"IT'S JUST ME":

A Grounded Theory of the Experience of Being a Long Term Exerciser

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University, Palmerston North, New Zealand.

Brian William Tuck

2004

ABSTRACT.

Exercise has been linked to a range of health benefits. Despite significant research into this relationship many of its dynamics remain a mystery. Almost all of this research has been quantitative in orientation with little emphasis given to the experiences of the exercisers' themselves. This study focuses on the lived experiences of eight long-term exercisers using a hermeneutic grounded theory methodology to collect, collate, explore and interpret their accounts of it. In arriving at themes that meaningfully describe these experiences this project was a collaborative effort between the co-researchers and myself to negotiate a shared understanding of what exercising means for us. These themes include exercising outcomes and background influences that combine to produce exercising experiences that are both self-defining and self-enhancing. Seen this way our exercising can be viewed as a three-stage process of self-discovery involving initiation, exploration and integration. This understanding of long-term exercise provides the opportunity to gain further insight into the dynamics of our adherence and longevity. In producing a public record of this shared understanding this study also validates and gives voice to our experiences.

ACKNOWLEDGEMENTS.

I would like to thank Mandy Morgan, my supervisor, for her support and insightful encouragement. A special thanks goes to J, B, F, L, G, M, R and D who through their co-researching of this study have made it possible. This research has been approved by the Massey University Human Ethics Committee.

CONTENTS.

SECTION II: The EXERCISE EXPERIENCE

Chapter Five. Co-Researcher Profiles

Chapter Six. Outcomes

Chapter Seven. Background

PREFACE

From the earliest times movement has played an important part in human life. As well as ensuring survival it has, over the centuries, served a variety of purposes including transportation, communication, socialization, status, wealth and recreation. In more recent times human movement has become the subject of scientific study and spawned, in the process, sub-disciplines including biomechanics, exercise physiology, motor behaviour and exercise and sport psychology.

With public interest focused on the lifestyle and health implications of exercise, a predominantly biomedical perspective has emerged to explain this phenomenon. However sociological and phenomenological perspectives seeking a more subjective understanding of exercise are challenging these explanations. One example of this is the 'reconceptualising' of exercise from a hermeneutical perspective that views "... the [human] body as, the site of meaningful experience" (Lyons, 1999, p. 246). This approach allows themes like well-being, health, injury, fitness, training, enjoyment and persistence to be explored from the perspective of individual meaning and relevance.

In adopting a hermeneutical understanding of exercise this project produces a 'verstehen' (Henwood, 1996) or negotiated understanding of the meaning of exercise for eight co-researchers. Four men and four women were interviewed about their exercising experiences over their lifetime. These interviews were transcribed and analysed by myself as the researcher using a hermeneutically influenced grounded theory methodology to produce an understanding of these co-researcher accounts. This understanding involved negotiation with each co-researcher as to the authenticity of the arrived at themes and meanings conceptualised by the researcher.

The interpretive nature of the study involved an active flip-flopping (Strauss & Corbin, 1998) back and forwards between co-researchers' words, my own thoughts and ideas and the grounded theory techniques used. The outline that follows covers these three key aspects of this interactive process that led to a grounded theory of long-term exercise as a process of self-discovery.

As a way of introduction chapter one discusses the history of exercise and contrasts quantitative and qualitative approaches to it. Chapter two looks at the history of, assumptions behind, and rationale for, using a philosophical hermeneutic perspective for this research. Chapter three provides a history and rationale for the grounded theory methodology used, as well as describing its procedures. Chapter four details the semi-structured interview method used and summarises how the data was collected, collated, analysed and verified. It also includes an overview of the preceding chapters. Chapter five introduces the co-researchers by using their own words to provide brief overviews of their exercising lives. These profiles lead into chapter six and seven that outline the outcomes and background influences that combine to produce an exercising journey of initiation, exploration and integration (chapter eight). These three phases can be summarised as a process of self-discovery and as chapter nine suggests leads to a number of implications for research.

CHAPTER ONE. Human Exercise

> The ability to move is basic to our nature. Our culture, science, art and communication . . . are inextricably woven together with our ability to move. Throughout history, cultures have explored the science and art of movement, often giving it legendary significance. (Brown, 2001, p. 4)

This chapter looks at the history and development of exercise research by examining the expansion of its knowledge base. Rationalist, empiricist and, more recently, interpretive models of exercise have contributed to this expansion. These models are contrasted to provide an overview of the literature, outline some of the current issues and situate this project within the exercise debate.

History

According to Byrd and Brown (2001) exercise science is underpinned by biology, chemistry, physics and psychology. Biology and chemistry inform exercise physiology, physics informs biomechanics and psychology informs motor behaviour. In turn physiological, biomechanical and behavioural studies have led to a widening in the applications or sub-disciplines of exercise science. These include sports nutrition, clinical exercise physiology, physical activity epidemiology, clinical biomechanics, sports biomechanics, athletic training, exercise and sports psychology, sports history and sports sociology. Psychology, motor behaviour and exercise psychology are therefore linked through a common knowledge base and history.

Psychological studies of human movement began with attempts to find neurological links to moving, development and learning. Sherrington (1906) was the first to use the term proprioception in attempting to explain the neurophysiological connection to motor control. Thorndike (1927) focused on motor learning and refining theory based on knowledge gained from results. Bayley's (1936) developmental work saw him publish motor development norms for infants. World War II then produced an upsurge in psychological research into motor behaviour primarily focused on pilot training. This research was based around descriptive analysis that subsequently developed into theory testing in the 1970's. The establishment of the peer reviewed Journals of Motor Behaviour (1969) and Sports Psychology (1979) saw the

differentiation of sport and exercise research as well as the popularising of applied psychology to sport and athletic specific domains. Although this increasing specialisation of exercise and sport has advanced the body of exercise knowledge it has done so primarily because it was, and still is, an interactive discipline that utilises psychology, physics and physiology.

Taking another perspective, Durstine and Brown (2001) map the influences of earliest civilisations, Greek and Chinese cultures and individuals like Leonardo de Vinci in the development of the current day sub-disciplines of exercise research. These sub-disciplines now also include sports philosophy, sports literature, sports art, exercise biochemistry, sports physiology and sports management as well as sports pedagogy (Byrd & Brown, 2001). Sports pedagogy, which subsumes the traditional understanding of physical education, illustrates just how far the evolution of exercise science has come in the last fifty to sixty years. Gill (1997) traces the evolution of exercise psychology in North America and suggests a sub-discipline that now comprises both traditional (hypothesis-testing research) and interpretive (experiential-seeking) research efforts.

Kretchmar (1997) maintains the development of a philosophy of sport was central to this current diversity. He suggests that prior to 1965 a predominantly broad concept of physical activity was studied that produced physical and experimental explanations for human movement. Through the work of Metheny (1968), Slusher (1967) and Weiss (1969) the field of exercise research came to be challenged over these particular types of explanations. They argued for human movement to be viewed as an appropriate and valuable subject area for genuine philosophical debate and inquiry. With this broadening of its philosophical base exercise research began to utilise interpretive approaches for gaining insight into subjective aspects of exercise. The experiences of the exercisers themselves have only more recently begun to be highlighted and explicated, helping to throw further light on both the processes and outcomes of exercising.

Concepts of Human Exercise

The development of alternative theories of human experience has resulted in epistemological stances like interpretivism, hermeneutics and constructionism (Schwandt, 2000). Although these epistemologies differ in the way experience is viewed and ultimately understood, they come under the umbrella term 'qualitative inquiry' which is more ". . . a site or arena for social scientific criticism than as any particular kind of social theory, methodology, or philosophy" (Schwandt, 2000, p.190). These models of human experience have necessitated the emergence of new research methodologies to enable significantly different processes of inquiry into phenomena, like exercise, to take place. These new conceptualisations and methodologies of human experience have histories of their own that have grown out of other research disciplines and practices. An example is a hermeneutically influenced grounded theory approach to exercise which this project adopts.

These alternative philosophical perspectives not only provide different ways of unravelling exercise phenomena but also challenge the usefulness of traditional positivist approaches to it. Discourse analytic, grounded theory, ethnographic, and more recently feminist and action research methodologies have become fertile ways to collect and analyse research participant information and behaviour. The production of these idiographic and emic accounts further questions the legitimacy and authority of the nomothetic model of knowledge. Danziger and Dzinas (1997) suggest such a model is based on,

> . . . a fairly widespread, though implicit and unexamined, belief that any psychologically relevant part of reality was already pre-structured in the form of distinct variables. (p. 46)

What these models provide is, essentially, another way of viewing human experiences. In exercise research these models seek out processes of meaning and purpose that are presumed to underpin exercise behaviour. In this way they can advance a richer, more credible body of exercise knowledge. Theoretical differences can be seen within this diversification of perspectives and situated accordingly as suggested by Becker (1993).

> Epistemological issues for all the arguing, are never settled . . . . If we haven't settled them definitively in two thousand years . . . we probably aren't ever going to settle them. These are simply the common places, in the rhetorical sense, of scientific talk in the social sciences, the framework in which the debate goes on. (p. 219)

The majority of studies on exercise are quantitative. Much of this research is biological in nature and premised on the assumption that exercise phenomena stem from central nervous system processes that produce sensory based psychological processes of feelings, thoughts and behaviour (Carvell, 1995). Much of this knowledge utilises a bio-medical model of sports medicine that has become institutionalised within Western societies. An example of this is the work being done in nutritional genomics, a sub-discipline within molecular biology. Media comments suggest that within two years a genetically configured dietary prescription will be available to individuals to help maximise their future health for the princely sum of $100,000 U.S. dollars. Bio-technical investigations like these add further weight to an empirically based research perspective that is both promoted to, and readily accepted by, a predominantly consumerist general public.

Implications of this type of research reach far beyond the laboratories where they are produced. Questions of an ethical, social and personal nature often go unasked or unaddressed in the rush for, and ready acceptance of, the latest bio-medical breakthrough. Such questions, suggest Kincheloe and McLaren (2000) are of

> . . . even greater importance in the contemporary electronic society where the socio-political effects of the cultural domain have often been left unnamed, allowing our exploration of the shaping of our humanness to go unexplored in this strange new social context. (p. 290)

Psychological studies that situate the exercising individual within social, personal, historical and cultural perspectives can help to do this. These types of inquiry view exercise phenomena as more than a collection of variables based around the functioning of a central nervous system and more generally the operation of mechanical forces. In advancing understanding of personalised experiences of moving this body of knowledge clarifies the personal and social contexts and consequences of such experiences.

These studies also heed Lowenberg's (1993) advice that any inquiry into human experience needs to find ways to account for its complexity and ambiguity. This understanding can be contrasted to the conceptualisation of exercise research around techniques designed to control and hence simplify aspects of its human manifestations. Regardless of whatever conceptualisation of exercise is used, psychology is about people and incorporates the ways in which researcher and researched interact. In providing a bridge between researched and researcher psychological inquiry draws attention to the distance between the two. This bridge or 'gap', Banister, Burman, Parker, Taylor and Tindall (1994) say, is the focal point for all science. Traditional positivist research tries to suppress this gap through techniques of standardisation and random sampling. Qualitative research embraces the gap as a reality of research by acknowledging any attempt to explain it as interpretation. In adopting this interpretive stance this project acknowledges the complexity of co-researcher experiences that it inquires into.

Literature Review

The literature supporting the physical, emotional, cognitive and social benefit of exercising is abundant. Aerobic exercise is related to a relief in depressive and anxiety symptoms, enhanced self-esteem, more restful sleep, improvements in cognitive functioning and mood, stress recovery as well as reductions in fatigue and confusion (Biddle, 2000; Biddle & Mutrie, 2001; Landers, 1999; Martinsen & Morgan, 1997; Raglin, 1997; Sonstroem, 1997). Findings also support the use of exercise for the unfit and highly anxious, for state and trait anxiety as well as panic disorder (Biddle, 2000; Broocks et al., 1998; Martinsen, Raglin & Hoffart, 1998; Petruzello, Landers, Hatfield, Kubitz & Salazar, 1991).

Hypothesised mechanisms for these findings include endorphin, neurotransmitter and thermogenic effects (Chaouloff, 1997; Dishman, 1997; Hoffman, 1997; Koltyn, 1997). The findings suggest exercise activates physiological systems in the body that influence changes in thinking, feeling and behaviour. However the specific relationship of these systems to psychological responses remains unclear. At best a 'feel good' concept is described but not explicated. For example, Biddle and Mutrie (2001) suggest these physiological mechanisms work synergistically to form a

'gestalt' effect that produces the psychological benefits reported. Unraveling the step-by-step processes involved remains the focus of current quantitative research.

These studies provide insight into the psychological effects of exercising. In its study of movement and its relationship with beliefs and emotions exercise psychology also investigates behavioural dynamics. Psychological models of behaviour aim to expand the exercise knowledge base by providing insight into its adoption and maintenance. These models have been used as the basis for intervention strategies designed to activate an increasingly sedentary population (Buckworth & Dishman, 2002). Bandura's (1977) model of self-efficacy is the most popular and along with self-determination theory (Deci & Ryan, 1985) uses a common self-referencing variable. Skinner's (1953) operant conditioning model along with an integrative model, the transtheoretical model (Prochaska & Di Clemente, 1983; Prochaska & Velicer, 1997) has also provided insight into behavioral change. The problem with applying these models is that they were designed for other behaviour and their applicability to exercise behaviour is still largely unknown (Lox, Martin & Petruzzello, 2003).

Longitudinal studies aim at uncovering population based determinants of exercising adherence. Reviews of these studies (Biddle, 1999; Lox, Martin & Petruzzello, 2003)) highlight associations with age, income, education, and gender. Exercise decreases with age, while males, the more educated and those earning lower incomes are more likely to exercise. Another way to uncover what determines exercising behaviour is to explore personality schemas or constructs that might influence it. Concepts like self-efficacy, autonomy and competence have been borrowed from behavioural research and applied in models like Costa and McCrae's (1992) personality inventory. Like longitudinal research this avenue of inquiry has found no specific exercising profile but has noted the influence of concepts like self-esteem, autonomy and independence on behaviour (Marcus, Bock, Pinto, Napolitano & Clark, 2002).

McDermott's (2000) use of a physicality construct combines quantitative and qualitative inquiry techniques. She found body perception to be an important factor in the exercising experiences of a group of women. Using one on one interviews she

compared eight women's verbalised experiences against her theoretical construct to determine its validity. This was an attempt to understand ". . . whether and how people are defined through their physical experiences of the body" (p. 334), by ". . .get[ting] down and dirty with the body on the level of its practices" (Bordo, 1997, p. 183). One problem with this type of approach is the artificiality of fitting qualitative experiences into pre-imposed hypothetical constructions. This raises concerns about construct validity and more importantly the possibility of the devaluation of participant's conceptions of their experiences.

Morgan (2001) notes the advances in understandings about the health benefits of exercise. Yet despite knowing how good exercising can be for us little definitive data has been produced to answer why so few of us do it. This problem is not new and has plagued humanity for centuries.

> If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health. (Hippocrates, 460-377 BC.)

Hippocrates would not be pleased to know that both dose-response and adherence understandings remain uncertain. Morgan (2001) suggests this is because we have been looking in the wrong place. He agrees with Bordo (1997) and suggests a shift of emphasis from principles of behaviour derived from groups (the nomothetic knowledge model) to the individual (idiographic).

> It seems to me that we need to begin thinking about exercise . . . in a very different sort of way. In short, our traditional approaches have not been effective, and we need to consider a paradigm shift. (p. 371)

He goes on to suggest that what is needed is a focus on the purpose and meaning of exercise.

In agreeing with Morgan, Stathi, Fox and McKenna (2002) suggest the key element of exercise is the lived experiences of the exercisers themselves. Focusing on the individual has produced a range of findings. Nies, Vollman and Cook (1999) identified facilitators and barriers to exercise while Henderson and Ainsworth (2000)

highlighted the role of social networks in exercise behaviour. Gender and stereotyping (Flintoff & Scraton, 2001; Kluge, 2002) have been found to have implications for exercising women in particular. Mastery, coping and well-being are also important aspects of exercising (Hed, 1997; Stathi, Fox & McKenna, 2002).

These findings support the quantitative research that highlights the physical, emotional, mental and social effects of exercising. Stathi, Fox and McKenna (2002) found physical activity influenced physical, mental and social well-being. Hed (1997) found psychological benefits of mastery, mood enhancement, cognitive functioning and rejuvenation and explains these effects by using a serotonin based, neurotransmitter theory. O'Brien and Congar (1991) found men derived greater satisfaction than women when exercising while women exercised primarily for sociability reasons. Henderson and Ainsworth (2000) also found that African American women focused on family and community relationships rather than their own identities when planning exercise.

These qualitative studies have also begun to describe some of the processes at work that underlie the more specific benefits or effects of exercising. Lang and Jessen (2000) took life histories of eight 58-72 year old women and using a grounded theory approach deduced key aspects of their exercising. These included perceptions of being physically active and its benefits as well as viewing few barriers to their activities. Kluge (2002) found fifteen 65-year-old women who held similar self-concepts and were particularly good at improvising exercise activity. Levy (2002) found perceived confidence an important theme along with self-fulfillment and self-control in the exercising of nine female mountain-bikers. McDermott (2000) suggests exercising helps develop physical competence that is itself an important part of identity formation for young females.

A consistent theme that arises from these studies is the enjoyment individuals experience from moving. Diener, Eunkook, Lucas and Smith (1999) found this joy was discovered in early age and retained throughout a lifetime of exercising despite barriers like ageism, loss of partners, loss of mobility and flexibility. The taking seriously of personal themes like joy places the individual at the centre of the exercising experience. The situated person of qualitative inquiry replaces the

theoretically dissected individual of traditional scientific investigation. In this way recognition is given to the influence of the individual on exercise and not just the influence of exercise on the individual. Exercise viewed this way can also be seen from within the context of human decision-making with all its ambiguities.

This Project

This project is interested in long-term exercisers; that hard core type who have exercised all of their lives and who continue to do so even as they age. By involving both genders with a spread of middle to older ages this research aims to access the motivations behind their long-term commitment, the associated problems and benefits and reveal any longevity insights. This research seeks to add these co-researchers' unique stories to the current store of exercise insights by asking why they exercise all of their life? It is hoped this project will add to understandings about long-term exercise specifically by including historically relevant gender specific perspectives and contrasting findings with the benefit and theme work already accomplished within the body of exercise knowledge to date.

To do this I as the researcher accept the reality of the gap between myself and the co-researchers and embrace it by adopting an interpretive stance to represent their accounts of their experiences. Adopting an interpretive understanding involves collecting co-researcher's accounts or 'thick descriptions' (Geertz, 1973), in one to one interviews and then ascertaining the meanings expressed in them. This approach is like any other research effort, a way of seeing the world and our place in it (Guba & Lincoln, 1994). Explicating these meanings is not only important to the co-researchers themselves but through, associated explanatory frameworks, to us all. This research conceptualises exercise from an interpretive perspective and presumes findings will elaborate existing knowledge through insights gained into the subjective processes of this meaning making.

Summary

The development of exercise research has a long, and more recently, contentious history. The quest to explain and investigate human movement has entered a new and

sophisticated realm. This project can be situated within the sub-discipline of exercise psychology but remains informed by biology, psychology and motor behaviour as well as retaining links to a number of other sub-disciplines of sport and exercise. Positivist models of investigation use rationalist and empiricist methodologies based on presumptions about cognitive schemas and physical systems to objectify exercise. Although these studies have produced a great deal of information about exercising outcomes uncertainty remains about their underlying causes.

Interpretative models of investigation utilise the way individuals experience and make sense of their lives in an attempt to better understand exercise and its place in their lives. These studies have confirmed many of the quantitative research findings as well as produced new insights into adherence and longevity. This turn to subjectivity is a new and important way of understanding adherence in exercise. In taking personalised definitions of exercise seriously this project presumes that its findings will be useful in furthering understanding about exercise. The interpretive nature of this inquiry also underlines the acknowledged separation between co-researcher and researcher. This interpretation is seen as valuable but remains only one way of viewing the world and the co-researcher's experiences of it.

