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Being physically active —  
A bodily anchorage on the journey  
for recovery in mental ill-health

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*To my beloved family, my anchorage in life*



# ABSTRACT

Suffering from mental ill-health does not merely involve mental distress; it also often comprises deteriorated physical health. The physical consequences can be of a severe nature and may lead to premature death. Since physical inactivity has been identified as a critical health risk factor, there is an imperative need to support physical activity in persons with mental ill-health. The benefits of being physically active for persons with mental ill-health are many, but there are also considerable barriers. In mental healthcare and research, there has been increasing attention on a recovery perspective that focuses the personal journey on repossessing meaning in one's own life. However, in the recovery perspective, as well as in mental healthcare research and praxis in general, there is a lack of recognition of the lived body of the person and the lived experiences of being physically active as a potential part of that journey.

The aim of this thesis is to contribute to our knowledge of aspects of being physically active for recovery in mental ill-health, and how this can be supported in mental healthcare. Overall, this research was conducted using a mixed methods research design, including both qualitative and quantitative methods. Philosophical and theoretical underpinnings consisting of a lifeworld perspective, of the notion of human capability, and of the existential dimensions of recovery have guided the process of seeking a comprehensive understanding of the phenomenon. An initial cross-sectional inventory of the self-reported health and physical activity of persons with mental ill-health was conducted (study I). This inventory showed that this population was a vulnerable group affected by both physical and mental health risk factors and low levels of physical activity. The lived experiences of being physically active in persons with mental ill-health were illuminated, and were interpreted to render opportunities to connect to one's being-in-the-world and to experienced meaning (study II). As physical activity enabled a sense of meaning, the person's ability to reclaim life was strengthened. Caregivers' lived experiences of motivating persons with mental ill-health to be physically active were described as something more than an act of doing – it was a way of being together, sharing experiences through being physically active, and interacting with each other's life-worlds (study III). In order to investigate a novel mode of physical activity, the use of interactive video games for physical activity among persons with mental ill-health was explored (study IV). Playing interactive video games

was found to enable experiences of evolvment and competence, which can be understood as dimensions of personal recovery.

The main finding from this thesis is a recognition of the potential of physical activity for embodied recovery in mental ill-health. Three core aspects were found to articulate the qualitative significance of being physically active as meaning and capability, connectedness, and wholeness. Furthermore, it is assumed, that a person's barriers to being physically active may not only represent realms of the mental illness itself, but also constitute expressions of disconnectedness from the lived body, as subjectively experienced disembodiment. In conclusion, there is a need to develop a more nuanced understanding of the potential of physical activity in mental healthcare, and by giving room for the lived body, experiences of embodied recovery in mental ill-health can be enabled.

**Key words:** caregivers, embodiment, lifeworld, lived body, mental healthcare, mental health nursing, mental ill-health, mixed methods research, personal recovery, phenomenological hermeneutics, physical activity, psychiatric disabilities, self-assessment, single case design

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# INTRODUCTION

During my years working as a nurse in psychiatric care, I have had countless encounters with patients who expressed their suffering explicitly through bodily experiences. It could, for example, be through compelling experiences of having alien life-forms inside one's body or a belief in the body being poisoned or withering away. For the most part, these beliefs were perceived by staff as psychotic manifestations that actually had little to do with the patient's body. Instead the body of the patient was, in a kind of ambiguous way, regarded as something unapproachable. I especially remember one patient, a young man suffering from a severe form of psychosis, who used to recurrently ask the staff if he could get his feet massaged. Most times, he was denied, with the underlying—but for him not pronounced—assumption, that body contact could be risky for a person with a psychosis. What I recall from the occasions when I, nevertheless, gave him his massage, was how he during these moments managed to have casual conversations about everyday things in life. Having his feet massaged seemed to constitute a momentary respite from the tormenting voices occupying his head, and I recall how relieved and calm he was afterwards.

The way that persons with mental ill-health experience and express their suffering through bodily experiences can be regarded as manifestations of how the lived body is evidently present in the context of mental health care. Yet it often tends to be disregarded. This lack of recognition of the lived body of the person with mental ill-health is worrying, considering the well-known physical distress that often comes with having a mental ill-health. There is also, as of this date, considerable knowledge about the health promoting effects of physical activity on mental health. The question is, however, how well this knowledge can be incarnated if the lived, experiencing body of the person is not acknowledged. My wish with this research is therefore to focus attention on the ever-present, lived body of the person with mental ill-health, and how moving this body through physical activity may support the process of personal recovery.

# THEORETICAL POINT OF DEPARTURE

In the following section, the theoretical compass that has set the course for this research is elucidated by presenting the philosophical and theoretical underpinnings that constitute the scientific direction. This will be followed by an outline of earlier research concerning the specific context for this thesis.

## LIFEWORLD AND THE LIVED BODY

The research conducted for this thesis has an approach based on a lifeworld philosophy, from where the ontological and epistemological bearings are taken. The lifeworld as a concept was developed by Husserl (1995) and refers to the experienced world of meaning that is manifested through our lived experiences (Bengtsson, 2005; Todres, Galvin & Dahlberg, 2007). The concept of the lifeworld was further developed by Merleau-Ponty (1997, 2002), who stated that as human beings we are our body and we experience ourselves, others, and the world through our lived, subjective body. This access to the world is expressed by Merleau-Ponty as 'being-to-the-world' (in French: *être-au-monde*). The preposition 'to' (or perhaps even better, 'towards'), instead of 'in', is significant since it conveys a communicative relation and directedness to the world. The lived body is understood as the habitat of our existence in ourselves and in the world (Rosberg, 2000) and is, with the words of Bullington (1999, p.199), '[...] a living relation to the world'. Bullington refers to how Merleau-Ponty defines the human being as a body-soul-world entity by stating: 'And just as there is no ideal consciousness busy constructing the world, independently of the body, so is there no mind/body unity which could exist independently of the world' (1999, p.197). This notion clearly challenges the old Cartesian view of the body and mind/soul as separate entities.

Viewing the body as a lived, subjective body-soul-world entity can be compared with the ontological standpoint in caring science, as a human science, where the human being is viewed as an indivisible entity of body, soul, and spirit (Barker, 2000; Eriksson, 1987). This conception implies that a human being is always all that, and in this sense, the human body is beheld as complex and indefinite. The lived body can further be described as a carrier of the person's self-conception, life-history, and inherent meaning, as the abode of existence (Lindwall, 2004). Conclusively, this gives by the hand a perspective of the lived body as an experiencing and communicating subject,

which means that the bodily experience also expresses a unique and personal dimension of health and ill-health.

## **NOTION OF HUMAN CAPABILITY**

An important ontological assumption for the present research is the recognition of the human being as a resourceful, capable being. Ricoeur formulated an understanding of the human being as *homo capax*, an acting and suffering being who has the ability to speak, act, narrate, and take responsibility (Ricoeur, 1994, 2011). What is especially emphasised is the significant meaning in '*I can*', as in the person being able to take hold of one's own life-meaning and to make things happen, which involves a potent acknowledgement of the power that lies in human capacity. The conception of the human being as *homo capax* is also distinguished by a radical openness to listen and to learn from the other, and in that sense, to be prepared to put one's own thinking at stake. This comprises seeing and valuing the other human being in light of his or her life-world, and having a genuine belief in the person's ability to evolve. This can be further understood to coincide with Barker's approach to health as the person's ability to possess his/her own life, and how mental healthcare presupposes a recognition of the person as the prime expert (Barker & Buchanan-Barker, 2005).

## **MENTAL ILL-HEALTH AS PROBLEMS OF LIVING**

The theoretical understanding of mental healthcare in this thesis adheres to the work of Barker, who formulated his theoretical work in the context of mental health nursing as the Tidal Model (Barker & Buchanan-Barker, 2005). In this model, Barker describes a person's life as a journey undertaken in an ocean of experience and uses the metaphor of water to visualise the ever-changing nature of human experience and life. Accordingly, mental distress is illustrated with the terms of the person being hit by storms, drowning and shipwreck (rather than diagnosis), and mental ill-health is formulated as a person's 'problems of living'. A person's problem of living can in this sense be understood as not being capable of mastering his or her life, and is regarded as a person's natural response when life circumstances are perceived as too difficult or demanding (Barker 2004; Barker & Buchanan-Barker, 2005). Barker

states: 'If people whose lives have been overwhelmed and drowned by mental distress need help, they need to be helped to reclaim their lives, and with it their identities *as persons*' (Barker & Buchanan-Barker, 2005, p.239). This represents a standpoint that focuses on the uniqueness of human experience by highlighting the person as the expert of his/her own life. The articulation of mental ill-health as a person's problem of living also seeks to bridge the linguistic distance that a psychopathological perspective risks creating between the professional and personal perspective.

### **Recovery as reclaiming life**

A person's problem of living, as not being capable of mastering one's own life, has above been described as what defines and constitutes mental ill-health. This ontological understanding of mental ill-health leads us further to the concept of recovery, which has become of increasing importance in mental healthcare and research (Roberts & Wolfson, 2004; Slade, 2009; Slade, Williams, Bird, Leamy & Le Boutillier, 2012). In its purest sense, recovery can be expressed as the person's journey in reclaiming his or her life, as in 'getting-going-again' (Barker & Buchanan-Barker, 2010; Barker & Buchanan-Barker, 2011). The person is recognised as the key driver in his/her own journey for recovery, and the caregiver's role is to help unlock the person's recovery potential. This requires an attitude based on genuine curiosity for the person's life story, and recognition of the inner resourcefulness and abilities of the person. The values articulated in the Tidal Model emphasise the importance of focusing on the person in need of care by recognising that belonging and membership are vital to our personal identities as social beings (Buchanan-Barker & Barker, 2008).

### **SUMMARY OF THEORETICAL UNDERPINNINGS**

The theoretical foundation that encompasses the scientific direction of this research can in brief be concluded in the light of what constitutes the metaparadigm concepts of nursing science (Fawcett, 1978). In the context of this thesis, this means that the human being is viewed as a resourceful, capable being, and is beheld as a person who is the expert in his/her life. Being human also involves being a lived body through which we experience

ourselves, others, and the world, as an embodied body-soul-world entity. It is through the lived body that we exist in the world, and the world is a relational world of experience that is given meaning through our bodily, lived experiences. Health is considered within a holistic view, involving the personal process of being in recovery, as a subjectively experienced journey towards reclaiming one's life. This comprises dimensions of experiencing oneself as capable of living one's life. Caring encompasses a recognition of the person's life-world and of the potential of the person as a capable human being. The purpose of caring is, in this sense, to enable ways for the person to live a constructive and meaningful life, despite the challenging circumstances caused by mental ill-health.

## **CENTRAL CONCEPTS**

In the following section, a clarification of important and relevant concepts is outlined with the purpose of facilitating the reading and understanding of this thesis.

