

**DEVIANT BODIES AND PATHOLOGISED
SUBJECTIVITIES: A SOCIOLOGICAL CRITIQUE OF
EXERCISE DEPENDENCE**

KAY BISCOMB

A thesis submitted to the University of Gloucestershire in accordance with the requirements of the degree of Doctor of Philosophy in the Faculty of Environment and Leisure

September 2001

ABSTRACT

Exercise dependence is described as "... psychological and/or physiological dependence upon a regular regime of physical activity ... and is characterised by recognisable withdrawal symptoms when the need to exercise remains unfulfilled after 24-36 hours ..." (Sachs & Pargman, 1979 p. 143). The study of exercise dependence has been a focus for consideration by researchers from the disciplines of physiology and psychology for approximately 30 years. Throughout this time, researchers have sought to measure, treat and prevent exercise dependence. A disease-based model has, therefore, dominated research and an extreme form of exercise behaviour has been medicalised. This study challenges the notion of the disease concept of exercise dependence and offers an alternative conceptualisation based on situation, time (Peele, 1985) and identity. It suggests that this medicalised concept of exercise dependence arises through a process of labelling certain types of participation for which there are only individual societal rewards.

In interviews (n=27) with individuals and their significant others over three phases of data collection, life history analysis of the participants' subjective experiences of exercise dependence indicates that there is no evidence of 'negative addiction' (Hailey & Bailey, 1982). There is also no evidence of a negative impact on significant other relationships, although intense commitment to exercise sometimes causes temporary periods of conflict. Significant others accommodate their partners' exercise participation within the relationship and participants accommodate relationship demands within their exercise regime. The analysis also indicates that dependent participants, 'exercisers', have a changing attitude to exercise throughout their life history.

It is proposed that the participants in this study construct one element of their self-identity through their exercise participation and that is subdivided into the physical self, the critical self and the social self. The thesis offers nine Propositions in an attempt to establish the basis for a sociological understanding of exercise dependence.

Author's Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of Cheltenham & Gloucester College of Higher Education and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the College.

Signed _____ Date _____

ACKNOWLEDGEMENTS

I would like to thank my supervisors Professor Celia Brackenridge and Vic Kerton for their continued help and support throughout this project. Without them and their advice I would not have been able to complete this project.

I would like to thank the participants who all gave up their time and often their homes for me to interview them. I hope that I have represented them accurately in the accounts written.

I would like to acknowledge the support given by my employer The University of Wolverhampton. This includes a contribution to my tuition fees and a gratefully appreciated sabbatical that enabled me to write the first draft.

Finally, I would like to thank my family and friends for their continued support throughout the last six years. They are too numerous to mention personally but they have all helped in a variety of ways and for that I will be forever grateful.

CONTENTS

		Page
1	Introduction	
1.1	Statement of the Problem	1
1.1.1	Research Questions	3
1.1.2	Research Objectives	3
1.2	Structure of the Thesis	3
2	Paradigms Debate	
2.1	Introduction	8
2.2	Positivistic Traditions	9
2.3	Interpretative Traditions	10
2.4	Justification for the Use of Interpretative Traditions	12
2.5	Life Histories	14
2.6	Grounded Theory	15
2.7	Acknowledging the Agendas	18
2.8	Summary	19
3	Review of Exercise Dependence Literature	
3.1	Introduction	22
3.2	General Theories of Addiction and Dependence	22
3.2.1	Explanations of Addiction and Dependence	23
3.2.2	Characteristics of Addiction and Dependence	23
3.3	Characteristics of Exercise Dependence	25
3.3.1	Terminology	25
3.3.2	Defining Characteristics of Exercise Dependence	27
3.4	Differing Explanations of Exercise Dependence	32
3.4.1	Methodological Tools	33
3.5	Exercise Dependence as a Positive or Negative Experience	36
3.6	Exercise Dependence as a Process or Product	37
3.7	Summary	39
4	Review of Sociological Framework	
4.1	Introduction	42
4.2	Identifying a Sociological Framework	42
4.3	Sociological Explanations of Exercise Dependence	44
4.4	Symbolic Interactionism	46
4.4.1	Self and Identity	51
4.5	Deviance and Labelling	57
4.6	Social Support	60
4.7	Summary	62
5	Towards a Sociological Critique of Exercise Dependence	
5.1	Introduction	64
5.2	Body Theory	65
5.2.1	Historical Development of the Sociology of the Body	65
5.2.2	Conceptual Frameworks of the Body	66
5.2.3	Consumer Society	67
5.2.4	The Body Project	68
5.2.5	Life History Analysis and the Body	70
5.3	The Social Control of Body Knowledge	71
5.4	Consolidating the Literature	72
5.5	Summary	74

6	Research Methods and Design	
6.1	Introduction	77
6.2	Research Participants and Terminology	78
6.3	Interview Technique	78
6.4	Research Design	80
6.4.1	Pilot Study	80
6.4.2	Phase One	81
6.4.3	Phase Two	84
6.4.4	Phase Three	85
6.5	Grounded Theory Data Analysis	86
6.6	Evaluation of Qualitative Research	87
6.7	Ethical Considerations	88
6.8	Summary	90
7	Presentation and Discussion of Findings from Phase One	
7.1	Introduction	92
7.2	Characteristics of the Research Participants	92
7.3	Life Histories of the Exercisers and their Significant Others	94
7.3.1	Episodic Ethnographies	94
7.4	Life History Analysis	107
7.5	The Construction of a Self Identity	113
7.5.1	The Physical Self	114
7.5.2	The Critical Self	117
7.5.3	The Social Self	118
7.6	Impact on Relationships	121
7.6.1	Accommodation	123
7.6.2	Conflict	124
7.7	Phase Two Interview Schedule	126
7.8	Summary	127
8	Presentation and Discussion of Findings from Phase Two	
8.1	Introduction	130
8.2	Characteristics of the Exercisers	130
8.3	Life Histories of the Exercisers	131
8.3.1	Ethnographic Episodes	131
8.4	Analysis of the Life Histories	148
8.5	The Construction of a Self Identity	155
8.5.1	The Physical Self	154
8.5.2	The Critical Self	157
8.5.3	The Social Self	159
8.6	Impact on Relationships	162
8.6.1	Accommodation	163
8.6.2	Conflict	164
8.7	Deviance and Labelling	167
8.8	Phase Three Interview Schedule	170
8.9	Summary	171

9	Presentation and Discussion of Findings from Phase Three	
9.1	Introduction	173
9.2	Life Histories	173
9.1	Fluctuating Association with Exercise	174
9.2.2	Critical Life Moments	175
9.2.3	Rationalisation of Activities	177
9.2.4	Nature of Change	177
9.3	The Construction of a Self Identity	178
9.3.1	The Physical Self	178
9.3.2	The Critical Self	179
9.3.3	The Social Self	182
9.4	Impact on Relationships	185
9.5	Deviance and Labelling	188
9.6	Summary	190
10	Summary of Findings	
10.1	Introduction	192
10.2	Process or Product Model	193
10.3	Concluding Comments	196
10.4	Summary	198
11	Reflection on the Research Process	
11.1	Introduction	200
11.2	The Interviewing Process	200
11.3	The Reading Process	206
11.4	The Process of the Argument	207
11.5	The Personal Process	212
11.6	Summary	212
12	Summary, Conclusions and Recommendations	
12.1	Summary of the Study	215
12.1.1	Phase One	215
12.1.2	Phase Two	215
12.1.3	Phase Three	216
12.2	Conclusions	216
12.3	Recommendations for Further Research	217
Appendix A	Additional Details on General Theories of Addiction and Dependence and Positivistic Research on Exercise Dependence	219
Appendix B	Summary of Exercise Dependence Literature	233
Appendix C	Structuration Theory and its Role in the Study	256
Appendix D	Prompt Chart Used in Interviews	259
Appendix E	Original Advertisements Used for Contacting Participants	260
Appendix F	Initial Details Sent to Exercisers	
Appendix G	Example of a Transcribed Interview	262
Appendix H	Initial Details Sent to Significant Others	
Appendix I	Descriptive Life Sketches	270
	Bibliography	275

CHAPTER ONE

INTRODUCTION

1.1 Statement of the Problem

Exercise is a stimulant that leads to a physiological arousal of the brain (Veale, 1987). The physical and psychological benefits of regular exercise have been well documented. They include the preservation of both physical well-being (Blair *et al.*, 1989; Paffenbarger & Hyde, 1989) and psychological well-being (Crews & Landers, 1987; North, McCullagh & Tran, 1990). Indeed, over the past 30 years, participation in sport and exercise have become increasingly popular (Thoren *et al.*, 1990; Anshel, 1991; Farrell & Thompson, 1994). Thoren *et al.* (1990) suggest that increased public awareness of the beneficial effects of regular exercise is partially accountable for its increasing popularity. Evidence for this can be seen by the increases in the amount of time spent on participation. In the only study of its kind, Farrell & Thompson (1994) note that over 35% of Canadian PE students and fitness participants exercise for more than 300 minutes per week in contrast to previous research which noted only 15% (1979) and 23% (1987) exercised for this length of time. This increase in participation is generating a research interest in physical exercise.

One specific area of research is the nature of exercise regimes. Some researchers are concerned with adherence, that is the extent to which an individual maintains an exercise programme, and examine the reasons why approximately 50% of people give up an exercise programme within the first six months (Dishman, 1988). In contrast, others have concerned themselves with why some people exercise excessively even though their activity may be causing problems with their personal or professional life or even be life-threatening (Yates, Leehey & Shisslak, 1983). Baekeland (1970) first documented this phenomenon of excessive exercise when he failed to recruit subjects who would be willing to abstain from exercise despite being offered a monetary incentive. In his study the participants never went without exercise for more than two consecutive days and many exercised daily.

Researchers' fascination with excessive exercise originally focused upon running as an activity and has been given a variety of names. These include 'positive addiction' (Glasser, 1976), 'negative addiction' (Morgan, 1979), 'habitual runners' (Thaxton, 1982), 'obligatory runners' (Yates, Leehey & Shisslak, 1983), 'morbid exercising' (Chalmers *et al.*, 1985), 'exercise dependence' (Veale, 1987) and 'exercise dependence syndrome' (Pierce, 1994). Throughout the 30 years of research into this subject the focus has shifted away from running, however, to include other activities such as swimming, cycling and weight-lifting. Therefore, it has become acceptable to refer to it as *exercise dependence* (Pierce, 1994) and this is the preferred term for this study.

Although researchers have expressed concern that exercise dependence (hereafter ED) has received a “relative dearth of interest” (Pargman & Burgess, 1979 p 120), much has changed in recent years. Research on ED has expanded dramatically and it has captured the attention of the research community (Lewis, 1984) to the extent that Griffiths’s (1997) concern about little research in this area is now unfounded. During the 1990s, the phenomenon appears frequently in popular culture, such as in literature (Hawkes, 1994; Lewis, 1984; Brehm, 1992b) and cinema. The character of Carol in the film *Peter’s Friends* (1995), for example, exposes the ED and eating disorder relationship to a broader public view. Johnson’s (1995 p. 267) statement that “the only concern about regular exercise has been the risk of overuse injuries” fails to take into account that the phenomenon of ED is receiving increasing attention.

What is evident from the literature, however, is that research on ED concentrates on particular disciplines in physiology and psychology. Despite the history of research, it is only in more recent studies that researchers are beginning to question the trend to pathologise ED (Bamber, Cockerill & Carroll, 2000). Although there are certain interesting sociological trends emerging within research on the subject, sociological accounts of ED have only been found in three articles (Ewald & Jobu, 1985; Nixon, 1989; Cole, 1998). Cole (1998) challenges the application of traditional discourses of addiction to exercise and outlines how these discourses label deviant bodies and pathologise subjective experiences.

The aim of this study is to approach the phenomenon of ED from a sociological perspective. This study challenges the medicalisation of ED and questions the notion of a ‘disease-based model’. An alternative view is presented, based upon Peele’s (1985; 1995) construction of dependence as a consequence of situation and time. The life histories of dependent individuals are explored to examine the subjective lived experience of dependence. Bailey (2000) acknowledges that the private has become part of the public debate, therefore the documenting of subjective experiences is seen as a potentially important means of expanding understanding of addiction (Peele, 1979).

In this study a qualitative approach is adopted, with interviewing as the method of data collection. The data are analysed by adopting a Symbolic Interactionist theoretical framework and a Grounded Theory analysis method. There are three Phases to data collection, described as Phases One, Two and Three. Interviews are conducted with exercisers and their significant others (hereafter SO) and the research project consists of 27 semi-structured interviews in total. Both exercisers and their SOs are interviewed in Phases One and Three, which enables an exploration of the impact of the dependency process on their relationship and their home life. Only exercisers are interviewed in Phase Two. Phases Two and Three allow a process of member checking the emergent findings arising from the analysis. A feature of the interview design is the exploration of participation in exercise using a life

history approach. The desire to develop a sociological critique of exercise dependence has resulted in methodological differences between this thesis and previous research.

1.1.1 Research Questions

The following research questions are identified:

Q1 What are the social parameters of exercise dependence?

Q2 How does a sociological analysis enhance understanding of exercise dependence?

1.1.2 Research Objectives

In order to address the research questions the following research objectives are set:

1. to examine the life histories of exercisers in order to describe and explain their subjective meaning of the term 'exercise dependent';
2. to present an alternative to the disease-based model of exercise dependence;
3. to understand the social parameters and processes of ED;
4. to explore the impact of ED on significant other relationships.

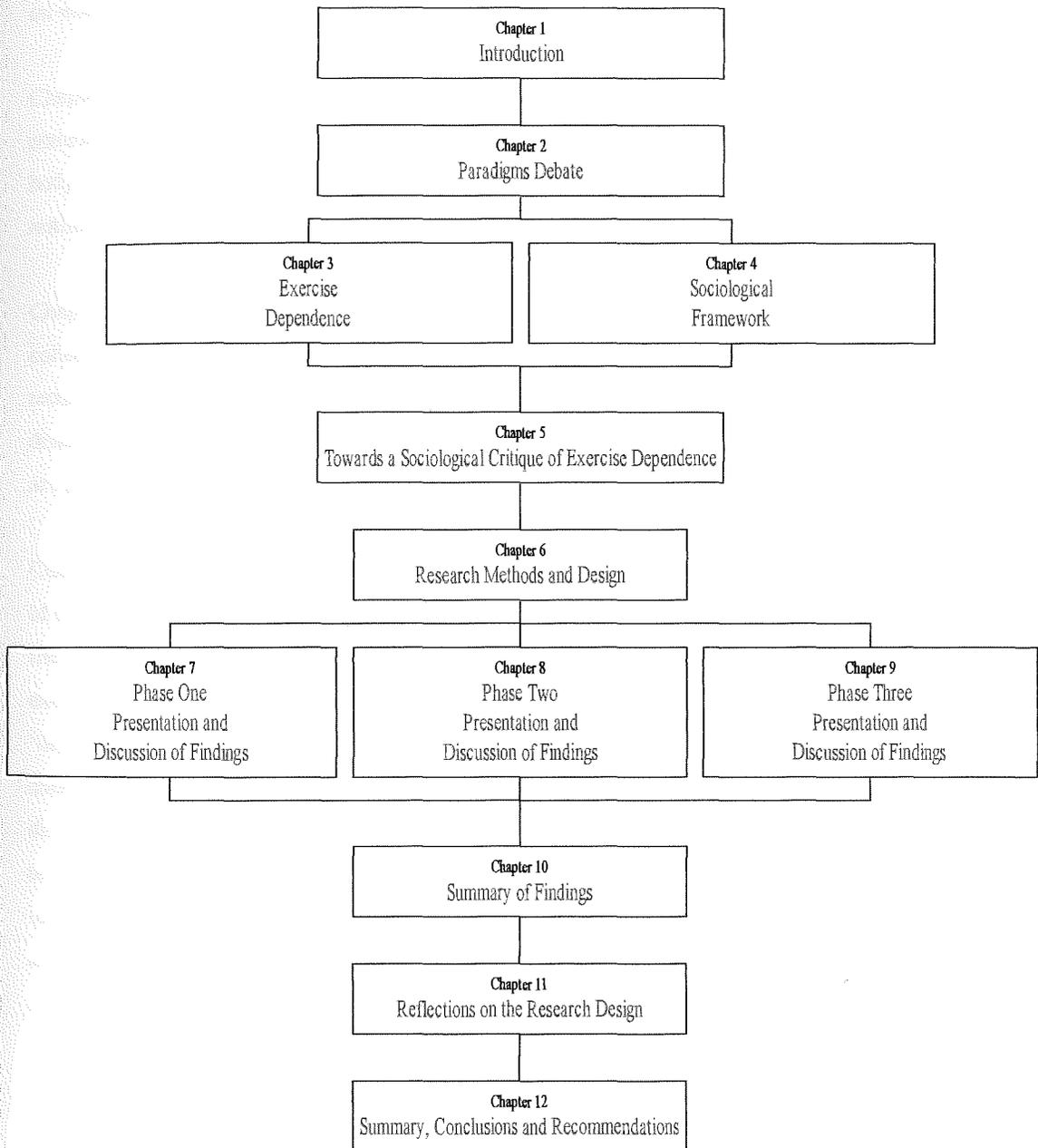
1.2 Structure of the Thesis

The thesis consists of 12 chapters. An outline of these can be seen in Figure 1.1. This figure reappears prior to each chapter in order to locate the chapter within the context of the study as a whole. The content of each chapter is summarised below.

The aim of this thesis is to question the disease-based model of ED and to present an alternative model based on situational, temporal and identity considerations. Chapter Two, therefore, starts by offering a critique of positivism and the traditional methods used to research ED. The chapter explores the methodological issues arising from the use of subjective life histories and considers the benefits and limitations of such approaches. It outlines Grounded Theory analysis and the rationale for this in the study. This chapter sets the scene for the first of the literature reviews.

There are three reviews of literature. The first literature review is Chapter Three, which explores the traditional research literature on ED. It outlines the comparative research on alcohol and narcotic dependence and questions the definitions of 'addiction' and 'dependence'. The chapter then examines the different explanations for ED and critiques the methodological tools that have been adopted in ED research. It concludes by considering two further conceptions of ED, the product/process and the positive/negative debates.

Figure 1.1 Outline Map of the Thesis



Chapter Four introduces the sociological context for the thesis. It starts by considering the few studies on ED that are written from a sociological perspective. These studies suggest that ED is related to the social construction of identity. The chapter then examines the theory of Symbolic Interactionism raising the potential relevance of deviance and labelling theory in developing a sociological understanding of ED. The chapter concludes by examining the impact of social support on exercise is considered.

Chapter Five highlights how a sociological critique of ED emerges. It does this by assessing the contribution of sociology to an understanding of the body. It starts by outlining the development of body theory over the last 30 years. Finally the chapter summarises the reviews of literature and outlines the specific concerns of previous ED research that this study aims to address.

Chapter Six outlines the research design and the processes undertaken in order to complete the collection of data. It describes the range of available methods and justifies the choice of interview technique. The processes associated with the pilot study and the three phases of data collection are described. Issues of identification of exercisers, access to participants, ethical procedures and analysis are presented.

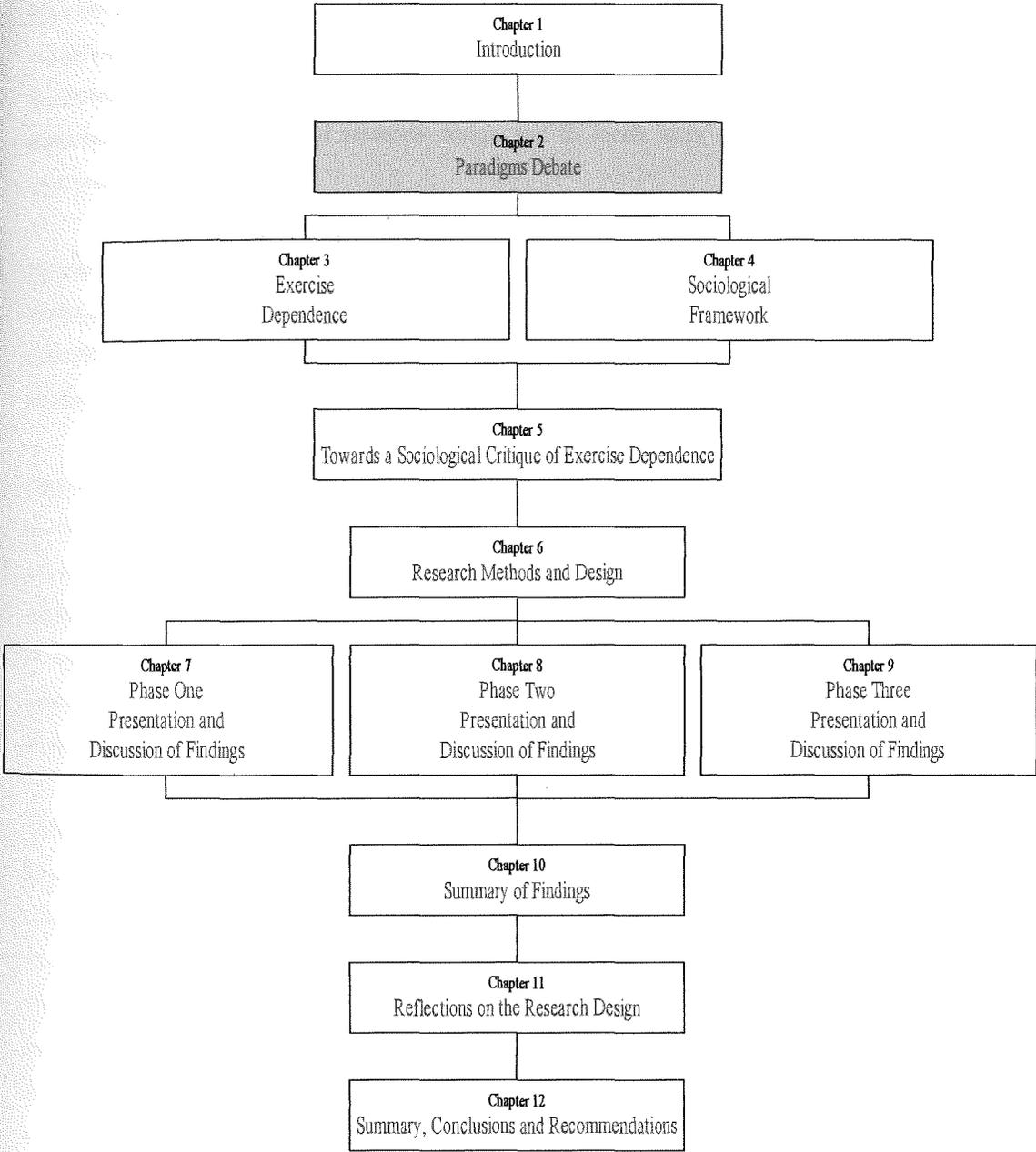
Chapter Seven presents and discusses the findings from Phase One data collection. The life histories of the eight exercisers and their SOs are presented as a series of episodic ethnographies or descriptive life sketches. This difference in detail is determined by the exercisers' choice of terminology for their exercise participation. Data from those exercisers who describe themselves as 'addicted' or 'dependent' are presented as a series of episodic ethnographies whereas data from exercisers who choose alternative terminology are presented as descriptive life sketches. The rationale for this difference is explained more fully in Section 7.4 (see page 106). The life histories are analysed in terms of the impact of exercise participation on SO relationships and the construction of a self-identity. The chapter concludes by presenting seven propositions about the relationship between ED and other elements such as life history, relationships and identity. These propositions guide Phase Two data collection.

Chapter Eight presents and discusses the findings from Phase Two. It follows a similar format to Chapter Seven. The life histories of the eight exercisers are again presented in different ways according to their own descriptions of their exercise participation. These are then analysed in terms of the impact of participation on SO relationships and the construction of a self-identity. This chapter presents a link between participation and labelling theory, which suggests that ED is a process of labelling deviant exercise behaviour. The chapter concludes by re-assessing the seven propositions presented in Chapter Seven and presents a revised set that is examined in Chapter Nine.

Chapter Nine presents and discusses the findings from Phase Three and follows a similar format to that used in Chapters Seven and Eight. The life histories of three exercisers from Phase One are explored here in further detail. These are then analysed from the perspective of the impact of participation on their SO relationships and the construction of a self-identity. The link between exercise participation and labelling theory is explored further, and the suggestion that ED is a process of labelling deviant exercise behaviour is discussed with the exercisers. The chapter concludes by confirming the eight revised propositions presented in Chapter Eight and identifies the ninth proposition. Chapter 10 is a summary that concludes the presentation and analysis of data. It discusses the nine propositions in their entirety and examines the product/process model of ED in relation to each one.

Chapter 11 is a personal reflection on the research process and the various elements of the research design such as interviewing and literature reviews. It draws upon the research diary and notes from tutorial meetings. It draws upon these to document the role of the researcher within the research process. It acknowledges the role of the 'private' in the production of 'public' (Bailey, 2000) and places emphasis on giving *voice* to the researcher. This chapter, therefore, is written in a different style and adopts a confessional tale rather than the realist tale (Sparkes, 1995). The final chapter presents the summary, conclusions and recommendations of the project, with suggestions for further research.

Figure 2.1 Outline Map of the Thesis Highlighting Chapter Two



CHAPTER TWO

PARADIGMS DEBATE

2.1 Introduction

This chapter outlines a rationale for the research design. Although ED has been researched for over 30 years there has been very little comment in the academic literature from disciplines other than the natural sciences. The adoption in this study of qualitative methods within an interpretative paradigm is, therefore, unusual in researching ED. The purpose of this chapter is to contextualise the decisions associated with the choice of research design and to locate these decisions within a qualitative interpretative paradigm.

Sparkes (1992) suggests that research within the field of physical education and sport has recently undergone a paradigm debate which has led to a detailed analysis of the research process, the researchers, and the real world. As a result, the more traditional, empirical paradigm has been challenged by interpretative and critical approaches (Sparkes, 1992).

This chapter comments on the existing quantitative/qualitative dichotomy that has been the focus of academic debate for many years (Blumer, 1969; Sparkes, 1998a). This debate is pertinent to the study of ED because most of the previous research has been informed by quantitative methods situated within a positivistic paradigm (see Carmack & Martens, 1979; Hailey & Bailey, 1982; Ogden, Veale & Summers, 1997 for examples). Natural scientists have been criticised for suggesting that quantitative methodology is *the* methodology (Blumer, 1969). This is evident in criticisms of, for example, interview techniques as both time consuming and difficult to validate (Pierce, 1994).

Within sociological studies a positivist-to-interpretative continuum of methodological and epistemological preferences is evident. Two distinctive methodological decisions are taken for this study. The first is the decision to re-examine the field of ED in the light of sociological theory. The second is the decision to adopt an interpretative research approach. The life histories of the exercisers are examined in relation to the impact that exercise participation has both on their SO relationships and on the construction of their self-identity. The life histories are analysed here using a Symbolic Interactionist framework (see Chapter Four) and the decision to use interviews is based on the desire to explore the life history narratives. Data from the interviews are analysed in relation to both the exercisers' accounts of their own exercise regimes and their exploration of the self within the ED process. This emphasis on actors' meanings of their own subjective worlds is a major influence on the analysis of interview data and on the subsequent synthesis of findings.

This chapter provides an outline of the differences between positivistic and interpretative approaches to research. It has two distinct strands: first, a criticism of positivism in relation to ED, and secondly,

the benefits of interpretative methods, including a justification for the use of life history narratives in this study.

2.2 Positivistic Traditions

Quantitative research methods involve the collection of data and their manipulation through statistics (Thomas & Nelson, 1996; Denzin & Lincoln, 2000). The inventories developed within the field of ED are typical of these methods (Hailey & Bailey, 1982; Estok & Rudy, 1986; Ogden, Veale & Summers, 1997). Quantitative methods are structured by positivism which is characterised by the view that 'scientific knowledge' is the only knowledge (Hemingway, 1995). Consequently, this approach strives to document an objective reality (Denzin & Lincoln, 2000). Scientific knowledge, in this example, is generated from observable phenomena, which may include both physical and social phenomena, organised through strict rules (Hemingway, 1995). The positivistic approach has been summarised as "adhering to scientific protocol, engaging in replication, testing hypothesis and using operational procedure" (Blumer, 1969 p. 33). It is alternatively referred to as the logical-deductive model (Denzin & Lincoln, 2000).

Physics, chemistry, economics and psychology are examples of sciences that typically adopt a positivistic approach (Denzin & Lincoln, 2000). Characteristic of positivism is the idea that truth is beyond opinion and bias. Positivistic approaches seek to discover and verify theories, emphasise internal and external validity and place value in structured and statistical analysis. In this view, therefore, a sense of reality exists and researchers aim to study, capture and understand this reality (Denzin & Lincoln, 2000). In other words, a positivist approach represents a desire to document the phenomenon from an objective and detached viewpoint (Sparkes, 1992).

According to Denzin & Lincoln (2000) positivism influenced the first movement of the history of qualitative research, the Traditional Period, which occurred from approximately 1900 until 1950. It was a movement stemming from positivism and postpositivism in which it was acknowledged that reality cannot be documented only approximated (Denzin & Lincoln, 2000). Postpositivist researchers, therefore, attempted to triangulate different methods in order to document 'reality' (Denzin & Lincoln, 2000).

Postpositivism was an attempt to apply arguments about validity to interactionist models of research. The work of a group of researchers known as the Chicago School became a basis for postpositivist researchers (Denzin & Lincoln, 2000) and academics at The Chicago School were the main writers in the field of Symbolic Interactionism during the inter-war years (Stryker, 1980) (see Chapter Four for further details on Symbolic Interactionism). The Chicago School became the focus for two trends within this movement. It characterised the move away from positivism towards more interpretative forms generally, and the development of positivism towards postpositivism, specifically.

Positivist traditions were central to British sociological inquiry until the assumptions of objective documentation of the social world that underpinned these traditions were questioned. Therefore, because positivism is essentially a dualistic approach, which seeks to remove the researcher from the research process, there is an implicit assumption that the positivist perspective is 'true' and 'real' (Sparkes, 1992). The challenge of the validity of positivism that occurred in British sociology during the 1960s resulted in the emergence of interpretative forms of inquiry.

2.3 Interpretative Traditions

According to Denzin & Lincoln (2000) expression of the limitations of positivism and postpositivism has brought about a methodological revolution in the social sciences. They suggest that this revolution has seen the blurring of boundaries and shifts in the history of qualitative research. Qualitative research methods encompass techniques such as observation, interview procedures (Burgess, 1984) life story, personal experience (Tsang, 2000) and case study (Denzin & Lincoln, 2000). Data produced through qualitative research are not derived from statistical procedures (Strauss & Corbin, 1998b) and should, arguably, be called empirical material rather than data (Denzin & Lincoln, 2000). Qualitative research is used across many disciplines but is not exclusive to any one and encompasses multi-method approaches (Sparkes, 1998a).

The nature of qualitative research is difficult to describe accurately but it is characterised by the undertaking of research in a natural setting from the perspective of the researched (Denzin & Lincoln, 2000). Denzin & Lincoln argue that the research process attempts to document the meanings that individuals bring to a situation or phenomenon. A qualitative researcher, therefore, also has to acknowledge the meaning that they bring to the research process themselves. It is accepted that research is shaped by the researcher's history, gender, socio-economic class and ethnicity (Denzin & Lincoln, 2000). Emphasis is placed on the relationship between the researcher and the research: reality is considered to be socially constructed.

According to Denzin & Lincoln (2000) the history of qualitative research encompasses five movements known as the 'traditional', 'modernist/golden age', 'blurred genres', 'crisis of representation' and 'Postmodern' or 'present' movements. Although these movements are chronologically historical they are also in evidence in some later studies. The traditional movement represents a positivist paradigm, whereas the modernist movement reflects the development of post positivism and new interpretative perspectives. Differences between the movements stem from epistemological theorising and the notion that qualitative research varies according to its historical origins (Denzin & Lincoln, 2000). It is these last two movements that are the focus of the next section.

Denzin & Lincoln (2000) suggest that research in the traditional movement was characterised by objective accounts of field experiences that aimed to offer valid and reliable interpretations treating the concepts of validity and reliability unproblematically. Individuals studied in these research projects were considered strange, foreign and 'other'. The modernist movement was characterised by two major trends. The first was The Chicago School, which emphasised an interpretative methodology that embedded the life history approach. At the same time, other new interpretative approaches such as ethnomethodology, phenomenology, critical theory and different feminisms adopted qualitative research practices (Denzin & Lincoln, 2000). Supporters of positivism began to acknowledge the difficulties of accounting for objective 'truth' and 'reality'. They acknowledged that, whilst it was not possible to account objectively for 'truth and reality', this should nonetheless still be attempted. This heralded the development of postpositivism (Denzin & Lincoln, 2000).

Qualitative methods are infrequent in the study of ED, possibly due to the concern expressed by Pierce (1994) about their 'validity'. Notions of validity and reliability were developed during the 1950s and were then largely associated with testing (Wolcott, 1994). Criticisms of the application of these terms in relation to qualitative research stem from an essential difference that qualitative research is often not concerned with 'testing' but rather about identification and interpretation. Furthermore, validity should be acknowledged as a socially constructed term and on these grounds renounced for alternative and more suitable criteria (Sparkes, 1998a). It is argued, therefore, that 'validity' is not what is sought in qualitative research and is, therefore, not a useful term (Wolcott, 1994) nor an accurate term to describe the process of trying to gain an accurate account of the social world:

What I seek is not unrelated to validity, but 'validity' does not capture its essence and is not the right term. I am hard pressed to identify the expression that is ...

(Wolcott, 1994 p. 356)

Qualitative researchers, therefore, explain the process of establishing accurate data and analysis in terms of making accurate records, allowing exercisers to contribute to the research findings, being honest and writing accurately (Wolcott, 1994; Henderson, Bedini & Hecht, 1994).

Interpretative approaches have the advantage of allowing the researcher to identify concepts that arise from the data rather than testing or measuring pre-determined concepts (Burgess, 1984). Sparkes (1992) suggests that research does not occur in vacuums but in collective communities of scholars that he refers to as paradigms. He outlines three distinctive paradigms; positivistic, interpretative and critical, which he believes are different from methodological approaches. Paradigms are more encompassing and not just reflective of a simple quantitative/qualitative dichotomy. Kuhn (1970) also refers to paradigms that he describes as collections of beliefs shared by scientific communities

and also potential solutions to the challenges in science. When applying Sparkes' (1992) analysis it is evident that the approach adopted in this thesis sits within the interpretative paradigm.