CHAPTER TWO. The Hermeneutic Perspective

> By accepting the evolving, highly contingent reality of . . . psychological phenomena, hermeneutically inclined psychologists are able to refer to a dynamic, yet not too ephemeral context of meanings and understandings within which to ground their interpretations. (Martin & Sugarman, 2001, p. 205)

Hermeneutics is the philosophy that underpins this project. It is a way of viewing the world, human existence and how we come to know and understand such things. This chapter outlines the ideas and presumptions behind this perspective by tracing its history and key contributors. It also explains the reasoning behind adopting a hermeneutic perspective for this research.

History

The ancient discipline of hermeneutics (Palmer, 1969) used literary techniques to unravel messages of God presumed to be conveyed within religious texts. Based on the Greek word, Hermes, meaning messenger of the gods, it has come to encapsulate a philosophical and psychological understanding of human being, knowing and understanding. This modern conception can be traced back to the late nineteenth and early twentieth centuries. Existentialists like Nietzche and Kierkegaard, historians like Schleiermacher and Dilthey and phenomenologists like Husserl, Heidegger and Gadamer all contributed to conceptualising human science differently than was popularised in the Cartesian model of dualism.

Prior to this dualism debate hermeneutics had become generalised to any written text and, in Schleiermacher's and Dilthey's work, was applied to human experience. Wilhelm Dilthey's ideas (1894, 1927 /1977) challenged the concept of a mind/body separation by proposing a human reality that comes about through reference to a barely acknowledged 'background' of presuppositions and practices that make up our lived experience (Martin & Sugarman, 2001). Developing this background Heidegger (1927/1962) married Husserl's (1970) pure phenomenology with existential thought to produce an existential phenomenology that situated human consciousness within personalised worlds (Hein & Austin, 2001).

Heidegger (1927/1962), like Husserl, believed conscious experience was a phenomenon that could be studied. He proposed a practical or ready-to-hand mode of human awareness as the essence of human experience and in which all understanding is rooted. He suggests this mode of engagement is practical activity, where we are engaged in some action, habit, task or practical involvement. Because this mode of doing engages the individual's awareness completely the experience ". . .cannot be grasped theoretically . . ." (p. 99), either by the 'doing' person who is too engrossed in it or by anyone else who is necessarily outside of it.

For Heidegger hermeneutics is the appropriate perspective to adopt when trying to explore and explain such essential experiences and behaviour. As Packer (1985) notes, "What is unique to hermeneutics is the character that practical action is taken to have . . . . it is semantic or textual . . ." (p. 1086). The meanings of practical action are explicated by reference to its purpose and are characterised by its uniqueness to the individual as well as its sensitivity to context. This holistic characteristic draws on the background theme again where human action is understood within a background of physical, personal and socio-cultural practices (Packer, 1985).

Gadamer (1960/1975) refined hermeneutics further by elucidating this background concept into an understanding of how we come to understand. His concept of horizon fusion meshes past experience with present reflection and interpretation to explain how we advance human understanding (Martin & Sugarman, 2001). Putting it another way, Gubrium and Holstein (2000) use the term 'typifications' to describe the ". . . delimited number of shared constructs . . ." (p. 489) that we use to organise, give meaning to and shape our lives.

Assumptions

Hermeneutic philosophy can be seen as part of Kvale's (1992) linguistic awakening within science. Subjectivity becomes a way to access a lived reality as opposed to the observed fiction of the scientific bystander. (Schutz, 1964). However Gallagher (1992) cautions that this lived reality of the typifications and historical traditions that help shape it, is like a skin. We cannot step outside of it or shed it in any inquiry into it, whether it be our own or another's experience, because it is an integral part of who

we are. In emphasising the importance of this social or contextual immersion of human life Danziger (1997) reinforces the uniqueness of individual experience as the basic rationale of contemporary hermeneutics.

Along with individual uniqueness hermeneutics accepts the reality of life as a flux of competing influences. It also trusts in human dialogue to uncover personal truths and meanings that social constructionists refuse to acknowledge because of their perception of the fallibility of language. The hermeneutic act of making sense of what has been experienced also involves a process of negotiation. As Schwandt (2000) suggests hermeneutics involves a mutual coming to terms with, or agreement between, researcher and co-researcher. This process is dialectical and contextual whereby understanding and knowledge are negotiated and created through words that attempt to do justice to the ambiguity and complexity of their contexts. This process of negotiation produces new and unique understandings rather than the discovery of pre-existing meanings presumed to be part of such dialogues by interpretivists. In subtle ways hermeneutics can be seen to differ in its epistemological orientation from other qualitative approaches. This orientation provides implications for the way that philosophical hermeneutics views the world and the way it can be understood.

Accepting these assumptions about human being and the way we interpret and understand it implies the following. Human perception is an intrinsically interpretive act in the pursuit of understanding. This search for understanding is hermeneutic in that it seeks to make sense of human actions by uncovering the purposes they serve and the sense they make. Hermeneutics is an inquiry into human experience that emphasises the way previous understandings and biases shape the process of any interpretation and meaning made of it. So the human (and scientific) inquiry into, and search for, understanding is both a fundamental feature (ontological act) and a consequence (epistemological act) of, human experience (Kincheloe & McLaren, 2000).

Rationale

These hermeneutic assumptions about human experiencing underpin this project's goal of seeking understanding and meaning through an interpretation of the co-researchers' accounts. This is instead of adopting the objective techniques of positivism since it is intended to preserve personalised understandings of exercise and its role in people's lives (Radley, 1999). One of the problems with using a positivist perspective like the bio-medical model to explain exercise is that it fails to take account of important psychological aspects of the experience. These studies remain limited to the characteristics that the instruments used in them are able to produce. These characteristics are presumed to be representations of an individual's internal world based around certain hypothesised cognitive make-ups. However these internal representations remain just that, as well as being devoid of personal meaning.

Consequently as Levy (2002) suggests, "A gap exists in our understanding of the meaning of that experience that can only be elucidated through allowing the participant to tell her story" (p. 109). Guba and Lincoln (1994) also suggest positivism minimises individual relevance as well as excludes new possibilities arising from the inquiry process itself. In the last decade qualitative epistemologies have challenged this fundamental conception of reality, knowledge and how to access it. These epistemologies with their evolved methodologies help highlight the role of personal, social, political and cultural influences in the ". . . shaping of a historical 'reality'" (Murray & Chamberlain, 1998, p. 293).

From a hermeneutic perspective this historical reality begins in individual practical activity, which has a structure or essence that is presumed to be semantic or textual. This practical human action is foremost an experiential phenomenon that is accessible only through reflective, second hand accounts. The act of making sense of or understanding these 'experiences' is an interpretive one and remains a fundamental feature of our existence. The meaning behind our own human actions takes shape through reference to past experiences and the typifications that guide our interpretations of them. As we fuse this past with the present these meanings provide

new ways of understanding ourselves and, in the process, new ways of being (Schwandt, 2000).

Another key element of the hermeneutic perspective is its implications for the researcher. To comprehend the experience that is being inquired into here I, as the researcher, need to be a long-term exerciser myself. This is necessary so that I can draw on my own first-hand experiences when reflecting on, and negotiating with, the co-researchers on an understanding of long-term exercising. Quantitative approaches disqualify such a stance and as Packer (1985) suggests, in the process, ". . . remove[s] the conditions for genuine comprehension of the phenomena being studied" (p. 1087).

This genuine comprehension is centred around my own and the co-researchers' practical understandings of the phenomenon because they contain the influences, routines and taken for granted practices that make up the background through which our exercising takes shape and produces meaning. Most importantly, a hermeneutic approach fosters each participant's voice and gives each the chance to define the meaning of long-term exercising in their own words and from within their own worlds. Co-researcher and researcher accounts are blended together to produce a negotiated, situated, experientially based understanding of the sensibleness of exercise.

Summary

Contemporary hermeneutics is an important epistemological foundation for qualitative research and is founded on a richly diverse past. It assumes, as Geertz (1973) did, that understanding is interpretation all the way down. It assumes practical activity as the source of human experience and is accessible through the individualised purposes and meanings it serves. Human experience is defined and intertwined within a background of practices, habits and influences that facilitate and make up our lives. Knowledge and understanding is derived from the interplay between this background and on-going practical actions. It originates in individual awareness and finds expression in dialogue and social interaction.

A hermeneutic approach is used here to inform an attempt to interpret or make sense of the subjective meanings of co-researchers' exercising. Unlike the majority of exercise research to date this project values what the exercisers themselves make of their experiences and prefers to give expression to their conceptions of it. Hermeneutics acknowledges these subjective meanings as co-researcher reconstructions and emphasises the contextual, dialectical and unique nature of them. Adopting such a perspective helps to safeguard the complexity and uniqueness of these exercising experiences and assists in a more accurate interpretation of it. The result is a negotiated understanding or interpretation of their significance and the provision of insight into life long exercising.

CHAPTER THREE. Grounded Theory

> . . . grounded theory, rather than a tidy process, is as messy as preparing a gourmet meal, where all the parts need to come together at the end. (Keddy, Sims & Stern, 1996, p. 450)

Grounded theory is a qualitative research methodology most popular in nursing research but becoming more widely used in psychology. It provides a method of systematically developing theory from data without hypothesising or using predefined constructs. This chapter will provide a brief overview of its history and its usefulness for qualitative research as well as point out its relevance for this project. Coding and analytical procedures will be introduced and will help describe how grounded theory combines both inductive and deductive thought.

History

Grounded theory was founded by Glaser and Strauss (1967) and was part of a sociological move in America away from positivistic research (Costain Schou & Hewison, 1998). Strauss and Glaser's (1975) study of chronic illness led the way for their method to be adopted within the health field. Unlike other quantitative models it was a way of accessing social and psychological experiences of health. What also set it apart was, and is, the way it views theory building as a process and not a product. The Glaser and Strauss grounded theory model was their way of addressing what they perceived as a lack of empirical relevance in much of the theory testing of their era. It was also a model that incorporated Glaser's quantitative research background with Strauss's social psychology interests. What resulted was a rigorous system of strategies and procedures designed to analyse individualised expressions of empirical data.

Pidgeon (1996) suggests grounded theory grew out of the socially immersed understandings of human experience embodied in symbolic interactionism. Strauss's background included working at the home of this movement, the Chicago school of social psychology and sociology. Pidgeon (1996) also identifies earlier influences of Dilthey, interpretive phenomenology and the psychology of the 1950's and 1960's. Thompson (1990) argues for the influence of hermeneutic thought on grounded

theory by suggesting symbolic interactionism arose out of the original hermeneutic protest against positivism. Denzin (1988) goes as far to say, "Heidegger's notion of being in the world has lurked like a shadow within symbolic interactionist thought . . . [which] cries out for a set of terms that will accurately reflect its experiences in the world" (p. 46). That set of terms could be argued to be grounded theory.

Since the inception of grounded theory, debate has raged both within and without. The founders have disagreed on its core elements, postmodernists challenge its underpinnings and methodology while others like Charmaz (2000) adapt it to a completely different epistemology. While highlighting the realist and positivist views of its founders Charmaz (2000) reminds us that Glaser and Strauss were revolutionists because they confronted, " . . . arbitrary divisions between theory and research . . . beliefs that qualitative methods are impressionistic and unsystematic . . . assumptions that qualitative research could produce only descriptive case studies . . ." (p. 511). Grounded theory's usefulness for this project lies in its ability to provide rigorous guidelines whilst being adaptable to a subjective perspective. This adaptability is seen by Annells (1996) as a crucial part of its development since its emergence in modernist times and along with Strauss and Corbin (1994) and Chamberlain (1999) support its use across paradigms of inquiry.

Health and clinical psychology are two areas of inquiry in which grounded theory has been used to explicate new understandings of the human body (Lyons, 1999). Concepts like identity, health, well being and fitness take on new meanings as ways of explaining the embodying of social, historical, material, cultural and biological processes and influences. Lyons (1999) suggests adapting grounded theory has allowed ". . . theory to be developed about the body as the site of meaningful experience" (p. 246).This theorising enables explanatory frameworks to include, and take seriously, the influence of psychological and social phenomenon on human experience within a bio-medically dominated culture of understanding.

Rationale

Denzin (1988) suggests by deriving theory directly from data grounded theory reflects a hermeneutic view of the world. Consistent with this view this project uses

grounded theory to expound a hermeneutic understanding of co-researchers' exercising experiences. In being generative and grounded, grounded theory uses co-researcher accounts to expound theory that genuinely reflects its origins. These fundamentals are compatible with the hermeneutical concern with the holistic, dialectical and unique nature of experience. As a researcher using grounded theory I am able to systematically work my way through each co-researcher account and to situate any understanding gained against the background of co-researchers' and my own lived experiences of exercising.

The semi-structured, one on one, tape-recorded interview method starts this process by taking seriously the co-researchers' reflections on their exercising. Coding activities then enable me as researcher to label lines or blocks of data to refine and eventually conceptualise their meanings. It also confirms the authenticity of subjective interpretations and through constantly comparing co-researchers' experiences acknowledges their similarities and differences. Through my following up or theoretical sampling of areas of interest the nuances of these experiences can also emerge. Diary entries of my own thoughts and ideas before, during and after my actual coding activities draw me personally and intimately into both the exercise experience as well as the research endeavour. In so doing this form of memo writing commits me to integrating co-researcher accounts with my own. The fusion of accounts stimulates further knowledge creation requiring co-researcher feedback and leads into the production of a public text that, in turn, requires reader authentication. As Henwood (1996) comments,

> The aim . . . becomes the production of a meaningful account that knits together the multiplicities, variations and complexities of participant's worlds – seeking . . . intersubjective meaning or Verstehen. (p. 35)

In these ways grounded theory can do justice to a hermeneutic perspective of exercising. Grounded theory does not impose any prior theorising or hypothesised constraints onto our experiences of exercising. Instead it produces theory that has to be justified in its fit with, or grounded-ness in, the personalised accounts that it represents. It provides a method of systematically processing these reflections in a way that allows for making sense of a human phenomenon that is complex and deeply personal. As Glaser and Strauss (1967) first proposed, it allows immersion

into co-researcher anecdotes. By creating ways to organise and interpret this data it also provides for a way out of it. The procedures and processes of grounded theory safeguard me, as researcher, from the unconscious adoption of co-researcher ideas as well as immobilisation through data overload (Charmaz, 2000).

A criticism of grounded theory is the privileged positioning of the researcher as the research instrument. As postmodernists suggest this positioning allows me, as researcher, to determine the shape and outcome of the inquiry. This starts with my framing of the research question, why do some people exercise all of their lives? This leads into my sampling practices and includes the interview questions I use to unravel the answers to this question. It also involves my particular coding style and emphases and the particular conceptualisations I arrive at. As the criticism implies my positioning distorts co-researcher accounts. However a hermeneutic grounded theory accepts these limitations and engages them by presuming and adopting an interactive stance. Even though I work with and conceptualise the data, this is done within a framework where together, each co-researcher and I, determine the interaction we have and together convey meaning to it (Charmaz, 2000). Charmaz goes on to suggest that in this way grounded theory can further, ". . . knowledge of subjective experience and to expand its representation while neither remaining external from it nor accepting objectivist assumptions and procedures" (p. 521).

An important process in this interaction is theoretical sensitivity. This refers to my ability as researcher to understand the phenomenon being inquired into. It requires me to be a long-term exerciser so as to better understand many of the long-term manifestations, ambiguities and implications. It is this first hand experience, the Heideggerian 'ready-to-hand' mode of experience that enables me to relate credibly with co-researchers as well as meaningfully integrate my own experience with theirs. Theoretical sensitivity facilitates access to the motivations underpinning long term exercising as well as assists in the negotiation of their significance. It remains a crucial aspect of grounded theory and this project in its contribution to the making sense of long-term exercising.

Procedures

Potter (1998) suggests grounded theory is not really a theory but more a way of theorising about data resulting from individually shared experiences. He also suggests it seeks patterns, not in numbers but in ideas and concepts that can be authentically interpreted from these experiences. It does this by using coding and refining techniques to sift out and identify data into over-riding themes and concepts leading to one or several core categories that succinctly and emphatically summarises the accounts of the underlying experience.

This project used a three stage coding process and three key analytical processes. Open or initial coding identified actions of the co-researchers through an examination of each line of transcript and summarised a physical, emotional, mental or behavioural response deemed significant. This line-by-line coding, suggests Charmaz (2000), ". . . helps us to remain attuned to our subjects' view of their realities, rather than assume that we share the same views . . . . sharpens our use of sensitising concepts . . . [that] offer ways of seeing, organising, and understanding experience" (p. 515). The labels or concepts generated used my own or co-researcher (in-vivo) words. Two examples of these labels, "elation" (co-researcher B, p. 5) and "flogging my body" (co-researcher B, p. 5; co-researcher J, p. 5) were both in-vivo terms. This labelling process led into the creation of sub-categories and categories that classify this level of data.

In the second phase axial coding identified how these sub-categories and categories were related by exploring the properties and dimensions of each. In this way labels or groups of labels became visible within a network of sub-categories that are linked together by a specific category. An example of this is the situating of "elation" as a dimension (high) of a property (intensity) of the sub-category emotional outcome. So elation then is not just an emotion it is a particular type of emotion with a specific property and dimension, i.e. it is a highly intense emotion. "Flogging my body" is sub-categorised as a physical outcome that involves a high (dimension) level of impact or intensity (property). These subcategories can then be seen under the umbrella category 'outcomes' which is a researcher concept that sums up and classifies the range of co-researcher responses to exercise.

The final coding process used was selective coding, where sub-categories and categories are compared and related, to produce an integration and refinement of them all. An overriding theme or core category emerges from this process that pervades all levels of coding and co-researcher accounts and draws them succinctly together. This core concept helped to make sense of the categories that were used to draw together the outcomes, influences and processes involved in long term exercising. It could also be traced back to the early labels used in the initial line-by-line coding work.

All these different levels of coding necessitate comparison work. This meant comparing individual accounts of exercising across their lifetime, comparing different co-researcher experiences, comparing incidents and actions, comparing data with concepts, subcategories and categories as well as concept with concept, subcategory with subcategory and category with category. All of this so that the terms used 'fit' the data (Glaser & Strauss, 1967). As Pidgeon and Henwood (1996) state,

> The active 'flip-flop' between the data and the researcher's developing conceptualisations demands a dynamic process of changing, rechanging and adjustment of the terms used until the fit can be improved. (p. 92)

Memo writing is another important analytical tool whereby I was able to link my analytic interpretations with the transcribed data. This helped me to keep a track of various conceptual developments and to clarify emerging themes and where they fitted. It involved writing down and recording the various types of analysis that I used. It included code notes (Appendix E (i)) that described the labels and concepts I produced from line-by-line examination as well as the subcategories and categories and the definitions and dimensions of these. Theoretical notes (Appendix E (ii)) described the thoughts and ideas I found relevant to the analysis process. Operational notes (Appendix E (iv)) were more directional in nature and included relevant definitions, quotes and outlines related to doing grounded theory work. Additional memos (Appendix E (iii)) also included historical accounts of my own exercising and my reactions to these.

These memos, as well as the hand written transcripts and note taking relevant to the theoretical and methodology section of this work, were all recorded in an A4 1DTP diary. This diary was used instead of the normal card system and coding entries were cross-referenced using a co-researcher identifier initial and transcript page number. The use of this diary was to ensure easy and ready access to all relevant information informing the process and helped maintain closeness to the data and the conceptualisations that arose from it. It also stands as a public record of the analytical processes and procedures used by myself. Consistent with the ethical undertakings of the project co-researcher anonymity is maintained in the information included and entered into the diary.