### **Persons with mental ill-health**

In research, there is no real consensus regarding the concepts that describe the group of persons that suffer from mental illness or ill-health. Nor is it that easy to clearly identify the criteria that must be met in order to be included in this group. Decisive for the studies conducted in this thesis was the context of community mental healthcare in Sweden. In this form of care, the diagnosis or type of mental disorder is not crucial, but rather the disability that it causes. This means that the concept of psychiatric disability is defined as a condition that causes a person difficulty in performing activities in important areas of life, as a consequence of the mental illness (e.g., schizophrenia, other psychotic disorders, bipolar disorder, personality disorders, major depressive disorder, anxiety disorder, and ADHD). The definition originates from the Social Service Act in Sweden (Nationell psykiatrisamordning, 2006:5) and the concept of psychiatric disability is also the most used term in the Swedish community mental healthcare system. In Swedish patient organisations and associations (RSMH, Schizofreniförbundet), the concepts used most often are 'disability', and 'user' or 'consumer', in terms of using mental healthcare and support provided by society. These concepts are applied by the organisations

in relation to the concept of 'mental ill-health'. In the articles published in this thesis, the terms 'mental healthcare users', 'persons with psychiatric disabilities', and 'persons with mental ill-health' are used. However, in this thesis, the concept 'person with mental ill-health' is used consistently, since it corresponds with the view of the patient organisations, as well as with the philosophical and theoretical underpinnings for this research.

## **Caregivers**

In the third study, the lived experiences of those caring for persons with mental ill-health were elucidated. The interest was not on experiences from a professional point of view, but rather from a lifeworld perspective, and therefore the concept of 'caregivers' was chosen. Further details regarding the participants in this study can be found in the section on methods.

## **Physical activity**

The concept of physical activity is commonly defined as all bodily movement that is a result of the contraction of the skeletal muscles, which causes more energy expenditure than resting (Caspersen, Powell & Christenson, 1985). It is a wide-ranging concept that can include body movement during both work and leisure, as well as other various types of exercise and play.

## **Significance**

In the context of quantitative research, statistical significance is a central term referring to the probability that an effect is not due to chance alone. However, in this thesis, the concept is applied in a qualitative sense, referring to the meaning of a certain phenomenon, as to the extent that something matters or is of importance.

## **EARLIER RESEARCH**

This following section is a passage through the fields of past scientific knowledge relevant in relation to the objective of this conducted research. It starts off with a brief orientation of the context of community mental healthcare and lived experiences of mental ill-health, followed by an exposition of bodily aspects in mental health research. This is followed by an outline of research regarding physical activity and mental ill-health. Lastly, the state of research concerning recovery is presented.

## **COMMUNITY MENTAL HEALTHCARE IN SWEDEN**

During the second half of the twentieth century, a deinstitutionalisation movement evolved in the western world, which in Sweden resulted in the Mental Health Care Reform of 1995. This reform aspired to improve the living conditions for persons with mental ill-health and constituted a clarification of the responsibilities of municipalities and county councils regarding housing, occupational activities, and support for this population (Rosenberg, 2009; Socialstyrelsen, 1992). The relocation of the focus of care, from the institution to the community, aimed at enabling these persons to live a more integrated and participatory life in the community. Nevertheless, in an evaluation made by the National Board of Health and Welfare in Sweden (Socialstyrelsen, 2012), it was stated that 15 years after the Mental Health Care Reform, persons with mental ill-health still had poorer living conditions than the general population. The evaluation showed that these persons continued to be insufficiently integrated into society, and that they also suffered from poorer physical health than persons without mental ill-health.

## **LIVED EXPERIENCES OF MENTAL ILL-HEALTH**

Mental health research does not focus that well on the lived experiences of persons with mental ill-health. However, there are studies that show that social alienation and existential loneliness are common features of the experiences of daily life among persons with mental ill-health (Erdner, Magnusson, Nyström & Lützén, 2005; Nilsson, Nåden & Lindström, 2008; Nyström, 1999; Nyström, Dahlberg & Segesten, 2002). Their lived experiences involve difficulties in managing relations with others, which encompassed

experiencing the world as hostile, and having to live with the constant experience of not being accepted as they are. This has further been delineated by Nyström (1999) as one plausible reason for why persons with mental ill-health often are reluctant to change. Nilsson (2004) describes how persons with mental ill-health living alone in their own apartments experienced an inner homelessness. It came out that, even though they all lived in their own homes, they still did not feel 'at home', and that they in this way experienced an existential loneliness. In a study exploring lived experiences of having an exhaustion disorder, the sense of homelessness was articulated as a gradual loss of 'homelikeness' (Jingrot & Rosberg, 2008). Feelings of not 'being at home' has also been elucidated by Syrén (2010), who found that suffering with mental ill-health conveys an existential dimension of not being in one's body, and therefore not in the world. Another expression of the experienced loneliness has been articulated as a loss of coherence in an external sense, involving loss of friends, occupation, and meaningful relationships. Not having the things in life that other people have and longing for living a normal life have been voiced in several studies (Armour, Bradshaw & Roseborough, 2009; Borg & Davidson, 2008; Forsberg, 2009; Mauritz & van Meijel, 2009; Syrén, 2010). In a review by Diamond Zolnierak (2011), the desire for normalcy also involved participation in meaningful activities, as an essential link to recovery.

## **The lived body in mental ill-health**

In the field of mental health research, experiences more specifically related to the lived body of the person is only sparingly explored. Syrén (2010) found that living with a psychosis comprised having experiences of one's own body not being a safe place, or lacking a fixed point in life that could enable an existential anchorage in the world. Furthermore, there are a few studies that have focused on mental ill-health in light of experiences of disconnectedness, as a detachment from the lived body (de Haan & Fuchs, 2010; Fuchs, 2003, 2005; Stanghellini, 2004, 2009). This is conveyed as a loss of self, as an estrangement and alienation from one's own body, which is referred to as disembodiment. The phenomenon of disembodiment can also be comprehended as withdrawal from the lived body, involving an interruption in the ability of the person to experience and create meaning (Bullington, 1999; Rosberg, 2000).

## PHYSICAL ILL-HEALTH IN MENTAL ILL-HEALTH

As stated above, there is a deficiency in research concerning the lived body in this context. On the other hand, there is a large and growing number of studies regarding the physical ill-health aspect of mental ill-health. It is now well known that suffering from mental ill-health often entails compromised physical health (Gray, 2012; McCloughen, Foster, Huws-Thomas & Delgado, 2012; Smith, Langan, McLean, Guthrie & Mercer, 2013). The physical consequences are many and are of a serious nature, such as an increased risk of diabetes (Stanley & Laugharne, 2012), being overweight and obesity (Gurpegui et al., 2013; Stanley, Laugharne, Addis & Sherwood, 2013), ischemic heart disease, and cancer (Crump, Winkleby, Sundquist & Sundquist, 2013; Munk Laursen et al., 2013). These physical health problems are consequences of the unhealthy lifestyle often lived by persons with mental ill-health, such as excess smoking (Bowden, Miller & Hiller, 2011), poor diet (Simonelli-Muños et al., 2012), and physical inactivity (McCloughen, Foster, Huws-Thomas & Delgado, 2012; Scott & Happell 2011). Another significant reason for hazardous health-threatening weight gain in this group is the side-effects of psychotropic drugs, which often involve metabolic disturbance (Chang & Lu, 2012; Choong et al., 2012). Altogether, the physical health problems that may come with suffering from mental ill-health lead to an increased risk of dying prematurely (Nordentoft et al., 2013; Wahlbeck, Westman, Nordentoft, Gissler & Munk Laursen, 2011), with a reduced life expectancy of up to 25 years (De Hert et al., 2011; Tiihonen et al., 2009).

Inactivity is known as the fourth leading risk factor for general global mortality (WHO, 2010). In a report prepared by the Swedish National Institute of Public Health (2010), the economic costs of physical inactivity and high BMI in the general population in Sweden were estimated to be 25 billion Swedish krona each year. Additionally, persons living in psychiatric residential settings are more inactive than others with the same kind of ill-health living on their own, despite support from caring personnel (Schiess & Christensen 2006). The evaluation of the mental healthcare in Sweden made by the National Board of Health and Welfare (Socialstyrelsen 2005, 2012) also indicates deficiencies in the mental health services and in their ability to meet the specific care needs of persons with mental ill-health. Despite evident and substantial knowledge of its impact on mental ill-health, physical health is not negotiated and implemented into mental health care to the extent that it should be (Bradshaw & Pedley, 2012; Ehrlich et al., 2014). Research states that there is a

need to further develop the clinical practice and attitudes among mental health nurses regarding physical health promotion (Blythe & White, 2012; Happell, Scott, Platania-Phung & Nankivell, 2012; Robson, Haddad, Gray & Gournay, 2013; Verhage, De Maeseneer, Maes, Van Heeringen & Annemans, 2013). Due to the high prevalence of physical inactivity in this group, and the serious health risks that come with that, interventions that promote physical activity are especially warranted (Happell, Platania-Phung & Scott, 2011).

## **PHYSICAL ACTIVITY AND MENTAL ILL-HEALTH**

Being physically active is known to have many health-promoting benefits in general (Swedish National Institute of Public Health 2010:14). Physical inactivity in patients with mental ill-health is a well-known health risk problem (Janney et al., 2013; Nyboe & Lund, 2013) and studying the beneficial effects of physical activity on mental health is a growing field of research (Alexandratos, Barnett, & Thomas, 2012; Happell, Davies & Scott, 2012; Mason & Holt, 2012). A report made by the Swedish Association of Local Authorities and Regions (2011) states that exercise habits have been focused on in 46% of patient appointments in outpatient psychiatric care in Sweden. For persons with schizophrenia, being physically active can alleviate negative symptoms and improve the person's well-being and general functioning (Gorczynski & Faulkner, 2010; Malchow et al., 2013). Gorczynski and Faulkner (2010) state that, even though the effects of physical activity on physical health in this group may be limited, further studies are crucial since schizophrenia is the mental illness most strongly associated with physical morbidities. The positive impact of physical activity on depression and anxiety has also been established through identifying that increased physical activity is associated with less depression, and counteracted the effect of physical morbidity and negative stress factors (Carek, Laibstain & Carek, 2011; Danielsson, Noras, Waern & Carlsson, 2013; Rimer et al., 2012; Robertson, Robertson, Jepson & Maxwell, 2012). Although many studies have been shown to have methodological weaknesses, there is, nonetheless, evident scientific support for using physical activity in acute care of mild and moderate depression. Preventive effects have also been shown in a long-term study followed for 10 years (Harris, Cronkite & Moos, 2006). Even though physical activity was not considered effective enough to replace the treatment with antidepressants, the lack of side-effects is a strong incentive for more extensive application.

## **Experiences of being physically active**

In studies focusing on subjective experiences of being physically active among persons with mental ill-health, additional beneficial effects have been put forward. Being physically active rendered increased ability to manage mental distress and provided improved confidence and self-esteem (Hodgson, McCulloch & Fox, 2011; Wynaden, Barr, Omari & Fulton, 2012). Being physically active also constituted a meaningful use of time and enhanced the person's ability to relate to and interact with others (Alexandratos, Barnett & Thomas, 2012). Likewise, in a review by Mason and Holt (2012) where mental health service users' experiences of physical activity were explored, social interaction and support, sense of meaning and achievement, feelings of safety, improved symptoms, and an experience of identity constitute the main findings. This is in line with studies by Crone and Guy (2008), and Erdner and Magnusson (2012), which focused on the experiences of social interaction, as well as getting control over one's life, as the positive health gains of being physically active. Carless and Douglas (2012) took the relational value of being physically active one step further by stating that what kind of physical activity and to what extent it is performed are less important than how it is supported.