Interpretative approaches place emphasis on the meanings derived from the interaction process (Hemingway, 1995). Interpretative approaches stem from, and are associated with, the work of interactionists but are utilised by other schools of thought such as ethnomethodologists and feminists (Burgess, 1984). The interactionist approach to research allows the researcher to explore participants' understanding of the social world. These meanings relate to both the activity undertaken and its position in the social world (Adler & Adler, 1989; Henderson, Bedini & Hecht, 1994). In this study of ED the exercisers are encouraged to explore and describe their own understanding and meaning of their engagement with physical activity and exercise (see Chapter Six and Section 11.4).

Confusion over the meaning of terminology has dogged the area of ED and this is still an area for debate (see Chapter Three p. 22). Comment upon this debate, and the location of subjective experiences within it, is one element of this thesis. Grounded Theory is recognised as being congruent with the traditions of interpretative approaches. One element of this is that it must include the perspectives and voices of the participants in the study (Strauss & Corbin, 1998a). This approach does not merely give voice to others' accounts, however, but differs in that researchers themselves are part of the interpretative process. Researchers interpret the data collected and should assume responsibility for their own interpretation (Strauss & Corbin, 1998a). A more detailed discussion of Grounded Theory is found in Section 2.6 (see p. 15).

2.4 Justification for the use of Interpretative Traditions

Many researchers acknowledge that quantitative and qualitative methodologies may be complementary in any research design (Burgess, 1984; Strauss & Corbin, 1998a) but this research project uses only qualitative methods. In order to justify the use of interpretative traditions, a critique of positivism is offered. The differing natures of research traditions have resulted in a polarisation of these methods based on a perception of "hard, objective and rigorous" quantitative methods on the one hand, and "soft, subjective and speculative" qualitative methods on the other (Burgess, 1984 p.3). Crucial to this polarisation is the notion of awareness and consciousness of what is being studied (Burgess, 1984).

Positivist approaches have been criticised by Symbolic Interactionists on two significant points. The first is that the use of techniques, expertise and equipment are not the only requirements for a researcher to explore an unfamiliar area. Secondly, an emphasis on objectivity is actually an emphasis on adopting the position of a detached outside observer (Blumer, 1969). This latter point is particularly significant in terms of Symbolic Interactionism because individuals act towards things on

the basis of the meaning that those objects have for them. Blumer argues that these meanings may not be the same as the meaning ascribed to those objects by an outside observer or researcher.

Blumer (1969) argues that 'reality' is part of the empirical world and not represented by the methods used for the purposes of study. Methods should be considered as instruments by which the nature and character of the empirical world may be explored. The value of these methods, therefore, lies only in their suitability for the required task as Blumer (1969) explains:

Very simply put, the only way to get this assurance is to go directly to the empirical social world - to see through meticulous examination of it whether one's premises or root images of it, one's questions and problems posed for it, the data one chooses out of it, the concepts through which one sees and analyses it, and the interpretations one applies to it are actually borne out.

(Blumer, 1969 p.33)

Research from a Symbolic Interactionist perspective focuses on how the social world can be discovered by direct probing of the empirical world (Blumer, 1969). To examine the nature of ED through its process and impact on individuals' lives it is, therefore, essential to use an interpretative methodology.

Any attempt to apply a new methodology or paradigm to an established field implies criticism of the existing area (Denzin & Lincoln, 2000). The decision to undertake this study, and to place ED, within the domain of sociology is driven by dissatisfaction with the appropriateness of current research approaches to this issue. Research on ED has been dominated over the last 30 years by quantitative methods. The number of qualitative studies in the field of ED is extremely limited (Sachs & Pargman, 1979; Bamber *et al.*, 2000) and it is clear that, apart from the Sachs & Pargman (1979) study, qualitative methodology is only just becoming popular in this field of research. Positivistic inquiry is characterised by researchers' attempts to apply their definitions and meanings to the research setting (Cresswell, 1994). For example, this can be applied to ED research in which inventories are typically used to measure ED for example the Exercise Dependence Questionnaire (EDQ) (Ogden, Veale & Summers, 1997) and the Negative Addiction Questionnaire (Hailey & Bailey, 1982) contain 29 and 23 items respectively such as 'I plan my other daily activities around what time I want to run'. They require the exerciser to respond to the statements with a number indicating degree of consent and applicability. This approach does not allow for the possibility of multiple meanings or personal subjective meanings. ED understanding is, therefore, dominated by researchers' voices and lacking subjective realities as defined by the exercisers themselves. Clearly, whilst these studies have given considerable insight into the phenomenon of ED, there are also limitations on this type of work. These limitations are that there is a temporal emphasis (i.e. measures are taken at one moment in time), which reflects a product model (i.e. ED as an all or nothing condition not a social process), the use of self-report data with no triangulation and the imposition of

researchers' definitions and terminology (see Chapter Three p. 33). Each of these limitations is considered here in more detail.

A decision about an individual's state of dependence, based upon whether they register above or below the score of 50 on a particular scale (Obligatory Exercise Questionnaire, Pasman & Thompson, 1988), can be useful for selection of individuals, or useful for studies involving large samples. This process is mechanistic, however, and describes only a single time point. The extent of dependency is measured at that one moment, merely a snap shot in relation to the person's entire life history. The individual is measured at that instance: no record is taken at other points in their experiences and, therefore, no account of the *process* of ED can be made (see Chapter Three). Therefore, this type of measurement is based on a perception of ED as being stable, unchanging and an 'all or nothing' state. Studies that collect data in this manner have thus used a measurement tool based on a product model of ED. Although recent trends acknowledge a shift towards a process model and away from a product model (Chapman & De Castro, 1990; Veale, 1991; Pierce, 1994), the utilisation of diagnostic criteria within the measurement of ED is traditionally based upon a product model. Therefore, tension exists in the current literature between the acknowledgement of a process model of ED and, at the same time, use of measurement methods based on a product model.

The second limitation concerns the use of self-report data with no triangulation. Pierce (1994) is critical of the use of qualitative data collection in the form of interview or case study on the basis that only self report data are gathered. Whilst this criticism may be justified, it fails to acknowledge that ED inventories, such as the EDQ, also only collect self-report data. Two previous examples of data collection other than just self report data are Anshel's (1991) analysis of physiological responses in relation to ED and Rudy & Estok's (1990) analysis of dyadic adjustment scores gathered from both exercisers and SOs.

The third limitation is a concern over the use of researchers' definitions of ED and the imposition of these definitions on the research community. The issue of definition is still a contested area that needs to be considered carefully. An attempt to understand the meaning of the dependency experience for the individuals involved is an appropriate research aspiration for a qualitative, interpretative study (Strauss & Corbin, 1998b). The application of an interpretative paradigm enables the research project to explore exercisers' meanings and understandings of their exercise participation.

2.5 Life Histories

The writers of the Chicago School made an attempt to develop a new interpretative strand in sociological enquiry, which emphasised the individual, their meanings and their historical biography (Denzin & Lincoln, 2000). The interpretative paradigm refers to a collection of approaches that

places emphasis on the desire to explore human meaning in social life and on the belief that the social world is best reflected by a set of processes that individuals both construct and define (Sparkes, 1992). The life history approach gained some popularity in the 1920s and 1930s but was then ignored in favour of other methods that emphasised biography (Sparkes & Templin, 1992). In more recent years, this approach, which allows for a more holistic view of the individual, has achieved renewed popularity in educational research (Sparkes & Templin, 1992). Analysis of the life history can enable more in-depth understanding of the processes of ED and its impact across a wider time span than is possible using more traditional measurement methods.

The life history approach normally utilises an interview technique to gather data. The advantage of this is that it enables the researcher to find out how the participants understand their world and their life (Steinar, 1996). Narratives by interviews and conversations with participants are considered essential when trying to gain knowledge about the social world. These types of interviews allow the researcher to explore the social world of the participant as they experience and interpret their relationship to that world (Steinar, 1996).

It may be argued that the interviews presented in this study are not an accurate representation of a life history for two reasons. The first is that the amount of time spent in the interview process is not as long as described in other studies (Sparkes, 1993) and the second is that most of the research participants in this study are represented through a single interview rather than a series of interviews, again in contrast to other studies (Sparkes, 1993; Armour, 1997). The criticisms of the methods employed, therefore, focus on the depth and detail of the data collected as being potentially insufficient to represent a comprehensive life history. In defence of these methods this study does, however, reflect the exploration of the individual's subjective reality, which is a characteristic of the life history approach (Sparkes & Templin, 1992). Sparkes (1993) argues that there is no one set pattern for undertaking life history analysis but rather a set of strategies that may be employed. Tierney (2000) notes that the life history approach is a retrospective view of the life either in part or in whole. Armour (1997 p. 68) chooses to use the term "life history reflections" to acknowledge the partial accounts taken for her study. A characteristic of the interviews undertaken within this study is the exploration of the individuals' exercise patterns across the spectrum of the whole life, rather than partial accounts. This detailed exploration of exercise as a part of the whole narrative is deemed to constitute a life history approach (Tierney, 2000).

2.6 Grounded Theory

Within their analysis of qualitative research Denzin & Lincoln (2000) refer to Grounded Theory in a number of ways. It appears as both a research strategy and a method of telling the research tale. Grounded Theory is a means by which theory is developed through the systematic gathering and analysis of data (Glaser & Strauss, 1967) and is presented as an alternative to functionalist and

structuralist approaches to research (Strauss & Corbin, 1998a). Grounded Theory has developed with notable differences of opinion between the original authors. Glaser's (1992) objectivist stance assumes a neutral researcher and an external 'reality'. Charmaz (2000) argues that this approach is similar to traditional positivism. Travers (2001) suggests that Grounded Theorists have been slow to adopt postmodern developments in the documentation of narrative and ethnographic accounts. This implies that a Grounded Theory approach is, therefore, not suitable when attempting to explore life histories. In contrast, Strauss & Corbin's (1998b) revised version of Grounded Theory acknowledges *participants'* voices and reality, which is more akin to postpositivism (Charmaz, 2000). More recent developments move Grounded Theory to a constructivist approach, which acknowledges postmodern criticisms and allows for a more interpretivistic exploration of participants' realities and *meanings* (Charmaz, 2000).

Theory is developed throughout the research project via an interchange between data collection and analysis (Strauss & Corbin, 1998a). One of the key features of Grounded Theory, therefore, is the notion of 'constant comparison method' (Glaser & Strauss, 1967). Interplay between data collection, analysis and theory are, therefore, characteristic of a Grounded Theory approach (Strauss & Corbin, 1998b). According to Strauss & Corbin (1998a), throughout a research project concepts are developed and the data are analysed in order to establish statements of relationships between these concepts. The researcher aims to verify these relationship statements. A Grounded Theory approach is, therefore, characterised by the richness of the data and concepts that emerge (Strauss & Corbin, 1998a). Other characteristics of the approach include:

the systematic asking of generative and concept-relating questions, theoretical sampling, systematic coding procedures, suggested guidelines for attaining conceptual (not merely descriptive) 'density', variation, and conceptual integration.

(Strauss & Corbin, 1998a p. 161)

A Grounded Theorist should have the ability to: detach him/herself from the research process and be critical of the analysis; accept and recognise bias; be abstract in thought; be flexible and use participants' words sensitively (Strauss & Corbin, 1998b). This approach and the subsequent analysis of data are, therefore, shaped by the way the data are considered and conceptualised.

Criticisms of Grounded Theory stem mainly from the objectivist stance. They include analysis that is more akin to postpositivism than to interpretative approaches (Denzin & Lincoln, 2000). Strauss & Corbin are criticised for modifying positivistic science approaches to provide a postpositivistic "conception of rigorous research" (Denzin & Lincoln, 1994 p. 5). They criticise Strauss & Corbin for adopting a postpositivist stance and yet Grounded Theory appears as a means by which constructivist researchers, as well as post positivist researchers, can present their findings.

Grounded Theory is suitable for the inductive process of applying sociology to the field of ED for two main reasons. First, there is some deductive research in the area of ED but it fails to account for the subjective experiences and narratives of the exercisers. Secondly, this approach is especially suitable for inductive and discovery types of research (Johnston *et al.*, 1999). Researchers who adopt Grounded Theory tend to be particularly interested in the patterns of interaction between individuals and the processes surrounding that interaction (Strauss & Corbin, 1998a). This thesis explores the processes of interaction between the exercisers and their exercise behaviours.

Strauss & Corbin (1998a) express concern that the Grounded Theory methods have the potential to become diffused and transformed. In other words, the research may not appear to adopt Grounded Theory, as recognised by other researchers (Strauss & Corbin, 1998a). It may, therefore, be argued that the method presented in this thesis does not reflect a true Grounded Theory approach. Reasons for this potential criticism include the prior knowledge established by other researchers, before the onset of empirical data collection.

In justification of the use of Grounded Theory, however, Charmaz (2000) argues that Grounded Theory methods should be viewed as flexible rather than a set of formulaic principles. In addition, the following rationale is offered. The prior knowledge about ED is located in the natural sciences. The purpose of this study is to critique ED from a sociological perspective. Therefore, the first phase is inductive because it explores new issues in an established field of inquiry. Secondly, the use of Grounded Theory in an existing field of knowledge can be justified in order to elaborate what is already known (Strauss & Corbin, 1998a).

Data are collected in this research project in three different phases and Grounded Theory informs the first phase of analysis. When applying Miles & Huberman's (1994) constant comparison method this three-phase approach is appropriate for Grounded Theory. In their view, qualitative data analysis should be a "continuous interactive process" (Miles & Huberman, 1994 p. 12). This three-phase approach involves the collection of exercisers' views about the analysis, which then contribute to further data collection. This method of data interpretation is considered to be essential for Grounded Theory (Strauss & Corbin, 1998a).

Finally, the development of Grounded Theory towards a constructivist stance allows the research process to give voice to the participants' meanings. This shifts Grounded Theory away from postpositivism and towards interpretativism (Charmaz, 2000). The collection and exploration of exercisers' meanings of their participation locates this thesis clearly in a constructivist Grounded Theory technique. As Charmaz states:

Thus diverse researchers can use grounded theory methods to develop constructivist studies derived from interpretive approaches. Grounded theorists need not subscribe to positivist or objectivist assumptions. Rather, they may still study empirical worlds without presupposing narrow objectivist methods and without assuming the truth of their subsequent analyses. Hence constructivist grounded theory studies of subjective experience can bridge Blumer's (1969) call for the empirical study of meanings with current postmodern critiques.

(Charmaz, 2000 p. 511)

Clearly, the exact status of Grounded Theory in the paradigms debate is arguable. Whilst acknowledging the influence of postpositivism on the establishment of Grounded Theory, this approach is still considered suitable for this research project.

2.7 Acknowledging the Agendas

Traditional research on ED reflects not only a quantitative approach but also a positivist paradigm, which may be largely due to the nature of the academic disciplines and traditions of physiology and psychology that have engaged with this field of study. When comparing Sparkes' (1992) division of paradigms to Denzin & Lincoln's (2000) paradigms, the latter offer further subdivision within the scope of interpretative paradigms. Their analysis of interpretative paradigms identifies the following categories: positivist/postpositivist; constructivist; feminist; ethnic; Marxist and Cultural Studies. When applying these categories the constructivist paradigm appears to fit this research project because of the identification of trustworthiness and credibility as criteria here and the use of interpretive case studies (Denzin & Lincoln, 2000).

The placing of this project within a sociological constructivist paradigm is not simply a matter of applying qualitative research methodologies but also about engaging in deeper issues and agendas. The use of the terms qualitative, interpretative and constructivist indicate an association with a set of particular agendas (Sparkes, 1998a). It is the agendas that are implicit within a research project that locate it within a sociological domain. These agendas may be identified as political interests and also representative of ontology, epistemology and methodology (Sparkes, 1998a).

In this study the issues of ontology are clearly informed by the perspective of Symbolic Interactionism, in that the reality of the empirical world can only be explored by going directly to it (Blumer, 1969). The study assumes a relativist ontology, which acknowledges multiple realities: exercisers', SOs' and researchers' realities (Denzin & Lincoln, 2000). Interactionist perspectives are compatible with Grounded Theory techniques (Burgess, 1984; Charmaz, 2000) and this can be qualified with the acknowledgement that one of the main writers in Grounded Theory, Strauss, was himself an interactionist (Strauss & Corbin, 1998b). Within the ontology is a concern over the hegemonic perception that the traditional view of science is the *only* view (Blumer, 1969) and how

this perception has pervaded research on ED. This again applies to ED because of the dearth of sociological accounts despite over 30 years of research.

The epistemology underpinning this study is informed by the belief that the exercisers are the individuals who have greatest knowledge of their experiences about their exercise regimes. This subjectivist epistemology acknowledges that the relationship between the 'knower' and the subject creates understandings of the phenomenon (Denzin & Lincoln, 2000). There is thus a desire to understand and document the individuals' experiences within the research process or to give voice (Strauss & Corbin, 1998a) and to place value on these subjective experiences. Within the constructivist paradigm the Positivist criteria of validity, reliability and objectivity are replaced by credibility, transferability, dependability and confirmability (Denzin & Lincoln, 1994).

The tension between sociology and biology created by sociology's criticisms of reductionism is evident within this study. Taking a body of knowledge from a traditional natural science paradigm and asking 'What can sociology offer our understanding of this phenomenon?' will result in methodological tensions and a struggle for credibility for those who ask the question. Therefore, it is possible that this study may be accused of "cultural hemiplegia" (Bourdieu, 1971 p. 198). Support for this paradigmatic shift may be found with Morgan & Scott (1993), however, who argue that there has been a tendency within sociology to accept biological determinism without true reflection and deconstruction. They argue for a sociology of the body that questions even the most basic assumptions and suggest that a true understanding should deconstruct biological causation and combine with history and culture (Morgan & Scott, 1993). This study challenges the natural science hegemony over the field of ED and attempts to analyse how sociology can enhance our understanding of it. The method employed, therefore, seeks to discuss and find out about the individuals' experiences through an interview procedure. It is through this particular methodology that some of the agendas outlined above may be addressed.

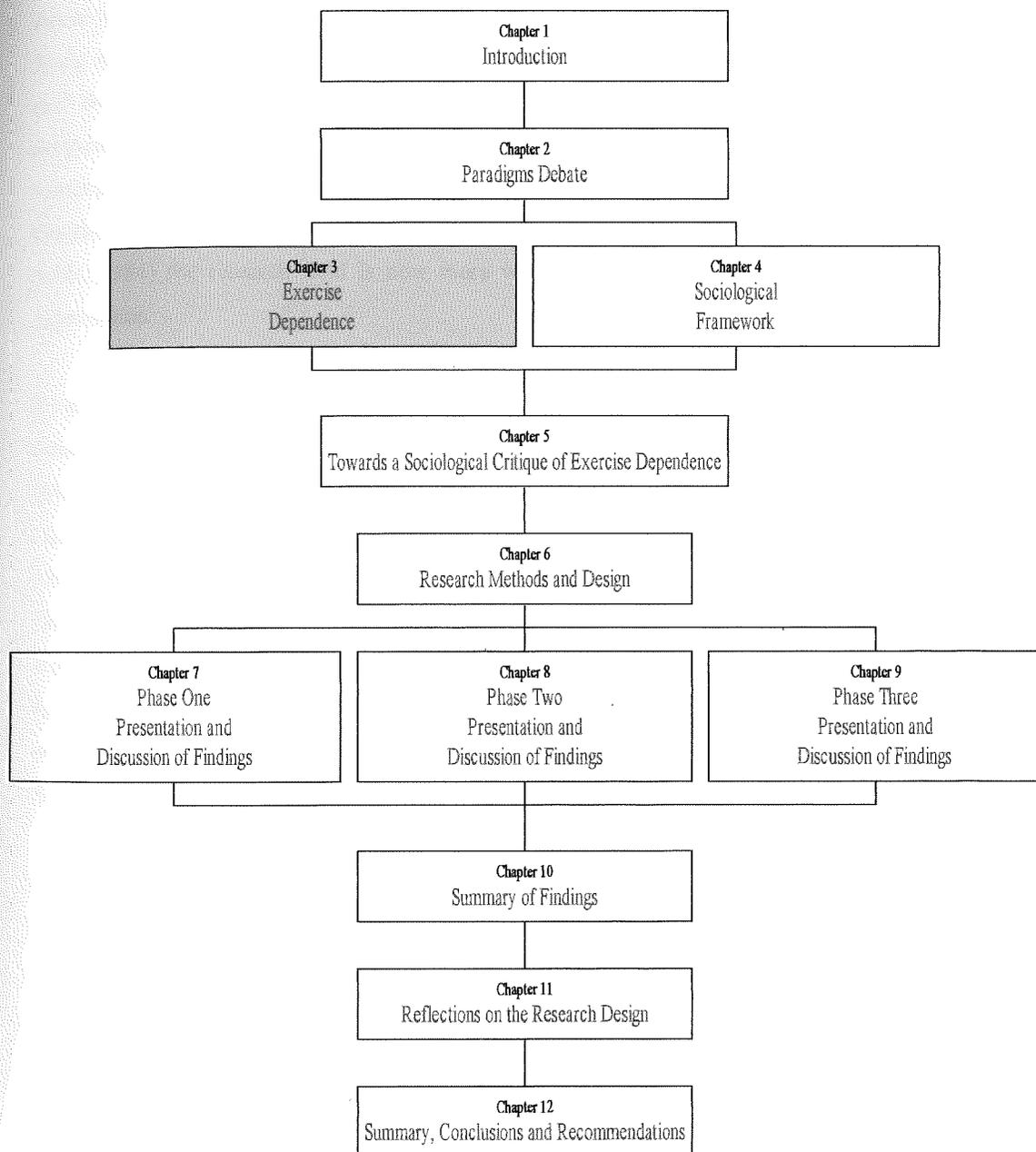
2.8 Summary

Qualitative methods in an interpretative, constructivist paradigm are adopted for the collection of data. The existing research community has largely ignored this approach (see Chapter Three) and Pierce (1994) expresses concern that this type of methodology is difficult to validate. Advocates of qualitative enquiry suggest that, given the distinctive differences between methodological forms, it makes little sense to apply the criteria of assessment from one form of inquiry to another. Thus, traditional notions of validity, reliability and generalisability do not apply to interpretative methods and alternative criteria should be sought (Sparkes, 1998a). Sparkes (1995) suggests that to even try to apply these concepts to qualitative and postpositivistic inquiry denies the legitimacy of individualistic research traditions. Consequently, he suggests that this preoccupation results in a crisis of

legitimation for qualitative research methodologies which is why some researchers are calling for the notion of validity in qualitative research to be abandoned (Sparkes, 1995).

This section has provided a rationale for the research approach and design in this project. The decisions made about these not only include the application of a different academic discipline, and its appropriate subject knowledge, but also the location of the research at the interpretative end of the qualitative methods continuum. The next chapter is the first in the reviews of literature and examines the ED research.

Figure 3.1 Outline Map of the Thesis Highlighting Chapter Three



CHAPTER THREE

REVIEW OF EXERCISE DEPENDENCE LITERATURE

3.1 Introduction

This chapter discusses the literature associated with the study of ED. A considerable amount of the research in this field focuses on the sport of running (Morgan, 1979; Carmack & Martens, 1979; Rudy & Estok, 1989; Johnson, 1995). As Epstein (1981 p. 179) suggests “ours is an age of health, and the runner is surely our most fanatical seeker after health”, which may explain why ED researchers appear to have been preoccupied with running. More recently, however, a few ED researchers have considered other individual aerobic activities (Clingman & Hilliard, 1987; Furst & Germone 1993; Smith, Hale & Collins, 1998). Rather than running addiction (Sachs & Pargman, 1979; 1984) the research field is now more widely considered to embrace *exercise* addiction or dependence.

Despite over 30 years of research, however, definitions of ED remain contradictory because researchers have still not agreed upon a common conceptual base, partly due to the different epistemological and methodological approaches that they adopt. For example, these include: ‘disease-based’ (Loumidis & Roxborough, 1995), psychobiological (Conboy, 1994; Thornabene, 1995), neurobiochemical (Johnson, 1995), psychological, physiological and behavioural approaches (Jiba Ja Rusth, 1990; Pierce, 1994). Acknowledgement of sociological or sociocultural factors within explanations of ED is uncommon, with few researchers placing any emphasis on such issues (Jiba Ja Rusth, 1990; Conboy, 1994; Pierce, 1994). This debate concerning the definition and interpretation of ED highlights the need for wider life history narratives, which will further extend understanding of the ED process and its impact upon subjective realities.

This chapter, therefore, establishes the rationale for adopting life history narratives by outlining the limitations of the current body of knowledge on ED. It initially examines general theories of dependence and addiction, which are based on drugs, alcohol and tobacco research. This is extended towards an analysis of the characteristics of ED including the associated terminology and ‘diagnostic’ criteria. Research on the different explanations of ED is explored, followed by an analysis of the traditional tools used for measuring ED. The chapter concludes by examining two critical debates in the study of ED – whether the phenomenon can be described as positive or negative, and whether it is a product or a process.

3.2 General Theories of Addiction and Dependence

ED research has been informed by general theories of addiction and dependence clearly locating an understanding of ED in a medical model. Whilst it is important to acknowledge the historical context of both narcotic and exercise dependence this is not central to this thesis. Therefore, details on

certain aspects of general theories of addiction and positivistic approaches to ED have been summarised and placed in the appendices. The following section outlines the *explanations* and *characteristics* of general addiction and dependence.

3.2.1 Explanations of Addiction and Dependence

Prior to contemporary theories of dependence the moral model, based on Christian morality, was the preferred explanation (Marlatt, 1985). This view purported that an addict was an individual who lacked the moral fibre needed to resist temptation. Critics of the moral model subscribed to the disease-based explanation, which was initially suggested by Jellnick (1960) and Seeley (1962) (both cited in Marlatt, 1985). Subsequent theories of drug dependency have been largely divided into two distinct branches, which are the disease-based explanation and the psychological or acquired habit pattern (Peele, 1985; Marlatt & Gordon 1985; Orford 1985). These are outlined in greater detail in Appendix A.1.

It is important to recognise that disease-based explanations for narcotic addiction are relatively recent developments moving away from moral justifications based on behaviour and choice. More recently, the belief that dependence comes not only from the drug but also from the individual and their life circumstances has become popular again (Rudy & Estok, 1989). It is important to emphasise that explanations of dependence are diverse because, as with ED, a unified theory has not been agreed upon (West, 1991).

3.2.2 Characteristics of Addiction and Dependence

In 1964, responding to growing problems with semantics, the World Health Organisation (WHO) decided to replace terms such as drug 'addiction' and drug 'habituation' with drug 'dependence' and researchers were advised to follow their example (cited in Willis & Campbell, 1992). Throughout this study 'dependence' is adopted as the preferred term. In addition to semantic discussion about the use of the terms 'addiction' and 'dependence', there is considerable debate in the literature about what actually constitutes the phenomenon. Theorists have outlined particular characteristics such as craving, relapse and withdrawal symptoms. Table 3.1 outlines the range of these characteristics of dependence/addiction, with the suggestion that at least four are required for diagnosis of an addictive disease (American Nurses Association cited in Rudy & Estok, 1990).

Table 3.1 Characteristics of Dependence/Addiction

Characteristics	Reference
<ul style="list-style-type: none"> tolerance, withdrawal, salience, avoidance of withdrawal, narrowing of repertoire of drug taking into stereotypical routines and reinstatement after a period of abstinence 	Edwards & Gross 1976 (cited in Drummond, 1991)
<ul style="list-style-type: none"> tolerance and dependence 	Pargman & Baker (1980)
<ul style="list-style-type: none"> eradicating awareness, hurting others, lowering self esteem, loss of pleasure and predictability 	Peele (1985)
<ul style="list-style-type: none"> denial 	Lefever (1988)
<ul style="list-style-type: none"> craving, loss of control and relapse 	Allsop & Saunders (1989)
<ul style="list-style-type: none"> compulsion, loss of control, withdrawal, continuation of behaviour despite conflict 	Gossop (1989)
<ul style="list-style-type: none"> tolerance, withdrawal symptoms 	Rudy & Estok (1989)
<ul style="list-style-type: none"> some loss of self-control occasional, continual maladaptive or abusive behaviour of a substance, development of dependency compulsive repetitive behaviour that has associated negative consequences for the individual or their interpersonal relationships 	American Nurses Association (cited in Rudy & Estok, 1990)
<ul style="list-style-type: none"> tolerance, craving and rapid reinstatement following periods of non involvement, loss of control, compulsion 	Wanigaratne (1990)
<ul style="list-style-type: none"> salience, euphoria, conflict, relapse 	Brown 1993 (cited in Griffiths, 1997)

A more detailed discussion of the component of traditional dependency can be found in Appendix A.1 but to summarise, these can be identified as tolerance, withdrawal, salience, craving/compulsion, loss of control and relapse. The inclusion of withdrawal in this summative list contrasts with the view

that withdrawal is not a characteristic of an addictive experience (Peele, 1985). Peele's argument is that withdrawal is a related but separate experience to addiction, which stems from an individual's experiences with a substance. Peele (1985) suggests that withdrawal is more to do with the reason behind the engagement with the substance rather than the substance itself. This view is different from those expressed by Gossop (1989) and Rudy & Estok (1989) who maintain that withdrawal is a characteristic of the addiction process. As withdrawal is a prominent feature of the ED literature it is included as a characteristic for the purposes of this study. (Further details about Table 3.1 can be found in Appendix A.1.)

Much of the ED research explores the phenomenon in relation to more general portrayals of dependence so that the similarities between behaviour can be highlighted. There are some noted differences, however, between ED and traditional forms of dependency. First, exercise does not carry the social stigma of other forms of behaviour. According to Orford (1985) it is difficult to present a disease-based approach for an activity that most people find a source of enjoyment yet this approach is a strong feature in the ED research. The effort and energy required to develop a dependence on exercise has been highlighted as a distinct difference in comparison with other dependency behaviours such as gambling, drug and alcohol addiction (Cockerill & Riddington, 1996). Secondly, in contrast to these activities, exercise is readily available and costs virtually nothing. The different characteristics of ED are now outlined.

3.3 Characteristics of Exercise Dependence

Different researchers describe different elements as the defining characteristics of ED. This section begins by problematising the discussion of the language of habituation, addiction and dependence, with specific reference to ED research. It then explores the evidence provided by research for ED diagnostic characteristics such as adherence, frequency, tolerance, motivation, withdrawal, associated life elements, gender differences, type of activity and injuries. (Additional details are presented in Tables B.1, B.2, B.3 and B.4 in Appendix B.)

3.3.1 Terminology

Words like 'addiction' are part of everyday language and are, therefore, often used without reflection or understanding (McMurran, 1994). It is arguable whether physical activity, specifically running, can be considered an addiction even though someone may be dependent upon it (Rudy & Estok, 1990). Despite WHO's (1964 cited in Willis & Campbell, 1992) recommendation, use of the term addiction is still prevalent in the ED literature and, although one prominent researcher acknowledges these recommendations, he retains the term addiction (Sachs, 1982a). As outlined earlier (see Chapter One p. 1) over the past 30 years researchers have adopted a wide range of terms to describe the phenomenon of ED. The most commonly used terms are outlined in Table 3.2.

Table 3.2 Commonly Used Terms in Exercise Dependence Research

Term	Researcher
Addiction	Glasser (1976); Morgan (1979); Sachs & Pargman (1979); Kagan & Squires (1985); Estok & Rudy (1986); Crossman, Jamieson & Henderson (1987); Annett <i>et al.</i> (1995); Griffiths (1997).
Obligatory	Yates, Leehey & Shisslak (1983); Blumenthal, O'Toole & Chang (1984); Blumenthal, Rose & Chang (1985); Pasman & Thompson (1988).
Dependence	Pargman & Burgess (1979); Veale (1987); Lyons & Cromy (1989); Pierce (1994); Conboy (1994); Cockerill & Riddington (1996), Bamber <i>et al.</i> (2000).
Excessive Exercise	Manning & Morrison (1994); Loumidis & Roxborough (1995); Griffiths (1997)
Commitment	Carmack & Martens (1979); Diekhoff (1984); Thaxton (1982); Corbin <i>et al.</i> (1987).

Cockerill & Riddington (1996) provide a basic exploration of terminology, preferring to focus their discussion on the terms 'obligatory' and 'dependence' (further details on the semantic issues relating to ED can be found in Appendix A.2). They consider addiction, neurosis and compulsion but do not explore these in great detail (Cockerill & Riddington, 1996). They conclude that 'addiction' has too many negative connotations and therefore agree with Peele (1981) that it is better to adopt WHO's preferred terminology. Veale (1987) also prefers the term 'exercise dependence' because it is not activity-specific and can be classified with other compulsive behaviour. Some studies have referred to the term 'abuse' of exercise (Anshel, 1991; Blumenthal, Rose & Chang, 1985) and although existing within the literature, is again not explored in any detail.

Pierce (1994) considers whether ED can be called an 'addiction' and implies that, regardless of the positive/negative debate (discussed in greater detail later), if certain characteristics are met then ED can be regarded as an addiction. Researchers agree that, regardless of the terminology utilised, the following elements need to be present in ED: salience, adherence, withdrawal (Pierce, 1994; Veale, 1991; Griffiths, 1997) and it is on this basis that the notion of dependence for this study is constructed (see Chapter Six p. 82).

West (1991) notes that addiction is used synonymously with dependence. Similarly, in this study, no distinction is made between 'addiction' and 'dependence' but the term exercise dependence (ED) is the preferred choice. The reasons for this are to comply with WHO recommendations and to reflect the current research basis of the addiction/dependence split of the 1990s. Dependence is also preferred over addiction because of the often negative connotations that are associated with this term (Cockerill & Riddington, 1996; Drummond, 1991) and because it allows for a range in severity

(Drummond, 1991). There are occasions in the present study, however, when different terms other than 'dependence' are used when discussing specific studies which prefer alternative terms to 'dependence'.

3.3.2 Defining Characteristics of Exercise Dependence

ED researchers have examined a wide range of variables associated with ED. These include: withdrawal, gender differences, motivation, associated life elements and injuries but researchers have identified adherence, frequency, tolerance and withdrawal as *central* to understanding and defining ED.

Adherence, Frequency and Tolerance

A common definition of ED is:

... psychological and/or physiological dependence upon a regular regime of physical activity ... characterised by recognisable withdrawal symptoms when the need to exercise remains unfulfilled after 24-36 hours ...

(Sachs & Pargman 1979, p. 143)

but this contains no reference to previous adherence. In contrast, Anshel describes exercise addicts as:

... persons who engaged in a variety of structured and non-structured activity programmes at the club at least five days per week for a minimum of 15 hours per week over the past 20 weeks ...

(Anshel, 1991 p. 148)

Table 3.3 summarises the relationship between ED, adherence and frequency.