The third analytic process I used was theoretical sampling. This involves taking key ideas from one co-researcher and focusing on them with other co-researchers to develop their significance. In this way theory is refined as the researcher moves from early to later interviews. Throughout the initial interviews I felt it appropriate to explore the historical or life span aspect of exercising. This necessitated asking the same questions of each co-researcher to help provide a historical match across them all. So rather than refine and change my questions, usually the norm, I deliberately sampled for a life span focus by maintaining continuity in my questioning. I did this because the focus of this project is on the long-term nature of exercise and the revelation of aspects of this nature. However I did use the second, follow-up interview to ask each co-researcher about unique aspects of their exercising to ascertain their wider relevance.

Summary

Grounded theory was devised by Barney Glaser and Anselm Strauss and developed from the theory of symbolic interaction. Originally conceived it was based on 'a real world out there' ontology and a positivist epistemology. In recent times it has become a popular qualitative methodology due to its adaptability and fundamentally subjective orientation. It is particularly compatible with a hermeneutic philosophy of human experience and provides a structured set of procedures and processes to enable inquiry into it.

This project used three coding procedures, open, axial and selective, and incorporated three analytic processes as well. These were the use of constant comparison, memo writing and theoretical sampling. These procedures and processes provided a structure to enable me, as the researcher, to get close enough to the data to produce an authentic account of it without becoming overwhelmed or overly immersed in it. Theoretical sensitivity is an important facilitating tool for accessing motivations for long-term exercising as well as negotiating their significance. In these ways this hermeneutic grounded theory attempts to do justice to co-researcher exercising experiences by valuing and making sense of their descriptions of it.

CHAPTER FOUR. Method

> . . . grounded theorists explicitly shape the materials they gather. Learning to shape the materials well from the start provides the basis for later coding and categorising. Further, interviewing works well . . . [where] the researcher often wants to obtain detailed individual chronicles. (Charmaz, 1990, p. 1167)

This chapter will outline the key elements of the method used to gather co-researcher data. These elements include ethical requirements and safeguards, researcher activities, co-researchers and description of the interviewing processes used for data collection. As this chapter completes section one of the thesis an overview of this section is included. It summarises the research question and how the project goes about answering it.

Ethics

The ethics process began with a proposal to the Massey University Human Ethics committee in February 2003 and was acknowledged on 13 March 2003 with approval to proceed with the project. Eight co-researchers were selected by the researcher and were recruited in a face to face meeting where they were informed about the project, supplied with the information sheet (Appendix A) and invited to participate. Each was given time to consider and weigh up their participation but all eight chose to be a co-researcher immediately. A time was then agreed to meet and complete an audio taped interview, prior to which they would sign a consent form (Appendix B) and view the questions (Appendix C) that would be asked of them.

The co-researchers were also advised that a follow-up interview would enable them to confirm the accuracy of transcripts made of their initial audio taped interview. This would include them having the opportunity to read through the full transcript of the interview and then correct or comment on it. This follow-up interview would also be audio taped. As part of the preliminaries to beginning the first audio taped interview each co-researcher was given the opportunity to read the information sheet again to confirm their rights and to facilitate any questions they might have. Completion of the consent form and reading the initial interview format (Appendix

C) provided co-researchers with another opportunity to confirm their comfort with being audio taped and questioned as planned.

Co-researcher anonymity was discussed at both the recruitment meeting and the subsequent initial interview. They were advised that no identifying information would be included in any transcripts and only the researcher would know each person's identity. As part of this anonymity co-researchers agreed to be identified by initial only. They were also informed that transcripts and consent forms would be held for up to a period of five years by the project supervisor, Dr. Mandy Morgan, and safeguarded against inappropriate access. Audiotapes would be returned to the co-researchers once the research had been completed. As part of the completion process co-researchers were advised of a third, feedback interview that would seek their verification of any research findings. This would not be audio taped but would involve some note taking by the researcher.

Researcher

In grounded theory the researcher is the research instrument and is important to sampling, ethics and the determining of the research process and outcomes. This research is dependant on my credibility, competence, sensitivity and reflexivity. My credibility in the eyes of the co-researchers is crucial in facilitating the 'thick descriptions' (Geertz, 1973) necessary to make the research endeavour worthwhile. This was enhanced through my being a long-term exerciser and having a shared exercising interest with each co-researcher. Meeting at the co-researcher's choice of venue (which in all but one case was the co-researcher's home) was a further attempt to facilitate this credibility through helping to ease any co-researcher discomfort with the interview format.

Competence through technical understanding and application of the grounded theory procedures is also important to making sense of the large amount of raw data produced. Competence was maintained through regular supervision sessions where procedural matters were clarified and feedback on ideas sought. Sensitivity is also needed to ask the right sorts of questions and develop appropriate theory to ensure a meaningful account of co-researcher experience. A hermeneutical understanding of

the research topic along with its personal significance to the researcher enhanced this sensitivity.

Researcher reflexivity is also a critical element in ensuring a close-ness to the data whilst maintaining an awareness of both my own, and co-researcher, biases to enable a sufficiently developed and productive account to be made. Keeping a hand written, yearlong diary helped to maintain this reflexivity. It included hand written transcriptions of the data, memo writing, quotations and various drafts of different sections of the research process. It also became a way for me to gather my thoughts together in one place as well as allowed almost instantaneous cross-referencing. Like all diaries it allowed for personal reflection and my own historical story telling.

Co-researchers

Sampling was very selective to ensure mutual understanding based on an insider perspective of exercising. Because I am a runner, runners were targeted out of a group of possible known candidates from a range of sports and pursuits within the Wanganui region. A tramper was also included to provide an element of negative case sampling. Selection criteria included each co-researcher knowing me well and being a long-term exerciser. An age range between mid-forties and sixty-plus was targeted along with an equal gender ratio. This was to ensure data included perspectives from both men and women, something that is lacking in previous qualitative studies that have an emphasis on women. The age spread helped to ensure information on longevity would also be included in the data collected.

The selectivity in sampling produced eight European co-researchers, one born in England, one in Ireland and the rest in New Zealand. All had lived in New Zealand for at least forty years and were representative of the ethnic predominance of Europeans in New Zealand athletics. Included in the eight co-researchers were two married couples, a widower, a teacher, a builder, a sign-writer, a receptionist, a fitness consultant and three retirees. These occupations indicate a fairly homogenous, middle socio-economic grouping. Two of the women were in their forties and two in their sixties while two of the men were in their fifties and two in their sixties.

Data Collection

Interviewing was used as a way to access accounts of exercising. The ability to generate rich data to a large extent depended on asking co-researchers the right questions at the right time. With these concerns in mind a semi-structured questioning format (Appendix C) was used based on Charmaz's (1990) recommendations. This involved starting with closed questions seeking factual answers and led on to questions designed to elicit historical experiences of exercising. More reflective questioning designed to elicit more personal descriptions followed and lead to more meaning-oriented feeling questions. Finally co-researchers were asked to reflect back on their overall experiences so that they could close on a positive note.

The advantage of using such a format is that it facilitates co-researchers to reconstruct exercising experiences that are only minimally influenced by the researcher (Mishler, 1986). This format was followed in accessing past, present and future exercising experiences. Although all co-researchers were asked the same questions in the same order the specifics of the 'What does it involve' question, i.e. the how, when, where, who and so on, was omitted after the first co-researcher interview as it accentuated factual information too much prior to the feeling and reflective questions. Prompts like 'tell me more' and 'what do you mean by . . .' along with self-disclosures of my own experiences were used to facilitate co-researcher disclosure. At the end of each interview the co-researcher was asked for feedback and in three instances the audiotape was turned on again so they could add further insights. In these ways the structure of the questioning schedule was offset by the flexibility of conversational dialogue to produce a more relaxed, semi-structured interview format.

The advantages of this method of data collection include efficiency, consistency, and flexibility and as already mentioned accessibility and minimal influence. It provides access to large amounts of data quickly and systematically. It also focuses areas of interest while containing overall disclosures within manageable boundaries. Applying the format consistently to each co-researcher allows comparisons of

similarities and differences and analysis of any underlying themes. This process also allows for flexibility and the freedom to follow up on interesting diversions.
One on one interviews were conducted at each co-researcher's home with one exception where a co-researcher chose to meet at my home. All initial interviews followed the interview and questioning format (Appendix C). Follow-up interviews took place once transcripts had been completed and the average time between interviews varied between ten and twelve weeks.

The initial and follow-up interviews were audio taped and transcribed verbatim. Transcriptions included pauses, researcher and co-researcher words, punctuation by the researcher and acknowledgement of emotion (e.g. laughter, tears). The first interview was transcribed in two phases, firstly by hand into my research diary then word processed into stand-alone copies. The second interview was word processed only and added to the previous stand-alone copies. All transcribing was by the researcher and apart from some grammar, punctuation and spelling alterations there was only one correction made by a co-researcher to a transcript. This was included in the follow-up transcript and was a reinterpretation of a phrase he had used. Each co-researcher was assured that grammar, spelling and punctuation mistakes are common in verbatim transcripts and that the process picks up discrepancies between written and spoken language.

A week before the second or follow up interview a typed copy of their interview transcript was provided to each co-researcher to assist them in providing feedback on it. The follow up interview was audio taped and involved the researcher asking two questions, 'what do you think of the transcript?' and 'is there anything else you want to add?' Co-researchers were also asked for their feedback on two themes identified by me from their initial transcripts. Themes differed among co-researchers and included teamwork, freedom, being disciplined, childhood experiences and life satisfaction. This feedback provided a form of theoretical sampling to help further identify key themes involved in exercising longevity. Initial audio taped interviews lasted up to one hour while follow up interviews lasted up to twenty minutes.

The third and final interview, which sought co-researcher feedback to the grounded theory produced, differed from the others in that it was not audio taped and included

meeting with married couples together. The format for this interview was a brief presentation of the research findings followed by an invitation to the co-researchers to ask any questions and to comment. Prior to this meeting a copy of a summary of the grounded theory (see Appendix D) was supplied to each co-researcher. These interviews took place approximately five months after the second audio taped interview and lasted up to thirty minutes. At this final interview audiotapes were returned to each co-researcher.

Summary

Ethical considerations included gaining approval from MUHEC and meeting specific co-researcher requirements. These included providing an information sheet, producing signed consent forms, clarification of the research conditions and processes and co-researcher rights before, during and after it. Confidentiality was achieved through initial only identification and the lack of any other identifying information in the research data. The researcher's credibility, competence, sensitivity and reflexivity were important elements of the research process. The four women and four men co-researchers were well known to the researcher and were all life long exercisers. They were European, middle class, aged between forty-five and sixty-five and resided in Wanganui.

Data collection was gained through semi-structured interviews that emphasised a consistent but flexible questioning format. This format was used to elicit rich descriptions of exercising experiences whilst reducing researcher discomfort in doing so. There were four meetings with each co-researcher, a recruitment meeting, an initial or first audio taped interview, a follow-up or second audio taped interview and a final feedback interview. The researcher transcribed the audio taped interviews verbatim. The interview format was chosen because it was efficient, flexible and provided appropriate access to co-researcher reflections.

Overview of Section One

> In spite of the variety of perspectives and methods, there still remains a desire for rigour in qualitative research . . . . rigour not based on operationalisation of variables, strict experimental control, or statistical analyses but upon both theoretical and methodological clarity. (Murray & Chamberlain, 1998, p. 13)

Section one was an attempt to produce the rigour described by Murray and Chamberlain. It should have made clear the nature of the research question 'why do these co-researchers exercise all their lives?' It should also have made clear how this project goes about answering it through accessing the purpose of their exercising and negotiating the significance of this. As Annells (1996) suggests, the research question ". . . arises from the researcher's notions about the nature of reality, the relationship between the knower and what can be known, and how best to discover [it] . . ." (p. 379).

Adopted here is a nature of reality that is open to individual interpretation and is therefore, changeable. This understanding of reality accepts there is no one reality rather a multiplicity of realities. Reality and truth are negotiated through individual daily life and actions and involves the interpretation of these. This interpretation process assumes knowledge originates from individual awareness and behaviour and takes shape through personalised mental creations of meaning and purpose that impregnate these everyday experiences and actions. These realities are dialectical, contextualised, unique and self-generated. They are therefore not directly accessible to anybody other than the subject of these actions and experiences.

However as Annells (1996) also suggests, any method chosen " . . . can be viewed as also arising from the basic philosophical beliefs about inquiry as held by the researcher" (p. 379). The philosophy adopted here incorporates a hermeneutic grounded theory research design that acknowledges the ambiguity of the research process and the complexities surrounding it (Lowenberg, 1993). This grounded theory attempts to incorporate history and language (Heidegger, 1927/1962) with a rigorous set of guidelines to access and ultimately negotiate the meanings and purposes behind one aspect of eight co-researcher realities, their exercising. This project seeks an inter-subjective understanding or 'verstehen' (Henwood, 1996) of

long term exercising which is understood as one version of reality, one 'take' on this unique adherence experience from within a particular place and time.

CHAPTER FIVE. Profiles

All of the co-researchers have unique perspectives on the exercising experience. The following profiles are a brief snap-shot of their exercising understandings across their life span. Co-researcher's words were used to clarify the role exercise has played and continues to play in their lives and the sense of its importance and purpose to them.

Co-researcher G

G found out at Intermediate school that he was good at running. He did not feel good about much else about himself. "Running, no cars, no girls, no parties, no alcohol. Just running! . . . . The village idiot . . . . Umm, which I suppose compensated for lacks or lackings as a person . . . . clinically, certifiably shy . . . . what a pathetic character I must have been in my twenties" (pp. 2 & 8).

He found by training very hard he gained success and this produced self-confidence and positive feelings. ". . . running, psychologically, it's very good for you . . . . Umm, gave me good self esteem . . . . boosted the ego up" (pp. 2 & 7).

Currently he is reduced to walking because of a recurrent knee injury and is coming to terms with an end to his running days. "It's been forced by injury . . . . It's hard realizing that there's going to be no more running or no more even moderately serious running . . ." (p. 4).

His training in earlier years involved ". . . ringing out every inch of ability . . ." (p. 2), leaving him with no desire to ". . . have to prove myself anymore . . ." (p. 5) and consequently no regrets. "I can look back and rest comfortably knowing that I didn't leave any stones unturned . . ." (p. 10).

G reports that after fifty years of running he is "Resigned to the fact that I can probably do without it" (p. 10), and looks back positively on his running experiences. "Hell yeah. If you asked me to go back and do it all again, I'd do it all again. Hell yeah" (p. 8).

Co-Researcher R.

R played rugby for nearly forty years and he got into athletics when the rugby started " . . . getting a bit hard for the old fella" (p. 1).

A major catalyst to his athletics was the Masters Games. " . . . got a couple of medals, so carried on from there" (p. 1). Through his running he has learnt about himself. " . . . it's trying to tell you . . . . my body feels better and I can, I can probably think a lot better . . . . Yeah, it relates to thinking" (pp. 3 & 4).

His experience at an outdoor adventure school helped him become more disciplined in his training and he has been surprised and satisfied by his achievements. " I got sponsored to go down to Outward Bound . . . . made me realize that I'd be a bit better at my sport if I trained a bit harder or more often . . . . the body can do a lot of things that you didn't think it could do previously . . ." (pp. 2, 3 & 5).

R's goal has been self-improvement. " . . . just to do a better time than from what I have done in previous years" (p. 3). In the process he has learned to listen to his body, " . . . just by taking note of body signals . . . . it's only a thing I've learnt over, over probably the last ten years" (p. 4), and uses this knowledge to look ahead with confidence. " . . . five years down the track, you know everything that's going to go wrong hopefully in that, you know with your body" (p. 7).

He also has no regrets when he looks back. ". . . some things I might change a bit . . . knowing a bit more now . . . . I probably would change little things, not major things . . . . it's worked out pretty well" (p. 7).

Co-Researcher L.

L has been running since her early twenties and has been involved in a variety of sports from primary school. She discovered her love of moving as a child living near the sea. "It was fun . . . walks along cliffs and around the beaches" (p. 1).

Once she got involved in running it became her passion, ". . . there's no exercise like running . . . . even when it's hurting like hell, it still feels right" (pp. 3 & 4), and identifies intimately with it being reduced to tears when explaining a period when injury prevented her from running (p. 7). When asked about a time when she may no longer be able to run she struggled to contemplate it. "Oooh, no, no I don't, don't want to think about that" (p. 8).

She sees herself as a very physical person "I love it, the tougher, the better" (p. 6), and enjoys the satisfaction of overcoming physical challenges and pain. ". . . you're enjoying the sensation that it's hurting, you know it's hard work, you know that once you get to the top you just, . . . it's done" (p. 7).

For L these physical sensations evoke emotional responses of achievement, satisfaction, exhilaration and attachment. "In all those other sports . . . I don't get the same satisfaction . . . . I love it. Absolutely love it" (pp. 4 & 7).

When looking back L admits to a life devoted to running, ". . . it's not my whole life . . . it probably used to be just about my whole life" (p. 11), the emotional struggle that has come with it, ". . . I'm slowly weaning myself out of it . . ." (p. 11), and it's meaning for her. " . . .my release . . . . I get a buzz out of it. It's me" (pp. 9 & 11).

Her only regret is that she is getting older and her body ". . . at some stage is going to say you've had enough" (p. 8). However, in her own way, she has already started to accept this. "No, I know I'll have to at some stage and . . . I'll have to go back to walking fast . . . . Yeah, so I just have to be more careful . . . so that I get the physical side from other means" (pp. 8 & 11).

Co-researcher B.

B has been exercising since she was five until recently when she took up cycling. She discovered she was good at sports at primary school and got into organized running when she was twelve. As a child and teenager, sports and running was fun but when the coaching started it became more serious. "So when we came home M took over my training. Then it started. The hard work. The dedication" (p. 2).

Through this serious and intensive training B achieved international success and discovered her body's ability to cope ". . . when you've trained your body . . . know the body will still keep going no matter what . . . . you're going to get to that finishing line . . . . you learn your body can take a lot of pain" (pp. 2 & 3).

Her running also helped her cope emotionally. "So by going for that run I could come back and I could cope. That released all that tension" (p. 3).

B admits her life revolved around running. "And I come home, have lunch, always had to have a rest for an hour, couple of hours, then it was out training again at four. So that was my life" (p. 3).

She reached the highest levels of achievement and in the process gained a range of benefits. "The enjoyment I got out of it . . . . I'm in control and have that fit feeling. . . . you're more alive . . . you've got more energy, you're not always tired . . ." (p. 6).

A side effect of this dedication and hard work is that B can no longer run. "Well, cos of injuries and joint problems and things I couldn't cope with the training any more . . ." (p. 4). She now cycles instead and also looks forward to her golf days and sees herself as always being active. ". . . I'll always try and be doing something. I don't see myself as stopping" (p. 6).

Looking back she has no regrets "Oh no, no regrets, it's been my life and so I'd do it again if I had my time over again . . ." (p. 8), and acknowledges the support she received. "I really don't think I would have got to where I was if it hadn't been him" (p. 8).

Co-Researcher J.

J was physically active from an early age. "I have always exercised. I used to walk to school and then I played sport and then I went running . . . at high school" (p. 1). She discovered the benefits of physical competence. "That's what I mean by successful. People liked people who were good at things . . . . I was coordinated and I had some skills. So I was, was successful . . . . I was good" (pp. 1 & 11).

This early physical activity was fun and socially oriented but this changed when J got to Teachers College where her skills were not so readily acknowledged. ". . . they didn't know how good I was . . . . I didn't want to play with a suck team" (p. 2).

She discovered running after marriage and this became both a source of joy and hard work " . . . I'd hardly been into running, but I loved it . . . . but I was trying to be great and I worked very, very hard at that . . ." (p. 2). The hard work led to injuries that in the end proved too much. " . . . I always ended up hobbling . . . . I was wrecking my body and I wouldn't be able to walk properly and if I couldn't walk, I would be a wreck . . ." (p. 4).

This led to a return to walking which had started as a child "Dad used to take us walking in the mountains . . . rabbit shooting . . . we walked for miles. And he took us through pain barriers . . . . And I loved it" (p. 5).