## **Barriers to being physically active**

Despite the solid evidence for the positive health-promoting effects of physical activity on mental ill-health, there are considerable challenges for these persons to being physically active. For persons with mental ill-health, physical activity can be difficult to achieve, and one impediment has been considered to be lack of motivation (Vancampfort et al., 2012; Verhaege, Maesneer, Maes, Van Heeringen & Annemans, 2013). Other barriers to being physically active are the impact of the mental ill-health itself, side-effects of medication, experiences of stigmatisation, lack of familiarity with being physically active, and the limitations of mental healthcare services (Johnstone, Nicol, Donaghy & Lawrie, 2009). In a review by Chadwick, Street, McAndrew, and Deacon (2012), the impact of practical obstacles was found to be significant, and factors such as the availability of facilities for physical activities, as well as transportation to and from them, has been shown to affect participation in physical activities (Henderson & Battams, 2011). Chadwick and colleagues (2012) also describe

other barriers to uptake of physical activity, such as insufficient support from professionals, social isolation, and unfavourable atmospheres.

## **Interactive video gaming in healthcare**

Interactive video games—also called fitness games or exer-games—constitute a new and effective way of being physically active (Peng, Lin & Crouse, 2011), and are a technique used in several healthcare contexts. For persons with multiple sclerosis with mild symptoms, the use of interactive video games has been shown to improve fitness levels (Plow & Finlayson, 2011), and in a study by Herz et al. (2013), patients with Parkinson’s disease improved their motor function by playing games on the Nintendo Wii. Furthermore, being physically active by using interactive video games has been proven to have a valuable effect on physical activity levels among older adults (Shubert, 2010), and has also been shown to offer experiences of enjoyment and flow (Marston, 2013). There are only a couple of studies of which the author is aware that were conducted in the context of mental healthcare. Bacon, Farnworth, and Boyd (2012) investigated whether using interactive video games could change the level of engagement in the physical activity of forensic patients at risk of obesity. The findings implied that playing the game was experienced as fun and challenging and constituted a motivating tool with which to promote engagement in physical activity. In another study, Leutwyler, Hubbard, Vingradov, and Dowling (2012) examined interactive video games to promote physical activity among older adults (55 years and older) with schizophrenia. Leutwyler and colleagues concluded that video gaming can be an ideal way to promote physical activity, since it is experienced as fun, accessible, and social. As a result, the authors’ of both these studies recommend the use of this kind of technology in mental health settings, while highlighting the need for further research.

## **RECOVERY RESEARCH**

The concept of recovery has become prominent in mental healthcare and research and it seems to have a self-evident meaning. However, there are generally two kinds of definitions or perspectives of recovery and, in a way, it is an issue of prepositions (Schrank & Slade, 2007). Recovery can on one hand be viewed as clinical recovery, meaning recovery *from* mental ill-health, with an

emphasis on outcomes as in being cured of symptoms. On the other hand, recovery can be defined as recovery *in* mental ill-health, meaning a personal process of recovery (Roberts & Wolfson, 2004, Slade, 2009). In this thesis, it is the latter meaning that is employed, where recovery is understood as a personal journey or process.

The understanding of recovery as a process should be grounded in the perspective of lived experiences (Slade, Williams et al., 2012) and several reviews have been conducted in order to compile the state of knowledge of the concept (Leamy, Bird, Le Boutilier, Williams & Slade, 2011; Slade, Leamy et al., 2012). Leamy and colleagues (2011) state that a recognition of recovery as a personal journey comprises five over-arching themes: connectedness, hope and optimism about the future, identity, meaning in life, and empowerment. This partly coincides with the findings of Stickley and Wright (2011), where hope, optimism, and meaning in life constitute main findings. These conclusions also articulate the responsibility of services and the community in promoting meaningful activities, which could support recovery for the person, such as sport and arts. Having meaningful content in everyday life as an enabler for recovery has also been discussed as the meaning of having an occupation (Borg & Kristiansen, 2008), and of participating in social and meaningful activities (Mancini, Hardiman & Lawson, 2005; Salzmänn-Eriksson, 2013). In a study by McEvoy, Schauman, Mansell, and Morris (2012), perceptions of recovery were surveyed among persons with common mental health problems such as depression and anxiety. The main findings imply that recovery comprises achieving a greater sense of balance and control, as in the ability to attain personal goals. A conclusion drawn from the findings is that care that aims to support personal recovery has to enable persons with mental ill-health to identify and pursue their goals. Furthermore, it has been emphasised that the relational and social aspects of recovery might be neglected if the focus is only on recovery as an individualistic, personal journey (Denhov & Topor, 2012; Topor & Borg, 2008; Topor, Borg, Di Girolamo & Davidson, 2011). The social dimensions of recovery involve experiencing a sense of belonging and participation in life and in society, as well as the potential to redefine oneself as a person, and not only as a patient.

## RATIONALE

The review of earlier research shows that, if you suffered from mental ill-health, it is likely you would live life in alienation and existential loneliness. It is also probable that you would find it hard to take care of yourself in a healthy way, and not having the strength to be physically active possibly would deteriorate your ill-health even more. This implies that having mental ill-health predisposes you to having vulnerable physical health. The physical consequences of your mental ill-health are of such a severe nature that you actually run the risk of dying 20 to 25 years early.

Thus, the serious consequences of bodily ill-health that come with mental ill-health, as well as the positive effects of physical activity on mental health, are well-documented. It has also been stated that the health-generating effects of physical activity are not only about objectively measurable aspects, but also involve important subjective experiences. In addition, there is to date considerable knowledge about what constitutes the barriers for persons with mental ill-health to being physically active.

Simultaneously, there are evident difficulties in implementing physical activity in the care of these persons. Despite the claim to hold a holistic approach in mental healthcare, it appears as if there is a gap in the way physical activity is approached in this context. This comes through as a lacking awareness of how bodily and subjective experiences can be incarnated. There is also insufficient attention given to the potential of physical activity in the perspective of personal recovery in mental ill-health.

In order to overcome this gap and to improve knowledge of what can facilitate physical activity for persons with mental ill-health, there is a need for research that accounts for a comprehensive point of view. The assumption is further that this research can contribute to an increased understanding of the potential of physical activity on health and personal recovery in the context of mental healthcare.

# AIMS OF THE THESIS

The overall aim of this thesis is to study aspects of being physically active for recovery in mental ill-health, and how this can be supported in mental healthcare.

The thesis is based on four studies with the following aims:

- Study I      To assess self-reported health and physical activity among persons with mental ill-health.
  
- Study II     To illuminate the meanings of lived experiences of being physically active in persons with mental ill-health.
  
- Study III    To illuminate the meanings of motivating persons with mental ill-health to be physically active as experienced by caregivers.
  
- Study IV     To explore the significance of interactive video games as a way to promote physical activity and health among persons with mental ill-health. A further objective was to evaluate ways of measuring this significance.

**Table 1.** Overview of studies

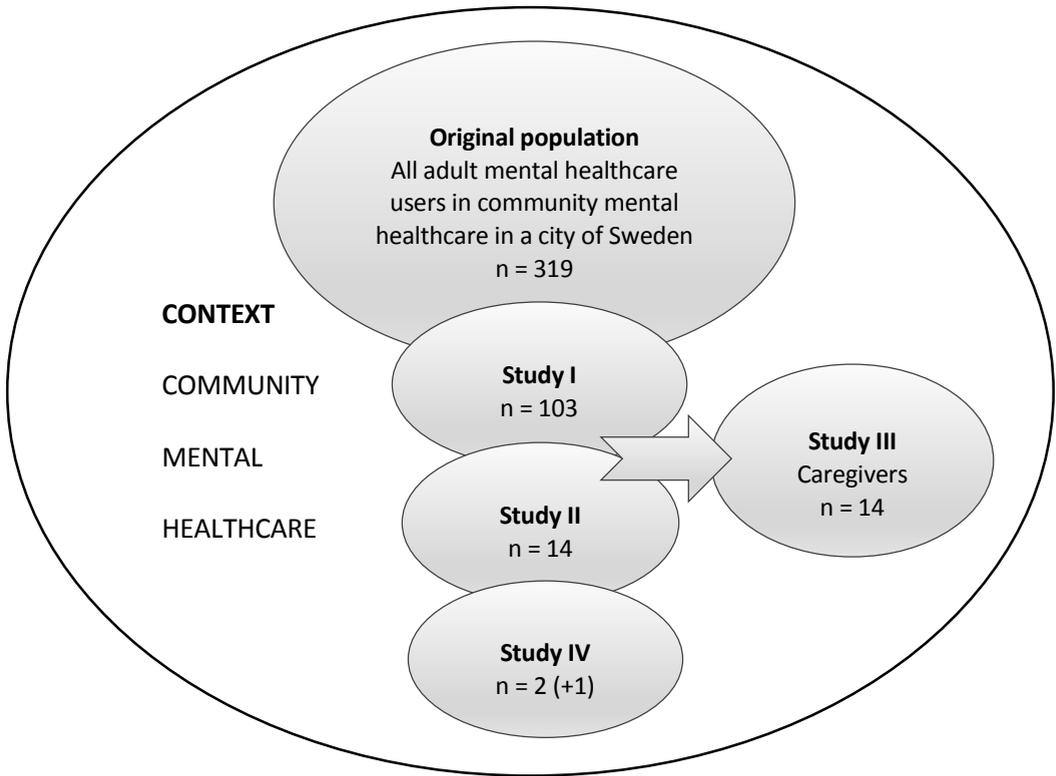
<b>Study</b>	<b>Aim</b>	<b>Design</b>	<b>Data collection</b>	<b>Analysis</b>
<b>I</b>	To assess self-reported health and physical activity among persons with mental ill-health	Cross-sectional	Questionnaires	Descriptive statistics
<b>II</b>	To illuminate meanings of lived experiences of being physically active in persons with mental ill-health	Descriptive, interpretative	Interviews	Phenomenological hermeneutics
<b>III</b>	To illuminate meanings of motivating persons with mental ill-health to be physically active as experienced by caregivers	Descriptive, interpretative	Interviews	Phenomenological hermeneutics
<b>IV</b>	To explore the significance of interactive video games as a way to promote physical activity and health among persons with mental ill-health A further objective was to evaluate ways of measuring this significance	Experimental single case with mixed methods approach	Questionnaires, accelerometer, self-monitoring, field notes, interviews	Descriptive statistics, graphical displays, deductive content analysis

# METHODS

## DESIGN

This thesis aimed to generate knowledge of aspects that involve the significance and implication of physical activity for recovery in mental ill-health. It has been suggested by, for example, Sandelowski (2000), and Faulkner and Carless (2006), that exploring complex human phenomena may benefit from combining different methodological approaches. This research has therefore been conducted using an overall mixed methods research design, including both qualitative and quantitative methods (Table 1). But to avoid the risk of the research becoming fragmented, it must be founded in a joint epistemology. Creswell and Plano Clark (2010) argue that mixed methods research should be based on philosophical assumptions that can guide the collection and analysis of data. It has been argued that the stated split between positivist and non-positivist philosophies is, in this sense, a false dichotomy (Kettles, Creswell & Zhang, 2011). Instead, as long as the different methods are reflected upon through a joint philosophical underpinning, mixed methods research can enable a richer understanding of multifaceted human phenomena.

The type of mixed methods research that is applied here can be compared with what Kettles et al. (2011) refer to as *embedded design*. This involves mixing research methodologies, but such that one type of data takes a more primary role. In this research, qualitative data has been primary, and the theoretical searchlight has consisted of the lifeworld perspective. The separate studies do not express the complexity of the phenomenon in question by themselves. Hence, it is the presence of the whole in the parts that enables an understanding of the complexity of lived human experience. A further clarification of the philosophical framework for this research is articulated in the section on the theoretical point of departure.