Table 3.3 Summary of Relationship between Exercise Dependence, Adherence and Frequency

Author	Adherence	Frequency
Glasser (1976)	2 years	1 hour daily
Sachs & Pargman (1979); Sachs (1981)	4-6 months - 1½ years	---
Veale (1987; 1991)	---	daily
Crossman, Jamieson & Henderson (1987)	---	6 days per week
Gauvin & Szabo (1992)	4 months	---
Thornabene (1995)	Addicted individuals adhere for longer than non-addicted individuals	5 times per week
Matthews (1997)	---	45 minutes 3 times per week
Griffiths (1997)	---	6 hours per day

Interestingly, intensity is not featured within the literature. Further details on the above table can be found in Appendix A.2.

Some researchers consider that increasing participation indicates a growing tolerance to activity and that there is therefore a consequent need to increase the activity level in order to achieve the required positive affect (Kagan & Squires, 1985; Steinberg, Sykes & LeBoutillier, 1995; Johnson, 1995). Although research findings are not conclusive in this area, a high level of commitment to exercise does appear to be required before a dependent state can be suggested. There seems to be common agreement on the need to engage in a regular participation (usually a minimum of once a day), participation for a substantial period of time (40 minutes to one hour) and a history of participation for a minimum of five months (Sachs & Pargman, 1979).

Withdrawal

One of the most important characteristics of ED is the appearance of withdrawal symptoms when a scheduled workout is missed. Steinberg, Sykes & LeBoutillier, (1995) suggest that withdrawal is a criterion of ED. The experience of these withdrawal symptoms has been likened to the effects of withdrawal from regular morphine intake (Christie & Chesher, 1982). Table 3.4 summarises the withdrawal symptoms found in research on ED.

Table 3.4 Withdrawal Symptoms Following Exercise Deprivation
 Source: adapted from Pierce (1994 p. 154)

Psychological/Behavioural Symptoms	Physiological Symptoms
Anxiety ^(1,2,4,5,9,10)	Muscle soreness ⁽¹²⁾
Depression ^(4,5, 6,10-12)	Disturbed sleep ^(1,12,13)
Irritability ^(1,2,4, 6,11,12)	Lethargy, fatigue ^(1,5,6)
Hostility ⁽⁵⁾	Increased galvanic skin responses ⁽³⁾
Anger ^(5,10)	Gastrointestinal problems ⁽¹²⁾
Tension ^(5,7,11)	Headaches ^(12,16,18)
Guilt ^(11,7,11)	Chest pains ^(12,16,18)
Frustration ⁽¹²⁾	General discomfort ⁽¹⁵⁾
Increased sexual tension ⁽¹³⁾	
Increased need for social interaction ⁽¹³⁾	
Confusion ⁽⁵⁾	
Decreased self esteem ⁽⁵⁾	
Relief ⁽⁸⁾	
Impaired concentration ⁽¹⁾	
Mood disturbances ^(1,6,7,11,12,14,15,16,17)	
Feelings of loss ⁽¹²⁾	
Restlessness ⁽²⁾	
Loss of vital energy ⁽¹²⁾	

Sources:

- | | |
|---|---------------------------------------|
| 1 Glasser (1976) | 10 Anshel (1991) |
| 2 Sachs & Pargman (1979) | 11 Blumenthal, O'Toole & Chang (1984) |
| 3 Thaxton (1982) | 12 Robbins & Joseph (1985) |
| 4 Morgan (1979) | 13 Baekeland (1970) |
| 5 Chan & Grossman (1988) | 14 Abell (1975) |
| 6 Carmack & Martens (1979) | 15 Summers <i>et al.</i> (1982) |
| 7 Pierce <i>et al.</i> (1993) | 16 Mondin <i>et al.</i> (1996) |
| 8 Crossman, Jamieson & Henderson (1987) | 17 Morris <i>et al.</i> (1990) |
| 9 Yates, Leehey & Shisslak (1983) | 18 Gauvin & Szabo (1992) |

Withdrawal symptoms have been observed after periods of abstinence from exercise as short as 24 hours (Thaxton, 1982; Mondin *et al.*, 1996) or over longer periods such as one (Gauvin & Szabo, 1992) or two weeks (Morris *et al.*, 1990).

The issue of withdrawal presents methodological problems for the researcher because of the need to cease participation in order for the symptoms to be manifested (Robbins & Joseph, 1985). Most exercisers would be unwilling to abstain from their regular exercise regime in order that a researcher could measure the impact of abstinence (Baekeland, 1970) and, therefore, researchers are usually left with exercisers' own accounts of withdrawal symptoms. Whether the individual's behaviour corresponds with what they *report* to be their behaviour is an additional issue for researchers (Kagan & Squires, 1985). Furthermore, it may be possible that exercisers avoid withdrawal to the extent that they always exercise and therefore never experience it. Only Thaxton (1982) attempts to gather data on withdrawal symptoms by measuring physiological responses and does not rely on self-report data.

Not all research, however, supports the concept of psychophysiological distress in the absence of exercise (Matthews, 1997). Researchers who have failed to find evidence of withdrawal symptoms include Crossman, Jamieson & Henderson (1987), Gauvin & Szabo (1992) and Matthews (1997). Research, therefore, is not able to confirm whether negative affect responses, as a result of missing a planned exercise schedule, precede exercise addiction or are a consequence of it (Anshell, 1991). Clearly, evidence of withdrawal symptoms remains problematic as a criterion of selection for research participants. Therefore, this study seeks to also access participants who do not report withdrawal symptoms (see Chapter Six).

Some of the salient variables in ED research are defined as *gender differences, motivation, associated life elements, and injuries*. These are summarised in Table 3.5.

**Table 3.5 Summary of Variables of Exercise Dependence Research
Gender Differences, Motivation, Injuries and Associated Life Elements**

Variables	Findings	
	Differences Found	No Differences
Gender	2, 4, 13, 15, 18, 19	5, 24
Motivation at Onset and Continuation	5	10, 26
	Evidence Found	No Evidence Found
More Likely to be Injured	1, 8, 14, 16, 21, 27, 29	9
Associated Life Elements	<p style="text-align: center;">Dominates All Aspects of Life 3, 12, 17, 30</p> <p style="text-align: center;">Negative Impact on Other Elements 16, 17, 20,</p> <p style="text-align: center;">Ageing and Death 11, 22, 23, 24, 28, 30</p> <p style="text-align: center;">Dysfunctional Family 7, 25, 29</p> <p style="text-align: center;">Lack of Enjoyment 6, 25</p>	

Key to the table is on the following page.

1. Adams & Kirkby (1997)
2. Anshel (1991)
3. Bamber *et al.* (2000)
4. Chapman & De Castro (1990)
5. Carmack & Martens (1979)
6. Cockerill & Riddington (1996)
7. DeBenedette (1990)
8. Diekhoff (1984)
9. Estok & Rudy (1986)
10. Farrell & Thompson (1994)
11. Graham (1979)
12. Hall (1995)
13. Kagan & Squires (1985)
14. Lyons & Cromy (1989)
15. Masters & Lambert (1989)
16. Morgan (1979)
17. Pierce, McGowan & Lynn (1993)
18. Pierce, Rohaly & Fritchley (1997)
19. Robbins & Joseph (1985)
20. Rudy & Estok (1983)
21. Rudy & Estok (1989)
22. Sachs & Pargman (1984)
23. Sachs (1984)
24. Summers, Machin & Sargent (1983)
25. Thompson (1990)
26. Thornabene (1995)
27. Veale (1987)
28. Veale (1995)
29. Wichmann & Martin (1992)
30. Yates, Leehey & Shisslak (1983)

Further details about the studies in Table 3.6 can be found in Appendix A.2.

With regards to associated life elements, a negative impact refers to the impact of ED on relationships such as professional and interpersonal relationship when the “exercise begins to dominate the life of the runner” (Estok & Rudy, 1986 p. 188). Another issue, which is acknowledged in the literature but not studied comprehensively, is the relationship between ageing, death and exercise. One of the reasons for this potential feature of ED is that most studies that record male runners' ages, suggest that ED is more likely to manifest in the third to the fifth decades of life (Yates, Leehey & Shisslak, 1983; Wheeler *et al.*, 1986). This has been dealt with only in passing in the current literature but there is the suggestion that dependent persons may be engaging in a two-fold process that connects exercise and death. First, they are trying to prevent or cope with ageing or ineffectiveness (Yates, Leehey & Shisslak, 1983; Summers, Machin & Sargent, 1983; Sachs, 1984) so exercise is somehow seen as a way of protecting themselves from inevitable death (Sachs & Pargman, 1984). For example, Epstein (1981 p. 179) states that: “the only difference between joggers and runners and the rest of us, when it comes to the fear of death, is that they are doing something about it: they are running from it” and, as Graham (1979 p. 821) expresses, “the anxiety of terminal helplessness”. Secondly, exercise is so essential for dependent people that the thought of life without it is not possible “... she described her aims in life as to ‘run till I die’”(Veale, 1995 p. 3). Some researchers propose this anxiety of terminal helplessness as a motivational incentive for continued exercise participation (Morgan, 1979; Summers, Machin & Sargent, 1983; Benyo, 1990). The existing ED research does not, however, have data that spans the life histories of individuals. Therefore, the issues relating to the inevitability of ageing and death have scope for more in-depth exploration through the narratives of dependent exercisers.

The type of activity undertaken within the ED studies has changed over the past 30 years. Initially there was a focus on running but researchers have since diversified in the activities chosen for their studies. Some authors suggest that other aerobic and endurance events, such as swimming and cycling, may have similar dependence-inducing effects as running (Crossman, Jamieson & Henderson, 1987; Willis & Campbell, 1992; Pierce, Daleng & McGowan, 1993). Veale (1991) hypothesises that elite populations would not be able to achieve maximum performance in a

dependent state because of the likely onset of staleness. The debate about the nature of the activity undertaken focuses on whether the exercisers are intrinsically dependent upon the activity or whether the requirements of achieving success at competitive levels may be the same as, or mistaken for the dependency syndrome. There is justification, therefore, for examining the dependency process in recreational exercisers exclusively. In order to avoid this debate this study uses non-competitive exercisers.

What is common about past research is that the selection of a specific activity has been constant throughout the research process. The majority of previous research has not examined the process of dependence independent of activity. One exception to this is a study that examines the impact of withdrawal on well-being, using a sample population participating in a wide range of activities (Gauvin & Szabo, 1992). However, it makes no claim to examine dependency. Another exception is the validation of the EDQ in which the sample population represents a wide range of activities (Ogden, Veale & Summers, 1997). Clearly, there is a need to explore the dependency process independent of activity so that the research can account for the social process. Therefore, choice of activity is not regulated in this research project.

The above section has outlined the terminology associated with the literature within the research field and the essential defining characteristics of ED. The following sections explore the main academic explanations for ED: these are physiological and psychological.

3.4 Differing Explanations of Exercise Dependence

Researchers have adopted a variety of different explanations for ED. These explanations all reflect a positivistic paradigm and lack rich, descriptive detail of the ED process across the life history. The different explanations can be categorised into physiological and psychological. Table 3.6 outlines these explanations and further details of these can be found in Appendix A.3.

Table 3.6 Summary of Different Explanations for Exercise Dependence

Type of Explanation	Examples of Researchers	Description
Physiological	Thoren <i>et al.</i> , (1990)	Individuals become dependent upon the released endorphins and that the process is very similar to other forms of opiate addiction because endorphins mimic the analgesic and narcotic elements of morphine and heroin.
	Steinberg, Sykes & LeBouitillier (1995)	
Psychological	Yates, Leehey & Shisslak (1983) Veale (1995)	Clinical – secondary ED appears in conjunction with anorexia nervosa
	Blumenthal, Rose & Chang (1985) Thaxton (1990)	Reinforcement - response to learned behaviour – achieving positive affect and avoiding negative affect
	Joseph & Robbins (1981)	Mastery hypothesis/therapeutic role - individual's expression of control or mastery over their body and that it is a reinforcement of their competence and self worth. Alternatively, it allows a mechanism for coping with stress
	Pargman & Burgess (1979) Thompson & Blanton (1987)	Motivation – opponent process theory of motivation. Endures the negative affect in order to enjoy the pleasure of cessation
	Kagan & Squires (1985) Hinkle, Lyons & Burke (1989)	Personality theories

The positivistic paradigm that underpins the existing ED literature emphasises measurement, prevention and treatment of the phenomenon. The following section highlights the current mechanisms used for the investigation of ED.

3.4.1 Methodological Tools

Some researchers have attempted to quantify and validate measures of ED. The use of such tools to measure ED exclusively, without additional support from other methods, is problematic. First, the tools only record participation in exercise at the moment of undertaking the study and therefore cannot account for changes or fluctuations throughout time. Secondly, the methods are based on self-report data and therefore are not triangulated. Thirdly, respondents are forced to adopt the researcher's language and terminology. ED research lacks subjective accounts of the dependency process. Peele (1979) acknowledges that addiction and dependency research could be enhanced

through the documentation of subjective accounts and it is this gap that this study seeks to address. The commonly used tools are summarised in Table 3.8 (see following page).

All these measures use statements of ED characteristics and ask exercisers to rate the statement on a Likert scale. Therefore, the measurement of ED is described as a numerical value underpinned by researchers' own meanings of ED. Individual interpretation is not accounted for and the research fails to account for subjective realities.

Table 3.7 Commonly Used Measures in Exercise Dependence Research

Name of Measure	Authors	Criticisms	Comments
Commitment to Running (CR) Scale	Carmack & Martens (1979)	Narrow application to running, irrelevant for other forms of exercise (Ogden, Veale & Summers, 1997)	Adapted for other forms of exercise (Corbin <i>et al.</i> 1987; Gauvin & Szabo, 1992)
		Lack of relationship between CR scores and self reported perceptions of addiction (Ogden, Veale & Summers, 1997; Thaxton, 1982)	CR scale can discriminate between addicted and non-addicted individuals (Thornabene, 1995)
		Mixes factors previously described as 'positive' with factors previously described as 'negative' (Rudy & Estok, 1989)	
		Key term not operationalised (Smith, Hale & Collins, 1998)	
Negative Addiction Scale	Hailey & Bailey (1982)	Some confusion between items that have been previously described as positive. Mechanics of scoring are absent (Rudy & Estok, 1989)	Some commonalties with the CR scale but caution should be used when comparing results between the CR and NA scales because they assess different qualities (Kirkby & Adams, 1996)
		Does not allow measurement of relative amounts of addiction so it is unclear at what score a person can be considered dependent (Furst & Germane, 1993)	Possible score of 0-14 but no cut off point that indicates dependence
Obligatory Exercise Questionnaire (OEQ)	Yates, Leehey & Shisslak (1983) all variations Blumenthal, O'Toole & Chang (1984) Pasman & Thompson (1988)	Exercise specific (Ogden, Veale & Summers, 1997)	Score above 50 indicates obligatory relationship with exercise
		Used descriptions from Yates, Leehey & Shisslak (1983) but they have been criticised for presenting fictitious case studies (Smith, Hale & Collins, 1998)	
Addiction-to-Running Score	Summers <i>et al.</i> (1982)	Does not outline how the scale was derived or how it is scored (Rudy & Estok, 1989)	
Exercise Dependence Questionnaire (EDQ)	Ogden, Veale & Summers (1997)	None reported thus far	Devised for a range of activities. Applicable to a UK population.
Running Addiction Scale (RAS)	Rudy & Estok (1989)	Sample of only 15 subjects used to determine test and retest reliability (Smith, Hale & Collins, 1998)	
Running Addiction Scale	Chapman & DeCastro (1990)	Key term not operationalised (Smith, Hale & Collins, 1998)	

Within ED research two debates fall outside those addressed above. These debates concern whether ED is a positive or negative experience and whether ED is best conceptualised as a process or product. These two debates are now considered in the next two sections.

3.5 Exercise Dependence as a Positive or Negative Experience

Early conceptions of ED describe the phenomenon as a 'product', an all or nothing state within which the individual is located. Sachs (1981) rejects Glasser's (1976) product model and offers an alternative process approach placing ED on a continuum of behaviour. This change in conceptualisation is also mirrored in research on more conventional forms of addiction with the recent emphasis placed on relapse as a process (Brownell *et al.*, 1986)

Pierce also believes that ED is best represented as a continuum with beneficial exercise at one end and a threat to the physical and psychological integrity of the individual at the other. This notion epitomises one of the central discussions concerning exercise dependence that is whether the nature of the syndrome can be summarised as being positive or negative. This is a unique and important element of the ED literature because of the negative value judgement that is applied often to other forms of dependence such as drugs, alcohol and tobacco. Society generally views taking illicit drugs as a negative habit and the participation in physical activity as a positive habit (Rudy & Estok, 1989; Johnson, 1995; Thornabene, 1995).

Essentially, when the exerciser remains in control of their physical activity then the experience may be described as positive. When the individual loses control, and the need to exercise controls them, then the experience may be described as negative (Johnson, 1995). Estok & Rudy (1986) believe that differences between addiction and commitment may ultimately be the key factor in identifying the positive or negative effects of the exercise. Pierce (1994) summarises the positive or negative debate amongst researchers in his review outlined in Table 3.8.

An issue of labelling arises from such categorisation of ED as a positive or negative experience. Current ED research neglects to question these value judgements of the exercise experience and fails to recognise that the discourse of ED centres around normative experiences. The research seems to ignore its own normative biases and consequently a sociological critique of ED can illuminate the impact of these biases.

Table 3.8 Exercise Dependence: Terminology, Characterisation and Measurement
Source: Adapted from Pierce (1994 p. 150)

Reference	Terminology	Characterisation	Measurement
Glasser (1976)	Positive Addiction	Positive dependence	Survey
Sachs & Pargman (1979)	Running Addiction	Positive dependence	In depth interview
Morgan (1979)	Negative Addiction	Negative dependence	Case study
Carmack & Martens (1979)	Commitment to Running	Positive dependence	Validated scale
Hailey & Bailey (1982)	Negative Addiction	Negative dependence	Non validated scale
Yates, Leehey & Shisslak (1983)	Obligatory Running	Negative dependence	Case study
Blumenthal <i>et al.</i> (1984; 1985)	Obligatory Running	Positive dependence (except at extreme)	Questionnaire
Chalmers <i>et al.</i> (1985)	Morbid Exercising	Negative dependence	Case study
Ogden, Veale & Summers (1997)	Exercise dependence	Negative dependence	Validated scale
Rudy & Estok (1983, 1989, 1990)	Negative addiction	Negative dependence	Validated scale
Lyons & Cromy (1989)	Compulsive jogging (exercise dependence)	Negative dependence	Case study
Chapman & DeCastro (1990)	Running addiction	Positive dependence	Validated scale
Matthews (1997)	Exercise addiction	Positive dependence	Non validated scale

Glasser's (1976) belief that ED represented a positive experience has been subject to criticism from other researchers who suggested a negative addiction (Morgan, 1979). In more recent research, however, it is once again acknowledged that negative addictions are extremely rare (Leedy, 2000; Bamber, Cockerill & Carroll, 2000; Szabo, 2000).

3.6 Exercise Dependence as a Process or Product

Initially, researchers adopted a product model of ED, suggesting that it is an all or nothing state (Glasser, 1976; Morgan, 1979). More recently, however, some have indicated that ED is best viewed as a continuum, thus adopting a process model (Sachs, 1984; Veale, 1987, Blumenthal, Rose & Chang, 1985; Pierce, 1994; Ogden Veale & Summers, 1997). This implies that there are degrees of

severity and that ED is an extension of ordinary behaviour (Sachs & Pargman, 1984). Chapman & De Castro (1990) suggest a process conceptualisation of addiction that differs from commitment.

Veale (1995) suggests that diagnostic categories, associated with a product model (see Appendix A.2), are more popular in North America whereas British researchers prefer a continuum model. However, he argues that both approaches have uses. Accepting a continuum of behaviour becomes easier with the knowledge that some individuals may experience partial or less intense syndromes, that extreme cases are very rare (Veale, 1987; Blumenthal, Rose & Chang, 1985) and that there is no evidence to suggest that ED is widespread (Cockerill & Riddington, 1996). Some suggest that the dependent athlete engages in a positive addiction and then progresses along the continuum to a negative addiction (Sachs, 1984; Johnson, 1995). The notion of an ED continuum is similar to alcohol and drug dependence concepts as these are also based on degrees of severity rather than all or nothing states (WHO, 1977 cited in Drummond, 1991).

A distinction between running commitment and addiction is addressed in the research literature by conceptualising a continuum with commitment/dedication at one end, which are feelings of guilt if the activity is not undertaken and, at the other, addiction/dependence with signs of psychobiological withdrawal (Pargman, 1980 cited in Pargman & Baker, 1980). This interrelationship between commitment and dependence is hypothesised in an orthogonal model (see Figure 3.2) defining four groups of runners:

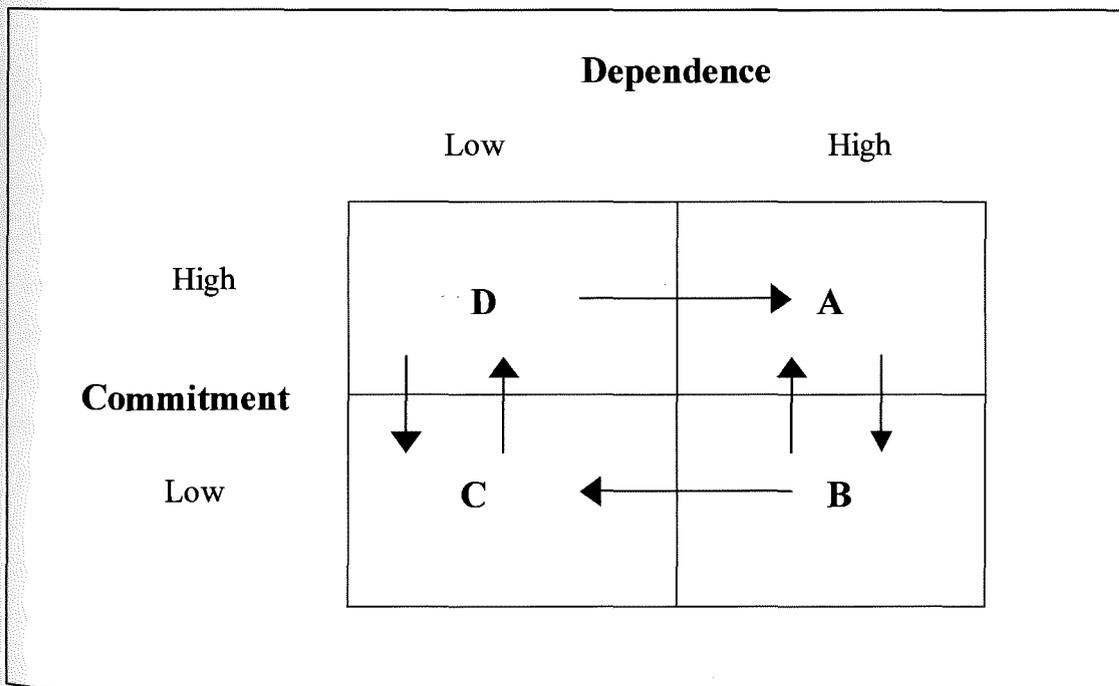


Figure: 3.2 The Sachs & Pargman Model of Exercise Dependence (1979)

Source: Sachs (1980)

According to the originators of the model, all individuals enter in quadrant C, where both commitment and dependence are low. When commitment increases individuals move into quadrant D. From there, if the individual develops a dependence upon the activity they move into quadrant A and it is these individuals who are the most committed and dependent upon their exercise. It is suggested that if commitment wanes the individual will slip into quadrant B but that this state will not be maintained for long because of the difficulty of remaining dependent without commitment. These individuals will either increase their commitment and move back into A or decrease dependence and move back into C. Movement from D to B contradicts the earlier suggestion that relapse is not a feature of ED (Cockerill & Riddington, 1996 see Appendix A p. 216). The model is considered to be a dynamic one because of the movement between the quadrants.

Conboy (1994) suggests that withdrawal is present when there is an interrelation between commitment and dependence, supporting the notion of an orthogonal model. This interrelationship between commitment and dependence is crucial in the previous model but there is not a critique of the differences in the ED literature. Conboy (1994) also suggests that all runners report withdrawal, even those in the low commitment and low dependence category, which suggests that factors *other* than just commitment and dependence are important within the ED process. Existing ED research cannot account for the processes by which one individual may move from one quadrant to the other. Nor can it account for potential differences between commitment and dependence. It is evident that further exploration of the positive/negative and process/product debates could enhance understanding of ED. Exploration of these processes through subjective accounts could add depth and detail to these issues.

3.7 Summary

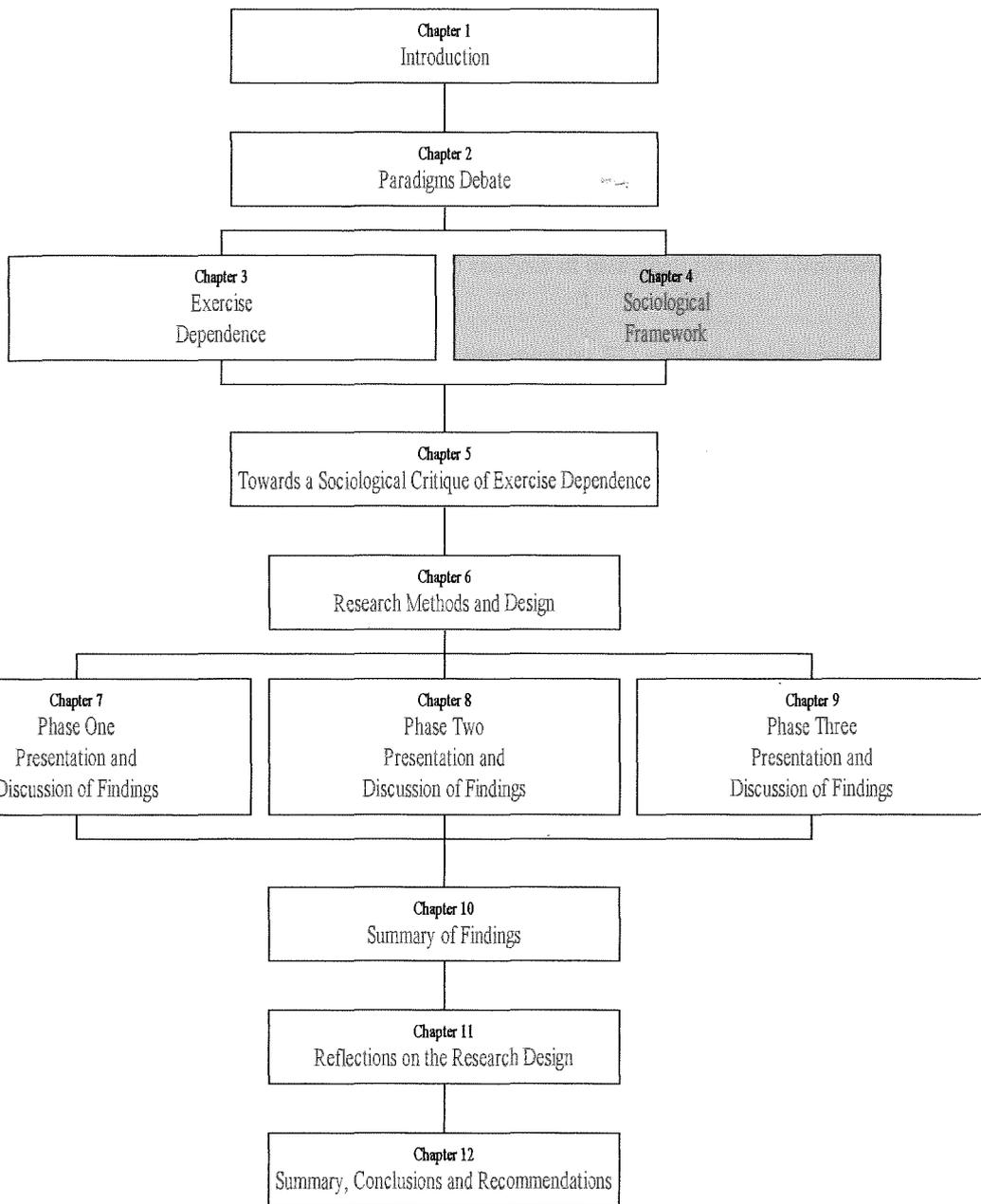
Over the past 30 years researchers' knowledge about the concept of ED has progressed but its aetiology remains unclear and disputed. Research on ED is wide-ranging and indicative of a variety of explanations and paradigms. Unfortunately, however, much of the literature is very descriptive and lacking empirical support (Robbins & Joseph, 1985). Sewell *et al.* (1995) questions whether the narrow focus on running that has dominated ED research had resulted in a misguided belief in the research community. In particular, they argue that researchers have been too quick to consider how the dependency process is instigated rather than fully considering whether the process actually exists or not.

Some of the literature reflects a tendency towards medicalisation of ED. This implies that ED is more prevalent and likely to be more encompassing than it probably is and frames ED within a disease-based explanation (Wichmann & Martin, 1992). Peele (1979; 1985) contends that disease-based explanations for addiction and dependence are a feature of recent history and that they can be challenged by presenting a view of dependence constructed instead on time and situation i.e. the social context to studies of dependence.

Sachs & Pargman (1979) acknowledge that few researchers have adopted qualitative approaches. Despite the expansion of interest in ED, most research is still based upon quantitative validation of the syndrome and its effects. Interview methods are criticised for being time consuming, subjective and because data and results are difficult to organise and quantify (Hailey & Bailey, 1982; Pierce, 1994). Pierce (1994) and Gauvin & Szabo (1992) judge qualitative methods negatively and call the data 'anecdotal'. However, it is argued here that researchers need to develop both qualitative *and* quantitative approaches as it only through a combined effort that the holistic nature of exercise dependence can be more fully understood.

Understanding of ED can be enhanced both methodologically and theoretically through the adoption of alternative research designs and theoretical paradigms. Qualitative research can develop understanding of the phenomenon by providing rich, detailed data and allowing more than simply a temporal snap shot of the dependency process. Furthermore, accounts of the social context of ED, which have largely been ignored to date, may provide some further illumination of the phenomenon. In order to develop a sociological critique of ED the next chapter therefore examines the sociological framework.

Figure 4.1 Outline Map of the Thesis Highlighting Chapter Four



CHAPTER FOUR

REVIEW OF SOCIOLOGICAL FRAMEWORK

4.1 Introduction

A sociological critique of ED has to take account of theoretical perspectives that differ from those traditionally associated with the phenomenon. As discussed in Chapter Three, ED terminology is contested, problematic and to date, defined only by researchers' voices. Exercisers' subjective accounts of their experiences are, therefore, explored in this study as an integral part of the research process. A Symbolic Interactionist approach is used which draws upon similar work such as Snyder's (1986) analysis of collegiate sport, Henderson, Bedini & Hecht's (1994) exploration of identity, gender and disabilities and Adler & Adler's (1989) analysis of basketball players' identities.

The first part of this chapter reviews the limited literature on ED and the sociological perspectives applicable to it. The second part outlines Symbolic Interactionism. Notions of the 'self' and 'identity' are such significant constructs within Interactionism that they are explored separately. The third part of the chapter examines additional sociological concepts identified in the ED literature, particularly that of 'deviance' (Cole, 1998; Folkins & Wieselberg-Bell, 1981; Ewald & Jiobu, 1985) and its association with labelling. Finally the importance of interpersonal relationships within the ED process is carefully considered so social psychological theories of support are explored.

4.2 Identifying a Sociological Framework

This thesis is driven by a desire to challenge the pathological underpinning of the previous ED research. This mirrors the paradigm shift previously noted in social sciences generally (see Chapter Two) and physical activity specifically (Sparkes, 1992). This thesis challenges the existing ED research on the basis that it is constructed only by researchers' voices and that the subjective meaning of exercise is not explored across the life history. Features of the previous research methods mean that the current body of knowledge cannot account for ED as an emerging social behaviour. Table 4.1 outlines the literature that might assist in developing a sociological perspective on ED.

Table 4.1 Content of Literature in Chapter Four and Application to the Thesis

Outline of Chapter Section	Description of Content	Link to Thesis
Sociological Explanations of Dependence	<ul style="list-style-type: none"> • General theories of dependence • ED 	Acknowledging the limited research undertaken from a sociological perspective
Symbolic Interactionism	<ul style="list-style-type: none"> • Meaning • Self and Identity • Sport and Leisure research from a Symbolic Interactionist perspective 	Theoretical framework which frames the life history analysis. Allows the research design to explore exercisers' subjective meanings and accounts of their dependency - interpretive biography (Sparkes, 1998c).
Deviance and Labelling	<ul style="list-style-type: none"> • Symbolic Interactionist approaches to deviance • Labelling • Deviant career • Sport and Leisure research from a deviance perspective 	Problematising the suggestion that ED is only manifested in recreational athletes not competitive athletes (Veale, 1991).
Social Support	<ul style="list-style-type: none"> • General research involving SOs • Weight loss programmes • Exercise and physical activity 	Framing the exploration of the impact of exercise on SO relationships (Morgan, 1979; Rudy & Estok, 1990).

The table outlines the relationship between the five areas of literature presented in this chapter and the relevance to the thesis in general. First, the chapter explores the limited sociological work that critiques dependence generally and ED specifically. Secondly, Symbolic Interactionism is introduced as the main theoretical school of thought used to frame the life history accounts that appear later in this study. The choice of this framework corresponds with the decision to collect interpretive narratives and the exploration of the role of exercise within identity construction (Sparkes, 1998c).

Thirdly, the suggestion that ED is only manifested in recreational rather than competitive athletes is problematised but there is little exploration of the different ED processes involved between recreational and elite athletes. This research project suggests that a labelling process of deviant exercise behaviour is at work here. Finally, the chapter outlines issues of social support in order to frame the exploration of SO relationships in exercise. ED is thought to have a negative impact on personal relationships and although this is an accepted area within the research, there is little empirical evidence to support it.

4.3 Sociological Explanations of Exercise Dependence

Dependence may be viewed as a social process. It is possible to explore understanding of dependence in relation to other social issues such as ethnicity, gender, social mobility and cultural pluralism (Gabe & Bury, 1991). Sociological approaches to dependence generally focus on the way in which the individual functions within their social system, including the environmental contexts, an attempt to highlight family or personal problems and, a response to peer group pressure (Jiba Ja Rusth, 1990). Some researchers consider these social issues in relation to ED. These approaches include a social learning approach (Thornabene, 1995), time and social support (Jiba Ja Rusth, 1990), concepts of identity (Major, 1995) and a risk factor model (Yates *et al.*, 1994). These considerations are limited, however, because they are marginalised within the research and are not reflected in the epistemology of the studies.