From her walking J gains a number of benefits. "I love walking . . . the peace and quiet . . . the exercise it gives me and it doesn't hurt my body . . . . the movement . . . the rhythm . . . I day dream, I think of things . . . . It's just a very nice time . . . . it is a great sense of achievement . . . it's not painful. It's so easy to do . . . I am aware of what's healthy for my body . . . . it actually helps my stomach as well" (pp. 3 & 4).

Looking back J sees herself coming full circle, from her early walking experiences to competitive running, race walking and other sports back to walking. ". . . it feels so good not to be doing it anymore. . . . I am a bit sucked into the walking but it's nothing . . . . training for a half-marathon I'd have to . . . do the hard yards . . ." (pp. 4 & 5).

This relief is tinged with the realization that ". . .the day that I can go and walk a half-marathon for fun will be the day I'm there . . ." (p. 5).

Co-researcher M

M discovered running during his late teens and early twenties while in the army. However, it was only after leaving the army did he apply the discipline learnt from

route marches toward his running. ". . . it gave me a grounding in discipline . . . . it set me off in to the . . . running field" (p. 2).

Because of work commitments M was unable to develop his own running, " . . . we worked 24 hours on duty and 24 hours off duty and it . . . . ruined my running career in a way . . ." (p. 1). He spent these earlier years coaching which led to a very successful running career for his protégé, "She never ran a really poor marathon. It was always . . . top six, internationally wherever she ran, yes" (p. 8). These achievements are a source of pride and enjoyment to M. "It gave me pleasure seeing her run so well, yes. . . . It was teamwork, yes . . . we were able to do the work together" (p. 8).

Once he got to his forties M was able to do more of his own training and sees his exercising as making him healthier, fitter and younger (p. 6). However his running led to injuries and a chronic achilles tendon problem. " . . . I used . . . to hobble home and I just thought well, when I get to sixty I'm not going to do this anymore . . . . I'd cycled . . . and it just changed my sporting activities into another field" (p. 2).

M sees himself fully committed to exercise ". . . I wouldn't say I'm addicted to exercise . . . but I'm pretty close. It's not just playing at it if you want to . . . . get some sort of performance out of it" (p. 4). This dedicated attitude has also brought regret and disappointment "I feel disappointed . . . . I've learnt what I know now at too late an age to put it into operation . . . . I would have been an international runner or an international cyclist" (p. 5).

He gains numerous benefits from his cycling, "It's rewarding, it burns calories, it controls weight and it's enjoyable . . . . It's calmed me down. I'm a much calmer person that I used to be" (p. 5), and sees it as part of his future. " . . . I'm going to keep competing because it's a way of life. It's a lifestyle for me . . . . then I'd probably move into something . . . less strenuous. Because I . . . need an outlet" (p. 5).

M is philosophical when reflecting on his exercising. "I'm happy . . . . I've learnt my capabilities . . . . It's changed me . . . . I'm happy with him" (p. 6).

Co-Researcher F.

F started exercising with running around the ". . . bogs of Ireland" (p. 1), and has been running around ever since. She played a variety of sports at school concentrating on hockey and athletics. "I kept up my hockey and athletics, um, right through until I got married" (p. 1).

Marriage meant a shift to a high country farm, family commitments and isolation. Despite these and work commitments F maintained her hockey. "It was my time, it was the only time I had to myself . . . . I just needed that time . . . and it was a really good break for me" (p. 8). It also served as a point of social contact. "It was a really good contact time" (p. 8).

She returned to athletics through Masters and still enjoys the social stimulation of people contact. ". . . you're learning from other people . . . you're seeing different places. Yeah, you're broadening your mind really" (p. 5). For her, the point of her exercising activities is enjoyment. "To have fun, as long as you're enjoying it and satisfaction . . . . you get satisfaction out of both . . . . the athletics you're doing it for . . . myself . . . . the hockey, you're playing for the team . . . they rely on you and you rely on them" (p. 5).

For F exercise has a major role in her life " . . . if I didn't exercise . . . I just wouldn't feel well . . . . it's that feeling of well-being" (pp. 6 & 7). Looking ahead, she sees herself exercising for as long as she is able to. "I'll probably keep on running until I can't run anymore . . . . I have to find something to do . . . . I'll have to move" (p. 6).

Reflecting back on all her years of moving F has no regrets. "I've enjoyed it, I've met a lot of wonderful people . . . . and they give you a different outlook . . . . stimulates your brain . . ." (p. 9). For F now is also a time to give something back to her sports. " . . . I'm involved with the young kids . . . . someone did it for me . . . and I think I should do it for someone else now" (p. 5).

Co-Researcher D.

D's exercising originated in his primary school days where he had to either walk or bike if he wanted to get anywhere. This continued into his first job with the Post office where he rode for miles around the suburbs delivering telegrams. He played a variety of sports through school and continued with cricket after marriage. "We had to go on cross country runs . . . . playing cricket, rugby and the bike . . . . and since being married I continued to play cricket" (p. 1).

Through his experiences of a big family, financial worries and the death of his wife D has developed an enhanced awareness of health. "I've realized since M died the importance of good health. I've changed my diet a lot . . . and made sure that I have regular exercise" (p. 1).

His main activities now are tramping and cycling from which he derives a great deal of enjoyment and satisfaction. "It gets the heart rate up and I . . . benefit from this . . . . it's just so nice to be out listening to birds or streams running by . . . . I enjoy the silence . . . . and the views . . . are just magnificent . . . . so peaceful . . . . It's happiness . . ." (pp.1 & 3).

D is keen on exercising without too much stress. "I really think some overdo the exercise . . . . pounding around the roads" (pp. 3 & 4). This approach is consistent with his philosophy on health, "And that involves exercise, good diet and relaxation . . . . I don't want to be popping pills to stay alive" (p. 6), and is viewed by D as "a holistic thing . . . sort of, mental as well as physical" (p. 6).

Much of his enjoyment from exercising has come after his family responsibilities diminished, "Yes, this is the time when I can do what I want and do things that I haven't been able to do . . ." (p. 8), and has enabled him " . . .to get away and just realize what sort of country we've got here to go and see. I love it" (p. 8).

In looking back D sees the value of his exercising. " . . .I'll continue to keep fit . . . the body's got to move. Sitting around is just not good . . . . it's enabled me to go out

and enjoy the outdoors and . . . be a better person . . . . it just makes . . . life so much better and enjoyable . . ." (p. 7).

Researcher Brian.

I have been running for over forty years. It all started as a child through informal play and exploring the fields, forests and creeks that lay over our back fence. It included walking and running to school, four kilometers a day, for eight years. By the time I got to high school I was playing soccer, tennis, cricket, badminton, and loving it. Most of all I liked running fast. As a child everything became a race to me because I knew I was faster than most others! As a teenager sports allowed me to use my speed to advantage but in early adulthood sport became really serious and involved high-pressure performance. The fun and exhilaration of moving became constrained by pressures to perform well and to win.

This need to perform at a high level continued through until my thirties where I rediscovered the enjoyment of moving fast again through Master's athletics. When I look back my running has been a means to winning, being successful and feeling competent in the process. It has also produced a sense of mastery over my body, my thoughts and my life in general. There is, in more recent times, the growing realization that my running has become an end in itself and that it retains an intrinsic value in its own right. This value appears to be the simple joy I get from moving, particularly moving fast, regardless of performance or standard. This is reflected in the pleasure and satisfaction I gain in my day-to-day training regardless of the longer-term goals of which they are a part.

Summary

These accounts describe a wide range of perspectives that merge in a common experience of joy and satisfaction. As long-term exercisers we are deeply committed to exercising and it is a way for us to express ourselves, meet important needs and fulfill ambitions. These needs and ambitions take the form of specific outcomes we experience from our exercising. Through lives that are inextricably bound to exercise we also express how we have come to understand ourselves.

One way to explain this inescapability of moving is to situate the personalized **outcomes** of our exercising within a **background** of contextual influences that facilitates them. Together context, our exercising behaviours and their outcomes interact to produce our exercising experiences. Over time these experiences form the basis of a **process** that shapes our exercising identity and contributes to our self-understanding. This process is the way we come to understand ourselves through reflecting on these behaviours and making sense of them. Chapter six will describe the main outcomes common to co-researchers while chapter seven will outline some of the contextual influences that facilitate them. Chapter eight will attempt to delineate the process of self-understanding that we all seem to go through.

CHAPTER SIX. Outcomes

One of the striking things about this research is the consistency of co-researcher reports over outcomes from exercising. There is a range of outcomes common to all co-researchers and these have been sub-categorised into physical, emotional, thinking, interpersonal and behavioural. Through property and dimension analysis each outcome was situated within a specific sub-category thereby refining its place in the grounded theory. This analysis pinpointed when each outcome occurred, its duration, frequency and intensity and the particular dimensions of each. Another important property analysed was the value that co-researchers attached to their outcomes based on negative or positive assessments.

Outcomes refer to a range of responses that each co-researcher acknowledges occurs in relation to their exercising. A description of these commonly shared responses helps to show the impacts of exercising on co-researchers' lives. These impacts are primarily positive but what appears to be unique to this group of long-term exercisers is their perception of what is normally construed as barriers to exercising. Although specific outcomes like injury, pain, frustration and hard work are viewed negatively they appear to be contextualised within a longer-term view of the benefits of exercise. As such 'pain' is viewed as an essential part of the 'gain' of exercising.

Physical

All co-researchers reported experiencing **energy level** effects. These could occur before, during and after exercise.

> . . . become a raging bull on the athletic track . . . (G, p. 2)
>
> I was always running tired. (B, p. 3)
>
> . . . when I come out I'll feel quite tired but feel as though I've had a good workout . . . (D, p. 5)

For G energy levels are primed prior to racing while B reports feeling constantly sapped of her energy. D experiences his energy swings after his exercise. The duration of these energy effects vary. F's activities ensure she has energy both for the

short and long term and is contrasted by J's long-term loss of energy. R highlights the rebound affect that research supports (Biddle & Mutrie, 2001) but which eludes J.

> Well you just feel like you can get stuck in and do things more, yeah. More energy . . . . with five kids you had to be active to keep up with them all and the things they were doing. (F, pp. 3 & 7)

> Sometimes your body is too tired . . . . But the next day could be, you know, you're back to normal. (R, p. 3)

> I just don't feel I've got the energy anymore, I haven't. I can't be bothered doing the training . . . . it's easier to walk and smell the roses . . . (J, p. 4)

The intensity of energy fluctuations varied from mild to extreme.

> . . . I worked really hard to get better and I was a wreck. (J, p. 5)

> Track was the hardest training . . . . doing ten quarters in one night, that used to make me sick. (B, p. 4)

> It is hard work carrying a full pack . . . you've got to stop and have a spell . . . throw the pack off, is just so nice. (D, p. 4)

Both frequency and intensity of energy changes coincides with exercising frequency. Daily activities produced daily changes. The intensity of energy loss can be remarkably high and contrasts with the positive energy gains of G's raging bull. The value placed on energy level effects is predominantly positive.

> . . . it's giving you the ability to enjoy life. (M, p. 3)

> I've got quite a physical work and it sort of helps me there . . . (R, p. 2)

> I'm a lot stronger physically . . . (L, p. 8)

> . . . you're more alive . . . . got more energy, you're not always tired. (B, p. 6)

I experience similar intense energy losses to B particularly after a hard track session and yet I can feel fresh as a daisy during an easy training week. My energy levels usually rebound quickly after a good night's rest and a day of no exercise while I have also known my tiredness to last for months due to prolonged periods of over training. Overall the physical sensation is one of having more than sufficient energy for tasks and life in general. This sense of increased energy is supported by research

that has found positive effects on vigour and negative effects on fatigue (Biddle, 2000; Hed, 1997; Thayer, 2001).

All co-researchers reported experiencing **injury and pain**. This occurred usually during or after exercising and could last for years.

> I used to go training . . . break down and have to hobble home . . . (M, p. 2)
>
> It's too painful . . . . I always ended up hobbling and the hobbling got more hobbling . . . . I was wrecking my body . . . (J, p. 4)
>
> It's been forced by injury . . . . there's going to be no more running . . . (G, p. 4)

For these co-researchers achilles and knee injuries created both short and long-term problems. The intensity of pain levels was variable with runners like B suffering, at times, extreme pain. Injury frequency varied from regular occurrences to very occasionally.

> I'd be in tears, the taste of blood in your throat . . . agony . . . (B, p. 2)
>
> I found it pretty hard on the elbows, a bit of tennis elbow . . . (D, p. 2)
>
> . . . at the moment my body's holding together, like two weeks ago . . . went kaput . . . . at the moment it feels pretty good . . . but that might change tomorrow. (L, p. 6)
>
> I've never been out of hockey either, except for injury. (F, p. 3)

The value placed on injury and pain was inevitably negative.

> Saturday night wasn't very good. Through injuries, bruising and anything else that come up through the game . . . (R, p. 2)
>
> That was just horrible when I couldn't run. (L, p. 7)
>
> . . . the body just wouldn't allow me to . . . reach higher areas. (M, p. 8)

Yet for some this negativity was offset by positive long-term gain.

> I just kept breaking down instead of getting better. That was frustrating . . .

> That's why it feels so good . . . . don't have to get out there and flog my body . . . (J, p. 5)

> I'm a healthier person. Accept for my aches and pains. But if I had my time again I'd do it all again. (B, p. 5)

For J long-term energy loss and injury problems proved a barrier to running but not exercising. She, like B, G and M have found other ways to move that do not continually hurt them. For me injury and pain are part of my running. However I have reduced its frequency and duration by managing its occurrence. I get injured when I over-train so it is a signal I'm overdoing it and need to re-schedule my programme. They are a frustration but injury and pain have taught me the value of listening to my body and ensuring I care for it. Current research has focused on injury prevention and remediation. There is little data on the place injury and pain play in the lives of exercisers other than being a barrier to adherence (Lox, Martin & Petruzzello, 2003). Koltyn (1998, 2001) has shown however that exercise does modify the experience of pain by acting as an analgesic as well as finding gender differences in pain threshold. These co-researcher accounts provide some evidence of analgesic effects, for example B, but do not differentiate gender on pain. It also provides fresh evidence for the way long-term exercisers adapt and improvise their exercising around the occurrence and aftermath of injury and pain.

Similar levels of intensity are reflected in the **hard work** and physical dedication co-researchers commit to their exercising.

> Sometimes when it's hurting like hell and it's a horrible day . . . and I still go out. (L, p. 6)

> Sometimes your body is too tired . . . or done too much . . . and it catches up on you. (R, p. 3)

> So you've got to put yourself through that . . . . agony . . . know you're hurting, know the body will still keep going no matter what . . . (B, p. 2)

> I find 200 has got me at a stretch and 400 I'm dead. (F, p. 5)

> I've got to put a hell of a lot of work in. (G, p. 7)

> . . . setting a high standard and doing a lot of training . . . . are seven day efforts, they need to be a high degree of training. (M, p. 4)

This type of commitment and training often occurred daily and included some form of pain and effort lasting between minutes and hours. Despite these aspects of exercising the value co-researchers place on their efforts is positive.

> Hell yeah. If you asked me to go back and do it all again, I'd do it all again. (G, p. 8)
>
> It gave me an outlet, hmmm, and I really enjoyed it. (F, p. 9)
>
> Oh no, no regrets, its been my life and so I'd do it again if I had my time over again. (B, p. 8)
>
> . . . some things I might change a bit but . . . not major things . . . . it's worked out pretty well. (R, p. 7)
>
> I love it, I love it, the tougher the better. (L, p. 5)

Energy levels, injury, pain and the hard work of training appear linked for the co-researchers. They all attest to these consequences but contextualise them within a work ethic that B explains as ". . . a little bit extra was better . . ." (p. 4). These outcomes can be seen as the means to an end, the end being for F an outlet and for J, enjoyment. For me it is the overriding purpose of putting my body to work, of feeling it and sensing it stretch, extend, sweat and exhaust. It is the sense of having done something and in the process earned the right to rest and recover. This work ethic is clearly identifiable as a philosophy of physical gain through physical pain. Research has confirmed the relationship between effort, intensity and biological outcomes (Biddle, Fox & Boutcher, 2000). Much less is known about the role of personality characteristics and the influence of work ethic perceptions on exercising.

For co-researchers their work ethic plays a role in achieving **fitness and/or strength**. These outcomes are seen as positive means and help counterbalance the negative aspects of physical outcomes.

> I'm a lot fitter than most people, I'm the fittest . . . fitter than all my friends. (J, p. 5)
>
> I'm a lot stronger physically . . . . I know it has made me a lot stronger . . . (L, p. 8)

> You're obviously doing it better or a bit fitter . . . or your muscles are used to . . . (R, p. 3)
>
> I like to feel as if I'm in control and have that fit feeling. (B, p. 6)
>
> Yeah, well, you just don't feel fit . . . (F, p. 3)
>
> . . . it's created a younger body in an older person. (M, p. 6)

Recent research confirms strength and fitness as significant outcomes of exercising (Biddle, Fox & Boutcher, 2000). These co-researchers provide insight into use of both formal and informal programmes of exercising. For all co-researchers their intuition plays a big part in deciding the usefulness of programming and also its timing. Typically more flexibility is introduced after the trials and errors experienced with more formal programming. Co-researcher perspectives on the hard work and pain involved in their exercising contrasts with quantitative research that found these outcomes to be significant barriers to adherence (Lox, Martin & Petruzzello, 2003). Co-researchers use these outcomes as motivation and perceive them as indicators of progress.

Weight control

For co-researchers exercising plays an important part in controlling their weight.

> Keep your weight down. Not have a pot belly. (G, p. 5)
>
> Started eating again, putting on weight, feeling sluggish. I've got to do something . . . . Someone put me on to the Spartans ladies club . . . (B, p. 2)
>
> One of the reasons . . . is because a weight thing. Yes, it helps to keep the weight down. (L, p. 4)
>
> I did a bit of running but the running was simply so as I could have control over the eating . . . . I was burning off calories I'd eaten. (J, p. 3)
>
> . . . it burns calories, it controls weight . . . (M, p. 5)
>
> Ah, I find that if I don't exercise . . . . I just sit and get fatter and blob out . . . (F, p. 3)

Research supports the physical health benefits of exercising including weight control and through it the reduction of risk for coronary heart disease, high blood pressure, obesity and diabetes (U.S. Dept. of Health and Human Services, 1996). Weight control also seems important for body image and self-esteem (Miller & Downey, 1999) especially for women (Fox, 2000). This distinction does not show up here. Both men and women talk about and imply the importance of good body image.

Competence

Weight control, body image and feeling good about our bodies appear linked through the competence we experience in our exercising.

> Oh much dedicated person . . . . I want to do something I know I'll do it. (B, p. 3)
>
> What have I learnt? . . . . that I'm a very physical person. (L, p. 9)
>
> Um, the body can do a lot of things that you didn't think it could do . . . . made me realise . . . if I trained a bit harder or more often. (R, p. 6)
>
> I've learn't my capabilities . . . . it teaches you a lot. (M. p. 6)

Competence can be seen here as the sense of control gained through physical accomplishments and the associated mental responses to this. It occurs regularly either during or after exercise. Actual performance levels attained among co-researchers varies yet all perceive themselves as competent and for some like B and M this competence remains even years after their original successes. The level of competence reported is mild to high and it is seen as an important positive outcome. Behavioral mastery and exercising have been found to be associated (Lox, Martin & Pretruzzello, 2003; McDermott, 2000). These and other studies (Fox, 2000; Sonstroem, 1997) also support links between competence and body image.

Emotional

Emotional outcomes of exercising include mood and feeling changes related to exercising and were very common among co-researchers. **Enjoyment, stress reduction, frustration, satisfaction and well-being** were outcomes common across

all co-researchers. Disappointment and regret were the least common outcomes with only one co-researcher reporting these. These emotions occur daily, predominantly during or after exercising and typically last minutes not hours apart from well-being which lasts for years. Intensity levels, like physical outcomes, vary from mild to extreme. The co-researchers view these outcomes, with the exception of frustration, positively.

Enjoyment

Enjoyment and fun appear as centrally important outcomes to our exercising. Every co-researcher mentions it in some form and it provides crucial motivation especially when the exercising gets tough to do.