**Figure 1.** Flow diagram illustrating the passage of participants through the studies

## **PARTICIPANTS AND SETTINGS**

The collection of data for all four studies was conducted in the context of community mental healthcare in Sweden. This form of care consists of housing in residential dwellings and in different kinds of provided daily activities. In this form of care, it is the level of disability (or problems of functioning) caused by the mental ill-health that defines the need for care, rather than the diagnosis. Staff working in these settings consists of mental health attendants, nurses, behaviourists, and physiotherapists. The passage of participants through the studies is illustrated in fig. 1, and in the following text, the participants will be presented study by study.

## **Participants—study I**

The aim of the first study is to assess the self-reported health and level of physical activity among persons with mental ill-health, and the study was therefore conducted through a cross-sectional design. The study population consisted of all adult community mental healthcare users in a city of approx. 135,000 inhabitants in Sweden. Since the study aimed to include the total population (n=319), the inclusion criteria was that the persons had to have an allowance of social assistance provided by the public authorities. The allowance is decided in agreement with a definition of disabilities as acquired or congenital physical or psychiatric disabilities due to illness or injury. This definition is set out by the Social Service Act in Sweden (Nationell psykiatrisamordning 2006:5) and, according to this, it is the problem of functional disability caused by the mental illness that is the determinant, rather than the cause of or type of medical diagnosis. This involved persons living in residential psychiatric dwellings and/or persons participating in the daily activities that were provided in community centres. All 319 persons were informed of the study and offered to participate. The information on the research was given repeatedly by the author at various meetings and gatherings arranged at the different care units. It was considered important that the author personally meet potential participants in order to be able to answer questions directly about the study. 103 persons answered the questionnaire and among them, 46% were women, 54% were men. The age range was 21 – 70 years old, with a mean age of 46.5 years. Pronounced reasons for refusing to participate were that the questionnaire was too extensive, lack of time, or no interest in participating.

## **Participants—study II**

The second study aimed to illuminate lived experiences of being physically active among persons with mental ill-health. Participants were recruited during the data collection for the first study, and consisted of persons who expressed an interest in being interviewed about their experiences. In order to be able to make themselves understood with regard to their experiences, the inclusion criteria for participation were that the person was not in an active phase of psychosis and that he/she was Swedish-speaking. In the same way as in the first study, the medical diagnosis was not considered decisive. Fourteen persons were included and among them, there were nine men and five women. Nine of

these fourteen persons lived in residential psychiatric dwellings and all of them participated in daily activities provided in the community centres.

### **Participants—study III**

The purpose of the third study was to illuminate caregivers' lived experiences of motivating persons with mental ill-health to be physically active. Participants were recruited during data gathering for studies I and II and consisted of caregivers who expressed an interest in being interviewed about their specific experiences. These caregivers worked in both residential psychiatric dwellings and in community centres for daily activities. It was the author's intent to get variations of experiences, and therefore it was considered valuable to select participants with different professions. Fourteen persons (eight women and six men) were included and among them, there was one nurse, nine mental health attendants, two behaviourists, and two physiotherapists.

### **Participants—study IV**

The main objective of the last study was to explore the significance of interactive video games as a way to promote physical activity and health among persons with mental ill-health. Since this study was to be implemented as a pilot-study with a single case design, the number of participants was small. Participants were therefore purposely selected among persons who had participated in the first study and who were living in one of the residential dwellings. This specific dwelling was chosen because of the pronounced interest among staff and residents that had been expressed during the prior studies. Inclusion criteria were that the person should be Swedish-speaking, could understand instructions, and did not have any known present, severe medical conditions. The author informed the residents of the study at a meeting and, afterwards, three persons declared an interest in participating. Since one of these persons already participated in another study, two persons, Robert and Patric (pseudonyms), were included as participants. They were both men in their forties (40- and 47 years old) and lived in their own apartments in the dwelling, with care personnel present around the clock, in shifts. Given that the study involved being exposed to the virtual world of an interactive video game, the participation of these persons was deliberated with their treating

psychiatrist. This was something that both participants had given their approval for. One of the participants, Robert, was dependent on having support in daily activities from his contact caregiver, and therefore this caregiver was included in the study as well.

## **DATA AND DATA COLLECTION**

Below, a presentation of data and collection of data is outlined, study by study. However, studies II and III were conducted with the same methodology and will therefore be presented together. An overview of the collection of data in the different studies is found in table 1.

### **Questionnaire—study I**

For assessing the self-reported health and physical activity of persons with mental ill-health, a questionnaire consisting of 67 items was used. For this study, 37 items that specifically assessed aspects of health and physical activity were selected, and the 30 remaining items constituted data to be used in future studies. The items in the questionnaire originated from the questionnaire 'Liv & Hälsa' (Life & Health) which was used for measuring public health by several county councils in Sweden during 2000, 2004, and 2008 (CDUST, 2008). The first six items assessed general state of health, mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. This was followed by eight items concerning different health problems; for a calculation of body mass index (BMI), self-reported weight and height were assessed. The next two items regarded levels of physical activity, which were followed by five items about lifestyle factors. Next were 12 items concerning current mental health in relation to the ability to carry out normal functions and to the occurrence of distressing experiences. The last two items were background questions about gender and age. Most participants filled out the questionnaire directly, but some of them brought it home to fill it out at their own pace. These participants were reminded after a week, either by the author or by care-personnel. About 20% of the participants needed help filling out the questionnaire, due to difficulties or insecurities in relation to understanding the questions. This assistance was therefore offered by the author, since an enabling of participation for all who wanted to participate was considered most ethical. A

further reflection concerning this can be found under the sections for ethical and methodological considerations.

### **Interviews—studies II, III**

In order to uncover individual lived experiences of (II) being physically active in persons with mental ill-health and of (III) motivating persons with mental ill-health to be physically active as experienced by caregivers, interviews were used as the source of data. All interviews were conducted by the author and were carried out at a time and place chosen by the participants. For the persons with mental ill-health, it was either in the participants' homes or at the community centres for daily activities, and, for caregivers, it was in the participants' workplaces. In both studies, participants were asked to narrate their experiences as freely as possible. Study II began with an open-ended question 'Could you please tell me about your experience of being physically active?', and study III began with 'Could you please tell me about your experience motivating persons with mental ill-health to be physically active in your work?' In order to encourage further narration and to clarify the understanding of the narratives, follow-up questions were asked, such as 'Would you tell me more about that?' or 'How do you mean?' In study II, the interviews lasted for 25-85 minutes, and in study III for 50-95 minutes. All interviews were audio-recorded and transcribed verbatim.

### **Procedure of intervention—study IV**

This study was carried out as an intervention with an overall timeframe of 17 weeks (see fig. 1 in the article, study IV). It started with a one-week baseline, involving evaluation at the beginning and the end, followed by 12 weeks with three evaluations. During these 12 weeks, both participants played an interactive video game based on an individually tailored programme that was created before the start of the intervention. This programme was formulated by the participants and the author together. The type of video game selected for this study was Wii Sports for the Nintendo Wii (Nintendo Co Ltd, Tokyo, Japan), which is an easy-to-use gaming console that naturally promotes physical activity. There are several sports to play, such as tennis, bowling, boxing, golf, etc. In a study by Miyachi et al. (2010), tennis, bowling, and golf were

considered light-intensity activities and boxing a moderate intensity activity. Participants chose which games they wanted to play and articulated their goals with being physically active in this manner. The goals consisted of planned progress in duration and extent of game play, and were continuously evaluated during the intervention period. Both participants got their own game console, which was connected to the TV in the participants' own apartments. During this 12-week period, the author was present as an observer once a week with each participant. This period was followed by three weeks when participants played the game on their own, without the author being present as an observer. After the 15 weeks of playing, a 1-week follow-up phase with evaluation at the beginning and the end was conducted. During this last phase, the participants were able to continue to play the game if they wished to.

## **Data collection—study IV**

Given that there are different aspects to consider in this type of intervention, various forms of data were collected with several kinds of measures. Physical activity was assessed with both an accelerometer (Actiwatch 2, Philips) and by a self-administered activity diary. The Actiwatch is a uniaxial accelerometer designed as a wristwatch that continuously monitors physical activity during all activities of daily living. Both participants also assessed their playing sessions in an activity diary by reporting the date, type of game, duration, and a brief note on how the playing felt. In addition to these notes, field notes were taken by the author who was present once a week with each participant. The supporting caregiver for one of the participants (Robert), who needed support to be present during every playing session, also took field notes. Field notes together with notes from the activity diary constituted qualitative data in the form of text. For assessing dimensions of general and mental health, numerous measures were used. Life satisfaction (Li-Sat) and general health (GH) were assessed with single items, while for the prevalence of subjectively estimated psychiatric symptoms, a standardised self-assessment scale (SCL-90) consisting of 90 items was used. Finally, waist circumference in centimetres (WC) and Body Mass Index (BMI) were also measured. The assessment for physical activity (Actiwatch, activity diary) and field notes were gathered continuously throughout the intervention and the other measures (Li-Sat, GH, SCL-90, BMI, and WC) were assessed intermittently. A flow-diagram illustrating the intermittent measures during the study can be found in the article. At the end

of the intervention period, closure interviews were conducted with both participants and with the supporting caregiver. These interviews aimed to explore the participants' experience of using the interactive video game in relation to their perceived health and physical activity. During the interviews, which were 15-35 minutes long, notes were taken and member checked with each participant afterwards.

## **DATA ANALYSIS**

The analysis of data in studies II and III was conducted with the same method, and therefore this analysis will be presented jointly. Data analysis for studies I and IV are presented separately. An overview of the analysis in the different studies is found in table 1, and further details can be obtained in the articles.

### **Descriptive statistics—study I**

Data from the questionnaire was analysed by using SPSS 20.0 (SPSS Inc., Chicago, IL., USA) for descriptive analysis. Relationships between variables were calculated with non-parametric methods, using Spearman's correlation analysis and with chi-squared analysis. For decreasing the possibility of type 1 error, a set value of  $p < 0.01$  was considered significant.

### **Phenomenological hermeneutics—studies II, III**

For illuminating the possible meanings of participants' lived experiences in studies II and III, and for reaching a deeper understanding of the experienced phenomena, a phenomenological hermeneutical method of analysis was chosen. This is a method developed for healthcare research (Lindseth & Norberg, 2004), inspired by the theory of interpretation as presented by Ricoeur (1976). It is a method that combines the life-world philosophy of phenomenology with a hermeneutic tradition of text interpretation, where the main interest comprises lived experiences of the phenomenon in question. The method is an intertwining of phenomenological and hermeneutical philosophy where the mutual dependence can be described in the words of Kristensson Uggla (1994, p.232): 'phenomenology has a mediating function that the

hermeneutics reveals, and hermeneutics cannot in itself be constituted without phenomenological conditions' (translated by the author). The process of interpretation is described as a dialectical movement between the whole and the parts, and between understanding and explanation. Explanation involves uncovering the structure of the text, and the essence of understanding reveals itself through perceptively listening to what the text has to say. In line with the thoughts of Ricoeur, Lindseth and Norberg (2004) define the interpretation of texts as moving from the whole in a first, naïve reading, through the parts in the structural analysis, to a new, interpreted, and deepened understanding of the whole. Consequently, the analysis involved three phases: 1) a first reading and naïve understanding of the text; 2) a structural analysis, where meaning units were identified, condensed, abstracted, and brought together into subthemes and themes; 3) a comprehensive interpretation, where the naïve understanding and the structural analysis were woven together and interpreted in light of relevant theory and the authors' reflections and pre-understandings. Unlike traditional phenomenologists, Ricoeur (1976, 1981) accentuates the preunderstanding as a prerequisite for interpretation and understanding. The act of explanation (as in the structural analysis) enables a distancing from the preunderstanding, but it is never possible to completely free oneself from it. Instead, a consciousness-made preunderstanding can enrich the understanding. The author's preunderstanding is expressed through the epistemological underpinnings that were articulated in the theoretical foundation for this thesis.