According to social learning theory, ED follows the same principles and patterns as other dependency behaviours (Thornabene, 1995). In other words it is a *learned* behaviour, based on past experiences. This social learning model is applied to the running addiction profile in order to identify preventative measures at the onset of a running programme (Thornabene, 1995). Although this health educational approach is based on social learning model of ED it is imbued with tension because it is still informed by an ideology of 'prevention' and, therefore, disease-based concepts.

Jiba Ja Rusth (1990) defines the socio-cultural context of obligatory runners as the social support available to runners and the amount of free time that runners have to undertake their activity. Social support is discussed in greater detail below. Interestingly, Jiba Ja Rusth maintains that leisure time is also not a predictor of obligatory running which contradicts Peele's (1979, 1985) concept of dependence based on situation and time.

In an interpretative analysis of 24 serious runners, Major (1995) was surprised by the discovery that 'addiction to running' emerged as a key theme. He applies Becker's (1960) concept of commitment to running and notes that a sense of personal worth and identity are key to understanding the runners' participation. Running without end goals or with friends is usually considered to be leisure whereas road running, training and racing are considered to be more "work like" in orientation and "something else" (Major, 1995 p. 176). This is likened by Major to 'serious' running after Stebbins' (1999, 2000) 'serious' leisure.

A risk factor model for ED is proposed by Yates *et al.* (1994) that combines traditional psychological, biological, physiological approaches with sociocultural and situational considerations. In this model dissatisfaction with the physical body drives a desire to achieve physical perfection, which is linked to a wider sense of dissatisfaction about the self (Yates *et al.*, 1994). They therefore, identify sociocultural risk factors as being achievement orientation, sensitivity to cultural standards and

dissatisfaction with the body (Yates *et al.*, 1994). They also suggest that situational factors may also feature within the process, so that irrational behaviour may only manifest itself in certain circumstances. This latter statement on situational factors is aligned to Peele's (1979; 1985) concept of dependence. Whilst there seem to be similarities between Yates *et al.*'s conceptualisation of ED and that adopted in this research project, these similarities are limited because Yates *et al.* work from a basically positivistic framework.

Some writers argue for a more holistic approach to social and political movements that have constructed the discourse of ED. For example, Nixon (1989) carefully considers the connection between male runners and female anorexics that Yates, Leehey & Shisslak (1983) propose. Extreme forms of running and dieting are seen as positive deviance and this is discussed in greater detail later (see Section 4.5 p. 57). According to Nixon (1989) this notion of positive deviance can be considered as an attempt to respond to identity crisis generated by unstable self-concepts. He argues that the American culture of individualism, achievement and success is manifested differently by males and females due to gender stereotyping and that excessive exercising for men and dieting for women are responses to contemporary American culture. This is a culture that breeds a society that strives to achieve unrealistic goals, hides the barriers that might prevent this, places responsibility on the individual, and causes anxiety and isolation. Men are more likely to question the nature of success and whether their pursuits will achieve success, whereas women are more likely to engage in apologetic behaviour because they should not be seen to be too successful. Participation in running for men and dieting for women allows individuals to engage in activities which emphasise traditional sexualities consistent with ascribed social roles. Nixon's view of the work of Yates, Leehey & Shisslak (1983) is interesting and places a macro perspective on the phenomenon for the first time but it is based on the contested idea that anorexia in women and ED in men is a gendered manifestation of the same phenomenon.

Cole (1998) suggests that during the 1980s cultural anxieties around 'free will' emerged. This arose when conservative forces manufactured war on a number of issues including the fitness boom. Physical transcendence and free will are the most popular commodities in postmodern America, which is tempted by addiction to consumerism and where acquisition turns a societal concern into something much more tangible and insidious - addiction to drugs. Her argument suggests that narratives of addiction are based on the 'logic of addiction' which emphasises an 'othering' of the body according to a display of free will. These narratives of addiction emphasise distinctive differences between deteriorating bodies that have insufficient free will in contrast to productive bodies with free will. An addicted individual is therefore one who has insufficient free will and should be managed. Cole (1998) suggests that it is better, however, not to limit a critique of the identities emerging through the logic of addiction simply to the conservative forces mentioned previously.

The promise of exercise during the fitness boom and its potential to transform the self, led to exercise being promoted as “nature's Prozac” (Cole, 1998 p. 264) and eventually described as something that could become addictive. During the 1970s and 1980s there were moves to pathologise the identity of the exercise dependent individual through the discourse of addiction which promotes a “passive-subject/demonised - object relation” (Cole, 1998 p. 264). Consequently, ED discourses focus on “deviant bodies and pathologised subjectivities” (Cole, 1998 p. 265). She challenges this interpretation and suggests “the discourse of addiction is a mechanism of classifying and producing both the normal and the pathological/deviant/excessive, and as such, is a technology of the self” (Cole, 1998 pp 264-265). She suggests that the exercise addict is best understood as a product of this discourse of addiction:

... the exercise addict increasingly became an object of scientific knowledge as scientists and psychologists sought to make visible, discernable, and quantifiable a newly produced and pathologised identity ...

(Cole, 1998 p. 271)

Cole concludes by suggesting that the exercise addict is the super-addict because it is not easy to apply the discourses of addiction to this activity. Instead the individual is addicted to the choice of free subjectivity and mythical properties are not part of the exercise but emerge within the self.

The language used by the researchers to describe ED provides an interesting insight into their epistemological biases. Those involved in psychology and psychiatry practice have professional responsibilities towards their clients and need to be in a position to be able to offer help. Even so, severe cases of ED are very rare (Veale, 1991). Therefore, there are a large number of exercisers in research studies who, while fulfilling the defining characteristics of ED, do not require external professional help. It is, therefore, possible that the ED literature medicalises exercisers. As Cole (1998 p. 263) comments “addiction is a term that implies a substance, licit or illicit, and a subject, a compulsive subject, who can be managed”. For example, one study superficially discusses the notion of 'deviance' but uses this concept with reference to a clinical scale on the Minnesota Multiphasic Personality Inventory (MMPI) rather than a social or labelling processes (Folkins & Wieselberg-Bell, 1981). Although excessive exercise rather than ED specifically, is the focus of this study, they conclude that: “ultramarathon runners appear to be very *normal* in personality” (Folkins & Wieselberg-Bell, 1981 p. 126). ED research is clearly caught up here in a process of either 'normalising' or 'medicalising' exercise behaviour.

4.4 Symbolic Interactionism

Symbolic Interactionism emerged during the last century within North American sociology as a critique of Functionalism (Swanson, 1972). The term Symbolic Interactionism was first used in 1937 in what was described as an “off hand manner” (Blumer, 1969 p. 1), who expressed surprise that it became featured in popular use. Academics at The Chicago School were the main writers in the field

during the inter-war years (Stryker, 1980) and Blumer became the school's notable representative who expanded an interpretative view of human behaviour (Manis & Meltzer, 1972). Other scholars included Mead (1934) and Cooley (1922) and some have suggested that it was Mead's work that laid the foundations of Interactionism (Blumer, 1969; Stryker, 1980). Symbolic Interactionism can be considered to be both a theoretical perspective and a methodological orientation (Manis & Meltzer, 1972). It focuses on micro-social processes and is concerned with how human interaction constructs social meaning. It is argued that the ideas proposed by Symbolic Interactionism are not formulated to the extent that they represent a theory but rather a theoretical framework (Stryker, 1980).

The development of Symbolic Interactionism stems from the work of Mead (1934) but it is important to establish that his theories were only published after his death and were not written in a form intended for publishing (Meltzer, 1972). Mead's work was a move away from behavioural psychology in that he considered observable human action to also include covert action (Meltzer, 1972). His work reflected a social philosophical approach in that he offered no empirical evidence but used illustrative examples with which he intended to replace data (Meltzer, 1972).

Symbolic Interactionism is not an homogenous school of thought and approaches to it vary, particularly with reference to social structure for example in comparison to the work of Mead, Blumer and the subtleties of ethnomethodology and phenomenology (Snyder, 1986). Stryker's (1980) account of Symbolic Interactionism draws heavily upon the work of Mead but is dissimilar to the work of Blumer (1969). Kuhn (1972) outlines some of the major schools of thought within Symbolic Interactionism on the basis of difference in the extent to which the self is determined or indetermined. Kuhn lists these schools of thought as: role theory; reference group theory; social perception and person perception; phenomenological theory; dramaturgical school of thought; interpersonal theory and language and culture orientation. Kuhn (1972) acknowledges that his selection is quite arbitrary and does not include all the differences within Symbolic Interactionism. In order to acknowledge these differing schools of thought it is necessary to overtly state the underlying principles that inform the Symbolic Interactionism of this study.

Three major premises of Symbolic Interactionism are:

1. individuals act towards things on the basis of the meanings that the things have for them;
2. meaning from such things is derived from, or arises out of, the social interaction that one has with one's fellows;
3. these meanings are handled in, and modified through an interpretative process used by the person in dealing with the things he encounters.

(Blumer, 1969 p. 2)

These three premises establish that Symbolic Interactionism has a distinctive approach that is different from other social theories. According to Blumer (1969) it focuses on agency, the individual within society, which consequently leads to a view that groups are considered to be individuals who engage in action. Agency is the focus in Symbolic Interactionism but structure, collective groups which form organisations, is accounted for differently by different authors. According to Blumer structure is viewed as acts that are interlinked, which can be contrasted to Stryker's (1980) structurally orientated account of Symbolic Interactionism. Humans exist in a world that is constructed of three categories of objects; physical objects, social objects and abstract objects. According to Symbolic Interactionism these objects are the product of symbolic interaction and are socially created and developed through interaction (Blumer, 1969).

The relationship between Symbolic Interactionism and research in sport and or leisure is particularly relevant to this thesis. Some of the Symbolic Interactionist work in sport explores the meanings that individual exercisers give to their engagement in an activity. Sport and a relationship with sport plays an important role in embodying multiple layers of identity (Maguire & Stead, 1996) and leisure is considered to be an important arena for self-expression of individuality because of the reduction of social obligations and constraints (Samdahl, 1987). Rather than presenting a passive view of socialisation, however, this research tends to reflect individuals as making choices about their identities and their roles (Snyder, 1986).

Maguire & Stead (1996) suggests that individuals are constructed through multiple layers of identity and that sport and a relationship with sport plays an important role in embodying those layers of identity. In addition, through participation in physical activity individuals can maintain their self-identity and consequently certain individuals learn to "anchor their perceptions in sport" (Snyder, 1986 p 212). Table 4.2 summarises some of the research undertaken in sport and leisure from a Symbolic Interactionist perspective.

Table 4.2 Summary of Key Sport and Leisure Research Studies from a Symbolic Interactionist Perspective

Authors	Focus of Research	Comments
Snyder (1986)	College athletic programmes	Identifies four major themes: <ul style="list-style-type: none"> • meanings and definitions • sport and self identity • coach and aligning actions • organisations and negotiated order Considers participators understanding of athletic identity
Leonard & Schmitt (1987)	Sport identity and commitment	Apply Becker's notion of commitment to the concept of side bets Elements identified in the construction of identity: <ul style="list-style-type: none"> • Reciprocity among role identity • Public behaviour • Constrained behaviour
Adler & Adler (1989)	College athletes and the construction of the 'gloried self'	Gloried self is constructed from the 'reflected self' and the 'media self' Public and private selves may be different Role repertoire and the master status
Henderson, Bedini & Hecht (1994)	Interrelationship and double constraint of women with disabilities	Construction of self identity through leisure activities
Sparkes (1998c)	Impact of injury on athlete identity	Life history analysis Sense of loss and fragmentation of athletic self when injured

Following the work of Snyder (1986), Henderson, Bedini & Hecht, (1994) and Sparkes (1997a) Symbolic Interactionism is considered to be an appropriate theoretical perspective upon which to base this thesis. The reasons for this are because of the emphasis on meanings and that individuals develop reflections about the self through interaction (Snyder, 1986). Exercisers' meanings of their participation and ED are, therefore, explored in the interviews.

Sport or physical activity is undertaken in leisure time but because of the inherent dichotomy between freedom and constraint the research in the leisure area can be considered to be helpful in illuminating certain elements. Freedom and constraint are issues within ED (Cole, 1998), Symbolic Interactionism and also leisure (Samdahl, 1987). Samdahl suggests that analysing elements of leisure that inhibit or constrain, can lead to a clearer understanding of freedom, which is a central issue in leisure.

Two key elements of Symbolic Interactionism are 'interaction' and 'meaning' and these are now considered in greater detail.

Interaction

In Symbolic Interactionism individuals are not considered to be passive recipients of interaction but are active in the process of developing meaning. In other words, they do not merely act but they react (Meltzer, 1972). Actions emerge from the self in response not only to other behaviour but also to intended behaviour (Meltzer, 1972).

... interaction may be roughly defined as the reciprocal influence of individuals upon one another's actions when in one another's immediate physical presence

(Goffman, 1959 p. 26)

Behaviour, therefore, stems from the interaction process and is not independent of it (Samdahl, 1987). Society should thus be seen as existing *in action* and this perspective should be the starting point for any empirical view of society (Blumer, 1969). According to Blumer, interaction, therefore, is paramount for the formation of conduct rather than simply being an expression of that conduct.

Different forms of interaction have been identified: non-symbolic interaction and Symbolic Interaction (Blumer, 1969). The non-symbolic form takes place when the reaction is a direct one without any interpretation. A reflex action would be an example. Symbolic Interaction, however, involves some form of interpretation of the action. The individual, therefore, is presented with a world that must be interpreted in order for them to act rather than a world responded to simply because of its organisation (Blumer, 1969). Blumer criticises the view that established society as merely a model of individuals who respond to a series of recurring patterns of joint action with pre-established meanings. Rather, he believes that society poses problematic forms of interaction that constantly required interpretation and response. Each instance of 'joint action', therefore, has to be interpreted afresh (Blumer, 1969).

Action should be seen as not just between individuals but also occurring between collective groups such as nations or corporations (Blumer, 1969). The relationship between agency and structure also occurs on a micro level when individuals give consideration to an outside audience which may determine their action. Interaction occurs between individuals, between groups and between individuals and groups. Structures, therefore, are viewed as groups of interlinked, interconnected individuals which is an organisation of actions. Perspectives on structures should be seen as how the individuals within those structures respond to their situations (Blumer, 1969).

Meaning

Meaning is a central concept to Symbolic Interactionism. Blumer (1969) criticises previous social theories for either taking meaning for granted or for viewing it as being a neutral link. In contrast to this perspective, Symbolic Interactionism regards meaning as central, and asserts that meanings are developed through and out of interaction (Blumer, 1969). Meanings, therefore, can be seen as social products that are created, defined and modified through interaction (Blumer, 1969).

Mead (1934) viewed actors as being part of the process of interaction, arguing that humans not only act in the presence of others but also react to intended meanings. Consequently, certain actions may become symbolic and, therefore, interaction includes responses to interpreted stimuli (Meltzer, 1972). By attaching meaning to a human action the individual is engaging in an interpretative process (Blumer, 1969). Mead's (1934) view of society was that human action stems from society and that society rests on the basis of the shared and common understanding of meanings. Meaning is central to the theories of Symbolic Interactionism because of the need to establish common ground from which individual members of society can interact. Meaning is, therefore, constructed through social interaction and mediates the individual and their environment (Samdahl, 1987). This process also includes interaction with the self because self-interaction plays a part in the development of meaning (Blumer, 1969).

Meanings and how individuals attribute and use meanings for self reflection are some of the major themes in the sport and leisure research (Snyder, 1986). Henderson, Bedini & Hecht, (1994) suggest that human behaviour is not static but dynamic and changing, occurring within a context of social interaction. Maguire & Stead (1996) suggest that people's identities are composed of a set of interwoven features and that questions like 'Who am I?' and 'Where do I belong?' are central to notions of the self. In addition, Karp & Yoels (1990) suggest that the contemporary urban world is anonymous and that participation in sport may provide a forum for the expression of self and identity. Therefore, researchers have considered the nature of activity in sport and the effect that engagement can have on the development and the manufacturing of identity. The self emerges, therefore, as another key feature of Symbolic Interactionism and is considered now in further detail.

4.4.1 Self and Identity

The concept of the self is widely contested and seen by some as complex (Stryker, 1968). The main theories of the self are not only those from within sociology, such as Goffman and Foucault, but also from psychology, such as (Fox, 1999). Research on the social self differs both in terms of methodology and epistemology. Sparkes (1997a) acknowledges the difficulties in bringing together the diversity of writings about the self and even chooses not to define either 'self' or 'identity'. Social self theorists tend to ask questions such as "to what extent is the individual a creature of society" and how are our "identities intimately bound up with the communities and cultures in which we live?" (Bakhurst & Sypnowich, 1995 p. 1). There are radical accounts, for example by Mead and Goffman,

which suggest that social selves are not simply social constructions but that our abilities to conceptualise are also socially constructed, and post modern accounts by Michel Foucault and Judith Butler which suggest that the self is a fiction of modernity created only by discourse (Bakhurst & Synowich, 1995). Contrasting views on the self are summarised in Table 4.3.

Table 4.3 Summary of The Sociological Self and The Postmodern Self

Source: adapted from Sparkes (1997a pp 84-86)

Perspective	Conception of Self	Characteristics	Influence
The Sociological Self	<ul style="list-style-type: none"> Fully centred person A unified individual <ul style="list-style-type: none"> - reason - consciousness - action 	<ul style="list-style-type: none"> Inner core - identity remains throughout life history Stable identity Identity is the interaction between self and society 	Self - formed in relation to Significant Others
The Postmodern Self	<ul style="list-style-type: none"> Fragmented Multiple, contradictory and unresolved identities Rejection of self as separate, autonomous 	<ul style="list-style-type: none"> Socially constructed Emergent Plural State of crisis 	Self - ongoing accomplishment influenced by meanings which are culturally embedded

The nature of social interaction, and the fact that individuals respond to others both at a symbolic and non-symbolic level, is a result of possessing a 'self' or a social self (Blumer, 1969). Mead (1934) considered the construction of the self in the sense that if an individual can respond to his own gestures and meanings, then this implies an existence of the self. This corresponds to the view that an ability to consider one's own actions reflectively is a clear indication of the self (Stryker, 1980). The individual may act socially towards their own self and the self is formed through interaction and definitions created by others (Meltzer, 1972). Central to Mead's (1934) concept of the self is a division between the 'I' and the 'Me' in which the 'I' is the central identity and the 'Me' is the identity that is seen to be in interaction (Meltzer, 1972) or the incorporated other. The 'I' is considered to be an instinctive self whereas the 'Me' is considered to be a cognitive understanding and appreciation of the self as object (Samdahl, 1987). Every act is considered to stem from the 'I' and be manifest by the 'Me', therefore, the 'I' gives propulsion and the 'Me' gives direction to an act (Manis & Meltzer, 1972). The self as object allows the individual to emerge from the process of interaction. It has been suggested that at the heart of Mead's definition of the self is the notion that individuals can view themselves objectively (Stryker, 1980). In her research on women's leisure Wearing (1991) is critical of previous leisure research for only accounting for the 'I' and not considering the 'Me'.

The construction of self is achieved in part through 'role playing'. Individuals assume different roles as individuals, members of a group or the community and through these different roles they are able to interact with themselves in these different roles (Blumer, 1969). The individual self in Symbolic Interactionism is, therefore, seen as more social and profound than in traditional models presented by psychology (Blumer, 1969).

Stryker (1980) suggests that individuals develop perceptions of the self through the perspective of others. According to Stryker (1980) this is a structural view of Symbolic Interactionism because the self emerges from social interaction and is, therefore, a social structure. The self is constructed through a process of role taking. Therefore, role and ultimately role constraint have become key elements in the concept of the self (Samdahl, 1987).

The emphasis that Mead's work places on the individual/society dualism has been criticised for being outdated and expanded into a division between personal and social identity (Deschamps & Devos, 1998). A social identity can be described as the extent to which an individual has feelings of similarity with others and a personal identity can be described as the extent to which an individual has feelings of differences with other. In this concept, belonging to a social group is central to developing a social identity. By belonging to different groups in society individuals are able to develop identities according to those social positions (Deschamps & Devos, 1998).

Stryker (1980) extends Mead's work into a version of Symbolic Interactionism that goes some way to account for this dualism. The introduction of role concepts and principles is Stryker's attempt to deal with the impact of agency and structure. This impact is considered to be reciprocal and has interaction at its centre (Stryker, 1980). Social structure operates on the ongoing process of interaction which unites individuals and results in role constraint, situational definitions and role repertoires. In Stryker's (1980) account of Symbolic Interactionism it is that the ideas of role theory that bridge the agency structure dualism associated with Mead's earlier work.

Any consideration of the development of self within society must include the work of Goffman (1968) who emphasises the body as integral to human agency (Shilling, 1993) and his work is based on the following premises. The first is that the body has been viewed as a material property that is owned by individuals. The second is that the body is not entirely a product of society but is determined by shared meanings, which are not necessarily or entirely under the control of the individual. In addition, Goffman's (1959, 1968) notions of the presentation of self and the management of stigma are particularly significant to a sociological understanding of deviant bodies and pathologised exercise behaviour (Cole, 1998).

Goffman (1959) considers how individuals present their essential notion of self to those around them. He outlines how this presentation is managed so that others' impressions of the individual are created,

The construction of self is achieved in part through 'role playing'. Individuals assume different roles as individuals, members of a group or the community and through these different roles they are able to interact with themselves in these different roles (Blumer, 1969). The individual self in Symbolic Interactionism is, therefore, seen as more social and profound than in traditional models presented by psychology (Blumer, 1969).

Stryker (1980) suggests that individuals develop perceptions of the self through the perspective of others. According to Stryker (1980) this is a structural view of Symbolic Interactionism because the self emerges from social interaction and is, therefore, a social structure. The self is constructed through a process of role taking. Therefore, role and ultimately role constraint have become key elements in the concept of the self (Samdahl, 1987).

The emphasis that Mead's work places on the individual/society dualism has been criticised for being outdated and expanded into a division between personal and social identity (Deschamps & Devos, 1998). A social identity can be described as the extent to which an individual has feelings of similarity with others and a personal identity can be described as the extent to which an individual has feelings of differences with other. In this concept, belonging to a social group is central to developing a social identity. By belonging to different groups in society individuals are able to develop identities according to those social positions (Deschamps & Devos, 1998).

Stryker (1980) extends Mead's work into a version of Symbolic Interactionism that goes some way to account for this dualism. The introduction of role concepts and principles is Stryker's attempt to deal with the impact of agency and structure. This impact is considered to be reciprocal and has interaction at its centre (Stryker, 1980). Social structure operates on the ongoing process of interaction which unites individuals and results in role constraint, situational definitions and role repertoires. In Stryker's (1980) account of Symbolic Interactionism it is that the ideas of role theory that bridge the agency structure dualism associated with Mead's earlier work.

Any consideration of the development of self within society must include the work of Goffman (1968) who emphasises the body as integral to human agency (Shilling, 1993) and his work is based on the following premises. The first is that the body has been viewed as a material property that is owned by individuals. The second is that the body is not entirely a product of society but is determined by shared meanings, which are not necessarily or entirely under the control of the individual. In addition, Goffman's (1959, 1968) notions of the presentation of self and the management of stigma are particularly significant to a sociological understanding of deviant bodies and pathologised exercise behaviour (Cole, 1998).

Goffman (1959) considers how individuals present their essential notion of self to those around them. He outlines how this presentation is managed so that others' impressions of the individual are created,

managed and nurtured through interaction. This presentation is characterised by two different activities: the expression that the individual *gives* and the expression that the individual *gives off*. This interaction establishes a communication process and establishes an 'information game' in which the self is revealed and discovered through 'face work' (Goffman, 1959 p. 20).

'Performance' within face work is considered to be activity in the presence of others that is intended to influence impressions. Goffman's notion of the presentation of self includes elements such as interaction, action, routine and front. These refer to the extent to which the performance is fixed and stable or alternatively fluid and arising out of the interaction. The performance may be considered to be idealised in that the presentation may attempt to fit into the expectations of the surrounding society. When actions do not measure up to the idealised performance these have to be hidden so as not to appear inconsistent (Goffman, 1959).

The audience may assume that the actions and cues presented are genuine and this places an emphasis on the performer to present them in an expressive manner so as to avoid misrepresentation which may occur when the audience is duped or misled by the performance. Therefore, the audience may find that they spend time inspecting the performance for authenticity, or alternatively questioning whether the performer is actually authorised to give the performance (Goffman, 1959).

Public status is important in the presentation of self. Consequently, although bodies are owned and the property of individuals, they are thus defined in terms of meaning and significant by society. Finally, the body is the conduit through which the relationship between people's self identity and their social identity is constructed (Goffman, 1959; Shilling, 1993). Sparkes (1997a) suggests that there is an intimate relationship between the self and the physical body and argues that this relationship is best explored through life history narratives. Therefore, when considering the literature to frame the sociological critique of ED (see Table 4.1 p. 43) certain areas of analysis are missing: the development and understanding of exercisers' meanings of their own behaviour; an exploration of the social self and identity in relation to exercise. Consideration of the role of the body is paramount to this thesis and is, therefore, considered in the next chapter.

Sport, physical activity and leisure are frequently acknowledged to be significant sites for the construction of self-identity (Watson & Brien, 1984; Brooks, 1989; Wearing, 1991; Haggard & Williams, 1992). Traditionally, labour and contribution to economic society has been promoted as the main means by which identity is created in sociological analyses but recent shifts in leisure theory have emphasised the role that leisure activities can play in the construction of identity (Wearing, 1991). Sport represents an individual environment in which the self can become absorbed by personal reward (Watson & Brien, 1984). Furthermore, Dunning (1996) suggests that it is within the realms of sport that both personal and collective identities are important in comparison to other forms of leisure activity. Membership of a group in which there is a common activity offers a sense of identity

to the members (Peele, 1981). He further suggests that the greater the importance assigned to the activity, the greater the sense of identity derived from the membership. A sense of identity that is derived from thinking of oneself as a 'health seeking person' may be considered to be the most long lasting and consuming (Peele, 1981). Research into the complex interrelation between sport, leisure and self identity includes studies of inactive married women (Watson & Brien, 1984), physical education (Arnold, 1977), women (Wearing, 1991), identity as a side bet (Leonard & Schmitt, 1987), body builders and hustlers (Klein, 1989), academic and athletic roles (Snyder, 1986), disabled women (Henderson, Bedini & Hecht, 1994), Carter's conservation ethic (Reiger, 1993) and immortalisation (Schmitt & Leonard, 1986). Table 4.4 summarises some of the key research that examines the relationship between sport or leisure and the development of self-identity. Research already identified in Table 4.3 is not duplicated in this table.

Table 4.4 Summary of Key Sport, Leisure and Identity Research Studies

Authors	Focus of Research	Comments
Watson & Brien (1984)	Inactive married women	Previously sedentary women shape identity through participation
Schmitt & Leonard (1986)	Consideration of the 'postself'	Conceptualisation of the self interconnected with a historical framework Sport can allow individuals to develop the 'postself' and leave an identity across history and time
Curry & Weaner (1987)	Ranking of identities	Sport identity is ranked relatively low in comparison to kin, peer, academic and romantic identities
Brooks (1989)	Marketing theory to understand consumer behaviour	Sport or exercise identity is constructed by comparing self-concept to stereotypical images Sport/exercise identity is conceptualised as a positive self-defining relationship with others who are considered attractive
Wearing (1991)	Gender identity	Traditional schools of thought suggest a macro version of identity which neglects Mead's 'I' in favour of 'Me' The 'I' may allow women to view leisure activities as forms of resistance
Haggard & Williams (1992)	Leisure activities as symbolic representations of self-identity	Identities are not passively accepted but cultivated and manufactured Images associated with leisure activities may be motivate identity formation

Leisure has been considered to be a good site in which to examine the nature of true self expression on the basis that it is usual to expect reduced role constraint and reduced self-objectification (Samdahl, 1987). The dimensions of leisure were characterised as freedom, intrinsic motivation/meaning and personal fulfilment (Samdahl, 1987). Previous conceptualisations of leisure were criticised on the grounds that not all leisure is necessarily fulfilling and such an assumption had been overlooked within contemporary research (Samdahl, 1987). In an analysis of 18 individuals' experiences recorded by experience sampling, Samdahl constructed a model of leisure that utilised Symbolic Interactionism as a theoretical framework. The proposed model of leisure can be found in Table 4.5

Table 4.5 The Proposed Model of Leisure
Source: Samdahl, 1987 p. 36

		Role Constraint	
Self Expression	High	Low Pure Leisure	High Enjoyable Work
	Low	Anomic Leisure	Obligatory Tasks

The results of this study emphasise the importance of role constraint and self-expression in the construction of social contexts. In comparison to other models of leisure this approach has the benefit of outlining the dimensions of leisure in relation to non-leisure but also accounts for anomic aspects of leisure that are not particularly pleasant or fulfilling (Samdahl, 1987). Here it relates to ED through fulfilment, obligation and self-expression. The positive/negative debate about ED considers the benefits, motivations and problems associated with the participation in an activity. The negative concept of ED suggests that the dependent individual does not necessarily enjoy their exercise (Veale, 1987), and may have lost control over it (Morgan, 1979; Pierce, 1994). Any application of ED to the above model of leisure poses considerable difficulties on the basis of categorisation. For some individuals participation in exercise might not be associated with a professional role that provides an income. If the role of runner, cyclist, exerciser is so salient to the individual's self concept, however, and the ED process is a negative one, then the undertaking of the activity could not necessarily be described as leisure. Should the application of obligatory task be considered then the individual, according to Samdahl (1987), does not engage in an activity that has an opportunity for high self expression, which is contrary to the mastery hypothesis of ED (Robbins & Joseph, 1985).

Symbolic Interactionism as a school of thought was popularised during the 1960s (Stryker 1980) and it can be argued that it is outdated for use as a theoretical framework. Structuration Theory is presented by Giddens (1984) as a postmodern development of Symbolic Interactionism, in which agency and structure are seen as a dualism. Despite this more recent development Symbolic Interactionism is still chosen as the theoretical framework for this thesis. A more detailed discussion of Structuration Theory and the choice not to use this framework can be found in Appendix C.

4.5 Deviance and Labelling

The idea that participation in exercise to excess may constitute some form of positive deviance is not new (Ewald & Jiobu, 1985) but does need some further exploration. Terminology such as 'normal', 'abnormal', 'conforming' and 'deviant' are recognised as being temporally and culturally bound (Schur, 1971). Definitions and interpretations of deviant behaviour may, therefore, vary as a consequence of time and place (Schur, 1971). Participation in exercise is usually seen as a socially acceptable behaviour in contrast to illicit drug taking, which is usually seen as unacceptable (Rudy &

Estok, 1989; Johnson, 1995). The actual psychomotor behaviour, i.e. exercising, is socially acceptable but questions arise about the legitimacy of exercise participation based on its specific and unique characteristics, especially its intensity, priority and outcomes. The same behaviour undertaken for professional reasons or to achieve Olympic or World standards would not be questioned or subjected to pathological or deviant labelling. To suggest, therefore, that excessive exercising is deviant behaviour is to pose a fundamental question about the nature of deviance. Before the specific context of positive deviance can be examined, however, a more general overview of deviance is presented. Symbolic Interactionist approaches to deviance are based on the premise that behaviours themselves are neither inherently 'good' nor 'bad'. Rather, according to Becker (1973), it is the socially ascribed value attached to such behaviour that determines whether or not it is deviant. An interactionist approach to deviance focuses on two central issues. First, consideration is given to who is labelled and who labels. Secondly, interactionists explore the impact of the labelling process upon the individual (Becker, 1973). Where the deviant label becomes internalised the deviant individual engages in a deviant identity and subsequently adopts a deviant 'career'. Becker (1973) claims that labelling 'theory' is not a theory at all in the traditional view, but is best viewed as a general way of considering human behaviour.

Deviance can be viewed as the conclusion drawn by a social group about an individual who is considered by them to be a rule breaker (Becker, 1973). Deviant behaviour could thus be described as behaviour that violates the norms for a given society (Eitzen, 1988). Although issues of deviance are often associated with criminality other behaviours have also been addressed in a similar way, for example excessive exercising (Ewald & Jobu, 1985), body building (Klein, 1989), competitive sport (Eitzen, 1988) and gambling (Lesieur, 1987). The deviant act may constitute a breaking of either formal rules or an informal agreement (Becker, 1973). The way that other people respond to an individual who is deemed to act deviantly significantly affects that individual's perceptions about themselves. This process of influence is central to theories of deviance and labelling (Schur, 1971). In other words deviance is a process by which particular behaviour adopts particular social meaning (Schur, 1971). This process may lead the individual to be considered an outsider; likewise, the individual may consider his/her judges to be outsiders (Becker, 1973). The question arises of 'Who or what determines deviance or applies a label?' (Becker, 1973).

According to Schur (1971) deviance may be considered to be created through social processes of interaction. Actors in such interactions include individuals, agents of social control and groups. The processes include the construction of definitions and rule making. Schur argues that these factors interlink to establish deviant identities amongst those individuals who break rules. The construction of deviance is thus a process of social definition that constitutes a particular identity and self-concept. The social construction of deviance is best viewed as a dynamic process, one that is continually being shaped and is an outcome of social interaction. Deviance is, therefore, not a characteristic of behaviour *per se* but is assigned to that behaviour from an audience and, therefore, an understanding

of deviance has to include an understanding of the role of audience (Schur, 1971). According to Schur the significant concepts within the notion of deviance are primary and secondary deviation, deviant identity, audience and career:

Human behaviour is deviant *to the extent that* it comes to be viewed as involving a *personally discreditable* departure from a group's normative expectations, *and* it *elicits* interpersonal or collective reactions that serve to 'isolate', 'treat', 'correct' or 'punish' *individuals* engaged in such behaviour.
(Schur, 1971 p. 24)

ED has elicited reactions focused on treatment, prevention and/or correction:

It is an interesting fact that most scientific research and speculation on deviance concerns itself with the people who break rules rather than with those who make and enforce them. If we are to achieve a full understanding of deviant behaviour, we must get these two possible foci of inquiry into balance.
(Becker, 1973 p. 163)

As Becker suggests it is important to question the processes generating the discourse of ED. With regard to ED questions about an individual's participation begin when their regime extends the 'normal' expectations of a recreational athlete. Indeed, if ED is suspected in an elite competitive athlete it poses difficulties because Bamber *et al.*, (2000) acknowledge that exercise expectations for elite athletes and members of the general population differ considerably. The discourse of ED is heavily laden with notions of 'prevention' and 'treatment'. The view that deviant behaviour is pathological implies a disease and is based on a medical analogy (Becker, 1973) which can be applied to ED. He further suggests that problems created by basing any view of deviance on the medical analogy stem from the difficulties inherent in identifying and establishing healthy behaviour.