> . . . you're doing something that's enjoyable . . . (M, p. 3)
>
> To have fun. If I stopped enjoying it, I wouldn't play. (F, p. 5)
>
> Elation when I'd done something well. (B, p. 5)
>
> I love it. Absolutely love it. (L, p. 7)
>
> Cos I liked it. It was fun. (J, p. 1)
>
> . . . and I enjoy the silence . . . . it's happiness. (D, p. 4)

Co-researcher accounts resonate with the enjoyment they get from exercising. It occurs during or after exercise and varies from mild (fun) to extreme intensities (elation). It accompanies regular exercise as well as one-off highlights or achievements and is viewed as a key motivator to ongoing activity. Research suggests it is an important intrinsic motivator, is positively associated with adherence and exercising in general (Hed, 1997; Levy, 2002; Motl, Dishman, Saunders, Dowda, Felton & Pate, 2001; Nies, Vollman & Cook, 1999). The outcomes reported here help to pinpoint specific aspects of exercising that appeal to co-researchers as well as highlight the more neutral or less attractive elements.

Stress reduction

Stress reduction is seen here as the reduction in emotional turmoil or tension. Exercising is an important tool for co-researchers in regaining a sense of control over themselves or their feelings.

> It's calmed me down. I'm a much calmer person than I used to be. (M, p. 5)
>
> It was my time, very, very necessary. I just needed that time away from the kids and it was a really good break for me. (F, p. 8)
>
> So by going for that run I could come back and I could cope. That released all that tension. (B, p. 3)
>
> Stress and things that happen at home, um, may be easier to cope with. (R, p. 2)
>
> And this is how I, running, through running, that's one of the main ways I can get my release . . . (L, p. 11)
>
> Just it's stress relieving. (D, p. 2)

Stress reduction appears directly related to exercising and occurs during and/or after it. For M it has had long term benefits while other co-researchers pinpoint more immediate relief. The level or intensity of relief varies from mild reductions (D & R) to high (B). All co-researchers see this outcome as extremely valuable. Numerous studies support these accounts of exercise induced stress reduction (Biddle, 2000; Buckworth & Dishman, 2002; Hed, 1997; Stathi, Fox & McKenna, 2002).

Frustration

Frustration is a part of long-term exercising with clear links to injury, pain and the commitment necessary to maintain it.

> . . . I used to think, oh if only we could . . . not worry about running. (B, p. 3)
>
> . . . my knee injury happened in 1991 so everything has been downhill since then. (G, p. 2)
>
> That was just horrible when I couldn't run. (L, p. 7)

> That was frustrating when I put so much into it. (J, p. 5)
>
> I wasn't as happy. Things would upset me more. (D, p. 5)

It occurs regularly even without injury and eventuates before, during and after exercise. It can be evoked by time constraints (J) and family responsibilities (D). One thing that eases frustration is freedom, whether from family commitments, work or other commitments (M, D, J & B). Frustration levels can reach very high levels (L) and is a commonly reported result of intense training (Moran, 2004). How exercisers deal with this type of frustration has not been well documented. What these co-researchers do is to persist with long-term frustrations, frustrations that keep reoccurring like injury and time constraints. L has had injury disruptions to her running for many years but she has never once contemplated giving it up. G too although currently shackled by his knee problems still sees the day when he'll run again, albeit slower.

Satisfaction

Satisfaction is an emotional outcome that describes a range of achievement feelings. It can be related back to the mastery outcome insofar as achievement is bodily but involves an emotional reaction to these feats as well.

> Aah there's pleasure, there's satisfaction. (M, p. 3)
>
> Uum, satisfaction . . . . You get back . . . and you feel bloody good about it. (G, p. 5)
>
> Aah, yeah, well you get satisfaction. (F, p. 5)
>
> And that's I think what you get out of more than anything. It's the personal satisfaction, I've done this. (B, p. 5)
>
> . . . just a general good feeling . . . . Ah just the feeling of how well I did. (R, p. 2)
>
> . . . you know that once you get to the top . . . it's done . . . . And that's a good feeling. (L, p. 7)
>
> Feeling that I achieved . . . definitely feel a sense of achievement. (J, p. 6)

Co-researchers report extrinsic (medals, faster times or winning) as well as intrinsic forms (personal feelings of accomplishment and enjoyment) of satisfaction. The intensity of satisfaction can be high although most co-researcher accounts are mild. It occurs after exercise and is usually immediate although in G's case it can also last for years. ". . . I achieved quite highly . . . I don't have to prove myself anymore, done it"! (p. 6). Research (Bandura, 1997; Sonstroem & Morgan, 1989) suggests that the satisfaction gained through exercising enhances emotional state and plays a key role in long-term exercising. This appears consistent with co-researcher comments.

Well-being

Well-being is a word used by the co-researchers.

> . . . it's a feeling of well-being. (M, p. 3)
>
> . . . it's that feeling of well-being. (F, p. 7)
>
> Oh just you're more alive. (B, p. 6)
>
> Um, I just feel a better person through it all. (R, p. 2)
>
> I love walking, I love the peace and quiet, I love the exercise it gives me and it doesn't hurt. (J, p. 5)

M defines it as ". . . the ability to enjoy life to a certain degree of eating well, sleeping well and those type of things" (p. 3). D calls it ". . . a holistic thing . . . sort of, mental as well as physical" (p. 6). Others talk about being a 'better person' from exercising and G sums up its multi-faceted nature by saying ". . . psychologically it's very good for you" (p. 7). It is perceived as a short-term consequence but has a lasting feel about it (B and R). Because it is used in a more general sense its frequency and intensity is not easily clarified. Both quantitative (Biddle, 2000; Hall, Ekkekakis & Petruzzello, 2002) and qualitative (Crone-Grant & Smith, 2002; Stathi, Fox & McKenna, 2002) research supports well-being outcomes from exercising. Interestingly Hall, Ekkekakis & Petruzzello (2002) found negative effects on well-being feelings during exercise but this negativity rebounded when the exercising ceased. This finding is consistent with these co-researchers who put up with both

short and long-term outcomes that are perceived negatively in return for both short and more lasting states of emotional well-being.

Enjoyment, stress-reduction, frustration and satisfaction outcomes can be viewed as dimensions of emotional well-being (Biddle, Fox & Boutcher; 2000; Biddle & Mutrie, 2001). Buckworth and Dishman (2002) suggest that exercise enhances mood in subtle ways. The co-researchers in this research however are unequivocal about their emotional outcomes. For them enjoyment, stress-reduction and personal satisfaction are very obvious catalysts for their exercising, so much so that they accept and adapt to high levels of pain, hard work and frustration to achieve them. In the process they feel a lot better about themselves both in the short and long term.

Thinking

Thinking outcomes of exercising refer to changes in thought content or processing. All co-researchers report **clearer thinking and self-awareness** changes along with a **need to move**. These outcomes occurred during and after exercise with clearer thinking more immediate than the long-term changes affecting self-awareness and our self-concept as movers.

Clearer thinking

Clearer thinking sums up co-researcher's comments on how they perceive exercising affects their direct thinking.

> And, sort of, mental as well as physical. It all works together I think. (D, p. 6)
>
> I can probably think a lot better at home and at work . (R, p. 2)
>
> . . . running kept me sane . . . (B, p. 3)
>
> . . . if I didn't exercise I'd be a cabbage . . . it stimulates you and makes you more interested in what's going on around you. (F, p. 3)
>
> And I could run along and I could . . . write a letter of thoughts . . . . so it was a, sort of, creative way as well as a creative mind. (M, p. 3)

Clearer thinking is reported as a short term outcome occurring primarily after exercising. It occurs frequently and is highly valued. These reports are consistent with previous findings on cognitive functioning (Boutcher, 2000). For co-researchers, extending the body provides a way to clear mental cobwebs and ease mental stress. I find that interspersing intellectual activities with physical exercise allows me to return to them alert and with the renewed ability to concentrate.

Self-awareness

> I'm happier now than I ever was . . . .involves exercise, good diet and relaxation . . . .it's enabled me to . . . be a better person. (D, pp. 6 & 7)
>
> Umm, gave me good self-esteem I know . . . . it's a quiet realisation that no, I've done an hours walking, that's not bad for a 53 year old. (G, pp. 2 & 5)
>
> . . . made me a better person than if I hadn't done them. (R, p. 2)
>
> That I'm pig-headed, um, I can be determined . . . . I have been this person all of my life, you know. Um, yeah, I'm kind of a go-getter. (B, p. 6)
>
> Um, I'm a doing person, I have to be doing something . . . . like to be doing something all the time. (L, p. 11)

All co-researchers feel strongly about how they have come to see themselves. Self-awareness grows over time and is measurable by its durability rather than its intensity. What is also noticeable is the way that exercise facilitates this growth and with it affects shifts in self-understanding that take place over many years. Exercise appears to be a very important way for us to reinforce who we are and how we feel about ourselves. That's why L can say "I don't like to think of what will happen when I really, really can't run" (p. 7), because without it she actually feels lost. "Cos that experience, two years ago, that was like hell on earth to me" (p. 7). Recent research supports the association between exercise and a growth in self-awareness as measured by the psychological constructs self-concept or self-image (Fox, 2000; Sonstroem, 1997).

For J self-awareness is both a global as well as an individual understanding, ". . . I am aware of what's healthy . . . very aware of my body and its needs" (p. 6), and includes acknowledging she has yet to reach her ultimate achievement. ". . . the day

that I can go and walk a half marathon for fun will be the day I'm there I reckon" (p. 5). For others it is more practically based.

> It's changed me and I'm certain if I hadn't taken up sport in the way I have, I'd be a completely different person today. I'm happy with him. (M, p. 6)
>
> I'm, sort of, one that eats to live rather than lives to eat . . . . my philosophy is now, to be healthy . . . (D, p. 6)
>
> Now it's a quiet realisation . . . I can't be like I was when I was 25. (G, p. 5)
>
> Oh much dedicated person . . . (B, p. 3)
>
> I've learnt my capabilities . . . . it teaches you a lot. (M, p. 6)

These self-awareness changes make more sense later in co-researchers lives as they reflect on the effects of their exercising and its continued importance to their lives. G finds a way to situate and accept his reduced activity by reference to his age while M tempers both his disappointments and successes with an educational perspective.

Need to move

All co-researchers talk of their body's need to move. This need arises on a regular basis and for some co-researchers provides no middle ground between being active or inactive.

> The body's got to move. Sitting around is just not good for you. (D, p. 6)
>
> I just sit and . . . blob out and I need to, I need to keep myself active . . . . If I didn't exercise I'd be a cabbage . . . (F, pp. 3 & 7)
>
> I'm a doer, I need to get out and do things, right. (B, p. 1)

In describing this need to move D, F and B reflect more of a mental picture or image of themselves and part of their rationale for it. However this image is tied into emotional consequences as well. The intensity related to this imperative to move can be very strong and is aptly illustrated by the co-researchers' use of an addiction metaphor.

> I wouldn't say I'm addicted to exercise but I'm pretty close to being addicted . . . (M, p. 4)

> I was totally addicted . . . it was like giving up smoking. I was frenetic and I was tight. (J, p. 5)

> I don't like to think of what will happen when I really, really can't run. Cos that experience, two years ago, that was like hell on earth to me. (L, p. 7)

> . . . probably be like a bear with a sore head. (B, p. 5)

The need to move is construed by co-researchers to be a positive thing both, as a result of and despite its emotionally addictive qualities.

> I get pleasure, I wouldn't do it if I didn't have pleasure from it. (M, p. 5)

> I still, even despite that frenetic stuff, I got enjoyment out of it . . . (J, p. 5)

Like Erikssen's (2001) study, most research so far has conceptualised the need to move as a basic human instinct and contrasted changes in lifestyle to promote exercise benefits. However along with other qualitative research (Lang & Jesson, 2000; Nies, Vollman & Cook, 1999) this project confirms an individual need to 'do' something as well as confirm this 'doing' as the source of the outcomes reported. Makhaya Ntini, the South African cricketer, provides cross-cultural evidence for this need to move. "You see the Kenyans, it comes from that part of the world. We all enjoy being on the road, we get tired sitting down, we just go out and do something" (Cited in Wanganui Chronicle, 2004, p. 20). Like Ntini and the Kenyans co-researchers identify strongly with a mental picture of themselves as active and as doing.

Mentally co-researchers shape out an exercising identity that they hold on to all of their lives. This identification with moving both shapes and is shaped by the various other outcomes that they report. Through the physical, emotional, and thinking outcomes that it generates, exercise helps us feel good about ourselves and contributes to how we see ourselves in the first place. Competence, self-awareness and the image we sustain of ourselves as physical movers appears linked and is supported by research (Kendzierski, 1994; Lox, Martin & Petruzzello, 2003; Sonstroem & Morgan, 1989).

Interpersonal

Interpersonal outcomes reflect the ways in which long-term exercising impacts on relationships. All co-researchers report **sociability** effects of some sort. Some view these as positive while others see them as necessary evils. Six of the researchers also report **teamwork** effects. Sociability effects occur at least weekly if not daily while teamwork is something that can take months to occur. Both can end up producing life long friendships. These effects occur usually during or after exercising and are of mild to moderate intensity.

Sociability

Sociability effects range from companionship and friendship to independence and social isolation. Some of the co-researchers enjoy the social interaction of their exercising while others enjoy the individualism that it also generates.

> Well I've got a few close friends who are runners . . . . one of the problems is when you're setting a high standard and doing a lot of training, you haven't got time for other people. (M, p. 4)

> The loner, yeah . . . . Going training when you like, as hard as you like and when the races come it's all been done by you, nobody else. (G, p. 3)

> Oh I've made a lot of friends . . . . you meet them, you don't see them for years and walk into them and it's like yesterday. (F, p. 7)

> So it was twice a day training . . . . was my life, you know, I never socialised . . . . no I wouldn't change it. But I missed out on a lot. (B, p. 3)

> Um, athletics is quite a lonely sport . . . . And I feel the need to get into a team sport . . . . I quite like the social side. (R, p. 2)

> . . . I used to see my mates going out and running . . . . there was an element of fun at times. Great afternoon teas. (J, p. 5)

Co-researchers differ on the social importance of exercising. F lives for the social contact it brings while G and M resist it and revel in the individualism it has bought them. B on the other hand would have enjoyed socialising more if she had the opportunity. J, R and F actively seek out companionship and interaction outcomes. Sociability then can vary from extreme autonomy to constant companionship and

occurs frequently. Co-researchers value the social contacts made even if their exercising has produced limited friendships and socialising opportunities. What is interesting here is that exercising is traditionally seen and confirmed in research (Biddle & Mutrie, 2001; Stathi, Fox & McKenna, 2002) as a socialising facilitator. Yet some of these co-researchers experience exercise as a barrier to socialising and actually see this as an advantage.

Teamwork

Teamwork as viewed by co-researchers is the support and encouragement they received as part of their exercising longevity. For F and R this involved reliance on and responsibility to other team members. For M, G, B and L it involved one on one relationships. Through teamwork special bonds and friendships are established and can last for years.

> It was teamwork . . . we were able to do the work together. (M, p. 8)
>
> . . . just around the corner from P who was running, running badly. So I said come and train with me on the track. (G, p. 2)
>
> . . . when I play hockey you're playing for the team . . . . you've got to fit in with other people, they rely on you and you rely on them. (F, p. 5)
>
> And M knew just exactly how to get me, um, to peak performance. I couldn't have done it without him. (B, p. 7)
>
> . . . you're in a group . . . and you had to help each other along. (R, p. 5)
>
> I met G and he showed me how to do it a bit better. (L, p. 3)

Teamwork is highly valued by those who report it. It takes time to engender but has lasting effects. For M it became the defining element of his running achievements. Even for G who enjoys his autonomy teamwork was valued because it enabled him to support two other individual runners. Social outcomes like increased and decreased sociability as well as teamwork are well documented in sport and exercise research (Biddle & Mutrie, 2001; Stathi, Fox & McKenna, 2002).

Behavioural

Long-term exercising makes a busy life busier. It necessitates **time management** and, stating the obvious, long term commitment or **longevity**. Time management requires the adapting of behavioural routines within work, family, home and other daily commitments. The stresses created by these scheduling demands can also be related to other outcomes including energy changes, frustration and enjoyment. Longevity is the simple behavioural result of being a long-term exerciser. It involves both regularly and durability.

Time management

Time management is about dealing with and organising one's life around constraints, primarily time constraints. Some were luckier than others in this regard. B never worked when her children were younger so did not experience the added pressures that J did.

> . . . the kids had to wait till I'd done my exercise, tea had to wait . . . everything had to wait . . . (J, p. 3)

> . . . everything was just running . . . . E was about three months old. And K was . . . four, five . . . . Goodness very understanding mother. (L, p. 2)

> So it was twice a day training, up in the mornings, housework as much as I could get done, kids off to school and at ten o'clock I was out training. (B, p. 3)

> It was just time after work um, sometimes running in the dark at night around Cooks Gardens. (R, p. 2)

> But I was working a full time job at the time and it meant running at eight o'clock at night. (M, p. 1)

The time management involved in long term exercising is a form of self-discipline and commitment that co-researchers make and have spent a lifetime practicing. It involves the constant juggling of priorities and is a daily occurrence lasting years. The level and intensity of time management varies with life stage. Research to date has focused on scheduling as a barrier to exercising (Moran, 2004). The two main constraints mentioned by co-researchers are work and family commitments. Each co-researcher found a way to fit exercising into their busy lives through time

management. These scheduling skills then have them well placed to cope with the changes that age and retirement bring with them. These skills also ensure that their routines of exercising continue and, in some cases like M, actually increase.

Longevity

Exercising longevity is the result of a lifetime of exercising. It starts in childhood, continues in adulthood and is maintained into old age usually on a daily basis. These co-researchers can count between them over four hundred and twenty years of regular exercising. All are adamant that it will continue to be a cornerstone of their lives even into the future.

> Hopefully be able to jog in the future, maybe have the odd race here or there. (G, p. 6)
>
> Umm, still running. I'd like to be still running, a lot slower obviously. Umm, but I'll, I'll just be probably be pushing myself as hard as I can, throughout my life. (L, p. 8)
>
> I'll probably keep on running until I find I can't run anymore. (F, p. 6)
>
> Well, I'm going to keep competing because it's a way of life. It's a lifestyle for me. (M, p. 5)
>
> Well as I said probably before I'll always be wanting to do, I'll always try and be doing something. I don't see myself stopping. (B, p. 6)
>
> I'm going to fall in a heap one day but while I'm able to do these things I want to keep doing them. (D, p. 8)
>
> Future, well I hope to carry on playing sport whatever it may be. Um, as long as I can. (R, p. 4)
>
> The day that I can go and walk a half-marathon for fun will be the day I'm there I reckon. (J, p. 5)

Research has been unable to pinpoint specific longevity and adherence mechanisms (Lox, Martin & Petruzzello, 2003) with various models (Bandura, 1997; Sonstroem & Morgan, 1989) providing only generalised motivation theories. For these co-researchers longevity is an outcome of a deeply personal connection with exercising. This vision of exercise as an integral part of their future lives completes the

exercising cycle. It began in childhood games and informal play, found deeper expression through training and competition and continues to find a place in our later years. Exercising is seen as an integral part of our lives and bodies that age (F, R, B and F) as well as die (D). For J the goal of getting the attitudinal mix right also remains to be accomplished.

This longevity can be viewed in terms of its duration and time or the outcomes it produces. However these types of summations do not do justice to the way co-researchers accept the inevitability of exercise for their futures. To get a better sense of this requires the analogy of a companion or friend. Exercising for me has always been there, through life's ups and downs, its challenges and its surprises. Like a constant companion it has been the source of frustration, knowledge, help and joy as well as consistent in its predictability. My exercising longevity has become something I relate to in a most fundamental way. Just as exercising has helped me to discover parts of myself so my history of exercising provides a place where I can replenish and savour who I am and who I have become. It follows that this place of understanding and expression would be seen as a vital part of my later years that will also include my death. Gallagher's (1992) depiction of our own human skin to explain our lived reality could also be used to explain our exercising and its longevity. Like other contextual aspects of our lives exercising has become so integral to who and what we are that to understand us without reference to it would be like asking us to shed our own skin.