### **Descriptive statistics, visual analysis, and deductive content analysis—study IV**

Since the main focus of study IV was to explore the significance on a personal level, data was analysed individually, participant by participant. For achieving a compound understanding of the different dimensions of the findings, a mixed methods approach was applied. The measures for Li-Sat, GH, SCL-90, BMI, WC, and time spent playing the interactive video game were analysed with descriptive statistics. Data from the Actiwatch was transcribed and analysed visually through graphic displays and by statistics from the Actiware® software. Qualitative data—notes from the activity diary, field notes, and transcriptions of closure interviews—were read through and reflected upon. In order to further explore these qualitative data, a deductive content analysis (Elo & Kyngäs, 2008) was applied. This was brought about by relating the expressions to the

main findings from study II, whose themes were: Capability for living, Liberation from a heavy mind, Companionship in being in motion, Longing for living one's life, and Struggling with limitations. The idea of comparing the data to the findings from study I was to investigate whether this specific form of physical activity conveyed the same or other dimensions. Further details regarding the analysis can be obtained in the article.

## **ETHICAL CONSIDERATIONS**

Persons with mental ill-health represent in many ways a vulnerable group (Liamputtong, 2007; Chen, 2010). Having to endure mental suffering often entails a limited strength to stand up for one's own rights. Mental ill-health can also involve cognitive difficulties that may affect the person's ability to handle and process information. Therefore the ethics of conducting research in this population must be considered thoroughly.

All four studies in the project were ethically revised and granted approval by The Ethical Review Board, Stockholm, Sweden, with Dnr 2010/1826-31/5. In line with the Helsinki Declaration (WMA, 2013) of ethical principles for conducting medical research, selected participants were fully informed about the aims of the studies, what participation involved, that participation was voluntary, their right to withdraw at any time, and of the confidential treatment of data. Information on how to contact the researcher was also given, if a need for additional information arose. Aside from the application of customary principles of research ethics, some of the studies raised certain issues that were important to reflect upon.

In the first study (I), data was collected using an extensive questionnaire, and some of the participants reported needing help with filling it out. Based on the knowledge of the cognitive difficulties that mental ill-health can entail, it was considered most ethical to offer these persons the support they needed. The help needed most was explaining the questions or how to understand the answer alternatives, and the risk of disclosing confidentiality was therefore considered low.

Persons with mental ill-health do not very often have the opportunity to get their voices heard in research and, as mentioned initially, they represent a

conspicuously vulnerable group. But being a caregiver in mental healthcare and sharing one's experiences working in this context through a research interview may also entail being in a vulnerable position. Being interviewed involved reflecting on one's own work, which may induce feelings of self-criticism. This altogether led to a heightened awareness of the necessity for a respectful attitude in relation to the participants' narratives and to their willingness to share their experiences (studies II-IV). With recognising the risk that the interviews could cause the participants distressing thoughts, an offer to contact the researcher afterwards if necessary was made. Additionally, participants who were care takers were also informed that their care would not be affected by their decision to participate or not. Furthermore, it was also relevant to pay attention to the ethical conduct of handling the narratives. This conduct was sought, besides the admitted ethical principles of research, to be founded in what Eriksson calls 'the natural ethics' (1992). This involves acknowledging a common sense and in the researcher's ethical strive for seeking the most truthlike interpretation of what the narratives convey.

The intervention study (IV) raised some additional ethical concerns, since it involved introducing interactive video games—a virtual world—to the participants. For that reason, the implementation of the intervention and the selection of participants were carefully deliberated. It was also important to reassure that the game playing should not cause stress or frustration for the participants. Simultaneously, it must be underlined that persons living in dwellings run by the community mental health administration are not in compulsory care and could therefore be considered able to make decisions regarding their own health. After the intervention was completed, the participants were offered to keep their gaming consoles if they wished to. Introducing something potentially positive for the participants, and then taking it away, was considered unethical.

# FINDINGS

The presentation of findings is conducted in two steps, in a movement from the parts to a comprehensive whole. In the first step, the four studies are summarised one by one. In the second step, a synthesised understanding of the findings, mainly from studies II-IV, is presented. This synthesis is carried out by considering the lived experiences of being physically active in relation to the body, health, and recovery among persons with mental ill-health, and furthermore, how this can be supported in mental healthcare. More detailed and specific presentations of findings can be found in the articles.

## SUMMARY OF THE STUDIES

### **Self-reported health and physical activity among community mental healthcare users (I)**

The purpose of this study was to explore self-reported aspects of health and physical activity levels among persons with mental ill-health in the context of community mental healthcare. The findings show that this group is affected with serious health risk factors. 69% were overweight or obese (BMI > 25), in comparison to 53% of the general population. Even more noteworthy is that 38% were obese or severely obese (BMI > 30), compared with 15% in the general population. 71% of the participants reported light (less than 2 h/week) to moderate (at least 2 h/week) exercise and 67% were only moderately active (walking, bicycling, gardening, etc.) 1-3 h or less per week. In the sample, 44% were daily smokers, in comparison to 12% in the general population. Participants also reported a low self-assessed general state of health, with 44% estimating it to be 'good' or 'very good'. The comparable number in the general population is approximately 75%.

The findings from this study highlight that this population is a vulnerable group affected with both physical and mental health risk factors. This can be regarded as indicative of emphasising the body in mental health care and that there is a need for more health-promoting caring interventions.

## **Moving toward reclaiming life: Lived experiences of being physically active among persons with psychiatric disabilities (II)**

The intention of the second study was to shed light on lived experiences of being physically active in persons with mental ill-health. The comprehensive understanding of being physically active was interpreted as moving toward reclaiming one's life, in the sense of regaining ownership over one's life. Being physically active could render an opportunity to connect to one's being-in-the-world and in that way to experience meaning. As moving becomes meaning, the person's ability to reclaim life is strengthened. Through the structural analysis, meanings of being physically active emerged as 11 subthemes condensed into 5 themes. Below, the themes are presented in bold and the subthemes in italic text.

**Capability for living** includes how being physically active was perceived as a way *to take care of oneself*. The bodily ill-health that often comes with having a mental ill-health motivated the participants to use exercise for their own health promotion. To be capable of this rendered feelings of joy and accomplishment and gave meaningful content to life. Participants expressed how *mastering something* by becoming skilled at a physical activity comprised feelings of being in control and enabled the person to become more independent. It provided a self-confidence that also reinforced the capacity to better endure the debilitating experiences of mental ill-health.

**Liberation of a heavy mind** involves how being physically active can be a way to dispel worries and *to feel released*. Exhausting oneself through bodily movement scattered heavy thoughts and discharged negative energy. *Respite for recovery* implicated how being physically active in restorative surroundings could serve as a breathing space. Being physically active in a another milieu than the ones that constituted daily living rendered an opportunity for healing and recovery, even if only for a short time.

**Companionship in being in motion** stands for how being physically active can offer experiences of closeness with others as well as with oneself. By performing physical activities together, a *companionship with others* brought feelings of encouragement and support, which reinforced a faith in continuing to move forward. Participants also expressed a consequence that being physically active could enhance the personal ability to relate to others and to manage social interaction. Moreover, being physically active together with others enabled a *companionship as a connection to oneself*. This was found

through experiences of meaningful belonging and of having a place in the world.

**Longing for living one's life** comprises the notion of how being physically active can open up the inner force of life within the person. Participants expressed an *enabling vitality* that came with being physically active and how this awakened an aspiration to participate in life again. *To keep dreams alive gave strength to live* was another dimension of the longing to live one's own life. When the daily struggles of mental ill-health conveyed that the goal of getting one's own life back was too distant, engaging oneself in a physical activity helped keep hope alive.

**Struggling with limitations** refers to the different impediments to being physically active that were expressed by participants. Lack of strength and feelings of being weak and vulnerable signified *the limiting body*, which also could involve experiences of being unconnected to one's own body. This sense of alienation was also related to bodily experiences deriving from inner voices, or the side effects of medication. The body could be perceived as withering away, which then led to a belief that being physically active was unmanageable or even dangerous. Having a body that was overweight entailed feelings of carrying a heavy burden, which also was a dimension of the bodily limits. *The alienating shame* refers to how suffering from mental ill-health conveyed feelings of being ashamed and how this affected the ability to be physically active. The outer world could be experienced as frightening or too demanding, which led to withdrawal and isolation. Participants expressed how a *lack of companionship* could be a consequence of non-supportive relationships. This was signified by experiences of a relationship not built on respect or lacking mutuality. A lack of companionship was also found in the person's relationship to him- or herself, as in giving up on oneself and on life.

A conclusion of the findings was a call attention to the lived experiences of being physically active in persons with mental ill-health, and how these experiences could serve as clinical indicatives of what could motivate to be physically active.

## **Motivation does not come with an ending - it's the beginning of something new: Experiences of motivating persons with psychiatric disabilities to physical activity (III)**

The aim of the third study was to shed light on meanings of motivating persons with mental ill-health to be physically active as experienced by caregivers. The comprehensive interpreted meaning of the lived experiences of motivating someone to be physically active was found as a dynamic way of being, relating, and understanding. Motivation was something more than an act of doing—it was a way of being together, sharing experiences in movement, and interacting with each other's life-worlds. Through the structural analysis, 8 subthemes condensed to 3 themes emerged from the meanings of motivating to be physically active. Below, the themes are presented in bold and the subthemes in italic text.

**An approach of conscious acts** involves how caregivers expressed having the responsibility to enable and provide the conditions for physical activity and how this came about through conscious acts. *Being an inspirer* entailed seeing the possibilities and finding and offering alternatives, instead of dwelling on barriers. This required a genuine interest in the person and a creative approach to finding out how to make the physical activity conceivable. Caregivers expressed how *keeping hope alive* was essential for never giving up on the person, and for acknowledging every person's ability to evolve. By *being here and now*, caregivers strived to be perceptive about when the time was right for physical activity. This entailed having the presence and sensitivity to realise when the person was responsive to the support of the caregiver.

**Companionship as a joint creation** comprises the reciprocal dimension of motivation. *Sharing in togetherness* signified how doing the physical activities side by side, and in that way creating and sharing a common history, founded a sense of belonging. These shared experiences then could form the basis for new challenges. By providing time, often a great deal of time, a trustful relationship denoted by *emotional safety* could take form. This trust and safety was a prerequisite for being able to motivate taking the next steps forward.

**Understanding as a way to create meaning** includes how the often challenging work of motivating persons with mental ill-health to be physically active required an experienced sense of meaning and direction. By acquiring actual knowledge, an *awareness of the manifestations of ill-health* helped the caregiver develop an understanding of the special conditions necessary for

these persons to be physically active. This also entailed *recognition of the existential dimensions*, which refers to an awareness of how mental ill-health concerns the existential experience of the body. Acknowledging the entwined relationship between body and mind enabled the recognition of physical activity as a potential for the bodily dimension of being in the world. *The enigmatic nature of motivation* stands for the encounters caused by not knowing if the caregiver's own ideas corresponded with the ideas or abilities of the person. This required a sensitivity and aspiration to trying to understand even silent expressions.