The onset of a deviant career results in the individual establishing deviance as a way of life and, therefore, developing a deviant identity (Becker, 1973). The individual engages with a subculture which is constructed around the activity. One of the significant processes in the establishment of a deviant identity is likely to be the act of being caught and publicly labelled. This grants the individual a deviant status, which in turn will impact on interactions towards him/her. A societal treatment of the 'deviant' is likely to result in a self-fulfilling prophecy (Becker, 1973). Research into ED has only ever considered the individual within the dependency process and has not considered the structures, social groups and discourses of that process.

One sociological approach to ED applies Becker's model of deviance to positive addiction (Ewald & Jibou, 1985). The socialisation processes of learning technique, perception and enjoyment of effects is adapted by Ewald & Jibou (1985) and applied to 72 body builders and 138 long distance runners. For the purposes of their study they change the terminology from Becker's model, believing that

enjoyment is akin to positive addiction. The results provide evidence that Becker's model can be applied to runners but not to body builders.

Deviance in physical activity may be manifested within subculture, such as 'hustling' within body building (Klein, 1989). In this example, unique role conflicts were experienced by male body builders who undertook the sale of sexual favours to men for economic survival. This behaviour was largely undertaken by heterosexual men and, therefore, resulted in conflicting identities and often homophobic responses (Klein, 1989). In Klein's analysis of hustling, the deviant behaviour was usually 'drifted' into which allowed time for the shifting identity and for the behaviour to be processed (Klein, 1989). Due to the nature of the juxtapositioning of hustling behaviour and heterosexual identity, the deviant behaviour, therefore, had to be 'managed' in some way (Klein, 1989). When applied to ED the actual behaviour itself is not usually considered to be deviant and, therefore, does not require management in the same way. What is different, however, is the intensity of participation that results in some describing the activity as positive deviance, or an over conformity to socially acceptable behaviours (Ewald & Jiobu, 1985). The ED literature suggests that tolerance is a characteristic of the dependency process and, therefore, this does suggest that 'drifting' into the physical activity also occurs within ED.

The clinical or pathological nature of certain behaviours has been discussed in relation to gambling in sport (Lesieur, 1987). Lesieur claims that the debate about whether gambling is pathological or not marginalises the study of such behaviour. By conducting a functional analysis of gambling behaviour he concludes that gambling provides examples of function and dysfunction in relation to society. Therefore, gambling reflects deviance in sports and is a sport-related social problem (Lesieur, 1987). To some extent this is mirrored in the ED literature. Social reflections on exercise behaviour have been limited to a few studies (Ewald & Jiobu, 1985; Nixon, 1989; Cole, 1998), therefore it can be assumed that because of the previous clinical claims over the extant ED literature, social scientists have not considered it relevant for analysis.

4.6 Social Support

Social support has been identified as an important characteristic of running (Jiba Ja Rusth, 1990), career paths (Pahl & Pahl, 1971) and weight loss programmes (Murphy *et al.*, 1982). Indeed, runners have reported gains in social approval as a consequence of their marathon running (Summers, Machin & Sargent, 1983). Significant others (hereafter referred to as SO), especially in relation to ED, provide a particular form of social support. The SO may provide reassurance, acceptance and a validation of the self which could protect the individual (Nixon, 1989). Social support in relation to exercise behaviour ranges from approval to actual shared participation. Research supports the notion that approval (Heinzelmann & Bagley, 1970; Wankel, 1985), intention to participate (Godin & Shephard, 1985) and participation (Rudy & Estok, 1990) from partners can assist both the

maintenance of participation levels in physical activity and the absence of conflict within a relationship. This section, therefore, outlines the research that explores the role of the SO in providing a social support system both in relation to exercise participation and to other facets of life.

Social support is important in the success of weight loss programmes (Murphy *et al.*, 1982). Murphy *et al.* (1982) found that research participants attending weight loss sessions with their partners lost more weight than those who did not. This suggests that a SO can be critical in influencing adherence behaviour (Minkler, 1981). Minkler (1981) outlines three hypotheses that may account for the relationship between social support and adherence to health behaviour. First, a supportive network of friends or relations may encourage an individual to undertake preventative health behaviours. Secondly, these social networks may enhance coping ability and, therefore help to prevent stress associated with the programme. Thirdly, support from others may increase feelings of confidence and control that may, in turn, affect health behaviours (Minkler, 1981). These hypotheses may be useful in examining the role of social support in the ED process because individuals may start their exercise participation for health reasons (Carmack & Martens, 1979).

The ED literature reports differing impacts of exercise on social support. Despite the contention that the ED process negatively impacts on personal relationships (Morgan, 1979) only one study specifically examines this and seeks to address this suggestion with SOs themselves (Rudy & Estok, 1990). The researchers examine 35 marathon runners and their spouses using the running addiction scale (RAS) and the dyadic adjustment scale (DAS). The DAS measures marital adjustment, including subscales for consensus, satisfaction, cohesion and affectional expression. The level of adjustment is measured along a continuum from 'well-adjusted' to 'maladjusted' with high scores indicating well-adjusted and low scores indicating maladjusted (Rudy & Estok, 1990). The results show that, for the partners, the higher the perception of running addiction the lower the DAS. This relationship between high RAS and low DAS is the strongest for the partners who do not run and for male partners of female runners.

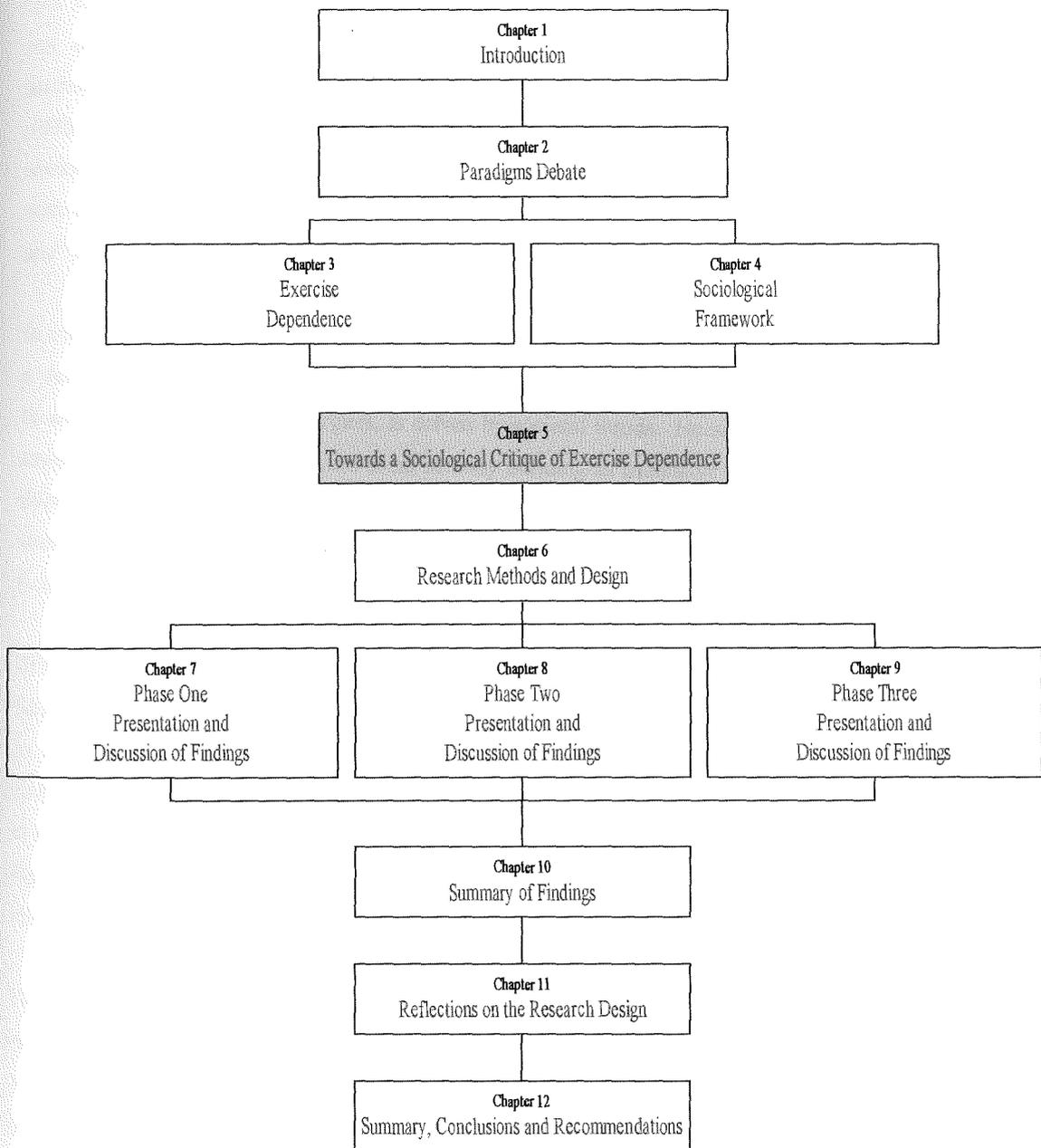
This evidence from Rudy & Estok (1990), that exercise behaviour can negatively impact on SO relationships, is supported by other research but in other studies such reports are based on the exerciser's self report data and not from data gathered from SOs (Rudy & Estok, 1983; Summers, Machin & Sargent, 1983). High intensity runners report more problems with SO relationships than low intensity runners (Rudy & Estok, 1983). This is in contrast to evidence of less conflict in the families of serious runners compared with a normative sample (Jones & Jones, 1977). Also, differences between male and female perceptions of social support suggest that female runners have perceptions of higher levels of social support than male runners (Jiba Ja Rusth, 1990). This reinforces the results of Summers, Machin & Sargent (1983) who note that strain on relationships, as a negative consequence from running, were indicated by only 17% of female runners as against 28% of male runners.

Male partners are more likely to be influenced by their female partners than vice versa. Heinzlmann & Bagley (1970) report that for 80% of those men whose wives' attitudes are positive, adherence over an 18 month period is 'good' or 'excellent'. In contrast, for men whose wives' attitudes are neutral or negative only 40% show adherence that is 'good' or 'excellent'. An expression of intent to exercise by a partner is more likely to positively impact on intention for men than for women. The reverse, however, is not true for female exercisers (Godin & Shephard, 1985). Godin & Shephard also note that support from female partners is more likely to be manifested in attitude rather than behaviour. This difference in social support and its impact on adherence was also reported by Wankel (1985) in a study of drop out from exercise participation. He suggests that support from SOs is useful in explaining why some individuals are able to maintain participation whilst others are not (Wankel, 1985).

4.7 Summary

Symbolic Interactionism is selected as a suitable theoretical framework for a sociological critique of ED. Data are collected through interview technique allowing an exploration of the exercisers' own meaning of their engagement in physical activity. Furthermore, Symbolic Interactionism allows a focus on agency and identity within the ED process. Finally, to extend the study of ED beyond positivistic approaches, literature focussing on deviance, labelling and social support has been considered within this chapter. These concepts can inform our sociological understanding of ED and are used in the discussion of results. The following chapter examines the remaining elements of a sociological critique of ED and consolidates the literature reviews.

Figure 5.1 Outline Map of the Thesis Highlighting Chapter Five



CHAPTER FIVE

TOWARDS A SOCIOLOGICAL CRITIQUE OF EXERCISE DEPENDENCE

5.1 Introduction

An overview of the historical context of social sciences reveals that, with the exception of anthropology, the body has largely been absent from social theories (Turner, 1991; Morgan & Scott, 1993; Gilroy, 1997) and that The Chicago School was important in restoring the body within sociological discourse (Berthelot, 1986). Interest in the body has been growing, however, and can be seen in the diversity of research covering areas such as body reproduction, representation, regulation and restraint (Morgan & Scott, 1993).

In contemporary consumer culture, Shilling (1993) argues that individuals engage in the 'body project', a desire to create and shape their body so that it conforms to an ideal image of health, beauty and fitness. This ideal image, he argues, is driven by societal trends. He sees both the increasing societal concern for health and the upward trend in body building as indicative of interest in the body project. Sparkes (1998c) argues that Shilling's body project concept is central to the understanding of self and identity. If Shilling and Sparkes are right, then a sociological critique of ED must take account of the body project and how it is theorised.

ED has been a focus of research for over 30 years within the disciplines of physiology and psychology. Researchers from these two areas have made attempts to explain why the individual becomes engaged in exercise to a dependent extent and what constitutes the dependency experience. The traditional research base can be criticised, however, for not adopting a more holistic approach to ED. Such criticisms focus on the lack of life history data which would provide narratives to explain the dependency process within the context of a person's whole life. Particularly, it is the salience of the role of the body in the development of identity that is missing.

This chapter is the third review of literature. Based on a belief that ED individuals are engaging in a body project, it examines theories of the body and the significance of embodied subjective knowledge in the development of a sociological understanding of ED. Finally, it consolidates the reviews of literature and highlights the key themes for this thesis. Table 5.1 summarises the literature in Chapter Five.

Table 5.1 Content of Literature in Chapter Five and Application to the Thesis

Outline of Chapter Section	Description of Content	Link to Thesis
Body Theory	<ul style="list-style-type: none"> • Historical context including interpretations of the reasons for renewed interest • Conceptual frameworks in the sociology of the body • Consumer society • The body project • Life history analysis 	<p>Providing a sociology of the body base upon which to build the next point</p> <p>Providing a base for the suggestion that ED individuals are engaging in a body project</p> <p>The body is a “prime symbol of the self” (Sparkes, 1999 p. 17)</p>
Social Control of Body Knowledge	<ul style="list-style-type: none"> • Construction of knowledge • Objective vs subjective knowledge 	<p>Rejection against the development of ED knowledge based entirely on researcher’s ‘objective’ viewpoint. Providing a rationale for the need for subjective embodied knowledge.</p>
Consolidating the Literature	<ul style="list-style-type: none"> • Summary of the literature reviews • Highlighting key themes 	<p>To provide a coherent approach to the literature and providing a basis for the empirical data collection</p>

5.2 Body Theory

Morgan & Scott (1993) suggest that, rather than consider why the body was absent from sociology prior to the last decade or so, it is perhaps more pertinent to question why there has been a recent growth of interest in the body. The date of their suggestion above corresponds with the development of knowledge about ED. It is surprising, therefore, that ED research has not considered a sociological account of the body and bodily practices. This section explores some of the sociological accounts of the body and applies the notion of the body project to ED. It is divided into subsections covering the historical development of the sociology of the body, conceptual frameworks of body theories, consumer society, the body project and life history analysis.

5.2.1 Historical Development of the Sociology of the Body

Prior to recent interest sociologists tended to treat the individual as dis-embodied and merely a decision making agent. More recently, however, sociologists have begun to acknowledge the importance of body presentation within social space and the subsequent impact of this on class, culture and consumption (Turner, 1991).

Turner (1991) writes how the body has been a central feature in the theorising of the Christian concept of moral restraint, sexual relations, especially exploitative ones, and Marxist concerns with capitalism. He outlines three reasons for the revival of the sociology of the body. First, there is consumer interest in the project of the ‘body beautiful’, associated with slowing the ageing process. Secondly, recent

changes in the interrelationship of men and women which has brought about changes in gender roles. Thirdly, demographic changes have resulted in an older population with consequences for health care and surgery (Turner, 1991). These three arguments are closely linked to those promulgated by Morgan & Scott (1993) who suggest that the body revival has been spurred by biology, health and illness, feminism and issues of sociological theory.

In addition, according to Morgan & Scott (1993) and Frank (1991) postmodernism is identified as an influential factor in the renewed interest in the body. Characteristics of postmodern discourse are a blurring between previously separate stages that are now forged and interrelated (Featherstone & Hepworth, 1983). Features of postmodernism that foster debate about the body include: deconstruction of dominant patterns of thought, transcendence of the nature/culture divide, and an embracing of diversity and fluidity (Morgan & Scott, 1993). It seems appropriate, therefore, that the body should become a central theme in a sociological critique of ED.

5.2.2 Conceptual Frameworks of the Body

The resurgence of interest in the body has resulted in the contribution to the field by a wide variety of theorists, each offering their own interpretation, application and model of embodiment. The body was the foundation for Goffman's (1959) theories on stigma, face work, embarrassment and social self and his work influenced Bourdieu's theories (Frank, 1991). Shilling (1993) identifies two approaches that have polarised discussion on the body: the 'naturalistic body' and the 'socially constructed body'. Although writings on the naturalistic body consider the relationship between the body, self-identity and society, this thesis most closely identifies with a concept of a socially constructed body (Shilling, 1993). By this view the body is shaped, constrained and possibly even invented by society (Shilling, 1993). There are a number of different themes within the sociology of the body that are relevant to the study of ED. These include issues of control, biology, the disciplined body and the relationship between the body and institutions. Each of these themes is considered below.

Feminist writers identify a central problem of power and control and establish the concept of the political agenda of the body (Frank, 1991). One of the themes of feminist writers is to document, question and resist the culture of normalising the female body as thin, muscular and buxom, a shape that most often can be achieved only through considerable exercise, diet and cosmetic surgery (Weitz, 1998). Strength is viewed as a means by which women's bodies can be controlled in both public and private arenas (Morgan & Scott, 1993). Women are described and defined within society in terms of their biological capabilities especially in relation to mothering (Morgan & Scott, 1993). Feminist writers consider the links between physical power and social power in relation to the body, and the development of the body physically (Gilroy, 1997). The interest by feminist writers in the site of the body has resulted in a legacy of an increasingly gendered approach to the sociology of the body. Morgan (1993) notes that the role of the male body and the relationship that it plays to the construction of masculinity was developed more recently and has prompted statements that women are 'more' embodied than men. ED researchers have mainly used sample groups that mostly consist of men (see

Appendix A). Earlier research also indicated that ED was a male manifestation of anorexia nervosa. Consequently, the notion that ED and anorexia are gendered manifestations of the same problem is one of the popular beliefs about ED. More recently, however, such strict gender differentiations have been replaced by views that note similarities in the desire to control and regulate bodies in both ED and anorexia.

The role that biology plays in the construction of our understanding of the body is criticised for two reasons. First, biological understandings are criticised as essentially unchallenged reflections of biological determinism (Morgan & Scott, 1993). Rather than deconstructing these understandings as cultural constructions, biological inevitability is left intact and protected by a surround of scientific language (Morgan & Scott, 1993). Secondly, biological understandings fail to encompass a cultural and historical context. Morgan & Scott argue that a sociology of the body should feature a historical and cultural analysis and even basic assumptions about anatomy and physiology ought to be questioned. The previous ED research would, therefore, be criticised by Morgan & Scott for failing to account for a cultural and historical context. An application of body theory to ED can open that possibility.

Frank (1991) identifies a typology of the body in action but it is his idea of the disciplined body that is particularly relevant to this thesis. The disciplined body performs in a regime and becomes isolated in performance. Frank implies that the disciplined body is self-regulated but according to Foucault (1979, 1987) regulation of bodies also occurs on a macro perspective through technological surveillance of the panopticon system. This emphasis on surveillance has contributed to the production of the useful and disciplined body (Turner, 1982). Given that the body is not isolated it must be considered in the context of the social structure of its embodiment. One of the elements of that social structure is the discourse of power and knowledge and therefore the social construction of body knowledge is discussed below.

5.2.3 Consumer Society

Some theorists emphasise the role of consumer culture in the body project (Featherstone, 1982; Shilling, 1993) but Featherstone recognises that the body maintenance is not a unique invention of consumer culture. Indeed, a slim active body with firm boundaries has become a powerful image of contemporary consumer culture (Sassetelli, 1999). Consumer culture has manipulated the body's desire to adopt survival strategies that will slow deterioration and death (Featherstone, 1982). This concern with breakdown has been combined with recognition that the body can be utilised as a medium for pleasure and expression (Featherstone, 1982). One notable shift within the development of the consumer culture has been the juxtaposition of discipline and indulgence. Both are not only acceptable, but are essential for achieving the desirable appearance of the body project. Furthermore, these qualities are no longer viewed as they were formally but are, according to Featherstone (1982), integrated through detailed body maintenance routines.

Featherstone (1982) argues that the development of health education, and the growing links between health, fitness and exercise, has produced a change in cultural attitudes towards personal self-responsibility for health and fitness. Accordingly, fitness is not simply a sign of good health but also an indicator of self worth and, therefore, the body can be seen as a symbol of wisdom in relation to matters of health (Featherstone, 1982). As a consequence, he argues, the body project becomes associated with virtuous leisure experience that produces other positive benefits. This is in contrast to the view of health education as merely for 'body maintenance', an approach that links the body project to the metaphor of the machine.

One of the impacts of consumerism on the theory of the body is the notion that there are two basic body categories: the inner and outer body (Featherstone, 1982). The first is connected to the preservation of health in the face of ageing, disease and death whereas the second is connected to appearance, control and movement of the body as presented in social space (Featherstone, 1982). The outer body can be identified through face work (Goffman), or the control and surveillance of disciplined bodies in social space (Foucault, Giddens), (Featherstone, 1982). The inner and outer bodies become interwoven in consumer culture because the priority of the inner body is the improvement and preservation of the outer body (Featherstone, 1982). Ageing and death are viewed negatively within Western consumer culture on the grounds that they serve to emphasise the inevitability of the life process (Featherstone, 1982). Concerns about an ageing and decaying body are identified in the ED literature as a motivational factor for participation (see Chapter Three). It is possible therefore, that for some ED individuals the regulation and maintenance of the body is an important factor within exercise participation. This suggests Little (1979 p. 55) can be considered as notions of the "body beautiful" and the "body in action".

Another impact of consumer culture has been the development of the culture of narcissism (Featherstone, 1982 after Lasch, 1979). This suggests an additional relationship that is termed the 'performing self', emphasising both appearance and face work (Featherstone, 1982). Featherstone (1982) suggests that the body is now an object for display within consumer culture; whereas once it was an object for display in the home it is now an object for display outside the home. Whereas once the choice and use of bodily adornments were considered to be important in the presentation of 'self', now the physical presentation of 'self' is considered to be indicative of the individual's real character (Goffman, 1959).

5.2.4 The Body Project

Shilling (1993) believes that the development of consumer society has fostered greater interest in the body as a project. The body project has become popular in consumer culture because individuals are convinced that by actively engaging in body work, desired cultural effects can be achieved (Featherstone, 1982). These desired effects are associated with idealised images of health, fitness, youth and beauty, which correspond with the consumer culture equation of youth=beauty=health, as determined by Helena Rubinstein (Featherstone, 1982). In addition, the emphasis of individual

responsibility in the procurement of health has contributed to the concept of individual blame (Morgan & Scott, 1993). This political climate of consumer culture, which requires individuals to take responsibility for their health or be damned, provides a motivational factor to participate in exercise and physical activity.

Individual interest in the body has manifested itself in the body project, keeping fit and the extension of youth through sport (Featherstone, 1982). It is this interest that has generated some of the sport specific research on the body. The activity of body building is linked to both body sculpting and dieting (Mansfield & McGinn, 1993). Bordo (1990) argues that manifestations of these activities (the anorexic body and the muscled body) could be seen along a continuum. The continuum represents the common problem of pantoptic technologies that aim to produce 'docile bodies' (Bordo, 1990 p. 90). The gym can be viewed as an institution which promotes the disciplining of bodies in a leisure setting. In the past this has been the exclusive domain of disciplinary institutions (Sassatelli, 1999). This sense of a passive agency is contested in field work in a different gym, that observed individuals who were active, differing shapes and sizes and who saw the gym as a place to develop identity and self worth (Fishwick, 1998).

Sassatelli's (1999) research identifies a link between the physical body and the development of identity. Using an interaction analysis of the gym, Sassatelli notes the significance of 'glance management' by the regular members. Glance management is utilised by the gym members to look, observe and make eye contact, in ways which are accepted and promoted by other gym members (Sassatelli, 1999). Glance management enables the members to create and define meanings around the presentation of the body within the gym environment (Sassatelli, 1999). The need to explore how ED individuals see the body as part of their development of identity is therefore apparent but lacking in the ED literature.

An area of physical activity that is closely linked to the sociology of the body is the sport of body building and this has been the subject of numerous papers (Mansfield & McGinn, 1993; Klein, 1989; Gilroy, 1997). In addition, activities like body building and aerobics are perceived as symbols of masculine or feminine methods by which the body can be altered (Mansfield & McGinn, 1993). Body building can be considered to be an example of a Foucauldian technology of the self (Mansfield & McGinn, 1993). In this activity, connections between muscularity and masculinity are often discussed because of the essentialist nature of man power and muscle power (Mansfield & McGinn, 1993). Body building and its discourse are so gendered that women who participate are often subject to questioning. They are considered both as *threatening* and their femininity is *threatened* (Mansfield & McGinn, 1993; Gilroy, 1997). The muscled female body can be perceived as deviant and dangerous; women who participate in body building, therefore, tend to adopt strategies of hyper-feminisation in order to emphasise and proclaim their gender (Mansfield & McGinn, 1993). It is probable that men and women view body building from differing perspectives as more women compete in the activity than men (Mansfield & McGinn, 1993). According to Mansfield & McGinn these discourses

surrounding the gendered nature of the activity are a consequence of the discourses used to construct identities.

Unlike traditional psychological models, the process of an adult life does not involve a series of predetermined stages (Featherstone & Hepworth, 1983). The impact of consumer culture on youth, beauty and health has generated considerable interest among life course analysts. Bodies are not only expressions of individuality and self, but are also constraining. This is predominantly due to the knowledge that one day the body will not comply with an individual's will, and death will result (Shilling, 1993). Although concerns about ageing and death are identified in the previous literature (see Chapter Three) these concerns have not been fully explored with ED individuals. This project aims to explore the meaning of exercise for ED individuals throughout their life history which should illuminate some of the processes of the relationship between ageing and the body project.

5.2.5 Life History Analysis and the Body

Shilling (1993) suggests that, for modern individuals, their sense of self is understood in terms of their own embodied biography. Bodies are both personal resources and social symbols that give off messages about their own self-identity (Shilling, 1993). There are similarities between a perception of the self and the physical form that the self adopts. When analysing forms of social self, the simplistic account of self (Bakhurst & Sypnowich, 1995) has commonality with Shilling's (1993) concept of a socially constructed body.

The desire to analyse the life course is indicative of the postmodern view (Featherstone & Hepworth, 1983). Shifts in terminology have been noted, with contemporary phraseology favouring 'life course' rather than 'life cycle'. Life cycle suggests a series of fixed and linear stages in which development has become marginalised from the social context in which it occurs (Featherstone & Hepworth, 1983). In contrast, life course implies that the process is more flexible and reflective of a changing social environment with a distinct beginning and end. In life course analysis, therefore, the life process may be considered as a unique social institution (Featherstone & Hepworth, 1983). Corresponding with previous work in sport and leisure (Sparkes, 1993; Armour, 1997; Dowling Naess, 2001) life history is adopted as the preferred term for this project.

In their postmodern life course analysis, Featherstone & Hepworth (1983) acknowledge the stigmatisation of ageing and propose the metaphor of the mask. In this, the exterior self, the mask is the version that ages while the inner self remains youthful. The metaphor of the mask can be seen as an additional attempt to challenge the age-related categories of the life cycle approach. The stigmatisation of ageing is relevant to the study of ED because previous research indicates that ED is manifested in older age groups (see Chapter Three).

Other body theorists consider the relationship between the body and consumer society as a factor in the renewed interest in the body. The above section identifies links between the sociology of the body and

the study of ED. These links include the development of the body project, the exploration of the embodied biography through life history analysis and the inevitability of ageing and death. Despite such links ED research lacks narratives which could illuminate them within the ED process. Understanding of ED has been largely constructed by researchers' voices and knowledge with little account of subjective embodied knowledge. The next section explores the social control of body knowledge.

5.3 The Social Control of Body Knowledge

In the early 1970s sociologists began to ask pertinent questions regarding knowledge and the social construction of knowledge (Young, 1971). Since that time questioning the construction and the deconstruction of epistemology has become more commonplace (Holzner, 1982). Sparkes (1997b p. 36) suggests that there are "different ways of knowing". The notion that knowledge may be problematic has been considered in sociology but has met with resistance from certain quarters. In sociology it has become more acceptable to question 'What is it that we know?' and 'How do we know it?' (Holzner, 1982).

Young (1971 p. 2) suggests that not only is it important to question "What counts as knowledge" but also to consider "How is it made available?" These thoughts were also voiced by Marx (cited in Blum, 1971) who believed that intellectual activity was both socially governed and socially constructed. Therefore, any suggestion that knowledge is socially constructed is accompanied by the implicit notion that some are "in a position to impose their construction or meanings on others" (Young, 1971 p. 2). Young's theoretical arguments can be applied to the research process and the construction of empirical knowledge through research. This results in the questioning of whether researchers impose their meaning of the research phenomena onto the research setting, including those individuals involved in the research process; it also exposes the prestige which producers and disseminators of knowledge inherently gain from this (Ingham & Donnelly, 1990).

The notion that knowledge is socially constructed leads to the suggestion that, if there is a differential in power at the site where knowledge is constructed, then those with more power will be in a position to legitimise what is considered to be the 'right' knowledge (Young, 1971). The notion that discourse ought to be considered in relation to control of the body is largely due to the work of Foucault who has placed the discipline of the body and the significance of scientific knowledge at the forefront of sociological debate (Foucault, 1981, 1987). Postmodernism is characterised by a questioning of the legitimacy of knowledge and the construction of epistemology (McGuigan, 1999). Therefore, not only can knowledge be considered to be socially constructed but, because some categories of knowledge may be seen to have more dominance and legitimacy, knowledge can also be considered to be stratified (Young, 1971). Knowledge that is considered to be legitimate is knowledge that is researched and stems from a researcher's objective knowledge. Knowledge that is considered to be illegitimate is embodied knowledge or subjective knowledge. Bourdieu (1971) views this stratification of knowledge

as deriving from groups of agencies that, through their construction of knowledge, are competing for cultural legitimacy.

Researchers investigate phenomena and then write about their findings. This is both informed by, and informs, other work in similar areas, which is discussed mostly in the domain of the academic journals and texts. In many cases researchers are writing about individuals, their experiences and how they make sense of their lives. How often, however, is the research shared with research participants? It is more common to see a complete chasm between the research process and experience of 'real lives'. Furthermore, because of the research rules and protocol, experiences of real lives are not considered as valid or legitimate as research findings (Morgan & Scott, 1993). A claim is made that the body provides a basis for a different form of knowledge: the notion that to know is to know through the body, therefore allowing the concept of experience to become legitimate (Morgan & Scott, 1993). Knowledge is stratified into the objective researched understanding of a phenomenon and the subjective 'lived' experience. This in turn leads us back to Young's initial question 'Whose knowledge counts?' Is a researcher's knowledge more legitimate because of the research protocol or is an individual's experience more legitimate because it is subjective, embodied knowledge?

In addition to questions concerning legitimate knowledge and 'Whose knowledge counts?', researchers have drawn relationships between the control of knowledge and the control of bodies. Scientific knowledge has developed in conjunction with the execution of political power over the labour force (Turner, 1991). According to Foucault (1981, 1987) growth of systematised knowledge corresponds with the expansion of power relations and, therefore, enables social control of large numbers of bodies. Consequently, institutions are sites for the discipline of the body, the control of which is exercised by *scientific discourse*. The debate about knowledge, power, control and embodiment identifies two opposing tensions, on the one hand the site of power and requirement to conform to social codes, whilst on the other, the lived experience and a sense of self (Berthelot, 1986). Thus the debate returns to the question of 'Whose knowledge counts?' and 'What counts as knowledge?' Do those who hold power identify knowledge, or rather is it the subjective lived experience? Previous ED literature emphasises knowledge identified by researchers and lacks knowledge which stems from the subjective lived experience. This limits our understanding of ED because of the exclusion of experiential knowledge. This study aims to expand our understanding of ED by gathering narratives about the subjective lived experience of ED.

5.4 Consolidating the Literature

The reviews of literature began with an exploration of the debate between positivistic and interpretivistic forms of inquiry, in order to establish a clear rationale for the use of interpretivism within research on ED. This was followed by an examination of the traditional research on ED, which has been conducted mainly within the fields of physiology and psychology. Extending this towards a sociological critique led to a consideration of Symbolic Interactionism, deviance, labelling and the role of social support in exercise. Finally, exploration of the body project was undertaken including an

examination of subjective embodied knowledge. The purpose of this section is to summarise the literature and to highlight the key concepts for the thesis.

The opening chapters within the literature review attempted to highlight the dominant concerns of existing ED literature. The theme of 'medicalisation of everyday life' (Markula, 2001) was dominant in the ED literature, extending even to those approaches that did not closely associate with a disease-based approach. A similar trend was identified when examining traditional research on drugs, alcohol, tobacco (Peele, 1985) and eating behaviours (Rankin, 1989). Power operates through the addiction discourse to suggest ways in which excessive exercise should be viewed. In agreement with Cole (1998) this thesis challenges traditional addiction discourses in relation to ED. The concept of ED as a pathological behaviour – one that requires signs, symptoms, identification and treatment – is questioned within this study and replaced instead with the suggestion that individuals participate in exercise as means by which to construct a social identity.

In approaching a sociological critique of ED, Symbolic Interactionism is selected as an appropriate theoretical framework for the thesis because it focuses on and therefore facilitates exploration of exercisers' own understandings of their physical activity. The exercisers' stories are told through an analysis of their life histories as a means of revisiting and challenging "well-worn, taken-for-granted realities" (Dowling Naess, 2001 p. 44). More recent developments of Symbolic Interactionism beyond a pure agency focus are acknowledged in Structuration Theory. Giddens (1984) believes that recreating the dualism of agency and structure into a single entity is an improvement on agency focused paradigms. Despite this development by Giddens, this thesis focuses upon agency and uses Symbolic Interactionism in favour of Structuration Theory. A more in-depth discussion on Structuration Theory can be found in Appendix C.

Traditionally, sociology has criticised approaches that medicalise behaviours (Morgan & Scott, 1993). Previous approaches to ED have adopted a pseudo-medical model of the phenomenon. This medicalisation of the behaviour is supported by a body of individuals who control, own and define the phenomenon. Take for example the summary of literature found in Appendix B. Of the 52 examples of empirically based literature, 20 have come from psychology related publications and 21 have come from medical related publications. Only 10 have come from the *Journal of Sport Behaviour* which is multi-disciplinary in its approach and not explicitly linked to the medical model of ED. One is from a sociological journal. Table 5.2 summarises the concerns of the existing ED literature and outlines the ways in which this thesis seeks to address these concerns.