Summary

Exercising outcomes include a range of physical, emotional, thinking, interpersonal and behavioural responses. Physical sensations include energy fluctuations, injury and pain, fitness and strength, hard work, weight control and competence. Emotional outcomes include enjoyment, stress reduction, satisfaction, frustration and an overall sense of emotional well-being. Thinking outcomes commonly reported were clearer thinking, self-awareness changes and a need to move. Interpersonal outcomes were increased and decreased sociability as well as the camaraderie and friendship obtained through teamwork. Behavioural outcomes were time management and the ultimate outcome of a love of exercising, life long participation and longevity.

Apart from competence and well-being, physical and emotional outcomes are predominantly short term in nature, lasting in most cases not more than days. Thinking and interpersonal outcomes of self-awareness, the urge to move and friendships persist for years and can last a lifetime. Most outcomes occur during or after exercise and can often be of high intensity especially when physical and emotional. All outcomes occurred regularly and were viewed positively except for injury, pain and frustration. These co-researcher outcomes are supported by existing research that has found them to be associated with exercising. However these accounts provide additional information in providing explanations of the personal meanings behind many of these outcome phenomena.

CHAPTER SEVEN. Background.

> The meanings of practical action are explicated by reference to its purpose and are characterised by its uniqueness to the individual as well as its sensitivity to context. This holistic characteristic draws on the background theme again where human action is understood within a background of physical, personal and socio-cultural practices (Packer, 1985). (p.12)

As the discussion in chapter two suggests understanding co-researcher exercising requires an assessment of contextual influences. As can be seen in chapter seven the outcomes described resonate with contextual themes and are influenced by a mix of historical, cultural, environmental and social factors. These background influences will now be described.

Lack of transport

All co-researchers report the use of exercise as transport.

> . . . we biked everywhere . . . there was no cars. (F, p. 1)
>
> It was a transport thing . . . . You got on your bike or you walked. (B, p. 1)
>
> And we had to walk . . . three miles there, three miles back . . . every single day. (L, p. 4)
>
> . . . I used to walk to kindy . . . walk to school . . . . I had a bike. (J, p. 1)
>
> We didn't get driven around and we all had bikes . . . we either walked or rode a bike. (D, p. 1)

Whether we liked it or not we had to walk, run or bike and usually for miles. Our bodies became our mode of transport and in the process became more efficient and trained in the discipline of doing it. It is not easy for a five year old to walk two kilometres with a school bag after an exhausting day at school. It is highly likely that a training effect included the development of mental and emotional capacities to cope with this type of discomfort. This type of necessary activity lasted in most cases many years. There is little or no research on exercise as personal transport (Biddle, 1999).

Informal play

Informal play and games particularly in childhood are mentioned a lot by co-researchers.

> Yep, pulling a racing car around on a piece of string for hours on end. (G, p. 1)
>
> We ran wild. (F, p. 1)
>
> . . . playing . . . with a pile of kids in Lower Hutt. (R, p. 1)
>
> . . . we never had T.V., we never had computers, we were always outside playing. (B, p. 1)
>
> Right on the beach, picking up rocks and seeing what was underneath them, fishing with a pin and it was so good. (L, p. 4)

Apart from M all co-researchers talk about their experiences of game-playing and informal play. For me this could take the form of impromptu games of soccer using a small block of wood or a tennis ball. It was bull-rush. It was also emulating cricket heroes with bat and ball on the front lawn at home with my brothers. It was 'hide and seek'. It was imagining riding horseback using a bamboo stick as my trusty steed. There is no meaningful research on informal play in exercise psychology. This research domain is dominated by educational and social psychology primarily designed around the classroom and playground.

The outdoors

Much of these early informal play experiences were outside and co-researchers report their interaction with the physical environment.

> Summer we spent most of our time at the beach. (F, p. 1)
>
> Um, when I think back we were farm kids . . . always outside . . .(B, p. 1)
>
> We were . . . living right on the beach and I was swimming . . . . picking up rocks . . . fishing with a pin. (L, p. 4)
>
> . . . Dad used to take us walking in the mountains . . . . We used to walk miles collecting oysters as well. (J, p. 6)

Co-researchers did not just play outdoors they interacted with it. J, F and L swam in and fished from the sea. J and L explored and canvassed physical terrains and experienced being a part of nature and New Zealand's landscape. I too played in, on and around rivers, forests, farmland and ocean. Most of us took for granted the pristine natural environment with which we were lucky enough to explore and interact with. Both M and F who immigrated to New Zealand speak of its unique natural environment and the opportunity to be on nature's doorstep. Research has focused on the influence of the outdoor environment in terms of barriers to and outcomes for adult exercise (Moran, 2004; Nies, Vollman & Cook, 1999). There is little quantitative research on the role of the environment in influencing exercising behaviour or attitudes in children or teenagers. Qualitative research (Lang & Jessen, 2000) has found the love of the outdoors to be a main theme for a group of older, exercising women.

Interactive neighbourhoods

Our early experiences were socially oriented as well. Like most children co-researchers used their early playing and exercising experiences as a way to socialise and meet with their friends and neighbours.

> I liked mixing with the other people. (J, p. 1)
>
> It was always a race . . . to play with the kids before school went in again. (B, p. 1)
>
> That was when I first started playing . . . with a pile of kids in Lower Hutt. (R, p. 1)
>
> Racing kids around the block. (G, p. 1)
>
> . . . we had miles of peat bog to run around in. (F, p. 1)

The interaction of neighbourhoods appears across cultures. F is describing her childhood experiences while still in Ireland. Her description differs little from those of the New Zealand co-researchers. It is stating the obvious but informal play, games, the outdoors and the neighbourhood all go together. You could not have a game without other children and the really good games needed plenty of space and a

natural environment. So time would be spent scouting for others to play with you, unless you were lucky enough to have lots of brothers and sisters, which I had. Then other children were still necessary because of age and interest differences. This combination of effects flowed over onto the school playground where a further integration of rural and town children took place. In this way us 'townies' gained diversity in our friendships and compared and tested our physical abilities with a wider range of physically active children.

Research is again scarce on the role that neighbourhood socialising has on the exercising of children. Instead it focuses on formalised institutions like school, formalised sport and role modelling. Peer pressure is seen as an important influence (Flintoff & Scratton, 2001; Biddle & Mutrie, 2001) but focuses on teenagers and adults only.

Formal sport/competition

At some stage, usually coinciding with intermediate or high school, co-researchers discover formal sports and get the opportunity to transfer skills learned in play and informal game settings like the school playground and the paddock over the fence.

> . . . we didn't get organised sport . . . . and I was probably eleven when I started playing netball. I enjoyed it. It was just something wonderful that I'd never had . . . (F, p. 9)
>
> I managed to get into a schoolboy rep. team and played on Athletic Park. (R, p. 1)
>
> It wasn't until I got to secondary school, about twelve, that we had organised running and that and probably still got records at the school . . . (B, p. 1)
>
> . . . and the biggest local club was called Belgrave harriers. And I joined them and that's when my running really started. (M, p. 1)
>
> I can remember playing netball for school when I was somewhere between standard two and standard four and I always wanted to be in the A team. And I loved it, yeah, I loved it. (J, p. 1)

Something that is clearly noticeable here is just how much the co-researchers relish this shift into formal sport and competing. F sums up the novelty of it all and how for

a time we are enchanted by it. J expresses this enchantment in the enjoyment of being part of the top team. For B it was about creating records and the satisfaction still apparent many years later in her achievements. For me playing in the high school second eleven, batting at number five and opening the bowling was like a dream come true. It just made so much sense and thrilled me when I looked ahead to the Saturday game. What many of us took for granted or was unaware of, was that our physical competence made our fit with and transition into sports a natural one.

Along with training, competitive performance is probably the most researched area of exercise psychology. The emphasis here has been on sports performance in particular with effort focused on revealing motivational and achievement mechanisms. Exercise performance is poorly researched with mainly qualitative accounts of its significance (McDermott, 2000; O'Brien & Conger, 1991). Even less is known about the early formal sporting experiences described by these co-researchers and their influences on later life behaviour.

Training

Formal sport with its competitive basis introduced co-researchers to intensive training that became an accepted part of their lives. For most this lasted for the rest of their lives or until injury curtailed its intensity and necessitated a reappraisal of its usefulness.

> Late high school was when I actually got involved in actual training . . . . and when I was in the College A . . . that's when I started getting into proper training. (F, p. 1)

> My top level was senior third division rep. squad, I got picked for . . . . made me realise that I'd be a bit better at my sport if I trained a bit harder or more often. (R, pp. 1 & 6)

> So when I came home M took over my training. Then it started. The hard work. The dedication . . . . My family and everything revolved around my training. (B, p. 2)

> Another level really . . . . Monday, Tuesday, Wednesday, Thursday, go and do this and this and this and this . . . it went on for ages and ages . . . (L, p. 3)

> Well and truly bitten by the bug . . . just lived for running. Training every day sort of following a Lydiard pattern I suppose. (G, p. 1)

> I didn't exercise that much . . . apart from going along and having a game on a Saturday. I probably didn't do a lot of formal exercise. (D, p. 1)

Due to work and family commitments D was the only co-researcher not to experience intensive training. For the rest of us as L describes, we went up another level. B and G attest to another level again, almost total commitment, and as a result these two achieved the highest levels of performance among the co-researchers. While focusing on the dose-response or for the co-researchers, the pain/gain relationship, research findings appear consistent with the outcomes section (Moran, 2004). Moran also suggests that there is a lack of research into the adverse effects of over-training and exercise addiction. Some of the co-researchers in this present study report these effects although to a milder degree than Moran discusses. However in doing so they provide some insight into how these effects are ameliorated. As already mentioned these more negative effects are contextualised within a wider perspective that incorporates the purpose behind our exercising.

Injured body

D is the only one of us who is relatively unscathed from physical injury, which occurred as a result of the intensity and frequency of training. For the rest of us permanent tendon and muscle damage determines what we now do and to what level of intensity we do it.

> . . . ended up hobbling and the hobbling got more hobbling . . . (J, p. 4)

> . . . go training still and break down and have to hobble home . . . (M, p. 2)

> . . . my running was always hampered . . . . get half way through the training and realise that no, my hip or leg wasn't going to let me . . . (L, p. 3)

> Now I don't even try, I know just running down the golf links I can feel my whole body jarring. And I'd get out of bed and I wouldn't be able to walk properly, so. (B, p. 4)

> . . . my knee injury happened in 1991 so everything has been down hill since then. As far as volume and effort and training goes anyway. (G, p. 2)

D and I are the only co-researchers who continue doing what we most like to do. All of the others have had to give up or reduce their involvement in their priority exercise. Both B and M had to give up running and have taken up cycling instead. J replaced her running with walking while R and F have given up rugby and hockey to focus on athletics. G and L have not given up hope of running again but are down to a walk at the present time. All of these changes are due to the after-effects of training and the resultant long-term injury problems suffered as a consequence. Moran (2004) focuses on over-training and exercise dependence as the main adverse effects of training and exercising. These co-researcher accounts provide insight into injury related exercising from a different perspective, a perspective of healthy acknowledgement, acceptance and adaptation.

Aging body

An awareness of our bodies aging brings awareness of our exercising limitations and expectations and with it mixed reactions.

> . . . I sometimes think oh you old bugger you're sixty-three now you're going to have to start slowing down . . . (D, p. 7)
>
> Well I don't know that I'm going to play hockey for that much longer. (F, p. 5)
>
> . . . I don't feel sixty-six years old is an old age and I just feel I should carry on until something occurs where I'm unable to cycle or do physical exercise. And then I'd probably move into something, sort of, less strenuous. (M, p. 5)
>
> . . . I realise I can't be like I was when I was 25 I suppose. (G, p. 5)
>
> I'm sick of flogging my body, right . . . . And I still visualise myself doing something every day until I drop dead. (B, p. 5)
>
> . . . I just don't feel like I've got the energy anymore . . . too painful. (J, p. 4)
>
> . . . still running, a lot slower obviously. (L, p. 9)

All co-researchers are aware of the on-going effects of exercising on an aging body. Notice here that aging has a slowing effect only and not a preventive one. Co-researchers see themselves as slowing down and turn their minds to adapting their exercising to this reality. For L this means continuing her much loved running but at

a slower pace. For M and B it involves moving in a way that does not hurt their bodies the same. Like the rest G is able to acknowledge and accept the reality of aging and its consequences for him and his exercising. Aging and exercise has been researched quantitatively and qualitatively. Both forms of research are in agreement about the usefulness of exercise to older people and support the argument that exercising and aging go together and that aging can facilitate exercise while exercise can slow aging (Stathi, Fox & McKenna, 2002; Moran, 2004).

.

Role models

All of the co-researchers were influenced in their exercising by other people in one way or another.

> Oh the family used to go tramping a lot . . . like walks along cliffs and around the beaches and that sort of thing. (L, p. 1)
>
> I had teachers . . . who were in sports and they were very good role models, that helped . . . . And Mum and Dad, encouraged that too. (J, p. 1)
>
> My parents never took us anywhere. If I wanted to go training we'd get on the bike and we'd go rain, hail or snow. (B, p. 1)
>
> Umm, '62 came around with Peter Snell and his record running and I threw away my cricket bat and threw away my rugby boots. I wanted to become a Peter Snell. (G, p. 1)
>
> I always think of M's experience, um, was a wake-up call for me in some ways. At least I was able to see what happens when you get sick . . . . there's things that they can't deal with and you've got to look after yourself. (D, p. 8)
>
> My exercise then was going around, helping D around on the farm we were working on . . . a Parapara hill farm, where you could climb . . . (F, p. 1)
>
> Well the army experience . . . . There were NCO's that were, took great delight in seeing, sort of, people suffer. But what it did for me, it gave me a grounding in discipline. I actually met a guy in the army who I trained with . . . and he gave me the inspiration as well. (M, p. 2)
>
> I got sponsored to go down to Outward Bound. And I think it changed my outlook and my life a fair bit. (R, p. 5)

The influence of role models on co-researcher exercising is obvious. Parents were important to J and B for opposing reasons while teachers also helped J. For D and F

spouses were important while M, R and F found particular environments conducive to developing their exercising attitudes. G found famous running figures excited his imagination, something that I can attest to as I remember sitting, glued to the radio as Snell crossed the line to win the Olympic 1500 metres gold medal. For me it was not so much the man himself that was the source of my inspiration rather it was how he achieved what he had achieved. It was the way Pele kicked the ball that I tried to copy rather than the way he looked. Research supports this type of influence from significant others on exercising (Henderson & Ainsworth, 2000; Lang & Jessen, 2000; Lox, Martin & Petruzzello, 2003)

Summary

All co-researchers report a number of contextual influences on their early exercising experiences. These include transport, informal play, interacting neighbourhoods, the outdoors and role models. These are primarily experienced in childhood and appear to be important formative influences in the lives of these long-term exercisers. Formal sport, competition and training come later and introduce co-researchers to the beginnings of injury related problems. These problems along with an aging body provide co-researchers with dilemmas later in their lives and necessitate a reappraisal of their activities. There is a lack of knowledge about these contextual influences, particularly the ones experienced in childhood, as well as a lack of research into their importance and significance within the exercising domain.

CHAPTER EIGHT. Process.

> Process can be thought of as the difference between a snapshot and a moving picture. Each one pictorial form presents a different perspective and gives insight, but if one wants to see what happens or how things evolve, then one must turn to the moving picture. (Strauss & Corbin, 1998, p. 179)

In the analysis of co-researcher accounts a distinction arises between exercising outcomes and exercising longevity. As already mentioned outcomes and background influences combine to produce our experiences of exercise. These experiences appear to form the basis of a process of self-understanding that is important to our identity and self-image. This process can be summarised by a journey that is identifiable in three stages. An **initiation** phase involves the initial development of our physical competence. An **exploration** phase provides the opportunity for us to test out and evaluate out competence. An **integration** phase is where our exercising and what it means changes and its place in our lives is reinterpreted. Each of these phases or stages is identifiable by a mix of outcomes and contextual influences that co-researchers report.

Initiation

The initiation phase occurs typically during childhood years and involves a context of interacting neighbourhoods, the outdoors, a lack of transport, informal play and role modelling. The primary outcomes experienced are competence, enjoyment, and sociability.

> Yep, pulling a racing car around on a piece of string for hours on end. Down the drive, around and around . . . . Racing kids around the block . . . . I was reasonably good . . . (G, p. 1)

> We walked to school about five miles. We ran wild . . . and we were out in the country. Summer we spent most of our time at the beach . . . . we biked everywhere . . . there was no cars. (F, p. 1)

> That was when I first started playing club rugby with a pile of kids . . . . That was combined with school . . . . I was in top teams . . . (R, p. 1)

> . . . we were always outside playing . . . . It was a transport thing . . . . You got on your bike or you walked. . . . It was always a race . . . to play with the kids

> before school went in again. We might go . . . to Otaki . . . . go to another on at the centre at night time. It was kind of our lifestyle, that was what turned us on. (B, p. 1)

> And we had to walk . . . three miles there, three miles back . . . every single day . . . . walks along cliffs and around beaches and that sort of thing . . . . we were living like opposite, look straight on the beach, right on the beach and I was swimming and rowing boats and kayaking from when I was really small. It was a fantastic way to be bought up. (L, pp. 1 & 4)

> . . . I used to walk to kindy . . . walk to school . . . . I swam . . . . I had a bike . . . . It was fun and I was good. I liked mixing with the other people and I was quite good at it and I liked those feelings. (J, p. 1)

> Well in those days, we had to walk a lot. We didn't get driven around and we all had bikes . . . we either walked or rode a bike . . . (D, p. 1)

> No, no, both my parents, they just weren't particularly in sports. My early years, they were war-time years . . . there wasn't any sport so. It was, I wanted to become a professional soccer player. That was my ambition . . . . in the army. I sort of started running. (M, p. 1)

These early, commonly experienced influences can be conceived of as an initiation into what turns out to be a life long engagement with exercise. Even M whose early experience is at odds with the others eventually found his own way into exercising through a different set of influences. With hindsight some co-researchers are more aware of this initiation phase than others.

> . . . I thought well this is all a build-up for my running, yeah. (B, p. 1)

> I've just been thinking that exercise part . . . was all building me for where I am now . . . (L, p. 8)

> We used to walk miles collecting oysters as well. Just those little things, might not seem much but they had quite a big bearing I think. (J, p. 6)

> As I say I think the younger years where we had to walk and had to ride bikes give me a basis of strength . . . it enabled me to go out and enjoy the outdoors. (D, p. 7)

Quantitative research is predominantly silent on childhood initiation. Qualitative studies (Flintoff & Scratton, 2001; Lang & Jessen, 2000; McDermott, 2000) describe family, environmental and social influences like gender stereotyping and the current exercise discourse, as important to exercise behaviour. This project goes further in specifying a mix of family, neighbourhood, environmental and transport influences

that combine with personal outcomes of enjoyment, socialiability and perceived competence. This mix appears to provide a climate or culture that facilitates co-researcher exercising. It can also be viewed as the stepping-stone into a deeper exploration of its merits and leads them into another phase of their exercising experience.

Exploration

The exploration phase of co-researcher's exercising experience appears to occur primarily in teenage years and young adulthood but can also extend into middle adulthood. This period involves formalised sport, competing and rigorous training. Primary outcomes include physical, emotional and interpersonal ones along with time management.

