the possible benefits of PA on enhancing a personal and social identity seem conducive to enabling opportunities to grow beyond an illness identity. Subsequently, as Slade (2009) suggested, self-care and self-management can help individuals 'frame' the illness part of their identity.

#### 2.6.3 Personal responsibility

Many people have reported experiencing a loss of control and choice during their recovery from mental illness (e.g. Deegan, 2007). Part of such loss, Ventegodt et al., (2005) claimed, is due to the application of the medical model and the subsequent removal of personal responsibility in the recovery process. As Ramon (2011) pointed, the current risk-avoidance culture may fail to encourage opportunities of positive risk-

taking to occur (i.e. transferring responsibility to the consumer). Positive-risk taking can enact a catalyst for change (Bonney & Stickley, 2008), and enable consumers to regain a sense of autonomy, independence and self-empowerment (Young & Ensing, 1999). Hence, the meaningful involvement of consumers (i.e. shared decision-making) should be incorporated into individual care planning (Repper & Perkins, 2003). Slade (2009) recommended that mental health professionals could support the development of people's self-management skills, by promoting activities that encourage daily functioning, self-coping and engagement in meaningful pursuits. For some patients, taking an interest in health and wellness can foster personal responsibility, develop meaningful life roles and afford insight into their mental illness (Noordsy et al., 2002).

There is evidence to suggest that participating in regular PA can facilitate the self-management of mental illness; to cope with illness symptoms, counter medication side-effects and develop empowerment and independence toward self-care (e.g. Crone & Guy, 2008; Faulkner & Sparkes, 1999). Studies have shown that PA can alleviate mood, anxiety and psychosis-related symptoms (Brown et al., 2007; Fogarty & Happell, 2005; Wright et al., 2009). For example, Foley et al., (2008), and Kerr et al., (2008) found significantly decreased self-reported scores of depression following a 12 week structured PA programmes. Similarly, Brown et al., (2007) showed that following 12 weeks moderate aerobic PA, OCD symptoms significantly reduced. Elsewhere, Faulkner & Sparkes, (1999) reported that PA fostered the participants coping with positive symptoms of schizophrenia (e.g. distraction from severe auditory hallucinations) and decreased negative symptoms (e.g. depression, anxiety or stress). These studies indicate that the benefits of PA can augment personal and social functioning, self-management, and decrease symptoms. Such PA benefits may also foster self-management by countering medication side-effects (e.g. reduce physiological risk factors, improve cognitive function).

Medication side-effects are reported to exacerbate the burden of mental illness (e.g. Deegan, 2007). Typical side-effects include weight gain, hair loss, itchiness, restlessness, memory loss, drowsiness, sexual dysfunction, heart problems, involuntary movements, dryness, hunger, or addictive behaviours (National Institute of Mental Health, 2010). Such side-effects often deters people from treatment compliance, especially if these effects hamper their engagement of meaningful activities (Deegan, 2005; Fenton, Blyler, & Heinssen, 1997). Research has also shown that PA can be equally effective as some medications for depression, without negative side-effects (Blumenthal et al., 1999). For instance, Hoffman et al., (2009) showed that exercise

therapy was equally effective as Sertraline to decrease symptoms of depression over a four-month period. They also measured perceived sexual function (a side-effect of Sertraline) and found non-significant trends of exercise improving sexual function compared to the medication treatment. Such studies show promising findings for the application of PA as a treatment modality for mild mental illness disorders (e.g. anxiety and depression) (Biddle & Mutrie, 2008). However, the lack of methodological robust trials, has led to much debate on the effectiveness of PA as a treatment modality for mild mental illness disorders (Blumenthal & Ong, 2009; Mead et al., 2009). Similarly, although evidence of the effectiveness of PA on major mental illness disorders (e.g. psychosis) appears few and laden with methodological weaknesses, PA has been supported as a method to self-manage and cope with the symptoms of ill-health (Ellis, Crone, Davey, & Grogan, 2007). Such evidence supports the adjunctive application of PA in mental health settings (Crone et al., 2009).

Additionally, some authors have suggested that PA may afford transferable benefits, to improve personal and social functioning in other contexts of people's lives (Carless, 2007; Crone et al., 2006). For instance, research has shown that following PA people have developed life skills and motivation toward self-care, such as rekindled former hobbies, increased interest in personal hygiene, appearance, desire for weight loss and physical fitness, and opening a bank account (Carless & Douglas, 2008d; Faulkner & Biddle, 2004; Faulkner & Sparkes, 1999). The generality of self-efficacy may explain such effects, as Bandura (1982) noted:

Efficacy in dealing with one's environment is not a fixed act or simply a matter of knowing what to do. Rather, it involves a generative capability in which component cognitive, social, and behavioural skills must be organized into integrated courses of action to serve innumerable purposes (p. 122).

Accordingly, self-efficacy has shown to be a key mechanism in the PA and mental health relationship, and the generality of self-efficacy may explain such transferable effects. However, no studies could be found specifically investigating the transferable effects of PA in other contexts of recovery. Nonetheless, while little is known of this benefit, this section has shown that PA can afford meaningful contributions to people's self-management and self-care. Other aspects of personal meaning are considered next.

#### 2.6.4 Personal meaning

Whilst the remission of symptoms is an important part of regaining personal control and signify clinical outcomes, for many people it is not the primary goal of their

recovery journey (Deegan, 2007; Repper & Perkins). Rather, it has been suggested that the purpose recovery should enable a person to (re)discover a life that is inherently meaningful (Roberts & Wolfson, 2004). Meaning could occur through engaging in activities of personal sentiment or significance, performing socially valued roles, or daily functional roles (Davidson et al., 2005). Iwasaki, Coyle, & Shank (2010) proposed six domains of leisure purists that may contribute to meaningful-living during recovery: (a) Health (physical, mental and co-morbidities), (b) identity and spirituality, (c) positive emotions, (d) human development, (e) harmony and social connections, (f) coping and healing. Iwasaki et al., claimed that these components are often neglected in mental health settings, and as such, should be promoted to encourage people's participation in active and meaningful life roles. Similarly, Deegan (2005) found that participant's had described meaningful pursuits during recovery journey as personal medicines, which encompassed their personal aspirations and activities of self-care. Such activities included attending university, employment, being a good parent, singing, fishing, exercising, shopping, solving maths problems, or helping others. Deegan reported that the everyday participation in such activities afforded people a sense of resilience during recovery; increased self-esteem, decreased symptoms and avoided unwanted outcomes. Given the potential diversity of meaningful pursuits, Repper & Perkins, (2003) suggested that mental health providers should support opportunities to identify and develop meaningful activities. Additionally, Slade (2009) advised that practitioners should explore personal recovery goals and treatment goals, in a process of shared-decision making. He suggested that doing so can explore and integrate the meaningful aspirations of the individual, while also satisfying the societal and professional obligations of the practitioner.

Accordingly, research on meaningful activities has shown to have a positive association with recovery, quality of life, pleasure, value and competence (Aubin, Hachey & Mercier, 1999; Lloyd et al., 2007). For example, Hendryx, Green, & Perrin (2009) found that social, physical or environmental activities were associated with increased recovery scores. They identified that one specific activity was not related to recovery per se, but that a variety of meaningful activities could yield a positive impact on recovery. Other prospects of participating in meaningful activities include social and peer-support benefits (e.g. social inclusion or connection to others), experiencing personal strengths (e.g. confidence), self-understanding and self-acceptance (Carless & Douglas, 2008c; Lucksted et al., 2009; Mancini et al., 2005). Additionally, some authors have reported that personal meaning can be experienced through PA (Carless &

Douglas, 2010). For instance, valuing experiences of relaxation (Carless & Douglas, 2009), enjoyment, happiness or euphoria (Crone, 2007; Crone et al., 2005), sense of control, empowerment, autonomy (Hasson-Ohayon et al., 2006), or buffering negative traits such as anxiety, tension, stress, or irritation (Crone & Guy, 2008; Tetlie et al., 2009). Equally, participating in PA may afford indirect meaningful experiences during recovery (i.e. instrumental value to achieve other meaningful pursuits) (Carless & Douglas, 2010). For example, Carless & Douglas (2004) observed some participants to value the social prospect of a PA programme rather than the participation or outcomes of PA. Other researchers have mentioned benefits where PA has been used to structure daily routines, encourage active lifestyles, and to provide a sense of purpose (Crone & Guy, 2008; Faulkner & Sparkes, 1999). Notably, such direct and indirect meaningful prospects appear to correspond to the benefits reviewed in Section 2.2.5, and Iwasaki's, et al., (2010) domains meaningful-living during recovery. Thus, the engagement of PA may offer multiple processes and outcomes (of participation) that can cultivate meaningful opportunities during recovery.

## 2.7 Chapter summary

This literature review has illustrated some of the complexity that surrounds the PA and mental health relationship. Despite the contemporary meaning and consumer value of recovery (Section 2.2.3), often PA research is explored in the context concerning clinical outcomes (e.g. symptom remission). While such outcomes are important for recovery, personal values are often neglected in the process of recovery i.e. toward fostering hope, a positive identity, personal responsibility and personal meaning. However, most authors advocate the biopsychosocial model (Richardson et al., 2005; Taylor & Faulkner, 2008), which can also risk an underlining or implicit clinical and biomedical model of recovery (Slade, 2009). In this chapter, multiple correlates, outcomes, processes, and mechanisms of PA have indicated the positive role that PA can afford during people's recovery from mental illness. Often, research has examined the benefits of PA in the context of clinical recovery, which can threaten incongruence with the individual's understanding and meaning of PA and recovery. For example, the literature review revealed that increased self-efficacy is a key mechanism of the PA and mental health relationship, but it is frequently explored in the context of symptom remission rather than understanding how self-efficacy may support personal thriving, resilience, meaning or valued life roles.

The complexity, history and context of mental illness as discussed in this chapter, highlight the necessity to understand the personal experience of PA and recovery. The PA and mental health relationship is complex, individual-specific, and multifaceted mechanisms of PA may determine its role during recovery. However, few studies have applied the personal recovery perspective as a guiding framework for understanding such relationship (Carless & Douglas, 2010). Whilst current literature indicates promising evidence supporting the application of PA during personal recovery, a theoretical examination and practical application of the constructs in the context of PA and personal recovery requires further investigation. Moreover, the PA literature appears to emphasise the psychological correlates of PA and recovery, and many studies do not examine this relationship in the political and social context. Yet, as Jacobson & Greenley (2001) pointed, recovery is a process of internal and external factors. Additionally, Crone et al., (2009) explained that much of the evidence guiding PA promotion in the mental health settings is informed by postpositivist principles. Subsequently, as Carless & Douglas (2010) asserted, the existing literature provides little scope of understanding how the processes of PA influence a personal recovery journey. Such issues informed the development of this thesis, research questions, methodology, my theoretical perspective, and wider worldviews.

In Chapter 4, I detail the research methodology as a qualitative case study to explore how PA might influence the selected processes of personal recovery i.e. hope, positive identity, personal responsibility and meaning. The following chapter examines the theoretical context of the thesis. I address the developments made in my theoretical perspective and consider how my worldviews, values and personal assumptions, influenced the research context and interpretation of the "Other."

#### **CHAPTER 3**

## Theoretical perspective

#### 3.0 Introduction

Often, researchers hold varying worldviews, where a phenomenon is viewed differently depending on the theoretical orientation of the researcher. As such, two independent researchers may concurrently observe the same object and view the phenomenon differently (Kuhn, 1996). For this reason, Crotty (1998) suggest that all research is grounded in a theoretical standpoint, and that by acknowledging one's perspective, readers can be better informed of the theoretical foundations that underpin the inquiry. For instance, identifying the researcher's perspective exposes their values, assumptions and beliefs, which conceptualise the interpretation and understanding of a phenomenon (Elliott, Fischer, & Rennie, 1999). Grix (2002) asserted that such transparency augments clarity, constancy and theoretical context to the research. He added that transparent knowledge can indicate the interrelated theoretical concepts with other research, avoid theoretical contradiction, and enable researcher's to recognise and defend their position. Such issues were anticipated to influence the thesis research, impact and epistemological contributions.

Therefore, the purpose of this chapter is to explore and acknowledge the theoretical perspectives that influenced me throughout the Ph.D. In particular, one critical issue emerged as a 'paradigm shift' (Kuhn, 1996) in my theoretical perspective. As I progressed through the research journey, I became aware of multiple theoretical standpoints that shape the nature and knowledge of the world in new and meaningful ways (e.g. Guba & Lincoln, 1994). Specifically, I moved beyond a postpositivist standpoint as I found my values converge with constructivism. This shift is acknowledged to influence the emergent methodology (see Chapter 4) and subsequent thesis outcomes. Accordingly, to illustrate my shifting worldviews and theoretical perspective, both standpoints are discussed in this chapter.

## 3.1 Moving beyond postpositivist sport and exercise science

In 2007, I graduated with a BSc Hons degree in Sport and Exercise Science. This degree contributed to my foundational knowledge in the theory and practice of sport and exercise science. Reflecting on this background, I believe that postpositivism implicitly underpinned my initial worldviews. Postpositivism (Section 3.2) is a

dominant, conventional theoretical framework that guides many academic disciplines, including the teaching and practice of sport and exercise science (Culver, Gilbert & Sparkes, 2012). As a student of the sport and exercise science community, I believe that my initial postpositivist influences came from the British Association of Sport and Exercise Sciences, the BSc degree modules, lecturers, and many sports and exercise science textbooks. Kuhn (1996) might assert that such a background was a typical passageway to 'normal science', and of gaining membership in a particular scientific community.

During the PhD journey, I became interested in the standards of quality and rigour in scientific research, which led me to recognise the importance of "owning one's perspective" (Elliott, Fischer, & Rennie, 1999, p. 221). After reading Guba & Lincoln (1994), I identified my then theoretical orientation as postpositivism, examining this perspective against: (a) Positivism, (b) transformative approaches (e.g. critical, feminism, disability, race theories), (c) constructivism, (d) participatory research, and (e) pragmatism (Lincoln, Lynham, & Guba, 2013; Mertens & Wilson, 2012). Each of these paradigms indicated a specific scientific outlook; research practice, governing laws, traditions, tools and methods of application (Kuhn, 1996). Guba & Lincoln (1994) distinguished these paradigms according to three key metaphysical beliefs of: (a) Ontology, (b) epistemology, and (c) methodology. Ontology questions the structure, nature and the existence of reality: "What is out there to know about?" (Grix, 2002, p. 175). The answer may subsequently inform the epistemological question: "What is the nature of the relationship between the knower or would-be knower and what can be known?" (Guba & Lincoln, 1994, p. 108). These beliefs influence the methodological question: "How can we go about acquiring that knowledge?" (Grix, 2002, p. 180). Accordingly, these assumptions guide the appropriate design and implementation of social inquiry within each paradigm<sup>5</sup> (see Table 3.1, p.63) (Crotty, 1998).

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<sup>&</sup>lt;sup>5</sup> Although these paradigms are distinguished by other philosophical assumptions (Lincoln et al., 2013), ontological, epistemological and methodological assumptions are discussed in this chapter, to illustrate key influences that steered my transition to constructivism.

Table 3.1 Key philosophical assumptions of six paradigms of social inquiry (Lincoln et al., 2013; Mertens & Wilson, 2012).

Paradigm	Ontology	Epistemology	Methodology
Positivism	Naïve realism	Objectivism	Experimental methods
Postpositivism	Critical realism	Modified Objectivism	Modified experimental methods
Transformative approaches	Historical realism	Subjectivist-transactional	Dialogic/dialectical
Constructivism	Relativism	Subjectivist-transactional	Hermeneutical /dialectical
Participatory	Subjective-objective	Critical subjectivity and four ways of knowing	Political participation in collaborative action
Pragmatism	Concerned with 'what works' in practice, rather than discerning philosophical assumptions about "truth"	Flexible relationships determined by what is important according to the research aims	Methods are chosen to suit research aims (often mixed methods)

The varying assumptions of the standpoints presented in Table 3.1 have led to 'paradigm wars' among the research traditions (Patton, 2002). Denzin (2010) suggested three in particular: (a) The discrediting of positivism (1970-1990), (b) competing paradigms to replace positivism and debates of accommodating multiple paradigms (1990-2005), and (c) competing paradigms as evidence-based methodologies (2005 to present<sup>6</sup>). Throughout this history (and since the Enlightenment period), positivism and postpositivism have dominated scientific inquiry and evidence-based practice (Denzin, 2009, 2010; Harding, 1991). Subsequently, my critical insights developed from 'studying up' the dominant paradigm (Harding, 2004). I became sceptical about the assumptions of postpositivism, which had become practiced, "science-as-usual" (Harding, 1991, p.1). The literature detailing the paradigm debates (e.g. Denzin, 2009; Guba, 1990) challenged my everyday perspectives and practice as a sport and exercise scientist. I noticed a discrepancy between the metaphysical beliefs of postpositivism, and my personal beliefs, research agenda, standpoint values and concerns of reconstructing and representing the "Other." However, as my understanding of constructivism matured, harmony was brought to such disparities (e.g. the abandonment of 'value-free' research).

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<sup>&</sup>lt;sup>6</sup> In Denzin (2010), 'present,' was used to suggest that the third war was current to the time of writing his paper. Although his paper was published in 2010, in the current writing of this thesis (2015), I believe this 'war' is still present.

It was unlikely that I became a constructivist 'overnight'. Rather, I believe that my transition occurred hermeneutically. Over time, as I traversed back-and-forth between the research literature, academic community, and my personal experiences as a researcher. Mezirow (1997) might assert that I encountered a transformative learning experience: I critically appraised my postpositivist 'habits of the mind' as I explored new and alternative ways of knowing. My governing 'frame of reference' (Mezirow, 1997) changed to encompass constructivist influences, which evoked a shift in my identity. I viewed the world differently; more cautious, critical, and with a hint of anxiety (see Section 3.5). Thus, despite my later rejection of postpositivism, it was likely that the early phases of the Ph.D. were influenced by this paradigm. Accordingly, postpositivism is discussed next; where I address critical issues that influenced my shift to constructivism.

## 3.2 Postpositivism

Postpositivism was established as a more critical version of positivism (Guba, 1990). Assumptions of realism, objectivism and experimental methods are less naïve, but are suspicious of the human fallacies that construct "truth" claims about the world (Alvesson & Sköldberg, 2009). Critical realism is the ontological assumption that reality exists independently and external to the objects of the world (Guba, 1990). As reality is claimed to exist external to the person's conceptions of it, the world is then explained by natural laws and cause-effect theories (Alvesson & Sköldberg, 2009); albeit limited to the fallacies of the human condition (e.g. perception, intellect) (Guba, 1990). Subsequently, critical realism is comprised by three domains of reality: (a) The empirical, defined by observer's experiences and perceptions; (b) he actual, of what happened external to the investigator; and (c) the real, underlying mechanisms of casual effects (Alvesson & Sköldberg, 2009). Notably, while multiple conceptions of empirical perspectives are accepted, critical realism maintains an underlining belief that reality remains external to the observer: In one 'real' world governed by natural laws (Appleton & King, 2002). For this reason, critical realism is often associated with objectivism, mainly because if one known-world is in existence then all of the investigators in the world must be separate from it (otherwise multiple realities would exist).

Therefore, postpositivists are likely to claim that a detached relationship exists between the inquirer (subject) and the inquired (object) (Ponterotto, 2005). Such dualism asserts that truth and meaning exists external to an object and separate from the

subjective mind of the inquirer; thereby, conforming to the same one reality (Crotty, 1998). However, given that the practice of science is a social activity (Kuhn, 1996), objectivism is modified as a "regulatory ideal" (Guba, 1990, p. 21). Personal values and politics cannot be separated from an inquiry (Harding, 1991), so a postpositivist inquirer typically strives to maintain a value-free approach (Lincoln et al., 2013). Doing so, a researcher can propose credible knowledge and truth claims through being detached from the inquiry (van Langenhove & Harré, 1999a). Subsequently, to assert truth claims, a researcher must apply critical verification and falsification upon the phenomenon by using their senses, intellect, logic and scientific reasoning (Crotty, 1998). This approach relies on falsifying existing theories to advance scientific knowledge (Phillips, 1990). Specifically, the hypothetical-deductive methodology: (a) Tests the hypotheses of existing theories, (b) deduces propositions from these theories, and (c) rigorously tests the theoretical propositions to determine its falsifiability (Crotty, 1998). Investigators can then quantify and test such propositions for generalisability, to produce nomothetic knowledge, explain and predict causality (Appleton & King, 2002; Wainwright, 1997). Therefore, postpositivism holds the premise that external objects can be accurately measured when they are manipulated, controlled and rigorously tested, to apprehend a plausible foundational truth (Lincoln et al. 2013).

Undoubtedly, the claim that a postpositivist lens can achieve foundational truth has led some authors to claim that postpositivism is the guiding paradigm for the development of policy and practice in health care (e.g. McEvoy & Richards, 2003; Wainwright, 1997). Clearly, if a proposition is deemed 'true' and in 'one reality', then it warrants a status that is valid and reliable (Healy & Perry, 2000). A researcher may then claim that their findings are generalisable to other contexts (Appleton & King, 2002). Such evidence is often desired to guide mental health policy, particularly to evaluate and minimise the potential risks of mental health care and treatment methods (Holloway, 2006). Therefore, it is unsurprising that this perspective has grown to become conventional in modern research, particularly in medicine and mental health care (Slade, 2009). Nevertheless, some authors have raised doubts toward the metaphysical assumptions of postpositivism (e.g. Burr, 2003; Lincoln & Guba, 1985; Moses & Knutsen, 2012). Such doubts are examined in the following sub-sections.

### 3.2.1 Critical Realism

The disapproval of critical realism is raised due to the assumption of one external reality: The claim that one conception of reality cannot exist of equal value to

another (Appleton & King, 2002). As critical realist assumptions position people's life experiences within one reality, a power divide is created in the 'discovery' process of knowledge (Harding, 1991). Namely, the researcher's reasoning of empirical laws of explanation (according to the external reality) is prioritised above the subjective experience and values of the individual (Alvesson & Sköldberg, 2009; Harding, 1991). Consequently, subjective meaning is 'taken-for-granted' when it is simplified as casual laws of explanation, to mirror the external world rather than reflect the values of the individual (Alvesson & Sköldberg, 2009; Gergen, 2009). However, the literature review showed that the PA and mental health relationship is complex; subjective, variable, unpredictable and context-specific (Crone, Smith, & Gough, 2006; Faulkner & Biddle, 2004). Subsequently, in agreement with Patton (2002), a programme evaluation (e.g. a PA intervention) would unlikely yield the same experience of a phenomenon among all participants. Each person will likely construct alternate views of the same phenomenon that is subjectively 'real' to their perceptions of the world (Crotty, 1998; Moses & Knutsen, 2012). As such, "if men define situations as real, they are real in their consequences" (Thomas & Thomas, 1928, as cited in Merton, 1995, p. 380). Hence, two people cannot subscribe to the same reality, but each construct individual realities of the world (Dyson & Brown, 2006).

To apprehend the nature of reality, a more suitable approach might aim to distil what people define as being real, according to their individual perceptions of the world. Doing so, positions people's stories as equal contributions to knowledge, which cannot be falsified or represent a false-consciousness (Lincoln & Guba, 1989). Preferably, people's stories construct meaningful representations of their subjective reality and lived experience; they can be retold for particular reasons or create certain outcomes (Frank, 1995; Smith & Sparkes, 2009). Stories become real through the telling and reception of narrative accounts, which provides a platform for people to construct an identity in order to portray themselves (Frank, 1995; Smith & Sparkes, 2009). Furthermore, a researcher cannot apprehend another person's subjectivity, nor can a person recollect a complete account of their experiences, since stories are always subjectively biased (Guba & Lincoln, 1989; Polkinghorne, 2005). Such issues challenge the critical realist position as such stance may fail to understand and illustrate the subjective and meaningful experiences that are pertinent to the role of PA during recovery (Faulkner & Carless, 2006).

### 3.2.2 Modified Objectivism

Some authors have argued that a researcher's theoretical and personal presuppositions cannot be detached from their inquiry (e.g. Moses & Knutsen, 2012; Willig, 2008). Rather, epistemological facts are socially constructed and dependent upon the inquirers values and theories (Guba, 1990; Kuhn, 1996). For example, the theory laddeness of facts supposes that knowledge is constructed from people's preexisting theoretical assumptions (Guba, 1990). Typically, a person's social, cultural or political, paradigmatic theories (Kuhn, 1996) may explicitly or implicitly regulate people's daily life, via micro, mid-range or grand theoretical assumptions<sup>8</sup> (Layder, 1993; Reeves, Albert, Kuper, Hodges, & Hodges, 2008). Such assumptions are likely to consciously or subconsciously influence the way in which an investigator observes a phenomenon: For an investigator to observe something, 'something' will always need to be observed (Moses & Knutsen, 2012). Specifically, the investigator's motivation to observe a phenomenon is inextricably tied to their predetermined assumptions, needs, and interests of the inquiry. That is; their presupposed theoretical assumptions influence their interpretations of an object (Moses & Knutsen, 2012). Therefore, it cannot be wholly known whether a person has successfully bracketed all of their presumptions from their observations and judgements (Lincoln & Guba, 1985).

Additionally, constitutive and contextual values may influence an inquiry via the researcher's commitment to their paradigm, personal, social and cultural values (Kelly, Carlsen, & Cunningham, 1993). Constitutive values indicate the 'scientific authority' of the investigator; whereby scientific discourses are used to objectively position participants to comply with the study's protocol (Moses & Knutsen, 2012; van Langenhove & Harré, 1999a). Otherwise, subjects who cannot be 'controlled' threaten the scientific rigour of a study (e.g. the reliability of the finding). Moreover, the researcher's commitment to a particular theory can overlook 'bottom up' insight, or 'blame' the study's limitations (e.g. equipment, environment, or participants), in order to preserve their theory (Kuhn, 1996). Likewise, the contextual values of the researcher cannot be detached from an inquiry due to unavoidable social forces, such as power relations (Karnieli-Miller, Strier, & Pessach, 2009), communication accommodation

<sup>&</sup>lt;sup>7</sup> Facts are defined not as ultimate truths, but as descriptors to suggest the way something "is", whereas values may correspond to the way in which someone "ought" to act (Williams & May, 1996).

<sup>&</sup>lt;sup>8</sup> A grand theory may be considered as an overarching theoretical perspective, lens or worldview (e.g. postpositivism, constructivism); a mid-range theory represents social or cultural abstracted conceptions (e.g. the self-determination theory, Deci & Ryan, 1985); lastly, a micro theory suggests a context specific understanding (e.g. people's reasons to participation in sports therapy, Crone & Guy, 2008) (Reeves et al., 2008).

(Giles & Ogay, 2007) and researcher-participant rapport (Patton, 2002). Such intersubjectivity can influence the participant's adherence to the research agenda (e.g. convergence or divergence), particularly concerning invasive protocols<sup>9</sup> (Hayman, Taylor, Peart, Galland, & Sayers, 2001), and the disclosure of rich experiential information (Patton, 2002). Controversially, in some cases, contextual values have led to 'bad science' (Harding, 1991). For example, some authors have accused pharmaceutical companies of creating biased research findings, withholding evidence, partially publishing findings, or 'paying off' researchers and psychiatrist's to promote their products (Bentall, 2009; Slade, 2009). Elsewhere, Harding (1991) suggested that science was previously dominated by male hegemony due to men being previously perceived as more objective and emotionally detached. Such issues determine the intersubjective act of science as social inquiry and context-specific. Nonetheless, to maintain postpositivist regulatory ideals, experimental methods are discussed next.

## 3.2.3 Experimental methods

Randomised Control Trials (RCT) are often hailed the 'gold standard' methodology of postpositivism, and social inquiry (e.g. Taylor & Faulkner, 2008). The RCT is designed to minimise selection and observer bias (e.g. participant randomisation, placebo-controlled groups and 'blindness') to quantify objectivist truth claims (Wessely, 2006). The removal of such biases may reduce statistical errors to produce findings deemed more valid, reliable and generalisable (Wessely, 2006). Nevertheless, some authors have indicated that such design may limit understanding the complex PA and mental health relationship (Faulkner & Biddle, 2004; Faulkner & Carless, 2006). One issue is the variability and complexity of an inquiry context that may restrict an understanding on issues such as: (a) the diverse nature of individual behaviour; (b) subjective interpretations of illness experience, including comorbidities; (c) the intricacy of complex clinical treatments; (d) person-specific changes that may occur during the course of a trial; (e) varying motivational preferences; or (f) the ecological validity and transferability of the research in people's lives (Anthony, Rogers, & Farkas, 2003; Faulkner & Taylor, 2005; Faulkner & Biddle, 2004; Wessely, 2006). Due to such complexities, RCT studies often require large sample sizes to generate significant generalisations (Wessely, 2006). However, small groups and

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<sup>&</sup>lt;sup>9</sup>It is acknowledged that, reasons beyond the research-participant relationship can determine a participant's motivations, such as for altruistic outcomes (Hayman, Taylor, Peart, Galland, & Sayers, 2001).

minorities may become marginalised if their values become overpowered by dominant population groups<sup>10</sup> (Harding, 1991; Wessely, 2006). Such misgivings have led some authors to question the effectiveness of RCTs as a suitable method to translate the benefits of PA programmes in mental health settings (e.g. Faulkner & Biddle, 2004).

Furthermore, preoccupation with evaluating the effectiveness of a trial can overlook implications of 'applicability' and 'feasibility' that equally inform evidence-based practice (Evans, 2003; Verhoef, Casebeer, & Hilsden, 2002). Here, Evans (2003) proposed that interpretive studies (and RCTs) could inform evidence based-practice by understanding the consumer experience and practical implications of an intervention. As such, qualitative methods can be applied through a postpositivist framework (Ponterotto, 2005); however, this may prioritise 'evidence-based practice' above 'practiced-based evidence' (Ramon, Healy, & Renouf, 2007). The key difference being, practice-based evidence is grounded in the consumer's values to inform mental health policy and practice (Ramon et al., 2007).

Other concerns of experimental methods include a focus on reductionism and the inquiry outcomes (Lakeman, 2004; Roberts, 2000). Typically, quantitative methods reduce people's experiences into numerical values to obtain statistical 'truths' (Henwood & Pidgeon, 1992). Consequently, diverse personal meanings and the fluidity of people's complex lives becomes suppressed through quantification (Roberts, 2000). Additionally, the emphasis of deducing theories to explain individual behaviour can restrict new theoretical growth to emerge (Willig, 2008). Kuhn (1996) demonstrated that scientific advancements occur outside the hypothetical-deductive model, as historically, science has radically advanced through paradigm shifts. Subsequently, the 'underdetermination of theory' supposes that ultimate conclusions cannot be falsified because any number of theories may undermine the researchers' truth claims (Guba & Lincoln, 1994). Thus, no body of evidence can demonstrate the superiority of one theory above another (Schwandt, 2001). This proposition challenges the foundational assumptions of postpositivism (Lincoln et al., 2013). Such caveats may create 'blind spots' in generalising evidence-based practice, as it may be difficult to determine which theoretical context has been manipulated (Lincoln & Guba, 1985). Therefore, human activity cannot be reduced and determined by one universal set of relationships (Appleton & King, 2002; van Langenhove & Harré, 1999a).

In summary, the above methodological, epistemological and ontological concerns of postpositivism led to the rejection of this paradigm. The critical issues

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<sup>&</sup>lt;sup>10</sup> Notably, one approach to minimise such concern is to implement a stratified RCT.

presented have indicated that this position fails to comprehend people's subjective experiences, and thereby, undermines the research aims, my emergent theoretical orientation, and the values of the research inquiry (see Section 3.4). Essentially, I wanted to understand the role of PA during people's recovery while also minimising the risk of oppression or marginalisation during people's research participation. Accordingly, in the following section I discuss the constructivist paradigm and examine how this perspective supported these aims.

## 3.3 Constructivism

Numerous interpretations of the basic metaphysical assumptions constructivism have led to the development of numerous strands to arise (owing to relativism) (Madill & Gough, 2008). Geelan (1997) identified six strands: (a) Personal, (b) radical, (c) social constructivism, (d) critical, (e) contextual, and (f) social constructionism. Noticeably, each strand shares a similar critique of positivism and postpositivism and maintains a distinct standpoint on the metaphysical beliefs of constructivism or accommodating paradigms (Geelan, 1997; Kincheloe, 2005). For instance, Schwandt (2000) proposed 'weak' and 'strong' constructionism. While both strands dispute objectivism as an epistemology, a 'weak' orientation may reframe objectivity within the epistemological framework of constructivism (see Section 3.5). Here, a researcher might attempt to filter the 'better' from 'worse' social constructions in order to inform their understanding of a phenomenon (Schwandt, 2000). Conversely, strong constructivism maintains the view that meaning-making is inherently subjective, where language (as an object) is incommensurable as a means to represent reality (Madill & Gough, 2008). Effectively, meaning cannot be objectively judged, but instead requires processes to scrutinise internal coherency (Schwandt, 2000). Thus, Schwandt positions constructivism on a bipolar scale, depending on the meaning of objectivity i.e. subjective, intersubjective or objective.

Nevertheless, Geelan (1997) asserts that a concrete strand of constructivism may contradict the relativist assumptions of constructivism (see Section 3.3.2). As such, some authors (e.g. Burr, 2003; Lincoln et al., 2013) have welcomed pluralism among the variations of constructivism. Although Kuhn (1996) suggested that paradigms are incommensurable, Lincoln et al., (2013) argued that accommodation among theoretical perspectives is possible when metaphysical assumptions overlap. Further, owing to the underdetermination of theory, multiple theoretical perspectives may implicitly influence an inquirers' approach (Kincheloe, 2001). As such, Kincheloe (2001) encouraged

researchers to embrace themselves as a 'bricoleur': A guilt maker who borrows tools from various overarching perspectives and disciplines to create a 'bricolage' (a crafted and sophisticated representation of complex conditions) (Denzin & Lincoln, 2013). Kincheloe (2001, 2005) further advised that the critical reflexive exploration of the researcher's cultural, social, philosophical and theoretical values (that potentially ladens the inquirer's approach) may lead to ontological insights during an inquiry. Otherwise, the researcher may risk a 'fuzzy interdisciplinary approach' wherein analytical frames are applied in an inconsistent and incoherent manner (Kincheloe, 2001). Such critical reflexivity may transform the researcher's assumptions, and inform a more sophisticated approach to research (Mezirow, 1997). Hence, a person's particular strand of constructivism may also change over time (Geelan, 1997). Indeed, this was the case with Lincoln et al., (2013), whose stance on constructivism became more critical and participatory oriented since the publication of Fourth generation evaluation (Guba & Lincoln, 1989). Their strand matured to address the demand for a critical social science, to influence social justice and policy (Lincoln, 2001) (and a possible response to the 'lack of a critical purchase' criticism, Schwandt, 1994). One noticeable alteration was the development of the authenticity criteria, which incorporated critical and participatory ideals as part of constructivist rigour (see Section 3.9) (Lincoln et al., 2013).

Noticeably, my constructivist perspective resonates with Lincoln's et al., (2013) conceptualisation<sup>11</sup>. Their contemporary strand resembles 'weak' social constructivism; accommodating critical and participatory values (see Section 3.4). For instance, these perspectives were integrated into the authenticity criteria, for investigators to scrutinise their reconstructions of the "Other" (Lincoln, 2001). Notably, Schwandt (1994) characterised the intersubjective nature of Lincoln & Guba's (1994) strand, suggesting that a psychological position (the subjective) constructs an epistemological knowledge claim. If knowledge is subjective, then radical constructivism and idealism is assumed, which implies that knowledge is constructed in the mind as cognitive structures and mental representations (Geelan, 1997). Consequently, knowledge 'mirrors the mind' and is therefore inaccessible to others (Guba & Lincoln, 1989). Conversely, 'weak' social constructionism assumes that knowledge is transformed via social interaction to reconstruct knowledge from people's psychological states to interpret and understand subjective experiences (intersubjectivity) (Schwandt, 1994, 2000). This position

<sup>&</sup>lt;sup>11</sup> Their strand is similar to earlier works, such as Guba & Lincoln, 1989, 1994; Lincoln & Guba, 1985, 2013.

contrasts 'strong' social constructionism, which negates the involvement of internal psychological states in the construction of knowledge (Burr, 2003; Gergen, 2009). Strong social constructionists may claim that knowledge is constructed wholly via social processes; refuting internal states such as attitudes, motivation, or personality to only exist as discourse and social constructs (Burr, 2003). However, this displaces the individual as the constructor of knowledge because people's subjectivities are positioned in reference to social constructs (van Langenhove & Harré, 1999b). Subsequently, although illness may be understood as a social issue rather than a personal defect (e.g. social structures or stimuli that position people as 'ill'), individual achievement may be attributed to a social process, rather than constructs of personality, motivation, or attitude. Such epistemological distinctions indicate the necessity to discern the researcher's strand of constructivism. Accordingly, the following subsections outline the metaphysical beliefs pertinent to the social constructivist strand adopted in this thesis.

#### 3.3.1 Relativism

Ontological relativism is the assumption that multiple realities and potentially infinite contexts define the nature of the world (Moses & Knutsen, 2012). The multiple contexts of the world will invariably differ, according to situational factors, such as experimental, social, cultural, historical, or political conditions (Guba & Lincoln, 1994). Here, one conception of reality may equally exist in agreement, conflict or contradiction to another, mainly because each person experiences, perceives, interprets and understands the world differently (Lincoln et al. 2013). For instance, the literature review identified that many people experience mental illness differently, including varuing cultural beliefs or social traditions (Cohen, 2008; Saravanan et al., 2007). Thus, as reality is relative to each context, it would be improper to claim that one context is more truthful than another.

Accordingly, relativism is antifoundational as this perspective negates the ultimate falsehood or truthfulness of facts (Lincoln et al. 2013). Instead, as a person interacts with the varying contexts of the social world, it is assumed that they will develop more sophisticated reconstructions of the world<sup>12</sup> (Guba, 1992). For instance, from a transformative learning perspective, a person's frame of reference (i.e. constructions that defines their worldviews) may become more sophisticated as they

<sup>12</sup>Pervious 'less' sophisticated constructions are not considered a false-consciousness, but are equally true and historically relative.

critically reflect on their taken-for-granted frames or engage in a 'critical discourse' ("the synthesis of existing views and evidence", p 61) (Mezirow, 2003). Therefore, for a researcher to comprehend subjective experience, sophisticated reconstructions can be achieved through dialectical approaches and engaging in critical self-reflexivity (Erlandson et al., 1993; Harding, 1991). Hence, truth claims are considered as dynamic, emergent, and fluid; particuallry since reconstructions are dependent on the researcher-participant relationships (e.g. power relations) and the degree in which a researcher examines their taken-for-granted frames of reference (all of which cannot be wholly known).

However, the rejection of foundational truth may subscribe to the 'problem of criteria' (Schwandt, 1994). Legitimate claims to knowledge may be suspect, owing to the self-refuting logic of relativism (Smith & Hodkinson, 2005). To suggest that relativism is superior to another position or to deny its rejection would negate an antifoundational stance (Williams, 2001). Therefore, it is not wholly possible to suggest that relativism may prevail above realism (O'Grady, 2002): "Relativism may be true and false" (Bernstein, 1983, p. 9). Such paradox may undermine the constructivist's argument against postpositivism (Murphy & Dingwell, 2003), and provoke an 'anything goes' criticism (Guba, 1992). Rorty (1985) cautioned against "a kind of silly relativism" (p. 12); whereby, any knowledge claim can be considered as true, irrespective to the meaning of such truth. Otherwise, this stance may legitimate immoral or unethical versions of reality (O'Grady, 2002).

Nevertheless, given that knowledge claims are socially constructed, it would be impossible to scrutinise the equality of multiple realities free from judgement or discrimination of the researcher (Smith & Hodkinson, 2005). Therefore, constructivist researchers "have a personal responsibility of knowledge" (Butt, 2000, p.85) and duty of care for the epistemological truth claims that are derived from stakeholder<sup>13</sup> constructions (Brinkmann & Kvale, 2005; Polkinghorne, 2006). Hence, moral and judgemental<sup>14</sup> relativisms are rejected, whereas historical, sociological or cultural relativisms may acceptably afford insight into the diverse lives of others (Harding, 1991). Moreover, a nonfoundational constructivist criterion can be applied to differentiate the 'good' from the 'bad' constructions (see Section 4.4) (Guba, 1992).

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<sup>&</sup>lt;sup>13</sup> A stakeholder is any person involved in the research inquiry (e.g. the researcher, participants, managers, funding agencies or wider community members) (Erlandson et al., 1993).

<sup>&</sup>lt;sup>14</sup> Objectivism subscribes to judgemental relativism due to the aim of observing a phenomenon free from bias, thus: "To insist that no judgements at all of cognitive adequacy can legitimately be made amounts to the same thing as to insist that knowledge can be produced from 'no place at all': that is, by someone who can be every place at once" (i.e. 'the God trick') (Harding, 1991, p.153).

Accordingly, the constructivist perspective maintains an inherent value toward understanding the constructions of others, where inter-subjectivity is paramount (Lincoln & Guba, 2013).

## 3.3.2 Subjective-transactional

A subjective-transactional epistemology contends that knowledge is socially constructed by two or more subjectivities (i.e. people) that negotiate a meaningful understanding of a particular phenomenon (Burr, 2003; Guba, 1990). A transactional dialogue can 'flesh out' people's experiences, particularly since people's stories are subjectively biased and inherently restricted (e.g. due to limited access to memories, rhetorical devices or interpretative repertoires) (Burr, 2003; Polkinghorne, 2005). Essentially, without the feedback from external sources (i.e. from other people) a person is unable to apprehend their experiences beyond their subjective perceptions (Kincheloe, 2005).

Accordingly when a researcher and participant engages in a dialogue, they enter a 'double hermeneutic' (Giddens, 1984), wherein both interlocutors actively and continually interpret each other to jointly-construct an understanding<sup>15</sup> (Rennie, 2012). The interactional dynamics in the researcher-participant relationship co-creates new experiences that represent a reflected account of the interlocutor's exchange, rather than mirroring a concurrent external reality (Nielsen, 2007). As such, the researcher is an active participant throughout the inquiry, which effectively connects their values to the co-construction of knowledge (Appleton & King, 2002). Specifically, the researcher (and, for example, their pre-existing assumptions, age, gender, social class, etc.) cannot be detached from how they interpret the participants, and equally how they are perceived by the participants (Harding, 1991; Lincoln & Guba, 1985). For instance, the power relations of the researcher-participant relationship can determine how knowledge is constructed (Aléx & Hammarström, 2008; van Langenhove & Harré, 1999b). Even if a researcher strives to position themselves as neutral and objective, power asymmetries are inescapable (for all stakeholders) throughout the inquiry (see Section 5.2.2) (Kvale, 2006). Consequently, to construct sophisticated knowledge claims, researchers are encouraged to scrutinise their etic perspective in order to provide a balanced interpretation of the participant's emic views<sup>16</sup> (Guba & Lincoln, 1989). Otherwise, an

<sup>&</sup>lt;sup>15</sup>In contrast to postpositivism, Rennie (2012) suggested that postpositivist researchers typically apply a single hermeneutic approach, to interpret an object in a one-way researcher-participant relationship.

<sup>&</sup>lt;sup>16</sup> Etic refers to an outsider's perspective of a phenomenon, whereas emic indicates the insider's perspective within a specific inquiry context (Ponterotto, 2005).

inquiry could be suspect of bias (Lincoln & Guba, 2013), marginalising participant values (Harding, 1991), or hide the researchers values if omitted from the inquiry (Potter & Hepburn, 2005). To avoid such outcomes, standards of constructivist rigour are addressed in Section 4.4. Additionally, researcher values are discussed in Section 3.4. First, the constructivist methodology is detailed.

### 3.3.3 A dialectic and hermeneutical methodology

The constructivist methodology is dialectic because communication and negotiation are required to co-construct knowledge (Guba & Lincoln, 1989). For this reason, Lincoln & Guba (2004) suggest that a dialectic approach strongly favours (although not limited to) qualitative methods. Generally, qualitative methods encompass strategies that are: (a) collaborative accounts, created from shared experience; (b) interview-led, questioning a person on their lived experience; (c) of naturally-occurring documents that are generated in everyday life; (d) observational and social engagement with the phenomenon; or (e) structured and rigid, using numbers or strategies with little modification (Madill & Gough, 2008). Typically, these approaches create a dialect (or discourse) that is used to reconstruct a meaning from the researcherparticipant dialog, researcher's observations or existing artefacts. Accordingly, to recreate meaning, a researcher examines dialectic accounts to understand the phenomenon (Ponterotto, 2005). An inductive approach is often applied to build a 'bottom-up' understanding and explore new meanings from the specific (i.e. participants lived experience) to the abstracted (i.e. theoretical conceptualisation) (Sparkes & Smith, 2014; Willig, 2008). Moreover, abductive reasoning (i.e. interplay of inductive and deductive reasoning) can be applied to conceptualise emergent themes (Lincoln & Guba; 2013; Rennie, 2012). Specifically, a researcher generates meaning from the participant's values (inductively) and examines emergent concepts deductively across the shared-constructions (i.e. multiple stakeholders) of the inquiry. interpretative process is approached via hermeneutics, where a more sophisticated understanding can be constructed, as the researcher further engages in the inquiry (Guba & Lincoln, 1989).

Principally, the researchers' interpretations of a phenomenon are suggested to enter a 'hermeneutical circle' (Guba & Lincoln, 1989). Here, the 'whole' of a context (e.g. a transcript, or research aims) is examined by interpreting its working 'parts' (e.g. participants, a section of text from a person's transcript) (Smith, 2007). Subsequently, a more sophisticated understanding may emerge as the researcher moves forwards and

backwards between the parts and the whole (i.e. interacts with more participants, rereading a transcript) (Alvesson & Sköldberg, 2009; Smith, 2007). This process may continue to be emergent until 'theoretical saturation' has been achieved to close the circle (Guba & Lincoln, 1989). However, given the relativist stance of constructivism, theorising is potentially infinite. So to close an inquiry, pragmatic decisions are required to judge whether a more sophisticated understanding has been achieved in light of the practical limitations of the inquiry (e.g. time or resources) (Lincoln & Guba, 1985; Smith, 2007).

Some authors have raised concerns of the constructivist methodology and qualitative methods (Paley & Lilford, 2011). For instance, a qualitative study would not be suitable to calculate the probable side-effect risks from taking antipsychotic medication or from participating in a PA programme. Here, the main disregard for qualitative methods in the hierarchy of evidence is primarily due to a lack of generalisability compared to RCTs (Barton, 2000; Lambert, 2006). Still, while the effectiveness of a mental health treatment is important; if the side-effects are incongruent with a person's worldviews then non-compliance may ensue. Evidently, such insights are important for steering mental health policy, thereby indicating that qualitative methods can afford particular strengths to social inquiry (i.e. understanding the lived experience) (Anthony et al., 2003). Accordingly, the issues presented in this section have attempted to define a social constructivist perspective and the theoretical assumptions of this standpoint. One key issue includes the implications of researcher's values influencing the inquiry. Therefore, in the next section I consider the axiological assumptions of my constructivist standpoint.

# 3.4 Axiological perspective

Axiology is a metaphysical assumption that addresses the role of values, ethics and morals of a research paradigm (Creswell, 2007). Lincoln & Guba (2013) asserted that such assumption may question: "Of all the knowledge available to me, which is the most valuable, which is the most truthful, which is the most beautiful, which is the most life-enhancing?" (p. 37). Similarly, as Heron & Reason (1997) suggest, axiological assumptions identify the nature of the human condition and the researcher's intrinsic purposes of their inquiry. Therefore, it cannot be detached from the inquiry that my primary values was to complete a thesis for the partial submission of a Ph.D., progress my career and obtain economic stability to support my family. Moreover, I wished to further my understanding of topics that I find inherently interesting (e.g. research

methodology, PA and mental health). To achieve these aims, I was also innately concerned with the standpoint values of others: I did not want to misconstrue, offend or upset others throughout the research. However, as my understanding of research methodology matured, I became conscientious of the 'privileged standpoint' of the researcher, wherein I might unintentionally impose inequality, oppression or marginalisation upon others (Harding, 1991; Lather, 1990). I believed that the postpositivist paradigm might inadvertently incur such risks (see Section 3.2) (Harding, 1991; Lincoln & Guba, 1985). Thus, following my rejection of postpositivism it became apparent that I could incorporate my values, ethics and politics within the inquiry<sup>17</sup> (Ponterotto, 2010).

As the thesis topic was on mental illness, I anticipated that the participants had previously experienced stigma, discrimination, marginalisation, oppression and inequality. This assumption stemmed from my personal beliefs, experiences, research literature (e.g. Pescosolido, Medina, Martin & Long., 2013) and the participants stories from the research (see Section 7.1). I have previously supported numerous people through moments of mental ill-health and crisis (personally and professionally), which reinforced my compassion and concern for others. Even though I am free from a clinical diagnosis of mental illness, I (just like everyone else) am susceptible to moments of stress, bereavement, low and distressed moods, loss, misperceiving things that are not 'really there', feeling helplessness and hopelessness. While such experiences may not be of the same magnitude as others (i.e. those diagnosed with mental ill-health), as a 'relational being' (Smith & Sparkes, 2009) I am able to draw upon my experiential understanding to empathise with the standpoint of others. Similarly, I became increasingly sympathetic from reading literature on personal recovery (e.g. Anthony, 1993; Ramon et al., 2009), and especially first-person narratives (e.g. Chadwick, 2007; Deegan, 1988). Moreover, when I established participant relationships and began collecting 'data', I saw, heard and felt participant stories of misfortune, illness and adversity. Such influences reinforced the desire to reposition myself from a potentially privileged standpoint (Lather, 1990) and move closer to a standpoint that maintains an intrinsic tilt towards honouring the participants values (Lincoln & Guba, 2013).

Accordingly, as a young male who is university educated, in full-time employment and undiagnosed of ill-health; I recognised that I might unavoidably and

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<sup>&</sup>lt;sup>17</sup> In contrast, postpositivist researchers are encouraged to maintain a neutral axiological stance as a regulatory ideal (Ponterotto, 2010).

implicitly display dominance and power, or be viewed upon as belonging to a privileged social group. Acknowledging such standpoint, I hoped to reconstruct an understanding to "'join with' rather than 'know and save'" the constructed "Other" (Cannella & Lincoln, 2013, p. 171). Indeed, my standpoint became critically reconfigured and redirected: I became responsive and adaptive to the participant's values (Sparkes & Smith, 2014) and I moved to respect their autonomy, dignity and personal needs of their involvement in the research, as well as my own. Thus, I embraced a constructivist standpoint similar to Lincoln & Guba's (2013)<sup>18</sup>, where some critical and participatory axiological ideals were welcomed. Namely, I hoped to create opportunities for human flourishing and emancipation (Heron & Reason, 1997). Distinction to the participatory paradigm was made, as the research goals and values were not shared or co-constructed with the participants (Lincoln, 2001). Equally, while my values embrace social change against injustice, I did not specifically seek to generate social change in the research study, thereby departing from the transformative agenda (Lincoln et al., 2013). However, the conflicting perspectives led me to experience ambivalence: Torn between upholding my values and the values of the participants (see Chapter 5). Therefore, through introspective, intersubjective and critical reflexivity (Finlay, 2002a; see Section 4.4.1.1), I hoped to raise my self-awareness of the potentially implicit issues that were laden in the inquiry.

Accordingly, the issues presented in this section and thesis chapter, have examined the paradigm shift of my theoretical perspective. Given such change, this had subsequent effects on the research methodology (Chapter 4), researcher-participant relationships (Chapter 5) and research findings (Chapters 6, 7, 8 and 9). Before summarising this chapter, I reflect on my departure from postpositivism.

## 3.5 A sympathetic reflection on postpositivism

Similar to Lincoln (1990), I am indebted to the postpositivist paradigm. This perspective underpinned the initial steps of my journey to constructivism, and while I have refuted postpositivism I remain sympathetic to the paradigm. When reflecting on this paradigm, from a constructivist perspective, I believe that postpositivism stands, acceptable, as a socially constructed discourse. As a rhetorical device, the discourse of postpositivism is traced back to the Enlightenment period, where it was applied to

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<sup>&</sup>lt;sup>18</sup> Notably, Mertens & Wilson (2012) suggest that not all constructivist authors endorse Lincoln & Guba's axiological standpoint on including critical and participatory ideals. However, their values essentially resonated with me and how I conduct social research.

understand, advance and challenge the world (Moses & Knutsen, 2012). For many people, positivism and postpositivism exists within their subjective realities, so to reject these perspectives would subsequently contradict my relativist assumptions. Moreover, the tenets of postpositivism have, implicitly or explicitly, led individuals, groups or societies to construct meaning from this perspective. To illustrate this point, when I drive my car, I maintain the foundational belief that when I brake, the car will without fail slow or stop. Similarly, if my daughter becomes ill, I desire the ultimate truth from the doctor that any prescribed medicine will heal her. However, following my contributions to the 'paradigm wars,' I am conscious of how the problem of induction can implicate such concerns. Consequently, (within my constructivist beliefs) I also hold postpositivist hope, optimism and faith that I will not encounter such unwanted events in my life.

Furthermore, postpositivism has influenced a large body of research evidence that has understood the role of PA during the recovery from mental illness. Undoubtedly, such evidence will be theory and value-laden, underdetermined, and perhaps fail to illustrate a rich understanding of people's subjective experience. Nonetheless, such evidence valuably contributes to the development of nomothetic knowledge and possible generalisations; where people may find hope from the foundational beliefs of postpositivism. Thus, to refute postpositivism would incur a rejection of the socially constructed discourses and knowledge's that has stemmed from this perspective, and allowed people to construct meaning from it.

Notwithstanding, the paradigm wars have tested the bounds of constructivism and postpositivism (and other perspectives). Without ideographic knowledge (through constructivism) postpositivism may fail to comprehend the complexities of human nature, which is socially constructed and context specific (Burr, 2003; Lincoln & Guba, 1985). Equally, I believe that postpositivism, as socially constructed discourse, provides a meaningful way for some people to construct their worldviews. Moreover, without postpositivism, it is questionable whether Lincoln & Guba (1985) (and my personal) drive to promote and develop constructivism as an alternative paradigm would have occurred. Hence, despite my rejection of postpositivism, similar to Potter (1998), I am positioning postpositivism within constructivism, where it is a rhetorical device. Sympathetically, I consider postpositivism another reality within a relativist world.