Table 5.2 Summary of Concerns with Existing ED Literature

Area of Concern from Previous Research	Criticism	Address
Understanding and Knowledge of ED	<p>Emphasis on disease-based product model of ED</p> <p>Hegemony of objective scientific knowledge over subjective lived experience</p> <p>Meanings of ED are created through researchers' voices.</p>	<p>Life history analysis allows observation of the ED process. Interviews allow the participants to explore their own understanding and meaning of their participation.</p>
Measurement and Documentation of ED	<p>Concentrated on single activity or comparisons of two or three activities</p> <p>Taken at a single moment in time (product model)</p> <p>Lacking rich and descriptive data from the narratives from ED exercisers</p> <p>No discussion with SOs to verify negative impact on relationships</p>	<p>Participants gained from a wide range of activities. Not activity dependent</p> <p>Life history analysis allows a longer period of time to be considered</p> <p>Collection of narratives</p> <p>Interviews with SOs</p>

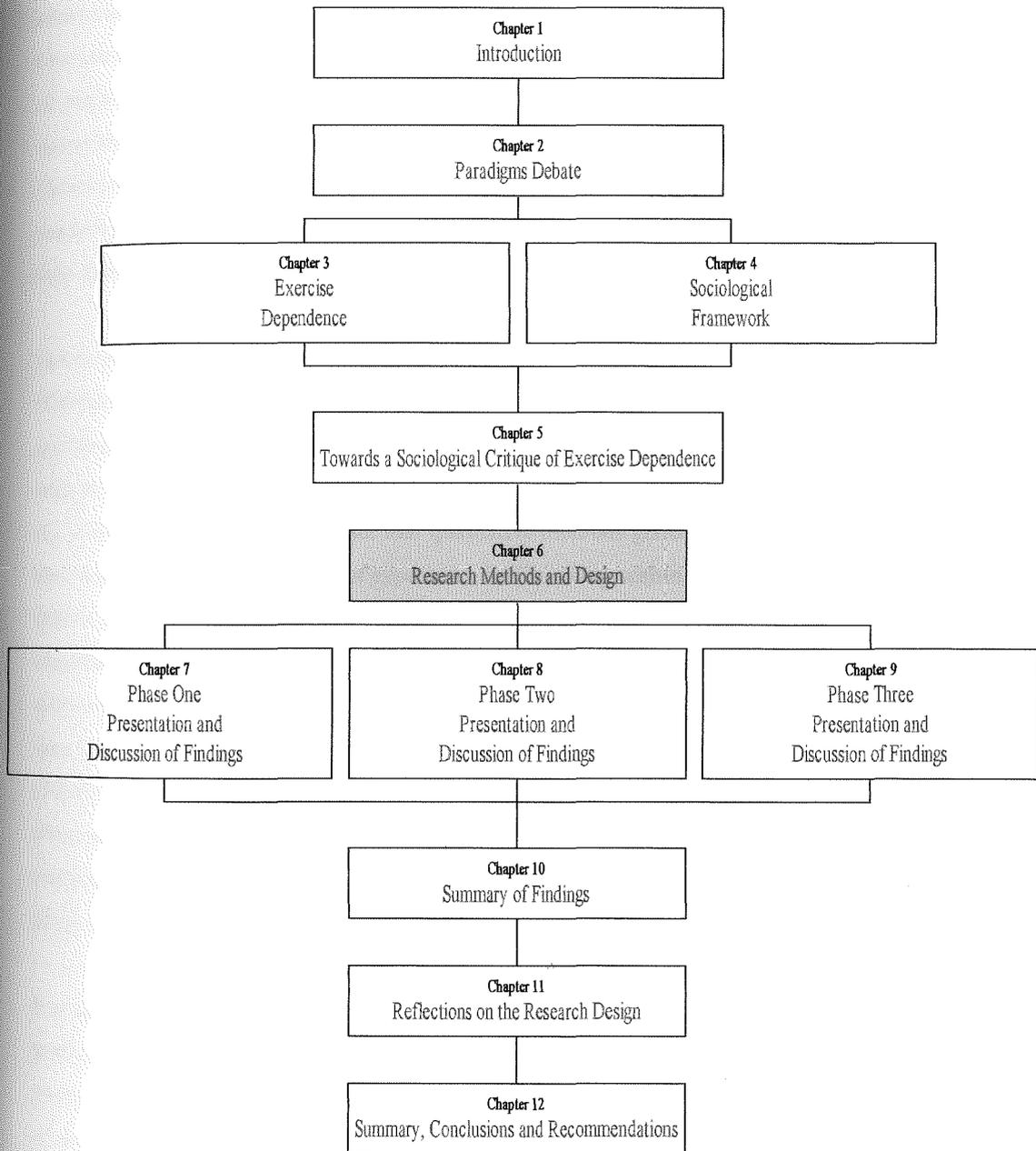
5.5 Summary

The work of the Chicago School brought the issue of embodiment back into sociological debate after the mind body dualism (Berthelot, 1986). Considerations of the body should not be viewed as additional to interactionist accounts but should be integrated in those accounts (Morgan & Scott, 1993). Sparkes (1997a) argues that the physical body plays a central role in the development and understanding of the self. Therefore, to explore the issue of ED as a sociological construct consideration needs to be given to the sociology of the body. Combining Shilling's (1984) work on body projects with identity theory mirrors Sparkes' (1997a) work but the difference here is the choice of Goffman and Mead rather than Giddens (1991) to further extend Shillings' analysis.

The concern expressed here is that the view of ED that has been constructed to date is only one perception of what the experience is about, a largely medicalised, clinical perception that is concerned with identification, measurement and treatment. There has been very little consideration of other issues such as labelling. Consider why, if someone participates to great lengths in order to achieve

Commonwealth, Olympic or World recognition, the extent of their participation is considered acceptable while if a different individual participates to great lengths in order to achieve an intrinsic goal the research community questions that behaviour and labels it? This sociological critique of ED questions the construction of our understanding of ED and offers a critique of natural science approaches to the phenomenon. ED discourse reflects the debate about how we know what it is we know: "And it is clear that we, as sport sociologists, need to develop our sociology of sport science and our sociology of sports medicine ..." (Donnelly, 1999 p. 457). Frank (1991 p. 45) states: "finally there is representation, which is as much an issue of how one chooses to represent one's own body as it is of how society provides for bodies to be represented". These reviews of literature aim to provide the initial basis upon which to begin a sociological critique of ED. The following chapter explains the research method and design in the collection of empirical data for this study.

Figure 6.1 Outline Map of the Thesis Highlighting Chapter Six



CHAPTER SIX

RESEARCH METHODS AND DESIGN

6.1 Introduction

This chapter explores the choice of methods for the project, explains the research design and addresses ethical considerations. Twenty-seven interviews were conducted over Three Phases. Phase One consisted of interviews with exercisers (n=8) and their SOs (n=8), whereas Phase Two consisted of eight interviews with only exercisers. Phase Three consisted of three interviews with both exercisers and their SOs. The data were tape-recorded, transcribed in full and analysed using a Grounded Theory approach (see Chapter Two for additional discussion on Grounded Theory analysis). This chapter first justifies and describes the methods employed for all three Phases and then discusses the methods by which the data were analysed.

Previous research on ED has predominantly used quantitative methods, especially questionnaires (Carmack & Martens, 1979; Hailey & Bailey, 1982; Ogden, Veale & Summers, 1997), while qualitative methods have been rarely used. The paucity of studies that have used qualitative methods may be a reflection of concerns and criticisms (Sachs & Pargman, 1979; Matheson, 1999; Bamber *et al.*, 2000). This is despite the fact that qualitative methods generate comparatively rich and detailed data that facilitate explanations of experience and meaning within an individual's overall social world (Miles & Huberman, 1994). Furthermore, knowledge about ED has been constructed on scientific objective understandings rather than the subjective lived experience (see Chapter Two). Criticisms of qualitative methods are that their validity has not yet been established, they are cumbersome to apply, they are 'biased' because they rely on self-report data and they are time consuming to analyse (Pierce, 1994). The question of 'validity' is extensively debated in the research methods literature (Wolcott, 1994; Sparkes, 1995, 1998a) and is discussed earlier in Chapter Two (see p. 11). The criticism that self-report data are biased can be rebutted as questionnaires used in positivistic research often collect similar types of data.

Previous research on ED has been criticised for collecting data from only one source, exercise participants, but ignoring both subjective accounts and others' voices involved in the dependency process (see Chapter Three p. 33). This research has described a negative effect of ED on the quality of interpersonal relationships, particularly exercisers' SOs (Morgan, 1979) but this finding emerged from self-report data and was, therefore, based only on *exercisers' perceptions*. The only positivistic empirical evidence provided to support Morgan's finding comes from the work of Rudy & Estok (1990) who analysed dyadic adjustment scores in relation to ED scores. Two methodological issues arise from the current research base, therefore. The first is a lack of triangulation in the studies of the dependency process. The second is a lack of SO perspectives on the impact of exercise participation

on the relationship. This thesis aims to address these issues by interviewing SOs, in Phases One and Three.

6.2 Research Participants and Terminology

For the purposes of the study a SO is defined as a significant other with whom the participant lives. Throughout the study the terms 'SO' and 'partner' are used to differentiate between two distinct groups. Individuals contacted initially who were physically active and fulfilled the base line criteria (see p. 80) are described here as 'exercisers' (Steven, Anita, Carl, Chris, Nigel, Bob, Tanya, Norman, Francis, Lesley, Jane, Derek, Arthur, Dan, Roger and Elizabeth). SOs in the study are Gavin, Duncan, Tracey, Sam, Cath, Jenny, Ivan and Fran. (Underlining of the name is used to differentiate SOs from exercisers). The term 'partner' is used, however, when describing the exercisers from the SOs' perspectives.

The adoption of the SO interview is consistent with the commitment of qualitative sociology to multiple perceptions (Song, 1998). According to Song, multiple accounts may also provide additional benefits to the research process by generating richer and more complete stories than stories with just single accounts. This approach should, therefore, enable a deep understanding of the effect of ED upon a SO relationship. In addition, it facilitates a form of triangulation of data. Traditionally in sociological research the tendency has been to triangulate qualitative data with quantitative data in order to add confirmatory layers (Fine *et al.*, 2000). Where narratives are collected as the only source of data, triangulation can be achieved through collecting a "quilt of stories and cacophony of voices" (Fine *et al.*, 2000 p. 119).

Multiple perceptions of accounts have become a recent interest in sociological inquiry particularly in the studies of family relationships (Song, 1998; Strauss & Corbin, 1998a). This is partly due to the acknowledgement that single accounts may represent one sided or biased pictures of the social world. Such an approach, however, presents not only methodological difficulties for the researcher but also analytical difficulties. Methodological difficulties concern access and allegiance, whereas analytical difficulties stem from the problematic nature of differing accounts (Song, 1998). Although multiple accounts may provide additional descriptions there is no guarantee that they will automatically result in greater depth or understanding. Rather, Song (1998) suggests that it is possible that multiple accounts will result in contradictions and tensions and will reveal complexities of human relationships (Song, 1998).

6.3 Interview Technique

Traditional research approaches advocate the adoption of formal interview methods that are highly structured in order to prevent bias (Burgess, 1984). Structure is achieved by using prepared questions and establishing a distant relationship with interviewees. Consequently, some argue that this creates

a power imbalance, with the researcher assuming a position that is hierarchically above the interviewee (Burgess, 1984) which according to Steinar (1996) creates a false environment. Power, therefore, is a fundamental element in the research process. More recently, however, semi-structured and unstructured or in-depth interviews have become more popular (Denzin & Lincoln, 1994). These differ from formal interviews in the extent to which the structure of the questions is predetermined and, consequently, the extent to which the participants are free to explore their own agendas (Burgess, 1984). Rather than offering a rigid set of questions, themes are identified which are then explored within the interview (Burgess, 1984; Steinar, 1996). The interviews undertaken in the research project were semi-structured in that the themes identified for exploration were themes emerging from previous literature (Burgess, 1984).

The role of the interviewer has been discussed extensively in research literature. For example, the description offered by Corbin (1971) of her role adopted during interviews differs significantly from the detachment advocated by traditional methods. She spent many hours in the homes of the interviewees attempting to develop trust, friendship and observe the family. This time also included helping with family chores and collecting children from school (Corbin, 1971). This is a different approach to traditional interview techniques that advocate a highly structured and non-biased approach to interviewing (Burgess, 1984). These differences stem from an epistemological rejection of objective knowledge and the desire to document subjective stories using the voices of the participants. The role of the researcher is also crucial to the interview process as is the researcher's voice in interpreting the stories (Fine *et al.*, 2000; Edwards & Ribbens, 1998).

Chapter Two outlines the rationale for recording the subjective experiences of the exercisers. Traditional methods in ED research have quantified and pathologised exercise behaviour, thus 'othering' and marginalising the research participants. Concern over the nature of traditional research technique, including interview methods, has been expressed by feminist researchers who aim to validate women's subjective experiences (Edwards & Ribbens, 1998) and for whom the 'personal is political'. The interviews in this study were based on a desire to give exercisers power and control of the process. This was achieved by going to the places they chose in order to undertake the interview (where possible), discussing their life histories and sharing the data with them. Sharing the data occurred on two levels. First, transcripts were sent to them for their approval and secondly, they were consulted about the emergent analysis of findings.

6.4 Research Design

Twenty-seven interviews were undertaken over the three Phases of data collection (see Table 6.1).

Table 6.1 Outline of Research Design

Phase One	8 semi-structured interviews with exercisers (Group A - Steven, Anita, Carl, Chris, Nigel, Bob, Tanya, Norman)
	8 semi-structured interviews with significant others (Group B - <u>Gavin</u> , <u>Duncan</u> , <u>Tracey</u> , <u>Sam</u> , <u>Cath</u> , <u>Jenny</u> , <u>Ivan</u> , <u>Fran</u>)
Phase Two	8 semi-structured interviews with exercisers (Group C - Francis, Lesley, Jane, Derek, Arthur, Dan, Roger, Elizabeth)
Phase Three	3 semi-structured interviews based on dialogue with both partners (Selected exercisers and significant others from Groups A & B - Anita/ <u>Duncan</u> , Chris/ <u>Sam</u> , Tanya/ <u>Ivan</u>)

All names used in this study are pseudonyms.

The following section explains the stages of the research. It outlines the Pilot Study, Phase One, Two and Three data collection and finally, analysis of data. The rationale for and selection of research participants are explained in each Phase.

6.4.1 Pilot Study

Three defining characteristics of ED were identified in the literature review: adherence, withdrawal symptoms and continuation of exercise against advice (see Chapter Three). The three characteristics were outlined in an advertisement that was used to identify potential exercisers, following a protocol adopted in previous research (Morris *et al.*, 1990; Veale, 1995; Ogden, Veale, & Summers, 1997).

The Pilot study involved three interviews with individuals who fulfilled the criteria in the advertisement. They were recorded and transcribed in full. Themes that were explored within the interviews were: family background and history of exercise participation; characteristics of ED as identified in the literature review; current exercise participation; and attitude towards exercise participation.

The last theme to be explored in the interviews was the discussion of the participant's own description of their engagement in exercise. During the pilot interviews this element was undertaken without prompts and was difficult to explore with the exercisers. Therefore, for the main data

collection phases a chart was used during the interview. A copy of the original chart can be found in Appendix D and an outline of the content with references can be found in Table 6.2. This was the only major change in the detail of the interview process between the pilot phase and the main data collection phase.

Table 6.2 Terminology Presented during Interviews (including sources)

Terminology	Source
commitment to running (exercise)	Carmack & Martens (1979)
exercise dependent	Pargman & Burgess (1979); Pierce (1994)
(exercise) running addiction	Morgan (1979)
exercise addiction	Sachs & Pargman (1979)
addiction dependent	Pargman (1978) cited in Robbins & Joseph (1980)
obligatory exercise	Pasman & Thompson (1988); Blumenthal, O'Toole & Chang (1984); Yates, Leehey & Shisslak (1983)

After analysing the interviews from the pilot phase, further criteria for selection for the main study were identified. These were: age of 25 years or more, participation in at least one form of aerobic activity, involvement in exercise being mainly recreational rather than competitive. The reasons for these further restrictions on selection criteria were that ED is mainly manifested during the third and fifth decade (Yates, Leehey & Shisslak, 1983), is mainly associated with aerobic rather than anaerobic activities (Glasser, 1976) and is that competitive elite athletes are not subject to the same processes as ED (Veale, 1991) (see Appendix A). A further criterion for exercisers in Phase One was the existence of a SO. Those people who did not meet all criteria were eliminated from the study.

6.4.2 Phase One

The description of this stage of the research includes access to the exercisers, access to SOs, interview procedure and data analysis. The same format is then adopted in the description of Phases Two and Three. Ethical considerations common to all Phases are considered at the end of the research design section.

Access to Exercisers

The description of how access is granted or denied is frequently omitted from research accounts but can often be illuminating of the research process (Burgess, 1984). Two versions of the advertisement, mentioned in Section 6.4.1 above, were written to account for the potential positive or negative experiences of ED, as suggested in the literature (see Chapter Three p. 36). Copies of the original

advertisements can be found in Appendix E but an outline of criteria in the advertisement, including sources, is given in Table 6.3.

Table 6.3 Criteria for Identification of Exercisers

Questions	Sources
Do you experience withdrawal symptoms if you are unable to exercise, train, participate in sport or physical activity?	Pargman & Burgess, 1979; Morgan, 1979; Carmack & Martens, 1979; Christie & Chesher, 1982; Morris <i>et al.</i> , 1990; Anshel, 1991; Pierce, McGowan & Lynn, 1993; Steinberg, Sykes & LeBoutillier, 1995; Mondin <i>et al.</i> , 1996
Does your participation take up a great deal of your life?	Glasser, 1976; Sachs & Pargman, 1979; Yates, Leehey & Shisslak, 1983; Sachs, 1984; Clingman & Hilliard, 1987; Anshel, 1991; Pierce, McGowan & Lynn, 1993; Hall, 1995; Griffiths, 1997
Have you ever continued to exercise against advice?	Morgan, 1979; Yates, Leehey & Shisslak, 1983 - such as when injured or ill; Anshel, 1991
Do you train every day or almost every day?	Morgan, 1979; Clingman & Hilliard, 1987; Anshel, 1991; Veale, 1991; Pierce, McGowan & Lynn, 1993

The advertisement included qualitative descriptions of the ED experience rather than a temporal duration of exercise criterion. Time criteria were used for previous studies, such as Ogden, Veale & Summers (1997), who required participation for four hours a week and Biscomb (1994), who required participation for five hours a week, in contrast to Anshel (1991) who adopted a criterion for dependence of participation on at least five days a week for a total minimum of 15 hours per week. This quantitative criterion was rejected for this study on the grounds that duration alone does not necessarily reflect other factors such as intensity of participation and salience of exercise. Unlike Ogden, Veale & Summers' (1997) protocol, however, these advertisements did not make reference to addiction or dependence or require the individuals to define themselves to be 'addicted' or 'dependent'. Similar to Cohen's (1995) protocol, certain terms were avoided because of their negative connotations.

Copies of the advertisements were posted on the notice boards of a Midlands University and were sent to 21 leisure and health centres in the West Midlands area. Exercisers were also identified through two other methods. First, the snowball technique was used, which asks research participants to identify others who may fulfil criteria. Secondly, some exercisers were identified proactively by the researcher, who already knew of their exercise habits (Gilroy, 1997; Thaxton, 1982). Access to exercisers through a variety of means increased the scope for suitable exercisers to be found. Multi-

method approaches of gaining access have also been used in previous studies (Diekhoff, 1984; Gilroy 1997). Individuals responding to contact were checked against the selection criteria. Any person who did not fulfil the criteria was asked to either participate in Phase Two or was not used in the study at all.

During the initial discussions with potential exercisers no reference to exercise 'dependence' or 'addiction' was made. Once an agreement to participate in the research was secured, initial details of the study were sent through the post (see Appendix F). Each exerciser was then contacted to agree a date, time and venue for the interview. Permission was gained to tape the interview, which was later transcribed in full (see sample in Appendix G). Interviews ranged in length between 50 minutes and one hour 45 minutes. Interviews were undertaken in university rooms, exercisers' homes and participant's places of work. Phase One consisted of 16 interviews, eight with exercisers and eight with SOs. Of the exercisers, three were previously known to the researcher, three were gained through snowball contacts and two responded to advertisements.

Access to Significant Others

At the end of the exerciser's interview permission was requested to send details of the research project to their SO by post (see Appendix H). The exercisers, therefore, acted as gatekeepers to their SOs (Burgess, 1984; Song, 1998). After an appropriate time delay, the SOs were contacted by telephone to establish a date, time and venue for an interview. Venues used for SO interviews were exercisers' homes and the researcher's home. Permission was gained to tape the interview which was subsequently transcribed in full. Interviews ranged in length between 45 minutes and one hour 30 minutes.

One exerciser from Phase One, Steven, consented to the involvement of his SO in the research process but this person refused. I originally assumed that Steven was blocking the interview because gatekeepers hold the power to deny access to research informants (Burgess, 1984). Speculation on such matters can be exaggerated but does illustrate the nature of the power held by gatekeepers in the research process (Song, 1998). Communication directly with Steven's SO, however, clarified that it was *her* decision not to participate. She explained her reluctance to be involved in the research by letter. Refusal by SOs to engage in the research process also occurred in a study about managers' careers where five wives refused to be interviewed (Pahl & Pahl, 1971). It clearly poses a problem for the researcher if the main research participant is willing and interested in the research process but cannot motivate their SO to co-operate.

After Steven relayed the message that his SO refused to be interviewed I approached her to ascertain whether she would participate instead in a remote self-taped interview. This request was also denied on the basis that she disliked interviews. Steven had been sharing accommodation with a different

individual, Gavin, immediately prior to his interview. After all possible avenues to include Steven's dissenting other had been explored, Gavin, was approached as a potential replacement. Therefore, for one participant his SO was not someone with whom he currently lived but someone with whom he had lived with in the recent past.

Interview Procedure

Phase One interviews with exercisers were undertaken before interviews with SOs. The twofold purpose of the SO interviews was to explore the research suggestion that ED causes conflict in interpersonal relationships and to provide a means of triangulating the data provided by exercisers. Yates *et al.* (1994) suggest that athletic populations maybe more unwilling to disclose emotional vulnerability because of their desire to appear strong and independent. The availability of an SO to triangulate the data, therefore, is particularly useful in this type of population. The aim was to collect data from exercisers and then discuss those data with their SOs. Certain ethical issues arose once this design was adopted and these are discussed in greater detail later (Section 6.6 p. 87).

Data Analysis

The data gathered from Phase One were analysed using NUD.IST 4 software and Grounded Theory (Strauss & Corbin, 1998a) technique (see Section 6.5 p. 86). The emergent findings from Phase One were then presented to individuals in Phase Two so that comments on the findings could be fed into the data analysis. This enabled the data to be informed by the views of the exercisers themselves which is a requirement for the Grounded Theory process (Strauss & Corbin, 1998a).

6.4.3 Phase Two

The purpose of Phase Two was to discuss initial findings from Phase One with a different set of exercisers to determine the trustworthiness of the initial analysis. This second Phase, therefore, provided an assessment of the earlier findings and allowed the exercisers to comment on them (Henderson, Bedini & Hecht, 1994). This is sometimes referred to as member checking (Sparkes, 1998a). The inclusion of interpretations of data from the participant group is advocated as an essential part of a Grounded Theory approach (Strauss & Corbin, 1998b). The findings were organised under the following headings: impact of exercise on the exercisers' life history; impact of the exercise on SO relationships; and, the construction of a self-identity through exercise participation.

Access to Exercisers

Advertisements (see Section 6.4.2 p. 82) were sent to 24 leisure centres and health clubs. Seven advertisements were sent to sports physiotherapy practices in the West Midlands area. Eight individuals were interviewed as part of Phase Two and access was gained in the same way for Phase One. Of the eight, two were approached proactively, three were identified through snowball

technique and three responded to advertisements. Venues used for Phase Two interviews were exercisers' homes and university rooms.

Interview Procedure

In Phase Two exercisers were initially interviewed using the same semi-structured schedule adopted for Phase One but with the addition of a Phase Two extension to the schedule. This involved presenting and discussing Phase One findings to allow for member checking. Exercisers were encouraged to comment on the basis of their own personal experiences, regardless of whether these experiences confirmed or contradicted the Phase One findings.

Data Analysis

The data collected from Phase Two interviews were then incorporated into the Grounded Theory analysis using constant comparison method (Miles & Huberman, 1994). This further analysis resulted in slight modifications to the early findings and these interim findings were then presented to interviewees in Phase Three.

6.4.4 Phase Three

Phase Three consisted of a series of three interviews undertaken jointly with both partners. The purpose of Phase Three interviews was to present findings to the exercisers from Phase One in order to repeat the member checking process and to allow a dialogue which would generate more detail than a single interview (Burgess, 1984; Gilroy, 1997; Cox & Thompson, 2000). The presence of both partners was intended to encourage honesty in response and to extend the additional accounts (Gilroy, 1997; Cox & Thompson, 2000).

Access to Participants

Phase Three interviewees were selected on the basis of their description of their exercise participation. The criteria for selection were determined by the choice of terminology to describe this. Table 6.4 outlines the terminology used to describe participation by each exerciser and their SO.

Table 6.4 Terminology Used to Describe Participation

Name of Exerciser	Significant Other	Term Used by Exerciser	Term Used by Significant Other
Steven	<u>Gavin</u>	addicted	commitment/addiction
Anita	<u>Duncan</u>	addicted	addicted/dependent
Nigel	<u>Cath</u>	addicted/commitment	commitment
Carl	<u>Tracey</u>	dependent	dependency/addiction
Chris	<u>Sam</u>	dependent	dependent
Bob	<u>Jenny</u>	commitment	commitment
Tanya	<u>Ivan</u>	not sure	commitment
Norman	<u>Fran</u>	commitment	commitment

From Table 6.4 it can be seen that Steven, Anita, Nigel, Carl and Chris described themselves as either 'addicted' or 'dependent'. Nigel was eliminated from Phase Three, however, because the description given by Cath did not correspond with the description given by him. Steven was not contacted because of the difficulties with consent to interview his SO (see Section 6.4.2 p. 83). This left three exercisers Anita, Chris and Carl who identified themselves as either 'addicted' or 'dependent'. They were requested to participate in a second interview with their SO present. In addition to the individuals identified as 'dependent', one exerciser, Tanya, who did not identify herself as 'addicted' or 'dependent', was also selected for a Phase Three interview. The purpose of this selection was to provide a data set which would be different from the three ED data sets so that comparisons could be made.

Access to exercisers has to be negotiated and renegotiated throughout a research project and those who are researched may shape or reshape the research design (Burgess, 1984). Phase Three provided an example of this because one person Carl, refused to be interviewed for personal reasons. This particular exerciser would have provided an interesting addition to the research because of the tension between his self-identification as exercise dependent despite his failure to fulfil the research criteria for dependency.

Interview Procedure

Those identified for Phase Three were contacted by letter explaining the need for an additional interview and requesting their co-operation. They were then contacted by telephone to arrange a date, time and venue for the interview when both partners would be present. These details were confirmed nearer the time and it was at this stage that Carl and Tracey declined to participate due to family reasons. Interviews were undertaken in the exercisers' homes and lasted between one hour 15 minutes and one hour 45 minutes. Each interview was based on the emergent findings from Phases One and Two. All the interviews were taped and transcribed in full.

Data Analysis

The data collected from Phase Three were incorporated into the earlier Grounded Theory analysis (see following section for further details). This further analysis resulted in slight modifications and these findings are presented in Chapter Nine. The next section outlines in more detail the data analysis process across all three phases.

6.5 Grounded Theory Data Analysis

The process of collecting qualitative data and then analysing them to determine an account of the social world is referred to as Grounded Theory (Strauss & Corbin, 1998a). As previously discussed (see Chapter Two p. 15) Grounded Theory has been subject to criticisms on the basis of representing a postpositivistic form of analysis which is not suitable for interpretive research. This criticism is

addressed by a development of a constructivist approach to Grounded Theory that allows the researcher to explore participants' voices, realities and meanings (Charmaz, 2000).

Analysis of qualitative data involves the identification of codes, a process that requires the researcher to interpret the data (Coffey & Atkinson, 1996). The researcher is concerned with the identification of phenomena, the collection of data to provide evidence for a phenomenon and analysis in terms of similarities, differences and patterns in relation to these phenomena (Coffey & Atkinson, 1996; Miles & Huberman, 1994). In other words, the researcher uses the data to deconstruct and reconstruct the codes to develop categories and concepts (Coffey & Atkinson, 1996). One of the features of qualitative analysis, therefore, is that emergent understanding of the data is returned into the data and the analysis (Fielding & Lee, 1998), a method that is referred to as constant comparison method (Strauss & Corbin, 1998a).

One of the processes of analysis within this study is a Grounded Theory approach. Emergent propositions are, therefore, grounded in data, which have been systematically collected and analysed (Strauss & Corbin, 1998a). Data were analysed in three stages. After Phase One open and axial coding of Grounded Theory were used. Coding refers to the "analytical processes through which data are fractured, conceptualized, and integrated to form theory" (Strauss & Corbin, 1998b p. 3). From Phase One the following themes emerged and were adopted as the basis for the Phase Two interviews: support from SO relationships; construction of self identity - made up of the physical, critical, social self, and fluctuating life histories. The emergent findings from Phase Two, which were refinements of these themes, were then used as the basis for Phase Three interviews. The three phases of the research, therefore, represented a process which is consistent with a Grounded Theory approach.

6.6 Evaluation of Qualitative Research

It was previously discussed (see Chapter Two p. 19) that the constructivist paradigm rejects Positivist criteria of validity, reliability and objectivity and replaces these with the notions of credibility, transferability, dependability and confirmability (Denzin & Lincoln, 1994). Attempts to describe the quality of research and appropriate terms to use have been collectively described by others as 'goodness criteria' (Smith, 1990; Marshall, 1990) and are an on-going debate within the 'interpretative turn' (Smith, 1990). In addition, Sparkes (1998a) acknowledges that to apply Positivist criteria to interpretative methods denies the legitimacy of these research methodologies and has contributed to the crisis of legitimation. This section discusses the application of trustworthiness and authenticity as appropriate criteria for this study.

It is possible to determine the development of criteria by revisiting some of the basic assumptions of constructivism. Guba (1990) suggests that those operating within a constructivist paradigm acknowledge that 'reality' is considered only in terms of a construct for thinking about it and that

many different constructions are possible. Multiple realities are therefore possible. Consequently, the previous dichotomy between the known and the knower is rejected thus rendering the distinction between ontology and epistemology obsolete (Guba, 1990). Further basic assumptions outlined by Lincoln (1990) are that the development of theory is grounded rather than a priori, an acknowledgement that the human researcher is the research tool, that the research design may emerge from the process and that the context for research is in a natural setting rather than a laboratory. All of these assumptions of constructivism can be applied to this study. This thesis places an emphasis on the subjective experience of the participants within the study. It attempts to document their understanding of their exercise activity and to give voice to their stories (Strauss & Corbin, 1998a) within the phenomenon of ED. The method for collecting data is that of interview and the analysis uses a Grounded Theory approach. This thesis is clearly located in a constructivist paradigm and therefore criteria associated with this paradigm is most appropriate.

Guba & Lincoln (1981) established that alternative forms of evaluative criteria, such as credibility, transferability, dependability and confirmability, should be applied to qualitative work as an alternative for rigour. These alternative forms became known collectively as 'trustworthiness' (Lincoln & Guba 1986). Critiques of these criteria, however, suggested that they were parallel or foundational because the concerns were based on the same foundation as conventional forms of criteria to determine internal validity (Smith, 1984). Lincoln (1990) acknowledged that in response to such critiques the criteria were further developed to include 'authenticity'. Trustworthiness has been described as appropriate criteria for the process of research and authenticity as appropriate criteria for the product of research (Lincoln, 1990). Authenticity includes an acknowledgement of the states of being which refer to ontological, educative, catalytic and tactical authenticity (Lincoln, 1990).

It can be questioned as to why this thesis adopts criteria that have been criticised as 'parallel' whilst at the same time claiming that it challenges the paradigm of the current understanding of ED. The Positivistic nature of the previous research base for ED lies in the answer to this. In order to critique and challenge the existing ED literature I thought it best to adopt a parallel position that would stem from the same indigenous concerns as Positivistic traditions (Lincoln, 1990). That this would seem to be safer ground upon which to base a qualitative, interpretivistic challenge. I suspect that this hesitation is partly due to the crisis of legitimation as emphasised by Sparkes (1995) and will be addressed further in Chapter 11 (see p. 209).

6.7 Ethical Considerations

Cresswell (1994) argues that ethical protocols in qualitative projects should include informed consent, giving transcripts back to participants and protection of participants' rights and wishes. Each of these parameters is now discussed in relation to this thesis. All research participants gave written,

informed consent to participate. The consent form was part of the initial details sent out to the exercisers (Appendix F) and their SOs (Appendix H).

Confidentiality of interview data is normally guaranteed to exercisers in research projects (Burgess, 1984) and it is the researcher's responsibility to protect and safeguard the interests of those studied (British Sociological Association, 1996). In this study some research participants were guaranteed confidentiality and anonymity, which was achieved by giving pseudonyms and removing identifiable references from the transcripts. Confidentiality was only conditionally guaranteed for the exercisers in Phase One, however, because the intention was to discuss the content of their interview with their SO in a later interview creating ethical difficulties. To try to protect the interests of the exercisers the interview was transcribed and the transcript was returned to the exerciser. The transcript contained indications of the areas intended for discussion with the SO and the exerciser was encouraged to examine the transcript and contact the researcher if there were any problems with these. Time was allowed for the exerciser to respond before the SO interview was conducted. Only one exerciser did so, in order to challenge the interpretation of the interview rather than amend it. He thought he appeared selfish in his interview and wanted to emphasise the importance of his family within his life. This issue of confidentiality was addressed by ensuring that the exerciser was fully aware of the role of their SO in the research process and by asking permission to interview the SO before the onset of data collection. Details outlining the role of the SO in the study were sent out to the exercisers once initial contact had been made (see Appendix D). Other participants were also given a copy of their transcript with the suggestion that they could respond to any issues.

Between the exerciser's interview and the SO interview, exercisers were asked not to discuss the details of the interview with their SO. They were told they would be free to do so once the research process was completed. Although there was no way of ensuring that exercisers fulfilled this request, many mentioned the request as a point for clarification at the end of their interview. The sensitive nature of personal data has been discussed by other researchers (Corbin, 1971). Interviews in this project were taped, transcribed and shared with SOs but the exercisers were informed of this intent from the onset of their involvement.