The findings from this study underline the reciprocal nature of motivation and how this incorporates the caregiver's own motivation to motivate. This requires a willingness to understand the person and to genuinely believe in every human being's ability to evolve.

### **Exploring the significance of interactive video games for physical activity among persons with psychiatric disabilities using experimental single case design (IV)**

In the fourth study, the significance of interactive video games as a way to promote physical activity and health for two persons with mental ill-health was explored. There was also a further objective to evaluate ways of measuring this significance, in order to generate knowledge and insights for future interventions of this kind. Both participants, Robert and Patrick, increased their playing time during the intervention, though Robert was dependent on having his supporting caregiver present when playing. Patrick, on the other hand, was more independent and he increased his playing time from 20 to 120 minutes per week during the intervention. Patrick also lost a couple of centimetres in waist circumference, but otherwise his measures remained stable. Robert did not lose any weight or centimetres in waist circumference, and his perceived life satisfaction and general health varied during the intervention. Both participants experienced playing the game as fun and stimulating, and especially for Patrick it was perceived as offering a relief from worries and frustration. Through the challenge that the game provided, the participants felt encouraged and their motivation to continue playing seemed to be reinforced. Playing the game was experienced as evolving, strengthened the participants' sense of capability, and provided an experience of companionship with oneself.

For Robert though, the presence and support of a person he could trust was crucial for the playing of the game to take place.

An evaluation of the measurements applied in this study made both problems and benefits evident. The accelerometer (Actiwatch 2, Philips) chosen for assessing the physical activity was not found suitable for this type of activity. However, continuous self-assessment through an activity diary was handled thoroughly by participants and generated both quantitative and qualitative data of value. When concurrently measuring levels of physical activity, subjectively perceived aspects of health, and when the main interest is to capture personal processes, complementary assessments are considered advisable.

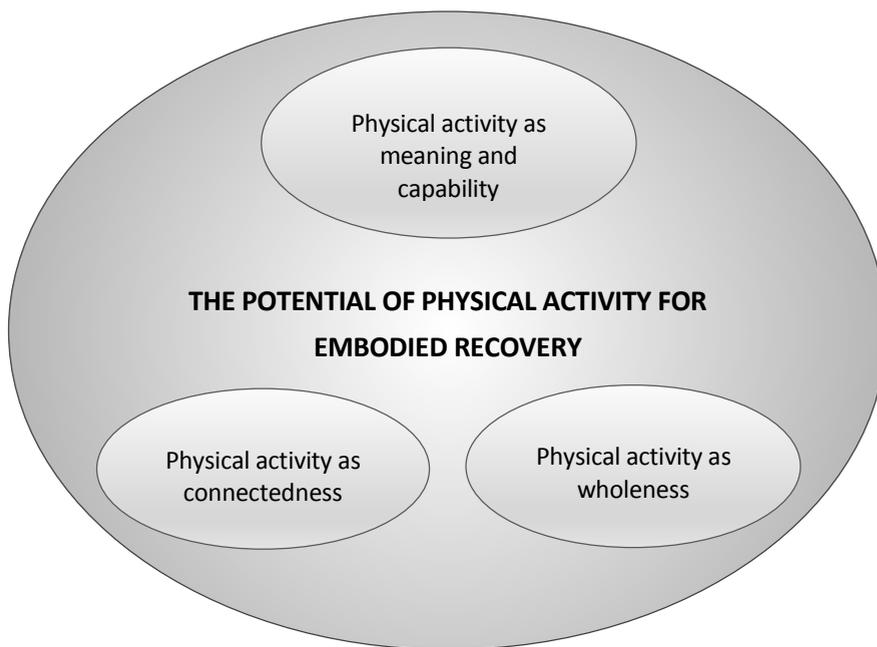
Conclusively, playing an interactive videogame as a way of being physically active was found to enable experiences of evolvment and competence, which can be understood as dimensions of personal recovery. The interactive video game can therefore be regarded as a facilitating tool; however, the importance of support from another human being cannot be overlooked.

## **SYNTHESIS OF FINDINGS**

### **The potential of physical activity for embodied recovery**

As a synthesised understanding of the main findings, the potential of physical activity for embodied recovery in mental ill-health emerged consisting of three core aspects. These core aspects are assumed to articulate the qualitative significance of being physically active as meaning and capability, connectedness, and wholeness (fig. 2).

The findings reveal that being physically active involves various dimensions of meaning and capability. This comprises facets of achievement (II, IV), evolvment (III, IV), and renewed capability to take care of oneself (II), as in taking possession of one's own life (II). A considerable part of the personal journey of recovery involves the person being at the helm. Engaging in physical activity can constitute a significant and tangible way of getting to the helm, since it is only the person him- or herself who can put his or her own body in movement. In this way, setting one's lived body in motion can literally encompass a movement for embodied recovery and constitute a source of



**Figure 2.** Core aspects of the potential of physical activity for embodied recovery in mental ill-health.

personal meaning. For physical activity to incorporate dimensions of capability and meaning for the person, the caregiver needs to recognise the person as a capable human being and to have faith in the person’s inherent potential (III). What is more, supporting the person to being physically active has the possibility of fostering an anchorage in his/her own body. The anchor is an old heraldic symbol for hope and stability (Online Etymology Dictionary, 2014), as the function of the anchor is to hold a boat or a ship still, and the meaning of anchorage consequently can be understood as being at anchor in a safe harbour. Accordingly, the meaning of physical activity as a bodily anchorage is comprehended as a metaphor for how moving one’s own body through physical activity and acknowledging the embodying dimensions can enable a reconnection to the inner force of life within the person. The bodily anchorage can in this sense be seen as the existential haven that can provide security and

strength for the person to embark upon the journey for recovery and reclaim his or her life.

Furthermore, being physically active has the potential to facilitate experiences of connectedness to oneself and to others, by means of a connection relating both inwards and outwards. Being physically active offers an opportunity to come closer to one's own body, and, in this way, closer to oneself and one's life as well (II, IV). Sharing experiences through being physically active together with others may render feelings of belonging and provide an opportunity to connect to a sense of having significance in the world (II, III).

Physical activity as wholeness relates to how being physically active can raise an awareness of how the body and soul are intertwined (II, III). This implies that caring for the whole person requires an understanding of the human being as an entity, and of an understanding how mental ill-health can affect the existential experience of the body (III, IV). Even though the knowledge and recognition of the physical health benefits of physical activity are important, there is a vital need for the caregiver to view physical activity in light of lived experiences of the human being as a body-soul-world entity. Otherwise, there is a risk of the person's experience of disembodiment being reinforced and the potential of physical activity for personal, embodied recovery may be counteracted.

The findings from the first study (I) suggest that persons with mental ill-health do not have to endure mental distress only, but that they are also often affected with bodily ill-health. This conclusion is in line with existing research and underscores the need to visualise the body and bodily aspects of health in the context of mental healthcare. It is therefore not that farfetched to recognise the value of promoting physical activity in this population. But promoting physical activity must not only entail striving for the performance of the activity—it should incorporate something of meaning for the person. By considering how being physically active can be related to the process of health and personal recovery, the step from a benevolent thought to meaningful action can become more conceivable.

Additionally, the synthesis of findings highlights the fact that a person's barriers to being physically active may not only represent realms of mental illness, as in psychopathologic reasoning, symptoms, or side effects from medication. The barriers should also be understood as expressions of

alienation and disconnectedness from the lived body, as subjectively experienced disembodiment (II). Furthermore, it can be assumed that experiencing a disconnectedness to one's own body, may impair the ability to relate to—and answer—questions about one's own body and health (I). Through the lifeworld perspective, personal corporeality and how it can be experienced have implications for the experience and ability to communicate with the world, with oneself, and with other human beings. This is undeniably also the reality for the person with mental ill-health. Suffering from mental ill-health can in various ways affect and change the experience of oneself and of the world in a way that may significantly shape the whole experience of one's own existence. Disregarding the context, our body and the potential for our embodiment is always present. Therefore, in order for physical activity to enable an embodied, personal recovery, there is a need to acknowledge the experiencing body that the person lives within, with, and through.

# DISCUSSION

## REFLECTIONS ON FINDINGS

The results from this research have in the previous section been presented through a synthesis of the main findings. In the following section, findings are reflected upon and discussed on the basis of this synthesis, with the starting point being the potential of physical activity for an embodied recovery in mental ill-health. How this can be supported in mental healthcare will be outlined in a separate section for clinical implications. More specific discussions and reflections in relation to each study can be found in the articles.

### **The potential of physical activity for embodied recovery**

This thesis aims to study aspects of being physically active for recovery in mental ill-health, and how this can be supported in mental healthcare. The beneficial effects of physical activity on bodily and on mental health are well documented. It is known that increasing physical activity among persons with mental ill-health is crucial for managing the deterioration that may come with suffering from mental distress. Recognising the subjectively perceived benefits of being physically active has also been found to be valuable for understanding what can support persons with mental ill-health in participating in physical activity. From a recovery perspective, the existential dimensions of the personal journey of experiencing meaning in life are emphasised. With the background of earlier research, one may ask what kind of knowledge and understanding is missing in order to enable enhanced physical activity that could be a part of recovery for these persons. The main findings in this thesis point to the need to recognise the lived body in this context, and that a person's lived bodily experiences in relation to being physically active encompasses dimensions of embodiment. The core aspects of the potential of physical activity for embodied recovery in mental ill-health conveys the significance of meaning and capability, connectedness, and wholeness.

## *Physical activity as meaning and capability*

Through the lifeworld perspective, the bodily, lived experiences of being physically active can be comprehended as an ability for the person to experience and create meaning (Bullington, 1999; Rosberg, 2000). As Merleau-Ponty (1997, 2002), argues, movement is our original intentionality and expresses an existential movement with the meaning contained therein. From this point of view, moving one's body in physical activity provides an opportunity to experience meaning. Through this meaning, individuals are able to strengthen their ability to reclaim life. To be physically active also renders experiences of capability, as achievement, evolvment, and as taking care of oneself, which corresponds to the notion of human capability. Ricoeur (1994, 2011) postulates that the human being is a resourceful, capable being with the ability to take responsibility, and being capable can be understood as a dimension of health. This can further be understood in relation to the thought of the person's inherent ability to reclaim life, as striving to manage the problems of living (Barker & Buchanan-Barker, 2010; Barker & Buchanan-Barker, 2011). A person's capability to possess one's own life is obviously affected by the impact and magnitude of the mental ill-health. But the capability of the person is also dependent on if and how the caregiver responds to the person as a capable human being. The power that lies within setting one's own body in motion through physical activity constitutes a concrete and potent way for the person to get to the helm. This implies that there is a tangible relationship of getting going physically, with how Barker defines the reclamation of life as 'getting going again'.

However, as it has been shown in earlier research, the barriers to a person being physically active are many. Within the recovery perspective, hope, identity, meaning, and personal responsibility are outlined as four key features involved in the personal journey for recovery (Slade, 2009). Essential dimensions of recovery have, among several others, also been delineated as feeling better about oneself, knowing how to take care of oneself, and actively engaging in life (Law & Morrison, 2014). When considering the potential of physical activity in relation to the central features of personal recovery, it is astonishing that physical activity has not received more attention in this respect. Hence, the ability of physical activity as way for the person to create his or her own meaning and sense of capability is an underutilised way of empowering a person's movement towards a reclamation of the inherent force of life.