## 3.6 Chapter summary

Declaring one's theoretical perspective has important implications for the epistemological contributions of a research study. Disclosing the values and assumptions of the researcher provides a theoretical context for the inquiry, which can inform the reader's interpretations of research findings (Elliot et al., 1999). In this chapter, I have attempted to define the key theoretical influences that underpin the While not all perspectives have been reviewed, I have focused on the thesis. experienced paradigm shift of my theoretical perspective. This transition marked a change in my identity, as a researcher and a sport and exercise scientist, and has influenced the research methodology and findings. My early postpositivist assumptions were believed to stem from the sport and exercise science community, and thus my experience of a paradigm shift may offer critical insights for other community members. For instance, Culver et al., (2012) found that few qualitative studies in sports psychology (6.6% of 183 papers) specified the researcher's theoretical perspective. The authors concluded that such disregard was owed to the privileged standpoint i.e. However, as identified in this chapter, some critical issues were postpositivism. addressed concerning the philosophical assumptions of postpositivism. included the variability of subjective meaning, the value and theory-laden of facts, the problem of induction and underdetermination of theory. Unknowingly, such issues conflicted with my axiological values, igniting a shift in my theoretical perspective. Consequently, in this chapter I have also presented the assumptions of my theoretical perspective, social constructivism. Important insights have included the appreciation of multiple, diverse and context-specific realities, co-constructing knowledge via intersubjectivity and creating a hermeneutically 'bottom-up' understanding of people's lived experience. These assumptions connect my theoretical perspective to the research methodology and epistemological contributions of the thesis (Figure 3.1, p.81). Moreover, my shifting worldviews led to a research methodology that was research 'in action,' which is discussed in the next chapter.

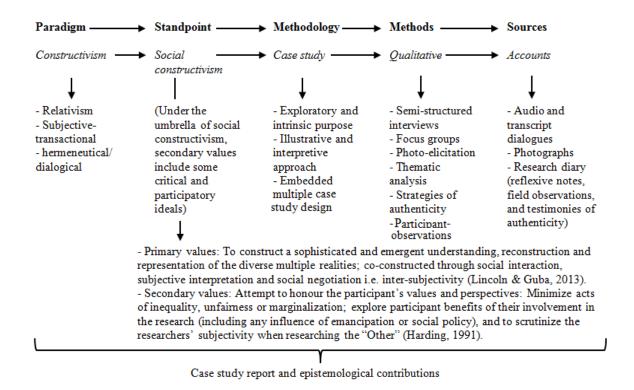


Figure 3.1 An overview of the thesis paradigm, standpoint, methodology, methods and sources.

### **CHAPTER 4**

Research Methodology: An emergent case study

## 4.0 Introduction

In the previous chapter, I examined my theoretical perspective wherein a paradigm shift was experienced as part of my Ph.D. research journey. To account for the emergent nature of the theoretical perspective, the thesis inquiry was considered research in action. Reason & Bradbury (2011) suggest that action research is different to conventional approaches; characterised by a values orientation, seeking to resolve practical issues, forming collaborative relationships, and creating diverse ways of Such features resonated with the emergent nature of my theoretical knowing. perspective (Lincoln, 2001), and subsequently led to the selection of a case study methodology. This chapter sets out to detail the case study methodology, procedure and selected research methods that were applied to investigate the research questions. In an effort to fulfil this aim, I define the 'case' and identify the purpose, approach and process of the case study methodology (Thomas, 2011a). This framework was support by the crystallisation of qualitative methods to interpret, understand and conceptualise the case within its bounded system. These methods include: (a) Participantobservations, (b) semi-structured interviews, (c) focus groups, (d) photo-elicitation, and (e) thematic analysis (TA). The (re)presentation of the research findings as realist tales is also detailed, followed by a description of how I applied the authenticity criteria to maintain constructivist standards of quality and rigour. Accordingly, seven staff members and twenty-two attendees from two voluntary sector branches participated in the research study. Therefore, this chapter also details the participant selection strategy, ethical approval and respondent demographics. First, I consider some key issues in the emergent methodology.

## 4.1 Research in action

Research can progress in unpredictable ways, as new information, experiences, interactions and understandings unravel (Erlandson et al., 1993). Such, naturalistic developments can sometimes lead a researcher to make methodological decisions post-inquiry (Guba & Lincoln, 1989). Cobb & Yackel (1996), for instance, recalled transiting from a psychological constructivist perspective to social constructivism as it became apparent to them that the social context of a classroom was equally important

for child academic development. In the current study, the research design emerged from ongoing interactions between my understanding of the inquiry context (e.g. participants, social activity, culture, and political aspects) and theoretical orientation (e.g. academic literature, discussions with supervisors). As I interpreted the interplay between my ongoing practical experiences 'in the field' while developing a theoretical knowledge, transformations of my 'practical knowledge' surfaced (Polkinghorne, 2006). Here, reflexivity was a key process, as I explored moments of 'ontological insecurity' when the emergent design fluctuated (Warne & McAndrew, 2009). Doing so led me to experience 'progressive subjectivity' (i.e. my previous etic assumptions were informed by my emergent emic understanding) and thus refined the inquiry working assumptions and research questions (Guba & Lincoln, 1989; Stake, 1995). Equally, as I integrated my standpoint values into the thesis theoretical perspective (Section 3.4), concerns of power became critically introduced into the hermeneutical process of the inquiry (Kincheloe, 2005). Accordingly, several key changes to the research design were encountered during each Ph.D. phase (see Figure 4.1, p.84). These developments are revisited in Section 4.5, where I illustrate and explain a chronological account of the research methods. First, the following sections detail the thesis methodology and research methods.

# 4.2 Selecting a case study framework

The internal tensions experienced as part of my paradigm shift led to a case study being selected in the Ph.D. third phase. It was acknowledged that other research methodologies are compatible with the assumptions of constructivism (Creswell, 2007). For instance, Table 4.1 (p.85) reviews several selected frameworks that are characterised by particular aims, focus, methods of data collection, analysis and representation (Creswell, Hanson, Clark Plano, & Morales, 2007). These strategies enable a researcher to systematically and reflexively explore the research aims and questions (Malterud, 2001). Following my development of practical knowledge of the research context, I selected a case study methodology according to several key influences. First, Lincoln & Guba (2013) suggest that the case study report offers an effective framework to reconstruct people's experiences within a thick description of the research context. They maintained that this might afford a credible and diverse representation of the multiple stakeholder constructions.

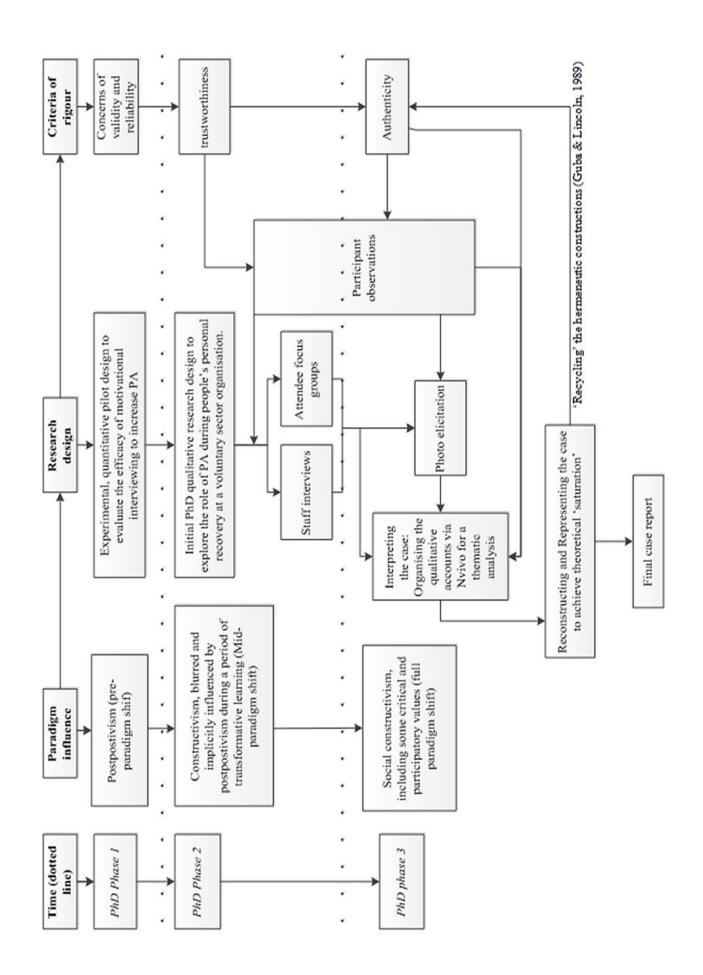


Figure 4.1 A schematic overview of the emergent research design

Table 4.1 Selecting a research methodology (Creswell, 2007; Starks & Trinidad, 2007).

Methodology*	Main focus		
Narrative	An emphasis on life experiences, where people's stories are		
	used to understand a particular research problem.		
Phenomenology	Used to describe the meaning of lived experiences to illuminate		
	the essence of a particular phenomenon.		
Grounded theory	To develop a substantive theory 'grounded' in the views of the		
	participants that explain the social processes of people's		
	experiences.		
Ethnography	To describe and interpret the observable patterns of a particular		
	culture or subculture.		
Discourse analysis	An emphasis on the micro-processes of interaction to		
	understand how language is used to construct meaning through		
	discourse.		
Case study	An in-depth exploration of the particularity and complexity of a		
	'case' to understand the complexity of its 'working parts' within		
	a bounded system, while enabling the use of a variety of		
	research methods.		

<sup>\*</sup>Some strategies are paradigmatically flexible, used with other theoretical perspectives, for instance, grounded theory, ethnography and case studies may accord to postpositivist assumptions.

Second, a case study methodology was also a pragmatic decision following a change in the mode of study. The Ph.D. first phase was initially a Masters of Research, where I investigated the efficacy of motivational interviewing to increase PA participation (see Appendix D, p.243). The motivational interviewing variable was later removed from the research agenda following the third phase progression viva (June 2011). This move was to develop an understanding on the meaningful role of PA during personal recovery: An intrinsic focus since the Ph.D. second phase (October 2009) (see Section 4.2.2). These considerations led to a 'case' subject being formed (defined in Section 4.2.1) (Thomas, 2011a), and my earlier 'problem-focused' and 'question-led' emphasis seemed to intensify my understanding of the case subject (Patton, 2002; Polkinghorne, 2006). Willig (2008) might assert that such developments are characterised as a 'naturalistic' case study, encompassing the emergent nature of the design. For instance, Yin (2014) claimed that the unpredictable nature of the 'real world' lends itself to a case study design, where a researcher can scrutinise any

unanticipated, unforeseeable or unplanned events that naturally arise within bounded context of the case (see Section 4.2.4).

Third, following a period of prolonged observation (see Section 4.3.4); I found that it was necessary to illuminate the multifaceted factors that appeared pertinent to the case. As such, (in October 2013) Layder's (1993) research map was used to guide my interpretations and understanding of the research context, in domains of: (a) Political, (b) organisational, (c) inter-subjective, and (d) subjective levels of social organisation (see Appendix E, p.244). Whilst the subjective domain was paramount to the research study, incorporating Layder's research map was an attempt to further explore the 'working parts' and 'whole' of the case within its bounded system (Yin, 2014). For instance, I hoped to gain valuable insights from comparing the macro and micro processes, such as exploring whether political and organisational factors impinged on the situated-activity and subjective perceptions of PA.

Therefore, the research strategy departed from an exclusive understanding of the essence of people's experiences, life stories, localised culture, micro processes of interaction, or constructing a substantive theory. Instead, I was interested in understanding the complexity of the research context as a rich and particularised conceptualisation (Creswell, 2007). To achieve such aim, some authors have embraced methodological pluralism as part of a case study design (Mertens & Wilson, 2012; Thomas, 2011b). Some have claimed that case studies might reveal the "essence of the phenomenon" (Baxter & Jack, 2008), p. 545), build theories (Eisenhardt, 1989), interpret cultural values and traditions (Thomas, 2011b), or re-story a person's life history (Hammersley & Gomm, 2000). Others have cautioned that methodological pluralism can position all research as a case study; a collection of methods, analytical process or a product (Patton, 2002; Stake, 2005). Nonetheless, as Thomas (2011b) maintained, the main justification for methodological pluralism should enable a deeper and more particularised understanding of the case, as the study naturally emerges. As such, Thomas created a typology to systemically guide and structure a case study design (Figure 4.2, p.87). His typology encompasses alternative theoretical perspectives, purposes, approaches and processes to investigate the case subject. To illustrate the research design of the current study, I have adapted Figure 4.2 to highlight the components that comprise the emergent methodology. In the following sub-sections, I detail the purpose, approach and process of the case methodology. First, I define the case in the next section.

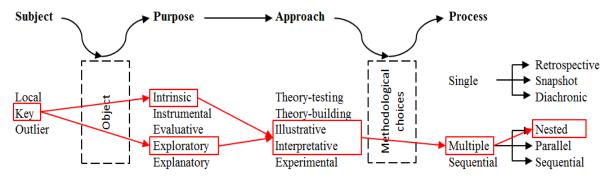


Figure 4.2 An overview of the case study methodology (adapted from Thomas, 2011a)

# 4.2.1 Defining the 'case'

Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame—an object—within which the study is conducted and which the case illuminates and explicates (Thomas, 2011a, p. 513).

The above definition encapsulates a common aspect of the case study methodology, where the selected 'case' is encompassed by a concrete or less concrete bounded system (Yin, 2014). A concrete system may include a case that is clear and specific (i.e. an individual, group, organisation, or partnership), whereas a less concrete case represents a somewhat abstract and complex system (i.e. a community, relationship, decision process, or a specific project) (Yin, 2014). Whichever system is selected as the case subject, Thomas (2011a) suggested that the case study must exist within an analytical frame 'of something' (otherwise the inquiry is not a case study). He maintained that the subject represents the practical and historical unity of the case, whereas, the analytical frame suggests the particularity and uniqueness of the case (Thomas, 2011b). Given the research aims, the case is defined below.

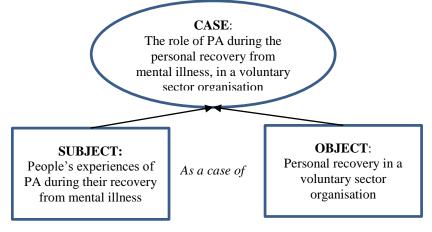


Figure 4.3 A distinction of the subject and object of the case.

Figure 4.3 indicates that a less concrete case subject was selected. This is perhaps is unsurprising, given the complex, multifaceted and context-specificity of the PA and mental health relationship (as discussed in Chapters 2 and 3). In effort to detangle some of this complexity, a 'key case study' was selected to exemplify an in-depth understanding of the subject within the analytical frame. As I am free from any personal experience of mental illness and personal recovery, a 'local case study' was not possible. Equally, because an existing understanding of the case subject is currently evident (e.g. Carless & Douglas, 2010; Crone & Guy, 2008), an 'outlier case study' was not selected. Rather, I hoped to contribute to the existing literature, furthering an understanding of the subject, via the exploration of the case object. As such, the nature of the case study was exploratory.

# 4.2.2 An exploratory and intrinsic case study

The exploratory nature of the methodology was mainly guided by my inherent interest of the subject area. Subsequently, I sought to develop my understanding of the case, to learn from the standpoint of those living the case. That is, I aimed to better understand the case in, "all of its particularity *and* ordinariness", by teasing out and learning from, "the stories of those 'living the case'" (Stake, 2005, p. 445, emphasis original). Hence, I was less interested in applying the case as an instrument, such as to evaluate the efficacy of the case, of to make generalisations. Although I held secondary, 'instrumental' interests (e.g. to inform other cases, influence policy, or to partially fulfil the Ph.D.), my intrinsic purposes were continually prioritised. Such purpose led me to follow my instincts and curiosities on issues that were deemed intrinsically pertinent to the case. Therefore, to foster my understanding of the case, an interpretative<sup>19</sup> case study was ideally suited for such purposes.

### 4.2.3 An interpretative and illustrative case study

Interpretative and illustrative approaches were selected as strategies to reconstruct an understanding of the case, and represent people's diverse and meaningful lives in a way that might resound with their lived experiences. This decision was in harmony with my theoretical perspective and resulted in the rejection of experimental

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<sup>&</sup>lt;sup>19</sup> Some authors have suggested that interpretivist and constructivist approaches refer to the same form of social inquiry (e.g. Lincoln et al., 2013; Ponterotto, 2005). However, epistemological differences have been expressed between these terms (Schwandt, 2000). To distinguish these approaches, I have taken the term interpretivism to suggest the processes in which an understanding might be meaningfully reached (i.e. empathetic identification), whereas, constructionism refers the reality which is meaningfully constructed via inter-subjectivity (Crotty, 1998; Schwandt, 2000).

and theory-testing approaches (see Chapter 3). While interpretative and illustrative approaches may afford theoretical contributions (Stake, 1995; Thomas, 2011b), I chose to reconstruct and represent knowledge that emphasised the particular (i.e. individual accounts), above the typical (i.e. abstracted theory) (Thomas, 2011a). Specifically, exploring the particular was inherently valued (above creating a theory) to understand Subsequently, interpretative approaches were the diverse participant standpoints. applied to understand the conceptual patterns that underline the emergent meanings of participant's stories (Darke, Shanks, & Broadbent, 1998). Understanding is a relational activity, where openness, dialogue and active listening are required to appreciate and interpret the perspectives of others (Schwandt, 1999). As such, qualitative methods are ideally suited to the interpretive approach (see Section 4.3) (Stake, 1995). Additionally, illustrative approaches can exemplify the uniqueness and diversity of the participant's experiences and context of the case (Ponterotto, 2005). Hence, a thick description of the research context is presented in Chapter 5, and a discussion of resonance is found in Section 4.3.9.

Accordingly, steps taken to maintain interpretative and illustrative approaches may encourage transferability and phronesis of the findings (Stake, 2005; Thomas, 2010). Phronesis is the proposition that knowledge is valid through a person's practical experience and individual context (Thomas, 2011b). As such, generalisations are cultivated through encounters that are of personal knowing and vicarious experience, 'naturalistically'<sup>20</sup> (Stake, 2000; Tracy, 2010). Therefore, another consideration of the research approach was to generate resonance that may encourage the transferability of the findings. If readers perceive a study to be of potential value, then the research may generate new expectations or inspire action (implicitly or explicitly)<sup>21</sup> (Frank, 2004; Stake, 2005). Such considerations affect the case process and boundary.

# 4.2.4 The nested case and boundary

As a 'case' is an integrated system with working parts, the contextual parameters that define the bounded system of a case may include time, activity and space (Baxter & Jack, 2008; Creswell, 2007). Subsequently, the number of such parameters can determine the inquiry process as a single or a multiple case study (Thomas, 2011a). Following the emergent nature of the inquiry, I selected a multiple, nested case design.

<sup>20</sup> Thus, for me, conventional generalisations are equally acceptable, when they resonate with my own phronesis and individual context at a particular moment in time.

<sup>&</sup>lt;sup>21</sup> This point is especially valuable, to facilitate standards of rigour in constructivist inquiry (see Section 4.4).

Specifically, I selected two key embedded units and acknowledged these to be situated within a wider context of social organisation (see Figure 4.4, p.91). This decision was informed by the research literature (e.g. Deegan, 2005), my emergent interpretations, and findings from the research context (historically situated during 2010-2014). Namely, it became apparent that the nature of people's PA participation, as a PM or non-PM, revealed some interesting implications with respect to their personal recovery journey. Following the guidance of Yin (2014), I sought to embed 'PA as a PM' and 'PA as a non-PM', to understand the working parts of the case in operational detail, and create a richer and more particularised understanding. Additionally, I recognised that people's PA experience might be influenced by other, known or unknown social structures. As such, in Figure 4.4 I have also considered the political, local setting and situated activity domains, which could shape epistemological contributions of the case. Should any social injustice arise as consequence of the research, I wanted to account for this within the case findings (e.g examine epistemological contributions at the macro level, such as policy change). Nevertheless, the selection of a multiple case study, Stake (1995) argued, detracts the intrinsic value from the single case. Respectively, to maintain my intrinsic interest, I sought to ensure that the embedded comparisons were not prioritised above the overarching case defined in Section 4.2.1.

In this section, I have explained the case definition, purpose, approach, and process of the research study. According to Thomas (2011a) these features may define a systematic case methodology, which I have applied to the thesis emergent methodology. Accordingly, the procedure of the research design is discussed next.

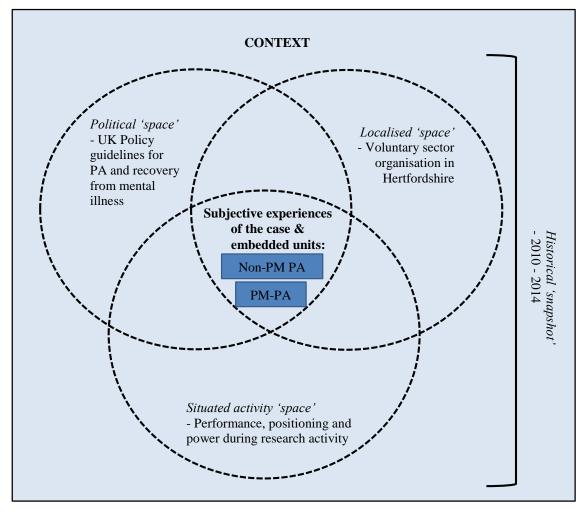


Figure 4.4 The nested case and boundary (influenced by Layder, 1993, Yin, 2014, and the emergent the research context)

# 4.3 Procedure: A crystallisation of qualitative methods

Typical to case study methodologies is the triangulation of multiple methods to validate the researcher's observations (Stake, 2005; Yin, 2014). Some authors have claimed that triangulation is an effective strategy to remove (researcher or participant) bias to apprehend a more accurate account by validating one observation against other perspectives (Barbour, 2001; Tobin & Begley, 2004). Nonetheless, such strategy subscribes to realism, which may prioritise one set of values above another (Tracy, 2010). For instance, a participant may report different values in an interview context compared to being observed elsewhere (Tracy, 2010). If a researcher triangulates these accounts, they neglect exploring the equal significance of each view within its respective context, thereby contrasting the social constructivist perspective (Tracy, 2010).

Alternatively, the 'crystallisation' of methods may align closer to my theoretical orientation (Tracy, 2010). The crystallisation of methods may illuminate the potential

diverse and multiple realities within an inquiry (Richardson & St. Pierre, 2005), including the researchers' subjectivity (Denzin, 2012). This approach tends to be reflexively orientated, to position an understanding of the phenomenon within the context of 'each side of the crystal' in which it was investigated (Richardson & St. Pierre, 2005). Doing so aspires to create a more sophisticated, "deepened, complex, and thoroughly partial understanding of the topic" (Richardson & St Pierre, 2005, p.963). Therefore, the crystallization of multiple methods fitted with the emergent case methodology (Thomas, 2011a) and constructivist perspective. Accordingly, multiple qualitative methods were used to create a crystallised understanding of the case. Prior the application of these methods, institutional ethical approval was first sought.

# **4.3.1** University Ethics Approval

The Psychology Department ethics committee at the University of Hertfordshire approved the thesis research design (approval number PSY/11/10/HK, Appendix F, p.245). Given that people diagnosed with mental illness were anticipated as vulnerable adults (The British Psychological Society, 2010), precautions were taken to minimise ethical risks and potential unforeseen adverse effects. To minimise the risk of psychological harm, distress or discomfort, I followed The British Psychological Society (2009, 2010) to guide the research design, ethically. For instance, each participant received an information document detailing; the requirements of the research study, confidentiality, and their right to withdraw from the study (see Appendix G, Verbal explanations of the research provided further opportunities for p.247). participants to ask questions, before consenting to volunteer in the study. Additionally, all research activity was conducted at participant's respective daycentre, for their convenience, comfort, and opportunity for immediate support if required. Following their participation in the research, each a debriefing document provided additional information and sources of support (see Appendix H, p.251). Notably, each research method brought alternative ethical considerations, which are discussed in the relevant method sections. Next, the participant selection<sup>22</sup> strategy is detailed.

# 4.3.2 Participant selection strategy

Following my social constructivist standpoint, a naturalistic sampling approach guided the participant selection strategy: "Studying real people in natural settings rather

<sup>22</sup>The term 'selection' is used instead of 'sampling' because a 'sample' implies that participants are generalisable to other 'samples.' Conversely, selecting participants indicates that the participants were chosen for a particular reason (Polkinghorne, 2005).

than artificial isolation" (Marshall, 1996, p. 524). Marshall (1996) suggests three approaches to naturalistic sampling: (a) Convenience, (b) purposeful, and (c) theoretical. Convenience sampling favours the selection of easily accessible participants, consuming less resources (i.e. time, effort, money), but can compromise the selection of information rich perspectives (Polkinghorne, 2005). Purposeful selection involves seeking out information rich cases through strategies that might, for instance, access outliers, maximum variation of experience, critical cases or key individuals with specific experiences or expertise (Patton, 2002). Lastly, theoretical sampling encompasses an iterative process of selecting participants to build, refine, or test an emergent theory (Marshall, 1996). As I was not seeking to build a theory and convenience sampling may overlook opportunities to select participants with information rich accounts, a purposeful selection strategy was sought.

Marshall (1996) suggests that purposeful selection requires developing a sampling framework to discern information rich participants. In the current study, the participants were selected via a combination of the typical case, snowballing and convenient strategies (Patton, 2002). Each strategy was used to select the most appropriate participants to provide information-rich accounts of PA and personal recovery experiences (i.e. typical case).

I began with the convenient selection of one mental health organisation, from a pool of nine local organisations. Each organisation was initially contacted (by email and telephone) to query potential research links. One voluntary sector organisation, Mental Health Help (a pseudonym) agreed to participate in the research. Other organisations did not participate because: (a) Another research study was being conducted; (b) one manager stated that the attendees would not be interested in the research; and (c) lack of response to the study invitation. These participant selection issues raised my awareness of the power imbalances apparent in social inquiry (e.g. the manager's opinions prioritised above the attendee's values). Accordingly, two daycentres from Mental Health Help (MHH) were included within the research study: The Rockwell Centre and Lavender Fields (pseudonyms). At the time of the study, each centre was running exercise-based projects to support people's recovery. Such activities included football, gym access, dance therapy, Zumba, yoga, badminton, swimming, walking groups, and martial arts. As the Rockwell Centre promoted a variety of PA opportunities, including an onsite gym, I selected this site to situate majority of the research activity.

At the Rockwell centre, the 'snowballing' strategy was first used to select participants through people's social networks (Noy, 2008). This included asking staff and attendees to suggest others who they thought might offer useful insights to the inquiry. Here, the centre manager enacted a gatekeeper, and provided a list of key informants who might offer rich accounts. Following the participant-observation strategy (see Section 4.3.4), I selected other participants through my subsequent field relations. An inclusion and exclusion criteria guided the selection strategy, to select members who attended the daycentre as part of their recovery and had engaged in the exercise-oriented activities at the centre (see Table 4.2, p.95). My field observations also led me to recognise a PA sub-culture within the centre, where the place and promotion of PA was apparent in numerous settings: PA oriented conversations occurred on the stairwell, in the tearoom, reception area and during other activities. Such observations led me to select several non-exercise staff to explore alternative staff perspectives on the role of PA during recovery. In contrast, I did not select attendees who had not experienced any exercise-oriented activities at the centre. My intention here was to focus an understanding on people's experience of PA and recovery, rather than exploring the reasons for PA non-participation.

Nevertheless, in effort to maintain my standpoint values (Section 3.4), I welcomed the involvement of self-selected participants. As such, I advertised the study at both research sites to: (a) Encourage equal opportunity, (b) open access to the study, and (c) to part satisfy the fairness criterion (see Section 4.4.1) by minimising power inequality while also encouraging a breadth of understanding across multiple stakeholder groups (see Appendix I, p.252) (Wilson & Clissett, 2011; King & Appleton, 1999). Moreover, I took into account what Humphreys, Phibbs & Moos (1996) had cautioned while endorsing the self-selection of research participants at voluntary organisations:

When individuals are randomly assigned or coerced into going to a self-help group...the organization loses its voluntary character (p. 302).

Hence, incorporating self-selected participants in the selection strategy moved the research closer to a naturalistic approach, whereas exclusively selecting participants risked opposing the spatial context of the study (Humphreys et al., 1996). Further, the involvement of self-selected participants enacts a convenient sampling strategy, which according to Silverstein et al., (2006), is a well-suited strategy for selecting participants from hard to reach and marginalised groups.

Table 4.2 Research inclusion and exclusion criteria

#### **Inclusion criteria**

- Have been regularly attending the daycentre for a minimum of six months, as an attendee, volunteer or staff member
- Currently participating in exercise-orientated activities at the daycentre (attendee participants)
- Have an understanding of other people's experiences of participating in exerciseorientated activities at the daycentre (staff participants)
- Feel healthy enough to participate in the research (attendee participants self-assessed and confirmed by centre staff)
- Are aged 18-65, male or female and from any ethnic background
- Can understand, speak, read and write English

### **Exclusion criteria**

- Are under the influence of alcohol or nonprescriptive medication during the study
- Feel unwell, experiencing serious symptoms of mental ill-health before, or during the study (attendee participants self-assessed and confirmed by centre staff)
- Have been told by their doctor or the mental health service provider that they should not participate in the study.

Participant selection ceased when I reached a more sophisticated construction of the case, and exhausted my available resources (e.g. time, energy, costs) to the point where further meanings of the case could no longer be achieved (i.e. the 'redundancy of data') (Lincoln & Guba, 1985, 2013). As 'theoretical saturation' was deemed impossible (Morrow, 2007), my reflexive approach provided insights to determine the 'redundancy of data,' (Khalil, 2013). Hereafter, I implemented an 'exit strategy' in my departure from the field (Picture 4.1, below).



## 4.3.3 Participants

A total of 29 volunteers participated in the research study, comprising 7 members of staff (4 female, 3 male; mean age of 45.4 [SD  $\pm$  11.1] years, and 22.6 [SD  $\pm$  18.5] months spent working at the centre), and 22 centre attendee's (11 female, 11 male; mean age of 42.6 [SD  $\pm$  9.7] years, and 20.7 [SD  $\pm$  12.3] months attending the centre). Where appropriate these participants were selected for staff interviews, attendee focus groups, or attendee photo-elicitation methods between December 2010 – November 2012 (see Table 4.3, below).

Table 4.3. Participant information

Participants (all	Centre	Role at the centre	Age*	Sex	Time at					
names are			(years)		centre*					
pseudonyms)					(months)					
Staff interviews: Listed in chronological order of interviewing										
Trisha	Rockwell	Receptionist	59	female	13					
Steven	Rockwell	Centre manager and fitness	53	male	24					
		instructor								
Danielle	Rockwell	Employment project officer	41	female	6					
		and volunteer coordinator								
John	Rockwell	Peer-support and community	49	male	25					
		liaison								
Fran	Lavender Fields	Project coordinator and yoga	44	female	60					
		instructor								
Ivy	Rockwell	Zumba instructor	48	female	6					
Ricky	Rockwell	Fitness instructor	24	male	24					
Focus groups FG A: Listed in no particular order										
Tim	Lavender Fields	attendee	49	male	24					
Linda <sup>2</sup>	Lavender Fields	attendee	40	female	6					
Hayley	Lavender Fields	attendee	55	female	6					
Lindsey	Lavender Fields	attendee	49	female	18					
Carlos	Lavender Fields	attendee	60	male	10					
Iris	Lavender Fields	attendee	56	female	36					
Judy <sup>2</sup>	Lavender Fields	attendee	35	female	6					
Focus groups FG B: Listed in no particular order										
Vince	Rockwell	attendee	40	male	8					
James	Rockwell	attendee	33	male	30					
Lucas	Rockwell	attendee	39	male	24					
Focus groups FG C: Listed in no particular order										
Ivan	Rockwell	attendee	38	male	33					

Richard	Rockwell	attendee	31	male	36		
Tina <sup>2</sup>	Rockwell	attendee	44	female	6		
Janice	Rockwell	attendee	49	female	6		
Tom**12	Rockwell	attendee	53	male	6		
Seb	Rockwell	attendee	33	male	6		
Amy	Rockwell	attendee	27	female	33		
Photo-elicitation: listed in chronological order of interviewing							
Stacy <sup>12</sup>	Rockwell	attendee	25-30	female	6		
Derek²	Rockwell	attendee	36	male	6		
Heidi	Rockwell	attendee	49	female	24		
Sarah	Rockwell	attendee	27	female	18		
Jacob	Rockwell	attendee	43	male	24		
Tom**2	Rockwell	attendee	54	male	21		

<sup>\*</sup>Some participants did not inform their age (¹) or duration at the centre (²). This information has been estimated based on my participant-observations. Such estimations are not included in the participant mean values.

Following the participant-observations, majority of participants were selected from the Rockwell Centre. However, some attendees did not participate in the research because they: (a) Did not meet the inclusion criteria i.e. too unwell to participate; (b) did not want to talk in a (focus) group environment; (c) were too busy or not interested; (d) they felt uncomfortable using a digital camera for the photo-elicitation; or (e) I perceived them as being potentially vulnerable (e.g. one person following a relationship break-up). Nonetheless, while some individuals did participate in the data collection methods, my general field relations and interactions within the community setting as a whole contributed to a richer, deeper, critical, reflexive and more authentic understanding of the case (Guba & Lincoln, 1989). Suitably, the participant-observation method is discussed next.

# 4.3.4 Participant-observations

Participant-observations involve spending a prolonged period within the 'natural' setting of the research context (Lincoln & Guba, 1985). Thomas (2011b) suggested that doing so, adds breadth and depth to the conceptualisation of the case within its bounded system. To perform participant-observations, I selected the participant-observer strategy (Gold, 1958). Other strategies were disregarded, for instance, a complete-observer role (and to a lesser extent an observer-participant) is likely to be detached from the field activities and participant interactions (Sparkes & Smith, 2014). Consequently, this may reduce the researcher's ability to understand the

<sup>\*\*</sup>Tom was selected for focus group and photo-elicitation methods.

meaning that the participants ascribe to their everyday experiences (Patton, 2002). Conversely, complete-participant roles have been suggested to risk biased interpretations owing to the researcher's over-involvement in the field, potentially 'going native' (Smith, 2010). Such 'complete' roles may further apply covert practices, which blur ethical boundaries and damage participant trust and rapport (Mulhall, 2003).

Accordingly, I spent two years (intermittently) at the Rockwell centre performing participant-observations<sup>23</sup>. I aimed to maintain an approach that was, "engaged with the people...as a friend as much as a neutral researcher" (Angrosino, 2007, p.55). In doing so, I became accustomed to the participant's emic experiences, social norms, values, goals and beliefs (Angrosino, 2007). A degree of distance was equally important to maintain a neutral stance (Smith, 2010) and prevent my values from overruling the participant's standpoint. To balance my etic perspective and emic reconstructions, I kept a field journal to log rich descriptions of events pertinent to the research agenda (Patton, 2002). This included details of the daycentre activities, participant interactions, my interactions, and observations of people's experiences, behaviours, beliefs, actions, emotions and goals. These events were reflexively explored, interpreted and informed the emergent methodology. In total, the participantobserver role afforded numerous benefits, including: (a) Increased participant rapport, trust and recruitment, (b) enhancing my ability to empathise with the participant stories, (c) creating personal knowledge of the discourses, traditions, and values of the culture, (d) examine potential saliences or discrepancies to the participant's accounts, and (e) probe particular aspects that are of interest to the research agenda (Erlandson et al., 1993; Patton, 2002). Thus, the participant-observations were a key strategy in the case study design and supplemented the application, collection and analysis of other qualitative methods.

### 4.3.5 Staff interviews

Interviews are an effective strategy to 'flesh out' people's multiple, complex, multi-layered or taken-for-granted experiences (Polkinghorne, 2005). As the interviewer and interviewee engage in dialogue, they enter into a 'double hermeneutical' (Giddens, 1984) process of questioning, answering and reflecting on an interview topic (Kvale, 1996). Here, the researcher and participant actively and continually interpret each other's values to jointly-construct an understanding that

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<sup>&</sup>lt;sup>23</sup> My intermittent participant-observation period was due to employment and personal commitments. The total time spent was estimated to equate to two days per week for nine months at the daycentre. This was approximated from reviewing the dates recorded in my field journal.

intersects the participant's experiences with the researchers' aims (Rennie, 2012). Thus, interviews have been coined a 'conversation with a purpose' (Bingham & Moore, 1959, as cited in Burman, 1994), which can position the researcher in a dominate role (Kvale, 2006). Nevertheless, interviews are said to afford reciprocal benefits for people to tell 'untold stories,' discuss sensitive or emotional experiences within an empathetic and comfortable environment (Dickson-Swift, James, Kippen, & Liamputtong, 2007). Further, interviews are suggested to afford participants therapeutic and reflexive opportunities, raise their self-awareness, awareness of others, or empower them into action (Brown Wilson et al., 2011; Peel, Parry, Douglas, & Lawton, 2006).

In the current study, an interview strategy was selected to explore staff perceptions on the role of PA during recovery. Doing so, a multi-layered interpretative account (a 'triple hermeneutic') was constructed from my interpretations of staff member's interpretations of attendee's interpretations and experiences (Alvesson & Sköldberg, 2009; Weed, 2005). However, two shortcomings of a triple hermeneutic include the loss of individual experience (Weed, 2005) and generation of dominate narratives (Alvesson & Sköldberg, 2009). Nonetheless, it was anticipated that interviewing staff members would generate synthesised accounts not directly experienced or conceived by the attendee's (McFarland, Barlow, & Turner, 2009). For instance, staff members might report stories that are outside the attendee's subjective awareness, or they may detail previous 'successful' attendees that no longer attend the centre.

Accordingly, a semi-structured approach was selected to encourage the natural flow of interview discussion while also retaining a structure to ensure that the research aims are met (Dicicco-Bloom & Crabtree, 2006). Semi-structured interviews enable a flexible strategy to explore unanticipated topical tangents and emergent insights (Kvale, 1996). In contrast, structured interviews may fail to advance the emergent design; whereas, an unstructured style can become problematic if numerous diversions detract the conversation from the research aims (Patton, 2002). As such, a semi-structured interview guide was created to explore six discussion topics pertinent to the research aims, on: (a) Recovery, (b) hope, (c) positive identity, (d) meaning, (e) personal responsibility, and (f) PA at the centre (see Appendix J, p.254). To deepen the understanding of each topic, additional probes and open-ended questions were used throughout each interview (Kvale, 1996). These strategies were used to further understand people's general engagement at the centre (i.e. attending other activities) and their PA experiences in relation to personal recovery.

The interviews were conducted 'face-to-face' at the staff member's respective centre. Light refreshments were also provided (as a token of appreciation). Overall, the interviews lasted 45-120 minutes, and each interview was recorded via a digital Dictaphone (Olympus, DS-2400). After each interview, reflexive notes were kept to assist my understanding of the interview context. Similarly, this approach to interviewing was applied to the focus group and photo-elicitation methods.

## 4.3.6 Attendee focus groups

Focus groups provide ideal opportunities to interpret a peer-constructed dialogue of a research topic in a more 'naturally' occurring context (Kitzinger, 1994; Morgan, 1996). Typically, focus groups illuminate the communicative conventions of everyday interaction, such as the use of jokes, metaphors, terminologies, empathy or arguing (Morgan, 1997). Subsequently, focus groups construct a multifaceted dialogue, determined by the social dynamics of the participant group (Morgan, 1996). Such context contrasts the traditional two-way researcher-participant interviewing techniques, thus displacing possible power imbalances (Sparkes & Smith, 2014). For instance, dominate, agreeable or silent group members might shape a 'common ground' narrative, wherein simultaneous discourses may inform how people converge, diverge or conflict with peers (Hydén & Bülow, 2003). As a result, some participants may reflect and potentially change their positioning to converge with the values of others, thereby empowering social action (Sparkes & Smith, 2014). Such potential benefits were of particular interest to the research agenda and theoretical perspective.

In the current study, as participants were selected from their local daycentre, it was likely that the groups were homogeneous and formed of previous acquaintances. This was seen as advantageous, given that it may facilitate group rapport, trust, discussion, peer debate, and encourage the disclosure of information within a preestablished comfortable environment (Kitzinger, 1994; Rabiee, 2004). Additionally, my participant-observer role had created pre-established relationships that equally influenced the context and dynamic of the group discussions (Morgan, 1997). Nonetheless, as the focus group moderator I aimed to maintain a distanced role by encouraging a participant-led discussion, providing examples to elaborate discussion topics and facilitate the subsequent group dialogue (Onwuegbuzie, Dickinson, Leech & Zoran, 2009). The focus group topics were semi-structured to understand people's everyday experiences of: (a) Their PMs, (b) recovery, (c), PA, (d) hope, (e) identity, (f) meaning, and (g) responsibility (see Appendix K, p.256). To facilitate the group

discussion, I used personal (e.g. listening skills, being welcoming, empathetic) and professional characteristics (e.g. being analytical, directing the group discussion probing questions to satisfy research aims) to probe for a richer understanding in relation to the research aims (Fern, 2001). Prior to each focus group, several 'ground rules' were collaboratively agreed upon by the group members. Typically, this included the mutual respect of each other's values, confidentiality, not to interrupt others, and not to disclose information that they might later regret. Furthermore, I aimed to facilitate a comfortable atmosphere through the provision of healthy refreshments (Fern, 2001). Similar to the staff interviews, the focus group duration ranged 115-185 minutes, and a digital Dictaphone was used to record the content of each session. Following the focus group method, the photo-elicitation method was implemented.

# 4.3.7 Attendee photo-elicitation

The photo-elicitation method is a fun, creative, reflexive and therapeutic way of understanding the social world through visual and representation and exploration (Drew et al., 2010; Van Auken, Frisvoll, & Stewart, 2010). Specifically, the photo-elicitation method requires that participant's take photographs to visually represent their experiences of a research topic, which are later discussed with the researcher in a semistructured interview (Harper, 2002). Noticeably, this approach integrates some participatory ideals into the inquiry: Doing interviews with participants rather than on participants (Loeffler, 2004). The participants perform a key role in the data collection (by taking the photographs), and they add to the analysis by offering their interpretations of the photographs (Oliffe & Bottorff, 2007). As such, formal aspects of interviewing can be avoided by encouraging a discussion that closely "resembles a natural exchange over family snapshots" (Sitvast & Abma, 2012, p. 190). Accordingly, this method may displace power imbalances, increase rapport and encourage the disclosure of information (Loeffler, 2004). The method may further empower participants to convey their experiences, illuminate the hidden emotions, experiences, or facades of illness and suffering (Erdner & Magnusson, 2011; Sitvast et al., 2010).

Such considerations move this method beyond traditional interviewing forms. Another difference is the opportunity to explore tangible, symbolic and materialistic representations of an experience, which may identify particular signs, symbols, clothing, garments, architectural designs, or metaphoric images relevant to the experience (Croghan, Griffin, Hunter, & Phoenix, 2008; Sitvast & Abma, 2012). Such interpretations are likely to inform the interview dialogue, enhance the participant's

memory recall, and raise their consciousness on the tacit knowledge associated with their experiences (Harper, 2002; Wakefield & Watt, 2012). Moreover, exploring the participant's photographs can expose underlining meanings of identity, cultural beliefs, daily practices, non-verbal behaviour, or significant and memorable life events (Clark-IbaNez, 2004; Pink, 2007). This may move an understanding closer to unearthing experiences that are 'taken-for-granted', habitual, automatic or unconscious; such as PA participation (Guell, Panter, Jones, & Ogilvie, 2012; Rhodes, et al., 2010). Hence, this method may raise the participant's consciousness of their lived experiences and evoke therapeutic benefits, such as mitigating illness-related frustrations, reframing illness narratives, reconstructing positive meaning, or empowering social change and action (Lorenz, 2011; Sitvast, Abma, & Widdershoven, 2010).

Accordingly, in the research study each person was provided with a digital camera (Kodak FunSaver digital, FD3, China), manufacturer's instruction manual, and a camera demonstration. Hereafter, the participants were instructed to record photographic images of their everyday experiences of PA and PMs in relation to their recovery journey. The participants were requested to limit their photographs to a maximum of twenty, in effort facilitate a more 'focused' discussion during the interview. To guide their photography decisions, the participants were encouraged to select photograph that were particularly meaningful, interesting, relevant or important to their experiences (Harper, 2002). Additionally, Wiles et al., (2008) guidance of ethical considerations were followed concerning issues of photograph copyright, anonymity, inappropriate photographs, photography in public places, and photography of others (see Appendix G, p.247).

Once the photographs were developed, they were numbered to guide the interview discussion and data analysis. At the interview, the photographs were displayed together to give a sense of the 'whole' (see Picture 4.2, p.103). During the interview, the photographs were used in a flexible manner, discussed singularly, in groups, ordered, or reordered to facilitate the unfolding discussion. A semi-structured interview guided the discussion, to understand the underlying meaning and importance of people's photographs in relation to their PMs and PA experiences during recovery (see Appendix L, p.257). Additional probes (e.g. "do you partake in any other PA or PMs that were not photographed and would also like to share?") were used to deepen the participant's responses. Overall, the interviews ranged 67-162 minutes, were recorded via a digital Dictaphone, refreshments were provided, and the participants were offered at least one

break during the interview. Following the data collection, a thematic analysis (TA) of the dataset was undertaken, which is discussed next.



Picture 4.2 The photo-elicitation interview

## 4.3.8 Thematic analysis

Thematic analysis is a flexible and theory-free approach that can be used to analyse, explore, understand and report the patterns of qualitative data (Braun & Clarke, 2006). Although TA can be applied from postpositivist or constructivist paradigms (Braun & Clarke, 2006), Sparkes & Smith (2014) suggest that TA is an effective strategy to interpret and compare participant cases. Owing to my constructivist standpoint, TA provided an analytical framework for me to construct an inductive understanding of the case by interpreting the latent and manifest patterns<sup>24</sup> of the participant's accounts. Henwood (2006) proposed that greater emphasis on latent patterns creates a more analytical and interpretative understanding. Nevertheless, comparison of the latent and manifest patterns may provide a richer and deeper understanding of the case (Thomas, 2011b). Accordingly, a TA enables the researcher to organise data into key themes illustrating the interpreted meaning of the participant's accounts (Guest, MacQueen, & Namey, 2012), which was desirable given the interpretative case study (Section 4.2.3) (Stake, 1995; Thomas, 2011b).

Additional justifications for TA were made in line with the purpose, approach and process of the case study. While I was predominately interested in understanding people's subjective experiences, I did not want to neglect the possible situated, social,

<sup>24</sup>Manifest content is analysed via the reoccurrences of codes, categories and themes; whereas, latent content is analysed by interpreting the explicit and implicit meanings of the participant accounts (Braun & Clarke, 2006).

cultural and political issues that may bound the case. Such features might be overlooked in Interpretative Phenomenological Analysis (Guest et al., 2012; King, 2004), which focuses on elucidating the 'essence' of the meanings that people ascribe to their lived experiences (Smith, Flowers, & Larkin, 2009). Additionally, the theory-free application of TA resonated with the case study design, above the requirement of constructing a substantive grounded theory (Braun & Clarke, 2006). Similarly, a discourse analysis was rejected since this approach emphasises on the micro-processes of interaction, which would neglect the narrative content of people's stories (Smith & Sparkes, 2005). However, a narrative analysis was believed to overlap with the case study approach (Thomas, 2011b) and TA (Riessman, 2008; Smith & Sparkes, 2009). Nonetheless, a storyteller approach was not selected because I wanted to reconstruct people's stories to illustrate the working parts of the case, which required deconstructing and reorganising people's stories.

Accordingly, to implement systematic analysis approach to TA, I followed the guidance of Braun & Clarke (2006) to implement six phases: (a) Data familiarisation, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. Although these steps suggest a linear approach, in practice TA involved an iterative process of analysis and data collection (Braun & Clarke, 2006). Doing so facilitated my abductive reasoning, to generate the codes inductively, which were then applied deductively to compare and contrast with the emergent themes during the later stages of analysis (Braun & Clarke, 2006; Rennie, 2012). To facilitate the TA, a computer-aided qualitative data analysis software (CAQDAS) package was used to audit, organise and manage the data sources (see Appendix M, p.258). Hereafter, high-ordered themes and sub-themes were identified as illustrative constructs of the case. The representation of these themes is considered next.

### 4.3.9 Resonance: Representing the case

In the Chapters 7, 8, and 9, a thick description of the findings are presented to illustrate the unique, individual, diverse and multiple values of the participants (Lincoln & Guba, 2013). To represent the case, 'realist tales<sup>25</sup>' were selected to demonstrate the emic and etic perspectives of the inquiry. In contrast to traditional 'scientific tales' (i.e. prioritising the researchers narrative to portray an objective and value-free article,

<sup>&</sup>lt;sup>25</sup>It is important to note that realist tales do not contradict my ontological rejection of realism. There are multiple meanings to realism (Schwandt, 2001). In terms of representation, a realist ontology adopts a 'scientific tale', which differs to the realist tale (Hopper et al., 2008).

Sparkes, 2002), I hoped to illustrate the findings while also distinguishing my values from the participants. Accordingly, Van Maanen (2011) proposed four conventions of realist tales: (a) Experiential author(ity), (b) typical forms, (c) the native's point of view, and (d) interpretative omnipotence. Typically, in realist tales authors are absent from the text to reconstruct the participant's values from the interpretative perspective of the researcher (Hopper et al., 2008). Researchers often aim to, "connect theory to data in a way that creates spaces for people's voices to be heard in a coherent context, and with specific points in mind" (Smith & Sparkes, 2009, p.281). In the current study, quoted extracts from the interview transcripts were used to represent the participant's values in relation to the interpreted themes. However, some aspects of the realist tale form conflicted with the research design; namely, emphasising on the absence of the author and the removal of rhetorical literacy devices, including a thick description (Van Maanen, 2011). Hence, following Sparkes's (2002) advice, I modified the realist tale method to position myself within the social context of the constructed findings.

Selecting participants quotes were chosen carefully, applying the following guidance. Some quotes were selected to 'speak for themselves' to exemplify a 'thick description' of the theme, to illustrate or explain my interpretations of the case. At other times, quotations were chosen to deepen thematic meanings through the context of the participant's context and voice (Kvale, 1996). Quote length was also considered: Narrow or broad quotes may fail to portray the complexity and meaningfulness of the data (Graneheim & Lundman, 2004). Some quotes were selected through writing analytically, during memo and report writing, as my understanding of the theme unfolded reflexively. I also aimed to select quotes that illustrated the diversity of the participant's perspectives to reconstruct an understanding of the case fairly from the multiple subjective perspectives. However, this meant that occasionally, some 'good' sections of text were not selected, to prioritise a multi-vocal representation of the findings, and prevent participant bias. In practice, equality of voice in the findings could not be achieved because some participants contributed to a richer understanding of the case more so than others did. Further considerations of constructivist rigour are discussed next.

# 4.4 Authenticity: Rigour in constructivist research

Following the paradigm shift of my theoretical perspective, the quality standards that guided my former position were abandoned (i.e. reliability, internal and external validity). In the Ph.D. phase two, the 'trustworthiness' criteria were adopted to guide

the research inquiry in an attempt to satisfy constructivist the standards of rigour (Lincoln & Guba, 1985) (see Appendix N, p.265). I selected the trustworthiness criteria mainly owed to the popularity of its application within the sport, health and exercise literature (Culver et al., 2012). However, near to the completion of phase two, I departed from the trustworthiness criteria, as I then understood that this approach 'parallels' the postpositivist criteria (Sparkes, 1998). Consequently, several axioms of constructivism were at risk of 'philosophical contradiction' (Smith, 2012). For instance, trustworthiness was 'methods-focused', which may neglect to ensure that the participant's standpoints have been fairly honoured and represented throughout the inquiry process (e.g. challenging and negotiating the inquiry product) (Erlandson et al., 1993). Furthermore, Sparkes (1998) criticised that the trustworthiness criteria might be applied to achieve a false-consciousness, and illustrate the multiple participant realities in a foundational way (i.e. filtering trustworthy from untrustworthy constructions). Following such recognition, I selected the authenticity criteria as the guiding standards that are intrinsic to the assumptions of constructivism (Lincoln & Guba, 1986).

The authenticity criteria include: (a) Fairness, (b) ontological authenticity, (c) educative authenticity, (d) catalytic authenticity, and (e) tactical authenticity (Lincoln & Guba,1986). Notably, Lincoln & Guba (1986) suggest prioritising the fairness criterion to ensure the participant accounts have been fairly reconstructed throughout the inquiry. Interestingly, this criterion appears to overlap with the trustworthiness criteria (Manning, 1997), although some authors have proposed that the strategies of trustworthiness are complementary to authenticity (Schwandt, Lincoln, & Guba, 2007; Tobin & Begley, 2004). Subsequently, some strategies from my earlier trustworthiness standards later became subsumed by the authenticity criteria. Additional considerations of transformative and participatory ideals are seen in the authenticity criteria (i.e. empowering the participant's into social change) (Lincoln, 2001; Lincoln et al., 2013), which converges with Lincoln & Guba (2013) standpoint of social constructivism. Such considerations are discussed next.

#### 4.4.1 Fairness

The standards of fairness are used to judge whether the researcher has safeguarded and honoured the participant's values throughout the inquiry (Lincon & Guba, 2013). Generally, the researcher should aim to provide a thick 'multivoice' description of the participant's values; examine the conflicts, confluences and congruence, while striving for equality among the multiple constructions (Manning,

1997). Given the privileged position of the researcher, strategies to scrutinise, challenge and negotiate reconstructing the "Other," were sought a process of subjective and intersubjective negotiation. The following strategies encompass the guidance set out by Guba & Lincoln (1989) and Manning (1997).

## 4.4.1.1 Subjective negotiation

Subjective negotiation was found through my ongoing engagement in reflexivity. Reflexivity has been suggested as the self-practice and evaluation of the researchers' role within the inquiry:

Actual (prereflective) lived experience can never be fully grasped in its immediate manifestation, with reflexive analysis, the researcher is aware of experiencing a world and moves back and forth in a kind of dialectic between experience and awareness (Finlay, 2002b, p. 533).

Accordingly, reflexivity examines the 'subjectivist' element of the researcher's subjective-transactional epistemology (Manning, 1997). Through self-exploration, a researcher may attempt to search and scrutinise the possible implicit assumptions that risk a less sophisticated interpretation of the "Other". Here, reflexive writing is a key process to textualize the researcher's inner monologue and elucidate their pre-existing theories, assumptions, feelings, beliefs or hunches (Manning, 1997). To aid such process, throughout the research I applied three styles of reflexivity as: (a) Introspection, (b) intersubjectivity and (c) social critique (Finlay, 2002a). Following Finlay (2002a), reflexive introspection explicated my subjectivity, ideologies, and values, to discern the impact that I might have upon the research context and vice-versa (e.g. Khalil, 2013). Reflexivity as a social critique was used to explore the power relations that might naturally arise during social interaction. Examples of such reflections are provided in Chapter 5, where I examine the researcher-participant relationship to contextualise the research and epistemological contributions. Additionally, I applied intersubjective reflexivity to examine the researcher-participant relationships, particularly when interpreting the meanings that were co-constructed from the interview, transcripts and participant photographs. To demonstrate, during the photo-elicitation method Jacob took a photograph that challenged my preconceptions (Picture 4.3 and reflexive excerpt, p.108). This example indicates that although emergent constructions (i.e. my interpreted context) were equally important as historical ones (i.e. the participant's original meaning), the reflexive exploration of such meanings aided my understanding of Jacob's context and not my own (preconceptions).