> Training every day sort of following a Lydiard pattern . . . . gave me good self-esteem I know that . . . . I was winning and running well. (G, pp. 1 & 2)
>
> . . . and when I was in the College A . . . that's when I started getting into proper training . . . . I still played my hockey on a Saturday . . . . It was my time . . . and it was a really good break for me. (F, pp. 1 & 9)
>
> . . . the feeling of being able to do things, aah, quite well. If you hadn't been training you probably wouldn't be able to do them as well . . . . made me realise that I'd be a bit better at my sport if I trained a bit harder or more often. (R, pp. 5 & 6)
>
> So when I came home M took over my training. Then it started. The hard work. The dedication. My family and everything revolved around my training. (B, p. 2)
>
> That's when it did get quite formal. Another level really . . . . Monday, Tuesday, Wednesday, Thursday go and do this and this . . . (L, p. 3)
>
> . . . I got a touch of success . . . . I really enjoyed that . . . . had this dream that I was going to be better . . . . And I worked really hard to get better. (J, pp. 3 & 5)
>
> I didn't exercise that much . . . apart from going along and having a game on a Saturday. I probably didn't do a lot of formal exercise . . . (D, p. 1)
>
> And I joined them and that's when my running really started . . . . competition was track races, cross country races in the winter . . . . I trained with a . . . lot of very good athletes . . . and I gained a lot . . . (M, pp. 1 & 8)

As described in chapter seven the progression into formal sport was a natural one given the co-researchers' earlier experiences of competence and enjoyment from moving. L describes the step up to another level that this transition required of us. For B and G this necessitated another level again in terms of commitment and dedication and bought with it national and international success. M who was trying to make up for lost time never reached these levels of success but duplicated their effort. ". . . I can train very hard . . . but the body just wouldn't allow me to . . . reach higher areas" (p. 8). J too was on a mission to be very good but for her this level of intensity and commitment produced mainly injury and frustration. "And I worked really hard to get better. I just kept breaking down instead of getting better" (p. 5). These accounts contrast to D whose concerns lay elsewhere, with a dying spouse and a large family to support.

Apart from D all co-researchers along with myself got into serious training and competing. This was a way of exploring the boundaries of our athletic abilities and resulted in club, national and international achievements. It also meant physical consequences for most of our bodies, both short and long term, due to injury. D on the other hand only began to explore his exercising interests once his family had grown up. This lack of intense training and competing left him relatively physically unscathed as he and the rest of us head into another stage of our exercising history.

Integration

The integration phase occurs in middle and later adulthood. This period involves an aging and often injured body that leads to changes in exercise activity. It is also dominated by the thinking outcomes along with well-being and enjoyment.

> I'm doing it for health . . . . I'm older, wiser . . . . I achieved quite highly . . . don't have to prove myself anymore, done it. (G, pp. 5 & 6)

> . . . I was very competitive . . . . Now I'm competing against me . . . if I win it's a bonus . . . . That's why I act as an official . . . someone did it for me, I do it for someone else . . . . I'll probably keep on running until . . . . I have to find something else to do. (F, pp. 5 & 6)

> It's hard to explain . . . . it gave me a different outlook . . . . I think it was the, um, discipline . . . made me realise if I trained a bit harder or more often . . . (R, pp. 5 & 6)
>
> I'm sick of flogging my body right . . . . So that's when the golf came in . . . . I could still be playing golf when I'm eighty . . . . I don't ever see myself as being a couch potato . . . (B, p. 5)
>
> . . . I'll just probably be pushing myself as hard as I can . . . . While the body still lets me . . . . it's not my whole life. I mean I've got the girls and I've got G and I've got the garden . . . . So it's not my whole life. (L, pp. 9 & 11)
>
> . . . I was wrecking my body and I wouldn't be able to walk properly and if I couldn't walk, I would be a wreck . . . . I love walking . . . . For pleasure and nothing competitive in it at all . . . . And it's like relief. (J, pp. 4 & 5)
>
> And in the last 15-20 years I've been on my own . . . . and I realise since M died the importance of health . . . . made sure that I have regular exercise . . . and now I'm still, at my age, able to do things like that on my feet . . . (D, pp. 1 & 7)
>
> Well I'm going to keep competing because it's a way of life. It's a lifestyle for me . . . . I don't feel sixty-six years old is an old age and . . . . you need an outlet . . . that's creative for the mind in some ways. (M, p. 5)

For most of us the physical and emotional ravages of hard training and competing have necessitated a reappraisal of our exercising. This reappraisal forces an integration of our past enjoyment from moving with the present reality of an aging and injured body as well as our future need to move. What emerges are new ways to move that satisfy these demands. For J this meant reverting back to her beloved walking the very thing she started with. For B it has meant the discovery of golf with its pain-free exercise and opportunity to socialise. For G it means not having to prove himself anymore along with the joys of lawn mowing. For M it has meant a change to cycling where he finds the same sort of utopia he once did with his running. For L it now encompasses her garden while for F it is also an opportunity to give something back to younger athletes.

This integration phase helps provide clues as to why we have exercised all our lives. In moving we have found a unique way to experience and express ourselves. L helps sum this up when she says, "It's just me . . . that's one of the main ways I can get my release" (pp. 9 & 11). M, along with R, finds it hard to explain, "Utopia, sort of,

yeah. I think it does. It's hard to explain" (p. 3). D explains it as a facilitating influence. ". . . to go and enjoy the outdoors and, I think, be a better person" (p. 7). B just cannot see herself any other way. "And I still visualise myself doing something every day until I drop dead" (p. 5).

All of us found out early that exercising was enjoyable and that we were somehow good at it. We also found it important to test out just how good we could be and in the process discovered more about ourselves. What also appears unique to our exercising longevity is the integration of where and how all this exercising fits in our lives. The importance of our exercising is revealed as a unique way for us to express and understand ourselves. Outcomes are but one part of a process that operates each day and over time to call us back to be that person we have become. In this way our exercising has become a tangible way for us to define as well as create ourselves.

Summary

These accounts of life long engagement with exercise provide a moving picture of initiation, exploration and integration. What is revealed is a process whereby commonly occurring outcomes are interwoven within contextual and historical aspects of our lives to produce an affinity to regular exercise. Most of these outcomes are experienced and perceived as self-enhancing and beneficial and serve to reinforce our connection to and identification with moving. The need to move becomes then an extension of who we are and how we like to express ourselves. Through this extension of self in exercise we discover and explore ourselves physically, emotionally and mentally. These experiences assist in also helping to define some of our behaviours and to influence the relationships we forge.

As we move into older age our exercising is constrained by our physical bodies and new ways of seeing and doing it emerges. This process involves no longer being able to exercise the way we once did as well as the challenges of our emotional and mental adjustment to this. What results is a more integrated understanding of exercise in our lives. Exercising becomes well-being orientated and is seen as an important part of the final stages of our lives.

CHAPTER NINE. "It's just me": A grounded theory of the experience of being a long-term exerciser

Conclusion

Together the stages and categories of exercising longevity coalesce into the overriding theme or core category of **self-discovery**. This concept captures every aspect of the long-term exercising experience and makes sense to both co-researchers and myself alike. It describes the daily attempts we make through our exercising to know ourselves and to express who we are. Our exercising does not define us entirely however. In developing our self-image through our moving we also contribute to a more general self-concept of ourselves. We do this by using our exercising to help establish physical, mental, and emotional boundaries and capabilities that we then use to guide our behaviour in other areas of our lives. One area we do this in is our friendships and the types of relationships we develop.

This self-discovery or self-interpretation is the acknowledging of who we are and is the purpose behind our long term exercising. It pervades all the specific outcomes of our exercising as well as the stages of its longevity. When we run, walk, tramp, play hockey or bike we get to be who we most feel, believe and behave ourselves to be. It becomes a way for us to blend and activate internal and external elements of who we are and who we see ourselves as being. Our reward, and the meanings we derive from it, is the pure and sure sense of ourselves gained through the connectedness we experience in moving. We connect to moving and moving connects with us to help define and create who we become. This connection is best described by the fit that co-researchers feel with their exercising.

> I'm out again, need to get out and do something, and go somewhere, yes, hmmm. (B, p. 6)
>
> Um I just like playing sport . . . . I just feel better. (R, p. 4)
>
> I lie in bed at night and plan the next day. (M, p. 5)
>
> The more I read it the more I thought it was me. When I read it the second time it was me. (F, p. 8)

> So being able to get around on my two feet is the best thing and I think we're designed that way. (D, p. 7)
>
> You get back and you think aawuh, bloody good. I feel like a beer now, have a shower and you feel good about it. (G, p. 5)
>
> I think I said that a lot, exercise made me feel better about myself. And I wanted to be good, or felt that I was good and that helped me feel better. (J, p. 7)
>
> That's just the way I am. It's just me. (L, p. 8)

All co-researchers agreed with the grounded theory summary (Appendix D) supplied to them as apart of the final, feedback interview. In fact all of them were very enthusiastic about the way the summary was able to capture in a few sentences the essences of their exercising. This agreement and enthusiasm can be seen in their following comments.

> I'd give you ninety-nine percent out of a hundred. (R)
>
> Yes, yes it does, I would agree. (D)
>
> Well done, you've got it in a nutshell. (M)
>
> You've summed that up very well, and in just one page. (B)
>
> That puts it in a nutshell. That's perfect. (L)
>
> Excellent, captured it in one page. (G)
>
> It's very clear, yep very clear. It's right. (J)
>
> Yes very good. It sums it up very well. (F)

Implications

This grounded theory of long-term exercise has implications for exercise psychology. However these implications need to be seen within the limitations of the project. These include this understanding of exercising as being 'me' emerging from the reflections of a very homogenous sample. All nine of us have similar backgrounds, ethnicity and socio-cultural experiences. Hence this understanding and the insights it provides come from a very narrow slice of the long-term exercising population and

do not necessarily apply to others. It is also only one way of interpreting co-researcher accounts and needless to say someone else may interpret them differently. These personal accounts are also dependant on memory and as such may not represent reliable and accurate accounts of past experience. These types of limitations serve to highlight this project as an attempt to understand and interpret exercising experience from within a particular place and time. This attempt also remains one inter-subjective perspective on exercising unique to those involved.

Even given these provisos a number of useful insights can be gleaned from the project. Firstly our shared contextual influences played an important part in the way we came to be exercisers. Therefore different contextual influences will likely influence different understandings. Researching and comparing contemporary influences on exercising like television, computers and videos with the ones illuminated here would make for interesting reading. It is also interesting to note that none of the co-researchers' children have continued in the exercising footsteps of their parents. This turn of events could be well worth researching in its own right.

Secondly, as with contextual influences the way outcomes are experienced also influences our understandings. For us moving is an important avenue for our learning and self-expression and it influenced the way we responded to specific outcomes especially the more negatively perceived ones. It may therefore be prudent to distinguish individuals who have different styles of learning and self-expression and who may well interpret similar outcomes quite differently.

Thirdly, we are all athletes long in the tooth both in terms of our exercising as well as our life experiences. This longevity provides us with a bias and a history that influences our outlook. Future research could contrast and account for this by sampling other individuals and groups with differing perspectives and motivations. These groups could include redundant exercisers, intermittent exercisers, specific age groupings as well as different pursuit groups. Making this type of research easier is the Masters Games movement that is currently popular in many countries. These week-long events provide a readily accessible research resource of middle to older aged participants who vary in all of the above ways and more.

One of the more interesting findings here is the lack of research on childhood influences. Sampling children for contextual and outcomes factors particularly before they reach the formal sport phase would be useful to discover current trends as well as contrast these with the influences mentioned here. This research also suggests that we shared some key motivational influences in our childhood years. However these findings may only scratch the surface of such influences as it also highlights the disparity of M's childhood experiences and with it the complexity of the attitude/behaviour relationship in the exercising realm.

In this complexity lies the rub of the exercising experience. Our experiences do not point to a magic bullet or more specifically the key psychological mechanisms underpinning it. All of the influences and outcomes mentioned by us do not exist in a vacuum, rather they are part of and are intertwined within, a process that evolves over time and with awareness. This process is personal, contextualised and socially and culturally bound. It rather argues against the current exercise discourse that generalises the benefits of exercise to everyone without due regard to these considerations. This lack of respect for the individual may well explain how it is possible for the majority of people to choose not to take exercise seriously.

The globalising of exercise does not work and another reason for this can be found in the presented grounded theory. When we exercise we do so for a purpose and with associated meanings. We move because it is our special way of expressing and experiencing ourselves. Outcomes provide a range of meanings that help reinforce and renew this understanding of ourselves each day. Would we do it the same or even at all if we did not gain this purpose and significance from it? Probably not, because it is these elements of meaning and purpose that provides the link to our connectedness with moving. Without reference to this hermeneutical context exercise will remain poorly understood and delineated by vague and hypothetical representations, except of course, for those of us who do it.

REFERENCES

Annells, M. (1996). Grounded theory method: Philosophical perspective, paradigm of inquiry, and postmodernism. *Qualitative Health Research*, **6,** 379-393.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, **84**, 191-215.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.

Banister, P., Burman, E., Parker, I., Taylor, M., & Tindall, C. (1994). *Qualitative methods in psychology: A research guide.* Buckingham: Open University Press.

Bayley, N. (1936). *The California infant scale of motor development*. Berkeley: University of California Press.

Becker, H. S. (1993). Theory: The necessary evil. In D. J. Flinders & G. E. Mills (Eds.), *Theory and concepts in qualitative research: Perspectives from the field* (pp.218-229). New York: Teachers College Press.

Biddle, S. (1999). Adherence to sport and physical activity in children and youth. In S. Bull (Ed.), *Adherence issues in sport & exercise* (pp. 111-144) . New York: John Wiley & Sons Ltd.

Biddle, S. J. H. (2000). Exercise and health psychology. In S. J. H.Biddle, K. R. Fox, & S. H. Boutcher (Eds.), *Physical activity and psychological well being* (pp.741-762). London: Routledge.

Biddle, S. J. H., Fox, K. R. & Boutcher, S. H. (2000). *Physical activity and psychological well being*. London: Routledge.

Biddle, S. J. H., & Mutrie, N. (2001). *Psychology of physical activity. Determinants,*

well being and interventions. London: Routledge.

Bordo, S. (1997). *Bringing body to theory. In twilight zones: The hidden life of cultural images from Plato to O.J.* Berkeley, CA: University of California Press.

Boutcher, S. H. (2000). Cognitive performance, fitness and aging. In S. J. H. Biddle, K. R. Fox & S. H. Boutcher (Eds.), *Physical activity and psychological wellbeing* (pp. 118-129). London: Routledge.

Broocks, A., Bandelow, B., Pekrun, G., George, A., Meyer, T., Bartmann, U., Hillmer-Vogel, U., & Ruther, E. (1998). Comparison of aerobic exercise, clomipramine and placebo in the treatment of panic disorder. *American Journal of Psychiatry*, **115**, 603-609.

Brown, S. P. (Ed.). (2001). *Introduction to exercise science*. Baltimore, Maryland: Lippincott Williams & Wilkins.

Buckworth, J., & Dishman, R. K. (2002). *Exercise Psychology*. Champaign, IL: Human Kinetics.

Byrd, R. J., & Brown, S. P. (2001). The emergence of exercise science. In S. P. Brown (Ed.), *Introduction to exercise science* (pp. 5-25). Baltimore, Maryland: Lippincott Williams & Wilkins.

Carvell, J. (1995). *Understanding as coping: A grounded theory of women's experiences of premenstrual changes*. Masters Thesis, Palmerston North: Massey University.

Chamberlain, K. (1999). Using grounded theory in health psychology. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology: Theories & methods* (pp. 183-201). London: Sage.

Chaouloff, F. (1997). The serotonin hypothesis. In W. P. Morgan (Ed.), *Physical*

activity and mental health (pp. 179-198). University of Wisconsin-Madison: Taylor & Francis.

Charmaz, K. (1990). Discovering chronic illness: Using grounded theory. *Social Science and Medicine*, **30**, 1161-1172.

Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed. pp. 509-535). London: Sage.

Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO personality inventory. *Psychological Assessment*, **4**, 5-13.

Costain Schou, K., & Hewison, S. (1998). Health psychology and discourse: Personal accounts as social texts in grounded theory. *Journal of Health Psychology*, **3,** 297-312.

Crone-Grant, D., & Smith, R. A. (2002). I feel totally at one, totally alive and totally happy: mental health benefits through physical activity - a qualitative inquiry. *Journal of Sports Sciences*, **20**, 61-62.

Danziger, K. (1997). *Naming the mind: How psychology found its language*. London: Sage

Danziger, K., & Dzinas, K. (1997). How psychology got its variables. *Canadian Psychology/ Psychologie Canadienne,* **38**, 43-48.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New York: Plenum Press.

Denzin, N. (1988). Act, language, and self in symbolic interactionist thought. *Studies in Symbolic Interaction*, **9**, 51-80.

Diener, E., Eunkook, S. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-

being: Three decades of progress. *Psychological Bulletin*, **125**, 276-302.

Dilthey, W. (1977). *Descriptive psychology and historical understanding* (R. M. Zaner & K. L. Heiges, Trans.). The Hague: Martinus Nijhoff. (Original works published 1894 and 1927).

Dishman, R. K. (1997). The norepinephrine hypothesis. In W. P. Morgan (Ed.), *Physical activity and mental health* (pp. 199-212). University of Wisconsin-Madison: Taylor & Francis.

Durstine, J. L., & Brown, S. P. (2001). Future of exercise science. In S. P. Brown (Ed.), *Introduction to exercise science* (pp. 409-418). Baltimore, Maryland: Lippincott Williams & Wilkins.

Erikssen, G. (2001). Physical fitness and changes in mortality: The survival of the fittest. *Sports Medicine*, **31**, 571-576.

Flintoff, A., & Scraton, S. (2001). Stepping into active leisure? Young women's perceptions of active lifestyles and their experiences of school physical education. *Sport, Education and Society*, **6**, 5-21.

Fox, K. R. (2000). The influence of exercise on self-perceptions and self-esteem. In S. J. H. Biddle, K. R. Fox & S. H. Boutcher (Eds.), *Physical activity and psychological well being* (pp. 78-111). London: Routledge.

Gadamer, H. –G. (1975). *Truth and method* (2nd rev. ed., J. Weinsheimer & D. G. Marshall, Eds. & Trans.). New York: Crossword. (original work published 1960).

Gallagher, S. (1992). *Hermeneutics and education.* Albany: State University of New York Press.

Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.

Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, **40**, 266-275.

Gill, D. L. (1997). Sport and exercise psychology. In J. D. Massengale & R. A. Swanson (Eds.), *The history of exercise and sport science* (p. 293-320). Champaign, IL: Human Kinetics.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Gubrium, J. F., & Holstein, J. A. (2000). Analyzing interpretive practice. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed. pp. 487-508). Thousand Oaks, CA: Sage.

Hall, E. E., Ekkekakis, P., & Petruzzello, S. J. (2002). The affective beneficience of vigorous exercise revisited. *British Journal of Health Psychology*, **7**, 47-66.

Hed, T.A. (1997). A qualitative study of exercise consistency and its psychological benefits. *Dissertation Abstracts International*, **58**, 2171.

Heidegger, M. (1962). *Being and time* (J. Macquarrie & E. Robinson, Trans.) New York: Harper & Row. (Original work published 1927).

Hein, S., & Austin, W. J. (2001). Empirical and hermeneutic approaches to phenomenological research in psychology: A comparison. *Psychological Methods*, **6**, 3-17.

Henderson, K. A., & Ainsworth, B. E. (2000). The connections between social support and women's physical activity involvement: The cultural activity participation study. *Women in Sport & Physical Activity Journal*, **9**, 27-53.

Henwood, K. L. (1996). Qualitative inquiry: Perspectives, methods & psychology. In J. T. E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 25-42). Leicester: BPS Books.

Hoffmann, P. (1997). The endorphin hypothesis. In W. P. Morgan (Ed.), *Physical activity and mental health* (pp. 163-177). University of Wisconsin-Madison: Taylor & Francis.

Husserl, E. (1970). *Logical investigation.* Atlantic Highlands, NJ: Humanities Press.

Keddy, B., Sims, S. L., & Stern, P. (1996). Grounded theory as feminist research methodology. *Journal of Advanced Nursing*, **23**, 448-453.

Kendzierski, D. (1994). Schema theory: An information processing focus. In R. K. Dishman (Ed.), *Advances in exercise adherence* (pp. 137-159). Champaign, IL: Human Kinetics.