The interviews in this project were undertaken in a variety of places such as university rooms, exercisers' places of work, exercisers' homes and the researcher's home. The first choice of venue was either the exercisers' place of work or their home. This choice enabled the research participant to be interviewed at their convenience and in their setting, thereby contributing to a development of rapport with the individual (Fontana & Frey, 2000). It presented certain moral dilemmas, however, that are discussed in Chapter 11 (p. 203). On one occasion an interview was conducted in the researcher's home at the suggestion of the research participant. This individual was someone previously known to the researcher, so although the interview did not occur in the participant's own

space and setting, it was convenient for them and at their request. The phasing of the data sources is summarised in Table 6.5.

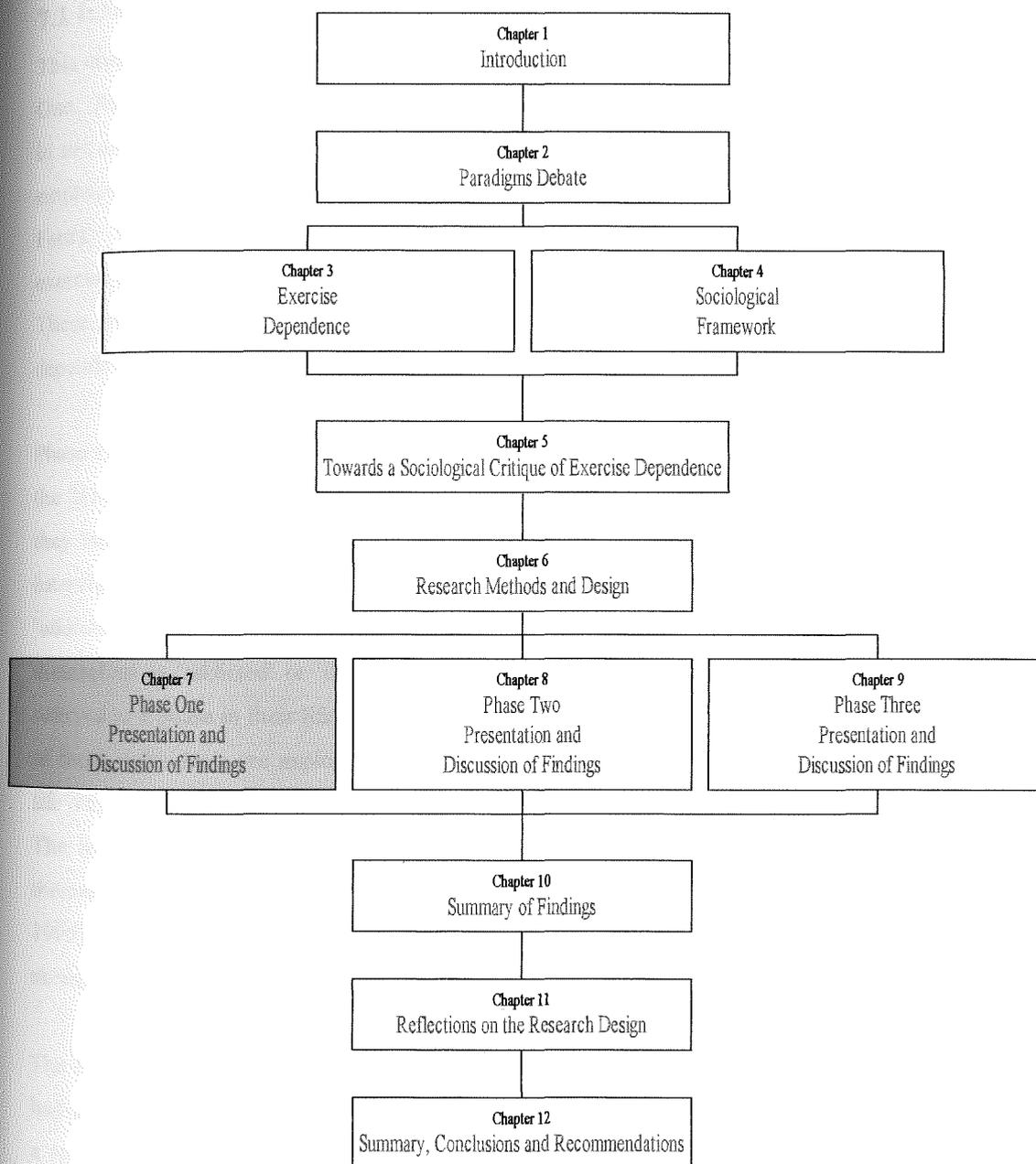
Table 6.5 Data Sources by Phase

Name	Significant Other	Phase	Method of Access
Steven	<u>Gavin</u>	One	Approached
Anita	<u>Duncan</u>	One	Approached
Carl	<u>Tracey</u>	One	Advertisement
Chris	<u>Sam</u>	One	Approached
Nigel	<u>Cath</u>	One	Advertisement
Bob	<u>Jenny</u>	One	Approached
Tanya	<u>Ivan</u>	One	Snowball
Norman	<u>Fran</u>	One	Snowball
<u>Gavin</u>		One	Partner
<u>Duncan</u>		One	Partner
<u>Tracey</u>		One	Partner
<u>Sam</u>		One	Partner
<u>Cath</u>		One	Partner
<u>Jenny</u>		One	Partner
<u>Ivan</u>		One	Partner
<u>Fran</u>		One	Partner
Francis		Two	Approached
Lesley		Two	Snowball
Jane		Two	Snowball
Derek		Two	Advertisement
Arthur		Two	Snowball
Dan		Two	Advertisement
Roger		Two	Advertisement/Gatekeeper
Elizabeth		Two	Approached
Anita/ <u>Duncan</u>		Three	Phase One
Chris/ <u>Sam</u>		Three	Phase One
Tanya/ <u>Ivan</u>		Three	Phase One

6.8 Summary

This project involved 27 interviews. The interviews were conducted using a Three Phase design consisting of 16, eight and three interviews respectively. Exercisers for the study were recruited through a variety of techniques including personal approach, snowball and advertising (see Table 6.5). Across all three Phases interviews were conducted in the West Midlands, Lancashire, Greater Manchester, Monmouthshire, Staffordshire and Berkshire counties. The data were transcribed in full and analysed using NUD.IST software, a Grounded Theory approach and constant comparison method. The results from each Phase are presented in the following three chapters. There then follows a summative chapter.

Figure 7.1 Outline Map of the Thesis Highlighting Chapter Seven



CHAPTER SEVEN

PRESENTATION AND DISCUSSION OF FINDINGS FROM PHASE ONE

7.1 Introduction

This chapter presents and discusses the findings from the analysis of interviews conducted in Phase One. As discussed in Chapter Seven, this study was based on an analysis and exploration of exercise in the context of exercisers' life histories. A Symbolic Interactionist approach was adopted, placing emphasis on the subjective meanings that the social actors gave to their experiences (see Chapter Four). Within the interviews in this study, therefore, individuals were asked to define their own exercise participation and to explain what they understood by their choice of terms associated with it. These subjective interpretations of exercise participation were then used to identify who was exercise dependent and who was not.

Phase One data were generated from interviews with eight exercisers and their SOs. The purposes of the SO interviews were twofold. They allowed the participant's self report data to be triangulated and they facilitated exploration of potential effects of ED on SO relationships. The exercisers' SOs were interviewed separately during Phase One. Of the eight exercisers, four described themselves as being 'addicted' or 'dependent' and four did not. The narratives of the four individuals who described themselves as 'addicted' or 'dependent' are explored in depth in this chapter. Of the others, three referred to a phase in their life history when they were more dependent upon exercise. The narratives of these individuals are explored to compare differences between 'dependent' and 'non-dependent' life stages. The narratives of all the exercisers indicated a fluctuating pattern of exercise intensity. The life histories are explored in two different ways. The life histories of those who described themselves as 'dependent' or 'addicted' are presented as a series of episodic ethnographies (Gurney, 1995). Those who did *not* describe themselves in this way are presented as a series of descriptive life sketches. Both forms of the life histories are analysed together.

The life histories of the exercisers are explored together with an examination of the impact that ED had on their SO relationships. The chapter extends traditional conceptions of ED by exploring it from a sociological perspective, incorporating considerations of the role of exercise in identity formation. The chapter concludes by presenting seven Propositions that emerged from the Phase One analysis and that formed the basis of the interview schedule for Phase Two.

7.2 Characteristics of the Research Participants

Eight exercisers and their SOs contributed to Phase One. Table 7.1 outlines the characteristics of the research participants in this phase.

Table 7.1 Characteristics of the Phase One Exercisers and Significant Others

Participant	Significant Other	Age Category	Rel	Profession	Type of Activity	Term Used
Steven	<u>Gavin</u>	20s	3	Education	Running	addicted
Anita	<u>Duncan</u>	40s	10	Education	Cycling	addicted
Carl	<u>Tracey</u>	30s	16	Leisure/profess	Gym	dependent
Chris	<u>Sam</u>	40s	13	Education	Triathlon	dependent
Nigel	<u>Cath</u>	30s	3.5	Leisure	Weights	addicted/commitment
Bob	<u>Jenny</u>	60s	36	Retired	Running	commitment
Tanya	<u>Ivan</u>	40s	5	Education	Running	not sure
Norman	<u>Fran</u>	30s	8	Professional	Cycling	commitment

Significant Other	Partner	Age Category	Rel	Profession	Whether Active	Term Used
<u>Gavin</u>	Steven	20s	3	Education	Yes	commitment/addicted
<u>Duncan</u>	Anita	40s	10	Education	Yes	addicted/dependent
<u>Cath</u>	Nigel	30s	35	Professional	sometimes	commitment
<u>Tracey</u>	Carl	30s	16	Professional	occasionally	dependency/addiction
<u>Duncan</u>	Chris	50s	13	Professional	yes	dependent
<u>Jenny</u>	Bob	50s	36	Retired	occasionally	commitment
<u>Ivan</u>	Tanya	40s	5	Education	yes	commitment
<u>Fran</u>	Norman	30s	8	Professional	yes	commitment

The length of relationship between the two partners is indicated in the fourth column. The sixth column, entitled 'activity', indicates the most frequently undertaken activity for the exercisers, or alternatively, indicates whether the SO is active. The extent of participation in physical activity by the SO is also noteworthy. The 'yes' indicator in the 'activity' column illustrates the SOs who regularly participated in physical activity. In all 'yes' cases the level and nature of activity was an integral part of the SO-exerciser relationship and common to both individuals. Gavin, Duncan, Ivan and Fran undertook physical activity both with their SOs and in other social groupings. Sam, however, undertook all physical activity with Chris. It would be inaccurate to describe Cath, Tracey and Jenny as sedentary but their exercise levels were minimal.

The final column indicates the research participants' choice of terminology or label for the exercisers' involvement. It can be seen that the individuals who identified themselves as being 'addicted' or 'dependent' were Steven, Anita, Chris and Carl. Although Nigel originally used the term 'addicted', he later replaced it with 'committed'. Two other individuals, Bob and Norman, described themselves as committed to exercise. Tanya found it difficult to categorise her participation and eventually concluded that she was unsure about it.

Meaning and the interpretation of meaning is a salient component of Symbolic Interactionism. The desire to document the interviewees' meanings and their interpretations of 'addicted', 'dependent' and 'committed' reflects a Symbolic Interactionist framework. All SOs provided verification of the exercise participation described by their partner. This even extended to the terminology used to

categorise exercise. When asked to describe their partner's attitude to exercise, it was interesting to note that, in most circumstances, the SOs chose the same terms as those selected by the exercisers themselves (identified in 'Term Used' in Table 7.1). The only exceptions to this were Cath and Ivan. Nigel chose to replace 'addicted' with 'commitment', and it was this term that Cath favoured. Tanya found it difficult to comment on her participation, whereas Ivan had no difficulty in choosing 'commitment' as a descriptor for Tanya's participation. It is also interesting to note that subjective meaning of 'dependent' may be different from published research interpretations of dependence. Carl particularly emphasised that he considered his exercise participation as 'dependent' but would have failed to fulfil the research criteria of frequency and duration. Subjective lived experiences may not, therefore, correspond with research definitions. The significance and meaning of the terminology chosen by interviewees are discussed later (see Section 10.3 and 11.4).

7.3 Life Histories of The Exercisers and their Significant Others

The transcripts from Phase One produced rich and descriptive detail of exercise participation and the impact of this on the various relationships. The purpose of this research project is to explain the subjective realities of ED. However, space does not allow for extensive detail to be given about the ED experience of all exercisers in the study. For this reason, a separation is made between those who describe themselves as 'addicted' or 'dependent' and those who used other designations. The former group are presented as detailed *episodic ethnographies* (Gurney, 1995) and the latter in shorter *descriptive life sketches*.

The life history of each exerciser is presented in detail and is supported by information gathered from his/her SO relationship. As a result of the separate interviews, two accounts of each relationship were gathered. As described by Song (1998), this generated a public representation of their family life. Descriptions of the life histories are, therefore, presented in pairs. The ethnographic episodes of the self identified 'dependent' individuals (Steven, Anita, Carl and Chris) are presented first. The descriptive life sketches of the self-identified 'committed' individuals (Nigel, Bob, Tanya and Norman) appear in Appendix I. It is not ideal to remove the stories of these individuals out of the main text to an appendix because this action may appear to marginalise their voices and subjective lived experiences. However, limitations of the format of this thesis require space to be dedicated to those individuals who identify as 'dependent' or 'addicted'. The impact of exercise upon each relationship is discussed after the life history analysis.

7.3.1 Episodic Ethnographies

Interpretive biography enables an exploration of the life history in order to document the epiphanies of life experiences (Denzin, 1989; Sparkes, 1998c; Fontana & Frey, 2000). These epiphanies are described as "interactional moments that leave marks on people's lives and have the potential for creating transformational experiences for the person" (Denzin, 1989 p. 15). The epiphanies of

exercise behaviour are noted and following the life history analysis by Gurney (1995) these narratives are presented as a series of "episodic ethnographies" (Gurney, 1995 p. 276). These are a series of episodes during the life history when exercise had a particular meaning for the exerciser. This provides an opportunity to reflect upon the salience of exercise for both the individual and their SO. One objective of presenting the life histories is to create descriptive accounts of the social processes involved so that these may be understood (Gurney, 1995). These accounts are used in order to frame a sociological account of ED. There is no claim here of representativeness or generalisability arising from these descriptions.

The episodes within each life history represent moments in which the significance of physical activity in the life of the individual changes. In all cases the initial episode focuses upon how physical activity became a salient part of the individual's lifestyle. In most cases this occurred during childhood and was influenced by particular individuals. Once a pattern of engagement in physical activity was established the episodes reported below signified a change in the meaning of physical activity within that person's life.

Steven and Gavin

Steven was in his late 20s at the time of the interview and had recently started his career in lecturing. He worked professionally in the field of sport and exercise, in a full time lecturing post and in part time instruction of various exercise classes. His main activity was running and he had competed at quite high levels when he was younger. He grew up in a family environment where sport was valued by his parents. Both parents participated in different activities but he described them as, "sedentary in later life". In addition to running, Steven also undertook circuit classes and gym sessions. He was involved in sport from his school days at varying intensities but had a substantial break from running during his mid 20s. He resumed his running after completion of his degree and the onset of his second career. Although it was unlikely that he would ever return to the elite levels that he had previously enjoyed, his participation was focused on competition during the early part of the research project. At the time of Gavin's interview, however, a shift in Steven's exercise participation was discussed. Owing to the difficulties in contacting Steven's first SO there was a longer delay between Steven's and Gavin's interview compared with other research participants (see Chapter Six p. 83).

Gavin was Steven's ex-flat mate who was also in his late 20s and worked professionally in sport and physical activity. He participated in physical activity, particularly running, and believed that he was partly responsible for Steven's resumption of running. They had known each other for about three years and had spent the early part of their friendship sharing accommodation. Both during the time they shared living accommodation and at the time of Gavin's interview they participated in running together and in larger groups. Steven's life history analysis was characterised by five episodes.

Episode 1: Establishing Activity

During childhood Steven's parents were physically active. His mother was a county tennis player and his father was a runner. Steven emphasised that "they didn't necessarily push me into sport, although they more sort of pushed me into my academic side at school ... sport was something for the spare time". His activities during childhood were varied but his main emphasis was on the school football team. When he left school he lost contact with the team members and his participation in football ceased. Steven's childhood experiences established physical activity as an integral part of lifestyle but there were limitations because his participation ceased when easy opportunities were no longer available as he made the transition from childhood to adulthood.

Episode 2: Becoming a Runner

Steven left school at an early age and started his first career in the finance industry. He noted that "I sort of found out that I had all this money and put on a little bit of weight, not a lot but erm ... so I thought, 'oh, I'd better do something about this'". His solution to this problem was to start running with a friend and his father. Carmack & Martens (1979) noted that physical health was a common motivational reason for the onset of exercise. He quickly worked up enough distance to compete in half marathons but he still did not identify himself as a 'runner'. He had started cycling and combined his running training with his cycling. A few years after his running had started he entered another half marathon:

I remember I did the "Gloucestershire Town" half marathon and I did it off no training at all and I ran something like one hour 20, which is not too bad ... and one of the old chaps afterwards he sort of sat me down and said, 'you ought to take up running really seriously because you could do really well at it' ... and I said, 'no, no ... don't think so, runners are really fast' and he said, 'no seriously'. He said, 'you should join a club' and he suggested that I join a smaller club ... 'go and join a club you could be a really good runner'. So I did, I went along and joined a club. Erm ... first night I went down they said, 'oh, ... erm the group that you would go with, have gone, so do a session' ... and they got me to do three hundreds and the times that I ran that night were quick enough to put me straight into like their top team so straight away sort of, 'yeah, yeah you come and join our club' sort of thing. 'You come and join us' ... and I joined the sort of men's group and I was about 18.

Later during the same year he competed in a prestigious marathon, achieved a high rank and came second for his age group. It was this success that was to prove instrumental in developing Steven's identity as a runner:

... and that was then the sort of spring board to me getting into it and started doing running and I got to a point where I was the central point of the club and you know the squad was built over me, the contest was there. So I sort of got into it ... I got into it because someone said that I could be good at it and I thought maybe I could give it a whirl. Not because *I* thought, but because *someone else* thought ...

Steven's progressive development of a runner's identity was quite slow. Despite the frequency, intensity and duration of his training and the participation in marathons and half marathons Steven did not see himself as a 'runner' until he achieved almost elite levels of success. He distinguished between *doing* running and *being* a runner, and there was a strong interrelationship between success and being a runner. Curry & Weaner (1987) reported that salience of identity in sporting activities was associated with the time spent in that particular role. It is possible that, as the time required to achieve success increased, Steven's involvement of 'self' in that role also developed (Curry & Weaner, 1987). It was the time commitment that helped to formulate Steven's identity as a runner.

Episode 3: Other Priorities

Steven's participation fluctuated considerably during his early 20s and this period of his life was a time of considerable change including further study and the start of a new career. During this time his running was given a different level of priority compared with other activities in his life, "so yeah ... there was a lull but that was because of work ... and in a way it was important then ... because it had to come first". Steven's decision to prioritise work may seem surprising considering the importance he attached to running and the enjoyment of the success he achieved. It is not uncommon, however, for a committed runner to prioritise work above running. In Robbins & Joseph's (1980) study, for example, occupational ambition was maintained in committed runners but committed runners started to see running as an additional means by which identity was derived.

Steven was involved in a personal relationship and, with the demands of a degree course, part time employment, investing in a relationship and running, it was difficult for him to find time for everything:

... and it got to the point when I had all this work I had my degree stuff, I was seeing Emma and I was running ... and really in the end something had to give. It very much got to the point where I would get home in the evening after Uni or whatever and I would sit down and think, 'shall I do this work or shall I go for a run'? ... and it got to the point where I thought, 'well, I'd better do this work' ... and running sort of suffered ... and the thing is with running if you sort of miss it for a time you very quickly lose your fitness and then when you go out for a run its really hard work and you think, 'ah, you know this is terrible' so it's quite easy to think 'oh, I don't think I'll go tonight I'll go tomorrow'. Which you never do.

Other significant elements were changing within Steven's life and exercise was given a lower priority in relation to his work and, therefore, his participation reduced.

Episode 4: Running Again

Another change in job during Steven's late 20s resulted in resumption of more serious running. Steven had started running again during his previous job but when he moved to a different institution

he was exposed to a more inspiring milieu. He met Gavin and became immersed in a subculture that valued and participated in physical activity:

I was training and he started training and it didn't take much for Steven then to come out running with me and he got back into it and then that was when he took off back into training ...

(Gavin)

Steven's return to running brought with it a sense of status in his working environment. This status was clearly important to Steven's identity:

... and it's so nice to sort of do that, feel really easy erm and the students think 'wow, didn't know you were a runner' and all this sort of thing and that was really quite nice.

In contrast to earlier moments in Steven's life he clearly viewed himself as being a runner at this point. Although he was pleased with his performance during this time it was not directly linked to specific times or rankings. It was more closely connected to his presentation of self (Goffman, 1959) and how others perceived him in his working environment. The self that he wanted to present to the outside world was that of a runner and this identity was further developed by the reinforcement of others particularly students. His identity as 'runner' was clearly formed and he reverted to the earlier stage in which both runner identity and worker identity were important (Robbins & Joseph, 1980).

Episode 5: Setting up Home

Steven's final episode actually occurred between Steven and Gavin's interviews. Gavin believed that Steven's participation had reduced and that Steven had prioritised setting up home with Clare above running. According to Steven, the change in his exercise regime was due to the injuries that he was experiencing rather than the pressure exerted by Clare. Gavin acknowledged a shift in Steven's attitude:

... when he moved in with Clare and bought the house with Clare and started settling down ... and I said, 'that's it, he is going to let himself go', revert to being Fat Boy again and the home comforts and Clare. He'll be out with Clare instead of doing the runs etc. He keeps saying 'no, no it's not like that'. Clare does encourage him to go out and run now, even now, but it's just the injuries etc. But having said that, I think it's ... he has lost the edge now. You know he has got a bit too comfortable now ...

Gavin was not convinced that injury was the main reason and believed that it was Steven's choice to reduce his running because of the new priorities in his life. The ethnographic episodes are analysed collectively later (see p. 106).

Anita and Duncan

Anita, a lecturer, was in her early 40s at the time of the interview. She had attended a boarding school from an early age and had not, therefore, been exposed to physical activity within the family environment. Although her father had been a competitive cyclist in his youth, Anita did not discover this until she was a young adult. Anita participated in a diverse range of physical activities. She had enjoyed an early 'career' in cycling and had achieved high standards competitively. This had progressed to the point where she had decided to stop competing because "I had kind of had enough and didn't think that I could get any better".

Once she had made the decision to abandon her cycling 'career' Anita continued to cycle but in a more recreational and non-competitive manner. She also complemented her cycling with other outdoor activities such as skiing, walking, mountaineering and running, interspersed with some swimming sessions. Anita's participation was far more diverse in comparison with other exercisers. Some of the activities she undertook with her SO, Duncan, but the main weekly activity of cycling was undertaken with members of her cycling club. Anita and Duncan had been involved in a relationship for 10 years and they had lived together for most of that time.

Duncan had enjoyed more physical activity in his early adult life but it seemed as if this had dwindled at the time of his interview. He enjoyed walking, cycling, climbing and mountaineering, and had participated in all these activities to a greater degree in the past. He also had a lecturing career but he taught a different discipline and at a different institution from Anita. At the time of the interview they participated in various types of outdoor activities together, such as walking, cycling and skiing but these activities were usually undertaken at the weekends or during holidays. Anita's life history was characterised by three episodes.

Episode 1: Establishing Activity

Anita established physical activity as an element of her life at an early age. She learnt to swim at the age of seven and, because she attended a school with a swimming pool, she swam almost every day until she was about 14. A change of school in her early teens dampened Anita's enthusiasm for physical activity:

I went to a co-ed school, a comprehensive school and I had been at a single sex girls school before that so I have been involved in enjoying sport playing rounders all that stuff you do in a girls school and then suddenly there you are in a mixed school and it was all horrendous.

She took little interest in physical activity for about two years until a teacher started a climbing club. Participation in climbing was the second activity in a pattern of an active lifestyle but it was cycling that was to become Anita's main activity during her early adult years.

Episode 2: Cycling Career

Anita's cycling activities started during adolescence and continued throughout her adult life. During her late teens the chance meeting of a lone cyclist in France inspired Anita:

... and then the other thing that did happen was that when I was 16, I went on holiday with a friend from school and we met this American woman who was cycling in France on her own. She was the same age as us she was only 16 ... and I was just stunned. I thought this is really impressive. So I came home and bought my bike ...

The purchase of her first bicycle started her career in cycling. After she started cycling, Anita discovered that her father had been a cyclist. Duncan suspected that this was a critical factor in Anita's love of cycling:

Her father was a cyclist as well, apparently, and her mother died when she was five or six years old, her father was a really big figure for her ... and I don't know how much the cycling thing has got to do with him actually ... erm because I think, he's dead now but it's all ... you'll will have to ask her about this, but I suspect that it is something in this that is partly to do with her family and her father that started her off cycling in the first place.

Duncan

The significance of others was clearly an influential factor in Anita's cycling. Minkler (1981) demonstrated that a supportive network of friends is a significant contributor to participation in physical activity. Within a period of just over 20 years of cycling, Anita progressed from being a beginner, to a competitive cyclist (in both time trialing and racing), to a recreational club cyclist. Eventually, after many years of competing in cycling at club level, Anita decided to stop competing. She qualified this in more detail in a Phase Three interview:

... it was a decision that I had made with the coach I had at the time that I was probably going to have to commit completely to cycle sport or I wasn't going to get any better and she actually said, 'you know far more sensible to commit to your career actually'.

Anita, therefore, gave up her competitive cycling career in order to focus on her occupational career, not an uncommon response also seen in committed runners (Robbins & Joseph, 1980).

Episode 3: To Be Outdoors

For Anita the exercise environment was a significant factor influencing her choice of activities. To be outside was important. In her first interview she explained this as simply: "Cycling and skiing ... and mountaineering. It's mountains I suppose that's the focus. Any way up." She expanded on this and tried to explain this significance in a Phase Three interview with Duncan:

A: ... there is definitely a thing about, I mean it's what is now classed as I suppose as adventurous activities although road cycling doesn't really fit into that but there is definitely a sense of wanting to be doing things that have got a function. So although I did weights when I was racing and for training, the idea that my exercise would consist of going to the gym and going to some sort of aerobics class it's just like ... I am just not interested! It's actually ... the first reason why I started cycling was because you can get to from A to B and because you are outside and out running you can actually, I'm not wild about running but you can be outside and that's quite important to me the same with walking and climbing and all of those things are all about doing ... yes doing sports, but also about doing things that have other things that are part of it. Being in the open air and also getting out into the wild country. So I guess I define my real interest in sport now as anything that goes up.

D: Or comes down.

A: Or comes down yeah. It's all kind of ...

KB: Mountains?

A: Yeah, yeah and that side of it's yeah, definitely very important. So go to a climbing wall for the fun and the crack but the idea that I would just become a climbing wall addict is ... not interested at all!

During this episode running had been added to the list of Anita's regular activities in order to supplement her cycling during winter evenings. Anita was so committed to her cycling that she wanted to supplement it with other activities in order to achieve a better cycling performance.

Carl and Tracey

Carl was in his early 30s at the time of his interview and his main occupation was as a fire fighter. He also undertook part time instruction work at the gym, however, because he enjoyed physical activity and felt privileged to be able to undertake part time work in that field. His exercise focused on weight training and running but his history of exercise participation was quite diverse. He had grown up in a family where his father played cricket but Carl's interest initially lay in football. He had participated in football, athletic events and long distance running since his school days until his mid 20s. From his mid 20s until the time of the interview, Carl's exercise participation mainly consisted of recreational running, circuit classes and work in the gym.

Carl and Tracey had been in a relationship for approximately 16 years at the time of their interviews. They had a young family consisting of a daughter and a son (estimated ages 10 and eight) who were both physically active. Carl had encouraged Tracey to be more active throughout their relationship, but this was not always successful:

... he always wants me to do more than I would like, to be honest. 'Just do another five minutes, just run a little bit faster, just do this...' and I end up losing my temper with him and saying 'I'm not doing it anymore' [laugh]. I think erm ... I think because he is my husband I have got less tolerance.

(Tracey)

Apart from these unsuccessful attempts to be active together the only other reference to Tracey's physical activity was by home exercise videos. Tracey and Carl balanced the demands of family responsibility with professional work in emergency services. Tracey worked nights in a local hospital, while Carl looked after the children. Carl worked predominantly during the daytime when Tracey was at home. Carl's life history was characterised by three episodes.

Episode 1: Establishing Activity

Carl had participated in physical activity since his schooldays, when football had been his main interest. He had represented the school at a very early age but during his secondary education he failed to be selected:

I wasn't that good but I enjoyed being part of the team, getting out and supporting ... erm just like being in a team, the team environment ... football really that's all there was at that school ... I wasn't particularly good at it, I wasn't particularly good at most sports. I think, although I liked sprinting, but er that didn't come about until later on.

His PE teacher expected that he would become a good long distance runner because of his physique but Carl failed to achieve the required standards and was not selected for the team. He felt that after this, he was overlooked in the school sporting environment. Consequently, Carl joined the ATC (Air Training Corps) and it was through this organisation that he continued his sporting experiences and established physical activity as a significant element within his lifestyle.

Episode 2: Something to Prove

The exercise participation that was established at the ATC continued through to his late teens and was complemented with sessions at the gym on free weights. Summers, Machin & Sargent (1983) noted that exercisers reported enhanced social status gained through running marathons. In Carl's case, he took the decision to enter 'Midlands Town' Marathon because he felt that he wanted to prove himself to other people, especially his ex-PE teacher. The decision to enter the marathon was a catalyst and transformed Carl into a serious long distance runner:

... so I did a few months training ... I did quite well ... I did the "Midlands Town" one first and I just got up and from doing nothing to 60 miles a week ... came to where it was great, it was great you got such a high afterwards such a high before it ... and then I was working in "Midlands Small Town" and I was an electrician. I was running, sometimes running to work, running, running back, cycling there, anything to, anything to keep ... even on holiday just a quick ... er just basically doing loads and loads of running ... kept running for years and did a few more marathons lots of halves ... with the competitions you had something to look forward to and it was running with other people rather than running on your own. It was really good.

Participation in running remained constant until Carl and Tracey decided to start a family. It was the impact of family life that brought about a change in Carl's exercise patterns.

Episode 3: Becoming a Father

For Carl, the decision to start a family resulted in changes in the level of his activity:

... when I stopped the distances, the long distances, was when I had the children. You couldn't fit it ... wasn't justifiable doing that ... 'I'm going for a run, I'll be back in two hours' ...

Carl's family, therefore, became a higher priority for him than his long distance running. He took his family responsibilities seriously and felt that he could not continue his running in the same manner as he had before the birth of his children. This was further reinforced by Tracey, who emphasised:

... and he used to do a lot more exercise then, erm after we had Justine, it became the kids' time really because he is a good parent because he does his share and when they were babies he would be quite happy to get up in middle of the night with them and whatever needed to be done he would do it and I think that Justine was a bit of a drain and the exercise dropped because they were babies and ... then the children do different sports like today there is a parents session and he is doing it and he hasn't got the time now, not because he is too tired but because the children were born and generally he is a big part of their ... activities.

Tracey

Further evidence of the importance of family life for Carl was given in his response to his interview transcript. He was the only exerciser who responded to a standard letter and copy of his transcript (see Chapter Six p. 87-88). He telephoned a few days after receiving it to express concern about how he had represented himself. From reading the interview he felt that he came across as being very selfish and that his family was not given the importance that they really had for him.

Although Carl continued running after the birth of his children the intensity of this participation changed considerably. He still tried to undertake physical activity on a daily basis but he did not run the long distances that he once had. Morgan (1979) noted that negatively addicted runners tended to prioritise running over other facets of life. In contrast, others have failed to find any evidence of a negative impact of ED (Estok & Rudy, 1986; Major, 1995). Carl provided an example of an individual who identifies with the term 'dependent' but did not allow his exercise to be prioritised over his family. Similar to Robbins & Joseph's (1980) committed runners who were able to prioritise both work and running, Carl considered his identity as being constructed around more than one facet of his life and gave priority to different facets during different episodes.

Chris and Sam

Chris was in her 40s at the time of her interview and her main exercise foci were the three triathlon events - running, swimming and cycling. Chris had always participated in physical activity since her school days and described herself as: "... yes, yes I was definitely a tom boy". Originally she had played games, both team and individual, but had then gravitated towards individual sports, as she

became older. Physical activity had been a part of the family life as she was growing up but the emphasis was on activity rather than sport or exercise. Chris worked professionally in sport and exercise.

Sam worked for the local council and had been in a relationship with Chris for 13 years. Sam was also very physically active and participated in activity with Chris, although not to the same extent. Physical activity was, therefore, a central part of their relationship. Chris's life history was characterised by five episodes.

Episode 1: Establishing Activity

Chris had grown up in a family environment where physical activity was valued by her parents. Although neither parent participated in sport, they encouraged the family to be active. She particularly recalled the influence of her older brother who provided her with a sporting role model:

... he is three years older than I am so he presumably got into a lot of sport before I did ... and certainly I can remember in terms of him playing rugby I would go out and attempt to help him practise playing his rugby but it wasn't very successful ...

The close proximity of the family home to a swimming pool also helped to establish physical activity as an integral part of her lifestyle. Swimming became one of the central activities throughout Chris's adult life: "swimming I suppose, more than anything else, has been the link, the continuum all the way through". Secondary school enabled Chris to participate in a range of team sports, two of which she continued into adult life.

Episode 2: Training for Competition

During childhood Chris recalled having a bicycle as a means of transport. Once activity was established within her lifestyle, however, cycling became a means of exercise. Other activities were also enjoyed, such as weights, when the opportunity allowed.

Participation in team sports and the continuation of swimming resulted in Chris maintaining an active lifestyle into adulthood. Some of these activities were competitive and took the form of team sports. Her team achieved a high level in their competition and, therefore, additional training schedules had to be observed. It was as a result of this that she started to run. As a consequence Chris started to run on a regular basis in order to maintain a level of fitness for her team sports.

It was during this episode that Chris participated in her first triathlon. She had been encouraged by a colleague to undertake a triathlon because of her separate interest in the three events:

... because I swam and I ran they kept saying you should do this [triathlon] too, you may pick up the blah blah ... and I went, 'no, no' ... I ran marathons and I swam long distance races but I couldn't envisage getting on a bike and racing for 112 miles that was just outside of my mental capacities, I guess ... and just before I left someone set up a little fun triathlon and I did that and it was kind of fun.