Picture 4.3 An evil robot, or is it?

### Researcher reflexive journal, 27.03.13

When I first saw this picture, I thought it was quite negative - I thought that it looked like an evil robot or something - but that was my perception. To Jacob, it has a positive meaning because it reminds him of his favourite exercise equipment in the gym. This difference highlights the alternative contexts ascribed to the image...the dark overshadowing in the picture (possibly due to the room lighting) created, to me, what looks like something quite daunting. Even though I share a similar enjoyment of the cross trainer and have some fond memories of exercising on a cross trainer, knowing the difficulties that some people face in terms of exercise barriers, my first reaction was a negative one.

These forms of reflexivity were recorded in a reflexive diary using free-writing exercises, mind-maps, poetry, thick textual descriptions, or photographs. Nevertheless, some caveats on reflexivity have been raised. One concern is the overemphasis of subjectivity may lead to 'navel gazing' and self-indulgence, thereby neglecting the participant voices and their epistemological contributions (Finlay, 2002a; Sparkes, 2002). Additionally, Manning (1997) cautioned that reflexive approaches are unable to explicate all of the researcher's subconscious awareness. As such, inter-subjective negotiation with the inquiry stakeholders is another strategy to challenge the researchers' assumptions.

## 4.4.1.2 Inter-subjective negotiation

To prevent the researcher's values from dominating the inquiry, strategies of informed consent, member checking and peer-debriefing were applied in the research study. These strategies invited opportunities for the inquiry stakeholders to negotiate

their constructions, involvement, and to challenge the researcher (Erlandson et al., 1993). Doing so may minimise power imbalances, hidden agendas, and move the inquiry closer to participatory ideals (Lincoln, 2001). Specifically, informed consent was undertaken initially (see Section 4.3.1), and as the emergent design unfolded (Lincoln & Guba, 1986). Additionally, I engaged in peer debriefing with stakeholders that were not directly involved in the research, but who are knowledgeable in qualitative methods, sport and exercise psychology, or mental health. This occurred formally and informally, at conference events (e.g. Khalil, Ramon, & Pack, 2013), postgraduate seminar groups, or as planned peer debriefing meetings. During such occasions, an expanding dialogue was created among a community of peers to challenge and scrutinise my emergent understanding, which further refined my reconstructions of the case (Erlandson et al., 1993; Manning, 1997). For example, one key influence emerged following a peer-debriefing meeting (on 03.01.14), which led to changing the conceptualisation of the findings (Section 6.1) from a concept-map to an illustrative process. This move attempted to better reflect the attendee's recovery journey at the voluntary organisation and to highlight the role of PA in this process.

Additionally, member checking was implemented to negotiate the removal, change or editing of any of the participant constructions in the inquiry (Manning, 1997). Such negotiation could lead to the removal of valuable data; however, the participant's values were prioritised above the loss of data. Specifically, I aimed to promote fairness of the inquiry process and product, as opposed to applying member checking for verification purposes (Lincoln & Guba, 1986). Subsequently, to implement member checking, all participants were offered a copy of: (a) Their interview transcript, and (b) the research findings presented in a case report. Where possible, I met with the participants to discuss and understand their perspectives of these research products.

Participants who received a copy of their transcript were encouraged to comment on the dialogue, their interview participation, and to identify parts of the transcript they wished to elaborate, remove or edit. This was undertaken with the intention to empower the participant's choice of how best to represent their experiences. Subsequently, this led to: (a) The removal of content from two participant transcripts; (b) removal of transcript repetition and verbatim spelling of some words; (c) additional content to three participant transcripts; and (d) some participants reflected on their PA and recovery progress since participating in the study and receiving the transcript. For example, Lucas and Janice recollected positive perceptions of PA participation as they

progressed in recovery, indicating a possible shift in their PA attitudes, stages of change and behaviour regulation.

Furthermore, I created a case report to share the research findings with the participants, and hoped to stimulate a dialogue on the emergent research 'product.' Doing so, I aimed to provide an opportunity to integrate the participant values with the emergent interpretation and representation of the research findings. The member checking report comprised: (a) An introduction detailing the research rationale, questions and inquirer assumptions; (b) overview of the research methods; (c) the research findings including a schematic overview, brief description and five exemplar quotes per theme; (d) discussing the research findings according to the research questions, and possible implications of the findings; and (e) questions relating to the ontological, educative, catalytic and tactical authenticity of the study. Accordingly, majority of the participants (n = 20) received the report, and five participants commented on the report. The results of the member-checking include: (a) Renaming three themes to better reflect the participants perspective; (b) some influenced my decision to select certain quotes in the thesis; (c) several elaborated on what the findings meant to them thereby extending my understanding of the case; (d) many affirmed that the findings resonated with them; and (e) some reflected on their raised self-awareness of how PA and PMs contribute to their recovery. For example, Vince questioned the title of Sub-theme B2 (Section 7.2.2), initially phrased, "you've always got a shoulder to cry on." He perceived that this title limited the way in which people experience social support at the centre, such as sharing new ideas, being creative, or leaning from others. Subsequently, such discussions led recrafting some aspects of the research findings, thereby fostering inter-subjectivity within the thesis.

Nevertheless, Koch (2000) noted that the multiple stakeholders of an inquiry are likely to contribute to varying degrees of input, displays of dominance and negotiate content to reflect their values. Hence, fairness was a political activity whereby equality was also inherently tied to the researcher's values (Seale, 1999). As such, maintaining fairness could incur some ambivalence and conflict between my values while also honouring the participant's values. Here, reflexivity was helpful when exploring such dilemmas (See Chapter 5). Another implication of member checking surfaced after the prolonged period of fieldwork and data collection, whereby eight participants were no longer available to review the case report. Additionally, ten participants declined to review the interview transcript, and as such, it is possible that some participants view member checking as a time-consuming activity. Consequently, this meant that some

participant's values could not be integrated into the emergent findings. Taking this forward, researchers applying longitudinal studies might consider implementing ongoing member checks, opposed to two fixed points as attempted in this study (i.e. transcript and case report member checking). Therefore, although ongoing meetings occurred with the centre manager, a participatory steering group is one possible strategy to advance this criterion. Despite such drawbacks, the above strategies of fairness contributed to valuable insights examining and understanding the remaining authenticity criteria.

### **4.4.2** Ontological and educative authenticity

The act of participating in research can raise people's tacit knowledge of aspects they had not previously considered, valued or appreciated (Lincoln & Guba, 2013). For instance, person-centred techniques<sup>26</sup> often supplement qualitative interviewing, which may enhance the participant's self-awareness (Patton, 2002). The interviewer may act as an alter ego; enabling participants to hear their experiences reconstructed through a verbal monologue or a paraphrased reflection (Rogers, 1951). Doing so may create cognitive dissonance within the participant's social, cultural or political context, to subsequently appreciate, relate to, empathise, or become more informed of the experiences of others (Lincoln & Guba, 1986). Similarly, they may also experience phronesis and naturalistic generalisation following their reading of the research report (Thomas, 2011c). Thus, by examining such occurrences, the research can understand where the participant's self-awareness (ontological) and the awareness of others (educative) have grown more sophisticated than previously (Lincoln & Guba, 2013).

Manning (1997) suggested that examples of ontological and educative authenticity might unfold during dialogical conversations. In the current study, the participant-observations, data collection, member checks and two follow-up workshops at the centre<sup>27</sup>, provided opportunities to examine these criteria. Equally, my experiences of these criteria were explored during reflexivity (Lincoln & Guba, 2013). Accordingly, examples of ontological authenticity were noted where the participants: (a) Expressed raised self-awareness of their personal capabilities and internal resources; (b) understanding the significance of PA and PM in their life (c); reflecting on their personal experiences in relation to future aspirations; and (d) recognising advancements

<sup>26</sup> Person-centred techniques typically include open-ended questions, reflective listening, expressing empathy, using affirmations, and summarising participant stories (Miller & Rollnick, 2002)

<sup>27</sup> The workshop was implemented to simulate catalytic and tactical authenticity; further details are discussed in Section 4.3.3.

111

in their recovery journey. For example, during one interview Jacob recalled an "oh God moment!" (1068), when observing his photographs as a whole. Below, he reflects on the need for increased social opportunities in his life:

I think it was quite strange, I mean, I suppose I part looked at them [photographs] thinking, 'oh god is that what my life's like', as well. You know, you sort of, obviously there's no pictures of people there, and it's just something that I would love to get back meeting people and stuff like that (1080-1082).

Additionally, examples of educative authenticity were observed in participant's accounts of: (a) not feeling alone; (b) recognising the achievements of others; (c) being more empathetic towards others; (d) feeling supported by others; and (e) valuing the role of others who supported them. To illustrate, after James received the research report, during a member-check feedback question, he reported how participating in the research had broadened his understanding of others in relation to PA:

Shows that we're all in a similar boat and how we can help each other with exercise and how we all have similar views on how exercise can benefit us.

Overall, the noted advancements of ontological and educative authenticity indicated moments when self-learning and personal growth, which signified some beneficence of participating in the inquiry. Lincoln et al., (2013) suggest that such raised consciousness can stimulate transformative ideals and empower research participants into action and social change. Such transformation also demonstrates catalytic and tactical authenticity, which is discussed next.

### 4.4.3 Catalytic and tactical authenticity

Catalytic authenticity refers to the participant's willingness to be stimulated into action or change (Guba & Lincoln, 1989). This can be fostered by providing the inquiry product (i.e. case report/findings) to the participants and their peer community (Guba & Lincoln, 2014). Subsequently, the research may become more useful, pragmatic, practical and non-elitist, as it disseminates knowledge among the various potential stakeholders (Manning, 1997). However, being stimulated into action may not guarantee that change will occur (Lincoln & Guba, 1986). Thus, tactical authenticity examines incidences of where change has occurred (Erlandson et al., 1993). Similar to the ontological and educative authenticity, participant testimonies provide opportunities to explore the fulfilment of these criteria. Additionally, two workshops were collaboratively designed with one participant (Heidi) to explore the meaningfulness of the findings further in the research context. Specifically, the workshop aimed to: (a)

Review the research findings; (b) present Heidi's personal experiences of PA and PM in her recovery; (c) explore the workshop attendee's experiences of PA and PM, including the benefits and barriers; and (d) explore possible strategies to overcome challenges to achieve these activities. Following the workshop, one attendee hinted the catalytic authenticity in a feedback questionnaire, where an intention was made to continuing his perseverance during recovery:

It reinforced my determination to work on and ultimately overcome my personal barriers (Anonymous).

Additionally, when performing a member check with Steven mentioned being concerned with one finding suggesting a conflict in the centre's ethos due to people's prolonged attendance at the centre (see Section 7.3.3). He hinted the catalytic authenticity by suggesting some level of organisational change at the centre:

[The research] will help us for the future planning of the centre, in what we really should be targeting and aiming and what we should be providing; not what we think we should be, but what we need to provide for the, it's like another organisation or anything that you sell, if people aren't buying it, then change.

Interestingly, tactical change of Steven's comment was perhaps demonstrated following my departure from the centre in 2012. When I returned in 2014 to conduct additional member checks, Steven advised that the branch had adopted a recovery-oriented model from a neighbouring MHH branch. One main change was restricting people's attendance to three bookable activity sessions per week, to refrain from people from becoming too dependent on the service. Elsewhere, reports of tactical authenticity were observed in several participants. For Heidi, participating in the research led her to apply PA and PMs as strategies after her recovery. When providing feedback on the member-check report, she said:

As I have made a full recovery, I am having a very bad time with the Menopause and am using PA + PM to see me through it.

These testaments of authenticity and fairness contribute to demonstrating the thesis rigour, according to constructivist standards. Additionally, given the dominance of the trustworthiness criteria (Culver et al., 2012), and paucity of the authenticity applied in sport and exercise science research (Sparkes & Douglas, 2007); this section may benefit the application of authenticity criteria in the wider sport and exercise community. Before summarising other methodological contributions in Section 4.6, a chronological overview of the research study is presented next.

### 4.5 Chronology of data collection methods

Table 4.4 (below) presents a chronology of the research methods across four key stages. The data collection methods ran from November 2010 – November 2012. Pre and post data collection activities are also acknowledged in Table 4.4 (e.g. stage 1 and 4), as examining the planning, process, and product of an inquiry are considerations of the fairness criterion (Guba & Lincoln, 1989). Specifically, each stage suggests how the data collection methods evolved over time as my emergent understanding unfolded; enabling me to probe, develop and explore previously unanticipated concepts (e.g. 1st and 2nd generations of staff interviews and participant focus groups). Further, progression through each stage seemed akin to a hermeneutical spiral, where concurrent data analysis influenced future data collection, and concurrent data collection influenced the emergent analysis. Notably, discrepancies in the timeline indicate periods where other research activities occurred, such as writing chapter sections, transcribing data, or attending researcher-training events. Essentially, Table 4.4 identifies when the research methods took place, in what order, and it presents an overview of why the methods occurred in this sequence.

Table 4.4. Chronology of data collection methods across four key stages

Time	Research methods	Stage overview
Stage 1: Preparations before entering the 'field,' April 2009 – June 2009		
April 2009	Reflexivity	As I had no prior experience of supporting
	I began documenting my research activity in a	people with mental illness at statutory or
	diary and fieldwork journal, using Gibbs	voluntary sector services, I hoped that the
	(2007) typologies for guidance on recording:	initial participant observations and reading
	(a) Observation, (b) methodological, (c)	first-person accounts would develop my
	theoretical, and (d) personal notes. These	qualitative research skills, understanding
	notes provided a foundation for me to engage	of illness and recovery and foster my
	in reflexivity throughout the research process,	decision-making in the research design.
	in the subsequent stages.	Reflexivity was selected to foster these
		planning processes in the preresearch
April 2009	Initial participant observations	stage (Finlay, 2002b). At this stage, I
-June	I volunteered at a local MHH branch, the	aimed to purposefully select research
2009	Hailton Centre (a pseudonym), for one day per	participants from the Hailton Centre;
	week participating in dance and computer	however, when institutional ethics was
	support classes. I was also an active steering	approved (November 2010), funding for
	group member on the exercise programme this	the exercise project at this branch had
	branch ran.	ceased, and exercise opportunities were no
		longer provided. Concurrently, the
April 2009	Reading first person accounts of illness and	Rockwell Centre became known to me as
- June	recovery	an alternative venue where attendees can
2009	To broaden my understanding of the	access exercise opportunities. Attendees
	subjective experience of mental illness and	from the Hailton Centre were excluded
	recovery, I read approximately 32 first-person	from the research study; to prioritise
	articles from peer-reviewed sources (e.g.	understanding of people's concurrent
	Chadwick, 2007; Deegan, 1988; Dykstra,	experience of PA and recovery, which
	1997), in effort to add depth to the scope of the	could also be observed within the setting
	research literature on illness and recovery.	during data collection.

#### Stage 2: Data collection, November 2010 - October 2011

November 2010 -January 2011; July 2011 – October 2011

#### **Participant observations**

I observed and engaged in the situated activity of the gym at the Rockwell Centre, and other activities at the centre, including creative writing and chess. I exercised alongside the attendees, and observed attendee and fitness instructor behaviours, and promoted the research study to staff, volunteers and attendees. In January 2011 I became a father, so I temporarily left the field, but continued to collect data from prearranged staff interviews and focus groups. I continued the participant observations in July 2011, where I was able to reflect on the time that had passed following my temporary absence.

December 2010 -March 2011.

### $\mathbf{1}^{\mathrm{st}}$ generation staff semi-structured interviews

(Trisha, Steven, Danielle, John and Fran). Interview questions were semi-structured to understand staff perceptions of attendee personal recovery, and specifically in relation to PA. Following my emergent understanding from these interviews, the PA and PM relationship was integrated into the research agenda.

January 2011

#### 1<sup>st</sup> generation attendee focus groups

(Tim, Linda, Hayley, Lindsey, Carlos, Iris, and Judy).

When reflecting on Focus group A, I realised that, unknowingly, the session resembled some characteristics of Delphi interviewing: I had encouraged all participants to respond to each question, with the intention to empower and include everyone in the discussion. However, this detracted from a 'natural' discussion, leading me to refrain from doing so in the second part of the session, and in focus groups B and C. Focus group questions related to the elements of personal recovery, and people's experiences of PA and PMs.

March 2011

### 2<sup>nd</sup> generation attendee focus groups

(Vince, James & Lucas [FG B]; Ivan, Richard, Tina, Janice, Tom, Seb and Amy [FG C]). I altered my moderator style to encourage a more 'naturally occurring,' group dialect: I had less involvement in directing the group discussion, which seemed to encourage autonomous responses from the participants, but also appeared to invite several dominant and agreeable participants during the discussion.

September 2011

#### **Thematic Analysis**

In January 2011, I began a deductive content analysis to fit staff accounts of PA and recovery within the Personal Recovery Framework Model (Slade, 2009). However,

Participant observations were selected as a strategy to partly address the fairness criterion of authenticity: To understand the local context and setting of the centre, establish trust and rapport with potential participants, examine and explore the saliences and discrepancies of the participant accounts. I found that rapport with the staff established quickly; however, more time and effort was required before attendees were willing to participate in the study. Due to many staff members self-selecting their participation, and because I hoped to obtain a synthesised understanding of the role of PA and personal recovery at the centre, I chose to interview staff members first. I sought to take forward this initial synthesised understanding, to deepen and guide the attendee data collection methods.

Although the participant observations afforded useful insights on PA and recovery, few opportunities were available to focus a discussion on these topics, and expand on attendee responses. observations led me to understand that social and group support at the centre seemed paramount to the attendee's Subsequently, the focus engagement. group method was selected to encourage people's participation in the research while also empowering their interview Focus groups may also engagement. access information beyond the limits of semi-structured interviewing, particularly as participants could listen and reflect on the views of others, to extend their own views (Patton, 2002).

During the data collection, I engaged in reflexivity and began the thematic analysis; both methods served to process, challenge and refine my emergent constructions while in the field. Following the emergent findings and feedback from my third phase Ph.D. progression viva, I sought to deepen my understanding of the research context and explore my shifting theoretical perspective. I planned to collect additional qualitative data (to examine meaningfulness of PA during recovery further), use NVivo as a strategy to manage the data analysis, and address the theoretical discrepancies in the research design. Subsequently, I temporarily departed the field in October 2011 to refine the research methods and emergent methodology.

following feedback from the third phase Ph.D. progression viva (July 2011), I recognised that a discrepancy in my theoretical perspective and research methods were present. Subsequently, I began Braun & Clarke's (2006) six steps to TA in September 2011, using NVivo to manage the data analysis. The TA continued throughout the subsequent stages as an iterative process.

Stage 3: Data collection, November 2011 - November 2012

November 2011 – August 2012

#### Member checking and peer-debriefing

During this stage, three staff and four attendees volunteered to provide feedback on their interview transcript and/or emergent findings. Additionally, a Sport Psychology Ph.D. candidate and a Senior Lecturer of Social Work gave three peer-debriefing meetings, where they acted as 'critical friends' on the data analysis and emergent findings.

### $2^{nd} \ generation \ staff \ interview$

January 2012, October 2012 (Ivy, Ricky).

I aimed to select additional fitness instructor staff to deepen my understanding on emergent concepts; such as the fitness instructor's role, their observations of attendees participating in PA and experiencing personal recovery, and to explore the transferable benefits of PA. Before returning to the centre for further participant-observations, Ivy contacted me in January 2012 to participate in the research. When continuing the participant observations, I hoped to interview two additional exercise staff; however, one had left when I returned.

August 2012 – November 2012

#### **Participant observations**

I aimed to extend a longitudinal understanding of PA and personal recovery, and address previously unexplored experiences, such as observing people's exercise PA participation in the community.

October 2012 – November 2012

#### **Photo-elicitation**

(Stacy, Derek, Heidi, Sarah, Jacob and Tom). This method reflected some advancement in my theoretical perspective, such as including participants in the data collection process and taking photographs to construct the subsequent interview storyline. As such, the interview questions aimed to understand the participant's photographs in relation to PA, PMs and personal recovery.

I began this stage by performing member checks and peer debriefing to guide my emergent understanding of research findings following the initial TA. Such intersubjective negotiation and findings of the TA led me to understand emergent concepts, including the interconnected PA and PM relationship and transferable benefits of PA during personal recovery. The final data collection method (photoelicitation) was selected following my participation in the research context, in contrast to the focus group and staff interviews. After spending time in the field, I became conscious to the importance of creativity at the daycentre. People actively expressed their stories through their creative achievements (e.g. poems, drawings or songwriting), which were often illustrated throughout the centre. This observation intersected with my continued reading of methodological literature, when I discovered the photoelicitation method (e.g. Pink, 2007). The photo-elicitation was selected because I believed that including an artistic element in the research design would resonate with the participant's values. I proposed this idea to two staff members from the Rockwell centre who agreed that the photo-elicitation method was a novel and worthwhile approach; thereby creating a shared, negotiated construction in the research design. Furthermore, I continued to analyse the data thematically, and where possible, I performed member checking, peer debriefing and searched dialogical conversations and field notes for evidence of authenticity. participants engaged in member checking, providing feedback on their interview transcript and the emergent findings. Additionally, two stakeholders gave peer debriefing on the data analysis and emergent findings. I departed from the field November 2012 to finalise the data analysis and create a final case report.

Stage 4: Activities after field work, May 2014 – August 2014, October 2015

May 2014 - August 2014

#### Member checking and peer-debriefing

Twenty participants and four stakeholders received the case report. I met with two participants to discuss the case report and five participants provided written feedback. The stakeholders offered peer debriefs as 'critical friends' on the case report. Their backgrounds comprised a Senior Lecturer of Social Work, a Mental Health Wellbeing Advisor, a non-participating employee at the Rockwell Centre, and a Sport and Exercise Science Student and fitness instructor at the Rockwell Centre.

June 2014, October 2015

### Workshops to disseminate and examine the case findings

I co-led two workshops at the Rockwell centre (June 2014), and one at a recovery conference (Khalil & Savanna, 2015), to disseminate and examine the research findings among interested stakeholders, and potentially stimulate naturalistic generalisations. workshops were co-designed and co-presented with one participant from the study. I asked Heidi to co-lead the workshops because: (a) She was interested in the research, sharing the findings and her personal stories; (b) her stories were rich and relevant to the research; and (c) she felt confident to present to a workshop group. These workshops also represent some advancement in my theoretical perspective i.e. the inclusion of participatory ideals in the research.

This stage provided insight into how the participants and interested stakeholders viewed the research findings, and the degree in which they might have been stimulated into action following their participation. The objectives of this stage were twofold: (a) To foster intersubjective knowledge construction in the final presented thesis, and (b) impact other people in recovery, mental health professionals and organisations on the potential of PA and PM during personal recovery. During this stage, I also published an article on PA, PM and recovery in PT Magazine, with the intention to impact Personal Trainers who might support people in recovery (Khalil & Pack 2014). Accordingly, the feedback the participants and wider from stakeholders resulted in numerous negotiated changes in the presented thesis findings.

### 4.6 Chapter summary

The purpose of this chapter was to provide an overview of the thesis methodology and detail the procedure of the research study. In this chapter, I have reviewed the emergent nature of the thesis, and documented how the research developed as action research. Subsequently, a case study framework was selected to examine the research methods, in light of my evolving theoretical and practical understanding. Using Thomas's (2011b) case study typology, I identified the application of a social constructivist case study. In particular, an exploratory, intrinsic, interpretative, illustrative, nested multiple, 'key' case study design was reported. Thus, in this chapter I have illustrated an example of an emergent constructivist case study that may guide or benefit other research.

In addition, I outlined the research procedure as a crystallisation of qualitative methods where the participants were selected via typical case, snowballing and convenient strategies. The participant-observations fostered my understanding of the research context, sub-culture, social norms and community. Semi-structured interviews

with staff members contributed to a synthesised understanding of PA and recovery. Additionally, the focus group and photo-elicitation methods were used to reveal people's subjective accounts of PA and recovery. These methods added a socially contextualised understanding and a visual exploration of people's experiences. I also identified the application of thematic analysis to reconstruct the participant accounts, and the modified realist tale form to represent people's experiences. Further, I illustrated the authenticity criteria to suggest the efforts made towards creating a robust social constructivist research study. Lastly, I pulled together the data collection methods to present a chronology of events in which the research was undertaken. Throughout this chapter, I have been concerned with issues of power and reconstructing and representing the "Other". Accordingly, in the next chapter I offer some reflections on my fieldwork activities and examine these issues further, while also contextualising the research study in a thick description.

#### **CHAPTER 5**

#### Reflections from the field

#### 5.0 Introduction

In Chapters 3 and 4, I acknowledged the use of reflexivity as a research strategy to understand, explore, interpret and scrutinise my assumptions during the research inquiry. Through adopting a reflexive approach, I aimed to create and maintain fairness during the reconstruction and representation of the "Other" (Lincoln & Guba, 2013). As such, one purpose of this chapter is to present key reflections examining the researcher-participant relationships in the intersubjective construction of knowledge. Specifically, in Section 5.2 I offer reflexive exhibits of my social role, positioning and self-presentation during the fieldwork and data collection activities. Additionally, following my relativist assumptions (Chapter 3), to contextualise the findings in Chapters 6, 7, 8 and 9, another aim of this chapter is to illustrate a thick description of the Rockwell Centre. Doing so, I hope to facilitate naturalistic generalisations of the research findings (Ponterotto, 2006). Therefore, through a reflexive approach, this chapter considers some of the ontological and epistemological issues discussed in Chapter 3.

#### 5.1 The Rockwell Centre

There are nine MMH branches situated across Hertfordshire, offering voluntary drop-in daycentres that provide services to support people with mental illness. The Rockwell Centre is in Tapsbury (a pseudonym), one of the largest towns in Hertfordshire. Located in the town centre, the Rockwell Centre is embedded near many local amenities; shops, cafes, parks, and several leisure centres. Here, the branch resembles a shop front (Picture 5.1, p.120), and often, people attended the centre before or after shopping, socialising or walking within the local area. The centre is also situated next to a bus station, which provides ease of access, especially since many people travel to the centre by bus. Some attendees travelled considerable distances to attend the centre. For example, Judy recalled a one hour and forty-five minute bus journey to use the Rockwell Centre gym because exercise opportunities were limited at her local MMH branch. Likewise, other people often attended two or more MHH branches, which seemed to afford continuity of care across the branches.



Picture 5.1 The Rockwell centre: 'shop front.'

Steven, the manager of the Rockwell Centre, estimated that approximately 400 people were 'on the books'; 70% of which were referred to the centre by local statutory mental health services, 30% were self-referrals (personal communication, 31.03.2014<sup>28</sup>). The attendees could access a wide variety of information, support, therapies, and activities to assist their mental health recovery and everyday needs. Such facilitates were situated in several regions across the three story building. On the ground floor, the 'front region<sup>29</sup>' of the centre included a reception, meeting point, shop and information forum. Information stands, notice boards, attendee artwork, and items for sale decorated the room. One key feature here was the 'signing-in book,' which according to John (a peer-support worker at the centre) marked differences in people's identity and social role: Labelling people as a 'service user', 'staff' or 'volunteer'.

On the first and second floors, 'back regions' included the main activity room (Picture 5.2, p.121), a small computer room, art room, another activity room, kitchen, staff office, counselling rooms and the gym. The corridors that connected these rooms were embellished with attendee artwork and creative writing excerpts. Similarly, in the main activity room, several large notice boards illustrated photographs and stories of a recent horticultural project and an attendee self-organised trip to the seaside. These displays exemplified people's achievements at the centre and inspired others to engage

<sup>&</sup>lt;sup>28</sup>The estimated number of people 'on the books' slightly differed to the interview with Steven in December 2010; recalling that statutory referrals were 60% and self-referrals 40%. This might indicate that self-referrals have decreased over this time period.

<sup>&</sup>lt;sup>29</sup> Generally, front regions provide a centre-stage for people to perform according to public standards and moral obligations to 'audiences' within social settings (Goffman, 1959). Such performances, might differ in backstage regions where a private setting might alter of the values and attitudes expressed by the performer (Goffman, 1959).

in the activities. Typically, the activity and art rooms were used for organised events, such as the friends drop-in session, Mood Master, Zumba, yoga, dance therapy, art classes, creative writing, table tennis, ladies group and organised workshops (e.g. confidence building, media training or healthy eating and living courses). On the second floor, four small comfortable rooms were used by qualified counsellors to deliver a variety of techniques, such as Cognitive Behavioural Therapy, body psychotherapy, couple/family therapy, psychodynamic, person-centred, or gestalt therapies. Next to these rooms, the gym was situated and available for personal training or self-regulated exercise. Notably, the gym and computer room were the only activities accessible throughout the day. The remaining activities were structured according to a timetable.



Picture 5.2 The Rockwell main activity room

The social spaces at the centre provided multiple regions to promote PA, and for PA-orientated discourses to occur. Occasionally the attendee's talked about their gym experiences and motivations in the computer room, kitchen, or in the reception area. Therefore, a social awareness of PA appeared embedded within the sub-culture of attending the centre. Specifically, having a gym built within the infrastructure of the centre created a focal point for the place and promotion of PA. The gym was set-up in 2008 with equipment donated to the centre or purchased with funding money. Compared to public modernised 'technogyms<sup>30</sup>,' the Rockwell gym was considerably smaller, furnished with fewer and older pieces of exercise equipment (see Picture 5.3, p. 122). Nevertheless, the available equipment often fulfilled people's basic exercise needs and could comfortably cater for six people to exercise simultaneously. However,

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<sup>&</sup>lt;sup>30</sup> A technogym typically enables a person to set personalised targets using an electronic key fob. This fob is inserted into the gym equipment to monitor and evaluate people's exercise progress.

as two attendees (Vince and Seb) expressed, the gym failed to meet their resistance exercise needs, which they fulfilled at home or in a public gym. Still, for many people the comfortable, supportive and social environment was important, wherein four comfortable chairs and hi-fi system appeared conducive to this.



Picture 5.3 The Rockwell gym

To attend the gym, an induction with the fitness instructor was first required. Here, attendees familiarised themselves with the gym equipment, measured physical and mental health variables (e.g. blood pressure, quality of life questions) and discussed exercise goals. Such baseline measures enabled the fitness instructor to review people's gym progress; however, this was not always undertaken. Over time, people's use of the gym varied: Some attended several times, others continued for several months before departing the centre, whereas some consistently attended the gym. Of the gym attendees, three types of PA engagement were observed: (a) Regular 'in-and-outers,' (b) social exercisers, and (c) 'ad hoc' exercisers. Regular 'in-and-outers' attended the gym for a short period (i.e. 30-60 minutes), appeared disciplined and self-sufficient and occasionally socialised. For social exercisers, the prospect of socialising with peers or the fitness instructor seemed the primary motive to attend the gym. exercised at lower intensities (in order to socialise whilst exercise) and attended the gym for longer periods (i.e. 1-2 hours). In contrast, 'ad hoc' exercisers seemed to attend the gym due to casual interest, and often their attendance was sporadic, infrequent and dependent on social support. Accordingly, these gym-attendee characteristics indicate three diverse forms of PA regulation in the gym. While these categories may not indicate fixed social roles, they highlight the dynamic use of the gym as part of people's attendance at the Rockwell Centre. As such, creating a social environment to promote PA could encourage social exercisers to attend the gym, whereas the 'in-and-outers'

might appreciate better exercise equipment in the gym. Additionally, as the 'ad hoc' exercisers appeared less committed to exercising in the gym, behaviour change strategies (e.g. motivational interviewing) might be worthwhile with such individuals.

Given people's diverse gym attendance, often one to four attendees exercised in the gym concurrently. However, occasionally no people attended the gym, and numbers dropped significantly during the winter. Furthermore, the findings suggest that people's prolonged attendance at the centre possibly led to the gym being underutilised, due to a lack of interest developing over time (see Section 7.2.3). These concerns may account for Steven's estimation of the gym-attendees comprising approximately 20-25% of the total attendees at the centre (staff interview, December 2010). Nevertheless, the gym was a valuable resource, praised by many staff and attendees, as indicated by the research findings (Chapters 6, 7, 8, and 9). In the next section, I consider the situated activity of the researcher-participant relationships and examine the intersubjective dynamics that led to the co-construction of the research findings.

### 5.2 Researcher-participant relationships

In Chapter 3, I argued that the researcher-participant relationships have an epistemic bearing on the process and outcomes of social research. To examine the researcher-participant relationships in this thesis, this section presents my approach to reflexivity as social critique. Several key influences from the social sciences fostered this approach, including my application of Social Role Analysis (Johnson, Avenarius, & Weatherford, 2006) to understand my role as an active-participant in relation to the other social roles I observed in the field (Appendix O, p.266). I also explored my selfpresentation and interactional behaviour within the social milieu, and 'centre-stage,' of the Rockwell Centre (i.e. helping understand the double and triple hermeneutic in the field) (Goffman, 1959). Further, I utilised positioning theory to understand how others, or I, were 'positioned' during researcher-participant interactions (i.e. to examine power relations within a constructed storyline) (van Langenhove & Harré, 1999b). Lastly, I engaged in confessional writing to explore my subjective experiences, problems, tensions, mistakes, misconceptions and vulnerabilities during fieldwork (Van Maanen, 2011, p. 91). I applied these strategies throughout the research inquiry, where necessary to probe, deepen and explore key reflections that emerged. Accordingly, in effort to illustrate the researcher-participant relationships, two critical issues are presented in the following subsections. In section 5.2.2, I shall examine the power dynamics of the researcher-participant relationships. In the next section, selected reflections are used to

illustrate the emergent researcher-participant relationships and my traversing social role from 'outsider' to 'insider'.

### 5.2.1 Initial storylines to ambivalent assimilation

During most introductory conversations at the Rockwell Centre, I chose to self-position my social role as a researcher who was exploring the role of PA in the recovery from mental illness (thus creating an opening storyline). Doing so, I attempted to maintain fairness (i.e. openness to purpose, Manning, 1997), establish trust and rapport, and to potentially recruit research participants. Following Carless & Douglas (2008c), in order to create a supportive and comfortable atmosphere I aimed to present myself in a "sensitive, friendly, type of 'matey' approach" (p. 1195). Often the attendees responded by openly recollecting their role at the centre, experiences of ill-health, everyday problems, or in some cases the influential impact of PA during their recovery:

Researcher field notes, 09.12.10

I told him about my research, which he liked the sound of, commenting, 'without the gym I would have nowhere to go - I would probably still be in the pubs drinking and doing drugs. If it weren't for the gym, I would probably be dead; that or 16 stone still.'

### Equally, other attendees seemed less forthcoming:

Researcher field notes, 09.12.10

I introduced myself to Libby, told her why I am around, and I asked her if it would be ok for me to chat to her while she did her gym workout...Libby seemed a little quiet, shy and weary about me at first, but she said that she was ok for me to chat to her in the gym. Because I am an unfamiliar face in the gym environment, and it is a place where she comes to be social and comfortable, I imagine that my presence made her feel cautious and on edge around me.

However, when I created a new storyline inviting the attendee's to participate in the research study, they often responded defensively<sup>31</sup>. Such proposition appeared to evoke a sense of discomfort and awkwardness, and reasons for non-participation included lacking confidence, having little to contribute, or feeling anxious toward talking in a focus group. It was anticipated that the introduction of a new social region (i.e. the research environment) and perceptions of me as an 'outsider', evoked protective practices from some attendees (Goffman, 1959). Nevertheless, as van Langenhove & Harré (1999b) pointed, storylines are temporal, and subjective positioning can change

124

<sup>&</sup>lt;sup>31</sup>In contrast, the staff appeared forthcoming to participate in research (see Table 4.4 and Section 10.4 for a discussion on self-selection in the study).

over time. Accordingly, as my prolonged engagement proceeded, trust and rapport seemed to develop through my self-presentations of 'tactful' and 'loyal' performances (Goffman, 1959). I was 'tactful' by avoiding undesirable social forces (e.g. use of stigmatising language), whilst encouraging a safe, comfortable and inclusive ambience. In effort to displace power imbalances, loyal performances (a concern of moral obligations and moral support, Goffman, 1959) were enacted as I exercised alongside the attendees (Tetlie, Heimsnes, Polit & Almvik, 2009). Here, I applied my knowledge as a sport and exercise scientist to assist the attendee's exercise experiences, and further supported them using motivational interviewing when they discussed issues of adversity and ill-health. These self-presentational strategies seemed to increase rapport with the attendees:

Researcher field notes, 27.07.2011

Sally told me that she needed a bit more confidence, which she feels that she gets from exercise and CBT, although she still struggles to meet and talk to people. I affirmed that she started to talk to me, as a new person, after I offered her a drink of water, and I felt that she came across to me as a very positive person. With a beaming smile, she said, 'you don't know how much that means to hear you say that.'

Nevertheless, occasionally, my social performance 'slipped:'

Researcher field notes, 09.06.2012

On a personal note, although Ivan has always been fine with me, at times I have found him quite annoying...Recently, while transcribing the focus group interview I noticed subtle differences in the tone of my voice where I had expressed more empathy towards Tina's story than Ivan's; despite Ivan's story being more catastrophic...I am deeply unhappy with myself for this, and I certainly did not realise that I was doing this at the time. I am quite shocked at myself. However, I also remind myself that I am only human, and subsequently, my emotional side and personal values can unknowingly surface. Looking back, I have gained greater insight from Ivan's stories than Tina's.

Hence, it was essential that I maintained discipline and circumspection, by enacting honest, diligent, careful and self-aware performances (Goffman, 1959). Reflexivity was paramount here: Examining my social performances whilst in the field raised my self-awareness of potentially 'ideal' compared to 'disruptive' performances. When a performance 'slipped', it was recognised that I could not always 'bracket' my subconscious values and biases from the positioning and social forces of a storyline (i.e. 'the problem of authority', Schwandt, 1994). Nonetheless, such reflexive insights fostered my refinement and adaptation as a researcher to facilitate future performances.

Equally, despite my attempts to maintain a disciplined self-presentation, uncontrollable social forces also surfaced:

Researcher field notes, 03.09.2012

Dee [a volunteer] came into the computer room asking us to keep the noise down as they were doing Mood Master next door. After she closed the door, in the corner of the room, an unknown man muttered, 'fucking bitch, who does she think she is; she's not one of us. This is *our* centre'. This made me feel uncomfortable, especially since I thought that it was a reasonable request from Dee.

In such situations, I tried to uphold a neutral self-positioned stance. I neither challenged nor accepted the unknown mans' forced position of others in a 'them and us dichotomy' (indicated by 'our centre'). If I accepted his positioning (against my values) I would contradict my moral obligation and loyalty for the members of staff. Conversely, an explicit rejection of his outburst may damage the loyalty of the attendee group. Fortunately, these occasions were rare, as managing a loyal yet disciplined performances incurred ambivalent feelings regarding issues of fairness in the field. Nonetheless, the above excerpt illustrates how I was positioned i.e. perceived by others as an attendee at the centre (in the inclusion of 'our').

Accordingly, it was likely that over time, my researcher role become 'invisible' as I actively engaged in the social norms at the centre as a 'passionate participant'<sup>32</sup> (Krane & Baird, 2005). Staff and attendees perhaps interpreted my social performances as 'typical' behaviour, thereby creating social expectations of my role and presence at the centre (Biddle, 1986). Subsequently, my role appeared to become naturally integrated with other cultural-specific roles within the organisation (Johnson et al., 2006). To examine such convergence, following a social role analysis, I identified that I had harnessed a blurred researcher/staff/attendee role (Appendix O, p.266) (Johnson et al., 2006). This especially became apparent on the last day of data collection: A staff member commented respectively, "it was a pleasure to work alongside you," while an attendee said, "I thought you were a service user" (field notes, 13.11.2012). It was possible that my supportive role in the gym led me to being perceived as a member or staff. For instance, on several occasions James (an attendee) introduced me to his acquaintances and friends as his personal trainer. Equally, it was possible that the attendees perceived me as a peer:

Researcher field notes, 13.11.2012

She [an attendee] had seen me around the centre, attending some of the creative writing classes, talking to other attendee's in the activity and computer rooms. Perhaps stemming

<sup>32</sup> Enacting a 'passionate participant' was in agreement with my theoretical perspective and in contrast to that of the postpositivist paradigm, i.e. 'a disinterested scientist' (Krane & Baird, 2005).

from her non-judgemental nature of attending the centre, she saw me with similar goals; chatting to other people, pottering around the centre, regularly engaging in activities and benefiting from attending the centre (albeit for my research), but now I see that we share similar purposes.

My adoption of multiple, blurred social roles appeared to facilitate and restrict research opportunities in the field. Being assimilated with the centre possibly granted me access to stories that were otherwise unobtainable through a detached-researcher role (Van Maanen, 2011). However, managing multiple social roles challenged my identity as a researcher and raised ethical concerns of implicitly adopting other roles in the field (Li, 2008). Balancing multiple social roles risked disruptive performances, due to the conflicting values associated with certain roles, including my researcher role. Compared to my initial storylines in the field, my later adoption of a social role led me to occasionally feel like a 'traitor,' and 'untrustworthy' wherein I might unknowingly 'abuse' empathy to prioritise the research agenda (Watson, 2009). Equally, I also recognised that my presence in the field afforded some attendees a therapeutic benefit (e.g. empathetically listening to their adversity and personal issues in a non-judgemental way), and thus I potentially became exploited by others (Watson, 2009). Such tacit conflicts of situated activity led to ambivalent feelings when readdressed reflexively (e.g. Khalil, 2013, Figure 5.1, p.128). Nevertheless, the exploration of such dilemmas furthered my self-understanding of the research, and fostered personal growth of my researcher role (Purdy & Jones, 2011). Additionally, my shifting researcher role could alter the power dynamics of the researcher-participant relationships (i.e. shifting positions of authority or social status) (Johnson et al., 2006). Thus, I was at risk of dominating others, or being dominated by others. Suitably, reflections on power relations are presented next.

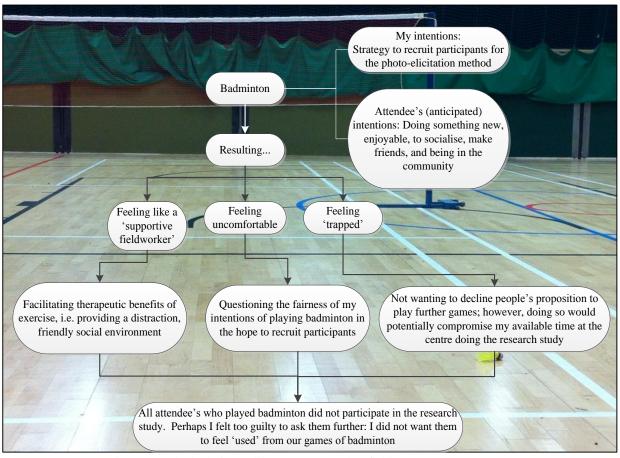


Figure 5.1 The badminton dilemma (Researcher field notes, 27.11.12)

#### 5.2.2 Power relations: A two-way conflict

Power relations are complex and multifaceted social forces, which may explicitly or implicitly dominate and direct social interaction (Aléx & Hammarström, 2008). Power may coerce, constrain or dominate others in forced positions of inequality (Harding, 1991). Similarly, acts of power can be of pastoral virtue, reciprocity, to create meaning, transform reality or emancipate others (Foucault, 1982). Power can be exerted directly through social positioning and apply discursive social structures to impose symbolic meanings within a dialogue (e.g. "I'm 'mad' about football) (Burr, 2003; Layder, 1993). Typically, people might convey acts of power through their habitus<sup>33</sup>, for historical justice, social and cultural traditions, class, age, experience, gender or size (Bourdieu, 1989; Harding, 1991). Therefore, the power relations of the researcher-participant relationships had a contextual impact on the epistemological contributions of the thesis (Burr, 2003). For example, in the excerpt below it was possible that my gender incurred a power imbalance that subsequently influenced Stacy's storyline:

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<sup>&</sup>lt;sup>33</sup> Bourdieu (1989) suggested that a habitus is a system of schemes, perceptions and judgments that presupposes the production and representation of everyday social practices as 'common sense' (Bourdieu, 1989).

Researcher field notes, 18.09.2013

There was a point during the interview where I felt myself as a researcher potentially impacting the co-construction of knowledge. Despite feeling that Stacy had opened up to me, her strive for a female identity, and specifically mentioning that she felt more able to connect and relate to other females, in contrast to sometimes feeling uncomfortable around men: I wondered whether a female researcher might have co-constructed richer information about Stacy's experiences.

Equally, given that the participants were gatekeepers to accessing their subjective experience and localised knowledge, they wielded the power to choose what information to disclose (Harding, 1991). Subsequently, I was also subjected to power imbalances and potentially being dominated by the participants. One particular situation incurred methodological consequences, which was perhaps due to my etic perspective and novice researcher role, where I found myself easily converging to John's advice due to his knowledge and longstanding personal experience of recovery:

Researcher field notes, 19.01.2011

Unknowingly, at times the FG was like a Delphi interview. Previously, John had recommended that during the FG I should give each person the opportunity to talk, one-by-one into the microphone, which may empower people who might be otherwise less likely to talk. I respected his input and thought that this was a good idea, so I decided to implement this in the first FG. Although some good responses were obtained from quieter members who might have otherwise remained silent, I also felt that the FG resembled the 'Delphi,' which equally appeared to reduce the group dynamic. Notably, during the second half of the FG, due to time constraints, I abandoned my initial approach and positioned the microphone in the centre of the group. This seemed to encourage a discussion that was akin to the FG papers that I had previously read.

Integrating John's advice into the initial FG design possibly risked forced positioning of others into constructing a storyline. Consequently, some participants perhaps felt coerced to answer a FG question, removing their choice to answer, challenge or reject participation. Such dynamics in the situated activity of every day interaction made the research inquiry fluid, emergent, ever changing and exciting. New opportunities, social meaning and practical knowledge continually surfaced (see Section 4.2). Reflecting on such field adventures as outlaid in this chapter has contributed to my epistemological understanding of social inquiry, which I take forward with me.

### 5.3 Chapter summary

Finlay (2002) suggested that critical reflections creates transparency of the research process and thus transforms personal experience into 'accountable knowledge'. Such epistemological contributions were important to the research inquiry, given my assumptions and values as a social constructivist. The intersubjective dynamics of the researcher-participant relationship had important implications for the research findings. Subsequently, in this chapter I have explored how critical issues of power, positioning and social performance, co-constructed the epistemological contributions of the thesis. Exposing such tensions through reflexivity, I attempted to demonstrate a robust constructivist study.

Furthermore, by providing a thick description of the Rockwell Centre I hoped to contextualise the participant's accounts that follow in the subsequent findings chapters. Stake (1995) proposed that an adequate thick description could stimulate experiential learning i.e. naturalistic generalisations. By contextualising the social setting (Section 5.1), alongside the subjective<sup>34</sup> (Chapters 6, 7, 8, and 9) and intersubjective domains (Section 5.2), I attempted to connect multiple levels of social organisation, in effort to facilitate new, meaningful and sophisticated interpretations of the findings. Suitably, in the next chapter, an overview of the research findings is presented.

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<sup>&</sup>lt;sup>34</sup> Subjectivity is indicated by the presentation of participants accounts i.e. their 'voice' in the findings chapters. While it is acknowledged that such accounts are inter-subjective, created within the social context of the inquiry; nonetheless, the participant voices represent the subjective reality of the "Other" that is apprehensible.

#### **CHAPTER 6**

### Overview of the findings

### 6.0 Introduction

This chapter presents an overview of the thesis findings. The TA identified six themes and eleven subthemes in response to the research questions. In this chapter, I present an emergent conceptual framework of the case, indicating the thematic patterns across the findings. Additionally, brief descriptions and two short exemplar quotes are offered to define each theme, and in effort to illustrate the 'whole' of the findings. Furthermore, one participant vignette is displayed in Section 6.3, to illuminate the complexity and sometimes overlapping nature of the themes within one 'case.' In this chapter, I also suggest how the themes and sub-themes are organised in accordance with the primary research questions:

- Q1. How do people experience PA at a voluntary sector mental health organisation?
- Q2. How is the physical activity and personal medicine relationship experienced?
- Q3. How do people experience personal recovery through participating in physical activity?

The above research questions further created Chapters 7, 8 and 9, where I have purposefully selected themes and sub-themes that appeared to contribute to a particularised and rich understanding of the case, relative to each research question. This organisation does not represent a fixed structure, however, as some themes contributed to understanding multiple research questions. Nonetheless, by presenting the findings in such way, I aim to integrate the conceptual findings with the theoretical grounding and assumptions of the thesis (Attride-Stirling, 2001). Accordingly, the conceptual framework is presented next.

### 6.1 Conceptual framework of the findings

Figure 6.1 (p.132) presents an overview of the findings as a conceptual process of participating in PA during people's recovery at a voluntary sector organisation. The framework comprises six high-ordered themes (square boxes with bold-font text) and eleven sub-themes (rounded boxes with italicised text). Theme and corresponding sub-theme relationships are displayed as solid block lines, whereas thematic relationships between high-ordered themes are indicated using red arrows. Numerous overlapping sub-theme relationships were observed, likely due to the complex PA and mental health relationship. Therefore, these sub-theme relationships are presented within the

analytical narrative of the subsequent findings chapters. These relationships are indicated using brackets, for instance, "(see sub-theme B2)". Notably, themes that contributed to a particularised understanding of the case, include 'if we had more resources…more could be done', 'a gateway on to other things', 'exercise is one part of the package', and 'from small acorns to big oak trees.' The connections of these themes and sub-themes are anticipated to drive several key contributions of the thesis.

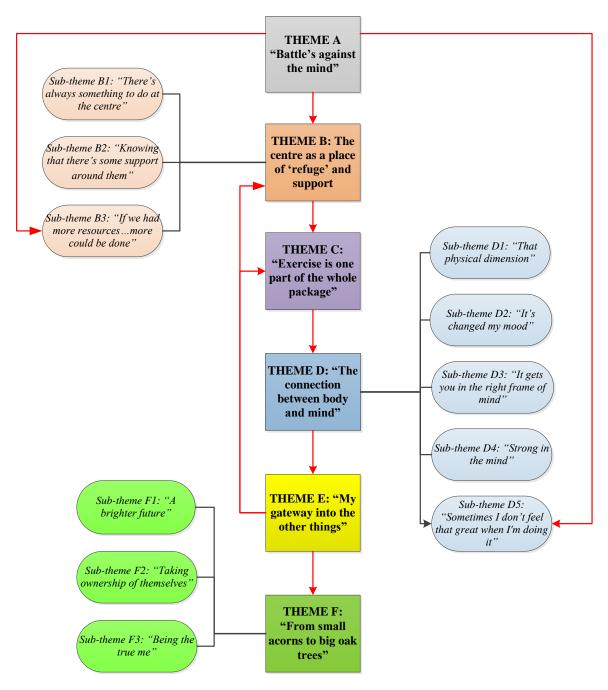


Figure 6.1 A conceptual overview of the research findings.

### 6.2 Thematic definitions

Table 6.1 overviews the research findings, where each theme is defined in order to identify the "'essence' of what each theme is about" (Braun & Clarke, 2006, p. 92). Further, two short quotes per construct are presented to provide initial 'evidence' of the findings. Some of the themes are also evident in the exemplar 'case' vignette presented in the next section.

Table 6.1 Thematic definitions and exemplar quotes.

### Themes presented in Chapter 7: How do people experience physical activity at a voluntary sector mental health organisation?

### THEME A: "Battles against the mind" (Section 7.1).

Daily struggles against adversity, ill health, marginalisation and stigma, possibly incurring detrimental experiences of PA and PMs. they go, 'there's no such thing as normal', and that's like a big kick in the teeth because you know you're different to everybody else (948-950).

Tom: One of the battles I have is against lethargy,

Seb: You say to the shrink, 'I want to be normal' and

Tom: One of the battles I have is against lethargy, tiredness, aches and pains you know, 'oh that hurts, I can't do that today, no' (506-507).

### THEME B: The centre as a place of 'refuge' and support (Section 7.2)

The centre seemed to provide a safe, comfortable, supportive and enjoyable environment to facilitate people's PA and PM engagement.

Tricia: It's like a haven here...[the attendees] feel comfortable in the way it's [the gym] been set up and the way its run (1612-1613).

Danielle: An organisation that supports the fact that they've had mental ill health, will understand it, have a good understanding of the different types of mental illness and have things that we can offer immediately (324-326).

### Sub-theme B1: "There's always something to do at the centre" (Section 7.2.1)

Participating in a variety of activities at the centre seemed to afford a sense of purpose during recovery.

Tina: I come here because I'm unemployed. I have got to keep myself busy (74).

John: People may have discounted things that actually end up being really useful for them, so the fact that they get the chance to be exposed to other things is good (451-453).

## Sub-theme B2: "Knowing that there's some support around them" (Section 7.2.2)

Staff and peers at the centre contributed to people's support network, and provided social support toward people's engagement in PA and

Ivy: You could see she [an attendee] was struggling with things...but she actually still had time for other people (623-624).

Stacy: They're [gym instructors] ready to help and advise you there, as and when you need them, and

PMs.

they're also there for moral support (780-781).

# Sub-theme B3: "If we had more resources...more could be done" (Section 7.2.3)

Some political and organisational issues seemed to constrain people's participation in PA and progression in recovery, including financial barriers and attendee's overreliance on the service provider.

Steven: With funding cutbacks, it's all very well putting on these courses, but if the same people are turning up all the time, then the numbers drop to practically none, it's just a waste of money (1528-1530).

Fran: There's always the chance or the risk of dependency...which is then not a good thing: It doesn't really facilitate recovery (262-263).

### Themes presented in Chapter 8: How is the physical activity and personal medicine relationship experienced?

### THEME C: "Exercise is one part of the whole package" (Section 8.1)

The respondents seemed to desire holistic wellness, where the value of PA varied among the participants in light of other meaningful pursuits during recovery.

### Theme D: "The connection between body and mind" (Section 8.2)

Participating in PA was reported to afford a variety of process and outcome benefits that seemed to influence people's wellness and quality of life during recovery.

### Sub-theme D1: "That physical dimension" (Section 8.2.1)

The participants appeared to experience reduced physical health risks and improved physical fitness.

### Sub-theme D2: "It's changed my mood" (Section 8.2.2)

For many, positive affect seemed to arise during and/or after PA, which possibly enhanced some people's experience of their social activities.

Vince: Add one of your personal medicines in the exercise at the same time, if you're doing both at the same time, get benefits from both (700-703).

Linda: I think physical exercise itself alone won't like, it's not the cure-all: It's the balance isn't it (1054-1055).

Fran: There's the endorphin thing, there's the circulation, there's the, breathing, getting more oxygen; all of that is very good on a physiological level, but it affects your mind (1006-1007).

Derek: The fitter I am physically, the healthier, the better I feel mentally (669).

Janice: I managed those stairs better when I going to the gym regularly, I was getting up those stairs fine (671-672).

Linda: The endorphins, the serotonin and your adrenaline...all those feel good chemicals (1244-1245).

James: Exercise started to help, especially when you're a bit stressed and way under a bit; it calms you down, it makes you feel better, it makes you feel more alert (367-369).