Kincheloe, J. L., & McLaren, P. (2000). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed. pp. 279-314). London: Sage.

Kluge, M. A. (2002). Understanding the essence of a physically active lifestyle. A phenomenological study. *Journal of Aging and Physical Activity*, **10**, 4-28.

Koltyn, K. F. (1997). The thermogenic hypothesis. In W. P. Morgan (Ed.), *Physical activity and mental hea*lth (pp. 213-226). University of Wisconsin-Madison: Taylor & Francis.

Koltyn, K. F. (1998). Exercise modifies the sensation of pain. *British Journal of Sports Medicine,* **32,** 20-24.

Koltyn, K. F. (2001). Effect of isometric exercise on pain perception and blood pressure in men and women. *Medicine and Science in Sports and Exercise*, **33**, 282-290.

Kretchmar, R. S. (1997). Philosophy of sport. In J. D. Massengale & R. A. Swanson (Eds.), *The history of exercise and sport science* (p. 181-202). Champaign, IL: Human Kinetics.

Kvale, S. (1992). Postmodern psychology: A contradiction in terms? In S. Kvale (Ed.), *Psychology and postmodernism* (pp. 31-57). London: Sage.

Landers, D. M. (1999). The influence of exercise on mental health. In C. B. Corbin & R. P. Pangrazi (Eds.), *Toward a better understanding of physical fitness & activity* (pp137-144). Scottsdale, Arizona: Halcomb Hathaway.

Lang, R. H., & Jessen, D. U. (2000). Contributors to lifelong moderate physical activity in the lives of women. *Dissertation Abstracts International*, **60**, 2393.

Levy, S. (2002). Women and the personal meaning of competition; A qualitative study. *Women in Sport and Physical Activity Journal*, **11**, 107-125.

Lowenberg, J. S. (1993). Interpretive research methodology: Broadening the dialogue. *Advances in Nursing Research*, **16**, 57-69.

Lox, C. L., Martin, K. A., & Petruzzello, S. J. (2003). *The psychology of exercise: Integrating theory and practice*. Scottsdale, Arizona: Holcomb Hathaway

Lyons, A. (1999). Shaping health psychology: Qualitative research, evaluation and representation. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology: Theories & methods* (pp. 241-255). London: Sage.

Marcus, B. H., Bock, B. C., Pinto, B. M., Napolitano, M. A., & Clark, M. M. (2002). Exercise initiation, adoption, and maintenance in adults: Theoretical models and empirical support. In J. L. Van Raalte & B. W. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 185-208). Washington, DC: American Psychological Association.

Martin, J. & Sugarman, J. (2001). Interpreting human kinds: Beginnings of a

hermeneutic psychology. *Theory & Psychology*, **11,** 193-207.

Martinsen, E. W., & Morgan, W. P. (1997). Antidepressant effects of physical activity. In W. P. Morgan (Ed.), *Physical activity and mental health* (pp. 93-106). University of Wisconsin-Madison: Taylor & Francis.

Martinsen, E. W., Raglin, J.S., & Hoffart, A. (1998). Tolerance of intensive exercise and high levels of lactate in panic disorder. *Journal of Anxiety Disorders*, **12,** 333-342.

McDermott, L. (2000). A qualitative assessment of the significance of body perception to women's physical activity experiences: Revisiting discussions of physicality. *Sociology of Sport Journal*, **17**, 331-363.

Metheny, E. (1968). *Movement and meaning.* New York: McGraw-Hill.

Miller, C. T., & Downey, K. T. (1999). A meta-analysis of heavy weight and self-esteem. *Personality and Social Psychology Review*, **31**, 68-84.

Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Cambridge, MA: Harvard University Press.

Moran, A. P. (2004). *Sport and exercise psychology. A critical introduction.* London: Routledge.

Morgan, W. P. (2001). Prescription of physical activity: A paradigm shift. *Quest,* **53,** 366-382.

Motl, R. W., Dishman, R. K., Saunders, R., Dowda, M., Felton, G., & Pate, R. R. (2001). Measuring enjoyment of physical activity in adolescent girls. *American Journal of Preventive Medicine,* **21,** 110-117.

Murray, M, & Chamberlain, K. (1998). Qualitative research in health psychology: Developments and directions. *Journal of Health Psychology*, **3**, 291-296.

Nies, M. A., Vollman, M., & Cook, T. (1999). African American women's experiences with physical activity in their daily lives. *Public Health Nursing*, **16,** 23-31.

O'Brien, S. J., & Conger, P. R. (1991). No time to look back: Approaching the finish line of life's course. *International Journal of Aging and Human Development*, **33**, 75-87.

Packer, M. J. (1985). Hermeneutic enquiry in the study of human conduct. *American Psychologist,* **40**, 1081-1093.

Palmer, R. E. (1969). *Hermenuetics: Interpretation theory in Schleiermacher, Dilthey, Heidegger and Gadamer*. Evanston, IL: Northwestern University Press.

Petruzzello, S. J., Landers, D. M., Hatfield, B. D., Kubitz, K. A., & Salazar, W. (1991). A meta-analysis of the anxiety reducing effects of acute and chronic exercise: outcomes and mechanisms. *Sports Medicine*, **11**, 143-182.

Pidgeon, N. (1996). Grounded theory: Theoretical background. In J. T. E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 75-85). Leicester: BPS Books.

Pidgeon N., & Henwood, K. (1996). Grounded theory: Practical implementation. In J. T. E. Richardson (Ed.), *Handbook of qualitative research methods for psychology and the social sciences* (pp. 86-101). Leicester: BPS Books.

Potter, J. A. (1998). Qualitative and discourse analysis. In N. R. Schooler (Ed.), *Comprehensive clinical psychology* (Vol. 3, pp. 117-1440). Oxford: Pergamon.

Prochaska, J. O., & Di Clemente, C. C. (1983). Stages and processes of self-change in smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, **51**, 390-395.

Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of behaviour change. *American Journal of Health Promotion*, **12**, 38-48.

Radley, A. (1999). Social realms and the qualities of illness experience. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology: Theories & methods* (pp. 16-30). London: Sage.

Raglin, J. S. (1997). Anxiolytic effects of physical activity. In W. P. Morgan (Ed.), *Physical activity and mental health* (pp. 107-121). University of Wisconsin-Madison: Taylor & Francis.

Ruth, J. E., & Coleman, P. (1996). Personality and aging; Coping and management of the self in later life. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (4th ed., pp.308-322). San Diego, CA: Academic Press.

Schutz, A. (1964). *Studies in social theory*. The Hague: Martinus Nijhoff.

Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics and social constructionism. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed. pp. 189-214). London: Sage.

Sherrington, C. S. (1906). *The interactive action of the nervous system*. New Haven, CT: Yale University Press.

Skinner, B. F. (1953). *Science and human behaviour*. New York: Macmillan.

Slusher, H. S. (1967). *Man, sport and existence: A critical analysis*. Philadelphia: Lea and Febiger.

Sonstroem, R. J. (1997). Physical activity and self-esteem. In W. P. Morgan (Ed.), *Physical activity and mental health* (pp. 127-144). University of Wisconsin-Madison: Taylor & Francis.

Sonstroem, R. J., & Morgan, W. P. (1989). Exercise and esteem: Rationale and model. *Medicine and Science in Sports and Exercise*, **21**, 329-337.

Stathi, A., Fox, K. R., & McKenna, J. (2002). Physical activity and dimensions of subjective well-being in older adults. *Journal of Aging & Physical Activity*, **10**, 76-93.

Strauss, A. L., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks, CA: Sage.

Strauss, A. L., & Corbin. J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Strauss, A. L., & Glaser, B. G. (1975). *Chronic illness and the quality of life* (2nd ed.). St. Louis: Mosby.

Thayer, R. T. (2001). *Calm energy: How people regulate mood with food and exercise*. New York: Oxford University Press.

Thompson, J. (1990). Hermeneutic inquiry. In E. Moody (Ed.), *Advancing nursing science through research* (pp. 223-280). London: Sage.

Thorndike, E. L. (1927). The law of effect. *American Journal of Psychology*, **39,** 212-222.

United States Department of Health and Human Services. (1996). *Physical activity and health: A report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centres for Disease Control and Prevention, National Centre for Chronic Disease Prevention and Health Promotion.

Wanganui Chronicle. (2004). From humble beginnings to cricket stardom. *Wanganui Chronicle*, February 21, p.20.

Weiss, P. (1969). *Sport: A philosophic inquiry*. Carbondale: Southern Illinois University.

Yardley, L. (1999). Understanding embodied experience. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology: Theories & methods* (pp.31-46). London: Sage.

Massey University
COLLEGE OF HUMANITIES & SOCIAL SCIENCES

School of Psychology
Private Bag 11 222,
Palmerston North,
New Zealand
Telephone: 64 6 356 9099
Facsimile: 64 6 350 5673

APPENDIX A.

THE EXPERIENCE OF BEING A LONG TERM EXERCISER.

INFORMATION SHEET

My name is Brian Tuck and I am completing a Master of Arts degree in Psychology at Massey University. My supervisor for this study is Dr. Mandy Morgan at the School of Psychology, Massey University, Palmerston North.

This project is a qualitative study designed to explore participant's exercise experiences. This will assist me to better understand such experiences and communicate them to other health professionals.

There are eight participants in the study who I have recruited because they are long-term exercisers and are well known to me. No participant will receive any form of compensation, payment or reimbursement. There are no risks or major discomforts envisaged to participants as a result of participation.

As a participant you will be asked to take part in an audio taped interview for approx. 30-60 minutes in which you will be asked about your experiences as a long-term exerciser. Your interview will then be analysed to gain further understanding of the meanings attached to your exercise experiences. You will be asked for feedback on the accuracy of my interpretation of your interview.

You will be asked to provide your name and contact details on a consent form for the purposes of consent, feedback and/or return of any material you provide. These personal details will be kept separate from the audio tapes and the interview analysis information so that at no time will your responses be identifiable to anyone other than me. All material you provide will be kept in lockable premises during the

course of the study and at its completion audio tapes will be returned to you. On completion of the study you may receive a summary of its findings.

You have the right to

1. Decline to participate
2. Decline to answer any particular question
3. Withdraw from the study any time
4. Ask any questions about the study at any time during participation
5. Provide information on the understanding that your name will not be used unless you give permission to the researcher
6. Be given access to a summary of the study's findings when completed
7. Ask for the audio-tape to be turned off at any time

Please contact me on (06) 345 8156 or (06) 345 8256 or Dr. Morgan on 0508 544 331 if you have any further questions.

Massey University
COLLEGE OF HUMANITIES & SOCIAL SCIENCES

School of Psychology
Private Bag 11 222,
Palmerston North,
New Zealand
Telephone: 64 6 356 9099
Facsimile: 64 6 350 5673

APPENDIX B.

THE EXPERIENCE OF BEING A LONG TERM EXERCISER

CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS

I have read the information sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being audio taped.

I agree to participate in this study under the conditions set out in the information sheet.

Signature: ..... **Date:** .....

Full Name – printed .....

APPENDIX C.

INTERVIEW FORMAT/QUESTIONS

Each participant will be interviewed and audio taped. Each interview will start with the same questions, which lead into more open-ended and discussion based interaction.

Initial Questions.
Before we turn the tape recorder on do you have any questions about why we are here and what we are going to do? Are there any concerns you have at this point? Do you understand your right to withdraw at any time and without any consequence? Can I turn the tape recorder on?

What age group are you in?

What do you understand exercise to be?

When did you first start exercising? What is your history of exercising? How did these experiences affect you? What sorts of feelings did you have? How did you come to see yourself?

What exercise do you currently engage in? What does it involve? E.g. how, when, where, who with, how often, what do you need, what constitutes doing it well? How would you compare the person you were in earlier exercising times with the person you are now? Why do you exercise?

What of the future? If you were unable to exercise what would this mean to you? Why?

Overall what place has exercise had in your life? How has it contributed to your life? What have you learned about yourself?

APPENDIX D.

GROUNDED THEORY SUMMARY

When we exercise a number of things happen. Our bodies get fitter, stronger and healthier. We also feel better and get enjoyment, satisfaction and a sense of well-being from it. It helps our thinking, reduces stress and helps us to understand ourselves better. It helps us socialise and gives us the opportunity to develop long-term friendships and partnerships. It has also meant lots of hard work and pain and involved a life of dedication and commitment.

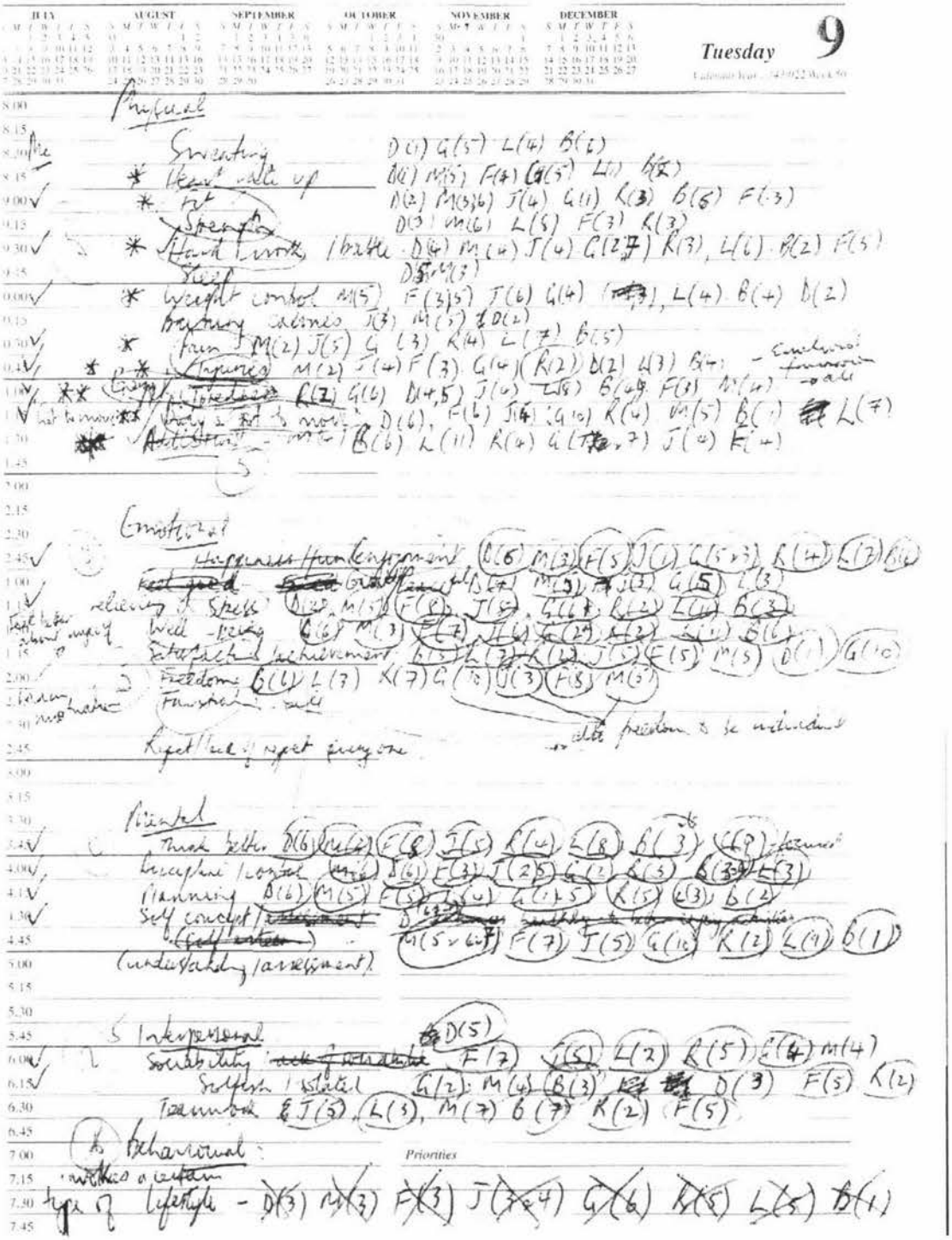
Some of the influences that helped us become life long exercisers were: having no transport as children and walking or biking everywhere, playing outdoors, playing with other children, parents and role models, formal sports and competitions and hard training. As we get older, injuries and an aging body catch up with us and means adapting to new pursuits or reducing the intensity of old ones.

Together these outcomes and influences contribute to our experience of exercise and in turn help shape some of the ways we like to behave and interact. Our exercising experience can also be divided into three distinct stages of our lives. An initiation stage where we learn we are good at exercising, an exploration stage where we test out just how good we are through competition and a final stage where we integrate our exercising into the latter part of our lives. Together these stages can be seen as our way of discovering different aspects of ourselves that lead us to a better self-understanding.

Throughout our lifetime our exercising helps us express ourselves and becomes an important way of defining who we are and feeling good about who we have become. It is not the only way we do these things but the importance of our exercising can be seen in the way we persist in doing it throughout our lifetime.

APPENDIX E.

(i) Code notes



(ii) Theoretical notes

Theoretical Notes

MAY 2003

22 Thursday

Calendar Year · 142/223 Week 21

Theme · WRITING ·

Finished off transcribing interview with G. Initially felt overawed by amount of work involved in transcribing but the more I did the more I came to understand the saying - 'stay close to the data'.
Felt both a privelege and an appreciation to be able to share with G about his experiences. Got a glimpse of the importance running had played in his life. Felt lucky to be sharing in this.
Led on to thinking about my own running and what this thesis is all about. Came up with the question
WHAT IS IT ABOUT RUNNING ?
Also realised that this is all about running my running and their running - our running. its not just about exercise!
New title - 'welcome to our world' - the experience of being a long term (exercise) runner. or should that be
welcome to our world - our experience of running.
Mandy suggested at supervision (13/5) that among the things need to
* link the main question I'm asking with where it comes from.
Also to determine why this approach - what is missing in quantitative approaches to research the same question
In other words, what is running like for me and what is it that is missed by quantitative approaches that this grounded theory gets at?
Remember - 'stay close to the data!'
I get, already, the sense of a journey, a personal meaning filled journey. the data is taking me walkabout!!!

Question is [what is it about running?? / why do we keep running?]

Come from: desire to understand what drives me to keep running

because I know I have benefitted from it -
can I state the benefits
- want to know if there is an underlying mechanism

- can identify specific benefits
but not any underlying, overarching mechanism
that pulls it all together

- psychological theme / drive / motivation

- What is the meaning ... [illegible]

(iii) Additional memos

Additional memos

JUNE 2003

19 *Thursday*

Calendar Year 170/195 Week 25

It all started for me out in the school playground at primary school. There was this big open space!! Initially as a 5-7 yr old climbing trees, jumping in the sand pit, and watching in awe the big kids playing on the main field. ~~Soon~~ Then I played my first game of rugby around age 7 – loved it, lived for it.

I we played in bare feet, remember Toko primary school. field covered in frost – won 6-0 scored two tries.

Then started going to athletics down at Jubilee park just the kids sport. Used to be handicapped, 1st got threepence, 2nd got twopence & 3rd got a penny or at least a small ticket redeemable the said amount at shop on the way home.

Then as I became a big kid used to play cricket, kanns, rugby, soccer with a kanns ball or even a small piece of wood! kicked around before and after school.

Through High School reinforced enjoyment of formalised sports played kanns, cricket, soccer, badminton, house rugby, did school athletics & cross country, jogged to get fit for soccer. Loved it all, lived for it all.

Then I suffered my first palpitations attack – at badminton, 6th form?

But had suffered my first panic attack in Form 2

lived in fear of panic attacks and palpitations brought new fear, that exercise might bring it all on! Too afraid to mention panic attacks but got treated for palpitations from chiropractor Colin Tengier

Early years: (antecedent) – ran & ran most days in all weather for eight years solid 5-13

(Constraint) – Panic attacks – especially palpitations
fear of dying / having a heart attack!

→ Consequence – was always fit
Given up with health benefits of fitness and well as feelings of competence.

Priorities

(iv) Operational notes