In the last study (IV), the significance of interactive video games in promoting physical activity for persons with mental ill-health was explored. Even though the objective health effects were noticeably modest, the qualitative significance was constituted by experiences of involvement and competence. As earlier research shows, the implementation of this new technology for health and physical activity promotion in this population is rare. It is also considered likely that this mirrors the overall extent of new thinking, regarding novel ways to promote health for this group. This can be understood as a sign of an insufficient appreciation of the abilities of persons with mental ill-health, which is essentially incongruent with the notion of human capability, as well as with the recovery perspective.

### *Physical activity as connectedness*

Through this research it has been shown that being physically active can enable a connectedness to oneself and to others, a connectedness that relates both inwards and outwards. The social and existential alienation and loneliness experienced by persons with mental ill-health has been considered in earlier research (Erdner et al., 2005; Nilsson, 2004; Nyström, 1999; Syrén, 2010). Loneliness is here meant as carrying both social and ontological meaning, and refers to a sense of homelessness in the world. The point made through this research is that this experienced homelessness is coherent with the meaning of disembodiment, as an experienced disconnectedness and alienation. This can be compared to how the identity of the person is understood as a central element for recovery, since having to endure mental ill-health often conveys experiences of loss of self, as being a 'nobody nowhere' (Slade, 2009, p. 83).

In line with a lifeworld perspective, as human beings, we are our body and we experience ourselves, others, and the world through our lived, subjective body (Merleau-Ponty, 1997, 2002). The lived body conveys a communicative relation and directedness to the world, and can further be understood as our existential habitat in ourselves and in the world (Bullington, 1999; Rosberg, 2000). This means that our lived, bodily experiences that come with being physically active relate to this existential dimension. Therefore, it may not be that farfetched to see how being physically active can enable an embodied connectedness. This embodied connectedness has been presented as a bodily anchorage, and involves feeling at home. Not feeling at home, as an existential

homelessness, has been articulated as one dimension of suffering from mental ill-health.

Anchorage as a metaphor for an existential haven signifies feeling safe, which is an interpersonal experience. Being a person with mental ill-health, with problems of living, and consequently with a need for support that provides safety. This implies the relational and outwards-going aspect of connectedness. Alternatively, this means that the inward- and outward-relating connectedness are both independent and together. This means that supporting the person's process for recovery requires relationships that comprise recognition and connectedness (Ådnøy Eriksen, Arman, Davidson, Sundfør & Karlsson, 2013). Elstad and Hellzén (2010) have correspondingly emphasized the importance of caregivers creating a social milieu that encourages user participation and that offers experiences of feeling included.

As Dahlberg (2007) states, by referring to Sartre, loneliness is the absence of presence, which in light of the findings in this thesis can be understood as the absence of experienced presence in the lived body. This leads us to reflect upon whether it is possible to make a distinction between disembodiment and embodiment. Since we are our bodies, the distinction of disembodiment might lead to the conclusion that we can also have a non-body. But the omnipresence of the body, in terms of Merleau-Ponty, excludes any pure non-physical position. As long as a distinction is made between disembodiment and embodiment—even when they are intimately related and connected—there is actually a risk of falling into the trap of body-mind duality. Therefore, it is crucial to highlight that the comprehension of disembodiment signifies the experience of disconnectedness, despite the omnipresent body.

### *Physical activity as wholeness*

The findings in this thesis, in relation to accumulated knowledge from earlier research, clearly show the potential of physical activity for recovery in mental ill-health. This potential is not only of significance for the biological, objective body or the subjective experiences, but above all for the wholeness of the human being as a body-soul-world entity.

Gretland (2007) problematises the approach to the body and physical activity in the context of mental healthcare in that it has been mostly reductionist.

Gretland refers to Burbach (1997), who states that the exploration of the significance of physical activity is conducted by looking through a telescopic sight. This means that the focus is mainly set on how physical activity can alleviate symptoms and improve the physical health of persons with mental ill-health. However, as it has been outlined through the review of earlier research, there is an increasing interest in subjective experiences of being physically active (e.g., Alexandratos et al., 2012; Mason & Holt, 2012). Nevertheless, even with the growing awareness of the subjectively experienced benefits of physical activity, it is not commonly comprehended in light of the wholeness of the person as a body-soul-world entity. In that way, the perspective and the understanding of physical activity remains detached and lacking the connection to lived experiences of the human being as an embodied being.

For the person with mental ill-health to be recognised as an embodied entity, it is required that caregivers have an ontological understanding of the human being as an entity (Barker, 2000). This also conveys an awareness of the bodily manifestations of ill-health, and how it could be perceived by the affected person. Mental ill-health can, for example, be manifested by a belief that parts of one's body do not exist, and an understanding of these conditions are crucial for giving the right support to the person for physical activity. By giving room for the ever-present body as the lived body, and by appreciating the potential of physical activity for embodied recovery, an experience of reentry into the world can be enabled.

## **REFLECTIONS ON METHODOLOGY**

Reflections upon issues related to the methodological process will be delineated from a comprehensive perspective. This means that the focus will be on the overall design, and that detailed methodological discussions associated with the specific studies can be found in the articles.

The overall design of this research involved a mixed methods research approach, as described by Kettles et al. (2011). The motivation for adhering to a mixed methods research design is based on the multifaceted nature of the phenomenon in question, and of the capacity of this methodology to answer complex research questions that relate to human experience. Mixed methods designs have been criticised for being a shortcut for producing the 'best of both worlds' with the risk of generating fragmented results (Giddings, 2006). This is a

relevant point, since a lot of research that has claimed to apply a mixed methods design has mostly resulted in 'one and one equals two'. Giddings argues that there is a confusion about mixed methods research, involving what on the one hand is meant by method and on the other hand by methodology. As Denzin and Lincoln (2005) state, methodology guides the framing of research questions, and the decisions for the process and use of methods. Methods, in contrast, are the practical means for executing this process, such as tools for gathering and analysing data. The consistency of the use of these concepts as different hierarchical levels may not necessarily clarify what it is that is actually 'mixed' in mixed methods, but it can contribute to evolve internal congruence (Giddings, 2006). Furthermore, if methods and methodology were considered as one, and if methodology is seen to be the same as ideology, it would likely cause problems in terms of foreclosing important sources of knowledge. Instead, the significance of having an open approach to methodological positions has in this research been valued, and the use of different methods has been regarded as applying diverse tools for comprehensively exploring aspects of being physically active for recovery in mental ill-health. This approach can be compared with how Dahlberg, Nyström and Dahlberg (2008) argue: 'Human science and lifeworld researchers must be sensitive enough to the phenomena of study and learn how to preserve and make visible the rich and thick meanings that are embedded in "the flesh of the world", that are the invisible flesh' (p. 329). It has also been stated that the inclusive nature of mixed methods research designs can be considered to have an ethical value, especially when conducting research with persons in vulnerable populations (Kroll, 2011). Furthermore, this inclusive nature can also enable a comprehensive understanding of contextual factors and processes in interventions (Kettles et al., 2011; Kroll, 2011). As Sandelowski (1996) highlights, giving qualitative research a central position in intervention studies can enhance meaningfulness by situating them in the real world of patients and caregivers.

However, as outlined by Kettles et al. (2011) and others, an aspect that is likely to be of greater relevance is the philosophical and epistemological framework and its role for the research. In this research, the lifeworld perspective, the notion of human capability, and the existential dimensions of the process of reclaiming life, as articulations of human science, have constituted the philosophical underpinnings. These underpinnings have guided the process, and are seen to be superior for an understanding of the phenomenon to emerge. In the same way that the body and bodily aspects cannot be comprehended by focusing on the parts, so too a comprehensive understanding of this research

cannot be sought without a joint perspective. In this sense, the approach of a mixed methods research design actually constitutes an embodying design. Conclusively, this research has largely been about negotiating how the whole is more than a summary of the parts.

The relevance of the terms objectivity and validity has been questioned in the context of qualitative methodologies, since they have been regarded as only communicating a quantitative logic not relevant in human science. Hence, Dahlberg et al. (2008) state that these terms are applicable for describing the scientific value of lifeworld research, but that this requires an understanding of the terms in relation to human science. Objectivity involves adopting an openness, a willingness to see the otherness of the phenomenon. This can be further considered through the hermeneutical process of understanding, and how this comprises putting ourselves in a position of otherness (Lassenius, 2014; Wiklund-Gustin, 2010). This means being prepared to be surprised, and to let our own thoughts be challenged. An openness to the otherness of the phenomenon has been a beacon throughout the process, pursued for thoroughness and clarity in reasoning. This leads us further to the claim of validity within human science, which signifies that research carries an inner logic, without internal contradictions (Dahlberg et al., 2008). In this research, there has been an ambition to provide transparency, and to stress the clarification of how the parts and the whole are related.

The context for this research is community mental healthcare, and a question to be raised is how the structure of this research may enable generalisation of the findings. The use of the term generalisation in lifeworld research has also been debated, but Dahlberg et al. (2008) state: 'The principle of understanding each part in terms of the whole, and the whole in terms of its parts, guides the act of generalisation as the creation of theory in that it is still a question about seeing relationships' (p. 344). The relationships between the parts and the whole in this research have been revealed through the synthesised understanding of the main findings, as the potential of physical activity for embodied recovery. In light of this synthesised essence, the findings mirror existential dimensions in meanings, which can be considered to be of value in various contexts of mental healthcare.

## ARRIVING AT CONCLUSIONS

The journey of this research is now coming to an end, even though it does not mean arriving at a final destination. Since the process of research is ongoing, the conclusions drawn from this research should not be considered as final thoughts, but rather as reflections in progress on the essence of the main findings.

The positive effects of physical activity on mental health and on the related problems, are already well documented in research. There are also reasons to presume that the understanding of physical activity in the context of mental healthcare has been rather one-sided. Despite a growing awareness of the experienced benefits of physical activity among persons with mental ill-health, this awareness does not seem to be comprehended with regard to the wholeness of the person as an embodied body-soul-world entity. In that way, the understanding of physical activity risks remaining detached, lacking the connection to lived experiences of the human being as an embodied being.

So, what is the value of the gained knowledge from this research? The findings stem from a lifeworld perspective and how this enables an understanding of how we gain access to the world and ourselves through our body. This also involves an understanding of the human being as a body-soul-world entity, that is, as an embodied entity. Focusing on the entity of the human being and the experiences of the lived body in light of embodiment is central to recognising the potential of physical activity. In these findings, physical activity encompasses aspects of meaning, capability and connectedness, and wholeness, which constitute sources for embodied recovery in mental ill-health. These aspects all have existential dimensions, and relate to experiences of being-at-home through a bodily anchorage. In this sense, the bodily anchorage can be seen as the existential haven that may enable the person to embark upon the journey for recovery and reclamation of one's life. Thus, in this perspective, recovery is more than being able to reenter a life in society—it may further serve as an experienced reentry to the world. The understanding of these aspects of physical activity is not prominent in mental healthcare, nor in the perspective of personal recovery, and as a result the findings suggest the need for a shift in how the body of the person is viewed. Based on the meaning of recovery as a personal and existential process, the endorsement of embodiment through physical activity is an underestimated resource for a person's journey in reclaiming his or her life. By giving room for the ever-

present body of the person as the lived body, and by appreciating the potential of physical activity for embodied recovery, an experience of a bodily anchorage may be enabled.