Ivy: They might come in [the dance class] a bit down, but they go out...laughing and having fun (24-25).

### Sub-theme D3: "It gets you in the right frame of mind" (Section 8.2.3)

Many participants reported experiencing cognitive benefits during or after PA, including a distraction from ill health, positive thinking, improved problem solving, and planning other activities.

Lindsey: The activities stop me from being so introspective, which I think can be destructive (877-878).

Tim: If I'm physically enjoying them activities [snooker and golf], I don't think about negative things, I think about positive things (68-69).

### Sub-theme D4: "Strong in the mind" (Section 8.2.4)

Most respondents identified experiencing personal strengths through PA, especially increased confidence, resilience and perseverance.

Lucas: Life isn't easy, and exercise actually helps you to deal with difficult things in life (1300).

Heidi: When I've done the Zumba...I've got the confidence to stand up front and not be worried about what people think (1076-1077).

### Sub-theme D5: "Sometimes I don't feel that great when I'm doing it" (Section 8.2.5)

Some participants mentioned negative experiences associated with PA and PMs, which seemed to incur some ambivalence toward future engagement.

Jacob: It might be my personal medicine thing, but it's also a thing that I don't like as well (126-127).

Sarah: [Facebook] helps the fact that you're talking...But there is that side where I do find it hard to balance...I'm going a bit too much on here, I need to be a bit more elsewhere (699, 701-702).

### THEME E: "My gateway into the other things" (Section 8.3)

The process and outcome benefits of PA appeared to afford transferable benefits in other contexts of people's lives.

Ivan: Going to the gym, actually gives me more energy towards other things. I won't tire so easily (831-832). Ricky: [The attendees] mind set changes; they're not so drawn inwards that they tend to open and they start to

think about other things (537-538).

### Themes presented in Chapter 9: How do people experience personal recovery through participating in physical activity?

### THEME F: "From small acorns to big oak trees" (Section 9.1)

Experiencing the process and outcome benefits of PA seemed to contribute to people progressing in their recovery journey through raised self-awareness and personal growth.

Carlos: You always start at the bottom...and as you go along, the better you get, the better you feel (833-834). Heidi: I've grown more as a person and done a lot more things and changed to become a lot more outgoing (113-114).

### Sub-theme F1: "A brighter future" (Section 9.1.1)

The prospect and achievement of experiencing process or outcome benefits of PA appeared to

Lucas: I would like a girlfriend in the future and I think if I had a nicer body, to be blunt about it, I'd stand more chance of getting a girlfriend (432-434).

Tim: You need some sort of goal or incentive to be

afford opportunities to recognise progression and resilience during recovery.

Sub-theme F2: "Taking ownership of themselves" (Section 9.1.2)

The respondents ongoing PA participation seemed to exemplify their autonomy, independence, self-management, and coping through ill health.

Sub-theme F3: "Being the true me" (Section 9.1.3)

Experiencing the process and outcome benefits of PA seemed to enable opportunities for the participants to redefine the self, and align closer to a sense of self-acceptance.

able to do the things that you dislike...you need some sort of 'carrot stick' (519-520,523).

John: They're not dependent on the centre, they can take hold of it...actually being in charge of their own recovery (323-324).

Sarah: I have been careful with food...sometimes I have that urge to buy, you know, a bit of chocolate or something sweet, but I think I'm a bit more careful...I'm not snacking as much as I did, I'm eating a bit more fruit (748-751).

Steven: I just think that exercise just gives you that opportunity to be yourself (629).

Stacy: Putting all these photos together, I can see it [PMs and PA] gives you a sense of self-worth...an overall good feeling about yourself (353-357).

### 6.3 Opening vignette

Vince is 40 years old. He has a previous diagnosis of schizophrenia, and at the time of his participation in the focus group, he had been attending the Rockwell Centre for eight months. Vince is an artist, author, poet, philosopher, father, and in my opinion, a badminton champion and an inspirational figure, furthering my understanding of other people's lives during recovery. Below, I have selected and organised his interview contributions to illustrate the key research findings.

"I train every morning. I do 45 minutes to maybe an hour weight training. As soon as I get up, have a banana and I do the training. That sets me off for the day, it makes me feel good about myself, I've done something for myself, and obviously it gets the blood circulating. And with training, it's like a mediation at the same time. You feel good after exercise, and that feeling helps you carry on with other things in life; whether it's walking, poetry, music, going out, socialising whatever. It helps you onto whatever you're doing next. It doesn't take much to do; just a little effort and that helps you move on to do other things within your life. It gives you that confidence and drive to do something else. With me, I suppose because exercise makes me think clearer, it gives me brain space to be creative, which I'm not bogged down with other things, so it sort of clears my head so to be creative, with my writing, pencil sketches and paintings so that's the effect I think it has on me. I might do a walk before I do a painting, walk through the park you know, at the common or something like that. It gets you in the right frame of mind to actually focus on what you're doing. It's a necessity. I remember thinking, I'm not harassed about it; it's my outlet, and it's a stage as my end product is the art exhibition. Exercise is part of the process because it

gives me more confidence to do my drawings and actually promote them, saying, 'they are good enough to be seen, what I want to say does matter', that sort of thing you know, 'the pictures I do are nice to look at'. It gives me the confidence to push, promote myself and not be so shy in what I do and what I am going to do, and what I see as something which can be pleasant to other people. I have to do it if I want to get to my goal, but that is just one part of the process."

### 6.4 Chapter summary

In effort to present the 'whole' of the findings, this chapter has overviewed the thematic processes, relationships, definitions and exemplar participant accounts. In Chapters 7, 8 and 9 these themes are illustrated in further detail. I begin by presenting Theme A next, which reveals the participant's enduring struggles during their recovery.

#### **CHAPTER 7**

# How do people experience physical activity at a voluntary sector mental health organisation?

#### 7.0 Introduction

This chapter presents following findings: (a) Theme A "battles against the mind," (b) Theme B 'The centre as a place of 'refuge' and support,' (c) sub-theme B1 "there's always something to do at the centre," (d) sub-theme B2 "knowing that there's some support around them," and (e) sub-theme B3 "If we had more resources…more could be done". These themes illustrate how the participants experienced of PA as part of their attendance at a voluntary sector mental health organisation, and emphasise the political, organisational and intersubjective aspects of people's PA participation. For all participants, salvation from the effects of mental illness was their primary purpose of attending the centre. Accordingly, the participants "Battles against the mind" (Tom, 491) are presented next.

### 7.1 Theme A: "Battles against the mind"

Experiences of mental illness appeared to manifest in various ways. Many participants recalled experiences of depression, anxiety, isolation, stigmatisation, and enduring struggles against unwanted, ruminating and intrusive thoughts. Others indicated that their experience of mental illness was laden with uncertainty, confusion, doubt and loss. For Derek, he suggested that mental illness was an enduring 'battlefield:' "It's like walking through a minefield in my brain" (452). His metaphor suggests an uncertainty of not knowing when crisis might arise, or how to navigate to safety. This seemed prominent as he anticipated the loss of his home due to a relationship breakup; a situation that seemed to exacerbate the possible reoccurrence of ill-health. He recalled his previous experience of residing in shared housing and hostels, having possessions stolen, being threatened with a gun, and witnessing another person being stabbed. Consequently, he expressed a sense of despair, helplessness and loss of control:

I know that I'm going to be homeless in a few weeks, so I'm going probably going to end up, I could end up in a shared house or a hostel, and I feel very, just, desperate about that and suicidal (37-39).

Lindsay and Hayley suggested that for them, introspection was their self-destruction (878). Hayley indicated that her introspective thinking and isolation was due to a lack of confidence:

You might sort of retreat within yourself and perhaps don't go out, it's sort of to do with confidence (371).

For Jacob, his isolation surfaced after encountering unexpected and unwanted thoughts, incurred by anxiety:

If somebody was coming towards me and I suddenly felt anxious, I felt like clobbering them, and I didn't like that sensation...I got into such a bad place that I thought I was protecting people by just cutting myself off...I didn't realise I was being anxious around people, I didn't know that was what was driving it at the time (143-144, 164-166).

Stacy described her experience of ill health as "5 years of hell" (249). Part of her isolation appeared to arise through extrospection. She alluded that her previous drug habit attracted the unwanted attention of others:

5 years of isolation is quite, quite horrendous really. I got a lot of hassle as well because I used to use drugs, so you know, there were people banging on my window, and so you know, I had that overshadow me all the time (256-258).

Additionally, John shared his observations as a member of staff. He had worked alongside some attendees who had "lost the purpose and the meaningfulness of their existence" (1630). From his understanding, he conveyed that mental illness is partly caused by, or incur experiences of loss. Particularly, he suggested that the loss of something perceived as significant or meaningful could result in the loss of identity.

Loss of meaning is a core thing actually...bereavement, loss of job, you know all those things. Wow! Just take out a huge chunk of your being, and see what's left. If people's invested too much in one part of their life, that's a big chunk gone (1648-1651).

Elsewhere, other respondents reported that their health fluctuated between periods of wellness and ill health, suggesting a non-linear journey of recovery. For instance, Iris recalled:

You feel depressed sometimes and then other days you feel a lot better (829-830).

Another implication of ill health was the perception that some forms of PA were undesirable, and unrealistic. For example, Tom said, "when I've been at the low ebb, exercise has been non-existent" (578). He indicated feeling overpowered by mental illness, which seemed to remove the volitional choice to participate in PA:

The head really wants to control the body...when the head wins, the body suffers (502-504).

Some participants identified physical health compilations, exacerbating their mental health difficulties, recovery and hindering PA participation. Health concerns included, being overweight (e.g. Amy, Judy), diabetes (Heidi), asthma (Tina), tuberous sclerosis (Ivan), or back pain (Richard). Excess body weight was the most common physical health concern reported. Janice explained that her physical and mental health diagnoses contributed to her weight gain. Consequently, changes in her physical embodiment possibly incurred the loss of her sense of self:

I have a hormone problem, which gave me my weight, then a thyroid problem, under active, which was more weight. So, that put the boot in to start with because I was always very skinny. Then obviously medications, psychiatric medication, comes along with, oh weight gain! (887-893).

Some respondents' physical health condition constrained their motivation toward PA. Tina suggested feeling helpless towards increasing her PA participation, as she felt unable to exert the appropriate intensity of exercise to initiate weight loss:

I'm supposed to do a lot more than what I do, but because I'm asthmatic, the bigger I am, I start struggling to breathe (506-507).

Additionally, for many participants their medication side-effects incurred an additional burden. Seb expressed his frustration of experiencing weight gain, isolation and suicidal thoughts following his diagnosis and medication prescription. Below, his opening comment appears sarcastic, which perhaps conveys his bitterness, anger and perceptions of betrayal toward the doctors he encountered. Consequently, he expressed an uncertainty toward the medical model of recovery, yet he also seemed to express a sense of entrapment and dependence, "you need to take the tablets otherwise you end up hurting yourself" (925-926):

Doctors are wonderful. They prescribe you medicines, yeah, they don't tell you all the dodgy side-effects. They said, 'oh you'll put on a bit of weight', so you get in your head, 'I'm going to put on weight', and you put on weight anyway because he's told you that. They don't tell you that you might be suicidal, or you might have dizzy spells and stuff. They just tell you you're going to put on weight, which is really, I don't know why they tell you that because it's out of order (849-854).

Encounters of unsupportive others were reported elsewhere. Some participants mentioned feeling ostracised and eschewed by other people from outside of the centre. In particular, Tricia said that some people encounter stigma when associated with the centre:

I heard somebody saying the other day that someone had stopped him in the street and asked him where he was going. And he told them he was coming here and it was like, 'ohhh that's where all the nutters are' and that really really upset him, but it like that's how people see it and that's hard for the people that come here because that's how it seemed" (1110-1113).

The issues presented in this theme suggest numerous internal and external factors that were associated with the (attendee) participant's experience of ill-health, attendance at the centre, and possible engagement in PA. Few accounts reported positive aspects of mental illness. Danielle made one suggestion, hinting that experiencing mental illness could raise people's awareness of the need for a positive change in life:

It's really hard to understand the meaning of it [mental illness], but I think as a minimum, its your body or your mind letting you know that something is wrong...an indicator that something has to change (1209-1210, 1212).

Accordingly, for all the participants, mental illness was the primary reason for them to attend the centre. Suitably, the centre as a place of refuge and support is presented next.

### 7.2 Theme B: The centre as a place of 'refuge' and support

Most respondents seemed to perceive the centre as a valuable place of salvation, from the distress, isolation and marginalisation associated with mental illness. For many, the centre afforded a temporarily 'escape' (Sarah, 560) from the potential 'alienation' (Derek, 222) of the 'outside world' (Danielle, 193). The centre seemed to provide a place for the participants to experience sense of togetherness, shared purpose, 'common ground' and belonging to a community. Tom described a connection to the centre as having a surrogate family, perhaps indicating he felt a sense of unconditional acceptance:

Growing up, I was in a family unit, and I don't have a family, so I try to gain that family feel from here...You know, I don't feel the family bond within anywhere else (35-36).

Other respondents reported a similar sense of connectedness and belonging at the centre. For many, the centre was a place for them to feel a sense of understanding, empathy, comfort and safety. Such social milieu possibly led Stacy to relax and feel more comfortable within herself and in her behaviour toward others:

I can get a bit snappy sometimes, but I think we all understand each other, you know, it's like, 'ohh Stacy's off on one, she's having a bad one today', you know, and 'oh leave her alone', that sort of thing (443-445).

Sarah described feeling liberated at the centre, experiencing a sense of control and empowerment through having some anonymity, possibly fostering her self-expression.

People don't know me that well and, you know, I can just talk to people and just say 'hello', and if I didn't want to discuss anything about what was going on I didn't have to". (560-562).

Steven, the Rockwell Centre manager, suggested that a non-pressurised environment was part of the centre's ethos. He indicated that the removal of external performance expectancies at the centre "provide a different angle" (235) compared to the mainstream mental health services. He viewed the centre as "a cog in the chain" (776):

The community mental health team often deals with medication and support, the GPs will refer them on, but here we actually run activities to help them with their mental health conditions, which supplements their medication and the support they getting elsewhere...there's somewhere for them to go, where someone is showing an interest in them, which I don't think you always get when you go to other places because your treated more as a statistic, rather than a person (74-76, 422-424).

Accordingly, the social milieu of the centre appeared conducive to the participant's experience of PA. For many respondents, the gym was perceived as a positive, comfortable and social setting, where they could experience a sense of support, acceptance and connection. Ivan appeared to value this setting as part of his PA participation, and as a place where some cognitive benefits were experienced (see subtheme D3):

- 398. Ivan: You end up actually having a laugh as well, because
- 399. Tina: You do have a laugh, yeah [laughs].
- 400. Ivan: Because if I make a mistake on training on one of the apparatus and I lose my balance on
- 401. the balance board or something like that right, and you just laugh your head off like.
- 402. [Several participant's laugh]
- 403. Ivan: Like, 'man up' you know, yeah. So basically, it is going to the gym, it's not just a
- 404. thing about personal fitness, it's a thing about like mixing with people, helping them out in the
- 405. gym as well as yourself and chatting away and being friendly yeah; and that's what I feel
- 406. takes my mind off, you know, bad things.

Some PA opportunities were also provided in the local community. Tom recalled his experience of participating in a walking group led by the centre staff. He seemed to value the shared experience of PA, wherein exercising in the local countryside was perhaps perceived as an exciting adventure:

We were doing it in like a large group and we were out in the middle of nature, you know, you might be able to see some things around and it would be against the elements...and there was a feel good factor because we're all doing it together we felt a kind of comfort within the doing it (1401-1403, 1412-1414).

In contrast, Tricia suggested that exercising within the centre was more favourable, because the process of PA was associated with the safe and comfortable environment. She further hinted that exercising within the centre could afford opportunities to demonstrate self-ownership (see sub-theme F2) and thereby experience social reinforcement and acknowledgement of their achievements:

There's a lot of self-esteem attached to people coming here and coming up through the centre, up the stairs and going to the gym. It's just a feel good thing I'm sure they get from everyone, you know, 'where you going?', 'to the gym!' Rather than, the walks were sort of taken away from the centre, because there's the whole safety aspect of being in here and that's why it's been more successful than the walks outside of the centre (1616-1619).

For Judy, exercising in a public gym (outside the centre) incurred several undesirable experiences, such as feeling a lack of support and understanding from the fitness instructors, and possible social physique anxiety. Despite her gym engagement being initiated by the Lavender Fields Centre, the community location appeared daunting. Moreover, this encounter seemed to contrast her experience of exercising in the Rockwell Centre gym, presumably due to exercising within a place of 'refuge':

With the gym, I went to one...at High Dells [community leisure centre] with MHH, but it was amongst all the other people that belonged to the gym. And I felt, I didn't feel good afterwards, because I was looking at them and what they was doing and have done over the weeks. And after it stopped I didn't feel better about myself, until I joined the gym at MHH [Rockwell Centre], because everyone there is a sufferer, so they're all the same...Even though there were professionals there that you could talk to at the gym [in High Dells], they didn't understand about mental health issues. So they were all for the getting fit, muscles, losing weight...And if you stop half way through, they'll sort of, 'come on you can go for further', but you don't always feel able to (661-666, 667-669, 672-673).

Similar comparisons were made elsewhere (i.e. Danielle, Jacob, and Steven). In contrast, some respondents seemed to favour the prospect of exercising in a community gym. For Lucas and Stacy, exercising outside the centre was seen as a goal for them to meet people outside a mental health environment. For them, PA perhaps provided a gateway to facilitate making a positive departure from the centre, as Stacy suggested:

Stacy: It's nice to get outside of the centre, so you don't become what I call institutionalised, you know. Yeah, I just don't want to be like that, you know?

Researcher: What do you mean by being institutionalised?

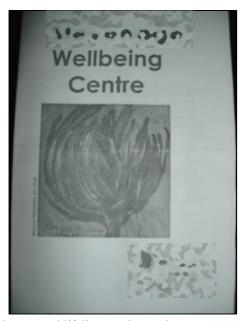
Stacy: Where you become, I don't know, when this is all you know.

Additionally, for others, despite the gym being located within a place of refuge, the gym was 'not for them' (e.g. Sarah, Heidi and Tina). Accordingly, the respondents suggested diverse PA preferences, and to cater for such needs the staff seemed provided a variety of activities at the centre, which is discussed next.

### 7.2.1 Sub-theme B1: "There's always something to do at the centre"

All participants appeared to value attending the centre as a purposeful and meaningful part of their recovery. For many, the centre offered a diverse range of therapeutic opportunities. Such prospects included (in no particular order), seeking support and help (Danielle, 871), doing something 'to get out of bed for' (Janice, 170-173), to 'kill a bit of time' (Jacob, 709), self-development opportunities (e.g. employment courses, Carlos, 105-110; Tim, 124-127), to participate in meaningful activities, or to socialise with others (Lindsey, 105-107). Subsequently, some participants identified that attending the centre was a PM. This was the case for Jacob, who had taken a photograph of an activity schedule (Picture 7.1 below). He recalled attending the centre, "enables me to do everything" (506-507) and "address certain problems I've had in my life" (507-508), thereby supplementing his recovery:

Everything revolved around coming to the centre: (a) Because I was meeting people in a similar boat to me; (b) I wanted to socialise a lot more; and (c) I suppose a lot of the stuff here, I've done, is stuff I've never done before, like going to a gym. I never went to the gym before I came here, I never did yoga anywhere before I came here, that type of thing. Obviously, I never had counselling before in my life until I came here. So yeah, it's been a really big help coming to here: I'd be stuffed if this wasn't available (500-505).



Picture 7.1 Jacob: "It's been a real lifeline coming to the centre" (516).

Similarly, Tom recalled that attending the centre enabled him to organise and run creative writing and meditation classes, indicating that the centre afforded opportunities for him to experience his PMs:

The centre plays a very important role in my personal medicines; it allows me, and gives me the ability to be able to exercise those personal medicines (551-552).

John expressed that a "menu" (245) of activities was an essential part of the services provided at the centre, as it enabled people opportunities to find "something that will grab their interest" (425). This possibly supported a sense of autonomy development through offering a choice of activities:

You go through the programme with somebody and here's a whole bunch of activities they can get involved with. And you give them a tour of the building and you say, 'right, this is what we do here, and our mood master's this type of group, here's computerised CBT, counselling services, the gym', and they see things that it's possible to do and get involved with (398-402).

Most participants seemed to value the activity programme at the centre, as it added structure to their daily routines. They perhaps gained a sense of purpose from such structure especially since many attendees were unemployed. According to Tricia, a receptionist at the Rockwell Centre, she appeared to believe that knowing what time and day to attend an activity formed positive 'projections of time' (Tricia, 519). She alluded that the centre's activity schedule and positive expectations of attending the centre could help the attendees cope when away from the centre, as they had something meaningful to focus on:

If you get people talking about stuff, coming up, up here [the centre], then they're already up here in their mind; which is, if they haven't been here and talked to those people, they'll be thinking, 'oh there's nothing past Saturday'...whereas I can imagine when they first come here, it's like, well you know, 'all I got to do tomorrow is go to the McDonalds' (513-514, 523-524).

Stacy recalled cherishing her daily attendance at the centre, which for her seemed to form an integral part of her daily routine. She mentioned that the prospect of attending the centre and partaking in the activities helped her "break free of that vicious circle" (258-259). Subsequently she revealed that the centre offered opportunities for her to develop a sense of 'self-worth' (353-354) through engaging with others and participating in meaningful activities:

Rather than waking up in the morning and putting the TV on and not having anyone to talk to, or just not being able to do anything, it's just, yeah, it [doing activities at the centre] gives you an overall good feeling about yourself. So, sometimes I'm here from like 10 o'clock in the morning and I don't want to go home, you know, because this is all I've got... I feel quite glum when I get home, obviously those thoughts and feelings tend to creep back in, but then I just think about the next day, you know, and where I'm going to be, what I'm going to be doing (354-357, 396-397).

Accordingly, accessing a variety of activities seemed conducive to developing the attendee's self-awareness of personal interests and capabilities. Some respondents suggested that the activities at the centre may 'rekindle an old hobby or talent' (Tricia, 850), enable opportunities to try something new (Carlos, 106), engage in a previously discounted activity (John, 458-459), or explore what 'feels good to them' (Fran, 780). Fran, a project coordinator at the Lavender Fields Centre, explained why she likes to "keep things fresh" (1221):

When people come here [the centre], they might get a sense of what's available and they start to pick and choose what feels good to them...once they start trying and testing out different things, different activities and what works for them, they become more confident. You know, if say a person starts to do craft, then they feel that, 'oh, that's, that feels good, I can do this' (779-780, 140-142).

Such opportunities possibly led Tom to associate exercising in the gym with a former passion of cycling. When he reflected upon his photographs of exercising in the gym (e.g. picture 7.2, below), he (re)connected with his previous happy memories of former achievements with his current efforts:



Picture 7.2. Tom: "I cycled from London to Brighton, that's what I did, about five hours" (687-688).

**Tom:** Cycling is something that I did many, many years ago, I did enjoy, I did a lot of it, you know. I cycled to many different places actually. Yeah so, perhaps I'm reliving past achievements on the bike, you know, which is ok.

Researcher: Is that important for recovery do you think?

**Tom:** Memories, the positive aspects of memory achievements, yeah I think it is, yes. You can remember the good and happy times; you know remember the positive times, yes, you know, remember how things used to be.

Steven was a keen advocate of PA at the Rockwell Centre. He seemed to believe that PA afforded several key benefits compared to other activities at the centre, including having an immediate "quick-fix" (Steven, 377), and being able to "nip it [ill health] in the bud" (907):

Someone who uses other activities might take weeks to actually feel the full benefit of techniques and cognitive behaviour therapy strategies, but exercise can be a much easier way to make someone feel better very quickly (377-379).

According to Steven, the exercise project at the Rockwell Centre had, "encouraged a lot of people to come to the centre initially" (80). This was the case for Heidi, who mentioned that she first attended the centre to participate in yoga (129-130), although she recalled being uninterested in other forms of PA at the centre:

I did try the gym but that's not for me, it's too stuck in: I need to be out doing things. Yoga's different, but I need to be out, you know (173-174).

Heidi's account reinforces the importance of promoting a variety of PA opportunities. However, some staff members expressed feeling restricted in offering a range of activities to satisfy everyone's needs (see sub-theme B3), particularly as John hinted, "different characters will get moved by different things" (464-465). To overcome such difficulty, often staff and peer support contributed to the success of people's engagement in the activities.

### 7.2.2 Sub-theme B2: "Knowing that there's some support around them"

The majority of respondents appeared to value a support network as an integral part of their recovery from mental illness. Often, this comprised centre staff, peers and volunteers, staff from other mental health services and key people, such as family and friends. This theme illustrates the support network as part of people's attendance at the centre.

Social support seemed to be provided formally during structured activities, or informally within the organisational setting, in-between activities, or through casually attending the centre without participating in any activities. John appeared to perceive that such diverse settings, afforded numerous opportunities for people to converse with others, reflect, and raise their self-awareness. Doing so, he added, was potentially therapeutic:

I think it's easier for people to look at those situations knowing that there's some support around them for it, than doing it all on your own. So whether it's being with a counsellor,

talking these things through, they're all chatting to someone over a cup of tea in the activity room after yoga, or whatever its going to be. People can share the things that they're worried about, get some different perspectives, you know, put the whole thing in context, and that makes their lives a little bit easier (1662-1666).

Sharing personal experiences, concerns, worries of ill health and overcoming adversity, appeared to enable respondents to connect, learn and reframe their subjective perspective, through relating to and empathising with others. Some respondents appeared to appreciate emotional support from others. Stacy valued her attendance at the centre, "to know you've got a shoulder to cry on" (176-177). For her, emotional support seemed important:

I've met someone with the same disorder as me, so my emotionally unstable personality disorder. I mean, it's a bit of a mouthful, but understanding that and where it's come from, and acknowledging the triggers and knowing and seeing the triggers in other people; I suppose I would be able to help someone else out emotionally. I mean it's nice to speak to somebody that's got the same disorder as me, so I suppose emotionally we'd be able to help each other (623-627).

For many participants, connecting to peers seemed to reduce or overcome perceptions of isolation. For example, Tim said:

Relating to other people with similar conditions and problems I find personally that's very important because you don't think to yourself 'it's just me' anymore...there are several people in the same boat (444-445, 449-450).

Several staff members also seemed to emotionally-support the attendees. While the fitness instructors primarily provided informational and tangible support, they also appeared to offer emotional support. Steven suggested that most attendees feel comfortable talking with the fitness instructors about their personal and mental health issues. He commented that talking with the fitness instructor was "like a counselling session really" (1178). Ricky, a fitness instructor at the Rockwell Centre, identified that an important aspect of his role included talking to the attendee's about personal and burdening issues:

You do get some people that are hung up on certain aspects of their life, like if its kids or something like that, but that generally tends to be, to do with something bad that's happened or something that's happened recently that's affected them, and that's playing heavily on their mind...Then they feel like they're getting something off their chest by talking to you about that (143-146).

Developing a therapeutic relationship between the fitness instructor and attendee seemed important. Some staff suggested that trust and rapport provided effective opportunities to reinforce informational support: "Signposting" (Steven, 925) attendee's to participate in other potentially beneficial activities. John perceived that the staff created a socially inclusive environment, which might counter PA barriers:

I think we've done a great job here to have a gym, and the people working there have a very nice rapport with people, that encourages them to take part, doesn't make them feel bad or, you know, non-athletic, that type of thing (251-253).

Ivy, a dance instructor at the centre, identified that when she exercises alongside the attendee's, she believed this to create a comfortable environment. She further perceived additional benefits of doing so, such as demonstrating dance techniques to improve the attendee's skill-acquisition, and creating a sense of togetherness within the group, potentially reducing power differentials of the therapeutic-relationship:

I don't have a big class; I have the smaller one's on purpose because I feel like I'm on the same level with them...so they feel like they're with you, not away from you, you know, they're with you, doing this together, we're all in it together (923-926).

Some participants valued the social environment of PA, which Jacob suggested enabled him to meet other people at the centre. He recalled the chairs in the gym as facilitating the social environment (picture 7.3 below):

As people come in [the gym], they usually sit in the chairs; you could have a little chat, or not" (556-557).



Picture 7.3. Jacob: "The picture of the chairs that represents people really" (555)

Conversely, Jacob further suggested that the chairs and social environment in the gym could hamper his exercise experience. In particular, he felt uncomfortable when on the rowing machine:

If you got people on the cycles looking down on you, or you got people on the chairs looking across you, like at your side, it's kind of quite intimidating, you know, you feel quite exposed (845-846).

Elsewhere, many participants appeared to value direct and indirect forms of peer-support. Janice expressed that exercising with her cousin in the gym was a prime motivating factor for her. However, when her cousin ceased attending the gym, Janice

recalled that her PA participation began to "slide" (173) and avoidance behaviour ensued, perhaps indicating that her motives to exercise were externally regulated:

You know, once she says, 'oh I'm not coming', and you think 'ooo', you know, well it's easy for me to sort of say, 'ahh, I'm not going' or 'I must do something else' (729-735).

Some participants reported peer-support to occur through vicarious experience, as John indicated: "Those examples by their peers is really useful thing to have around" (553-554). John further recalled the importance of positive social comparison at the centre, possibly influencing people's development of hope:

When they see somebody else that they know, and work with, have got themselves a job...a girlfriend, or have got themselves, you know, going off and doing leisure activities: That's wonderful, because there's real examples going on around them, and 'if so and so can do it, no reason why I can't do it' (550-553).

Another form of social support included the feedback and positive reinforcement provided by staff and peers, which affirmed the attendee's efforts and achievements. As Tim indicated, negative reinforcement could be detrimental to his recovery:

You got to have the encouragement and the positive feedback all the time, particularly with mental health issues. The slightest thing can give you a knock back, and make you feel a whole lot worse again (1101-1103).

Unfortunately, Sarah revealed one incident of experiencing negative feedback. When showing her artwork to a group, she was told, "that's not art!" (836). Despite her resilience of wanting to 'prove herself', the comment appeared detrimental:

It just really annoyed me because it was personal, it was about my art...it hurt me a little bit because I'm thinking, 'I've done art, art's kind of a big thing to me', so when you get those sort of little comments it brings you down a little bit...it hit me hard thinking, 'I can't deal with this anymore' (835-846).

Elsewhere, Tricia mentioned that social cliques within the centre could be problematic, and such sub-groups could create an uncomfortable setting for some to participate in PA. For example, during the health walks, she said, "the same nucleus of the people that go on these things, maybe they're off putting to other people" (1625). Consequently, she felt such sub-groups and differences of physical ability could deterring some people from PA:

I went on a couple of walks when I first came here, and I know some of the ladies couldn't keep up, so they stopped coming because they couldn't keep up with the guys who were up the front (1653-1654).

Accordingly, this theme has indicated that while social support was highly valued and a supportive aspect of people's PA participation, occasionally, the social environment appeared to incur negative experiences. Some participants raised concerns of needing more staff to deliver the services at a higher standard i.e. strengthening

people's social support. However, the infrastructure of the centre as a voluntary sector organisation raised numerous concerns regarding adequate resources to foster people's recovery journey.

## 7.2.3 Sub-theme B3: "If we had more resources...more could be done" 35

This theme reveals some conflict between the centre's service provision and ethos, which seemed accountable due to limited resources. The reliance of public funds appeared to restrict the staff in offering a diverse recovery package at the centre, and the longevity of some projects appeared uncertain. Danielle, a volunteer coordinator at the Rockwell Centre, recalled an example from another local MMH branch that had recently lost funding to continue implementing a PA project:

There was an exercise programme in the Hailton Centre and that project lost its funding, you know, people said that was a huge shame...and there's an understanding that it's been lost, but then we don't sort of say, well what can we do to re-introduce it (219-220, 2247-2248).

At the Rockwell Centre, funding restrictions appeared to limit the number and type of staff support available. Steven mentioned that during periods of attendee crisis, "sometimes it's beyond our remit" (800), and so staff occasionally referred attendees to the local statutory services. John also identified that more staff was required to implement PA outside of the centre:

"Often there's not enough cover so people can go out on health walks and leave the centre" (617-618).

Likewise, Tricia suggested that counselling was a popular activity choice at the centre. However, she identified that due to limited counsellors at centre; attendees who were waiting to receive support could feel a sense of hopelessness:

You got to wait five months for counselling...to come here and talk to somebody...but that just seems, you know, when you've already been through everything...if you suffer from mental health, you know, it's like starting at the bottom again (319, 323, 331-332).

Several staff members also mentioned that sometimes the attendees proposed high or unrealistic expectations, as Steven recalled below:

Sometimes you're not always in the position to offer everything they want and often they come here with huge expectations that we can help them with their housing and all their other benefits (522-524).

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<sup>&</sup>lt;sup>35</sup> Some content presented in this theme was excluded from the member checks. Specifically, some staff members perceived people were 'stuck' at the centre, and subsequently in their recovery journey. When discussing this finding with the manager of the Rockwell Centre, we agreed that this finding was to be included in the thesis and not in the member checks. It was anticipated that some animosity could be incurred through sharing this finding with the attendees at the centre.

Accordingly, the lack of funding appeared to cause some conflict concerning the staff feeling able to meet all of the attendee's needs. While meeting the attendees needs were important to the staff, according to Steven part of the centre's ethos was:

To move people back into the community...to an extent where they're able to cope with their condition...come to terms, and live with their conditions (113, 116-117).

However, one prominent concern was that staff members appeared to debate whether people's prolonged attendance at the centre was positive or not. Several staff members hinted that people's long-term attendance could absorb the centre's resources (i.e. more staff time, activity costs, greater need to provide a variation of activities) and was unconducive for people's recovery. Fran suggested that some attendees were "stuck" (171) at the centre:

I think people that don't move beyond the centre, I would say, they're kind of stuck probably and they're still trying to figure out, or maybe they don't know, what's beyond the centre. Yet, there's always, you know, the chance or the risk of dependency. So they might become dependent, which is then not a good thing. It doesn't really facilitate recovery in that sense when they become dependent on us (171-174).

As indicated in Fran's account above, there appeared to be a further need of resources to support people's personal recovery development in fostering a sense of independence and generating personal aspirations. According to John, he felt that the centre should invest in recovery-oriented approaches to support people in developing such skills:

Researcher: You mentioned you could do more [in the centre], what do you mean? John: Educational programmes around what is recovery. Recovery wellness recovery action plans; can we run those types of activities to make people more conscious of what's going on? Things happen on a - random would be wrong – umm informal way... Can we, not fast track, but be more specific in our approaches to say, 'right, this is what recovery is about, this is what a wellness recovery action plan is, this is about spotting early triggers, this is about recognising your own strengths, spotting your own weaknesses, establishing a better support network, to keep you more stable for longer'. You know, I think we could be much more upfront about that stuff (1306-1308, 1310-1314).

Additionally, Steven and Tricia speculated that perhaps the comfortable environment of the centre led to an entrapping environment. Tricia identified that some attendee's form social contacts only within mental health settings, which could be detrimental:

I think a lot of them make their friendships in the circle of mental illness, because everybody understands that ... They get stuck in the same circle and it just continues and implodes" (1081-1082, 1100).

Consequently, as Steven indicated, people's prolonged attendance may inhibit reframing an illness identity:

They get to a stage where they feel that by coming here all the time, it actually holds them back because they're reinforcing their mental health condition...it's very easy for someone who's trying to recover, if they start discussing medication again and mental health issues, it can drag them back into that way of thinking (328-329, 332-333).

However, John further believed that some people could be resistant to recovery and may avoid wellness as an unfavourable outcome:

I think there'll be people that will be saying, 'recovery is not for me:' It's a scary thing to recover, 'I'm stable', you know, 'I got my finances sort out, I'm secure', so any recovery that might challenge all of that, that's actually difficult (52-54).

In contrast, Danielle commented that people's prolonged attendance may signify that they were taking personal responsibility to continue seeking support and thereby, maintaining wellness during recovery. She suggested that people's prolonged attendance may indicate self-awareness and insight by maintaining their attendance:

If people are acknowledging the benefits they are getting just from coming here, why would they want to move on?...They're choosing to keep coming because they acknowledge that what they're getting is benefiting them, and acknowledging that perhaps what else there is out there [outside the centre], it's not as beneficial to them (1975-1976, 1983-1985).

Equally, Steven appeared to value the long-term attendee's presence within the centre as they often supported others and were proactive during the activities:

They have a lot to say in the groups, they tend to use all the activities rather than one or two. So their identity profile is much bigger, and more people know about them (578-580).

However, Steven continued to suggest that some long-term attendees could demonstrate a lack of commitment toward the activities. He hinted that some attendees engaged in the activities possibly for the expectancy of experiencing outcome benefits. However, when such outcomes ceased to benefit them, commitment appeared to falter, and dropout typically ensued. Subsequently, he suggested that their engagement in the activities were for "inquisitive" (1558) purposes, and as indicated below, alluded that perceived behavioural control also influenced people's commitment:

If they [attendees] learn badminton and enjoy it, and they get to a certain standard where they're not going to improve, they'll just lose interest and say, 'right, what else we got on offer?' And if there's a nice sunny day and I want to go out on a health walk and they'll come. If it's raining, none of them turn up (1563-1566).

Accordingly, some of the issues presented in this theme indicated some political and organisational concerns surrounding people's attendance at the centre. Staff targets seemed ambiguous, client outcomes were possibly unpredictable, appropriate funding

was lacking, and staff and attendee's seemed to have conflicting goals. These findings perhaps problematise the delivery of PA schemes in voluntary sector mental health services.

## 7.3 Chapter summary

This chapter set out to illustrate the participant's perceptions toward the role of PA in a voluntary sector mental health organisation. Most attendees reported experiencing periods of crisis, daily struggle, marginalisation and adversity, which they sought support for at the centre. The view of the centre as a place of comfort, support and empathy appeared conducive to people's engagement in PA, whereas there was some disparity noted toward exercising in the community. Perceptions of safety appeared controversial, however, as further debate were apparent toward the prolonged and overuse of the centre. According to staff accounts, not all attendees were able to integrate independently and fully into the community, indicating a conflict in the centre's ethos. As such, several staff members suggested room for development, where the centre could move towards a recovery-focused approach.

Nevertheless, all participants viewed the centre as an enabling environment that offered numerous opportunities for personal recovery. Social support was widely available from staff and peers, and the various activities at the centre enabled the attendees to develop a sense of competency and autonomy. These types of support appeared complementary to the promotion, uptake and experience of people's diverse PA and PM needs. Still, limited funding and resources meant that staff were restricted to fully meet people's individual needs. Accordingly, the themes presented in this chapter suggest a possible diversion in the macro/organisational context impinging on the situated activity and subjective experience of PA and recovery. Even so, many participants reported numerous benefits of PA and their PMs, which are presented in the next chapter.

### **CHAPTER 8**

### How is the physical activity and personal medicine relationship experienced?

### 8.0 Introduction

This chapter presents the following findings: (a) Theme C "exercise is one part of the whole package," (b) Theme D "the connection between body and mind," (c) subtheme D1 "that physical dimension," (d) sub-theme D2 "it's changed my mood," (e) sub-theme D3 "it gets you in the right frame of mind," (f) sub-theme D4 "strong in the mind," (g) sub-theme D5 "sometimes I don't feel that great when I'm doing it," and (h) Theme E "it was basically my gateway into other things." These findings indicate the role of PA during people's recovery, and in relation to other contexts of their lives. For many participants, PA seemed an important construct alongside three other meaningful types of activity. Accordingly, PA as part of people's wellness 'package' is discussed next.

## 8.1 Theme C: "Exercise is one part of the whole package"

Most respondents valued participating in a combination and balance of various activities during recovery. Doing so appeared to afford meaningful experiences, many of which were derived from their PMs. When analysing the participants PMs, the TA revealed four emergent categories: (a) Physical activities, (b) social activities, (c) mental activities, and (d) livelihood activities (see Table 8.1, p.156, for brief definitions and Appendix P, p.271, for a thick description of these category types). Specifically, the attendee's (n = 22) reported a Mean average of five (range: 1-12) PMs. For many participants, having multiple PMs seemed important to their recovery, because it provided a repertoire of PMs that could be selected when required (discussed further in this section). Accordingly, the total number of PMs across the dataset (n = 124) included 44 variations of activities (i.e. the same activity meaningful for several respondents). These 44 variations were clustered into four overarching categories (see Table 8.2, p.157). Noticeably, while some participants identified PA as a PM, others described PA as separate to their PMs<sup>36</sup>. Subsequently, non-PM PA responses are added to Table 8.2 to distinguish between PA types.

<sup>&</sup>lt;sup>36</sup> Participant references to PA as a PM was given directly (explicitly stating PA is a PM), or indirectly (interpreting PA-PM from participant accounts).

Table 8.1 Types of personal medicines: Emergent definitions and examples

Personal medicine type	Example quotes
Physical activity  For some, PA afforded a meaningful purpose in life, whereas others valued the adjunctive role of PA during recovery.	Jacob: When I was a kid I used to walk everywhere, I used to walk milesSo I suppose it's getting back to enjoying just walking (150-152).  Vince: I train every morningThat sets me off for the day, it makes me feel good about myself (15, 17).
Social activity Socially oriented activities appeared most desirable and meaningful pursuits during recovery, evoking a sense of connection, togetherness and belonging with others.	Tina: I take my dog out every morningshe means the world to meshe's my big baby (83, 89).  Richard: Gives me pleasure getting out, seeing people, which the darts does, the autistic group does (2009-2010).
Mental activity  Participating in creative, expressive or intellectually stimulating activities, were frequently mentioned as important strategies during low periods of recovery.	Derek: Karate and chess are both intellectual things, they're both mental activities, they're both involved using your brain (147-148).  Linda: The knitting, sowing I've done since being at MHH, very much makes me feel I'm being of use to somebody as otherwise I'm just sat up in my house on my own being me (612-614).
Livelihood activity  Some respondents reported PMs as doing activities that supported their basic daily needs being of importance to them.	Hayley: The voluntary work helps me feel valued (600).  Lindsey: The gardening, I'm feeling I'm actually being productive, also gets me out of the house which is very important (610-611).

Table 8.2 Participant personal medicines: Clustered by activity type

Physical activity (frequency)	Social activity (frequency)	Mental activity (frequency)	Livelihood activity (frequency)	Non-PM PA (frequency)
Walking (7)	Socialising with	Art (5)	Attending the	The gym (13)
Yoga (5)	friends (10)	Music (5)	centre activities and	Walking (10)
The gym (4)	Being with family	Doing puzzles (3)	workshops (9)	Swimming (2)
Tai chi (3)	(4)	Creative writing (3)	Employed or	Yoga (3)
Bowling (2)	Having pets (4)	Relaxation/	Volunteer work (8)	Badminton (2)
Cycling (2)		meditation (3)	Gardening (6)	Being active at
Dance (2)		Going on the	Having a morning	work (2)
Darts (2)		computer (2)	routine (3)	Cycling (2)
Pilates (2)		Going to the cinema	Healthy lifestyle (3)	Dance (2)
Badminton (1)		(2)	Housework/	Table tennis (2)
Boxing sparring (1)		Singing (2)	Cleaning (2)	Football (1)
Golf (1)		Sowing and	Self-talk coping	Hockey (1)
Karate (1)		Knitting (2)	techniques (2)	Star Jumps (1)
Snooker (1)		Watching television	Paying bills (1)	
Swimming (1)		(2)		
Table tennis (1)		Aromatherapy (1)		
		Being around nature		
		(1)		
		Chess (1)		
		Going to church (1)		
		Going to the theatre		
		(1)		
		Massage (1)		
		Photography (1)		
		Reading (1)		

The descriptive findings in Table 8.2<sup>37</sup> identify more variations of mental activities (41%), compared to physical (34%), social (7%) and livelihood (18%) activities. Moreover, mental activities appeared more frequent (30%) compared to physical (28%), social (16%), and livelihood (27%) activities. Despite these findings, most participants appeared to value social activities as more meaningful during recovery. Often the participants valued their PMs differently, and prioritised some PMs above others. For example, Jacob seemed to describe a hierarchy of valuing different PMs at alternative stages of recovery. Noticeably, he indicates a preference of participating in mental activities during low periods of recovery to help cope with the

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<sup>&</sup>lt;sup>37</sup> Table 8.2 is organised according to the manifest content of each category, and does not suggest a hierarchy of importance among activity types.

symptoms of ill health. After engaging in mental activities, he appeared more able to cope with other PMs, especially one that he regarded of higher meaning - being able to socialise: "That's what life's about you know, at the end of the day it's about being sociable" (368-307). Subsequently, he appeared to use his PMs in combination, as strategies to progress towards a higher aspiration, as illustrated in Figure 8.1 below:

Pictures 1 [watching television], 2 [going on the computer] and 3 [doing puzzles] stop me ruminating over things, you know, stop me focusing on just one thing and having that rolling round in my head. So, they're distractions more than anything, to get me out of that particular way of thinking, whereas, 4 [socialising] and 6 [walking] are more about socialising when I'm feeling ok, which is nine times out of ten. But if I'm not, then I've also got 1, 2 and 3 to fall back on and I'm not just sitting there like doing nothing and ruminating over things (178-182).



Picture 4: Socialising with friends

Social activity: Well periods of recovery



Picture 6: Attending the centre



Picture 6: Walking

Physical & livelihood activity: Making progress in recovery



Picture 1: Watching television



Picture 2: Going on the computer



Picture 3: Doing puzzles

Mental activities: Low periods of recovery and Relapse prevention

Figure 8.1 A three tier hierarchy of Jacob's personal medicines.

According to Jacob, to initiate wellness he first engaged in mental activities for instrumental purposes (as a distraction). Similarly, while Sarah regulated mental activities to initiate a sense of recovery, she did so for intrinsic purposes. She then felt able to cope with extrinsic activities and expectations, such as exercise. Below, her account suggests that overcoming the initial challenge of participating in an intrinsic activity (i.e. art and music) generated an important sense of achievement. As she said, the "positive mental side of it, is what helps me gradually get better" (832):

If I was to think how to make myself feel better, I would probably think, as a start, I would defiantly put music on and probably do a little bit of drawing or painting or like do something like a few doodles, and that would be a start for me I think. That's the sort of, maybe start talking you know, eventually start talking to close people, and then I think the exercise would come after, I think. Because if I do exercise straight away, I think it'd drain me I think. I mean I do enjoy exercise, it does obviously help, it does eventually help, but it's not, I wouldn't say it's the top of my list if you know what I mean, so. I have to be mentally, I prefer to be mentally challenged than physically challenged, if you know what I mean, that kind of makes me feel better (819-827).

Other respondents indicated a preference of being 'physically challenged' to initiate their recovery. Heidi mentioned that participating in a variety of PMs was important for her recovery. She recalled that being with her grandchildren was "the icing on the cake...with the cherries on top" (564-565), suggesting that this was her most favourable activity. She further recalled that walking her dog and participating in yoga were equally important in her recovery, as these activities afforded benefits that led her to overcome her barriers and participate in other social activities (see theme E):

They're [PA and PMs] all part of the package I think. It's all part of my recovery and help, but exercise defiantly started it off with walking Lexi. That was the main thing, with walking Lexi and then getting over the fear of talking to people (512-514).

Similarly, Vince suggested that balancing his PA and PMs enabled him to maintain and demonstrate a level of wellness during recovery, and achieve a higher goal. For him, maintaining a positive relationship with his children was his "main objective" (1246), especially since he recalled being absent from his children, possibly due to ill health: "Five years ago I wasn't there" (1248):

I have to have a certain lifestyle on a certain level. So the fitness and keeping my house tidy, doing my art and all that; it's all in conjunction to keep me well so that relationship [with children] can happen (1243-1245).

Another finding was the concurrent regulation of multiple PA and PM activities afforded "win-win" (Heidi, 194) benefits. Stacy recalled a seaside trip with other

attendees from the centre, where she appeared to combine PA with her social activity of being with friends. Walking along the beach seemed to form memorable experiences for her, possibly enhancing a sense of connectedness during the social activity.

Me and Tina, we walked up to the water breakers, you know, where it stops the sea coming up so far, but yeah, we walked all the way up to the top of the beach and back again. And we collected shells, which was quite nice...my head was, you know, quite clear. I just felt connected, you know.

In contrast, Derek's participation in karate was for physical and mental purposes. He seemed to value experiencing physical outcomes (such as positive self-perceptions of physical competence), while also appreciating the psychological process of the activity: "There's something very all-encompassing about it [karate]" (85):

With the karate, it's not just about being able to defend myself...I've always been fascinated by the spirituality of it as well as the physical exercise. The grace and the art literally of watching someone do it when they're very, very good at it. It is an art, it really is an art form, and it's very graceful and very beautiful to watch I think (80-84).

Lucas shared his experience of being physically active while performing his livelihood PM, paying bills. He appeared to experience a sense of freedom and liberation for being responsible for his independent living. Interestingly, he compared such activity to feelings of restraint (i.e. 'being told what to do'), possibly incurred from understanding the experience of hospitalisation (personally or vicariously):

I often go and pay my bills early in the morning, and that feels like a constructive thing to do in itself... I'm free and that I'm very lucky to be in such a great country where you can walk around free and do your own thing, and not be told what to do all the time by something, you know, or some institution, sort of thing, if you know what I mean (75-76, 86-89).

Taken together, this theme has illustrated several accounts where PA appeared part of people's recovery, in a hierarchy with other PMs, or regulated as a process alongside other PMs. As such, the participants appeared to value their PMs in a primary, secondary or supplementary way, which could afford alternative benefits at various points in recovery. Notably, numerous benefits of participating in PMs and PA were reported. Given that the emphasis of the case is to focus an understanding on PA, the benefits participating in PA (as a PM and non-PM) are presented next.

# 8.2 Theme D: "The connection between body and mind"

The participants appeared to experience a variety of process (i.e. during PA) and outcome (i.e. after PA) benefits of PA. For many, these benefits seemed to interweave physiological with psychological aspects of wellness, which were clustered into the

following sub-themes: (a) Physical, (b) affective, (c) cognitive and (d) personal strength based benefits. Most participants appeared to experience these benefits during or after PA, which seemed conducive to their recovery. For many, this raised their awareness of a possible mind-body dualism, which some felt was an important aspect of recovery. Danielle suggested that the parity of physical and mental health should be a priority for recovery:

You know, health comes in first doesn't it. First it's sort of mental health and physical health, and they go hand in hand. They're two sort of completely related concepts (782-783).

Many participants appeared aware of the physical and psychological benefits of PA, and often reported experiencing multiple benefits. Heidi, for instance, suggested such benefits contributed to improvements in her mental health:

It [PA] helps me feel better, and it's good for you, it helps your self-esteem, your confidence and also helps you lose weight and or maintain weight, and that has a bearing on your mental health (1090-1091).

Similarly, for Stacy the prospect of experiencing the mind-body dualism seemed to motivate her attendance at the yoga group: "You're more there for mental wellbeing and physical exercise" (318-319). Such viewpoint perhaps contrasts other participants, who expressed a preference for attending PA sessions primarily to socialise (e.g. Ivan). Additionally, Stacy hinted to experience multiple physical and psychological outcome benefits of PA, perhaps raising her awareness of the mind-body connection:

It's made me physically tired, emotionally; it's made me feel it's given me emotional wellbeing because I've felt that physical tiredness. And it didn't let my mind wander, you know, it's given me something else to focus on rather than sitting there and focusing on the problems in my life (128-130).

Elsewhere, Fran advocated that the mind-body connection was essential for recovery. She explained that such parity can raise people's consciousness and self-understanding to subsequently inform productive decision-making (see theme E):

The main message here that I want to convey is that the mind and the body are related and that through physical activity you can have recovery, because if you become all mindful, you know, you become in touch with what works for you and what doesn't work for you (250-252).

As part of Tom's PA participation, he perhaps experienced kinesthetic learning; indicating improved self-awareness through understanding the outcome benefits of PA. He said,

I'm learning that physical exercise takes away stress and tension because it exercises the body which exercises the mind (399-400).

In contrast, Tim appeared to experience a mind-body connection through the physical process of playing golf:

The actual physical activity of trying to play a good stroke, try to get a good putt... moving your muscles and actually doing something was enough to make me feel good (1122, 1125).

Accordingly, the following sub-sections (in no specific order) illustrate specific findings of the mind-body dualism, detailing physical, affective, cognitive and personal strength based benefits. Additionally, although some respondents reported negative PA experiences (sub-theme D5), none indicated PA as being overall detrimental to recovery.

# 8.2.1 Sub-theme D1: "That physical dimension"

Some participants described experiencing physical benefits of PA, including reduced physical health risks, increased physical fitness, and biochemical outcomes of PA participation (e.g. endorphin release). Of these benefits, commonly, weight loss was reported as a desirable outcome. Sarah identified experiencing weight loss as part of living a physically active lifestyle. She recounted her busy daily routine, which seemed to initiate a negative energy balance:

At the minute my day is busier...it's more dominant with the physical activity because I'm doing two cleaning jobs, I'm cycling. To be honest, it's good because even though I still eat obviously, I have less time eating and snacking. So, that's kind of made me lose weight a little bit (643-646).

Some participants mentioned that weight loss as an important benefit to reducing co-morbidity health risks. Heidi recalled the positive impact that PA had on her diabetes:

I was on three tablets for diabetes, and now I'm down to 1, because I've lost a lot of weight (193).

Other participants revealed the prospect of preventing physical health risks as a desirable outcome for recovery. Derek suggested that his mental health would dramatically suffer if regular PA did not maintain his body weight:

I probably would just become obese if there was no benefit out of physical activity. I just would probably completely let depression wash over me and comfort-eat to the full point of bloody obesity. So, I think that it's important to stay physically healthy, I do think it has a massive impact on your self-esteem and your mental health (672-675).

The benefits of weight loss also seemed favourable for some participants, as they anticipated that it could offset some unwanted medication side-effects. Seb recalled that he exercises because "it kind of regulates what I eat, that's kind of why I got back into

it" (849). He mentioned that after being diagnosed with depression and taking psychiatric medication, he led a sedentary lifestyle and went from being "thirteen stone to seventeen stone in four months" (913-914):

You just sit there; you take your drugs, you're zonked out because they're so strong to start with and because your body's not regulating and you just watch telly all day, you're going to put on weight...and then they [medication] start kicking in and you want to start eating more because it ups your hunger because it's numbing the part of your brain that's telling you, you need to eat. So you eat and you eat, but then you don't eat the right things because you need to, you're craving sweet stuff all the time and the fat stuff, you know, it's really vicious (909-911, 920-925).

As indicated above, Seb suggests that he lacks a sense of control over his diagnosis and medication. Subsequently, experiencing weight loss through exercise and regulating his nutrition perhaps enabled him to regain a sense of control during recovery. As such, weight loss was perhaps an indicator of him taking personal responsibility for his physical health (see sub-theme F2). Likewise, Ricky recalled observing many attendee's to experience a sense of reassurance through offsetting their weight gain. He suggested that doing so, could facilitate the self-management of wellness and increase physical self-esteem:

A lot of medications for certain conditions have the side-effect of weight gain. So they're taking the medication that's helping their mental state, but then they're gaining loads of weight. So by coming into here [to exercise], they're reducing the gain in weight...So that makes them feel a little more comfortable in everyday living because they're not battling those daemons of weight gain (449-453).

Other physiological improvements included increased physical fitness, improved posture, body toning, feeling stronger, more agile and flexible. Accordingly, some respondents recalled noticing the physical, tangible improvements of PA, which seemed to enabled people to be "in touch with" (Fran, 1792) or "see their physical selves" (Tricia, 281). John suggested that the physical dimension of PA afforded conscious-raising opportunities for people to see and feel a sense of achievement. He contended that such experiences were important because psychological markers were difficult to measure in comparison to PA: The "black and white physical stuff" (313):

The thing that's just stuck me is the measurability of physical improvement. You know, it's much harder to say to somebody, 'you know, you come to mood master, has you mood improved?' But actually if you say, 'can you bench press X?', 'well, I know I can bench press X plus 10': Real clear, real measureable, someone is improving (306-309).

These physical benefits seemed to have a positive influence on some respondent's PMs, especially physically oriented ones (Theme E). Several participants mentioned

that increased strength and energy following PA seemed to improve how they performed their PM. Lucas illustrates this point below:

I think exercising helped me do my gardening better...because when I first started gardening I could hardly dig at all, but now that I have gone for walks and done some exercising in the gym, I can dig a lot harder and, you know, better and more of it (665-667).

Similarly, Heidi recalled experiencing increased energy following her yoga participation. Interestingly, she appeared to reserve her increased energy levels to self-manage and control her anxiety. She suggested that this coping mechanism occurred as a learning process, through increased self-awareness and self-understanding:

Heidi: I find yoga, it does give you more energy, especially, you know, and it defiantly does help with the anxiety, it makes you feel so much better and more energy after it.

Researcher: Oh ok, yeah. What do you do with that extra energy?

Heidi: I used to rush round and do more things at home, but now I got to realise that energy, I need to save that to try and make me, instead of rushing around using that extra thing, try and use it to calm myself, you know, I'm sort of learning that way (795-803).

Another physical benefit included the participant's perceptions of a biochemical response to PA. Neurotransmitters adrenaline, serotonin, dopamine and endorphins were rationalised by some participants as "all those feel good chemicals" (Lindsey, 1245). They suggested such biochemical pathways as a physiological response to exercise, and initiating experiences of positive affect (see theme D2). This way, PA was perhaps perceived as an alternative to pharmaceutical medication. For example, Judy recalled:

With the badminton, and all the exercise and the biking and the gym, you sort of, it sets off your adrenaline really, so that's a natural pick me up (577-578).

Other respondents recollected positive indicators of physical exertion during PA, including increased blood circulation, sweating, and breathing. For some, these markers seemed to provide positive feedback of exercising at a desired intensity. However, others perceived such indicators as negative experiences during PA (see sub-theme D5). For Jacob, sweating during exercise seemed to indicate that he was exercising at the appropriate intensity to achieve his desired outcome goal of PA: Experiencing positive affect when changing into clean clothes (sub-theme D2):

If I exercise, I exercise hard. I like to get a sweat on, and then once I get a sweat on, I can change my clothes at the end, and then I feel better. Whereas, if I had just gone through the motions [of exercise], I'm not going to get any sweat up and I'm not going to be getting that feeling at the end, because to me, if I didn't get a sweat on then I didn't get the payback of changing into dry clothes (745-748).

Accordingly, the physical benefits of PA seemed to connect the mind-body dualism partly through subsequent experiences of positive affect, which is presented next.

## 8.2.2 Sub-theme D2: "It's changed my mood"

Many participants identified seeing or experiencing transformations of affect (i.e. mood/emotional related) before, during or after participating in PA. Transformations were observed when the participants described a change from neutral or negative affect (i.e. apathy, feeling depressed, unhappy, distressed, or sluggish), to experiencing positive affect across three arousal states of low (i.e. feeling calm, relaxed), medium (i.e. feeling happy, sense of pleasure) or high (i.e. feeling elated, a buzz) affect. As James recalled:

When I might come in the morning, I feel a bit groggier, I feel a bit lazy, and when I come out of the gym I felt totally different. So that's made me, it's changed my mood, it's made me feel from low to happy (1113-1115).

Similarly, Fran and Ivy noticed affective transformations in some attendee's physical-being post PA. Below, Fran recalled observing a change in people's aura and self-presentation:

On their faces, there's a smile, or the comments are more positive, their whole vibe about them, there's something about the energy about them that has changed" (986-988).

Fran further suggested that affective transformations might arise when the attendees experience a physical escape from the embodiment of illness. Below, she reports the possible change from a depressed form, appearance and posture, to then remoulding the body as a physical, living and reenergised being:

If you're a person that's depressed and like this all the time [looking down, slouching shoulders], and then suddenly, during an exercise they lift their shoulders [acting this out], learn to breath, and 'ahhh' [exhales]. Like the energy changes, and so they might get a glimpse of what it feels not to be depressed, even if it's just for like a minute, they might feel the difference (1024-1028).

Transformations of neutral or negative affect to low arousal states of positive affect were predominantly observed in activities that seemed low in PA intensity (i.e. housework, walking, or yoga). Such activities seemed to mediate or prevent negative affect from occurring; reduce anxiety, stress, tension, frustration or worry. Tom revealed that attending the centre helped to control his tension, stress, anger and emotional issues. He participated in PA, "to calm me down" (201):

The dance therapy that we've been doing, getting rid of tension and pressure of stress, really releasing any feelings of negativity from the body that's very good as well, you know it's there to stimulate and to help take away pressure (153-156).

Some participants seemed to experience medium arousal positive affect when they felt good, alert, a sense of enjoyment, or happiness through PA. For Linda, socialising with a friend was an important aspect of her exercise enjoyment. Doing so seemed to create an interesting and interactive environment. Her perceptions of happiness through PA surfaced through doing something purposeful, connecting to others, and experiencing a sense of achievement:

[Exercise] makes you feel happier; it makes you feel sort of more active, more you know, when you're relating with people you get on better, and you feel like you've achieved something, you feel better about yourself (1209-1211).

For some, experiencing a sense of achievement through PA was reported to evoke a sense of pleasure, satisfaction, self-worth, enjoyment, or happiness. Several respondents indicated that such emotions from experiencing a sense of mastery, self-development or improvement in PA. Judy mentioned valuing the enjoyment and health benefits of yoga. Moreover, she expressed a sense of pride when reflecting on the long-term benefits of improving her physical ability:

I'm getting healthier the more I do it [Pilates and yoga], and that I wouldn't have been able to do it two years ago...I suppose satisfaction that I can do things what I couldn't do before (746-747, 749).

Stacy appeared to feel elated following her PA achievements. She acknowledged an understanding of the physiological response to exercise (i.e. breathlessness, sweating) as an opportunity to recognise improvements of competency, which reinforced that she was "doing something right" (529). These experiences seemed to evoke positive affect:

I love the treadmill because it's the breathlessness that I like. It's the strain on the body, you know, knowing that I'm doing something right. So yeah, I do enjoy my cardio because you get a sweat out of the cardio. So, I do like a good sweat because it shows that you've achieved something, so yeah. I mean when that 30 minute buzzer goes on the treadmill and it just stops, it's like, 'oh yeah', it's excellent, you know, it's a brilliant feeling' (Stacy 528-532).

For Lucas, a sense of excitement was experienced in the prospect of being physically active while shopping for a book. Such PA was particularly significant as reading was a PM for him. Below, his account illustrates the simultaneous benefits of valuing the affective process and outcome rewards of an activity:

I walk from one part of the town to the other part, and when I'm walking, I feel I've got this sense of anticipation of what book I'm going to buy, and I feel on a big high, you know. And, I think the

exercise of walking and the combined anticipation of what book I'm going to buy gives me a sense of excitement...When you've got something to look forward to, it gives you a lift and I think when you're physically moving as well, that gives you a lift as well you know. If I sat down and just thought about it, it wouldn't be so exciting (258-262, 269-271).

Derek recalled that experiencing a sense of enjoyment from performing karate (a PM of his) helped him overcome certain barriers of feeling "alienated" (33), "awkward" (94) and "uncomfortable" (103) when participating in public Karate classes. His account below hints the value of intrinsically regulated activities as possibly affording personal strength opportunities during recovery (sub-theme D4):

I enjoy the things that I enjoy doing [karate], and they're worth putting up with being around other people [a barrier] because I feel that passionately about them [PMs]; I enjoy them that much (110-111).

Elsewhere, other respondents suggested that the affective benefits were temporal, and the "feel good factor" (Ivy, 924) required daily determination and motivation to pursue. Such continued effort to experience positive affect may incur a barrier to PA. According to Tom, "the feel good factor lasts for about a day" (1108), and consequently, to continue achieving such benefits, PA could be a tiresome venture:

I think when you do the [PA] things in the morning, it keeps you going throughout the day. When you wake up and go back to sleep, it's like you've gone back to square one again (1108-1111).

The findings in this theme suggest diverse ways of experiencing positive affective through PA. However, some participants reported negative experiences of affect from PA (see sub-theme D5). Another benefit of the mind-body dualism was improved cognitive function, which is discussed next.

# 8.2.3 Sub-theme D3: "It gets you in the right frame of mind"

Numerous participants suggested that positive cognitive benefits could occur during or after participating in PA. Cognitive benefits included improved decision-making, focus, concentration, clearer thinking, having a distraction, escape, and generally being in a better frame of mind. Many respondents seemed to value experiencing a distraction through PA; averting unwanted thoughts, symptoms of ill health, personal struggles, worries and concerns. Derek seemed to appreciate such benefit as, "a holiday from the mental illness" (49-50). He said that participating in PA offered, "time to recuperate, to gather my strength, to cope...and to handle the mental health side of my mental health problems" (50-52). As part of his PM-PA participation in karate, he suggested that focusing on the sensei and the physical exertion of PA enabled him to maintain a distraction from mental illness:

When I'm doing these activities [karate, table tennis and chess], I tend to focus on them and what they involve as much as possible. I try to give them my full attention mentally. I try to think about nothing else other than the activity that I'm doing because that's where the escape comes in, that's why I do these activities in the first place (386-389).

Similarly, Ivan reported becoming "engrossed" (2208) in exercise, by concentrating on regulating his PA and using the apparatus in the gym to displace his unwanted negative thoughts. Some of his negative thoughts – such as worrying about life events, finances, or repairing his car – seemed to dissipate through concentrating on the physical exertion of performing PA. Subsequently, Ivan reported experiencing clearer thinking and respite following PA:

I feel that if you set your mind on something, it helps you take your mind of bad things you've been through, bad experiences during the week. Say if you had a bad day and if I go to the gym it will take my mind off that...and what it does, it makes me feel like I've got nothing on my mind. The fact that I'm working out and it helps clears the stress, it just takes away the problems, it just gets rid of them, cleanses them out because you're thinking nothing but, 'exercise, fitness, fitness' (372-376).

Likewise, Jacob recalled, "if I had a busy mind I couldn't concentrate on much." Subsequently, he appeared to appreciate experiencing "inner quietness" (979) during and after PA. Specifically, he said, "being talked into a calm state" (1056-1057) during yoga, and then changing into clean clothes after exercise, created distractions and respite from his obtrusive, ruminating and negative thoughts. Moreover, he mentioned walking as an effective PM-PA that helped structure his day, and distract him from the potential imprisonment of mental illness:

If I did half an hours walking, it's half an hour's less time just sitting around doing nothing, maybe having obtrusive thoughts or just being bored out of my mind, ruminating over stuff. So to me, I suppose looking back I did a hell of a lot of walking...it got me out of that place of just sitting there ruminating over things, thinking that I never was going to get out of where I was, that type of thing (437-439, 444-447).



Picture 8.1. Jacob: "I did quite a lot of walking, wore out quite a few pairs of shoes" (432)

Elsewhere, John suggested that some attendees could experience a distraction and escape from mental illness after PA. Particularly, he said, "that peace afterwards, gives them a better chance to reflect and think differently" (1365). Doing seemed to afford opportunities for people to process their thoughts in an alternative way:

If you're drowned in the thoughts, and never get away from them, then it's hard to make some progress. You got to have some different ways of thinking, one way or another, whether it's meditation, physical activity. 'Can I think differently? I'll have to go to the gym, I'll think differently (1369-1371).

To elaborate on John's comment, Lucas appeared to value thinking differently through PA. He suggested that PA helped him to organise his thoughts better, enabling greater control over selecting certain thoughts, while also detaching him from unwanted ones. Such strategy perhaps prevented him from internalising uncontrollable environmental factors:

Dealing with small and big problems through exercise...you can detach yourself from people and events, you know. If you got a problem that is bothering you can compartmentalise it in your head and put it in a box and put the lid on it and then forget about it, you know. Exercise helps you to concentrate your thoughts more to do that, you know, to be able to do that skill in your own head (1449-1453).

Accordingly, the cognitive benefits outlaid in this section appeared to position people "in a better frame of mind" (Sarah, 772). This seemed to benefit the respondents in other contexts of their lives, especially with the regulation of mental activities (see Theme E). For instance, James expressed that following PA he experienced clearer thinking, which seemed to transform his thought patterns toward being more optimistic:

I think the exercise makes you feel positive, but when you're stressed you're not feeling in a good frame of mind so that when you do exercise it can make you think clearer about what you're thinking about and in a positive way (1454-1456).

Nonetheless, some respondents reported negative cognitions during and after PA, which are illustrated in sub-theme D5. Next, I present the last positive benefit of the mind-body dualism; findings illustrating how PA might develop people's personal strengths during recovery.

### 8.2.4 Sub-theme D4: "Strong in the mind"

This theme is characterised by the personal strengths the respondents appeared to experience during and following PA. The participants reported increased confidence, resourcefulness, resilience, perseverance, determination, assertiveness, courage, and facing personal fears and challenges. Some of these strengths appeared to aid

overcoming PA barriers, and perseverance through the discomfort of PA (see sub-theme D5). Some respondents appeared to develop resilience through increasing the self-awareness of their personal competencies during PA. Most participants seemed to improve perceptions of their physical competence through increased confidence. For Tim, developing self-confidence seemed an important enabling factor of his recovery. He suggested that PA could increase his confidence to being productive, connect with others or experience enjoyment. This way, PA was perhaps associated with generality of self-efficacy as part of a 'knock on effect' (Theme E) to perform other activities. He recalled:

If you've got confidence, then you can do a lot more things during the day, during the week, than you probably would have done if you haven't got confidence. Confidence is quite paramount with the ability to interact with people, get things done, basically make life enjoyable, or as enjoyable as you can (420-424).

Ivy had observed some attendee's develop self-confidence during her dance classes. She believed that confidence was pre-existing within an individual and the experience of negative life events can "take that confidence away" (448). Further, she perceived that exercise could raise the attendee's consciousness of their physical competencies and task achievements. Doing so seemed to evoke positive affect and subsequently increase self-confidence. Subsequently, similar to Tim, she also indicated generality of self-efficacy through PA:

I think that Zumba actually does bring that confidence to the surface...People have got it [confidence] there, but they don't realise it. But once they do the classes, they feel like they can do more, they're happier. I think when you're a happier person; you feel like you can do more, you can take on more and I think that's really what it brings out; it brings out the happiness, umm, which in turn brings out more of the strength with the confidence with it (449-452).

Likewise, Amy appeared to experience increased competence from exercising in the gym. She indicated that PA raised her physical self-perceptions, which seemed to improve her exercise self-efficacy and feelings of physical self-worth:

You feel strong in yourself when you're doing it, and you don't feel weak, you just feel really, really strong and you just think to yourself, 'yeah I can do this, I can do this, I can do this' (395-9-397).

Improvements in physical self-worth and self-efficacy seemed to influence Ivan's engagement in other activities at the centre. He recalled feeling "relaxed" (1877) and "relieved" (1881) after exercising in the gym. Such positive affect seemed to reduce feelings of social anxiety, and evoke self-confidence to participate in other activities at the centre:

After you've been to the gym and you come down for the afternoon group yeah, you don't feel vulnerable when you walk into a group, you don't feel on edge you, you won't come in rusty, you'll come in feeling like happy (1892-1894).

Accordingly, developing self-confidence seemed to increase some respondents' resilience during daily challenges. Following resistance exercise and housework, Vince suggested that he experienced increased self-confidence, which bolstered his resilience during difficult situations and life-events, potentially offsetting ill health:

If something does come along which is difficult to deal with, you're at a higher level, so when it knocks you down a little bit, it's not right at the bottom...you're not at a low, so when it hits you it knocks you out of it. So keeping that level with exercise and keeping the house [tidy] it probably gives you that armour just to cushion some of the things what happen in life (1321-1322, 1326-1329).

Fran perceived that some attendees could develop their inner strengths and resources through improved physical self-perceptions. She suggested the physical exertion of PA perhaps enhanced the attendee's mindfulness as part of directing the generality of self-efficacy:

Doing the martial arts, if something feels uncomfortable on a physical level and you're in touch with that, then you might be in touch with feels uncomfortable on an emotional level. And so, you might be able to put better boundaries for yourselves and be more assertive and say, 'no I don't wanna do this anymore' (371-376).

Lucas seemed to apply "the negative side of exercise...there's no gain without pain" (1296) to develop a sense of assertiveness in other contexts of his life. For him, experiencing the physical discomfort of PA (see sub-theme D5) seemed to help him persevere through the general difficulties of life, and perhaps progress toward achieving self-concordant aspirations. As illustrated below, the raised self-awareness of overcoming PA challenges seemed to develop some generality of his competence and confidence in other contexts:

Sometimes when it's [exercise] difficult, you can think of things in life that are difficult, and that you have to work hard at them to overcome the problems related to them to achieve what you want to achieve in life. And that I just mean that generally across the board that, you know, life isn't easy, and exercise actually helps you to deal with difficult things in life, you know, generally (1297-1300).

Similarly, Tim seemed to describe developing resilience through his PM-PA, playing snooker. He recalled numerous occasions where he had marginally lost, yet he reframed his misfortune due to being satisfied with his performance. His participation seemed regulated by an internal locus of control, accepting that success is not always possible in snooker. Further, his account below indicates his experience of a mastery-

orientated performance (i.e. playing for personal improvement) as perhaps developing a sense of resilience. He appeared to apply such reasoning to life in general:

I play snooker quite a lot and I've had loads of games where I've lost on the black ball, but I wasn't particularly upset about that because I know that I've played a very good game. It was just unlucky that I had lost on the last ball. So that's the way it goes isn't it [laughs]; you have to take the knocks, you have to take the ups and the downs with most things in life. It's not always going to go your own way all the time (1163-1167).

Elsewhere, Jacob appeared to describe applying two psychological skills as coping strategies to persevere through exercise. He recalled some negative experiences of PA, including boredom, physical discomfort, and negative perceptions of the gym environment (see sub-theme D5). Subsequently, his strategies included positive self-talk, "I'm going to be feeling good after I've done this" (667), and goal setting, "I would try and break it down into small chunks to work my way through it" (664-665). Noticeably, he applied multiple goal strategies, including a contingency plan: "you can always fall back on the music...I'll go for a certain amount of time till that track ends" (817-818). Part of his goal setting strategy is illustrated in picture 8.2 below, and the following account:

Researcher: Was there any other pictures there that are really important to your exercise experiences?

Jacob: It would be picture 11 really [below], because it would give me goals to work to, you know. You could set yourself little personal targets, like I say if you're on the rowing machine, you might set yourself a target of rowing at least, between 38-40 strokes per minute, something like that or do a certain distance in a certain amount of time.



Picture 8.2. Jacob: "Break everything down into tiny time bits...that's how I operate in the gym" (814-815).

Similarly, Derek appeared to apply a focusing technique to persevere and overcome his anxious and paranoid feelings when partaking in public karate classes:

I try to focus purely on what I'm doing and the actions I'm doing and what I'm trying to learn, and block everything else out, including everyone else in the room, apart from the sensei that's instructing me (25-27).

Such coping strategies seemed important constructs as part of demonstrating personal self-care and self-management during recovery (see sub-theme F2). Likewise, facing and overcoming personal fears and challenges appeared to facilitate some experiences of personal growth (Theme F). However, some respondents reported negative and paradoxical experiences of the mind-body dualism. These findings are present next.

# 8.2.5 Sub-theme D5: "Sometimes I don't feel that great when I'm doing it"

Some respondents appeared to experience a "love-hate relationship" (Jacob, 692) associated with PA. Such individuals seemed to value the outcomes of PA whilst disliking the process of PA. Additionally, other participants indicated that occasionally their PMs could be a "double-edged sword" (Derek, 558), when experienced as contradictory, unenjoyable or counterproductive. This latter finding was surprising, and so this theme will illustrate the respondent's paradoxical accounts of PA and their PMs.

Some respondents reported that they disliked the physical exertion of PA, especially when experiencing discomfort, pain or strain during PA. Although some participants valued such experiences as feedback of their PA performance (e.g. Seb and Ivan), others suggested this created a PA barrier. For instance, Richard described, "a catch twenty-two" (2055) situation following PA. Although he recalled PA facilitating his PMs through positive affect, conversely overdoing PA could also worsen his back pain and incur "a detrimental effect" (2047) on his PM, playing darts:

I do have a habit of overdoing it [PA] and make making the problem worse [back pain], and then it gets me down because I can't do much else... I'm struggling to focus on both playing the darts and fighting the pain at the same time (2054-2055, 2109-2110).

Sarah also mentioned that overdoing exercise could have a negative effect on her PM socialising, through physical tiredness:

As long as I'm not overdoing it [exercise], you know, that's when I feel tired and I'm not up to having a long conversation (780-781).

Another undesirable effect of PA included the occurrence of negative thoughts. This seemed apparent to Amy, who perhaps noticed a discrepancy in her perceived PA competence with actual physical ability. She recalled exercising to exhaustion, and despite her admirable efforts, when she failed to achieve her PA expectations, she

described a decline in self-worth, perhaps induced by feelings of guilt, shame and hopelessness.

I just need to make sure that I've increased the amount of fitness I do. I don't want to do under, because it makes me feel I'm not doing enough, I'm just really not doing enough, I should be doing more, not less. Sometimes I do feel like I'm depressed when I'm doing them, and I was like, 'it's not enough, it's just not enough' (2342-2345).

Jacob suggested that the exercise environment seemed to influence "a pessimistic view of coming in the gym" (569). Although he reported positive benefits of PA, he also described having to "go through a little bit of uncomfortableness to get yourself to a place that's a lot more positive" (642-643). Specifically, he described experiencing an adverse "domino effect" (600) when focusing on 'weak' aspects of the gym infrastructure. He occasionally felt disjointed when first noticing that two exercise bikes in the gym were misaligned (Picture 8.3, below):

If I was having a bad day and I was coming into the gym, it would just be another thing to say, 'yep, things aren't great', you know, it's just like another downer as soon as I came in the gym. I suppose it would be frustrating that somebody had left the machine like that (566-567, 576-579).



Picture 8.3. Jacob: "It might be not parallel with the other machine...another nail in the pessimistic side" (568, 576).

Thereafter, Jacob recalled observing other 'weak' aspects of the gym environment, including a punch-bag frame (Picture 8.4, p.175), the free-weights shelf (Picture 8.5, p.175), rowing machines (Picture 8.6, p.176) and treadmill (Picture 8.7, p.176). To him, these features represented perceptions of weakness, as illustrated below:

You see the punch bag isn't hanging on it anymore...that had obviously been moved because it must've come off the wall ...you catch yourself looking at the wall, 'yeah, that's fallen off', and then it's sort of like that. It's a weakness I suppose. And then I might

think, obviously once I start getting into that sort of frame of mind, then I start looking at other thoughts. And obviously, picture 15 [Picture 8.5, left] I look at that and I look at weakness I suppose...That's where all the weights are held, and people put stuff on that shelf that long shelf in there, which is related to number 14 [Picture 8.5, right] where that's a strong picture to me because it got a post in the middle, so that would be ok, whereas, I would look at something like that and it would frustrate me...it's another thing that can break (591, 602-608).



Picture 8.4. Jacob: "Another thing that had obviously gone wrong somewhere" (595).



Picture 8.5. Jacob's perception of weak and strong structures in the gym.

# Regarding the rowing machine, Jacob said:

I just noticed the angle of the [rowing] machine and it sort of stuck in my head. It was such a weak point in the machine, it sort of really got to me [pointing to the angle of the rowing machine] (615-616).



Picture 8.6 Jacob: "It just represents weakness...something that's going to break...go wrong (618-619).

## Concerning the treadmill Jacob recalled:

You got such a great big machine with people jumping up and down on it running along, and you just got like a couple of plastic wheels it sits on, rolling up and down that alters the height. So, I suppose it would just, I'd just look at everything and think weakness, you know, it's all things that can go wrong. (623-626).



Picture 8.7 Jacob: "The negative side of the gym" (626).

Elsewhere, the respondents reported occasionally experiencing controversial encounters when participating in their PMs. Tom identified organising events as one of his PMs. This enabled him to spend time with other attendee's at the centre, whilst also maintaining a sense of being in control. Nonetheless, doing so also potentially incurred additional stress, tension and anxiety:

When you get involved in events and planning and organising them, yes it's consuming, it's almost debilitating to a degree, you know, and it really does take a lot of energy and a lot of strength to be able to deal with that...There's collecting money, organising transport, working out routes, you know, arranging pickups, fuel, destinations, times, you know. [The seaside trip] was very stressful and it was very difficult to sleep the night before. You know, I think I only got four, five hours sleep because my mind wouldn't relax (84-89).

Ivan suggested that his mental health condition could affect his PM performance of playing darts. His account indicates possible over-arousal, stimulated through a competitive game; incurring negative affect of frustration and anxiety. Interestingly, his experience of non-competitive darts differed, suggesting that being ego (performance outcome) oriented may incur contradictory side-effects:

Every time I played [darts] against somebody I start getting nervous. I start getting tensed up inside because I fear the fact that I'm going to mess up and lose, right. And when I get that fear I start getting panicky and the Asperger's syndrome kicks in or me panic, you know, anxiety kicks in, and I start getting annoyed with myself (961-964).

Similarly, several other participants mentioned struggles to perform their PMs when unwell. Heidi recalled an occasion when she was unable to walk Lexi (her PM) due to being unwell. She possibly felt an initial sense of disappointment, but reflected upon the situation as highlighting the importance of self-care, and rest before regulating her PM:

I've been sort of, a bit washed out recently; I didn't take my dog for a walk for 3 days... I didn't like it, and I thought that I was letting her down, but I thought, 'no, I need to look after me and rest for a little while, and then take her' (846, 855-856).

For Hayley, regulating her PM of gardening appeared to be controlled by her physical ability and the weather. These factors could incur undesirable experiences, such as, "frustration because I can't do as much as I would like" (762), and, "gardening is very much, sort of, seasonal" (804). As indicated below, these barriers seemed to avert her PM participation:

I'm trying to do more heavy gardening for example digging, but that's more in the summer when that's a bit more easier (132-133).

Accordingly, this sub-theme has indicated some undesirable effects of PA and PMs. The participants suggested greater motivational struggles toward PA than PMs, possibly because PMs were often intrinsically regulated. Occasionally, PA was also found to incur a negative impact on the participants PMs, mainly through overdoing PA and experiencing physical tiredness. Nonetheless, persevering through the struggles of PA and PMs appeared to afford benefits as previously outlined in Theme D. Noticeably, many respondents seemed to apply the process and outcome benefits of PA to afford a, "gateway into the other things" (Jacob, 757), as presented next.

# 8.3 Theme E: "My gateway into the other things"

Most participants reported situations where the benefits of PA were applied in other contexts of their life, especially regarding their PM participation. Many described PA as facilitating the development, engagement and achievement of their PMs, such as

"getting in the mood" (James, 237) or in "right frame of mind" (Vince, 884) for their PMs. Other accounts were identified where some respondents had utilised their increased confidence to try new things or activities, rekindle previous interests, depart the centre, regain independence, help others, and become more productive. Additionally, other nuances observed encompassed developing valued social roles, whereby the benefits of PA seemed to contribute toward the uptake of employment, educational opportunities, volunteering or community engagement. For instance, Steven reported observing multiple situations where the attendees seemed to experience a "platform" (387) on to other contexts via PA. He suggested that PA may provide some necessary resources (i.e. weight loss, increased confidence and self-esteem) to direct people's agency toward their self-concordant aspirations:

We've seen recovery on the exercise programme through people going out into the community to join health clubs themselves. So, they develop the self-esteem and confidence now to go out. People have gone from the health project onto college courses because through going to the gym and gaining confidence, and feeling better about themselves...We've had people who have reduced their medication considerably, others who feel much better about themselves because their body image has improved through weight loss, and some of them have gone on to be volunteers at the centre, which again is, they're on the processes on the road back to recovery, to work...I've had one take up football and he's gone on to be semi-professional, so I think in that respect that, you know, the exercise kick-started them back into wanting to do something that they've always wanted to do [133-139, 1036-1038].

Similarly, Fran noted a "domino effect" (1200), whereby the physical dimension of PA seemed to raise people's self-awareness, perceptions of independence, control, competence and autonomy. She suggested that such "inner resources" (73) are developed through PA, and contribute towards people's conscious or subconscious engagement in other opportunities:

"It [PA] kind of spills out from one thing into other areas of your life, you might not be aware of it, but it's kind of a domino effect almost, it happens. It can't stay still because when you integrate physical activity then there's a different energy to you, so you carry that energy in the outside world, and that may attract other circumstances, events, cos you just have this different energy about you" (1199-1202).

Some participants indicated that experiencing cognitive and affective outcome benefits of PA might enhance their PM experience. Vince recollected some cognitive benefits as alleviating unwanted thoughts, which seemed to help him concentrate and think clearly when performing his PM, art. His account indicates that the cognitive outcomes of PA may influence his mentally stimulating PMs:

With me, I suppose because it [exercise] makes me think clearer, it gives me brain space to be creative, which I'm not bogged down with other things, so it sort of clears my head. So, to be creative, it helps out sort of with my writing, my pencil sketches and paintings, so that's the effect I think it has on me. It just gives you brain space to be creative or do other things, which help you along as well (674-679).

Similarly, James suggested that walking to his poetry group fostered his PM of creative writing. He recalled cognitive and affective benefits occurred whilst walking, which perhaps fostered his self-expression, and helped him prepare for the poetry group:

James: When it's a nice day, I can walk down [to the centre], and so getting in the mood to write what you need to write down and about, you know.

Researcher: And the walk from group to group helps you get in the right mood.

James: It does, yeah, makes you feel excited, and when you want to go there you feel happy and all that

Researcher: And during the walk, what kind of things are running through your mind?

James: What's the poetry group going to be about, what am I going to write about, so I do it in a different group you see, so maybe what's the theme going to be about, things like that, happy to go there (237-248).

In addition, affective outcomes after PA seemed to influence socially oriented PMs. Sarah described herself as a sociable person; valuing her time with family and friends as PMs. Through her physically activity lifestyle (walking, cycling, and employment), she recalled how such activities could elevate her mood, feel more enthusiastic and sociable:

Doing a bit of exercise, doing the cleaning job, sometimes it makes me, when I do that sort of exercise, it boosts me up with obviously my mood and it makes me enjoy when I see people, if you know what I mean like. You know I feel more positive and I feel more up for a conversation, you know a little bit, I just feel better in myself...when I do exercise, it does encourage me to be more sociable, more in a better frame of mind I suppose (763-767, 771-772).

Similarly, Tricia noted that the attendee's increased confidence through PA could encourage them to feel more comfortable in social situations. Subsequently, she suggested that this could facilitate the centre's ethos of community integration:

Being sociable with people in the gym, and they can then be sociable with people from out the centre...and then they might look at some of the other courses...and try other things outside [the centre] as well (1266-1267, 1272, 1281).

Another example of "the knock on effect" (Danielle, 207) included the possible influence that PA had on the attendee's livelihood activities. Jacob appeared to value

keeping physically fit as part of returning to employment: "I've always done like manual type of work, I'm not a sort of an academic" (1107):

To keep myself in some sort of shape to get back into work was quite important because I used to work a lot on building sites, that type of thing. So I didn't want to let myself go too much because I would struggle getting back into that type of work. Even though I haven't got back into that type of work, the job I'm doing is quite physical, it can be quite physical. So that was important for really keeping myself in some sort of nick to get back into work" (1109-1113).

For Janice, although she suggested feeling generally helpless and amotivated - "I'm terrible for everything...I have no motivation for absolutely anything" (169-170) - she recalled feeling more productive following PA. Subsequently, feeling more productive perhaps led Janice to consciously engage in other meaningful activities, such as contributing to the centre. Doing so perhaps evoked further benefits, such as feelings of satisfaction from being more productive:

After I've done it [exercise] I do feel better and I don't feel so lazy, and that carry's on through to perhaps the evening, whereas when I haven't done anything it does show...it's easy to let things slide I've found, because I've obviously got that type of personality, you know. So yeah, I've found, if I'm doing that [exercise], I would be more inclined to do some other things around, you know. I would wash up all the cups and stuff afterwards and you know, I don't mind...whereas instead I would've gone out the door and not given it a thought, and when you get home and be a bit like dive on the chair and not move, you know (463-470).

Similarly, Tim appeared to describe the benefits of PA as enacting a catalyst effect, which could increase his motivation toward other activities. His account perhaps indicates an internalisation process associated with his perceptions of PA participation. Part of this process, he indicates experiencing enjoyment, positive reinforcement and developing personal competencies as important features of PA toward increasing his confidence to participate in other activities:

If you do a physical activity and you enjoy doing it, and then because you enjoy doing it you become good at it, and because you can become good at it you enjoy it more. It has more of a positive feedback. And then, because you're becoming good at it and you enjoy it, that helps you maybe think, 'oh maybe I can do other things as well', and improve your skill set. So, you're developing like a portfolio of an increased skill set. And then the more that motivates you to do other things, and the more you do other things, the more that motivates you to keep on increasing almost exponentially. Then eventually, you'll start thinking, 'well there's nothing I can't do', eventually, because you've gained so much confidence that it almost has a self-positive feedback, a sort of, snowball effect basically (981-990).

However, in response to Tim's account above, Linda and Judy suggested that other activities might equally afford such benefits (Theme C), contrasting his perspective. Nevertheless, the benefits of PA seemed to influence some attendees future behaviours (see sub-theme F1), as Fran suggested, "when you start to see the results,

then you become more motivated" (1151). According to Ricky, he recalled that many attendees experience a sense of achievement through PA, which can let their "mind set change" (181). He suggested that they demonstrated increased self-determination, possibly due to increased self-perceptions of physical competency. This perhaps influenced an experiential process of behaviour change. Namely, his account below appears to suggest dramatic relief and conscious raising through PA:

They believe that they can take on new challenges because they've come into here, they've set themselves a goal, they've hit that goal, they've can achieve it, and then they've gone to take on a new goal. So they've gone away and think, 'well ok here's a challenge, previous experience tells me that I can get past this challenge', and their mental state is a lot better. So they attack it and they go forward because it's not such a scary challenge once they know that they can do these things

Interestingly, another finding was the indication of PMs potentially affording transferable benefits to influence PA behaviour. This suggests a two-way PA and PM relationship as being beneficial to recovery. For example, James suggested that experiencing elevated positive affect after listening to music (his PM) might influence his PA participation:

I can listen to something good on the radio, it can make you feel good and happy so, and I think make me feel a bit more, how can I say it [laughs] a bit more wilder as they say. In a happy mood, you might want to do more exercise in the gym (183-186).

Accordingly, this theme identified some outcome and process benefits of PA and PMs influencing the respondent's engagement in other activities during recovery. Doing so could facilitate the experience of further benefits and new possibilities during recovery, suggesting that PA participation may afford enabling opportunities during recovery.

### 8.4 Chapter summary

This chapter aimed to illustrate the diverse ways in which the respondents experienced PA and PMs. Some participants identified PA as a meaningful strategy during recovery, whereas others appeared to appreciate the adjunct role of PA. The participants PA regulation varied and PM-PA appeared more intrinsically motivated compared to non-PM PA. Notably, the respondent's non-PM PA seemed to present more barriers and negative experiences compared to PM-PA. Additionally, during periods of ill-health or low periods of recovery, some non-PM PA and PM strategies were reported. Subsequently, a lower stage of readiness to participate in certain activities was observed, and the combination and balance of multiple activities seemed

desirable. The findings indicate that a repertoire of PMs might include physical, social, mental, and livelihood activities to facilitate recovery.

Participating in PA appeared to afford physical, affective, cognitive and personal strength process and outcome benefits. These benefits influenced the regulation of Non-PM PA, mainly to achieve outcome benefits, whereas these benefits were an important process and outcome of PM-PA. Focusing on PA outcomes seemed important for persevering through ill health, motivate PA participation, and afford a sense of hope (see sub-theme F1). Process benefits seemed to include experiencing a distraction from ill-health and a sense of enjoyment during the activity. Furthermore, the process and outcome benefits of PA seemed to afford enabling opportunities in other contexts of the respondent's lives. These transferable benefits may have a catalyst effect, evoking opportunities of personal growth during recovery.

#### **CHAPTER 9**

# How do people experience personal recovery through participating in physical activity?

#### 9.0 Introduction

This chapter presents the following findings: (a) Theme F "from small acorns to big oak trees," (b) sub-theme F1 "a brighter future," (c) sub-theme F2 "taking ownership of themselves," and (d) sub-theme F3 "being the true me." The participant's recovery was perceived as an individual journey of progressively moving forwards in life. Views of the meaning of recovery varied among the participants, some suggesting recovery as a process, while others perceived it as an outcome. For instance, Hayley compared the FG A group perceptions of recovery:

They've [other FG members] focused quite a lot more on how you achieve recovery I think, whereas we looked on more what it would be feel like once you are recovering (472-473).

Accordingly, recovery as a process and an outcome are considered in the following sub-themes, wherein PA seemed to direct future aspirations, demonstrate self-ownership and redefine a more positive identity. These constructs seemed to contribute to experiences of personal growth during the recovery journey.

## 9.1 Theme F: "From small acorns to big oak trees"

The respondents recollected experiences of overcoming challenges, making constructive lifestyle choices, self-achievement, self-development, self-understanding and self-acceptance as part of personal growth during recovery. John suggested that self-exploration was part of people's recovery journey, and possibly furthered experiences of self-understanding. He perceived recovery as an enduring non-linear journey, wherein change was important and personal growth was part of transforming to a place of stability:

Can people get themselves into a different position other than the one that was causing them too much difficulty? So can they recover, not necessarily to the same place as before, but to the place where they're more stable and will have a better quality of life...You're going to be stumbling and falling, and then up and down. Can you generally make progress one grain of sand a time towards a place where you're more stable? (14-19).

Other participants appeared to desire returning to a previous healthy self as part of personal growth. Tim identified that his aim of recovery was to "enjoy life again to its

full" (844), by getting "back where I was before I became ill" (841). Nevertheless, he also noted the enduring journey of recovery: "Improving on a day to day basis" (840). Likewise, Jacob described his recovery progress as "an on-going battle" (1257). At the time of the photo-elicitation interview, he indicated that he had "started fighting back" (1266):

I got to keep remembering that I'm sort of part way along the track really. It's just sort of getting my life back. It's not something that's going to change over like ten months" (Jacob, 1266-1268).

Furthermore, Jacob reflected upon his photographs during the photo-elicitation interview. He indicated that his recovery had progressed further since he initially captured his photographs:

The pictures probably tell one thing, and I feel slightly different... I'm probably slightly further on than the pictures I took, not a lot, but probably slightly further ahead (1222-1223, 1204-1205).

Stacy recalled similar reflective benefits following her engagement in the photoelicitation interview. Although she mentioned enduring "five years of isolation" (256), "hell" (249) and feeling trapped within a "vicious circle" (259), using drugs and being harassed by other people; she recalled, "exercise has helped me overcome the challenge of getting better" (806). She identified how experiencing a sense of achievement through PA led her to recognise the improvements she made in her recovery journey:

To this day, I say to myself, 'I'm not ill, I'm not ill, I'm not ill', but looking at those photos I can see that you know, I've achieved a lot...I can see my illness isn't what it was, but I can still see that illness there in the photos because a lot of the time I used to just grin and bare it, you know. But yeah from what I was, it's been a big improvement I think" (Stacy, 431-438).

Heidi also reflected on her recovery progress through her photographs. She recalled receiving an adult learning award from the local county council (Picture 9.1, p.185), following the yoga instructor at the centre nominating her in recognition of her recovery progress:

This one, number 7 [award ceremony], it's me overcoming challenges award...It's how far I've come since I started at the centre, so it was a real big thing. And actually getting up and speaking in front of 150 people...I was a nervous wreck, but I done it (86, 889-90).



Picture 9.1. Heidi: "That's in recognition of how far I've come" (39).

Five months after the award ceremony, Heidi suggested that she had further progressed in her recovery journey, where she recognised: "I had to change my life for the better" (119). Part of such change, included participating in new activities and attempting new challenges:

I've looked at what I achieved there [receiving the award], but since then...I've done a lot more other stuff. I've sort of grown more as a person and done a lot more things and changed to become a lot more outgoing and everything else, so it's like a progression" (112-114).

Elsewhere, several staff respondents had observed numerous attendees' recovery progress at the centre, through participating in the activities (sub-theme B1). Majority of staff members recalled seeing people progress from periods of crisis, ill-health, or low periods of recovery when first arriving at the centre. Changes in the attendees demeanour was noticed by some, as illustrated below in Steven's account below. He seemed to notice a change in some attendee's personality, through experiencing the benefits of PA (Theme D):

I had so many people who've come in the gym who have been shy, reserved, lacked self-esteem and confidence, and within two or three months they're very chatty, very friendly, very outgoing, different people (1164-1166).

Moreover, the staff participants perceived that many attendees could experience a sense of success at the centre. Ivy recalled observing the attendee's experiences of success during her dance classes. She noted how some attendee's physical competency

improved overtime, as small and immediate successes (i.e. successfully performing a dance routine) to larger and long-term successes (i.e. having the confidence to take up a hobby):

I have seen changes in people: Little things sometimes as well as bigger things. Things like, 'I know some routines now', 'I can do what people can, that I couldn't do at the beginning'. I knew they probably would be able to do them [dance moves], but they wouldn't even want to attempt them. But now I've seen that they will attempt doing them, and even if they maybe can't do it first of all, they do start to pick it up and they are doing it (48-52).

Likewise, Judy mentioned participating in a wide variety of PAs since joining the centre, including tai chi, Pilates, yoga, walking group, exercising in the gym, and cycling. These activities appeared to elevate her physical competency, to perform better in other activities, and afforded a sense of personal successes through self-development:

The yoga and Pilates exercise style...I'm getting healthier the more I do it, and that I wouldn't have been able to do it two years ago...I suppose satisfaction that I can do things what I couldn't do before (746-749).

Experiencing success seemed to ignite people's motivation to confront new challenges. As some progressed in PA, concurrently, in their recovery they appeared to seek further challenges. Doing so perhaps broadened and advanced their recovery goals, perhaps toward self-concordant aspirations, as illustrate by Fran's account below:

If you are progressed [in recovery], then your purpose might be bigger or higher. You might be able to think further, and so your purpose becomes more meaningful. And you know you might want to become a volunteer now, and help, so that might be your purpose now, whereas, perhaps a year ago, you were happy with making yourself a cup of tea (1066-1069).

Subsequently, some respondents experienced a learning process as part of their recovery progress. Derek identified that overtime; he became familiar with effective coping strategies; refined through trial and error. He acknowledged that these strategies seemed to maintain his recovery progress through preventing relapse:

I've had these coping mechanisms [PMs] for a great deal of time now, so I've stuck to them over the years because I know that they work. You know, I learnt that lesson very quickly when I was quite young that there were certain things if I engaged in that they would serve as a distraction, you know, allow me to cope better, and allow me to escape from the hell in my head. The older I got and the more I've done that the less the hell has become in my head, and you know, the better I've become at coping and containing myself (486-491).

Accordingly, experiential learning, success, achievement and overcoming challenges seemed relevant to the participant's progress in their recovery. Doing so

invited opportunities for future prospects and aspirations during recovery. Suitably such findings are presented next.

## 9.1.1 Sub-theme F1: "A brighter future"

Having 'something' to look forward to was an important aspect of directing progress in the respondent's recovery journey. Some participants identified the importance of setting small and large goals to coincide with the gradual non-linear process of recovery. Small goals included going shopping, attending an activity, making a cup of tea, weight loss, or improved PA technique, ability and fitness. Larger goals appeared to be more abstract, such as forming platonic and romantic relationships, having a family, having a career, volunteering, returning to a previous healthy self, overcoming isolation, and feeling a sense of existence. Some of these goals encompassed James's aspirations, as part of feeling a sense of acceptance (see subtheme F3). Steven suggested that the benefits of PA (Theme D) fostered the attendees progress toward achieving such aspirations, and as indicated below, reinforcing such benefits could influence James's behaviour to continue exercising, and perhaps progress toward his aspirations:

You know, [James] wants, he's desperate to be like anyone else. He wants friendships, a girlfriend, he wants to lose weight and doesn't want people to look at him because of his size, and it's [exercise] important to him because it will help him with his mental wellbeing. He's determined that he wants to carry on with that, but he struggles with his diet. So, he'll keep coming back because it's important that I keep reinforcing that he's benefitting. And he'll say to me, 'I have improved Steven haven't I? And I have lost weight, and I am doing well', and I say 'of course you are, all you got to do is watch the biscuits.' And he will laugh and take that on board, and then he'll come back and say 'I better come in the gym today because I've eaten three biscuits' (658-665).

Similarly, Danielle suggested that experiencing a sense of achievement through PA could enable some to, "push the boundaries of what they hoped they could've achieved" (535). To do so, she hinted that autonomy, specificity, personal interest, preparation, contingency, maintenance and continued goal setting were effective constructs. Therefore, she alluded that PA perhaps contributed toward structuring and setting the attendee's self-concordant aspirations:

Some people train for a particular goal in mind. You know they want to run a marathon, or they want to run 5k, or they want to run 5k in a certain amount of minutes, or whatever it is. It's kind of, it's a meaning in itself. Or somebody like me, I just don't set those kind of goals, but I like to exercise regularly to feel better. Or again, I suppose for some people it's about losing weight isn't

it; 'I exercise because I want to lose a certain amount of weight'...want to live longer, you know, they want to be healthier, happier: All of those things can give it meaning (1644-1650).

Accordingly, experiencing a sense of achievement through PA appeared to evoke positive hopes of wellness during recovery. In Stacy's account and photographs below, her PA achievements seemed to reinforce the positive progress that she had made in her recovery journey. Doing so appeared to foster her hope for recovery:

Stacy: I'm quite pleased with myself of what I have achieved in yoga considering when I first started.

Researcher: So, you've noticed a lot of achievements.

Stacy: Yeah I've seen a lot of achievements since I've come in here [the centre], and obviously pictures 9 and 8 of me in the gym [below], again, it's just what I'm hoping to achieve and what I have achieved, you know, what I'm hoping to achieve don't seem so far off now, you know. I mean, I was in a bad place for oh, how long, 7, 8, 9, 10, 11, 12: It's been 5 years of hell so, and it's only in this year that I've managed to straighten myself out and look forward to a brighter future (241-250).



Picture 9.2. Stacy: "Looking at those photos I can see that I've achieved a lot" (431-432).

Other participants indicated that experiencing the process or outcome benefits of PA could form positive conjectures of these benefits reoccurring. This seemed to form positive anticipations and expectancies toward PA, which motivated people's PA regulation. For instance, Lucas seemed to value the outcome rewards of PA to benefit his PM gardening:

Before you go to the gym you have this sense of anticipation of having to reach these [exercise] tasks, and once you get to the gym you get into it and you do all these exercises and you achieve these tasks, and then, like I said before, you get that sense of wellbeing. And then, so if you can do it in the gym, you can do it in other contexts as well, you know, maybe not on a very high level, but certainly you can that with gardening (919-924).

Similarly, Ivan said, "knowing what I've got to look forward to the following day...that's what I think motivates you" (1984, 1987). He recollected his eagerness to

participate in his PM, bowling: "I'm playing tonight...I can't wait to go; I get excited...geared up for it because I just love the game" (161-162). Interestingly, he mentioned that his task-oriented goal of improving his bowling performance formed part of his recovery aspirations: "I would like to go up one higher, one stage higher" (1270). He also appeared to structure his bowling routine to offset his negative 'perfectionist' expectations (see sub-theme D5). He suggested that participating in two bowling leagues on the same night reframed his expectations toward being task-oriented:

With the bowling if I'm playing say two sessions, basically, let's say a doubles league and then I'm in a trios league afterwards on the same night...what you can do is, you can think to yourself, 'well, I'll try my best here; I've got another game to look forward to afterwards'. That doesn't mean to throw this game away, but it makes you think, 'well, I still got another chance in the second league, I can probably work on the errors that I'm making' (1986-1902).

For Hayley, PA participation appeared to be associated with the motivation to rekindle an activity that she previously valued. As such, she seemed to hope that her PA participation could foster her return to a previously healthy self:

Physical activities linked with the hope that things will improve, that I will be able to do more and more gradually over a period of time to get back to the sort of things that I really enjoyed doing in the past, which was walking in the countryside (871-874).

Likewise, Vince suggested, "knowing the results" (490) and the prospect of achievement facilitated his continued participation in PA. For instance, below he recalled the anticipation of experiencing cognitive benefits as contributing toward his PA motivation:

By doing my 40 minutes in the gym twice a week, I know that it's achievable to help you think clearly...I know the results you can get from it, so that's the motivation, you know, to get my arse in and do it (491-495).

Therefore, this sub-theme has illustrated the use of numerous proximal and distal recovery goal-pursuits that the participants seemed to apply in directing their PA regulation. These findings also suggest that previous achievements and experiences of PA benefits could lead to positive conjectures and expectancies of PA, and perceptions of recovery progress. Notably, as the participant's recovery progressed further, they appeared to demonstrate self-ownership.

# 9.1.2 Sub-theme F2: "Taking ownership of themselves"

When the respondents reported situations of independent living and selfmanagement to maintain wellness during recovery, they appeared to demonstrate selfownership. Self-ownership seemed to stem from attendees developing an, "invested interest in themselves" (Steven, 1170). Some examples of this included, being self-sufficient, having a routine, applying coping strategies, self-nurturing, engaging in self-development opportunities, and self-exploration to identify and engage in meaningful pursuits. The participant's accounts suggested that attending the centre facilitated these needs. Danielle suggested that people's physical presence at the centre informed her judgements of the attendees initiating self-ownership taking, "the first step to gaining support" (1767-1768):

The fact that they're coming in [to the centre]...they see that there's some value in attending...they've made the decision not only to gain support, but also that usually means that they've acknowledged that they've got some kind of mental ill health, or that there's an organisation that can support them (305-306, 1765-1767).

Other examples of demonstrating self-ownership at the centre included, committing to activities, turning up on time, interacting with others and helping others. Doing so appeared to structure the attendee's daily routines, indicate self-discipline and independence. In particular, Steven advocated that PA could structure people's routine: "I think the gym is good because it's only open at certain times" (1242). Subsequently, he implied that a pre-understanding of the possible PA benefits could reinforce the attendee's PA commitment:

The very fact is that they have to motivate themselves to come in at certain times, to take part in certain activities, so I think there's a discipline there, that they know there's a benefit in regular attendance (1198-1200).

Similarly, Tricia noticed that as many attendee's PA commitment was associated with PA-related outcomes, she suggested that attendees might structure other activities after PA:

Once they really get into it [PA], they get sort of hooked on it, then they're; there's a lot of them here who are here every day, you know, that gives them discipline, sense of well-being. Especially if they come early in the day, then they got the whole [laughs] rest of the day where they got the benefit of it (384-386).

Rickey and John also indicated that PA could influence self-ownership. They recalled observing some attendees taking an interest in their physical appearance and initiating other self-care activities, such as improving their nutrition. John further suggested that such positive changes could equally afford indicators of relapse, should such self-care cease: "Spot the loss of identity...before it gets pear-shaped" (928). Such positive changes are illustrated in his account below:

You just see them, you know, people have been working hard and, you can recognise it, you can see it, absolutely. If someone's been in the gym, you can see that stuff, someone's been, you know, looking after themselves better, shaving regularly, whatever it is, you know, wearing nicer clothes, you'll see these physical changes, definitely (920-923).

Fran suggested that PA influenced people's tacit knowledge of their physical competencies, as an influential characteristic toward developing self-ownership:

With physical exercise, there's a great responsibility involved, because you have to do the work, the physical work. So your very responsible for doing that, you know, lifting your leg...They might not be aware of it...I think it's a very subconscious thing. It's not very, you know, spoken or it's more the message that you give to yourself, 'I'm in charge', 'I can do this', so subconsciously you are taking responsibility on that level (1320-1321, 1322, 1363-1364).

Vince appeared to value demonstrating his self-ownership through PA, because he could reinforce his independence. Doing so could, "make you boost again" (1060):

Because of the confidence that you show and because of that you do something for itself and your being independent, it's, you breathe respect...what your doing is, you're doing it for yourself and no one else is doing it for you (1064-1065, 1067-1068).

Taking control of one's life also seemed important to self-ownership. Some respondents suggested that they control their symptoms through PA as a means of self-care. For Jacob, as PA increased his confidence, this enabled him to begin new activities or strategies to further control and alleviate his obtrusive thoughts:

I used to struggle with obtrusive thoughts. Now I can sort of like, I put myself in more certain situations where even if I do have the thoughts. Before, I would cut myself off from people to not have to try and deal with it that way, whereas now I would probably try more things than put up with certain thoughts, and just have to deal with it because I've got through it before. So I sort of, I know what drives it a bit more now, so I can deal with that side of it. If I've tried more things and getting a bit more confidence, then I'm less likely to be anxious; if I'm less anxious, I'm less likely to have the thoughts (1135-1137).

Similarly, Derek recalled using PA as a coping strategy to prevent ill health from recurring. He desired more than psychiatric medication to cope with stressful life events: "Taking a tablet, taking an anti-psychotic, which I do, is not enough on its own" (219). He appeared to value PA more favourably when he experienced outcome benefits to support his participation in other meaningful activities. Conversely, he appeared to associate inactivity with potential ill health:

I know that if I stay indoors and don't do any kind of physical activity, or see anyone that my feeling of alienation becomes massive and my mental health suffers a lot for it...I need those escapes, I need those distractions to maintain my mental health as it is at the moment, so I don't get worse. And I am finding that very, very hard at the moment, but the physical activities are helping with that. If I wasn't doing anything, I would probably lie in bed all

day and get more and more depressed to the point where I probably would end up having a nervous breakdown (207-208, 213-216).

Other participants indicated that PA could promote a liberating experience when taking self-ownership. Lucas described a "sense of freedom" (90) as a process benefit when he was physically active while walking around the local town to pay his bills. Heidi recalled a similar benefit when cycling around the local town. Subsequently, it seemed that opportunities to autonomously perform an activity i.e. decisions of how and where to regulate the activity, was part of the participants self-ownership. Heidi's account and photograph below illustrates this point:

When I'm cycling I'm with a friend, I go cycling with a friend, so that and obviously the exercise does help lift your mood, so yeah, and going places it's like a little bit of freedom, you go where you want to go (72-74).