## CLINICAL IMPLICATIONS

The care that persons with mental ill-health perceive is shaped by the view that caregivers have about what can be done—and this obviously also includes support for physical activity. Depending on what the assumptions are regarding the relation between physical activity and the process of recovery, this will consequently influence how physical activity will be supported.

The findings in this thesis draw attention to the potential of physical activity for embodied recovery in mental ill-health. The basic necessity of enabling the needed support for this is that caregivers in mental healthcare have knowledge about the significance of physical activity for personal recovery. This means that caregivers should be introduced to and become familiar with the aspects of physical activity that can enable embodied recovery. To integrate this kind of knowledge into clinical work, the involvement of leaders/managers of care is most likely necessary for facilitating organisational resources.

It is important to notice that physical activity does not only belong in outpatient settings or in the context of mental health rehabilitation. As Wynaden, Barr, Omari, and Fulton (2012) have stated, the support for and uptake of physical activity during hospital stays promote an adherence to more sustainable change in terms of being physically active. This is no coincidence, since the body is ever-present, disregarding whatever the degree of mental ill-health is. With the potential of physical activity to simultaneously improve health and well-being *and* tackle the physical health problems that may come with mental ill-health, it is crucial to integrate a perspective of the lived body in mental healthcare. It is therefore essential to underline—particularly from an ethical point of view—that the significance and value of physical activity can enrich and improve the care of persons with mental ill-health.

## FUTURE RESEARCH

As the understanding of the potential of physical activity for embodied recovery in mental ill-health has emerged, it has also become clear that this was only a scratch on the surface. It would therefore be highly important to more specifically and profoundly explore experiences of the lived body in mental ill-health, in relation to embodiment. This kind of knowledge could shed more light on this complex phenomenon, and continue the founding of an incorporated understanding of the potential of physical activity for mental health recovery.

In order to support the incorporated understanding of physical activity as a part of recovery, research concerning practical implementation would be valuable. This could, for example, involve research that engage 'experts by experience' in developing of guidelines that could be used in mental healthcare settings to support physical activity. Given that mental health nurses are key persons offering support to caregivers, further research addressing the attitudes of mental health nurses regarding physical activity for embodied recovery is relevant. In order to identify possible contextual challenges, this should be done preferably within different contexts of mental healthcare.

It could also be important to focus on aspects of organisational factors, and how these might influence the support for implementing physical activity in the process of recovery. It has been stated that recovery research in the Nordic countries is rather limited and primarily echoes the findings from research conducted in the USA and Great Britain (Schön & Rosenberg, 2013). Since there are prerequisites related to the organisation of mental healthcare, it may therefore be necessary to conduct further studies on this topic on national and local levels.

# SVENSK SAMMANFATTNING

Att vara drabbad av psykisk ohälsa innebär för många att leva med känslor av utanförskap och existentiell ensamhet. Men som om det psykiska lidandet inte vore nog, medför detta många gånger även en försämrad fysisk ohälsa. Denna fysiska ohälsa kan vara av allvarlig art, så som t.ex. hjärt-/kärlsjukdom, diabetes, cancer, vilket försämras av att det vid psykisk ohälsa ofta är svårt att ta hand om sig själv på ett hälsosamt sätt. En förvärrande omständighet i denna onda cirkel utgörs av att fysisk inaktivitet – en välkänd hälsoriskfaktor – inte sällan drabbar personer med psykisk ohälsa särskilt hårt. Forskning har likaså visat att fysisk aktivitet har många positiva effekter, inte bara när det gäller den kroppsliga hälsan utan även psykiskt. Trots denna kunskap samt medvetenhet om den fysiska ohälsan hos personer med psykisk ohälsa, är dessa personer fortfarande i hög grad fysiskt inaktiva. Detta kan förstås som ett uttryck för att kroppen – särskilt i ljuset av den levda kroppen – är tämligen ouppmärksam i den psykiatriska vården. Det är därför av stor vikt att utveckla kunskapen kring vad som kan utgöra möjligheter och hinder för fysisk aktivitet.

Det övergripande syftet med denna avhandling har varit att studera aspekter och innebörder av att vara fysiskt aktiv i relation till hälsa och återhämtning (*recovery*) vid psykisk ohälsa, samt hur detta kan stödjas i psykiatrisk vård. Den teoretiska och filosofiska grunden har baserats på ett livsvärldsperspektiv där den levda kroppen, så som den beskrivs av Merleau-Ponty (1997), varit central. Den ontologiska förståelsen av människan har tagit sin utgångspunkt i Ricoeurs tankar om den kapabla människan, benämnd som *homo capax* (2011). Vidare har Barkers (2000) förståelse av psykisk ohälsa som svårigheter att leva sitt liv samt återhämtning (*recovery*) som en personlig och existentiell process i rörelse mot att återerövra sitt eget liv (*reclaim life*) varit vägledande.

Avhandlingsarbetet genomfördes med en *mixed methods research* design, innefattande både kvalitativa och kvantitativa metoder. Avhandlingens kontext har utgjorts av kommunpsykiatrisk vård.

Den första delstudien (I) syftade till att kartlägga självskattad hälsa och fysisk aktivitet hos personer med psykisk ohälsa. Data samlades in genom enkäter bestående av 67 frågor. Av total 319 tillfrågade personer var det 103 personer som besvarade enkäten. Deltagarna rekryterades från kommunpsykiatrisk verksamhet för vuxna i en medelstor, svensk kommun, var boende i gruppbostad och/eller deltagare i daglig verksamhet. Data analyserades med

hjälp av deskriptiv statistisk analys samt korrelationsanalys. Resultatet visade att denna grupp är drabbad av olika typer av hälsoriskfaktorer, så som övervikt, låg fysisk aktivitet och lågt skattad upplevd hälsa. Detta bekräftar tidigare studier och tydliggör det faktum att personer med psykisk ohälsa utgör en sårbar grupp i behov av adekvata, inriktade och hälsofrämjande åtgärder utgående från personens förutsättningar. Studien visade även på de utmaningar som medföljer denna typ av datainsamling i den specifika populationen, då ca 20 % av deltagarna behövde stöd i att fylla i enkäten. Metodologiska aspekter diskuterades därför specifikt.

Delstudie II hade till syfte att belysa innebörder i levda erfarenheter av fysisk aktivitet hos personer med psykisk ohälsa. En beskrivande och tolkande design tillämpades och data samlades in genom intervjuer, vilka analyserades med hjälp av fenomenologisk-hermeneutisk metod. Av de 14 personer (nio män och fem kvinnor) som deltog i studien var nio boende i kommunpsykiatrisk gruppboende och fem i egen bostad. Samtliga 14 deltog i daglig kommunpsykiatrisk dagverksamhet. Fem teman framträdde som analysresultat: *Förmåga att leva sitt liv*, *Befrielse från ett tungt sinne*, *Samhörighet genom rörelse*, *Längtan efter det egna livet* och *Kampen med begränsningar*. Att vara fysiskt aktiv bar med sig en möjlighet att återknyta till ett eget vara-i-världen och upplevelse av mening. Den övergripande helhetsförståelsen av innebörderna i att vara fysiskt aktiv för dessa personer tolkades som en strävan och längtan efter att återta besittning över sitt eget liv. Denna strävan kan ses utgöra en drivkraft i personens återhämningsprocess, inte bara på en konkret kroppslig nivå utan även existentiellt.

Delstudie III syftade till att belysa innebörder i vårdares levda erfarenheter av att motivera personer med psykisk ohälsa till fysisk aktivitet. Med en beskrivande och tolkande design samlades data in genom intervjuer, vilka analyserades med hjälp av fenomenologisk-hermeneutisk metod. 14 personer (sex män och åtta kvinnor) deltog i studien och av dessa var en sjuksköterska, nio mentalskötare, två beteendevetare och två sjukgymnaster. Deltagarna arbetade i kommunpsykiatrisk gruppboende och/eller inom kommunpsykiatrisk dagverksamhet. I resultatet framträdde tre teman: *En hållning präglad av medvetna handlingar*, *Samhörighet som en gemensam skapelse* och *Förståelse som en väg för att skapa mening*. Den övergripande helhetsförståelsen av innebörderna av att motivera personer med psykisk ohälsa till fysisk aktivitet tolkades som ett dynamiskt sätt att vara, relatera och förstå. Den upplevda meningen i motiverandet tog formen av en interaktion mellan livsvärldar som

något man är tillsammans - snarare än något som bara görs. Det förutsätter att vårdaren ser den inneboende potentialen hos personen och att vårdaren bejakar de relationella dimensionerna av både motivation och återhämtning (*recovery*).

Den sista delstudien (**IV**) syfte var att utforska betydelsen av interaktiva tv-spel för främjandet av fysisk aktivitet och hälsa hos personer med psykisk ohälsa. Studien utformades som en pilotstudie, då denna typ av intervention är ett tämligen utforskat område i den specifika populationen. Designen utgjordes av en experimentell single case design och studien genomfördes med två deltagare (samt en vårdare). Deltagarna (två män) var bägge boende i en kommunpsykiatrisk gruppboende och led av olika former av psykisk ohälsa. Båda deltagarna deltog under studiens totala tid på 17 veckor. Själva interventionen utgjordes av 12+3 veckor, med en veckas inledande baslinje och en veckas avslutande uppföljningsperiod. Under interventionen spelade deltagarna det interaktiva tv-spelet Wii Sports (Nintendo) utifrån individuellt formulerade mål. Både kvantitativa och kvalitativa data samlades in, bland annat beträffande fysisk aktivitetsnivå, självskattad hälsa och deltagarnas subjektiva upplevelser av att vara fysiskt aktiv på detta sätt. Resultatet visade på en liten, men kontinuerlig ökning av den aktiva speltiden för bägge deltagarna. Kvalitativa data visade på att bägge upplevde spelandet som positivt, framförallt i relation till att känna sig kapabel och att utvecklas genom utmaningarna. Metodologiska aspekter med tanke på framtida interventioner av detta slag diskuterades.

Avhandlingens huvudresultat är ett understrykande av den fysiska aktivitetens potential för återhämtning för personer med psykisk ohälsa. Denna potential innefattar kvalitativa aspekter av att uppleva mening, duglighet, samhörighet och helhet, och möjliggörs genom ett införlivande av den levda kroppen. Detta bottnar i en förståelse av människans som en förkroppsligad, levd helhet av kropp-själ-värld, där kroppen utgör både konkret och existentiell förankring (*bodily anchorage*). Denna kroppsliga förankring utgör en möjlighet till upplevelse av hemmastaddhet och att känna sig hemma både i sig själv och världen. Utifrån avhandlingens kunskapsbidrag kan man anta att de hinder, som en person med psykisk ohälsa upplever i relation till att vara fysiskt aktiv, kan förstås som mer än konsekvenser av själva sjukdomen. Det handlar med stor sannolikhet även om en bristande upplevelse av relation till den egna levda kroppen, vilket bidrar till en upplevelse av existentiell hemlöshet. Sammanfattningsvis, för att kunna möjliggöra och stödja personer med psykisk ohälsa till fysisk aktivitet krävs en ökad uppmärksamhet och förståelse av

människan som levd kropp. På så vis kan den fysiska aktivitetens potential förbättra möjligheten för återhämtning – och vårdandet – av hela människan i psykiatrisk vård.

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