Picture 9.3. Heidi: "I've started cycling again, which I enjoy because I know it's good for you" (705).

Nevertheless, some respondents also suggested self-ownership could be challenging. Although most staff members said they encourage the attendees to develop self-ownership, some appeared conflicted with the centre's ethos of providing a non-pressurised and comfortable environment. Danielle recalled respecting people's personal choices: "You can take a horse to water, but you can't make it drink" (918). Thus, although autonomy, control and independence seemed to influence self-ownership, perceived readiness to take self-ownership was equally important:

It's about the choices that you make, you know, you can still choose to sit at home and eat a chocolate cake or you can choose to go for a run and eat healthy food and you can't force people to, you know, it's about personal choices again isn't it (941-944).

The findings in this theme indicate that PA appeared to be associated with self-ownership, through increasing the attendee's confidence, autonomy, liberation and empowerment. However, taking self-ownership was dependent on the respondent's perceived readiness for self-care and self-management. Through engaging in activities of self-ownership, the participants appeared to progress further in their recovery journey, beyond the constraints of ill-health. Subsequently, the next sub-theme illustrates how some participants experienced a sense of redefinition and self-acceptance.

### 9.1.3 Sub-theme F3: "Being the true me"

Many participants described experiencing redefinitions in their sense of self as they progressed through recovery. Some respondents appeared to value, "finding myself again" (Sarah, 454), whereas others indicated a preference for transformation: "I had to change my life for the better" (Heidi, 119). Heidi suggested that experiencing a sense of achievement from her PA and PMs contributed to redefining a new sense of self: "I've sort of grown more as a person, done a lot more things, and changed to become more outgoing" (113-114). She further suggested that such redefinition and personal growth was evident in her photographs, noting some detachment to a former self as she constructed a newer identity:

Researcher: Now you're looking back [since initially capturing the images] and your achieving bigger and bigger things now, like retrospectively, what's it likes looking back at that?

Heidi: I am still that, I'm not, I know that was a different type of person: That wasn't the true me, I'm being the true me now, and sometimes it's a bit amazing how far I've come. Yeah

Researcher: can you see that in the pictures?

Heidi: Yeah, smiling, yeah, yeah definitely (546-554).

In contrast, Stacy desired rekindling her physical, healthy self, as she felt uncomfortable within her illness-laden, embodied form. As such, she was motived to participate in PA to reclaim her former identity:

Sometimes I feel positive about myself and other times I think, 'God you got to lose this weight'. I mean I was quite skinny the best part of my life, so I find it hard, really hard being a big girl you know. I feel very uncomfortable. So yeah, it's that feeling of being able to be that slim girl again. So that's why, that's my motivation, to be that slim girl again; a happy go-lucky, charming, nice young lady that I should be (512-516).

One aspect of redefining the self included the detachment from an illness-identity. For Lucas, PA seemed to reframe his self-perceptions of an illness identity, as he appeared to construct an identity that he rationalised as being socially acceptable:

You go from an anxious person who's got problems to a positive person who hasn't got a problem, who's just somebody who exercises but doesn't work yet; he's in between a job, you know, that's one way of looking at it (1166-1169).

Moreover, Lucas continued to suggest that participating in PA altered his worldviews, whereby, connecting to others, increased positive affect, self-esteem, and confidence seemed to influence this transformation:

It [exercise] can change your whole, sort of, outlook and view point of life. It doesn't have to be all negative, like you normally are when you haven't exercise...It can be a positive outlook and you think people are nice, you think people are generous, they're kind, you don't think that it's a horrible world and that you're just a victim, you know (1173-1177).

Other respondents hinted that the physical improvements following PA could influence their perceptions toward self-acceptance. Jacob desired changing his physical appearance following ill-health: "I hadn't worked for a while, I had, you know, piled on the pounds and I wasn't happy really" (938-939). Subsequently, he valued weight loss through PA and dieting to foster a sense of self-acceptance:

I don't like the way I look, sometimes it drags me down, it could be a real drag on me. Obviously losing loads of weight, I've lost about a couple of stone, so it's like, that has helped me, you know, that's boost my confidence. I just don't feel as bad about myself as I used to" (Jacob, 932-935).

Tim also indicated that he experienced self-acceptance, describing his PA participation to evoke a sense of normalisation and existential fulfilment:

We are physical creatures by nature. As humans we have to, we're driven by activity I think. We're not sedentary creatures where we can act like a sloth, where it doesn't really do very much apart from eat and move very slowly (1011-1014).

Similarly, Hayley appeared conscious of a physical difference incurred through mental illness. Subsequently, the prospect of demonstrating physical competency through PA possibly reduced negative self-perceptions (such as helplessness). Instead, she anticipated feeling a sense of social acceptance:

Not being able to take part in certain activities does make me feel very much an outsider. So by increasing what I'm able to do physically, makes me feel part of society basically, that I too can go out a walk or garden, or whatever, and that has a huge impact on my own identity and not feeling an outcast (971-974).

Elsewhere, some respondents hinted that participating in PA might contribute toward fulfilling their self-concordant needs. Derek described how participating in karate also marked the achievement of a long-term aspiration: "Since I was a child I've always wanted to do karate" (76). Additionally, he alluded that karate contributed toward reframing an illness identity. Noticeably, he appeared aggrieved by the self-

perception of an illness identity: "Just being a mental health patient is a bit depressive really" (271). Conversely, he seemed to construe karate as enabling an athletic identity. In Picture 9.4 (below), Derek portrays his athletic identity; wearing his uniform and performing a karate technique. Moreover, in the photograph he is wearing a white belt, whereas in the extract below, he reports the prospect of achieving a blue belt grade. This perhaps further reinforced an athletic identity via self-perceptions of physical competency associated with this activity.

The karate does because it makes me feel like I'm a student of karate and I keep obsessing about my next belt because I'm only a white belt at the moment, becoming a blue belt. So then, yeah, I would be, when I get my blue belt, I would be a blue belt in karate, and that will give me a sense of identity in that sense that I am proficient in this martial art and I am now a blue belt (243-246).



Picture 9.4. Derek: "Getting a higher belt in karate...that's all I care about really" (746-474).

Richard appeared to suggest self-presentational qualities of an athletic identity that he associated with his PM, playing darts. He combined his personal interest of military history with playing darts, suggesting, "your equipment is what makes you an individual" (1771). Doing so seemed to elevate a sense of attachment to his PM-PA. Moreover, he recalled tailoring his equipment, darts technique and style, to further aligned himself to a sense of self and social inclusion:

Richard: The colours you choose for the shafts, the materials you choose for the shafts, the weight; it's individual to each different person. Each person has their own throwing styles. In fact I got my darts in my pocket still [gets out darts to show everyone], this set, these make them individual because of the colours we choose the materials.

Researcher: Why did you choose those colours and the materials?

Richard: Right, I got the military, hence the red coats and that one with the four badges across the middle, makes me think of the guards division. It's individual to me because I like me military

history and of course the weight itself is comfortable for me. Someone else might find the barrels comfortable, but might go for a metal shaft" (1787-1799).

Tom valued the adjunctive benefits of exercising in the gym to improve his yoga performance and subsequently facilitate his aspirations of instructing yoga. He desired to achieve an advanced level of physical competence to, "be seen as a role model" (1223):

When I go to the gym, I kind of like to do my set routines, and do it, and to focus on that solely by myself because I think that when I do come to run a group or to facilitate something, I have got to be to a level of fitness that I want to feel comfortable within myself (425-428).

Accordingly, this theme has highlighted how some participants appeared reframe a positive identity through PA. The accounts presented illustrate the importance of constructing a purposeful identity through progressing toward self-concordant aspirations in recovery.

## 9.2 Chapter summary

This chapter set out to illustrate how the participants experienced personal recovery through PA. The findings indicated that, for many, experiencing a sense of achievement through PA led them to acknowledge a sense of progression in their recovery journey: Transiting from a previous ill self, to a physically healthy form. The prospect of such achievement appeared to afford a sense of hope in the anticipation of experiencing process or outcome goals of PA. Subsequently, actual achievement of PA goals appeared to enable opportunities to experience and demonstrate mental wellness, self-ownership, and a sense of social and self-acceptance. Accordingly, as the participants progressed further in recovery, they appeared to develop a sense of mindfulness and toward engaging in self-concordant pursuits. These findings, alongside the findings from Chapters 6, 7 and 8, are discussed next.

#### **CHAPTER 10**

#### **Discussion**

### 10.0 Introduction

The purpose of this chapter is to interpret, examine, and evaluate the research findings in relation to the existing literature, and suggest key implications of the thesis. Chapters 6, 7, 8 and 9 presented findings of the case study, which were summarised and organised, according to the research questions. For purposes of clarity and continuity, this chapter is structured in a similar fashion. Section 10.1 discusses how the participants experienced PA at a voluntary sector organisation. Section 10.2 considers how the participants experienced PA and PM during their recovery. Section 10.3 examines the potential influence of PA during personal recovery. Lastly, in Section 10.4 I attempt to pull together the key contributions from these research questions, to suggest the implications of the findings for mental health services and policy. Accordingly, the next section discusses the findings in relation to the role of PA in the voluntary sector, and against the backdrop of a shifting landscape of Government policy and multiagency service delivery in the mental health services.

# 10.1 How did people experience PA at a voluntary sector mental health organisation?

The findings of the current study showed that the social-cultural aspect of service delivery was a key influence to PA participation at the voluntary organisation. Most staff, volunteers and attendees valued the centre as a meaningful pursuit in itself, highlighting the significance of 'place' in people's recovery. Frumkin (2003) reviewed four categories of healthy 'places' he considered as being conducive for wellness and wellbeing: (a) Nature, (b) buildings, (c) public places, and (d) urban form. In light of these typologies, the Rockwell Centre was a 'healthy' building, wherein attendees could experience a sense of wellness and recovery. The centre provided an accepting, supportive and therapeutic place, which fostered the delivery of PA at the centre. In this way, the attachment to 'place' was an important aspect to PA service provision. Place attachment is a multifaceted construct, where the sentiment value of a place can develop through emotional relationships, behaviours, positive affect, individual and cultural identity and security (Chow & Healey, 2008). These aspects were apparent in the current study, where perceptions of safety, access to PA opportunities, staff and peer-

support, positive attitudes of PA and recovery, and available resources at the centre likely contributed to place bonding.

Notably, fewer participants gave reference to PA and place attachment in the local community, such as public, nature, and urban places. While the preference of place to regulate PA varied among the participants, many reported that they perform PA in the community when it is associated with a PM (e.g. Sarah's attachment to walking with her dad and taking photographs). However, the exposure to non-PM PA places in the community seemed problematic. Some participants found PA in public and urban places daunting (e.g. exercising local leisure centres), evoking negative self-perceptions. Others valued opportunities to connect with nature through the walking group, but limited centre resources restricted the implementation of this activity (sub-theme B3). Likewise, in the literature, various healthy 'places' have shown to facilitate or debilitate people's PA participation during recovery (Carless & Douglas, 2004; Crone, 2007). For instance, appreciation of the countryside environment may connect people with nature (Crone, 2007), in contrast to living in urban neighbourhoods that are perceived as unsafe (McDevitt, Snyder, Miller & Wilbur, 2006). These findings also suggest that attachment to public and urban places are difficult and can create barriers to PA participation (Ussher et al., 2007), possibly due to the stigma and discrimination associated with mental illness (Pescosolido et al., 2013). However, the current study indicates one possible method to develop a positive sense of PA attachment to these places, through promoting PA as a strategy to participate, achieve and foster PMs in these places (see Section 10.2 for discussion). Therefore, healthy places play a key role in the promotion and participation of PA for those recovering from mental illness, particularly at voluntary organisations as healthy buildings and in nature settings.

Nevertheless, the Rockwell centre as a healthy place was notwithstanding tensions with service delivery and PA promotion. Application of Layder's (1993) research map afforded valuable insights when scrutinising the macro and micro contexts of the case study. Caveats to the centre as a healthy place include the lack of resources to fully integrate and implement recovery-oriented services, and entrapment issues through providing a safe and comfortable environment. One surprising finding was that the social-cultural environment of the centre appeared to restrict some attendee's full independence and integration into the community; thereby, conflicting the organisation's ethos. One explanation for this stems 'top down' from the macro context (i.e. policy and availability of public funds to voluntary organisations), which likely incurred limited resources to promote PA in community settings. Equally, a 'bottom

up' implication from the micro context was indicated by the degree of personal responsibility that is required for attendees to engage in their recovery journey, such as their commitment to attend activities. These macro and micro issues indicate that individual strengths (i.e. aspirations, competencies and confidence) and environmental strengths (i.e. resources, social relations and opportunities) were not fully supported in centre, to achieve desired outcomes in recovery (Rapp & Goscha, 2006). Consequently, the centre may risk an entrapping environment; where people are defined by their illness, "turn to their own kind" (p. 36), have limited aspirations, few expectations of progress, and less social relations outside of mental health services (Rapp & Goscha, 2006). Such description seem reminiscent to several staff accounts who described longterm attendees at the centre. In contrast, enabling niches are environments that cultivate personal growth beyond the context of mental illness; help people develop their aspirations, competencies, confidence, resources, social relations, and a greater sense of citizenship and positive identity (Slade, 2009). Such enabling factors were equally apparent in the current study. For example, the provision gym services at the Rockwell Centre led many participants to develop personal strengths through PA participation (sub-theme D4), which also afforded transferable benefits in other contexts of their lives (Theme E). Therefore, the findings of the current study indicate that a blurring of enabling and entrapping opportunities occurred at the centre in both macro and micro domains. Thus, contributing evidence to suggest that, while comfortable environments are desirable for PA promotion, controversially such context may present a barrier for some people to experience enabling opportunities for personal recovery.

The implications of entrapment within the Rockwell Centre suggest that voluntary organisations should tailor their services to meet the needs of short-term and long-term attendees. In the current study, staff gave mixed views on people's long-term attendance at the centre, and suggested that the needs of long-term attendees often differed to short-term attendees. Several staff commented that long-term attendees consumed more resources, effort and their mental health needs were lifelong or more complex. Alternatively, long-term attendees seemed to benefit from regularly vising the centre, to sustain their livelihood needs, daily routines, enact meaningful roles, engage in social forums, and taking ownership of the centre. Here, it is plausible to suggest that people's long-term attendance at the centre also satisfied their personal recovery needs: Taking personal responsibility to continue thriving, living well, having valued social roles and being in an identity-enhancing environment (Slade, 2009). However, what is missing from the current study is a better understanding of the role of short-term

attendees at the organisation. Although comparisons were not made according to time attending the centre, the consensus among staff was perceptions that short-term attendees satisfied the centre's ethos and had integrated back into the community. Yet, as staff did not perform follow-up assessments, some ambiguity remained for the reasons of departure, and people's progress since departing the centre. Consequently, the differences between these social roles need further exploration.

Existing literature on PA promotion for short and long-term attendees in mental health settings is also lacking. The work of Carless & Douglas (2008) may expand on these roles further. They suggested that people often tell a restitution narrative (the motivation and desire to return to a healthy self) when intending to attend mental health services for a short period. This narrative type appeared in the current study, such as when participants desired to move on from the centre (e.g. Stacy). Alternatively, Frank (1995) suggests that when restitution becomes non-desirable, people may tell a 'quest story': "Meet suffering head on; they accept illness and seek to use it" (p.115, emphasis original). Additionally, Davidson & Roe (2007) suggested that some consumers value recovery "from" (i.e. symptom remission), whereas others desire recovery "in" (i.e. participating in meaningful roles) mental illness. In the context of the current study, the voluntary organisation appeared to provide opportunities for people to recover 'in' mental illness as they engaged in the quest for self-exploration, attending activities, engaging in the social milieu and maintain a meaningful role of their attendance. However, the parameters that define a 'long-term' or 'short-term' attendees are unclear, and it is notable that people may evolve and change the narrative they tell during recovery (Carless, 2008). While further investigation is warranted to compare the social roles and needs of short-term and long-term attendees, it is conceivable to suggest the two groups will have different recovery needs. As such, the implementation of PA within mental health services may equally need tailoring to suit these two groups.

Another caveat of the centre as a healthy place was the lack of resources to fully integrate and implement recovery-oriented services and PA opportunities. Although PA projects are cost-effective compared to other interventions (Foster et al., 2012), funding to implement PA in mental health services is a common barrier (Carless & Douglas, 2010; Crone & Guy, 2008). Particularly, voluntary organisations are often under financial pressure, relying on public funds and require constant renewing of funding bids to maintain service provision (Ramon, 2008). Consequently, the longevity of PA schemes in this sector is uncertain, and PA projects can cease to continue - as observed in the pre-data collection phase (Table 4.4, p.114). Nevertheless, given the shifting

Government policy agenda and UK mental health strategy (Section 2.2.4), performance indicators to commission PA projects may equally accord to shift. As such, integrating PA into recovery-oriented services may strengthen the case to fund PA schemes. For example, Barbic, Krupa, & Armstrong (2009) reported preliminary findings following a 12-week recovery-oriented workbook intervention, which did not include a PA element. The workbook comprised strategies to support goal setting, self-management, identify personal meaning and sources of support. The authors noted significant improvements in perceived hope, empowerment, and recovery, but not in quality of life. They noted that the intervention timeframe was too short to improve socioeconomic status, relationships, and health function as indicators of quality of life. Yet, studies elsewhere have shown PA to improve quality of life within a 12-week timeframe (e.g. Brown et al., 2007; Kerr et al., 2008). Thus, suggesting the scope of including PA as part of a holistic approach to achieving recovery-oriented outcomes.

In addition, several staff members called for organisational change to advance the centre toward a recovery-orientated service. Although in many ways, the centre appeared to deliver a personal recovery-oriented approach (e.g. encouraging shared decision-making, creating an inclusive environment, respecting personal choice, and supporting the development of self-management skills), areas of suggested improvement include supporting the attendees to set and achieve recovery-oriented goals, and monitoring and evaluating people's progress at the centre. The absence of these factors may explain people's long-term dependence on the centre; particularly given the staff concerns that attendees were not fully supported in creating recoveryoriented goals to transition into the community, or to evaluate the progress of meeting their targets. Subsequently, integrating such changes into the service may work toward meeting the centre's ethos and empower attendees in their recovery journey. For instance, a report by the Mental Health Foundation (2009b) showed improvements in service user empowerment following the implementation of a recovery-oriented framework across seven UK voluntary sector sites. This initiative provided staff with training and checklist guidance on implementing and evaluating the concepts of recovery in everyday practice. However, organisational and practical challenges surfaced, including the lack of resources and staff and attendee willingness to take ownership of recovery concepts. To support mental health services cope with such challenges, Shepherd et al., (2010) recommend implementing a three phase organisational change strategy comprising: (a) Engagement, (b) development, and (c) transformation. Hence, organisational change can take several years to integrate

recovery-oriented practice, and demand involvement from all levels of social organisation to implement.

Another feature observed in the current study was the strong social support links available at the centre. The participants widely reported positive experiences of PA encountered through staff and peer support. This finding was consistent with existing research (Carless & Douglas, 2008; Crone & Guy, 2008; Raine et al., 2002), wherein evidence of esteem, informational, tangible and emotional support were found in the current study. Such encounters of social support through PA possibly contributed to participant perceptions of the centre as a place of comfort, security and safety. Additionally, due to the available social links at the centre, PA promotion often occurred in multiple regions (e.g. in gym, computer room, and tearoom). A PA subculture was observed, where most respondents in the current study valued the role of PA (intrinsically or extrinsically), as a socially acceptable and worthwhile activity for recovery PA. According to the TPB (Section 2.4.1), this sub-culture possibly influenced the formation of normative beliefs and social norms, PA intentions, and contribute to the internalising PA as part of one's identity (McGannon & Schinke, 2015). Additionally, the socially valued role of PA indicates this activity as nonstigmatising, promoting prospects of social inclusion and reducing barriers to PA (Raine et al., 2002). Here, TTM processes of change constructs (Section 2.4.2), environmental reevaluation and helping relationships, were perhaps key to the PA sub-culture, and enabling opportunities to increase self-efficacy and uptake of PA. Furthermore, staff and peers could provide an atmosphere where attendees could experience a sense of competence, relatedness and autonomy. These psychological needs were apparent in the current findings; such as when staff and peers reinforced people's PA achievements, the attendees related to and understood the individual needs of others, and through providing a range and choice of PA opportunities. According to the SDT, when these psychological needs are supported, people may internalise behaviour regulation (Ryan & Deci, 2000). Indeed this was noted in the current study, where several attendees appeared to internalise PA, while attributing the centre as a key resource to facilitate this process. Thus, the intersubjective nature of PA sub-culture was a key process to PA promotion at the centre.

Nevertheless, the current study identified several incidences of negative peersupport, such as unhelpful or stigmatising peers. Although rare, such accounts suggest that staff should be prepared to facilitate and resolve potential attendee conflicts, and if necessary, refer individuals to alternative services. However, adverse peer interactions may go unnoticed, as negatively appraised verbal and non-verbal interaction could present barriers to PA (Soundy et al., 2007). Alternatively, negative encounters can surface when peers become activity leaders or peer-support workers within mental health settings, as boundary, friendship and loyalty tensions can occur (Davidson, Chinman, Sells & Rowe, 2006). Consequently, these findings suggest that the PA subculture in mental health settings can be negative as well as positive (Crone et al., 2005). Furthermore, the findings discussed in this section show how the macro (i.e. political) and organisation setting (i.e. the centre) could either constrain or facilitate the subjective and interpersonal aspects of PA participation. Given the paucity of studies examining the role of PA in voluntary sector organisations (e.g. Peacock, Hine, & Pretty, 2007), such findings contribute key insights to the role of PA in the voluntary sector, and the wider elements of statutory service provision. Accordingly, this section has considered critical issues that may limit or facilitate the role of PA in voluntary sector organisations. In the next section, I discuss the findings of PA as a meaningful strategy in recovery, through the PA and PM relationship.

# 10.2 How was the physical activity and personal medicine relationship experienced?

The findings presented in Chapter 8 illustrate the applications of PA in meaningful ways during recovery, as a PM or non-PM. In particular, a repertoire of PMs identified PA as a meaningful pursuit during personal recovery, situated among social, mental and livelihood activities. As such, to focus examining the case, in the analysis and following discussion, primacy is given to understanding the PA aspect of the PA-PM relationship. Given that PA was identified as a PM and non-PM, notable differences and similarities between these types are presented in Table 10.1 (p.204). For instance, participants mostly regulated PM-PA for identified, integrated or internal purposes; fulfilling valued social roles, to experience a sense of control, self-acceptance, freedom, mastery, wellness or general wellbeing. Even through the participants valued non-PM PA; they often prioritised their PMs and presented more barriers toward non-PM PA. In particular, non-PM PA was associated with more dissatisfaction, discomfort and ambivalence, which moderated the participants PA participation. Subsequently, in agreement with Crone et al., (2004), integrating motivational interviewing into PA promotion in mental health settings may support people's non-PM PA participation. Van Citters et al., (2010) applied motivational interviewing to increase PA participation as part of a health promotion program, and found significant improvements in mental

health functioning and reduced symptoms of mental illness. These findings suggest that further research may consider exploring the application of motivational interviewing to influence non-PM PA and examine the impact of this on personal recovery outcomes.

Table 10.1 Key differences and similarities between PM-PA and non-PM PA.

Diffe	erences	Similarities
PM-PA	Non-PM PA	
Regulated mostly for	<ul> <li>Regulated mostly for</li> </ul>	Valued physical, affective,
internal purposes	external purposes	cognitive and personal strength
Internal value toward	• Instrumental value toward	process and outcome benefits
enjoyment, self-	symptom management or	Valued the transferable benefits of
development, living a	environmental norms	PA
meaningful life	• Likelihood of ambivalence	Walking as a valuable activity
Likelihood of self-	• Greater need for social	Experience increased self-
concordance	support to perform activity	awareness, competency, connection
Autonomously performed,	and overcome PA barriers	to others
requiring less social	• Lower perceived PA self-	Experience a sense of wellness
support	efficacy	Used as a coping mechanism during
Higher perceived self-		recovery
efficacy		Can facilitates and achieve positive
		experiences of PMs

The current study found that many participants identified PA as a PM, suggesting the vital role of PA in their recovery from mental illness. Although other studies have indicated the meaningful role of PA during recovery (e.g. Carless & Douglas, 2010; Crone, 2007), the significance of this finding was the comparison with non-PM PA (Table 10.1). The existing literature on PMs and self-care strategies during recovery imply that personally valued activities afford coping mechanisms, meaning, purpose and aspiration in life; creating ways to live well within and beyond the constraints of illness (e.g. Cohen, 2008; Deegan, 2005). In particular, this thesis builds on the work of Deegan (2005), whereby the current findings illustrate the multifaceted nature of PMs. Personal medicines were identified as fluid constructs, which varied according to individual motivations, personal interest, value, identity, or previous experience. Some PMs seemed to change or evolve according to the participant's ongoing life experiences, while others recalled activities that later became PMs as they progressed in their recovery journey. Moreover, the participants recollected, on average, five PMs that were important to their recovery. This was an important finding as many participants had a repertoire of tools to select a suitable PM for a particular

outcome, or it enabled them to select an alternative PM if necessary. Alternatively, some participants appeared to rank their PMs in a hierarchy, which could create pathways and strategies for them to reach other, more valuable PMs. These findings complement the contributions from research elsewhere, that meaningful activities may elicit positive experiences of choice, control, competence, value, importance, pleasure, connectedness and fulfilment during recovery (Aubin et al., 1999; Tew et al., 2011). Hendryx et al., (2009) found that a greater number of meaningful activities corresponded to greater improvement in personal recovery. Further studies have shown activities that promote personal functioning (i.e. work, social, and independent living) or leisure are more intrinsically regulated than activities that alleviate illness symptoms (Lloyd et al., 2007; Yamada, Lee, Dinh, Barrio, & Brekke, 2010). Mancini (2008) added that satisfying intrinsically regulated goals could progress personal recovery and community integration.

Accordingly, it is likely that many PMs identified in the current study were intrinsically regulated activities. This was unsurprising given that when the psychological needs of autonomy, competence and relatedness are met, behaviours are more likely to be internalised, foster self-concordant needs, and associated with life satisfaction (Ryan & Deci, 2000; Sheldon & Elliot, 1999). The current study provides evidence to suggest that PMs benefit these psychological needs; such as self-selecting activities as PMs, performing activities that are associated with individual or social identity, or participating in activities to experience a sense of mastery within that activity. Alternatively, the findings showed that some PMs were extrinsically regulated, which may indicate subtle differences between PMs that are for self-care (i.e. valued for the instrumental outcomes) or aspirational (i.e. intrinsically regulated) purposes.

However, in contrast to the current study, Duff (2012) categorised three relational 'places' wherein meaningful activities could be experienced in the community as material, affective and social resources. Duff suggested that places where activities could be associated with social interaction, consumerism or emotional attachment, fostered enabling opportunities for recovery. His findings were consistent with Rapp & Goscha's (2006) theory of strengths and characteristics of the oppressed. In comparison, the current study showed that the daycentre provided many participants with the resources to experience and develop their PMs. While it is plausible to suggest that the centre offered a place for material, affective and social resources to occur, overreliance on the centre to provide these resources could restrict opportunities to develop PMs in the community. As such, it is likely that environmental influences are

determinants of PMs as well as individual resources. Notably, a unique finding in the current study was evidence to suggest that PA created enabling opportunities to facilitate positive PM experiences. Specifically, Theme E illustrated exemplars of PA being attached to the process and achievement of PMs (e.g. walking and socialising, PA as housework and, or walking to buy art supplies). This association might explain the participant's preference for walking as a mode of PA, expanding on the research elsewhere (Ussher et al., 2007). Crone (2007) highlighted the meaningfulness of walking as an activity that can afford affective opportunities to connect with the self, others and the environment. Likewise, in the current study, walking was found to facilitate and achieve material, affective and social resources as part of people's PMs. Therefore, connecting such instrumental benefits to PA participation could create an innovate strategy for mental health professionals to promote PA.

Additionally, consistent with the current literature (e.g. Fogarty & Happell, 2005; Hodgson et al., 2011), this study identified physical, affective, cognitive and personal strength benefits that contributed to wellness and recovery (Theme D). Notably, PA was found to evoke a variety of process and outcome benefits, which could further afford transferable rewards in other contexts relevant to personal recovery (Theme E). Similarly, Faulkner & Biddle (2004) and Faulkner & Sparkes (1999) reported several transferable benefits of PA to include rekindling former hobbies, increase self-care and structuring daily routines. Carless & Douglas (2010) suggested that PA outcome benefits could afforded 'stepping stone' opportunities in recovery, whereas process benefits may facilitate (re)constructing positive meaning and identity. Likewise, this study found process and outcome benefits having transferable qualities, particularly in relation to PMs. Transferable outcomes included: (a) Feeing in a better frame of mind to perform a PM, (b) personal strength to overcome challenges in recovery, (c) confidence to participate in new activities, or (d) rekindling hobbies and interests. Transferable processes included: (a) PA as part of performing a PM, (b) PA as a process to facilitate and achieve PMs, gather resources or generate ideas, (c) performing PA while fulfilling a personal aspiration, or (d) PA as part of enacting a socially valued role. Furthermore, the current study found that certain PA benefits seemed to influence particular PM types. For instance, some participants suggested that increased positive affect evoked a sociable aura; positive cognitions facilitated creativity, organisation, concentration or spiritual experiences; and increased confidence fostered independence, self-care, and overcoming challenges in recovery. Table 10.2 (p.207) illustrates these tentative relationships; however, cause-effect mechanisms are refrained as numerous overlaps in these relationships were observed (e.g. personal strength benefits may equally facilitate social activities). Nevertheless, Table 10.2 suggests the main transferable processes found in the PA and PM relationship, and may create a working framework to guide PA prescription. For example, if a social PM is an important part of personal recovery, then mental health professionals may promote the affective benefits of PA facilitate this PM. Subsequently, this preliminary framework develops the existing literature on the transferable benefits of PA (e.g. Carless & Douglas, 2010) and warrants further investigation to explore the correlation of these constructs.

Table 10.2 Transferable PA benefits in the PA-PM relationship

	PM type
<b>→</b>	Physical activity
<b>→</b>	Social activity
<b></b>	Mental activity
<b></b>	Livelihood activity
	<b>→ → → →</b>

In support of the relationships presented in table 10.2, Ekkekakis, Hall, VanLanduyt, & Petruzzello (2000) demonstrated that PA can increase positive affect, while Watson, Clark, McIntyre, & Hamaker (1992) showed that positive affect was associated with better social functioning. Colcombe & Kramer (2003) found that exercise improved cognitive function, and Aartsen, Smits, van Tilburg, Knipscheer, & Deeg (2002) revealed that information processing speed was related to developmental (i.e. intellectual and creative) activities in older adults. Additionally, Raine et al., (2002) indicated that increased confidence through PA led some attendee's to overcome perceptions of 'risk,' and participate in PA in public settings. It is possible that these transferable effects occur due to increased self-empowerment as a process benefit of PA (Hasson-Ohayon et al., 2006; Skrinar, Huxley, Hutchinson, Menninger, & Glew, 2005). Chamberlin (1997) suggested that self-empowerment is a multi-dimensional concept concerning the agency required to live an independent and autonomous life. As such, indicators of self-empowerment include decision-making power, access to information and resources, options to enable choice, assertiveness, being hopeful toward change, self-discovery and learning, synergy, redefining the self, self-acceptance and personal growth (Chamberlin, 1997). Suitably, Crone, Smith, & Gough (2006) suggest that increased perceptions of independence, control and success through PA can support

people in their everyday lives, such as with daily functioning. Corrigan & Rao (2012) added that self-empowerment is crucial for challenging self-stigmatisation and motivating self-concordant pursuits. Notably, such processes of self-empowerment were apparent in the current study, particularly where PA afforded opportunities to experience choice, autonomy, self-regulation, agency and self-determination. Thus, it is plausible to suggest that PA can foster personal skills and strengths to enable other activities that are important to personal recovery.

Additionally, self-efficacy theory (Bandura, 1977) may further explain the transferable effects of PA. Bandura (1977) proposed that in some situations, selfefficacy expectations are generalisable to other contexts. While there is sound evidence to suggest that self-efficacy increases with PA participation (Marshall & Biddle, 2001), less is known of generalisable effects of self-efficacy following PA participation during Bandura (1977) suggested that efficacy expectations and outcome recovery. expectancies enact cognitive processes that determine and control the self-regulation of activities. In the current study, outcome expectancies were commonly associated PM-PA and non-PM PA as moderating factors in PA behaviour; for instance, participating in PA for expected outcomes of positive affect or weight loss. Interestingly, several participants demonstrated high self-efficacy toward PM-PA, especially to overcome PA barriers. Here, it was possible that the internalised value of the PM heightened the participants PA self-efficacy (Thøgersen-Ntoumani & Ntoumanis, 2006). Alternatively, efficacy expectations refer to the confidence of one's ability to achieve an outcome (Bandura, 1977). Bandura maintained that efficacy expectations occur from: (a) Performance accomplishments, (b) vicarious experience, (c) verbal persuasion, and (d) emotional arousal. Equally, these sources were noted in the current study; for example, PA achievements informed performance accomplishments, direct and indirect peersupport influenced PA uptake, staff referring attendees to other activities following PA, or increased positive affect influencing self-esteem and competence perceptions. These factors possibly contributed to the transferable effects of PA and development of selfempowerment; however, exact mechanisms of these interactions were unknown. Therefore, promoting PA in the mental health services may create opportunities to generate efficacy outcomes, develop efficacy expectations, and influence the generality of these expectations in other contexts of recovery.

One unexpected finding in the current study was that PMs could incur negative experiences, such as being counterproductive or unhelpful. This contrasts the findings of Hendryx et al., (2009), who reported that any type of activity was associated with

recovery (r 0.47). The qualitative nature of the current study, encouraging an inductive approach, possibly created scope for identifying occasions where PMs failed to meet the participant's expectations. However, in contrast to Deegan (2005), the participants did not report risky behaviours as PMs (e.g. drug taking and alcohol consumption). Rather, negative PM experiences seemed to occur when the participants were unwell and some PMs were less effective. This finding reaffirms the importance of identifying multiple PMs as part of a recovery plan. Additionally, negative experiences of PA were reported (e.g. physical discomfort and social physical anxiety), although such encounters mostly related to non-PM PA. Notably, exercise dependence was not observed in the current study, possibly due to the naturalistic design and absence of intervention withdrawal (Faulkner & Sparkes, 1999). Nevertheless, some participants reported that PA incurred detrimental or unwanted experiences toward their PMs. This finding indicates a caveat with PA promotion in mental health settings, whereby a 'clash of perspectives' could occur if a treatment effect hinders a PM (Deegan, 2007). Deegan explained that mental health professionals that emphasise clinical recovery outcomes rarely explore the patients' values during consultations. Consequently, she argued that non-compliance is likely to ensue when a treatment effect undermines a PM (Deegan & Drake, 2006). As such, Deegan (2007) recommends incorporating PMs through shared-decision making as part of mental health consultations. Doing so may also implement the Government mental health objective; more people will have a positive experience of care and support (HM Government, 2011b). These concerns are relevant to the delivery of PA in mental health settings, given that service providers may facilitate or hinder PA opportunities (Hodgson et al., 2011; Soundy et al., 2007). Thus, when implementing PA for personal recovery, integrating PMs in PA consultations may meet policy targets and prevent a clash of perspectives from occurring.

The findings discussed in this section provide evidence to suggest how PA might target two objectives as set out in the current HM Government (2011b) mental health strategy. Specifically, experiencing physical, affective, cognitive and personal strength benefits provide exemplars of how people can experience good mental health and good physical health during recovery. Additionally, the recommendation of integrating shared-decision making as part of PA promotion may work toward meeting the objective; more people can have a positive experience of care and support. In the next section, I discuss the findings that illustrate how people might experience recovery through participating in PA. Subsequently, the next section considers how PA might meet another policy objective; more people with mental health problems may recover.

# 10.3 How do people experience personal recovery through participating in physical activity?

In Chapter 9, the research findings illustrated how PA influenced the participant's recovery from mental illness, by fostering a journey of personal growth. Many participants described their engagement in PA across various stages of their recovery journey, wherein a sense of achievement, resilience, self-understanding, aspiration, self-ownership and self-acceptance through PA were key contributors to experiencing a sense of progression in recovery. In relation to the existing literature, Andresen et al., (2006) suggested that recovery could progress across 5 stages: (a) Moratorium, (b) awareness, (c) preparation, (e) rebuilding, (c) and growth. Moratorium indicates a period of withdrawal, loss and hopelessness, which was evident in the current study when the attendees first arrived at the centre (e.g. Theme A). In relation to the second stage, PA raised the participant's self-awareness through the physical dimension of PA, when they experienced esteem support, and following a sense of achievement. Examples of the preparation stage occurred when the outcomes of PA seemed to afford enabling opportunities for the participants to overcome personal and recovery-oriented challenges. Additionally, the process benefits of PA seemed relevant to the rebuilding phase; as PA could develop the participant's sense of self, allow them to demonstrate self-ownership. Finally, personal growth occurred when PA fostered moments that led participants to move beyond the constraints of ill-health and lead a meaningful life. However, whilst these stages provide a useful comparison with a recovery-oriented framework, it was unclear whether the participants experienced these stages sequentially, or if these stages were applicable to all participants. The implementation of PA within a personal recovery framework is currently lacking in the PA and mental health literature. Therefore, the current study adds preliminary support to implement such framework, to examine the relationship of PA across the stages of personal recovery.

Furthermore, Andresen's et al., (2006) five-stage process suggests how people might progress through key elements of personal recovery: Hope, meaning, identity and responsibility. For example, a person might transition from a negative identity (suggesting moratorium), to a positive identity (signifying personal growth). Subsequently, the following discussion examines the research findings in relation to the literature on how PA progresses these elements of personal recovery.

The current study showed that for many participants, attending the centre and participating in PA afforded a sense of hope during recovery. Specifically, promoting PA at the centre created positive projections of time, through the expected process or outcomes benefits of PA. This level of anticipation was important, given that many faced ongoing adversity in their daily lives (Theme A). Many people diagnosed with mental illness are reported to lack hope or they maintain high-expectations of hope (Repper & Perkins, 2003). As such, Slade (2009) advocated that mental health professionals, peers and social relations are valuable sources to motivate and sustain agency thoughts during goal-directed behaviour. Such sources of support were evident in the current study, through the staff and peer-support availability (see Section 10.1). Equally, the findings indicated that pathway thoughts could develop through PA participation. This was similar to Curry et al., (1997), who found that athletes participating in sports showed higher levels of hope compared to non-athletes. They suggested that improved perceptions of physical self-worth, contributed to developing higher hopes in future goal-pursuits. This seemed apparent in the current study, as PA achievement was often associated with increased self-esteem and confidence, which led some participants to overcome challenges in recovery. Specifically, developing their perceived self-worth (i.e. self-belief in their abilities) through PA, it was possible that some participants cognised alternative pathways toward achieving their hopes for recovery. As Rapp & Goscha, (2006) said, "Aspiration x Competency x Confidence = promise and possibilities" (p. 45).

Elsewhere, Smith & Sparkes (2005) found men with spinal cord injury constructed perceptions of hope as restitution, quest or chaos narratives. They suggested that the absence of hope in one's recovery incurs a chaos narrative (i.e. in a stage of moratorium), whereas restitution narratives conceptualise hope as a concrete goal for recovery (i.e. return to a previous self). Notably, restitution narratives may favour a medical model of recovery; yet, if a person cannot return to a previous self, narrative wreckage may ensue – reawakening the chaos narrative (Carless, 2008). Alternatively, Smith & Sparkes (2005) found that quest narratives transcend hope; adding mystery, excitement, optimism, and growth to a recovery journey, while also risking abstractness and uncertainness of future prospects. Accordingly, these narrative types illustrate how a person can move between the stages of hope during personal recovery, and seem relevant to the findings of the current study. Particularly, most participants appeared to tell restitution narratives, indicating that PA participation at the centre developed concrete hope. One explanation for this is the tangible nature of PA

found in sub-theme D1. In contrast, Derek appeared to recollect a chaos narrative; describing his impending loss of control and hope when faced with uncertainty toward stable accommodation. This exacerbated his mental health, and consequently, his PA and PM activities became less effective. Strikingly, his account reaffirms the need for a multi-agency approach at the centre (see Section 10.4). Lastly, few participants told quest narratives, perhaps due to the potential risks and insecurity associated with this state. Rather, as the centre housed many long-term attendees, it could be suggested that 'safety' narratives were also told, in effort to preserve non-change and prevent threatening situations.

Another finding in the current study was the indicated by the tangible adaptations from PA participation (i.e. weight loss, physical fitness, and improved physical competence) that allowed participants to reframe a sense of identity. The photo-elicitation method in the current study afforded a unique opportunity for participants to explore and reflect PA in their physical identity. Derek displayed his identity as a student of karate: His uniform indicating some belonging to a community, the colour of his belt suggesting his level of competency, and his stature demonstrating karate techniques. Likewise, other participants were able to exemplify their identity through their photographs, and express the meaningfulness of PA and an athletic identity. In the focus group, Tim recollected several achievement narratives of his golf performance, which according to Carless & Douglas (2008), achievement as a culturally accepted social activity and may contribute to positive self-identification (i.e. 'being a golfer'). This finding was similar to other participants (e.g. Derek, Tom), research elsewhere (Carless & Douglas, 2008a; 2008b), and may expand to the wider community and team sports, such as self-identification with a football team (Pringle, 2009). Equally, some participants experienced a sense of social acceptance through PA, from self-perceptions of doing something 'natural,' or 'normal,' which is consistent with findings elsewhere (Faulkner & Sparkes, 1999). For instance, the current study found that participating in PA enabled some participants to demonstrate a level of wellness to In particular, they felt able to exemplify their self-management, personal responsibility, independence, and thus a progressed level of recovery. Others valued exhibiting positive social roles, such as living a healthy lifestyle or belonging to a sporting community. As such, changes in physical self-perceptions possibly influenced perceptions of a positive social identity. These findings suggest that PA contributed to developing a positive identity, which was particularly valuable to participants who PA was a PM, or those who were able to exemplify progress in their recovery.

Furthermore, the current study illustrates how some participants experienced a sense of meaning and purpose through the PA-PM relationship (Section 10.2). In particular, many PMs required a degree of physical exertion to perform, which likely contributed to the participants engaging in an active and independent role during recovery, opposed to a passive and dependent one (Iwasaki et al., 2010; Laitakari, Vuori, & Oja, 1996). Even inactive PMs (e.g. watching television, reading, art, doing puzzles) require a degree of physical exertion to perform (Ainsworth et al., 2000; Tinsley & Eldredge, 1995); thereby continuing to contribute to active living. As such, mental health professionals can promote PA in innovate ways, as part of everyday 'mundane' activities, while also fostering people's PMs. However, conscious raising strategies may be necessary, as habitual and automatic information processes are likely to regulate such PA behaviour (Chatzisarantis et al., 2002). Another way in which mental health professionals might promote a sense of meaning through PA, is through offering strategies that integrate PA into people's PMs. For example, Theme C identified that most participants' valued social activities due to the sense of meaning, purpose, connection, relatedness, and acceptance that such PM afforded. Subsequently, PA could be promoted as a social PM, via group PA classes, encouraging PA with family and friends, or introducing a 'buddy' system. Likewise, Theme C also revealed that many participants preferred walking or mental activities during low periods of recovery. As such, mental health professionals could promote walking as a strategy to supplement mental activities, which might be particularly valuable given the cognitive benefits of PA. In addition, some participants valued employment and volunteering as meaningful pursuits, which according to Jacob, the physical benefits of PA had a positive influence on his return to employment. Respectively, mental health professionals may therefore consider integrating PA targets as part of an employment support programme. These exemplars imply diverse strategies where PA can be promoted to elicit direct or indirect meaning during recovery, and thereby contribute to active living.

The contemporary meaning of recovery suggests that people desire an active role, independence, self-management and autonomy in their treatment and care planning (Slade, 2009). Consistent with research elsewhere (e.g. Carless, 2007), sub-theme F2 showed that PA could develop perceptions of personal control and self-regulation in everyday self-care. Notably, the application of PA for self-management was diverse: The participants viewed it as a coping strategy, a method to live a healthy lifestyle, enable independent living, structure their routines, foster self-organisation, commute to

self-help services, do something constructive such as housework or gardening. Such PA regulation enabled the participants to take control of their lives, through volitionally regulating self-care and self-management activities. Subsequently, encouraging them to frame the 'mental illness part' of their identity and reframe a positive one (Slade, 2009). Specifically, the participants adopted an active role during recovery, opposed to passivity in their self-care and self-management. This was an important finding, as people with mental health and chronic illness often perceive an external locus of control when unwell, whereas an internal locus of control is associated with recovery (Harrow, Hansford, & Astrachan-Fletcher, 2009; Holmberg & Kane, 1999). Hence, the findings in the current study suggest that PA had a positive influencing in shifting people's locus of control in their recovery. Moreover, the successful achievement of PA in PA contexts perhaps installed agency and efficacy beliefs toward their perceived ability to cope, manage and make positive changes in their recovery. For instance, the physical dimension of PA (i.e. physical exertion and regulation) appeared to raise the participant's self-awareness of their physical competencies. Equally, social support seemed to empower some participants toward self-ownership, which was similar to the findings of Carless & Douglas (2004). They found that the responsibility of regulating PA transferred from instructor to the participant through teaching PA technical skills. They noted that toward the end of a golf programme, participants were able to autonomous regulate the skills they had mastered. Yet, one contrast with the current study was that staff struggled to transfer responsibility when perceived competency had plateaued. This possibly occurred due to the reported lacking of monitoring, evaluation and feedback of people's recover progress at the centre (see Section 10.1). Thus, while social support contributes to transferring responsibility, creating a motivational climate was equally important (e.g. setting personalised goals and encouraging choice) to PA promotion.

Interestingly, one aspect of self-care absent from the current study was the application of personal budgets to fund PA. To foster self-management in contemporary mental health care, personal budgets (i.e. benefits) are issued to mental health patients, to afford better control in their self-care (The NHS Confederation, 2012). The current study found identified that, according to one staff participant, the attendees were reluctant to using personal budgets to fund PA, preferring to rely on the free services at the centre. Additionally, several attendees discussed financial barriers toward PA, including PM-PA, yet the use of personal budgets to fund such PA was not mentioned. Given the importance of PMs as highlighted in this study, it is suggested

that personal budgets may help fund meaningful opportunities that are important to personal recovery. For instance, if swimming was a PM, then a person could pay for a swimming membership; equally, if art was a PM, a person could fund an easel, paints and brushes. However, tools to identify and negotiate the role of a PM during personal recovery need developing (e.g. discussing pathway and agency thoughts toward a PM to facilitate hope). Subsequently, it is feasible that individuals who receive personal budgets can fund their mental health self-care through PA and PMs.

Accordingly, this section has discussed the role of PA during people's personal recovery from mental illness. For many participants, PA fostered opportunities to experience a sense of hope, positive identity, meaning and personal responsibility. Specifically, PA could create positive expectations of time and influence pathway and agency thoughts to overcome challenges during recovery. The physicality of PA fostered opportunities to amplify personal interests, competencies, successes and achievements in recovery (thereby reframing the 'mental illness' part of their identity). Moreover, promoting the PA-PM relationship may encourage the meaningful participation in life, and internalise a sense of control toward active living for self-care and self-management in recovery. Accordingly, the applications of research findings are considered next where I discuss the implications for the mental health services, evidence-based practice and policy.

### 10.4 Implications for mental health practice and policy

Throughout the thesis, I have referred to the complexity of the PA and mental health relationship, whereby multiple physiological, psychological and social mechanisms are likely to influence the personal recovery from mental illness. To account for the potentially multi-layered applications of the research findings, in this section I harness Layder's (1993) research map (Appendix E, p.244) to examine the above discussion and research findings in relation to the micro and macro contexts of social organisation. Regarding the subjective and intersubjective domains, I explore the implications of the findings concerning the participants who self-selected their involvement in the research, compared to those who did not. Specifically, I consider the implications of the findings to those who may have alternative perspectives on the role of PA during personal recovery. Thereafter, I deliberate the applications of the findings in the macro context, in relation to the development of evidence-based practice for the mental health services and Government policy. Particular focus is directed toward the applications of the research findings for the independent, private, voluntary and wider

statutory elements of service provision. Given that the participant selection strategy and researcher-participant relationship has an epistemic bearing on the research findings, suitably the implications of the micro context are discussed first.

# 10.4.1 Micro applications of the research findings

In the participant selection strategy (Section 4.3.2), I aimed to recruit individuals whose accounts could contribute to a rich understanding of research aims, while also incorporating my standpoint values and the fairness criterion into the strategy. However, it is possible that such strategy evoked self-selection bias and reactivity, which can limit the interpretations and transferability of the study findings. There are a variety of factors that motivate people to participate in research (purposefully or self-selected); including external regulation (e.g. asked by a health care professional, family), altruistic purposes, therapeutic gain, subjective interest and enjoyment, political empowerment, or to inform social change (Clark, 2010; Peel et al., 2006). Equally, non-participation may stem from misunderstanding the research, concerns about privacy, personal reasons, and lack of interest (Williams, Irvine, McGinnis, McMurdo, & Crombie, 2007). Noticeably, these reasons of non-participation appeared reminiscent to the justifications given by attendees in the current study.

Parker (1994) noted that research participants are likely to interpret their role in a research study differently, according to their subjective views and values. Equally, Parker maintained that participants might misunderstand or over-engage their role in social research (Parker, 1994). Whilst subjective biases should not be perceived as misgivings of naturalistic research (Lincoln & Guba, 1985), it was likely that subjective values were determinants for research participation and non-participation. Namely, the subjective values to participate in a research study concerning the role of PA during the recovery from mental illness could be associated with the barriers and facilitators of PA as mentioned in Table 2.3 (p.36), and observed in the findings (e.g. the benefits and negative experiences found in Theme D). Subsequently, given that the nature of the sampling strategy may influence the transferability of the research findings (Malterud, 2001); examining the potential values for participation and non-participation may illustrate the relevant applications of the findings as exemplary knowledge. As Thomas (2011c) asserted, exemplary knowledge, "is interpretable only in the context of one's own experience —in the context, in other words, of one's phronesis" (p. 31). Thus, to encourage transferability and applications of the research findings, resonance with the values of others is essential (Carless & Douglas, 2010). In the current study, this was perhaps satisfied through the authenticity criteria, whereby workshop presentations were delivered at the Rockwell Centre and at a Recovery Conference (Khalil & Savanna, 2015). However, to explore how the findings might apply to other stakeholders, those attending mental health services and the general population, such considerations of participation and non-participation are further examined.

As mentioned in Section 4.3.4, the participant-observation strategy was an influential method that furthered my understanding of the research context and created opportunities to establish trust and rapport with the participants. Even though I perceived that a cohesive researcher-participant relationship occurred, such connection could lead participants toward over-engagement of their involvement in the research (Parker, 1994). For instance, they may seek to nurture our friendship above recounting their personal views. As such, my presence in the research setting possibly evoked some reactivity in social change, social performances and self-presentation and from the accounts collected.

In Sections 3.4 and 4.4.3, I suggested that reactivity is embraced in the social constructivist paradigm. Nonetheless, the participant's subjective values will likely determine the observed effects of reactivity and social change. Labov's (1972) 'observer's paradox' suggests that naturally occurring data cannot be wholly achieved: The presence of the observer means that people are likely to be conscious they are being observed. Consequently, people might act and behave in ways that are not 'natural' (Goffman, 1959), and elicit a 'meaning response' from their expected psychological and physiological treatment effects (i.e. the role of PA during recovery) (Moerman, 2002). Subjective expectations have shown to conjure a 'placebo effect' in studies examining the psychological and physiological benefits of exercise (Crum & Langer 2007; Desharnais, Jobin, Côté, Lévesque, & Godin, 1993). Subsequently, it was possible that the self-fulfilment of subjective expectations of the psychological and physiological effects of PA were reported above 'actual' experience. Likewise, it is possible that some participants reported self-promotional accounts to (re)position themselves or the organisation in a favourable light. Alternatively, I observed two respondents (Tom and Ivan) deflect several interview questions, perhaps demonstrating 'counter control' to rebalance the power asymmetry to convey their values (Kvale, 2006). explanation for self-selected engagement, includes the participant's needs to satisfy their role in attending the centre for therapeutic purposes. Accordingly, these values suggest numerous reasons of participation in the research study, including for intrinsic

or extrinsic outcomes, positive attitudes and expectations of PA, to experience a sense of control, for social or therapeutic purposes, or as a habitual behavioural process.

Notwithstanding, the inclusion of self-selected participants may also minimise opportunities to purposefully select participants with contrasting experiences and perceptions. As such, the current study might be limited by failing to purposefully select participants who did not participate in exercise-oriented activities at the centre. Although some participants reported unfavourable and negative experiences of PA, it is likely that amotivated or precontemplative individuals will hold differing perspectives toward PA and recovery. Research has shown that individuals categorised as amotivated or precontemplative often denote negative characteristics of physical selfworth, social physique anxiety, barriers, self-efficacy expectations, learned helplessness, and have low needs satisfaction (i.e. autonomy, competence, relatedness) (Ntoumanis, Pensgaard, Martin, & Pipe, 2004; Thøgersen-Ntoumani & Ntoumanis, 2006). Factors such as learned helplessness, being unwell, other more-valued priorities, high social physique anxiety, low physical self-worth and self-efficacy suggest plausible explanations for avoidance behaviour to ensue. Therefore, such issues may limit the transferability of the findings to individuals of amotivated regulation and those in lower stages of change, due to the above characteristics.

Notably, few amotivated and precontemplative individuals often volunteer to participate in PA-oriented research (e.g. Matsumoto & Takenaka, 2004; Rose, Parfitt, & Williams, 2005). Rather, as Biddle and Marshall (2001) meta-analysis show, a randomised sampling strategy typically fares better at recruiting precontemplators compared to non-random strategy. Thus, whilst randomised sampling contradicts some aspects of the naturalistic approach, it would appear fruitful for future research to apply a two stage sampling strategy. Researchers could first randomly screen the sample population, and follow with purposefully selecting a maximum variation of participant characteristics. Accordingly, this section has illustrated some plausible applications of the research findings within the micro context of social organisation. Interestingly, such 'micro' values appeared coherent with the TBP, TTM and SDT, indicating possible wider theoretical links with established models of PA behaviour. In the next section, I consider applications of the findings in the macro context of social organisation.

### 10.4.2 Macro applications of the research findings

This section sets out to examine the potential applications of the research findings within the mental health services, across private, independent and voluntary

sectors, and the wider statutory elements of such service provision. In the current study, the centre's relationship with local statutory services mostly occurred through referrals between the services. Many participants perceived the centre as separate to local mental health services, which influenced their motives to attend the centre. Several participants mentioned that the local mental health services would sometimes refer people to the centre, to supplement their recovery treatment and to cope with their mental health Likewise, staff referred the attendees to the statutory services when they encountered a mental health crisis. Although these findings indicate some level of multi-agency partnership, it was unknown whether joint-liaison with other private, statutory or independent services occurred. Glasby & Lester (2004) suggest that a multi-agency approach can help patients access the relevant support services from multiple providers, reduce bureaucracy and duplicated services, meet policy and Government targets, and pool resources to deliver cost-effective services. Subsequently, integrated services that provide continuity of care may enhance the quality of care delivered within the local authority (Wierdsma, Mulder, de Vries, & Sytema, 2009). Following the current research study, one suggested partner to facilitate the implementation of PA in voluntary, private and independent sectors are County Sports Partnerships. County Sports Partnerships are tasked 'at an arm's length' from the Government to deliver sport policies in local communities (Phillpots, Grix, & Quarmby, 2011). These local authorities aim to collaborate with local primary care services, voluntary organisations, business, agencies, schools and universities as part of a single delivery system to increase PA in the community (Crone & Baker, 2009). Subsequently, to implement PA across the mixed modes of mental health service delivery, developing multi-agency partnerships in collaboration with County Sports Partnerships may diversify PA opportunities in the community. Additionally, given the benefits of PA (see Sections 10.2 and 10.3), offering PA in a variety of mental health settings may afford continuity of care should transitions across the services occur.

Additionally, the research findings may have important implications for the development of evidence-based practice, and the delivery of policy objectives in the mental health services. Typically, to guide clinical expertise and patient views on the development of evidence-based practice, a hierarchy of evidence is used to evaluate the quality of research evidence (Evans, 2003). For instance, a study may be evaluated on a scale from 'poor' to 'excellent' based on the research design (see Section 3.2.3) (Evans, 2003). With this in mind, in Chapter 4, strategies to examine, evaluate and satisfy the authenticity criteria (as standards of social constructivist rigour) were documented in

effort to demonstrate the soundness of the research design. As such, it may be appropriate to suggest that the standards of the current study offer a 'good' level of evidence (Evans, 2003). Subsequently, using Petticrew & Roberts (2003) typology of evidence-based practice, possible inferences are made to suggest how the findings might apply to the development of evidence-based practice in the mental health services. According to their framework, qualitative research may inform health care services on:

(a) The processes of service delivery, (b) salience, (c) safety, (d) acceptability, (e) appropriateness, and (f) satisfaction with the service. Suitably, the following discussion considers examples of how the research findings might apply to these areas in the development of evidence-based practice, and across the mixed modes of service delivery.

The current study may have implications on the processes of service delivery for the independent, voluntary, private and statutory services, concerning the role of longterm attendees at the voluntary daycentre. The findings revealed conflicting accounts that risked compromising the centre's ethos. Whilst long-term attendance was perceived positively (e.g. effective peer-support, and demonstrating personal responsibility for recovery) negative implications equally surfaced (e.g. overdependence hindering recovery, and consuming resources). Nonetheless, the findings exemplify the role of voluntary organisations among the mixed modes of service delivery. Research has shown that voluntary organisations often support 'hard to reach' and marginalised groups who may otherwise avoid the statutory health services (Davis et al., 2009; Flanagan & Hancock, 2010). Whilst this seemed apparent in the current study, the participant's wider support network and links with other services was unknown. Yet, given the reported overreliance of their attendance at the centre, it is possible to imply that fewer opportunities were available to them in the local community, and wider statutory services. These unmet needs may explain such overreliance on the voluntary sector, which is concerning given the increased responsibility of the voluntary sector to provide mental health support in the community (HM Government, 2011a). Moreover, as voluntary organisations are often under-resourced in comparison to the independent, private or statutory sectors (Ramon, 2008), these findings suggest that more funds are needed to resource the voluntary sector. As indicated in the current study, such resources could fund staff-development, services to support long-term attendees, integrating a recovery oriented-framework, or diversify further PA and PM opportunities. Particularly, following the recent reform of the mental health services to treat and care for majority of the populations mental health

needs in primary care services (Joint Commissioning Panel for Mental Health, 2012), greater efforts are needed to ensure that people do not 'get lost in the system.'

Regarding issues of safety and acceptability, whilst majority of the participants did not report adverse effects exacerbating ill-health, several did recall experiencing social physique anxiety when exercising in public. These findings suggest that transitioning PA participation into community settings may evoke an alternative stage of change. According to Prochaska et al., (1992), stage progression in the TTM is related to decisional balance and self-efficacy. As such, it is possible that the participant's social anxieties moderated their stage of PA participation. Additionally, other issues of safety included the implications that PA could have a negative effect on PMs. Several participants reported physical tiredness as restricting the engagement in their PM. Such shortfalls of safety and acceptability could be effectively resolved through the client-therapist relationship, wherein mental health professionals could support people's PA stage progression into community settings and explore the PM-PA relationship through shared-decision making.

Concerning the appropriateness, salience and satisfaction of the findings, the current study demonstrated that many staff and attendee participants valued the role of PA during personal recovery. In particular, outcome and process benefits of PA afforded a variety of psychological, physical and social health benefits, which underpinned the participant's application of PA for adjunct and/or PM fulfilment. Noticeably, in the HM Government (2011b) objectives for effective mental health care and treatment (Table 2.1, p.32), little reference was made toward applying PA as a strategy to meeting these objectives. Whilst the current policy suggests PA as an adjunct benefit to recovery (HM Government, 2011b), this was found in contrast to the current study, whereby PA was also a meaningful activity (i.e. PM-PA) for personal Interestingly, valuing relationships though meaningful activities were recovery. reported as part of the Government's (2011b) guiding policy principles and values. As such, Table 10.3 (p. 222) presents applications of the research findings, suggesting how numerous stakeholders across the mental health sectors might use the research findings to meet the policy objectives. Table 10.3 does not suggest a definitive or fixed list; rather it presents example suggestions to encourage phronesis and thereby influence mental health professionals to consider the findings within their own context of service delivery.

Table 10.3 Suggested applications of the research findings to meet Government policy and develop evidence-based practice

develop evidence-based practice		
Policy objective	Key findings	Suggested application of the findings
More people will have good mental health	PA increased psychological wellbeing, including self-esteem, positive affect, improved cognitive function, and increased personal strengths. These benefits occurred as a process and outcome of PA, and could foster the better engagement in other activities.	Mental health professionals may seek to harness the transferable benefits of PA to support shared-decision making during patient consultations. Specifically, Exploring the effects of how PA can be applied as a practical tool to benefit other contexts of people's lives, PMs and personal recovery. Equally, such application may be delivered in brief interventions using motivational interviewing.
More people with mental health problems will recover	The findings showed that PA progressed people's recovery journey through experiencing personal growth, overcoming challenges, creating hopeful expectations, reframing a positive identity through the physicality of PA, and PM-PA was inherently meaningful in the recovery journey.	Overcoming challenges was a key process to progressing in recovery. PA was seen as a mechanism to develop resilience through overcoming challenges in the PA context, which was then applied generally. Mental health professionals might consider delivering clients psychological skills training during PA promotion (e.g., goal setting, self-talk, relaxation), to develop transferable coping skills elsewhere.
More people with mental health problems will have good physical health	The findings showed that many people experienced physical benefits such as weight loss, increased physical fitness, toning/building muscle, and reduce co-morbidity risks.	The findings showed that walking was valued as a PM and non-PM. Mental health professional might seek to increase people's ambulatory PA through an individually tailored walking intervention. This could be integrated with other activities to foster the wider elements of statutory care. For example, a 'walk back to work' initiative might combine PA with seeking employment opportunities.
More people will have a positive experience of care and support	The findings showed that the voluntary sector service provided a 'healthy' place to experience PA. Key aspects included offering a diverse range of activities to develop a sense of meaning and competence, and staff and peer support.	The research findings could be used to develop the client fitness-instructor relationship. Fitness instructors may create a motivational, supportive and comfortable environment. Given the level of support provided within the gym environment, fitness instructors might consider training to also deliver counselling during PA consultations, or exercise alongside attendees to displace power imbalances. Fitness instructors also need to be aware on the potential 'clash of perspectives,' as if PA undermines a client's PM then non-adherence is likely to ensue. This may be prevented through applying shared-decision making and power statements to explore the role of PMs within PA consultations.
Fewer people will suffer avoidable harm	The current study showed that participating in PA could lead to the formation of effective coping strategies that may offset negative or suicidal thoughts.	Sharing the participant stories to may encourage phronesis, igniting hope in others. The illustrative accounts presented in this thesis (including photographs) could be made accessible to attendees at independent, private, statutory and voluntary services via a newsletter article. Additionally, mental health professional might encourage active stories to form through promoting 'twalking' groups or an active creative writing grouppotentially combining PA and other PMs.

Fewer people will experience stigma and discrimination

The findings showed that participating in PA afforded a sense of normalisation, through being able to demonstrate wellness, and allowed people to 'frame' the mental illness part of their identity through enacting valued social roles

A multi-agency approach might apply these findings to commission PA events in the community across, such as park 'challenges' competing against other organisations or exercise fund raising. Doing so may reduce perceptions of stigma through enabling people to demonstrate a sense of wellness and engaging in valued social roles.

Furthermore, the PM-PA relationship was shown to afford numerous transferable opportunities for people during recovery. As such, the wider mental health services therefore may capitalise on opportunities to combine wellness programmes with PA promotion. Doing so, as illustrated in the thesis, may foster the engagement, achievement and regulation of other activities pertinent to personal recovery. Therefore, in agreement with Happell et al., (2011), funding opportunities to develop leadership roles in the mental health services is warranted. As such, local voluntary, private, independent and statutory services may elect a 'champion' within the organisation to enact such role. This could foster the development of multi-agency partnerships across the mental health services to promote PA within the local community. In particular, following the recent shift of responsibility in GPs delivering majority of the primary mental health care services, GPs that are PA 'champions' may commission further opportunities for PA in the community. Finally, given the notable differences between PA and PM-PA, to guide mental health professionals in the delivery and promotion of PA across the mixed modes of service delivery, two guiding position statements are offered:

- PA as a PM: PA is viewed as a core strategy as part personal recovery. The value of PA may vary from instrumental (i.e. value self-management) to intrinsic (i.e. value self-concordant purposes); the latter indicating a more significant role of PA in one's life. Integrating PA as part of a 'power statement' may reduce a clash of perspectives (Deegan & Drake, 2006). PA may form part of a recovery goal, to experience wellness and living a meaningful life during recovery, and as an outcome of recovery. Therefore, opportunities should be sought to integrate PA during the shared-decision making of personal care plans for recovery.
- PA as an adjunct therapy: PA is viewed as a supplementary activity as part of personal recovery. Activities that afford wellness and a meaningful significance in life should take precedence to facilitate personal recovery; PA promotion should refrain from conflicting with such activities. PA promotion should explore the role of PA in-conjunction with PMs, and

illuminate an understanding of how PA may afford enabling opportunities during personal recovery. This might include, highlighting self-empowerment to engage in other meaningful activities, or where PA benefits might facilitate the achievement or positive experience of other activities. Doing so may increase PA adherence, especially when meaningful outcomes are associated and expected with PA participation. Therefore, a more meaningful role of PA may become internalised when integrated as part of people's PM.

### 10.5 Chapter summary

This chapter has discussed the key findings of the thesis. The voluntary organisation appeared to influence PA promotion through a supportive and comfortable environment. However, this social-cultural environment also seemed to create an entrapping environment for some attendees. While the centre seemed to promote recovery-oriented values, organisational change was possibly required to support, monitor and evaluate attendee progress at the centre. Doing so, may strengthen the contemporary understanding of promoting PA and PMs during recovery. Nevertheless, PA and PMs appeared conducive to personal recovery, wherein the centre provided a 'healthy' place to support, foster, develop and maintain the attendees PA and PM experiences. Therefore, the centre appeared successful in delivering a holistic wellbeing service.

Additionally, the current study found that having a repertoire of PMs may support the non-linear journey of recovery. PMs were observed as flexible activities that may be utilised at different points in recovery. In particular, the current study found PMs were meaningful activities that offered hope, purpose, structure, self-care and a positive identity during recovery. Hence, should a person identify their PM as a PA type, this would suggest that PA is vital to recovery and possibly an intrinsic and self-concordant activity. The current study added that PMs are influenced by other activities, and multiple activities regulated concurrently, thereby affording 'win-win' benefits. Where PA was a non-PM, it was also observed to afford meaningful contributions to personal recovery through being regulated as a process of a PM, or where the outcomes of PA fostered the experience of other PM contexts. However, some negative experiences of PA and PMs indicated the need for shared decision making in PA promotion to minimise risking a clash of perspectives. It was anticipated that should PA clash with a PM, non-adherence to PA would likely ensue.

The findings of the current study further discussed the role PA in the context of personal recovery. The current study indicated that PA afforded positive projections of time, through anticipating the process or outcome benefits of PA. The tangible benefits of PA supported reconstructing self-perceptions as part of developing a positive identity, while the process benefits possibly influenced personal meaning through supporting PM experiences. Additionally, personal responsibility was observed through self-ownership, wherein self-acceptance seemed associated self-care. The implications of these findings were also discussed regarding the macro and micro applications for mental health service provision and policy. Implications of participant values, reactivity and self-selection were discussed in relation to the research findings and wider stakeholder groups. Additionally, to support the development of evidence-based practice, applications of the findings were considered in relation to processes of service delivery, salience, safety, acceptability, appropriateness, and satisfaction with the service. Through this discussion, applications of the research findings were suggest in effort to inform the development of mental health service provision and policy.

### **CHAPTER 11**

### **Conclusion**

### 11.0 Introduction

This thesis set to understand the role of PA during people's personal recovery from mental illness at a voluntary sector mental health organisation. To guide this investigation, three primary research questions were created to understand: (a) The experience of PA at a voluntary organisation, (b) the PA and PM relationship, and (c) the role of PA during personal recovery. These research questions guided the thesis methodology and subsequent contributions of originality and significance. Before discussing these contributions in Section 11.3, the thesis limitations are considered in Section 11.2. Additional suggestions to guide future research are presented in Section 11.4. Then in Section 11.5, I shall close the thesis with a final reflection. To first contextualise the thesis contributions, Section 11.1 provides a synopsis of the thesis, where key contributions from each chapter are briefly summarised.

### 11.1 Thesis summary

The literature review identified that approximately 25% of the general population may experience mental illness within their life, causing personal, social and economic consequences. Subsequently, three perspectives of mental health care were reviewed: (a) Clinical recovery, (b) the biopsychosocial model, and (c) personal These frameworks provided an understanding of the historical and recovery. contemporary issues relevant to the experience of PA during the recovery from mental illness. The implications of PA promotion in mental health settings were considered, including the against the shifting landscape of Government policy and recent strategy reform. Due to the paucity of studies investigating the role of PA during personal recovery, the literature review further sought to examine key determinates of PA behaviour. The TPB, SDT and TTM revealed theoretical constructs associated with PA to include the role of attitudes, social norms, self-efficacy, stages of behaviour change, and motivational control. Additionally, studies investigating wellbeing and quality of life were reviewed, indicating that regular PA could benefit positive affect, self-esteem, confidence, and better physical health. When reviewing the current literature on PA and personal recovery, promising findings from qualitative illustrated the potential contributions of PA toward hope, meaning, positive identity and personal responsibility. However, the literature review also showed that due to the complex nature of the PA and mental health relationship, any number of contextual factors might influence the recovery from mental illness. A concern was levelled here against postpositivist research, whereby such designs are likely to mask important incidences of individual successes, personal strengths and meaning (Carless & Faulkner, 2006). Hence, researchers have called for qualitative methods to provide a more sophisticated understanding on the role of PA during personal recovery (e.g. Crone et al., 2006; Faulkner & Biddle, 2004).

In Chapter 3, I declared the theoretical perspective of the thesis as social constructivism. I explained how my earlier assumptions of postpositivism had evolved after becoming familiar with the ontological, epistemological, methodological assumptions of constructivism. Subsequently, I examined the theoretical tenets of postpositivism and constructivism, to scrutinise and further understand my paradigm shift. As such, I acknowledged that my shifting theoretical perspective had influenced the research methodology and epistemological contributions of the thesis.

Accordingly, in Chapter 4, the thesis methodology was considered research in action, and a nested case study design was selected as a suitable guiding framework to examine the research questions. Specifically, I defined the 'case' as the role of PA during personal recovery at a voluntary sector mental health organisation, with an embedded interest of the PA-PM relationship. I applied Layder's (1993) model of social organisation to explore the bounded context of the case across macro, organisational, intersubjective and subjective domains. This framework also led me to contextualise the thesis, and provide a thick description of the bounded system of the case. Chapter 4 further detailed the research procedure as a crystallisation of qualitative methods. I described the participant selection strategy as a combination of purposeful and convenient selection, and detailed the qualitative methods that were applied to understand the participant's accounts. These include participant-observations, semistructured interviews, focus groups, and photo-elicitation methods. I further sought to demonstrate the efforts made to satisfy constructivist standards of rigour via the authenticity criteria. Lastly, I attempted to illustrate the chronological developments of the research methods and data collection by overviewing the hermeneutical developments of the research inquiry.

In Chapter 5, a thick description of the voluntary organisation was presented with the intention to contextualise the research findings and encourage naturalistic generalisations of the case study. I further offered several critical reflections to examine the researcher-participant relationships and intersubjective dynamics of this

relationship. I scrutinised my social role, positioning, social performance and power relations in a confessional tale to illustrate the tensions of fieldwork. Such critical reflexive approach severed to raise my self-awareness of the potential implicit assumptions that may influence intersubjectivity, and the epistemic bearing that this may have in the co-construction of knowledge.

The research findings were presented in Chapters 6, 7, 8 and 9, and discussed in Chapter 10. The TA revealed seventeen thematic constructs, including six high-ordered themes and eleven corresponding sub-themes. The thematic constructs identified a process of recovery from being unwell to personal growth, indicating the possible role of PA during the recovery journey. Typically, the attendee's sought refuge at the centre due to ill health, and as such, the initial process of seeking support was one possible determinate of PA participation. Experiencing PA at voluntary organisation afforded a supportive and comfortable environment that provided opportunities for attendees to engage in meaningful activities and benefit from social support. Such prospects were facilitators of PA participation, whereas organisational resources seemed to encumber PA promotion. One surprising finding was the entrapping environment within the organisation, due to the comfortable social milieu. One possible explanation for this was the lack of a recovery-oriented framework within the branch. Nevertheless, the voluntary organisation enacted a 'healthy' place; whereby, opportunities to experience a sense of autonomy, competence and relatedness through PA could afford enabling opportunities for recovery.

When examining the PA-PM relationship the findings revealed four types of meaningful activities that contributed to the participants personal recovery, including:

(a) Physical, (b) social, (c) mental, and (d) livelihood activities. The participants suggested that a repertoire of PMs facilitated a holistic sense of wellbeing during recovery. One interesting finding was that mental activities were mostly preferred when unwell, indicating that PMs could be prioritised in a hierarchy of importance that may fluctuate with recovery. Findings relating to PA-PM relationship revealed that many participants identified PA as a PM, thereby indicating that PA could be an essential activity for personal recovery. Disparities in the PA-PM were noted, wherein PM-PA was associated with more favourable experiences compared to non-PM PA. Additionally, the findings indicated that the process and outcome benefits of PA could afford enabling opportunities for people during recovery and influence other contexts of their lives. Plausible mechanisms explaining such effects included self-efficacy augmenting self-empowerment. Notably, Self-efficacy seemed to develop through PA

achievements, increased competence physical self-worth, which then appeared to enable the generality of self-efficacy.

Participating in PA also appeared to influence personal growth during recovery, which seemed to arise through the participant's recognition of their PA achievements. As the participants experienced a sense of achievement, they demonstrated increased perceptions of physical competency, which led to affirmations of physical self-worth and self-esteem. Achievements through PA also led some participants to reflect on their recovery journey, while acknowledging the progress they had made. Notably, the physical dimension of PA provided tangible markers in people's recovery progress, which led them to determine well periods of recovery. Such raised consciousness informed positive outcome expectancies associated with PA, potentially increasing agency thoughts in hopeful goals. As people progressed in their recovery they reported self-ownership, indicating greater self-interest and more independence in personal selfcare and management of ill-health. Another stage of personal growth indicated selfacceptance. This was characterised by PA influencing opportunities to (re)create valued social roles and reframing an illness identity. Finally, the implications of the findings were discussed in relation to the macro and micro contexts of social organisation. At the micro level, the epistemic influence of the participant values were considered, in effort to discern potential population groups where naturalistic generalisations might be suitable. Additional applications of the findings were made at the macro level, where suggested implications were made concerning mental health policy, evidence-based practice and the mixed modes of service delivery. These implications are made in light of several limitations, which are discussed next.

### 11.2 Thesis limitations

In addition to the limitations addressed in Chapter 10, in this section I outline several limitations relating to my theoretical perspective, thesis methodology and research methods. First, limitations concerning the participant selection strategy are considered. Several shortcomings of the selection strategy include the lack of a comparison with private, independent and statutory organisations. Several interesting comparisons occurred in the discussion chapter regarding the implementation of mixed modes of service delivery. However, situating the case study within the voluntary sector created some uncertainty was apparent concerning of role of the centre in providing interdisciplinary services across the sector. Alternatively, a comparison site with another voluntary organisation may illuminate further insight across this sector,

while also deepening an understanding of the strengths and weaknesses of the centre that was studied. Equally, a wider participant sample variation could yield greater comparisons at the micro level. For instance, selecting additional exercise staff, non-PA participating attendees, attendees from centres that do not run exercise programmes, or attendees from that are younger in age.

Another limitation of the research methodology included the lack of a mixed methods design. As such, the findings indicating the positive effect of PA on personal recovery could be "self-limiting" or "regression by the mean" (Moerman, 2002, p.12). The former term, refers to the likelihood of participants recovering from mental illness through no means of their engagement in the study, PA or PMs (e.g. medication, talking therapy). The latter, denotes the non-linear journey of long-term chronic illness, wherein the reported indicators of recovery are associated with the non-linear journey rather than treatment effects (i.e. PA). As people's personal recovery journey was not directly measured, a repeated measures mixed-method design might create a more robust understanding on the effects of PA. For example, it would be worthwhile for future research to include repeated measures of PA participation (e.g. Lowther et al., 1999), personal recovery (e.g. Neil et al., 2009) and semi-structured interviews, to enrich an understanding of the temporal, spatial and situational factors of PA and recovery. Additional limitations concerning the participant-observations and focus groups methods are discussed next.

Concerning the participant-observation strategy, In Table 4.4, I illustrated how the participant-observation periods occurred across three separate occasions due to personal circumstances, and shifting workload priorities. Consequently, whilst the intermittent participant-observations provided opportunities to reflect on interim periods, several drawbacks of doing so were noted. This included a loss of participant rapport, lack of opportunities to perform member checking or interviewing participants who later moved on from the centre. Additionally, even though the participant-observations occurred intermittently over 2 years, a year lifecycle understanding to PA participation at the centre was lacking. This was perhaps relevant as seasonal barriers were reported to affect PA participation and attending the centre. Further, regarding the focus groups, these were perhaps limited due the selection of previous acquaintances at the centre. Notably, such sample could limit the disclosure of information due to preformed social cliques, dominant members, and concerns of potential ramifications (Hollander, 2004).

Another limitation included the 'necessary problem' of 'flooding' the research context with pre-defined definitions and psychological constructs (Potter & Hepburn, 2005). The research interview is potentially embedded (implicitly or explicitly) with terms of social science, which may risk epistemic asymmetries between interviewer and interviewee understanding such terms (Potter & Hepburn, 2005). For instance, when designing the data collection methods, to ensure consistency of the key terms relevant to the research agenda, definitions of PA, PM and personal recovery were provided to the participants. However, this perhaps limited constructing a 'bottom-up' understanding of these terms, whereas implementing a steering group committee or a pilot study investigating these terms might achieve better epistemic harmony.

Lastly, limitations relating to the authenticity criteria are considered. Given the limited guidance currently available on implementing this criteria (Brown Wilson, Clissett, & Wilson, 2011), and few studies applying this criteria in research (Sparkes & Douglas, 2007), one limitation was the uncertainty of knowing whether the criteria had been satisfied. Although I believe that I had satisfied the criteria, despite not achieving all aspects of fairness. This includes the absence of an external audit on the audit trail, and the risk of underrepresentation of some participants. Some tensions were encountered when striving to achieve a fair representation of the diverse perspectives; however, some voices dominated the findings due to their greater contributions and information rich accounts. Notably, my concern for fairness led me to 'conveniently' select some participants, which according to Patton (2002), threatens the loss of 'information rich' stories. In addition, not all participants contributed to the member checking activities, and consequently, it is unknown whether their values would agree to the research findings. Notably, Schwendt (2000) acknowledged the problem of 'authority,' whereby it is likely that I maintained a dominate role in research activity and the co-construction of knowledge compared to the participants. Consequently, it was unknown whether my values in the research design were in agreement with the values of the participants. As such, the implementation of a participatory steering group committee may be one approach to 'know' whether participatory values were maintained (Pitt, Kilbride, Nothard, Welford, & Morrison, 2007). Lastly, to further stimulate catalytic and tactical authenticity, it acknowledged that perhaps more could have been done to make to research product accessible to other attendees at the organisation, and other service providers (i.e. dissipating the findings via branch newsletters or websites). Accordingly, in light of the presented limitations, the thesis contributions are considered next.

### 11.3 Thesis contributions

The purpose of the thesis was to understand the role of PA during the personal recovery from mental illness in a voluntary sector organisation. The findings in Chapters 6, 7, 8 and 9 have conveyed this understanding, and in Chapter 10, these findings were compared to the existing literature. One key contribution of the thesis was the particularised understanding of the PA-PM relationship, which seemed to diversity the potential role of PA during personal recovery. Additionally, the critical issues presented in Chapter 3 illustrate how the shifting theoretical perspective of a researcher affects the research methodology, data collection and final report. As such, an emergent constructivist case study was formed using Thomas (2011b) case study typology and Layder (1993) research map. Other methodological contributions include the use of the authenticity criteria and the critical reflexive approach illustrated in Chapter 5. Accordingly, I have identified several contributions of originality and epistemological advancements that may impact the field of PA psychology and personal recovery.

### 11.3.1 Contributions of originality

The thesis has made several original epistemological contributions. First, few studies have located an understanding on the role of PA within the context of voluntary sector organisations. The current study identified the importance of such service provision in advocating and delivering PA schemes, wherein the social-cultural context and milieu of the organisation were likely determinants of PA participation. Controversially, the comfortable environment appeared to somewhat hinder PA participation and recovery progress in long-term attendees. The lack of resources continues to burden such organisations (Ramon, 2008) and restrict opportunities to implement or develop personal recovery and PA. Therefore, the current study adds evidence on the potential benefits of PA on personal recovery, and may reinforce calls for commissioning bodies to fund PA opportunities in the mental health services. Essentially, this study suggests that voluntary organisations should not be excluded from such calls. Rather, further research is required to examine issues of potential entrapment and to identify ways in which this sector might further develop.

Second, in the current era of organisational change in mental health policy (Ramon, 2011); the current study has contributed to an understanding of PA and personal recovery. Given that the elements of personal recovery are often absent from

the PA and mental health literature (e.g. Bodin & Martinsen, 2004), the PA and mental health relationship conveyed in this thesis informed aspects of hope, meaning, identity and responsibility. Although some qualitative findings have hinted that such features are pertinent to the experience of PA during recovery (e.g. Carless & Douglas, 2010); the integration hope, meaning, responsibility and identity into the secondary research perhaps advanced the understanding of PA and recovery in this thesis. Therefore, this thesis adds to the continuing line of inquiry supporting the role of PA during personal recovery and provides contemporary evidence of this.

Third, although the PA and mental health literature have reported the process and outcome the benefits of PA (i.e. positive affect, cognitive function, confidence), few studies have demonstrated how such benefits are experienced in other contexts of recovery. The current study illustrated how the benefits of PA can influence other physical, social, mental and livelihood activities, that are meaningful to recovery. In addition, this project hinted that certain benefits of PA might be relevant to particular a types of PM. This has practical implications for the delivery of PA in mental health settings, whereby mental health professional can promote the instrumental value of PA to achieve desired outcomes to benefit a person's PM. Doing so may reduce a 'clash of perspectives' and facilitate wellness during recovery. Connecting the PA and PM relationship may afford a 'win-win' situation; experiencing the benefits of PA (as an adjunct activity) while enhancing a positive engagement in PMs.

Lastly, several original methodological contributions of the thesis were noted. This study applied multiple qualitative methods as part of a longitudinal investigation to create an in-depth understanding of PA in a voluntary organisation. Although evidence of PA in mental health settings is growing, most studies are short term (i.e. <6 months). Therefore, the prolonged observation and data collection that encapsulated the case study, contributes a longitudinal understanding to the experience of PA in a mental health setting. The thesis was further unique in the context of the applied methodology; research in action as my theoretical perspective evolved toward the design of a social constructivist case study. Particularly, the photo-elicitation method was an innovative strategy, in that it seemed to evoke a greater sense of self-awareness compared to the other applied methods. For instance, the participants were able to reflect on the progress of their recovery journey, which may advance this method as a tool of data collection and therapeutic benefit. Indeed the application of combining photography, PA and PMs may contribute toward a plausible adjunct activity for clinical practice. Another unique approach to the methodology included the use of positioning theory,

social roles and power relations to guide a critically reflexive understanding of my standpoint and in relation to the perceived 'other'. This was a particularly useful strategy when examining the intersubjective dynamics of the researcher-participant relationships. Moreover, the acknowledgement of my evolving theoretical perspective, contributions of social constructivist inquiry and authenticity criteria advances the current field in the design and delivery of qualitative methods in PA research (Khalil, 2014b). Accordingly, the methodological contributions presented in this thesis revealed some methodological issues pertinent to the context of researching PA in mental health settings (Khalil, 2013b). As such, they may offer new ways of knowing and exploration of social world (Douglas & Carless, 2010). Therefore, the above original contributions of the thesis are anticipated to afford contributions of impact.

### 11.3.2 Contributions of impact

In considering the significance of the thesis contributions, I aspire to generate impact across all levels of social organisation; in the political context, organisational setting, situated activity and subjective levels (Layder, 1993). Currently, the thesis has contributed toward some academic and professional outputs at academic conferences (Khalil & Pack, 2008; Khalil et al., 2013; Khalil, 2013b) and article publications (Khalil & Pack, 2014; Khalil, 2014a, 2014b). At the University of Hertfordshire, the thesis has contributed toward guest lectures on an Advanced Exercise Psychology module, presentations during research seminars, and Life and Medical Sciences departmental postgraduate conferences. In my everyday practice, verbal communication with peers, friends, family, colleagues or in my online profile and communications (e.g. Khalil, 2013a), I have advocated this thesis. In my current employment as a Student Support Officer, the perspectives outlaid in this thesis have influenced my role and subsequent pastoral support of student welfare in campus accommodation.

In the situated activity of the organisational setting and participant subjectivities, the research study and follow-up workshops contributed toward ontological and educative authenticity, and in some cases stimulated change (e.g. Jacob). Noticeably, not all levels of social organisation are presently fulfilled. Therefore, following the completion of the thesis, additional activities to generate impact include written articles for peer-reviewed publication to disseminate the original contributions of the thesis, and to contribute to a newsletter (paper and online) article and poster to reach interested stakeholder groups (e.g. other mental health organisations).

### 11.4 Future directions

In addition to the suggested future directions in Chapter 10, the thesis has opened new avenues to extend the current understanding of the PA and mental health relationship. In Section 10.4.2, a positioning statement defined the application of PA as an adjunct activity and PM-PA as a meaningful activity for recovery. As such, one suggestion is to apply this position statement in the delivery of educational and motivational support programmes in mental health settings. Providing educational support may raise patient's awareness on role of PA in relation to PMs, and overcome potential challenges to PA and PM participation. Motivational interviewing might strengthen such approach, as a method to develop intrinsic value, autonomy and self-efficacy (Miller & Rollnick, 2002). The application of motivational interviewing has been suggested elsewhere (Crone et al., 2004; Soundy et al., 2007), and the current thesis supports its application to direct future work. In particular, integrating the exploration of the PA-PM relationship could also be as one-way to facilitate the 'spirit' of motivational interviewing. This may further resolve ambivalence toward PA and improve PA adherence in exercise referral schemes.

Additionally, while the current study found evidence to support the role of some existing correlates of PA to aid recovery (e.g. positive affect, improved cognition), future research might consider investigating the relationship of such benefits toward particular PM types. The current study found that certain PA benefits could be effective with particular PM types. Here, it was suggested that the generality of self-efficacy perhaps fostered some self-empowerment in other contexts of people's lives. Given the research findings, future research may consider measuring variables such as self-determination, self-efficacy, stages of change, personal recovery, competence, resilience, or positive affect. It might be particularly worthwhile to understand what correlates to of PA contribute toward the development and positive experience of PMs, how people might initiate a positive departure from the centre, return to employment, or live a meaningful life. Subsequently, mental health professionals could then promote PA benefits to target particular PMs or other indicators of personal recovery.

Another possibility for future research might involve examining the macro determinates of PA and recovery, through cross-site and sector comparisons with other voluntary, private, independent, statutory or local agencies. The lack of a comparison group in the current perhaps limited the possibility of naturalistic generalisations across the sectors. Subsequently, a better understanding of the strengths and weakness of PA provision from different agencies could develop the applicability of PA in the mental

health services. Such application might also lead to investigating the effects of delivering PA as a multi-agency partnership programme, delivering sector-wide PA programmes in local communities. Such study, may develop insights on the effectiveness, cost-effectiveness, feasibility, and applicability of PA schemes in the community.

Although the current study may support 'good' evidence of feasibility and appropriateness of implementing PA and PM in mental health settings, the effectiveness of PA and PMs during recovery was not addressed I this thesis. To further develop evidence-based practice, another suggestion for future research is the implementation of a RCT design to evaluate the effectiveness of PA and PMs in relation to variables of personal recovery. Doing so may strengthen the significance of the thesis findings and further impact social change in policy and practice (Evans, 2003). Nonetheless, given my theoretical perspective, such recommendation is not without caution. A mixed methodology guided by constructivist, critical and participatory values may generate a rich understanding of such effects, while also seeking to reduce marginalising study participants. For instance, a participant steering group and examining the researcher-participant relationships throughout the inquiry could guide such intervention. One challenge here arises in the pragmatic difficulty in satisfying the diverse needs of multiple stakeholder groups, presenting a further caveat for such trial. However, in light of the above recommendations:

It is important, we think, to remember that sport and physical activity are also games. Oftentimes, involvement is most beneficial to the human spirit when it is ludic: it perhaps requires no further outcome other than that is fun and enjoyable in the moment, that makes us laugh like a child that surprises and entertains. If we try to pin down and control activities too much, we threaten the potentially essential elements of enjoyment, connection, surprise, inspiration, creativity and spontaneity (Carless & Douglas, 2010, p. 165).

The intrinsic value of PA should not be forgotten. Nor should it be undermined by the instrumental purposes of social research. To captivate the intrinsic value of PA, a participatory design might further colour, contextualise and visualise such role, grounded and socially constructed by the 'other' and their values. Few studies have included participatory designs to understand the role of PA during recovery. Continuing to do so, may be an oversight of the current epistemological understanding on the intrinsic value of PA. As Sparkes & Smith (2014) suggested, to appreciate and fairly construct the 'other,' the researcher's prejudices and judgements should be challenged during social inquiry. Therefore, PA and mental health researchers may

consider locating the researcher's role throughout the inquiry; reflexively, in comparison to the 'other'. To allow self-expression of the 'other,' qualitative research is an ideal format to understand and represent new, exciting, evocative and interesting ways of knowing, that might further illuminate the intrinsic value of PA. As advocated by Carless & Douglas, (2010), crafting poems, songs, art, plays, videos and stories are some ways in which further research might consider expressing the intrinsic value of PA. I would like to add to their recommendations; a participatory design may continue such advancements to signify the meaningful role that PA has during the personal recovery from mental illness.

### 11.5 Thesis reflections and closing thoughts

When I was an undergraduate student, I exercised most mornings and evenings: Lacrosse, resistance or cardiovascular training comprised my daily routine. I never conceptualised the barrier of 'time.' I had studied it as a barrier to PA, but I never experienced such obstacle. As I journeyed through the Ph.D., my theoretical orientation unfolded, and I then perceived time as an illusion: A social construction, perhaps takenfor-granted in everyday life (Berger & Luckmann, 1966). Overtime, the stress of the PhD mounted. In my second phase of study, I became a father, retired from lacrosse and exercise to focus on my work and familial commitments. I lost my 'athletic' identity as new identity constructions ensued. Ultimately, the stress of the Ph.D. grew, and took the shape of 'the beast' (Khalil, 2013). The Ph.D. took control, and I felt my own mental health suffer. Needless to say, exercise was the last of my priorities: I did not have enough 'time'.

This thesis has taught me many lessons. The development of my theoretical perspective changed me as a person. One impact of my evolving worldviews was understanding the close relationship of myself being intertwined in the research. As I journeyed through the Ph.D., I continued to reflect on my personal life in relation to the participants (e.g. Khalil, 2013); trying to understand the introspective, intersubjective and critical 'place' of myself in the thesis and research context (Finaly, 2002). Like Carless and Douglas (2010), I too, often reflected on the participant's lives during my daily living. I have experienced benefits of PA that has influenced my own mental health. I have related to the theme of feeling 'stuck' and needing to take responsibility to finish this thesis, despite personal barriers. Like Derek, I felt huge anxiety when faced with the uncertainty of homelessness. I have empathised deeply with the respondents who have lost or are without the love of family members; knowing that

after departing the research setting, I would return home to my family. I have spotted similarities in some respondents akin to my family members, leading me reflect on my relationship with my mother and father. Perhaps most importantly, the thesis has taught me the value and significance of a PM, and my own PMs: Family, Lacrosse, walking, running and music.

When I embarked on the Ph.D. journey, I believed that PA was the 'answer' to recovery. Upon my departure, this understanding evolved to perceiving to PMs as being essential to recovery. In the first phase of the PhD journey, I assumed PMs were things people enjoy. Through understanding the lives of others and reflecting on the PhD journey, my preconceptions have evolved. Now, I perceive PMs as multifaceted, complex, fluid and contextual. In our darkest hour they offer a shimmer of hope. When life becomes over-encumbering, they offer us strength to continue fighting. They add value and meaning to even the smallest parts of life, or a second in the day. They enable us to transform and (re)constructs parts of ourselves that are internally important, and live-out aspects of our identity. They shape the value of our everyday, social role, and existence. Thus, for meaningful activities need to be effective, they should be acknowledged, specified, applied and reflected upon. It is one key contribution of this thesis, that PA offers one such way of fostering, facilitating, empowering and flourishing our PM experiences. It is sometimes difficult to overcome the challenges, ambivalences and enduring struggles, to continue being an active participant in life. Perhaps when we do, this is what makes the journey more worthwhile, enticing, thrilling and fulfilling.

# Appendices

# Appendix A. Public guidance for the recommendations of physical activity (Department of Health, 2011a).

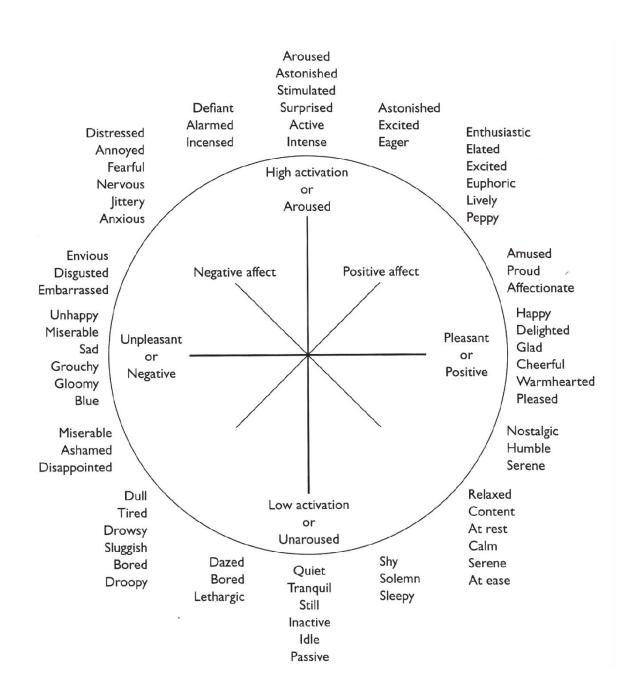
Population	Aerobic recommendations*	Resistance recommendations
Children and adolescents (2-18 years)	Participate in at least 30-60 minutes daily PA of moderate and vigorous intensities.	Twice weekly include activities that improve bone strength, muscle strength and flexibility.
Health adults (18- 65 years)	To maintain general health, accumulate 30 minutes moderate PA on 5 or more days per week or accumulate 20 minutes vigorous PA 3 or more days per week. To reduce the risks of chronic disease the minimum recommendations should be exceeded by a further minimum 15-30 minutes.	Participate in 8-10 different exercises targeting all major muscle groups, using a resistance in 8-12 repetitions on 2 or more non-consecutive days of the week.
Adults with chronic diseases (18-65 years)	Participate in moderate 30-60 minutes PA on 5 or more days per week. Obese adults and maintaining weight loss after obesity should accumulate at least 60-90 minutes of moderate PA on at least 5 days per week. This population should consult a doctor before planning vigorous PA.	Same as healthy adults.
Older adults (>65 years)	The same as healthy adults, however it is important to focus on light-moderate intensity PA to avoid adverse cardiovascular events with vigorous activity. Individuals should consult a doctor before starting an exercise programme.	Participate in activity focusing on balance and coordination lasting a minimum of 10 minutes, twice weekly. To improve strength, participate in 8-10 different exercises targeting all major muscle groups, using a resistance in 10-15 repetitions on 2 or more non-consecutive days of the week.

<sup>\*</sup>Research has shown that these guidelines can be achieved when accumulated in multiple shorter bouts, such as several 10-minute periods (Haskell et al., 2007).

# Appendix B. Processes of behaviour change (adapted from Lowther et al., 2007).

Type of process	Process of change	Definition related to physical activity
Experiential	Consciousness-raising	Efforts by the person to gain information and understand
processes		the benefits of exercise.
	Self-reevaluation	Reappraisal attitudes towards PA.
	Dramatic relief	Experiences and expressions of feelings toward
		inactivity and the associated consequences.
	Environmental	Consideration of how inactivity relates to the physical
	reevaluation	and social environment.
	Social liberation	Awareness toward the availability of PA alternatives
		within society.
Behavioural	Counter-conditioning	Reducing sedentary behaviour and becoming more
processes		active
	Stimulus control	Controlling stimulus's associated with inactivity (e.g.
		walking instead of driving) or providing stimulus's to
		encourage PA (e.g. PA posters).
	Reinforcement	Self or social rewards when exercising.
	management	
	Helping relationships	Trusting and using social support.
	Self-liberation	Being committed to a belief in the maintenance of
		exercise.

### Appendix C. The circumplex of emotions (Carr, 2004)



# Appendix D. Ph.D. Phase one abstract, the efficacy of Motivational Interviewing toward enhancing self-regulated physical activity

The abstract below briefly overviews the Ph.D. first phase, before the emergent methodology commenced. Presenting the abstract as part of the emergent methodology indicates a change in the 'evolving issues' and research assumptions of the inquiry (Stake, 1995).

**Objectives:** The objective was to investigate the efficacy that motivational interviewing (MI) had upon increasing self-regulated physical activity (PA) and adherence to PA. Specifically, it was expected participants receiving MI would significantly increase PA compared to a control group.

**Design:** An independent group design randomised participants into a treatment group receiving MI and a control group during eight weeks of self-regulated walking.

**Method:** Six control (age 28.00 SD± 9.70 years) and five treatment (age 24.20 SD± 7.76 years) female participants volunteered to take part in an eleven week intervention consisting of: a) one week baseline PA recording, b) eight weeks PA monitoring, c) two week 'washout' period, d) one week PA follow-up assessment. The treatment group received MI eight times during the eight week monitoring period. The efficacy of MI was evaluated via: a) increases in pedometer (Yamax SW200 Digi-Walker) steps, b) estimated minutes of PA (Scottish Physical Activity Questionnaire), c) stages of change (SoC) questionnaire, and d) self-determination (Behavioural Regulation in Exercise Questionnaire 2).

**Results:** Repeated measures of variance showed non-significant ( $P = \leq 0.05$ ) changes in pedometer steps, minutes of PA, self-determination and SoC throughout the intervention. Furthermore, discrepancies among subjective and objective measures of PA were observed.

**Conclusions:** The disparities among the objective and subjective measures of PA are linked to the habitual nature of PA, whereby efficacy beliefs are impacted by faulty self-knowledge. Discrepancies between SoC and self-determination also indicated inconsistent efficacy and outcome expectations towards PA. This may be explained by a clash with other situational, contextual, or global motivational factors. Thus, future research might investigate the impact that MI has upon self-knowledge and efficacy expectations with regard to intrinsic PA participation.

## Append E. Layder's (1993) research map

In the figure below, Layer's (1993) research map is presented alongside the research context. Specifically, he defines the research map to encompass a research method and focus. I have redressed these levels of social organisation and considered them within the studies context.

	Research element	Research Focus	Thesis context
	MACRO CONTEXT	Macro social forms (e.g. class, gender, ethnic relations)	Government policy relating to physical activity and mental health care
HISTORY	SOCIAL SETTING	Immediate environment of social activity (e.g. schools, family, factory)	The Rockwell centre 2007-2014 Positioning, performance and 2014
HIS	SITUATED ACTIVITY	Dynamics of face-to-face interaction	Positioning, performance and power in the researcher-participant relationships
	SELF	Biographical experience and social involvements	The multiple and diverse subjectivities of the case study

### Appendix F. Documents of ethical approval

I obtained institutional ethical approval twice, for the emergent research design. Below, presents the first document of approval for the phase 2 research design, including the use of participant-observations, staff interviews, and attendee focus groups.

Revised (September 2008)

# SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL

Student Investigator: Hassan Khalil

Title of project: The role of physical activity and personal medicines during the recovery in

mental illness

Supervisor: Dr Stephen Pack, Prof Shula Ramon, and Dr Nick Troop

Registration Protocol Number: PSY/11/10/HK

The approval for the above research project was granted on 1 November 2010 by the Psychology Ethics Committee under delegated authority from the Ethics Committee of the University of Hertfordshire.

The end date of your study is 1 March 2013

Signed:	Kvaviland	Date: 1 November 2010
Professor Lia	a Kvavilashvili	
Chair		
Psychology I	Ethics Committee	
From my dis	OF THE SUPERVISOR: cussions with the above stu col approved for this projec	udent, as far as I can ascertain, s/he has followed the t.
	ervisor):	
Date:		

In the third Ph.D. phase, I added the photo-elicitation method to the research design, and extended the data collection period from 1/03/2013 to 01/10/2014, to coincide with the final registration date of the Ph.D. Below, presents the approval form received for the accepted modifications of the original application. I complied with the suggested amendments, changing the information sheet before distributing this to potential participants.

# APPROVAL OF PROTOCOL APPLICATION FOR MODIFICATION

We support the approval of modification of the above protocol	YES
But please amend the following:	
Carefully proofread the Information Sheet to avoid mistakes like 'Ethic' instead of 'Ethnic'	
Please amend the consent form in such a way that it includes additional statements	
about making photographs and copyright issues, the interview being tape recorded,	
etc.	
We <b>do not</b> support the modification of the above protocol for the following reasons:	

Signature <

Date 23.07.12

**Chair of Ethics Committee** 

Knavilan

Ethics LK/CH/2006

Created: 19/09/06

### Appendix G. Participant information document

Below is an example of the participant information document, tailored for the photoelicitation method.

### PARTICIPANT INFORMATION DOCUMENT

### TITLE OF STUDY

The role of physical activity, exercise and personal medicines during the recovery in mental illness

### AIM OF THE STUDY

The aim of this project is to explore your experiences of physical activity, exercise and personal medicines during recovery in mental illness. In this study, physical activity, exercise and personal medicines are defined as:

**Physical activity**: is any form of light, moderate or heavy physical exertion that is performed as part of your daily living and routines. Physical activity might therefore be unplanned, for example: walking to the shops, lifting boxes, carrying shopping, doing housework, light gardening (Caspersen et al., 1985).

**Exercise**: is a form of physical activity that you have planned to do. It typically involves moderate to heavy exertion, which can increase your breathing rate, sweating, and blood circulation. Examples include power walking, running, cycling, lifting weights (Caspersen et al., 1985).

**Personal medicines**: are individualised non-pharmaceutical methods that give you meaning and purpose in life, which could also be self-care strategies during recovery in mental illness. Examples include being a good parent, having a career, providing something to the community, solving math problems, exercising, grocery shopping, or washing (Deegan, 2005).

The lead investigator for this project is Hassan Khalil, a PhD candidate from the University of Hertfordshire under the supervision of Dr Stephen Pack, Professor Shula Ramon, and Dr Nicholas Troop. This project has been approved by the school of psychology ethics committee [PSY/11/10/HK].

### PURPOSE OF THE STUDY

This research is interested in understanding people's experiences of physical activity, exercise and personal medicines during their recovery journey. Current mental health research and policy guidelines have suggested that physical activity, exercise and personal medicines can benefit some people during recovery. However, there is little evidence understanding the role that physical activity and exercise have as a personal medicine, or the impact that physical activity and exercise might have upon people's personal medicines. For example, some people might have positive experiences of exercise (such as increased confidence, weight loss, or a sense of achievement), whereas, other people might have negative experiences of exercise (such as medication side-effects, feelings of failure, or guilt). This research would be interested in hearing and understanding your positive, negative or neutral experiences of physical activity and exercise during recovery, and how these experiences might impact your personal medicines and recovery.

### WHAT IS INVOLVED?

On the next page, a detailed flow diagram illustrates what is involved at the different stages of this research study. This study has adopted a photo elicitation interview method. This means that you will be lent a camera to take pictures of your physical activity, exercise and personal medicine experiences that relate to your recovery journey. Hass will then interview you to discuss your experiences and the pictures that you have taken. The interview meeting, and the final meeting to comment on the findings report, would be recorded by a digital Dictaphone. The recordings would then be transcribed to help Hassan to analyse the meeting to create themes to understand the role of physical activity, exercise and personal medicines during recovery. If you are unhappy about being recorded, please inform Hassan, and he will not record any of the meetings.

Meet with Hass at the Stevenage wellbeing centre for an introduction to the study. Providing that you are happy to participate in the study, you will need to sign the consent form at the end of this document. You will then be lent a digital camera and a memory stick. Finally, Hass will brief you on how to use the camera, and how to take appropriate pictures for this study. This meeting should take about 15 minutes.



After one week Hass will contact you, via telephone, to arrange a time and date to collect the camera and memory stick from you. This phone call should take several minutes.



At our arranged time and date, Hass will then meet you at the Stevenage wellbeing centre to collect the camera and memory stick from you. Hass will then schedule an interview time and date with you. He will also give you the interview agenda so you can think about what you would be happy to share with Hass before the interview. This meeting should take about 5-10 minutes.



Hass will then develop the photos. He will develop two copies of the pictures. One copy is for you to keep, and providing you are happy, one copy is for Hass to keep as part of his research. Hass will also create a CD for you to keep a digital copy of your pictures. Also, providing you are happy, Hass would also like to keep a digital copy of the pictures for his research.



At our arranged interview time and date, Hass will meet you at the Stevenage wellbeing centre. Hass will give you a copy of the pictures (printed and CD), and together we will discuss which pictures you are happy to permit Hass copyright use of the pictures for his research purposes. The interview will then discuss nine topics relating to your pictures, physical activity, exercise, personal medicines, and recovery. Each topic should take about 10 minutes to discuss. A 5 minute break will be offered at 60 minutes, but you are also free to request a break from the interview at any time. Light refreshments will also be provided (fruit and sparkling water). This meeting should not take longer than 120 minutes.



After the interview, Hass will transcribe the interview discussion. When the transcripts are complete, he will contact you again, via telephone, to offer you a copy of the interview transcript. Here, you have the opportunity to further comment, change or remove any of the content in the interview that you are unhappy with. If you wanted a copy, Hass will email or post you the transcript.



Once Hass has analysed for the themes in all of the interviews he has conducted, he will produce a findings report. Hass will contact you one last time to offer you a copy of the findings report. If you wanted a copy, he would then arrange to meet you at the Stevenage wellbeing centre one last time. In this final meeting, Hass will give you the report, discuss the findings with you and ask you to comment on the findings. This meeting should take about 15 minutes.

### GUIDANCE ON TAKING PHOTOGRAPHS IN THIS STUDY

For the purpose of this study, Hass would like you to take 10 pictures that relate to your experiences of exercise or physical activity, and another 10 pictures that relate to your personal medicine experiences. If you like, you can take pictures of the same exercise, physical activity, or personal medicine, or, take different pictures of multiple exercises, physical activities, or personal medicines. You have the freedom to be as creative as you like with the pictures, and you can delete any pictures from the camera that you do not want used in this study. When taking pictures, please follow the 'do's' and 'don'ts' below:

Do

- Take pictures that represent the experiences that are most important to you.
- If you want to take a picture of another person, please ask for their permission first and explain to them why you are taking their picture (including if you want to take a picture of a photograph).

### Do not

- Take inappropriate pictures (e.g. nudity, identify any form of illegal behaviour or practice, pictures that might show or lead to psychological or physical harm of the participant or other people). These pictures will be discarded from the study and will not be discussed during the interview
- Let another person borrow the camera, unless it is to take a picture of yourself and you trust them.

Finally, please note that as the photographer, you have legal copyright to the photographs. By signing the consent form attached to this document, you are also consenting that Hass can have digital and printed copies of your pictures to use in his PhD thesis, publications, or public posters that disseminate the research findings. You are free to remove any pictures from the study at any time, or to not permit Hass to reuse the photographs outside of the interview; please let him know during the interview.

### WHAT ARE THE BENEFITS OF TAKING PART?

For many people, talking and reflecting about their experiences can benefit their self awareness to understand and learn about themselves better. It is hoped that your active participation in the interview, and taking pictures of your experiences might facilitate such benefits. This research also encourages you to be creative by taking pictures of your experiences, which will be used to shape the interview discussion. Additionally, Hass aims to publicise the findings from this study, which he hopes to advance the current understanding and evidence regarding the role physical activity and exercise has during recovery in mental illness. This can inform mental health policy makers, other mental health services and their service users, and further academic research.

### AM I ELIGIBLE TO TAKE PART IN THE STUDY?

To take part in this study you would be:

- An adult male or female aged 18-65, from any ethnic background.
- If are in recovery or have experienced recovery in mental illness (assessed by yourself whether you feel healthy enough to participate, and by your mental health service provider).
- Able to understand and speak, read and write English.

### WHEN SHOULD I REFUSE TO TAKE PART?

You should not take part in the study if:

- You are under the influence of alcohol or non-prescriptive medication during the study.
- You feel unwell, or are experiencing serious symptoms of mental illness during the study.
- You are told by your doctor or mental health service provider that you should not participate.

### ARE THERE ANY ADVERSE EFFECTS?

There are no foreseen severe adverse effects from participating in this study. If at any time you feel distressed, are in discomfort, or uncomfortable answering any of the questions the interview will stop for a break, and you do not have to continue if you do not want to.

### PERSONAL DATA

To take part in the study Hass would need your contact details, such as your phone number, email address, or home address, whichever is most convenient for you. He will need these details to contact you to arrange an interview time and date with yourself, send you a copy of the interview transcript and a final report of this study. All personal data collected will be held in a locked filing cabinet in a locked office, and all electronic data would be kept on a password protected laptop.

During the transcription of the interview, all names and places that might make you identifiable will be replaced by a fake name to ensure confidentiality. Additionally, any photographs used within this study will be edited to ensure that you, other people, or a place is unidentifiable to maintain confidentiality. For example, a plain white circle will be used to cover the face of a person, or a plain white rectangle will be used to cover the name of the place.

Finally, because Hassan aims to use this study for this PhD, and in the publications of peer-reviewed journals, all data collected from this study will remain with the researcher for six years (estimated at 2018), and then it would be destroyed.

### **VOLUNTARY PARTICIPATION**

Please note that all participation in this study is voluntary. You can choose to withdraw from this study at any point without having to provide a reason, and without prejudice. If any data has been collected from you, this will be removed from the study.

Thank you for taking the time to read this information document. If you do decide to take part, please ensure the consent form below has been signed, and that you fully understand your participation in this study. To participate in this study, or if you had any questions about this study, please contact Hassan via email (h.khalil1@herts.ac.uk) or telephone (07583218153).

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### **CONSENT FORM**

I, the undersigned, agree to take part in: The role of physical activity, exercise and personal medicines during the recovery in mental illness

### Approved Protocol Number PSY/11/10/HK

To be carried out by: Hassan Khalil

I confirm that the purpose of the study has been explained to me by the investigator and that I have been informed of the details of my involvement in the study. I confirm that my questions regarding involvement with this study have been answered to my satisfaction. I confirm that I consent for the investigator to record with a digital Dictaphone our conversation in any interview associated with this study. I confirm that I consent copyright use of any photographs that I take as part of my participation in this study, for the investigator to use in his PhD thesis, publications, or public posters that disseminate the research findings. I confirm that I understand that I am not obliged to participate in this study and that I may withdraw from the study at any stage without the need to justify my decision and without personal disadvantage. I understand that any personal information I consent to provide will be treated as confidential and will not be made publicly available without seeking any further consent.

Name of subject	
Signature of subject	Date
Name(s) of investigator	
Signature(s) of investigator(s)	Date

### Appendix H. Debriefing document

Below, the debriefing sheet handed to the participants following their engagement in the research.

### **DEBRIEFING DOCUMENT**

Thank you for taking the time to volunteer in this study. This research aimed to explore people's experiences, views, and opinions in a discussion to understand how physical activity, exercise and personal medicines might benefit recovery. The findings from this interview will be collated with other similar interviews and will be interpreted and analysed by Hass and the research team to reconstruct and represent your experiences. These findings will contribute towards a valuable part of Hass's PhD, and he hopes to publish these findings to contribute to academic knowledge that can inform mental health policy providers, people that experience mental health, and future academic research.

### ORGANISATIONS OFFERING SUPPORT

If, upon leaving the interview, you feel like it had opened up areas that you wish to further explore, would like to discuss further, or you need any additional support or help with; the following organisations can offer support:

### The Samaritans

The Samaritans is a helpline which is open 24 hours a day for anyone in need. It is staffed by trained volunteers who will listen sympathetically.

Telephone: 08457 909090 Website: www.samaritans.org

The following mental health services are available to help people take control of their mental illness, provide information and advice, and reduce discrimination:

### MIND

Telephone: 01727865070

Website: http://www.mindinmidherts.org.uk

### Time to Change

Telephone: 02082152357

Website: http://www.time-to-change.org.uk

### Rethink

Telephone: 08454560455 Website: http://www.rethink.org

### Viewpoint

Telephone: 01707328014

Website: http://www.hertsviewpoint.co.uk

Once again, thank you for your time and help.



# What does exercise mean to you? Join in one 2 hour group meeting to discuss how physical activity and exercise has helped in your recovery

If you would like to know more information about this research, please contact Hass by telephone 07583218153, or by email h.khalil@herts.ac.uk. Thank you

# What does exercise and physical activity mean to you?

Volunteer to take part in one 2 hour group discussion. Even if you don't take part in exercise or physical activity, please come along for the discussion – your views and opinions are important.

Name	Tick one o	Tick one date to attend the group discussion	discussion
	Monday 7th March	Tuesday 8th March	Wednesday 9th March
	10am-12pm	10am-12pm	10am-12pm

Maximum 8 people per group

After selecting the date which you would like to attend the group discussion, please contact Hass to let him know. You can email at h.khalil@herts.ac.uk, or call or text him on 07583218153

### Appendix J. Staff interview script

### **Example staff interview questions**

Topic 1: Recovery

What does recovery in mental illness mean?

When people first start using the services at the centre, what do they think recovery is?

When people use the activities available to them at the centre, in what ways do they show elements of recovery?

When you see people move/don't move on from the centre, in what ways do they show elements of recovery?

In what ways do you see PA or exercise influence people's recovery?

Topic 2: Hope

What is hope?

When people first start using the services at the centre, in what ways do they show hope?

When people use the activities available to them at the centre, in what ways do they show elements of hope?

When you see people move/don't move on from the centre, in what ways do they show elements of hope?

In what ways do you see PA influence people's hope?

Topic 3: Positive Identity

What is a positive identity?

When people first start using the services at the centre, in what ways do they show a positive identity?

When people use the activities available to them at the centre, in what ways do they show elements of a positive identity?

When you see people move/don't move on from the centre, in what ways do they show elements of positive identity?

In what ways do you see PA influence people's positive identity?

Topic 4: Meaning

In what ways do people find meaning from their mental illness experiences?

In what ways do people find meaning outside their mental illness experiences?

When people first come to the centre, how do they see meaning?

When people use the activities available to them at the centre, in what ways do they show elements of meaning?

When you see people move/don't move on from the centre, in what ways do they show meaning?

In what ways do you see PA influence people's meaning?

### Topic 5: Responsibility

What does it mean to take personal responsibility in mental illness?

When people first start using the services at MIND, in what ways do they show personal responsibility?

When people use the activities available to them at the centre, in what ways do they show elements of personal responsibility?

When you see people move/don't move on from the centre, in what ways do they show elements of personal responsibility?

In what ways do you see PA influence people's personal responsibility?

Topic 6: experiences of encouraging Physical Activity

What methods do you think would be the best way to increase PA participation in people with mental illness?

What has worked so far in the centre to increase people's physical activity levels?

What has not worked?

What skills and qualities should an exercise leader possess to run exercises session in the centre?

### Appendix K. Focus group script

### Box 2. Example focus group questions

- 1. Think about a typical day in your life; starting from when you first wake in the morning to going to bed at night, describe what personal medicines you tend to use throughout the day? In your description's outline how much physical activity you would say is involved when doing these things?
- 2. Think back to a previous exercise session you participated in. Describe your experiences before, during, and after participating in exercise?
- 3. As a group, list the things that you have experienced from taking part in exercise and physical activity.
- 4. Discuss within the group how these things may, or may not, influence your personal medicines?
- 5. What short and long term goals are important to you? Describe how you plan to reach these goals, and how you motivate yourselves towards these goals.
- 6. Think back to a recent time when you took part in an exercise session, or you were physically active. Take a second to imagine doing this activity and describe what things makes you feel like an individual, and what things makes you feel connected to you other people?
- 7. Think about the things in life that are really important to you; what drives you, makes you get out of bed, makes you feel happy, satisfied, and gives you pleasure and purpose in life. What are these things, and describe the ways your physical activity and exercise experiences have influenced you, when doing the things that are important to you?
- 8. Think about the daily challenges in your routines, and larger challenges that you have had to face. Can you describe a time when you took it upon yourself to overcome these challenges independently without the help of others? Describing how physical activity was involved in this process

### Appendix L. photo elicitation script

### Box 3. Example photo-elicitation interview questions

Topic 1: Pictures of PMs

What is important about each of the pictures that you have taken on your personal medicine(s) experiences?

Can you now sort and rank all of your personal medicine pictures to show the order of pictures that are most important to you? Can you describe why you have chosen this particular order?

Using your photos to guide you, how do you use your personal medicines during a typical day in your life?

Topic 2: Pictures of PA and exercise

What is important about each of the pictures that you have taken on your physical activity experiences?

Can you now sort and rank all of your physical activity pictures to show the order of pictures that are most important to you? Can you describe why you have chosen this particular order?

Using your photos to guide you, how have you experienced physical activity during a typical day in your life?

Topic 3: Additional experiences of PA at the centre

What have been your experiences of taking part in PA at the centre?

What, if any, challenges have you experienced when trying to do PA at the centre?

What, if any, benefits have you experienced from taking part in PA?

### Appendix M. An audit trail of thematic analysis and CAQDAS

Following the data collection, numerous sources comprised: (a) audio recordings, (b) transcripts, (c) photographs (attendee and my own<sup>38</sup>), (c) reflexive notes, (d) field notes, and (e) testimonies of authenticity. To manage the data set, a CAQDAS package–NVivo<sup>39</sup> (Version 10, QSR International)—was used to organise the 'messiness' of qualitative research and manage the research audit trail (Bringer, Johnston, & Brackenridge, 2004; Khalil, 2013). I also applied NVivo as an analytical tool to supplement the TA, and to explore, interpret, integrate and interrogate the data (Lewins & Silver, 2007). The software fostered analytical strategies, such as enabling flexible coding, linking coded segments to 'memos,' create analytical narratives, search the data to explore emergent concepts, and use matrices to compare participant attributes. Moreover, I paid attention to the caveats of CAQDAS, raised by other authors (e.g. Sparkes & Smith, 2014). For instance, Gilbert (2002) suggested that a researcher might lose a sense of 'closeness' to the data (e.g. auto-coding), fall into "the coding-trap," (e.g. overuse the coding function); or use the software to 'do' the analysis. Subsequently, for purposes of transparency, the following subsections illustrates each step of the TA, supplemented with screenshots from the NVivo project.

### M1 Data familiarisation

Braun & Clarke (2006) suggested two procedures of data familiarisation: (a) transcribing, and (b) repeatedly reading the transcripts and listening to the audio data. From each interview recording, a transcript was constructed<sup>40</sup> as a 'denaturalised' script, to maximise the readability and understanding of the text (Oliver, Serovich, & Mason, 2005). To enhance readability, several alterations to the transcripts were made, including: (a) omitting unnecessary words and 'conversation fillers<sup>41</sup>' (e.g. 'mmm', 'yeah', 'you know', or 'err'); and (b) where linguistic variability compromised readability (e.g. changing "hwaryuhh" into "how are you?") (Bailey, 2008). Additionally, when transcribing, I kept reflexive notes on initial meanings, patterns and emergent ideas on the text. These notes were later embedded in the NVivo database as

<sup>&</sup>lt;sup>38</sup> Verbal permission from the centre manager granted, for me to photograph the centre and further my reflections after leaving the field.

<sup>&</sup>lt;sup>39</sup> Although numerous CAQDAS programmes exist (e.g. Atlas.ti, MAXqda), NVivo was selected due to convenience of availability.

<sup>&</sup>lt;sup>40</sup> A 'verbatim' transcript indicates realist connotations and therefore philosophical conflict with my constructivist standpoint (Lapadat, 2000).

<sup>&</sup>lt;sup>41</sup> Not all 'conversation fillers' were removed. Some were kept if they retained the content of the narrative.

'memos.' Further notes were recorded when re-reading the transcripts. Example emergent concepts from early readings of staff interviews (27.10.2011) included:

- Awareness
- Counselling
- Goals
- PA key in all aspects of recovery
- Confidence
- Self-esteem
- Process of moving through the centre
- Mind-body dualism
- Internal and external behaviour regulations and barriers
- Sense of achievement
- Turning up to the centre
- Meaningful activities
- 121
- Linking with other mental health services
- PA comparison with other activities at the centre
- Difficulties in responsibility
- Difficult moving people on from the centre
- Transferability of PA benefits
- Barriers and resource limitations
- Challenges of recovery on an individual level and at the societal level
- Needing a variety of PA to stimulate motivation

### M2 Generating the initial codes

A fractured and inductive coding strategy was implemented to generate the initial codes 'bottom up' from the transcripts (Braun & Clarke, 2006; Guest et al., 2012). Specifically, when 'meaning units' were identified in the transcript, relevant segments of text were highlighted, then 'dragged', and 'dropped' into the emergent codebook. Some segments of text were 'parallel coded,' multiple times, in line with my relativist stance (King, 2004). Additionally, each code boundary was examined, for each code to be read independently from the original transcript while retaining meaning (Braun & Clarke, 2006). These strategies led to a variety of segmented text coded, including words, clauses, sentences, or paragraph(s). When necessary, codes were organised into hierarchal clusters: High-ordered codes indicated a general overview of certain topics, whereas, lower-ordered codes provided specific insights and distinctions within the emergent elements (King, 2004). Figure M1, (next page) illustrate these strategies in NVivo.

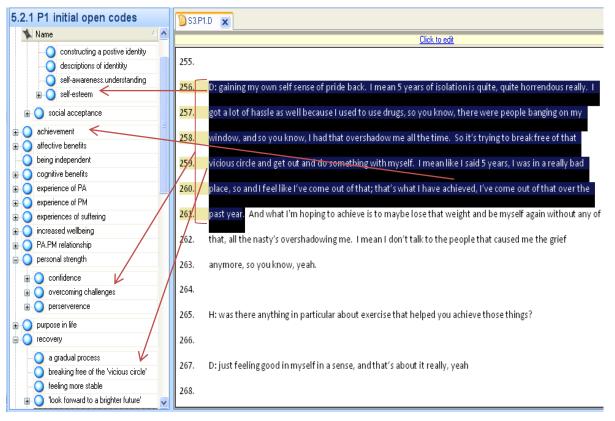


Figure M1 The emergent codebook in NVvivo

Furthermore, to scrutinise and challenge my interpretations, I repeatedly questioned the text (Gibbs, 2007). Specifically, to guide my interpretations, I questioned the scripts in relation to my research questions. For instance, how does the text relate to PA? What is it telling me about people's experience of PA during recovery? Additionally, following Charmaz (2006), I questioned where necessary:

- What processes are at issue here? How can I define it?
- How does this process develop?
- When, why and how does the process change?
- What are the consequences of the process?
- What are people saying?
- What does the data suggest? Pronounce?
- From whose point of view?

  These coding strategies led to emergent themes becoming apparent to me.

### M3 Searching for themes

To identify emergent themes, first all participant codes were collated together, to then merge any overarching codes with similar meanings or patterns (Braun & Clarke, 2006). Second, two strategies were applied: (a) memos, and (b) mind-maps. I used these strategies to explore, interrogate, understand and refine the emergent patterns and relationships in the data. I created memos to: (a) define the candidate themes, (b)

contrast other themes, (c) initiate a descriptive and analytical narrative, (d) list the categories that contributed to the theme, (e) select exemplar quotes, and (f) understand the conceptual boundaries of the theme (see Box M1 for example, below) (Guest et al., 2012). Additionally, I created mind-maps to speculate theoretical insights, visualise and conceptualise the data in concise, alternative ways, and add clarity to the data (see Figure M2 for example, next page). This phase led to the mergence, deletion, creation, or movement of codes that began establishing a refined list of candidate themes and sub-themes.

# Box M1. Example section from the memo, "a gateway onto other things" (written on 16.04.13)

### When to code

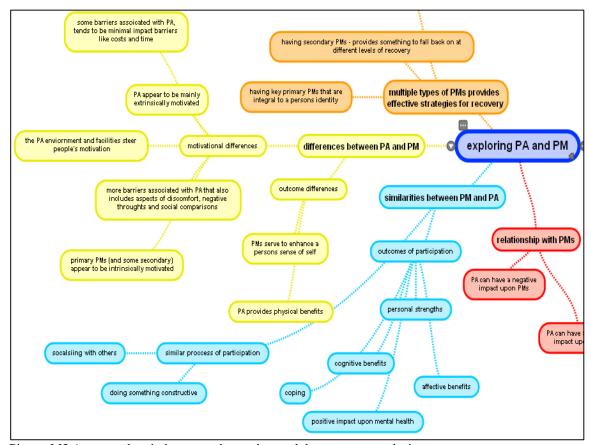
Any segments of text that suggest people use the process or outcome benefits of PA that also contributes towards a positive engagement in other activities, particularly although not restricted to PMs. This might include occurrences where PA has been a part of doing and achieving other activities, where PA has led a person towards the uptake of other activities, or where it has enhanced the experience of other activities. This code includes all activities that are physically active, including the physical routines of day-to-day habitual living, planned exercise, or sporting participation. It might also include PM-PA and non PM-PA.

### When not to code

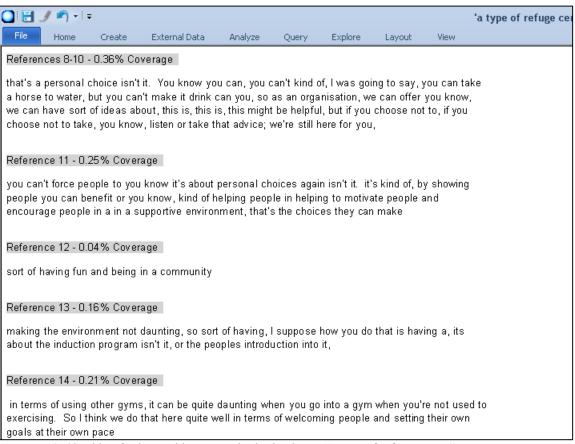
Do not code any activities that are not PA orientated. This might include activities that are solely mental, social, or constructive, and not physically active. Also, do not code if the process or outcome benefits of PA has not provided any transferable property to other activities.

### M4 Reviewing themes

In this phase, I aimed to refine the candidate themes by checking for the internal and external homogeneity (Braun & Clarke, 2006). Internal homogeneity was achieved by re-reading the segmented data extracts per candidate theme whilst checking for internal coherency among other extracts that comprised the theme (see Figure M3, next page). Similarly, to fulfil external homogeneity, the dataset was re-read to examine candidate themes against the dataset, and the research questions (Braun & Clarke, 2006). Whilst re-reading the dataset, I was segments of text were deductively coded that might have been previously overlooked in the previous phases of analysis (Braun & Clarke, 2006).



Picture M3 An example mind-map used to understand the emergent analysis.



Picture M4. Checking for internal homogeneity in the theme "a type of refuge centre"

### M5 Defining and naming themes

The aim of this phase was to 'refine' and 'define' per theme (Braun & Clarke, 2006). In doing so, the essence of each theme may unfold by transforming the data extracts into an internally coherent analytic narrative, which re-stories the participant's experiences (Braun & Clarke, 2006). This was reached by expanding upon the emergent memos, by (a) further questioning my thoughts on each theme (for examples, see box M3), (b) engaging in free-writing to explore my implicit assumptions per theme (c), and continued to use mind-maps to aid the visualisation process (Charmaz, 2006). Accordingly, a typical memo was likely to (a) define the characteristics of the theme, (b) identify gaps in the analysis, (c) make comparisons in the data, (d) integrate raw data, (e) link the theme to existing evidence and theories, and (f) detail the processes that comprise the theme (Charmaz, 2006). To illustrate a typical memo, a section of text from a memo is provided below in box M4. By the end of this phase, I had a list of strong candidate themes, complete with analytical narratives and exemplar raw quotes.

### Box M3 Questioning the themes (Braun & Clarke, 2006)

What does this theme mean?

What are the assumptions underpinning it?

What are the implications of this theme?

What conditions are likely to have given rise to it?

Why do people talk about these things in this theme?

### Box M4 An example section from the memo, "getting over that fear of the mirror"

Several staff members commented that people show courage when they face challenges in their path. Courage is about facing something. To feel courageous means bravery. By being brave to face potential risks or something that is perceived as dangerous, it means to face your fears and to move outside your comfort zone. Whereas, the opposite of courage is cowardly, the avoidance of something, as it is easier to walk away and go in hiding than it is to stay and fight the challenge. People demonstrate courage when they take ownership and responsibility for the self, and their own actions (and consequences of actions) take courage. Also, having the confidence to talk to someone, to face your issues, and to express yourself and your feelings takes a lot of courage.

In the title of this theme I have included a quote from an exercise instructor. Although the word 'mirror' was used literally during the interview, I feel that it also provides a useful metaphor to describe reconstructing personal strengths, and particularly courage. Getting over

the fear of the mirror; it is about facing the mirror, what you might see in the mirror. You will see yourself in the mirror, however you construct yourself. This could be problematic for people with mental illness that might have distorted self-perceptions, low self-esteem, low body image; they are likely to not think too highly of themselves when they look in the mirror. Worried at what you might see, it is easier to avoid looking in the mirror.

To get over the fear of the mirror means that you need strength to overcome and face your fears to look at yourself. Take a deep look at yourself. You begin to analyse yourself, you reflect on yourself, you identify with yourself; you are facing yourself. You question yourself. You probe your worth as a person, as a neighbour, a work colleague, a brother, a father. You question your worth in society, what you contribute, how connect to the world. Constructing answers to the question yourself is difficult, it is hard, and it is scary. BUT. You are facing yourself, you are no longer hiding, you are no longer running, but you are stood here, taking a real good look at yourself. That takes a lot of strength for some people.

## Appendix N: The trustworthiness criteria (Lincoln & Guba, 1985).

Table N the trustworthiness criteria, adapted from Lincoln & Guba (1985).

Trustworthiness criterion	Technique
Credibility (internal validity)	Activities in the field that increase the
	probability of high credibility
	Prolonged engagement
	Persistent observation
	Triangulation (sources, methods, and
	investigator)
	Peer debriefing
	Member checking
	Negative case analysis
	Referential adequacy
Transferability (external validity)	Thick description
Dependability (reliability)	The audit trail
Confirmability (objectivity)	The audit trail
All of the above	The reflexive journal

Appendix O: Analysis of possible social roles in the field (adapted from Johnson et al., 2006)

How various social roles (across) might inform active participant- observations (below)	Centre attendees	Management & general support staff	PA staff (gym, dance and yoga instructors)	Counsellors	Volunteers	Cleaner	Receptionist	'Formal' researcher role'*
Freedom of social movement (potential for movement across other social roles and subgroups within the setting)	Moderate to high. Access to a broad range of activities and other groups. Interaction is likely to be influenced by attendee preferences or staff encouragement for certain activities or subgroups.	Moderate. Support provided in numerous settings and group activities. Outside of activity settings, the staff members are likely to be situated in the staff office.	Limited. Staff mainly present in the PA environment.	Limited. Staff mainly present in the counselling environment.	Moderate. Access to a variety of activities, but can be limited if only attending the same activity.	Low to moderate. Movement around the centre in all areas, however, mainly brief interactions with others.	Low to moderate.  Mainly positioned on the front desk, but in contact with other roles during the arrival or departure from the centre.	Low to moderate. Access to other groups may be limited due to being perceived as a 'stranger' and needing time to develop trust and rapport.
Neutral status ability (the potential to be identified with other social roles of subgroups)	High. Attendees have a broad range of access to activities at the centre, to be also identified with.	Moderate-high. Staff have a broad range of access to activities at the centre, but may be limited to certain activities which they facilitate.	Low. Limited to gym environment.	Low. Limited to counselling environment.	Moderate-high. Volunteers have a broad range of access to activities, but may be limited to certain activities, which they facilitate.	Low. Mainly associated with cleaning responsibilities.	Low. Mainly associated with admin responsibilities.	Low. Limited to the availability of formal data collection periods.
Need for specialised knowledge (knowledge and skills required for	Low. No specialised knowledge required. Awareness of	Moderate to high. Broad range of skills and knowledge required to	High. Specialised training and qualification in fitness instructing required.	High. Specialised training and qualification in counselling required.	Low. Sensitive awareness and understanding of mental health issues, and	Low. No specialised knowledge required, but organisational and	Low. No specialised knowledge required, but organisational and	Moderate to high. Skills, knowledge and training required in qualitative

each the social role)	mental health issues and interpersonal skills would be advantageous.	organise and implement various centre activities. Awareness of mental health issues, and staff interpersonal skills advantageous	Awareness of mental health issues, and staff interpersonal skills advantageous.	Awareness of mental health issues, and staff interpersonal skills advantageous.	interpersonal skills would be advantageous.	interpersonal skills advantageous.	interpersonal skills advantageous.	methods (see section 5.6).
Entrance probability (based on skill requirements, the chances of being granted access to engage in active participant- observations)	High. Access to a wide variety of activities as social support from the researcher was perceived to possibly benefit the attendees.	Low. Dependent upon organisational specific knowledge, training or qualification.	Low. Dependent upon PA specific knowledge, training or qualification. My degree in Sport and Exercise Science, and background in lacrosse coaching likely raised my entrance probability.	Low. Dependent upon counselling specific knowledge, training or qualification.	High. Access to a wide variety of activities as social support from the researcher was perceived to possibly benefit the attendees.	Moderate. Likely to be seen as providing a positive contribution to the maintenance of the centre.	Moderate. Likely to be seen as providing a positive administrative contribution to the centre.	Low-moderate. Would possibly need to demonstrate how the attendees might benefit from the research.
Type of informant relations (the participant's potential dependence upon the researcher if they have adopted a particular social role)	Low dependence, but participants are anticipated to benefit from social engagement, which may become dependent.	High dependence as the implementation and facilitation for a broad range of activities are likely to impact attendee benefit.	Moderate dependence, which is likely to be localised to the PA context	Moderate dependence, which is likely to be localised to a counselling context	Moderate dependence, which is likely to be localised to whichever activity a person is volunteering in.	Low to moderate. Provides a clean environment for attendees to engage in.	Low to moderate. Welcome attendees, provide information, take bookings and payments, and attendance registrar	Low dependence, but the participant's may benefit from the research via the authenticity criteria.
Access to information (the potential access to different kinds of information from	Diverse range of information, from multiple attendee perspectives across the whole	Localised and diverse information from facilitating activities	Mainly localised information relating to PA experiences.	Mainly localised information relating to counselling.	Broad overview of centre activities, and possible access to attendee	Diverse and abstract information during brief encounters.	Diverse and abstract information during brief encounters.	Diverse, broad and potentially limited or superficial. Largely

a particular social role)	centre.	numerous at the centre.			perceptions (if a peer-supporter).			dependent upon researcher- participant relationship.
Types of information (type and depth of information available)	Detailed and broad range of past present and future personal accounts of engagement at the centre and wider settings that may impact their recovery.	Detailed and broad information on organisational, managerial or infrastructure aspects of the centre, and perceptions on attendee activity experiences.	Detailed but limited to PA environment, including perceptions on attendee's PA experiences and possibility other activities or subgroups at the centre.	Detailed and broad information on attendee experiences at the centre and in wider settings, which may impact their recovery progress.	Broad information on perceived attendee experiences at the centre, which may become more detailed with personal experience.	Limited information due to non-attendance in centre activities and fewer opportunities for interacting with the attendees.	Limited information due to non-attendance in centre activities and fewer opportunities for interacting with the attendees.	Limited to detailed information given, dependent upon researcher- participant trust, rapport and power relations during dialogue.
Information reliability** (the degree of sophistication in the accounts retold by the participants)	High. Due to the high levels of trust and rapport among attendees, active participating in a broad range of activities may lead to sophisticated accounts being told.	High. A strong staff-attendee relationship is evident at the centre. Being supportive during a wide range of activities is likely to increase rapport and trust to evoke sophisticated accounts.	Moderate-high. A strong staff-attendee relationship is also evident, but sophisticated accounts may be restricted to a PA context.	High. A strong staff-attendee relationship is also evident, particularly in a supportive counselling environment; sophisticated accounts have a high chance of being elicited.	Moderate-high. A strong volunteer-attendee relationship is evident, although support may be restricted to certain activities.	Low-moderate. Fewer opportunities to socialise may lead to incomplete or abstract accounts.	Low-moderate. Fewer opportunities to socialise may lead to incomplete or abstract accounts.	Low-high. Sophisticated accounts dependent upon researcher-participant relationship, which is likely to be enhanced with greater degrees of trust and rapport.
Reliance on key informants (the likelihood that each role depends on key informants)	Low-moderate. Key informants may be required if few attendees engage in PA.	Moderate. Where activities are non-PA related, key informants are required to probe additional information on PA related perceptions.	Low. Less dependence on key informants due to the PA environment likely to reach participants who meet the purposeful sampling	High. Less information on PA during recovery likely to be elicited, so more reliance upon key informants would be required.	Moderate. Where activities are non-PA related, key informants are required to probe additional information on PA related perceptions.	High. Less information on PA during recovery likely to be elicited, so more reliance upon key informants would be required.	High. Less information on PA during recovery likely to be elicited, so more reliance upon key informants would be required.	High. Without prior knowledge of the research setting, or potential participants who meet the purposeful sampling criteria, key informants

			requirements.					and 'gate keepers' are essential.
Accessibility to organisational sectors (potential access to various organisational levels and sectors)	Moderate-high. Attendees are likely to use a combination of local statutory and voluntary sector mental health services. However, some attendees may be reluctant to attend statutory services, due to stigma and a clinical setting.	Moderate-high. Staff relationship with local statutory or voluntary sector organisations to afford continuity of care for the attendees. Also facilitating an involvement with local businesses or community events, to advertise the centre and promote mental wellbeing.	Low-moderate. Some PA classes may be implemented in other centres or in local businesses (e.g. leisure centre). However, the gym is likely to be limited to the centre only.	Low-moderate. Counselling situated at the centre, but may refer attendees onto other services if necessary.	Low-moderate. Situated at the centre, but may also volunteer in other centres, or attend voluntary or statutory support services (if a peersupporter).	Low. Likely to be situated at the centre only.	Low. Likely to be situated at the centre only.	Low-moderate. The researcher is required to initiate contact with other organisations to establish access; yet, without being recommended by the centre, access may be low.
Power within organisational setting (the potential degree of power and autonomy within each role)	Low-Moderate. Attendees may perceive to lack power and autonomy, despite the centre encouraging personal responsibility and independence.	High. Responsible for the overall daily running of the centre.	Moderate. Provides PA opportunities at the centre.	Moderate. Provides counselling opportunities at the centre.	Moderate. Flexibility for volunteers to choose activities in which to support.	Low. Fixed role to ensure that the centre is clean.	Low. Fixed role to perform administrative tasks.	Low. The researcher is an outsider to the organisation, so power is likely to be minimal.
Basis of power (the characteristics that are likely to influence the power of an active role)	Lack of power possibly due to stigma and ill- health, however, perceived power might increase with progression	Decision-making, control of resources within the centre, the organisation and implementation of daily activities,	Skill and knowledge in delivering PA.	Skill and knowledge in delivering counselling.	Providing social support, and if the volunteer is a peer-supporter, then they may empower others more effectively.	Control of centre cleanliness.	Control of administrative tasks.	Skill and knowledge to provide a positive contribution to the centre.

personal	in recovery, shared-decision making or experiencing	and empowering attendees to make independent decisions.
achievements.	personal	

<sup>\*</sup> A 'formal' researcher role was considered as research situations lacking active participant-observations.

<sup>\*\*</sup>This definition was altered to reflect a relativist conception of 'reliability'.

### Appendix P: Descriptive examples of personal medicines typologies

This appendix describes the PM categories: (a) physical activity, (b) social activities, (c) mental activities, and (d) livelihood activities.

### P1: Physical activities

Some participants described PA as a PM, whereas others identified their participation in PA as a non-PM type. Both types are illustrated in the next two subsections.

### Physical activity as a personal medicine

As indicated in Table 8.1, most respondents appeared to value walking as a preferable form of PM-PA. Perceptions of control to regulate a PM-PA varied among some participants. Heidi identified walking as a PM when she combined with walking her dog, Lexi. She suggested that walking Lexi was an important process toward her socialising and making friends, as she could meet and socialise with other dog walkers. Further, she appeared to demonstrate a high level of self-efficacy toward her PA, commenting that she walked Lexi "in all weathers" (214). Below, she exemplifies her commitment,

Researcher: What's it like walking [with Lexi] around the park?

Heidi: It's lovely, and I take her out in all weathers, every day, snow, hail, whatever, I take her out and she loves it...I'm not a fair-weather dog owner [laughs], and I enjoy it yeah. It may take me longer to get round the park in the deep snow [laughs] (212-215, 223-224).

Conversely, other participants identified barriers that could restrict their PM-PA engagement. For Judy, although she appeared to value Pilates as a PM, she also reported being deterred by the financial barriers; attending Pilates classes and doing Pilates at home. In this way, she perhaps demonstrated lower self-efficacy and perceived control to successfully regulate her PM-PA.

I'm doing all the things [PMs] that I was talking about, apart from the Pilates, I do on my own at home and the yoga, but I'd rather do them with a group. It's just the costs that hold you back really...a lot of the Pilates, yoga type of things you have to have, well you need, some of the equipment to do it properly, and even that costs, the DVDs, things like that cost a lot of money (794-796, 1346-1348).

Similarly, although Stacy did not mention swimming as a PM, her financial barriers toward PA perhaps inhibited this activity from being a PM. Below, her account suggests swimming as an activity that possibly aligned with her self-concept; describing herself as a "water baby" (72). Moreover, she appears to acknowledge the potential therapeutic benefits of swimming, suggesting this activity might also aid her recovery.

Researcher: It looks quite nice that you've got the sea and you're like paddling your feet and it's quite a nice picture [8.1 below].

Stacy: Yeah, I'm a water baby, so I like the water and all that yeah

Researcher: Oh right oh ok, do you do swimming?

Stacy: Yeah, I love swimming; I haven't been in ages so, but I'm going to be taking that back up again

Researcher: Oh right, do you mind me asking, if it's something that you enjoy doing, but you're not doing it

Stacy: Well unfortunately benefits is an issue, so it's the money for being able to pay for myself to get into the swimming pool, but I do love water

Researcher: Yeah, and you were saying that you want to get back into swimming?

Stacy: Yeah, because water's quite therapeutic. I mean they use that for people with learning disabilities don't they? (69-90).



Stacy: "Water baby" (72).

Derek reported participating in karate was a PM-PA for him. His interest in such activity was perhaps associated with his passion for military history and strategy:

I have studied military history for like 25 years. I am absolutely fascinated by strategy games, I think that's one of the things that appeals to me about karate, it's the strategy involved and trying to assess what your opponent will do and how you can react to defend or attack against that (299-301).

Overtime, some respondents appeared to associate the value of PA as a PM. Jacob recalled his negative experiences of OCD, initially caused him to dislike walking. However, as he progressed in recovery and encountered positive experiences of walking

i.e. the prospect of attending the centre and "just to kill the time" (428); these appeared to facilitate internalised value of walking. Subsequently, he recalled rekindling positive childhood memories, feelings of happiness and liberation of doing something enjoyable without the detrimental effects of ill-health.

I didn't used to like walking anywhere...And I suppose I started coming down here, I walked down here, which is about a half hour walk each way, so I quite enjoyed that...not being afraid to walk past people or get myself in certain situations, you know. So I feel happier walking now than I ever have done, which is a good thing...getting out and about, getting out in the fresh air. You see, when I was a kid I used to walk everywhere; I used to walk miles. We used to go up to the fields that type of thing. So, I suppose it's getting back to enjoying just walking (142, 144-152).

Similarly, Tim identified enjoying the process of playing golf or snooker as important features of experiencing his PM-PA. In these activities, he appeared to appreciate the companionship of a friend during the activity. Moreover, he suggested being mastery oriented, rather than focusing on ego outcomes during his participation in these activities. This way, enjoyment seemed to be derived from developing a sense of competency and improvement in his golf and snooker performance. Below, he recalls "doing the sport for the sake of enjoyment" (1129) as part of his participation in golf:

Trying to think about the stroke rather than just playing the stroke, being a bit like rushing things and stuff like that. So it's making me think about the sport itself while I'm doing it (1122-1125, 1126-1128).

Thus, although perceptions of control and overcoming perceived barriers varied, an important aspect of the respondents PM-PA choice appeared to be the internal value that was ascribed to the process of the activity. Notably, some respondents appeared to internalise the value of PA. For instance, when Heidi began attending the centre, she was perhaps externally regulated toward yoga: "Someone who used to come to the centre she told me about it and I didn't know anything about it" (141-142). Following two years of maintenance behaviour, she appeared to internalise her yoga participation: "Yoga is very, very important, but that is, I love doing yoga" (870). Moreover, she recalled, "I've progressed that far that I know things so that I can do it at home". Subsequently, she appeared to demonstrate high self-efficacy to continue her PM-PA:

Next week there's no yoga here, and I'm thinking I've got a yoga disc at home, I might try and do it at home because I miss it because I love doing yoga. So I thought I'd have a go and see if I can do it at home (967-969).

Similarly, Ivy appeared to observe some attendee's internalise participating in Zumba. As indicators of internalised behaviour, she had noticed: improvements in physical exertion and effort, physical and technical competence, requesting particular

routines, joining dance classes in the community, and continuing this activity at home. She recalled.

A few people have now bought it [zumba] on the Wii, and on Xbox and they're doing it at home, and they've even brought it into the centre as well, which is great...I know how much they like that particular routine because I can see how well they're doing at it, you know, and obviously whether they've been doing it on the Wii (670-671, 675-676).

In contrast, most respondent appeared to externally regulate non-PM PA. Such activity type is presented next.

### Non-personal medicine physical activity

More participants identified participating in non-PM PA compared to PM-PA. Of the non-PM PA types, most respondents reported exercising in the gym. The high number of gym exercise was possibly due to the promotion and availability of the gym at the Rockwell centre. Steven seemed a keen advocate of promoting and encouraging the attendees to engage in exercise in the centre's gym:

The first thing I always mention when I show someone round is the gym, and I take them to the gym first and then work them down, so they've already got that interest set in their mind. Then get them to book an induction when they're here on that visit, so there's a commitment involved in that as well (1341-1343).

Nevertheless, maintaining commitment to the gym appeared to be an issue, as Steven recalled: "The problem is keeping them [the attendees]" (1386). In contrast to PM-PA, the respondents appeared to reported more barriers, experience discomfort and ambivalence toward PA (see sub-theme D5). Moreover, non-PM PA appeared to be mainly regulated for extrinsic purposes. These aspects seemed apparent to Seb and Janice in the dialog below. Seb described himself as a keen natural bodybuilder, and appeared to enjoy exercising in the gym. Accordingly, during FG C, Janice (and myself) assumed that Seb's exercised in gym for intrinsic purposes. Noticeably, below, Seb challenges these assumptions, indicating that he values the outcome benefits to obtain a bodybuilding identity, more so than enjoying the process of such exercise (494). Yet, as Janice associates Seb's experience of PA as enjoyment, Seb rejects this claim; reminding the group that he is externally regulated, and focused on achieving PA Subsequently, Janice compares herself to Seb ("you're in a different league"), suggesting she encounters greater difficulty in overcoming PA barriers to regulate PA, perhaps suggesting a sense of guilt (494-495). These accounts illustrate how non-PM PA was observed as an externally regulated activity. Janice perhaps indicates introjected regulation, whereas, Seb was possibly exhibited identified or integrated regulated toward PA.

- 479. Seb: I like the goals and the numbers and the rest of the day you do feel a bit sped
- 480. up inside which is kind of good, and it's even better the following day if you've got the ache
- 481. in the right place, if you've hit the specific bit and then you've got the ache then that's kind
- 482. of good
- 483. Researcher: So for you, that's the feedback, knowing that you've had a good workout
- 484. Seb: Yeah, and it's kind of like that release, it is like a release, you know, you've got that last
- 485. rep out, or you've done a drop set, and you've got the pump. You don't need to get the
- 486. pump, the pump's not going to help me, the pump doesn't make you bigger, but the pump
- 487. just it's a psychological thing
- 488. Janice: But you're in a different league aren't you because
- 489. Seb: Not really, everybody starts somewhere
- 490. Janice: You are to a degree because it really is a big thing and an enjoyable thing for you, the
- 491. Gym.
- 492. Seb: I hate it. It's numbers, I just like the numbers, I don't want to go, I
- 493. Janice: You just do your bodybuilding and stuff like that don't you, whereas, me I just go up
- 494. there and think, 'ah come on Jan, you really ought to get off your backside and get a bit of
- 495. exercise'.
- 496. Seb: It's all to do with the numbers for me. It's like, new goals, new amounts of reps,
- 497. different change in body shape.

Other respondents appeared to combined non-PM PA with their other PM types. This way, such PA was possibly internalised and regulated as part of their PMs. For instance, even though Lucas did not suggest walking as a PM, he appeared to value the process of walking as fulfilling and enhancing his PM experiences of buying and reading books (Theme E).

When you've got something to look forward to, it gives you a lift and I think when you're physically moving as well, that gives you a lift as well, you know. If I sat down and just thought about it [buying a book], it wouldn't be so exciting, but the walking and doing it is more exciting I think, you know. Walking and thinking about it, you know, is more exciting in terms of the anticipation the excitement of buying that book and the actual getting there to buy it (269-275).

Similarly, Sarah indicated that her current busy lifestyle was owed to her participation in non-PM PA. She described herself as physically active; on a typical day she recalled working two cleaning jobs, attending the centre, and working as a make-up sales representative. These commitments were physically demanding for her to perform. Moreover, she recalled cycling around the town to commute to the necessary

locations and fulfil her livelihood commitments. However, she reported that such PA was weather dependent.

At the minute my day is busier...thinking about it now, I've actually, now it's more dominant with the physical activity because I'm doing two cleaning jobs, I'm cycling...I'm always sort of here and there. Sometimes there's days in between the cleaning jobs I got to go to people's houses about their [make-up order]. So, you know, I got to maybe plan myself for whoever lives in Downtown, some of the people around Downtown, so it's around the town that I have to walk up there, and one of them was in Foxton Avenue as well, so it's near the old town, just walk across the park. So yeah, every day is a little bit different (643-645, 684-688).



Sarah: "I want to be out in the fresh air and have a good cycle (212).

These findings suggest that non-PM PA was beneficial for people's recovery, despite more barriers associated with PA compared to PM-PA. Nevertheless, When PA was performed as a PM or non-PM, the respondents reported similar benefits: Experiencing physical, affective, cognitive and personal strength benefits during or after PA (see Theme D). Overall, walking seemed the more preferred pursuit, presumably because activity could be regulated at a low intensity and in conjunction with social, mental, and livelihood activities. Accordingly, findings of these PM types are presented in the next three sub-sections.

### P2: Social activities

The participants appeared to report fewer types of social activities and frequencies such activities, compared to other PM orientations. This lower number was possibly owed to social activities typically being combined with other activity types. For instance, socialising with others during dance groups or at work. People's activities were categorised as a social activity when the participants described social aspects of an activity as particularly meaningful or significant, and above fulfilling needs of another

activity type. Generally, social activities seemed to evoke a sense of togetherness, connection, belonging and attachment to others. This may have countered their isolation and provided opportunities for social support (sub-theme B1).

For some respondents, being with family was perceived as deeply important. Heidi felt that she was fortunate in having a close relationship with her grandchildren: "We've got such a lovely bond and they do lift my spirits up, and I'm very lucky...I'm very blessed" (46-47). She had four grandchildren, each child contributing toward Heidi's experience of connection, feeling needed and loved. For instance, she recalled,

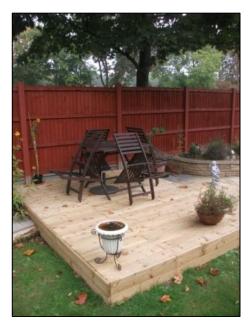
Tami, the 2 year old, this week her mum phoned up...and she said, 'there's a little girl here that wants to see her nanny. She's really missing her nanny'-and I've been round the week before-and she's crying, she's sobbing her heart down the phone, 'nanny, nanny, nanny', really, really breaking her heart. And I said that, 'well I was going to come round anyway'. When I got there, knocked on the door, her mum opened the door...as soon as Tami saw me, her tears, 'nanny!' and she comes running up to me and her face: Aww it's lovely (574-581).

Similarly, being a good parent was perceived as significant for several participants. Seb highlighted that part of his parental role, bringing the family together and teaching good manners to his children were important. Below, he suggests the focal role of a dining table providing a social hub in his house.

We have every meal together basically. There might be one or two days in the week when we don't, but we have three meals a day together, most days, so we think that's pretty important. A dining table takes up a big chuck of my front room, but I think it's important. You know, telly goes off, music goes on, and it's a time for everybody to kind of concentrate and sit down, and it teaches the kids good manners as well I think (63-67).

Similarly, Sarah identified socialising and talking with her family was important for her recovery. She recalled sharing problems and having a laugh was, "a good way of fighting [mental illness]...getting things out in the open" (481-482), whereas, 'bottling things up' could incur negative consequences. She highlighted the importance of socialising with her family when describing the photograph on the next page. She said,

We all sat round the table and, it's kind of, I remember one evening we sat...chatting till about nearly 11 o'clock at night, it was in the summer and we were just talking. We had a really good conversation and t was just one of those moments where I felt very, quite relaxing and, you know, we were all deep in conversation, and it's just nice (133-136).



Sarah: "It's to do with my family...a place where we sometimes talk" (476-477).

Other respondents appeared to use anthropomorphist descriptions of their pets as family members. Ivan and Amy recalled a close parental relationship with their cats. Tina, like Heidi, also had a dog. Tina appeared to describe a parental relationship with her dog, Trixie: "She means the world to me...she's my big baby" (23). She also recalled educating, grooming, bathing, and disciplining Trixie. Moreover, she recalled some PA being intertwined with the responsibility of having a dog:

I take the dog out first thing in morning; it's one of the rules if you've got a dog. Often you have to exercise, and can't be cooped up all day even if you have got a garden, cause it's not fair on the dog, it gets bored there (81-83).

However, during a follow-up period at the centre, I learnt that Trixie had passed away. For me, this moment was perhaps the first indicator of a 'double-edged sword' with peoples PMs (see sub-theme D5): The consequences following the removal of a core PM. My field observation below illustrates this concern.

Tina used to talk so fondly of her dog, Trixie, and today I learnt that last month she had to 'put her down' as she was suffering too much. Tina was always a jokey and bubbly person, but today she seemed quiet, serious and reserved. Tina held a brave face as she told me her story, but I could tell that this had cut her hard, and cut her deep. I knew that she often referred to Trixie as her 'baby', giving the impression that Trixie was more than just a dog to her (personal field diary, 06.04.2012).

Such situation perhaps reaffirms the importance of multiple PMs as an effective strategy during recovery. Other findings of social activities suggested that when combined with PA, experiencing positive affect (sub-theme D2) seemed more likely to ensue than exercising alone. Moreover, participating in PA also seemed to afford a

'knock on effect' (Theme E) to then participate in social activities. Similar benefits were observed for people's mental activities, as discussed next.

### P3: Mental activities

Mental activities seemed to be the most popular PM type among the participants. Typically, the respondents appeared to regulate mental activities for intellectually stimulating, creative, self-expressive, or reflective purposes. Vince's mental activities included creative writing and art. These activities seemed to initiate flow state experiences during the activity, followed by a sense of satisfaction from the outcome product.

Poetry, which is like my art and my paintings and that, it's a personal medicines cause you like just get lost in yourself when you're doing it...makes you feels good when you finish the end product of this, making you feel a bit more uplifted when you're finished (191-193).

Mental activities seemed to contrast with social and physical activities, as for some respondents, they could perform mental activities alone or with little physical exertion. For this reason, some participants preferred to engage in mental activities during low periods of recovery. Sarah suggested her mental activities as worthwhile ventures during low periods of recovery. When unwell, she recalled feeling unmotivated towards the physical exertion of PA; nor did she wish to socialise, despite being a sociable person (556). Rather, as her account below illustrates, art was an activity type that she felt able to perform while unwell. In particular, she reported feeling uplifted through experimenting with bright colours on a canvas, which seemed to intrigue and stimulate her. Her account below, like Vince, perhaps indicates Sarah experiencing a flow state during her PM. This was also the same for Derek, who described karate as "all-encompassing" (85). Sarah recalled,

I just value colour. I just value different colours, and I'm very visual, as in, I'm quite an observant person. I don't know, I just find when I look at something very vibrant or something that, you know, catches my eye, it really makes me stare for ages, and take it all in, and it just does something, just sort of fascinates me a little bit (157-160).

Additionally, below, Sarah recollected painting when unwell. In her extract below, she describes painting the image in the picture on the next page. She indicates overcoming feelings of amotivation to regulate an activity.

I remember thinking, 'ohh I don't want to do it really', you know, because I was in a state of mind where I wasn't feeling very well...the enthusiasm wasn't there, but I remember as I started it did help, it did. It's just that thought isn't it, that initial thought where I thought,

'I just don't know whether I'm up for it', but yeah, it did help especially doing bright colours, you know it kind of took away a little bit (389-395).



Sarah: "I just value colour" (157).

Elsewhere, Tom appeared to value meditation as method of experiencing a sense of mindfulness. He described himself as a "visual person" (292), and participating in meditation possibly helped him to visualise wellness. During and following meditation, he recalled improved concentration, reduced unwanted thoughts and stress. As indicated below, part of his techniques included focusing on the self, body and mind, and removing unwanted external pressures.

The craziness that goes on at the front of the head...what meditation does, it takes you away from that so it focuses your mind over all the areas... you get away from neighbours, family, friends, those sorts of things, you just focus only on the sound and the relaxation (292-95).

Similarly, Derek appeared to value escaping ill-health through being mentally stimulated by his PMs. One such activity included going to the cinema, which seemed to ignite his imagination; recreating favourable identities from positive traits of film characters he saw. Doing so also perhaps addressed a personal aspiration of his: "I've always wanted to be an actor" (190). Recreating positive identities was an important coping strategy for Derek, possibly regaining a sense of identity (see sub-theme F3 for further findings). He said,

You get to be someone else, and as I don't really know who I am, because I'm borderline personality disorder...I have a no real sense of identity. I think that's why I've always been attracted to being an actor, and why I've always been obsessed with cinema...partly because I suppose being an actor, as I say, would give me the ability to have, find some kind of sense of identity, even for however briefly. I do find myself throughout the day thinking of different actors I've seen in different films and then almost like I become them temporality I become the persona of that person in that film, and I find a lot of pleasure in that (191-200).

As indicated by the examples in this section, many participants identified little or no PA involvement when performing a mental activity (e.g. Lindsey, 216). Some respondents suggested that PA helped them get in the 'right frame of mind' to then perform their mental activities. This way, the cognitive benefits (see sub-theme D3) perhaps had an 'knock on effect' (THEME E) to then influence some people's mental oriented activities. Moreover, similar to people's social and physical activities, the respondents appeared to value the process of participating in mental activities. As part of maintaining wellness, numerous respondents recalled livelihood activities

### P4: Livelihood activities

Some respondents suggested regulating their PMs for constructive purposes as supporting their daily living needs, self-care and self-management. This included using PM livelihood activities to experience a sense of structure, routine, productivity, independence, discipline and responsibility (see sub-theme E2). Lucas described his experience of paying bills as a PM. He suggested that being in control of his finances helped dissolve his anxieties. Doing so, he seemed to experience a sense of freedom, being responsible for his independent living. He recalled such perceptions to contrast feelings of restraint (i.e. 'being told what to do'), possibly incurred from understanding the experience of hospitalisation (personally or vicariously).

Lucas: I often go and pay my bills early in the morning, and that feels like a constructive thing to do in itself...I just feel very satisfied after I've paid the bill that I don't have that worry anymore.

Researcher: and is there anything running through your mind while you're walking from shop to shop, while you're paying bills?

Lucas: I think the sense of urgency that I've got to pay the bill. And also, the sense that I'm free and that I'm very lucky to be in such a great country where you can walk around free and do your own thing, and not be told what to do all the time by something, you know, or some institution, sort of thing, if you know what I mean (75-89).

As indicated in Lucas's account, some livelihood activities appeared to incorporate some PA. Similarly, Vince identified housework a livelihood activity. He seemed to value an organised house to facilitate clarity of the mind: "A tidy the place is a tidy mind" (100). Doing so made a conducive influence on his other PMs;

I organise my house before I leave the house in the morning, sort out the tables, sort out the washing up and that. It just gives you a clean slate to work on when you come home to do your art, do some more poetry, or whatever (891-894).

Additionally, many participants valued attending the centre, volunteering or being employed. Some respondents appeared to demonstrate self-care as seeking support at the centre, especially during low periods of recovery. Tim reported benefitting from attending a variety of courses at the Lavender Fields Centre. These included: (a) returning back to work, (b) laughter and breathing; (c) song writing, music recording and production; (d) confidence building; and (e) gardening courses. Subsequently, these courses appeared to enable personal development opportunities; toward cultivating a potential career, maintaining and developing his interests, and possibly reduced the likelihood of ill-health. As part of Tim's course participation, he recalled social support from centre staff and peers as important factors in his PM experience of attending the centre.

I had positive feedback from the course tutor and from other people in the centre, and that can give you the encouragement to keep going. I think if they said, 'oh that's rubbish, I don't think you should bother with that', then I think I would probably would've stopped, because I think you got to have the encouragement and the positive feedback all the time, particularly with mental health issues. The slightest thing can give you a knock back, and make you feel a whole lot worse again (line).

Elsewhere, Judy described being a coordinator at another mental health charity. She identified the importance of self-care, before helping others, which seemed to afford her a sense of satisfaction from doing so. This perception appeared to form a common ground narrative among other group members (see dialogue below). Moreover, Judy seemed to distance herself from being perceived as a volunteer, perhaps to illustrate her level wellness as having greater responsibility as a coordinator.

- 392. Linda: Helping others is part of recovery; I would say, what about pampering yourself
- 393. Judy: You know that it says about helping others, what about putting something along the
- 394. Line helping others as well as your self
- 395. Tim: Part of recovery is thinking of other people rather than yourself
- 396. Judy: You know, if you can't help yourself, then you can't help others
- 397. Linda: No, very true
- 398. Judy: Especially now I've got my new personal ID card with rethink. It says not a volunteer;
- 399. It says I'm a coordinator
- 400. Linda: Pamper the self, shall we put pamper yourself.
- 401. Carlos: Oh yeah
- 402. Judy: Yeah, time-out

Accordingly, the findings presented in this section suggests that engaging in livelihood activities could foster opportunities of self-ownership during recovery (see sub-theme F2). Moreover, other respondents identified transferable benefits of PA, which seemed to enhance the motivation to regulate livelihood activities (see THEME

E). Nonetheless, as some people reported, livelihood activities could be physically demanding, require a higher level of personal responsible, and so may appear challenging for some people to perform when unwell. However, seeking support may also enact a livelihood activity by indicating the motivation for seeking care and willingness to take self-ownership.

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