After the initial enjoyable experience of the "fun" triathlon Chris realised that this combination of competitive events could be very satisfying and it was an activity that she would later take up with regularity.

Episode 3: Moving Life

The significance of exercise for Chris changed during a time when she made considerable changes in her personal life. She moved geographically and undertook a career change at the same time. These changes resulted in Chris experiencing a time when she was less confident and less established. It was during this time that her exercise increased to a point that she described as "obsessive". The changes in her life were on many levels and exercise was something that Chris could keep constant and stable:

... it was much more important to me that I went out and certainly the runs that I am doing now would have been like nothing then ... I felt as if it was that the obsession came about in a way because of the situation I found myself in ...

Sam, who described Chris during the same time period, also noted this change:

I remember her attitude in general ... and it is much more confident [now] and I can appreciate that now ... so I think if she was more compulsive and demanding of herself it was because she was less secure

Sam

Sam continued to explain that Chris's "compulsion" was not different even though her exercise behaviour had changed. Chris had developed confidence through the new career and this confidence had replaced the security being sought through exercise.

Episode 4: Settling Down

Further changes occurred in Chris's life during her settling down episode, including meeting Sam, another geographical move and a new job. These seemed to mark the change from Chris's obsessive behaviour to one that she described as being merely dependent. She explained the change on the grounds that: "I think because ... I got more interests into my life so, therefore, exercise wasn't as pivotal as it was". Sam described the contrast between this episode and the previous one:

She knows where she's going ... she's accomplished most of what she wants to accomplish she is quite in control of all aspects of her life and contented perhaps and so she is ... she is much more relaxed about it now.

Blumer (1969) suggests that individuals are presented with a world that must be interpreted and that meaning is derived from the interpretation of this social world. The meaning associated with exercise changed for Chris according to her life circumstances. Exercise changed from representing stability and security to representing a confident expression of identity. It was during this period that Chris started to participate in triathlons more regularly. Triathlon brought together all three strands of her activities and she gained some satisfaction from the competitive element:

... then when I got to "Small Town" University ... got interested again I suppose through Mark ... because he had the Saturday morning training and he was into triathlons ... and he would let me know where the races are. So started there in the January and did my first one which was stupid really. An Olympic distance one ... in about June of that year and it's just really gone on from there.

This episode represented Chris's exercise participation at the time of her Phase One interview. By the time of the Phase Three interview Chris had shifted into a new episode.

Episode 5: Using the facility

The Phase Three interview was undertaken approximately 11 months after the Phase One interview. During this second interview Chris explained: "I would probably say at the moment I am maybe going through an increased level of dependency on the exercise". When asked to explain this further she replied:

I think it is partly related to erm some things that I am trying to sort out but I also think it is accessibility ... I have the ability now to go and exercise during the day with the facilities at work which I didn't have before ... which for me I find that quite interesting that I was able to deal with only exercising once a day because ... and it didn't bother me that that's all I did, because that's all that in a way I had access to. But now that I have access and the accessibility to do more, then it's like well that's what I'll do ... *should* be doing.

Accessibility had been given as one of the reasons why Chris became a good swimmer as a child and the need to utilise facilities that were accessible seemed to be a driving force in the exercise regime.

Sam discussed the significance of these facilities:

I think she feels a variety of emotions around that facility - pride, you know, new facility with new locker rooms and high tech equipment and obligation to be seen to be using it and for it to be being used ... I think those are all playing into this.

Goffman (1959) noted that public status was important in the presentation of self. The audience contributes to the nature of the performance and the significance of the public arena is an important factor in the notion of 'role'. Sam suggested that this was one factor that contributed to Chris's

change. In addition, both Chris and Sam acknowledged the sense of 'obligation' about the use of facility.

The narratives of the individuals who did not describe themselves as 'addicted' or 'dependent', Nigel, Bob, Tanya and Norman, presented as descriptive life sketches, can be found in Appendix I. The following section now analyses the life histories of the exercisers.

7.4 Life History Analysis

The methodological approaches adopted by previous research in ED only provide an account of ED at a single moment in time throughout the life history e.g. Carmack & Martens (1979), Hailey & Bailey (1982), Ogden, Veale & Summers (1997). The measures used in these studies required individuals to complete a Likert scale assessing the salience of exercise *on the day the inventory is completed*. With the exception of the history of adherence, these studies did not require exercisers to reflect upon the salience of exercise during previous life phases. The understanding of the gradual development of an interest in exercise, and the process of change in the meaning of exercise, has not been previously documented. The life history analysis presented here, therefore, allows the salience of exercise over a longer period of time to be detailed.

One of the key features of all the life histories is the finding that an ED individual will have a fluctuating attitude towards intensity of engagement in exercise. All exercisers who identified themselves as 'dependent' or 'addicted' referred to a time in the past when they were more 'addicted' or 'dependent': "I'm not as obsessive ... when it was long distance ... now that is obsessive" (Carl), "there was a time ... when I would say that I was kind of obsessive about my exercise and it was much more important to me" (Chris). This pattern of changing in attitude to exercise was also evident with the exercisers who described themselves as being 'committed'. One participant, Bob, acknowledged that although he was committed to his running there was a time when he was definitely addicted and this was corroborated by his SO: "... at one stage I would have said that, yes, he was almost addicted to his exercise" (Jenny).

The ethnographic episodes illuminate a changing involvement in exercise, reflected in the nature and intensity of participation. These fluctuations are characterised by choices to maintain participation and give priority to exercise in comparison with other life elements. The life histories indicate that all exercisers engage in some form of systematic physical activity but, when one type of activity becomes impossible to pursue, it is *changed* or *replaced* by another. Although the specific activity may change, exercise participation *per se* remains constant. This suggests that the exercisers construct an element of their identity through their exercise in general rather than through a specific type of activity. In relation to Mead's (1934) concept of the 'I' and the 'Me', the exercisers' 'I' thus display a need for exercise. The 'Me' seeks an activity that allows the expression of this.

One of the reasons for the exercisers' changing attitude to exercise appears to be the length of time that they had been physically active. All exercisers in Phase One had engaged in physical activity from an early age. During childhood changes in their emotional and physical investment in exercise relationship were frequently associated with school activities. These activities were extensions of the standard PE lessons and included additional clubs and practices. They often altered when the structure within the school changed or when the individual left school. In these examples, the specific type of activity was not of any significance. What was more important was the establishment of physical activity as an integral and salient part of lifestyle and personal identity. This first episode was common to all the exercisers. They had all begun taking part in exercise during childhood and had maintained their participation, more or less, from childhood through to adulthood. During their adult life the intensity and the nature of the participation often changed due to a number of reasons. Table 7.2 summarises these changes.

Table 7.2 The Change of Major Activities throughout the Life History for Phase One Exercisers

Name	Activity	Reason for Starting	Age of onset	Reason for Change	Age of Change
Steven	football running running	school team put on weight competing	teens mid teens mid 20s	left school work commitments relationship	teens mid 20s late 20s
Anita	swimming climbing cycling running skiing	school activity teacher started club influence from others to replace cycling on winter nights to replace cycle racing	child teens late teens 30s 30s	school change did not like club competitive to recreational - -	child early 20s 30s resumption finish competing 30s - -
Nigel	swimming tennis gym	family influence family influence work related	child early teens early 20s	too isolating - -	early teens 30s (participation not as intense) -
Carl	running gym	to prove to others to replace running	teens mid 20s	onset of own family -	mid 20s -
Chris	swimming running triathlon	family influence, pool nearby training for team sport influence from others	child mid 20s late 20s	- - -	- - -
Bob	rugby walking running	school health and social health and weight	teens 40s late 50s	onset of family - -	early 30s - -
Tanya	hockey	school	teens	family/cessation of high level comp social activity	mid 30s resumption late 30s
Norman	walking cycling	with friend with friend	mid teens late teens	- -	- competitive element started early 30s

This pattern between key stages in life and the reason for changes in participation in physical activity was common in all interviews. Exercise participation during early adulthood usually involved a set pattern, with a reduced number of activities (often only one or two) being selected for more committed pursuit. These choices made during early adulthood seemed to map out participation for the remainder of adulthood up until the time of the interview.

Participation in exercise during adulthood was characterised by episodes in which the assignment of priorities determined nature and intensity. Even though the exercisers' activities might have changed during adulthood, decisions about increasing or reducing activity were seldom *ad hoc*. Major changes in participation were often linked to fluctuations in work activity such as a change of job, change of role, or onset of study. Therefore, altered priorities accounted for the changes in participation levels.

Factors that were likely to impact on the assignment of priorities included: competition, major life change and onset of a family. More intensive participation in exercise during periods of greater

prioritisation supports the suggestion that addiction is best represented by a situational and temporal model rather than a disease approach (Peele, 1985, 1995). According to Peele (1985) individuals become addicted to an experience when their lifestyle allows them opportunities and time for that addiction to develop.

Competition was especially identifiable as a factor that impacted upon the nature and intensity of exercisers' participation due to the priority that it was assigned. Competitive periods often resulted in the exercise being given higher priority and consequently, on occasions, an increased sense of dependency. This increased sense of dependency also occurred without reference to competition and this contrasts with suggestions in previous research. Cockerill & Riddington (1996), for example, suggested that a return to previous states of dependence, 'relapse', was not applicable to ED because it was unlikely that individuals would resume an exercise regime that prioritised participation over other life elements. Analysis of Chris's, Steven's and Tanya's life histories, however, indicates that these individuals have resumed more intensive regimes during later stages in life. Relapse is considered in greater detail later (p. 111). The suggestion here is that commitment to exercise remains constant throughout the life history but the priority assigned fluctuates, thereby changing the nature of the exercise behaviour.

Six of the exercisers had experienced changes in their commitment to competition and activity. Four of the 'dependent' exercisers had achieved either club, national or near elite standard. Common to their experiences of this was the intense and demanding regime that was required by their involvement at the competitive level:

... the competition ... I would say that long distance one is more addictive once you've gone ... started getting into the realms of 50, 40-60 miles a week then you are runner addict no doubt about it.

(Carl)

(Carl independently chose to use the word 'addict' in his interview. The discussion about terminology had not featured in the interview at this stage). In contrast the others, with the exception of Norman, had competed in the past but now participated on a recreational level. Norman, however, had only just started to compete in cycling at the relatively late age of 30 and Fran commented on the potential impact of this:

I know that being out in the countryside or whatever mountain biking or walking I know that that is where Norman, that's where he likes to be what he likes to be doing so if there are other elements there as well that heightens the experience and the exhilaration and the sense of the thrill say 'yeah, all the better' ... there is a growing sense of addiction in relation to the competitiveness ...

(Fran)

(Unlike Carl the use of the word 'addiction' in Fran's statement was not independent. By the time Fran made this comment she realised that dependence was key to the interview.)

The intense engagement in competitive activity, which was associated with a more addictive state, was only mentioned in relation to individual pursuits such as running and cycling. Those exercisers who had engaged in competitive team games did not make these links between competition and dependency level.

Research on ED has mainly focused on aerobic activities (see Appendix A) but there have been some exceptions such as studies that involved gym members (Matthews, 1997), golfers (Sewell, Clough & Robertshaw, 1995) and Jiu-Jitsu exercisers (Griffiths, 1997). Interestingly, despite using a range of aerobic and non-aerobic activities, individual pursuits were a central feature in all of these studies. Research on running has demonstrated a linear relationship between miles run and level of addiction (Pierce, McGowan & Lynn, 1993). Robbins & Joseph (1980) noted that time spent on the activity was crucial to the development of commitment. Therefore, it is likely that it is more difficult to become exercise dependent in team or group sport situations because the time spent on these activities is limited by their very nature (Glasser, 1976).

Moments of change, particularly those characterised by stress, were other factors that altered the priority assigned to physical activity. These times of stress were often prompted by changes to other life elements, such as changes in jobs or geographical moves, and had an impact on participation. For Chris, whose most intense period corresponded with a change of both job and a geographical move, exercise was used as a form of stress relief:

... maybe I used exercise when I first went ... as ... a form of relief because I was in such a strange environment and didn't have any friends, whereas the more enmeshed I became within the ... way of life of being a graduate student the less important ... less importance there needed to be placed on the exercise because I had other things to balance it out.

(Chris)

An association between positive moods and running has been reported by Sewell, Clough & Robertshaw (1995). It is likely that during times of stress Chris particularly enjoyed and benefited from the post exercise enhanced mood. During these times she referred to being more "obsessive" about exercise. Although other elements had changed within her life, exercise remained constant, providing stability and was given a high priority. Changes in Steven's ethnographic episodes were associated with moments of increased stress. Ivan also noted that one of Tanya's most involved exercise episodes was during a period of bereavement. Peele (1985) previously acknowledged this association between the dependency and times of stress or social pressure.

The birth of children was cited as a reason why exercise came to be given a lower priority. Two of the couples had children still living in the family home and only Carl, Bob and Tanya had children in their families at the time of the study. For Bob, the decision to marry and start a family resulted in him completely stopping rugby, which was his main activity at that time.

When Tanya was asked about her exercise she referred to a time in the past when she had been at her "peak". When asked to clarify when that peak was, she stated: "we are probably talking about before I had the children ... probably four, Karen's three and a half, so probably about four years". It was later confirmed that Tanya used to exercise on a daily basis prior to having children and that it was the children and the associated lack of time that had resulted in the change in her activity pattern.

Ivan reiterated the impact that children had on Tanya's exercise participation by stating; "she is quite active but not as active as she was before the children". He later explained this in greater detail:

The children are demanding on both of our times ... so erm the main reason I think is because of the children and being tired. You know really tired. Karen didn't sleep particularly well for a long time and it affected both of us so we both let it slip, you know a little. But then we've always been active. We've wanted to get back into it, you miss it. You miss the feeling of it and you miss the crack with the crowd. But I can't honestly think of any other reason why she stopped.

(Ivan)

The changing association with exercise throughout Tanya's life history supports the notion of a process model of dependency. This model suggests that the exerciser moves along a continuum of exercise intensity, rather than ED being an all or nothing state (Jacobs, 1990; Johnson, 1995). The evidence from the exercisers within this study indicates, however, that the progress along the continuum is not necessarily linear over the life history. Rather, the progress along the continuum is dynamic and may be either more or less intense depending on *social* rather than physical or physiological factors. When exercise is given a higher priority then intensity increases towards a dependency state. At other stages in life, exercise may be given a lower priority and, therefore, intensity may slide away from the dependency state. What these life histories indicate is that the fluctuation in intensity occurs more frequently than has previously been conceptualised.

The changes in prominence of exercise in someone's life can be likened to the concepts of lapse and relapse (Allsop & Saunders, 1989) in classical theories of drug addiction and dependence. Relapse is where drug addicts return to previous uses of a drug either temporarily or regularly after periods of non use (Griffiths, 1997). Relapse has previously been rejected in relation to ED on the grounds that individuals do not resume excessive exercising (Cockerill & Riddington, 1996). Contradictory evidence gathered from this study, however, provides some support to suggest that individuals may resume periods of intense or even excessive exercise and it is, therefore, premature to discard properties that show similarities to 'relapse'.

Although the fluctuation in exercise described by the exercisers is, in some senses similar to the concept of relapse, it could be argued that the use of the term 'relapse' is inappropriate for use in studies of ED. Relapse has been rejected in relation to eating behaviours on the grounds that the use of such a term medicalises an element of normal human functioning (Rankin, 1989). A changing pattern of exercise participation is common to many individuals who engage in physical activity (Coakley, 1993) and, therefore, could be described as an element of normal human functioning rather than a unique dimension of ED. The individuals within this study did exhibit a fluctuating association with exercise throughout their life history. At times they were dependent upon their exercise and at times they were not, so the life history was characterised by moments of change. What was interesting about the ED individuals, however, was that, even when physical activity played a less intense role within their lifestyle, exercise remained a salient element in their identity.

What emerges from the analysis of these life histories is the possibility of a construction of identity based on exercise participation. Dependent individuals use their exercise to construct their sense of self in ways that non-dependent individuals do not. An element of the 'I' is constructed through participation. At times the 'Me' may not express this identity and, therefore, at *that* moment the individual may not describe him/her self as exercise dependent. As the identity remains residual, however, exercise may resume at other moments during the life cycle.

7.5 The Construction of a Self Identity

The analysis of the data from the life histories has highlighted that a sense of social identity is at least partly constructed through participation in exercise or as Sparkes (1999 p. 20) notes "certain kinds of self in specific social contexts". Goffman (1959) noted that performance of the self was often related to the notion of role-playing. In order to play a repertoire of roles (Adler & Adler, 1989) it is possible that identity constructed through exercise has 'multiple layers' (Maguire & Stead, 1996). This mirrors trends within contemporary sociological thought which examines the personal separately from the private. There is an emphasis on bringing the private realm into the public such that issues of subjectivity, intimacy and self-identity are terrains that can be explored and mapped (Bailey, 2000). This shift allows acknowledgement that the private, subjective experience has interest and value in the same way as the objective, researched experience. The individuals within this research project constructed a major part of their public and private identity through their exercise. This sense of identity was a combination of different elements: the physical self, the critical self and the social self.

As discussed in Chapter Four Goffman's notions of the *Presentation of Self* (1959) and the *Management of Stigma* (1969) are particularly significant to this discussion. Consequently, although bodies are owned and are the property of individuals, they are defined in terms of meaning and

significance by others. Finally, the body is the conduit through which the relationship between one's self identity and social identity is constructed (Shilling, 1993).

7.5.1 The Physical Self

Shilling (1993) argues that a sense of self is understood in terms of embodied biography. He further suggests that individuals engage in a body project. Within the research interviews there is evidence of the body project and attempts to construct the idealised physical self. This suggests that the body helps the exercisers to generate meanings through their physical activity and that through their participation they are constantly displaying information as a consequence of their embodiment. The sense of self that was developed through physique and personal presentation was important to all exercisers but for different reasons. They identified it as a key criterion for motivating them to initiate and continue exercise.

As discussed in Chapter Four, Goffman (1959) argued that identity is constructed through physical interaction and the management of impressions. The importance of physical representation for the research participants is reflected in certain comments that they and their SOs viewed their bodies as an aspect of their 'self' that was within their control, for example: "... and that bothered about health and fitness, so yeah, to keep the weight off ..." (Cath); "I think she likes having muscley legs and things ... she does exercise for how she looks" (Duncan); "I will be honest vanity comes into it to a certain degree" (Nigel). The acknowledgement that the body is within one's personal control emphasises the body project, a body that can be sculpted, shaped and manipulated to present a desired image through personal effort and investment in time.

The importance placed on the physical self-presentation was evident in all Phase One interviews. All exercisers and their SOs discussed aspects of the physique and the meaning associated with the development, shaping and sculpting of the body. In some cases the meaning created through the physical presentation of self was on an individualistic level. The creation of a desired image was often related to a personal conception of what was understood by that image. 'Lean', 'trim', 'toned' and 'balanced' were descriptors used to illustrate the image sought after but the emphasis was often on a personal interpretation of the desired shape rather than one that was constructed for the benefit of others, especially SOs:

I mean have you seen cyclists legs, I mean they are like tree trunks you wouldn't do it because you want to look conventionally attractive. I mean for other cyclists perhaps they think 'wow' but most people would think 'Jesus' [laugh].

(Duncan)

... when I met him he was quite chubby I suppose, yeah it must have been important because he took some steps to lose some weight. Yeah ... I think he likes being trim now. I think he likes the fact that when he was on his bike, I think he likes his muscley legs ... I think to some extent it is important what

he looks like ... he takes pride in his appearance. He is not a slob by any means ... I don't think there is anything to do with 'I've got to look good for Fran' or anything like that [laugh] ...

(Fran)

Both Duncan and Fran reflect on their partners' physique and the importance that the construction of that physique has for only Anita and Norman. Even though this image is viewed as being personal to only their partners, Duncan acknowledges the influence of the cycling subculture in the construction of Anita's body concept.

In other cases, however, meaning was constructed through comparisons with others. The internally reflective and comparative approach to physical identity was very different from Carl's experiences. According to Tracey, his sense of physical identity was constructed by comparisons with other people:

T: He is obsessed with his physical appearance ... if he thinks he has put on a couple of pounds he will ask me. I have looked at him and thought that he looked fine.

KB: In what way will he show his interest in his weight?

T: He always knows how heavy he is ... like last night watching television and somebody said their weight ... 'lighter than me you know'. He knows how other people who have gone on, people that he works with might have gone ... on a diet over summer holidays or they might have just decided to go on one because they were ridiculously over weight ... he is interested in their progression and how they are getting on and then comparing with them ... 'heavier than me, two stone heavier than me, before' ... he compares himself with others you know ...

The relationship between exercise and the body project had an interesting bi-polar dimension. In some cases the manipulation of the body was about increasing size. Those who undertook work in the gym often emphasised the desire to shape or increase muscles, for example: "I like a balanced look. Yeah, I don't like huge chests and little thin arms you know that would look stupid" (Nigel); "... she does like getting muscle on her arm" (Duncan). In other cases the manipulation of the body was about reducing size: "I think fear of fatness is a big motivation for Chris" (Sam). The similarity between both categories was the importance of changing and controlling the body. The body project was not just undertaken on the level of desired social image but also related to an efficient, performing body. Changes were therefore made in an attempt to produce an efficient and performing body. This was expressed by exercisers as both an effective body, that can perform the activity well, and a healthy body, that will enhance physical well-being and forestall illness.

Featherstone (1982) suggested that the body was an object for display in consumer culture. The descriptions of the exercisers of their bodies and their desires to produce efficient performing bodies is similar to Featherstone's (1982) *Culture of Narcissism* (who took the term from Lasch, 1979) and the development of the performing self. Changes made to the body were also related to the impact that

such changes would have on performance. The impact of the physical body on the effectiveness of the body performance likens the body project to the 'body as machine' (Rail & Lefebvre, 1999) analogy:

... it was only when we started climbing again, a few years ago and her upper body was not very strong so her arms weren't very strong and I suspect that that is when she started doing weights, in fact, starting to keep her upper body strength.

(Duncan)

... she doesn't want to personally put on a lot of weight because she wouldn't be able to do what she wants to do.

(Ivan)

At the moment he is pissed off because he has got a really big pot belly, if he got his pot belly back and I don't think he would be pleased, I think he would feel like he had let himself down a bit and that his cycling would suffer.

(Fran)

These examples illustrate the importance of the size and shape of the body in relation to the body's performance and how the two are interrelated. This was particularly emphasised by a story told about Steven in Gavin's interview. Gavin was reflecting upon Steven's resumption of running during his early 20s and comparing Steven's physical self with his performance:

G: ... giving him stick about his weight 'Fat Boy' just to rib him ...

KB: Tell me about Fat Boy.

G: Fat Boy. I think of erm ... school boy, he just looked like a wee school boy a fat rotund school boy and a wee cap and I was looking at him ... and he said he used to do a lot of running and came second in the "Big City" marathon as a junior etc. ... 'are you sure?' ... because ... I felt he was fat for a runner, for an athlete, you wouldn't expect anybody who ran and ran and competed at the level which he did which was a high level to be that weight. You just can't do it and obviously like he didn't and he didn't and he had stopped running basically so er the fat was that part and the boy was because he looks like a boy he didn't look like a man. He didn't look his age ... he looked very much a young ... the young school boy. So that was the Fat Boy.

KB: How did he react to Fat Boy?

G: He was fine about it. He ... I think the reason Steven ... reacted the way he reacted to it is because he knew ... there was never any risk of Steven being ... getting bothered about his weight in terms of going anorexic or ... even being ... in terms of him being a runner and that at this stage he wasn't a runner and his whole physique was not of a runner ... it was ... of a Joe Bloggs someone in the street. You know a member of the public who doesn't do any sport etc... and that was Steven and he was not in any condition to be a runner and to get to run ... but he would react very well but he also realised that he was not at a racing weight or he wasn't at a weight to train to run properly ...

Gavin made a distinction between the physique of a runner and a "Joe Bloggs ... in the street". To Gavin the differences in an efficient body for performance and a non-performing body were visually

possible to determine. For Gavin the body was clearly a conduit through which self and social identity were constructed (Shilling, 1993). The relationship between the healthy body and performance was discussed by some of the older exercisers but did not seem to be a focus for the younger ones. Bob had started his participation in running during his late 50s because of a health problem. During his five years of running he had found his running to be very effective in solving his health issues. Carl justified his participation in all his forms of exercise on the grounds of health: "to keep myself healthy ... healthy mind healthy body isn't it?"

7.5.2 The Critical Self

The critical self was a sense of identity that was pre-requisites by high standards and the drive to achieve those standards. It was characterised by a fear of not fulfilling these personally set standards. This element of the self-identity was clearly evident in all exercisers including those who did not define themselves as being 'addicted' or 'dependent'. One of the features of the critical self was a sense of internal competition. Individuals would set a particular standard for themselves and want to achieve or even improve upon that standard, which would result in feelings of guilt if not achieved:

... there was a tremendous amount of self guilt ... he is very ... he sets himself extremely high standards and if he falls short of those standards he is a bit unbearable. Not just in running that's a characteristic trait ...

(Jenny)

In one particular example, Duncan identified Anita's competitive side as particularly focussed towards him. He later clarified that even though Anita was competitive with other people her main sense of competition was an internal form:

She is not only competitive with other people she is very competitive in herself as well and I think and perhaps that that is the main thing maybe it is herself that she is competing against

(Duncan)

Standards that were set were commonly referred to as being very personal rather than concerned with competition between other individuals. Tanya struggled to explain the almost contradictory nature of competition as an internal form of competition:

A: ... yeah I do like to come and feel like that I've pushed myself a bit. Like I say when ... I was a bit fitter the sprint finish ... er inwardly competitive sort of ...

KB: Inwardly competitive? ... so you with yourself ... or with each other?

A: ... I'm sort of competitive I set myself ... be honest ... I suppose I am competitive but in saying ... that I have never you know when I do these races and things I'm not too bothered about where I am in relation to where ... I'm ... I just like to do my best really

The claim that the need to achieve a particular standard was "personal" was frequently made: "it's me against me" (Chris). This personalisation of the standards could be attributed to the mainly individualistic activities in which exercisers were engaged and it could be linked to the body project mentioned previously. The sculpting, manipulation and transformation was described in relation to personal interpretation of the body beautiful. This personal interpretation of standards was, therefore, a manifestation of individuality. Consumer culture has made the body project possible and accessible to individuals by emphasising that the desired effects of youth, beauty and health can be achieved through a hard working and disciplined body (Featherstone, 1982). Morgan & Scott (1993) outlined the emphasis of individual responsibility for the establishment of health. For the individuals in this study the engagement with an individualised personal body project could have been a reaction to these societal trends in consumer culture.

The identification of a set of high personal standards resulted in the suggestion that the exercisers acknowledged they were striving for a sense of perfection. In some cases the perfection was strongly identified by the SO:

I am not as much as a perfectionist as he is ...

(Cath)

Chris is able to make adjustments and erm show compassion so is a perfectionist but is warm in that perfectionism.

(Sam)

The other thing about her is that she is a perfectionist in skiing ... not only does she want to be fit to do the skiing she also wants to be technically erm ... perfect I suppose ... so her cross country skiing is attractive skiing. I mean she is a beautiful skier

(Duncan)

The expression of the critical self can be linked to Goffman's (1968) notion of the management of stigma and how individuals may feel the stigma of being failed members of society. Therefore, the critical self constantly checks the participation and the physical self in order to prevent stigmatisation, so as to maintain success or acceptance.

7.5.3 The Social Self

The social self was a part of the identity that related to the external representation of the individual on a societal level. One of the properties of the social self was manifest through the public status that exercisers believed their participation granted them. This was especially important for the five individuals whose employment was related to physical activity:

I think again with PE I mean it's important as well you know yourself as a role model and you know I like to keep up with the kids ...

(Tanya)

I must admit truthfully that was one of my reasons for getting back into it ... because I sort of thought, people will think 'yeah, he's a runner'.

(Steven)

Both Tracey and Steven felt that their identification with their role as "a runner" was professionally important in their work within PE and sport. Although other exercisers did not have the same professional obligations they also mentioned their enhanced status experienced with friends and generally in other facets of life. Status achieved publicly is important in the presentation of self. This was noted by Summers, Machin & Sargent (1983) whose exercisers reported an enhanced social status gained through running marathons. Maguire & Stead (1996) suggested that individuals are constructed through multiple layers of identity and that sport plays an important role in embodying those layers of identity. The body is an object for display within consumer culture. Through physical representation in activities the exercisers were able to display their identity publicly and this status had marginal importance for them. The 'private' was given 'public' display.

This public status gained through participation was also reinforced by the need to participate with other people. There was clear evidence within the interviews that all individuals had identification with, and the need for relationships with, similar types of people who exercise and participate in the same activities. This was most strongly expressed by Anita who explained that most of her friends were physically active and much of the time spent together with these people focused on participating in activities at the weekend. She emphasised that: "I'm not very keen to commit my weekend time to those sorts of people" (Anita) where "those sorts of people" were essentially sedentary individuals. The significance of the choice of friendships based around physical activity was confirmed by Duncan who acknowledged:

I mean she has an awful lot of friends who are very involved in sport you know so quite a lot of them do some things but quite a lot of them do skiing as well ... I mean quite good at their sport so say we have a couple of our friends one of whom ran in the Commonwealth Games. Another ... she ran in the hurdles in the championships ... so I think that she sees herself as part of those people ...

Although both acknowledged the significance of friendship choices that included people who were active rather than sedentary, Duncan did not seem to realise that these choices were conscious ones. Anita avoiding choosing sedentary individuals as friends.

For most of the exercisers (Bob was the only exception) there was some preference and desire to be able to exercise with other people and enjoy group involvement within the exercise setting. Although all exercisers undertook considerable amounts of their participation alone, exercise with others was enjoyed. This then became more of a social activity and it helped to maintain high standards in participation. Undertaking activity with other people also enabled a public reinforcement of the

exercising self: "So you did the competitions and it was something to look forward to and it was running with other people rather than running on your own" (Carl).

Participation alone was sometimes referred to as being more serious or important whilst participation with others was considered important in a different way, for varying social reasons. In the past the choice and use of bodily peripherals were considered to be important in the presentation of self but Goffman (1959) now suggests that the *physical* presentation of self is considered to be more indicative of an individual's real character. This seemed evident with the exercisers' discussions of both the status gained from their participation and the need to undertake elements of participation with other people.

Another property of the social self was 'life essential' exercise. Exercise was at times described as being so salient to identity that it was considered to correlate with existence. Individuals often stated that, if they were unable to continue their participation, life would have little meaning. Exercise was so integral to survival that there was an implicit belief that, without it, only death or catastrophe could result:

I can't imagine not being active and not wanting to go out running.
(Tanya)

I think she would think of herself as cycling in her 70s ... she would say that if she had to stop cycling and exercise she would drop dead ...
(Duncan)

If I was to die when I was out running that would be the sort of ...
(Carl)

I would say that if we didn't exercise together our relationship would be in clear jeopardy ...
(Sam)

Much of the previous research on exercise dependence has identified the importance of the third to the fifth decade of life as critical times for the onset of the dependence process (Yates, Leehey & Shisslak, 1983). This has been linked to a suggestion that there is a connection between the exercise and the preservation of the physical body and, ultimately, life (see Chapter Three). Bodies can not only be expressions of individuality and self, but can also be constraining because of the knowledge that one day the body will not comply with the will, and this leads to eventual death (Shilling, 1993). Survival strategies are sometimes characterised by an individual as life movement options, and the assurance of survival by increasingly focusing on the maintenance of health (Bauman cited in Shilling, 1993). For the individuals within this study there was evidence that activity was essential to identity as well as essential to existence. Exercise, therefore, was a strategy for postponing the inevitable decay of the physical body. Physical activity has been explored as a means by which immortality can be achieved through the establishment of the post self (Schmitt & Leonard, 1986). Physical activity can be utilised

as an attempt to slow the onset of death by the undertaking of immortality projects (Berger, 1999). The construction of a self-identity through exercise develops a commitment to the activity. This corresponds with Stryker's (1968) notion that commitment to a role or behaviour is related to identity. The more salient the identity the more likely that individuals will perform behaviours to fulfil that identity. In addition to the construction of identity through exercise, another significant feature of the data analysis was the impact of ED on relationships.

7.6 Impact on Relationships

Interviewing different family members creates multiple accounts of family interactions and can, therefore, generate certain problems for the researcher (Song, 1998). These have been described as *allied* and *oppositional* accounts where the accounts of the family life are either confirmatory or contradictory. In this research project the accounts generated were all allied accounts, which is different from Song's research undertaken with siblings, in which she experienced both allied and oppositional accounts. The explanation of allied accounts in this research project can be considered to be twofold. First, only two family units had children within the family home. Therefore, for six family units the 'family' consisted of two adult individuals. If the relationship is a stable and happy one then it can be assumed that the accounts would be allied. Both adults have the vested interest in the success of the relationship, whereas siblings do not always have the same goals. If the relationship was not stable then there might be an expectation of oppositional accounts. Secondly, the roles held by the individuals who were interviewed were roles that held power within the family unit. The siblings in Song's (1998) research were still under the influence of the power of the adults in the family. Power differentials amongst the siblings could account for oppositional accounts.

The notion that ED negatively impacts on personal relationships has previously been suggested but has very little empirical support (Morgan, 1979; Pierce, McGowan & Lynn, 1993). The connection between participation and SO relationships has been explored, however, in relation to other forms of participation (Heinzelmann & Bagley, 1970). Interestingly the relationships within this study were comparatively long term, ranging between three and a half years to over 40 years. The interviews of exercisers and SOs were not undertaken at the same time. Exercisers were interviewed first and then their interview transcripts were used as a basis for the SO interviews. The SO accounts, therefore, acted as a form of triangulation or confirmation of the exercisers' self report data. Results indicated that both exercisers and their SOs gave a similar account of the exercise involvement, thereby verifying the exercisers' self report data.

In the relationships where both parties participated in activity together the verification was clear and unequivocal. Limitations to the verification process occurred when SOs were unable to provide specific details regarding frequency and intensity of their partner's participation. Where participation

was undertaken at work, for example, the SO was unable to provide verification because the activity was more an extension of working life than a feature of family or non working life:

He goes to the gym erm he works ... obviously he works at the gym and I know that often he will go an hour earlier to work or stay an hour later and do his training sessions ... and I think he probably does it about three maybe four times a week, erm because I know for instance that he had a week off work ... he gets twitchy so I know that it must be about three or four times a week.

(Cath)

I know that he is working but I'm sure he is exercising as well. I'm not really sure how much exercise he does.

(Tracey)

One individual expressed some doubt about confirming her partner's exercise routine because of her separation from it. Although Jenny originally confirmed Bob's extent of participation she later said: "to do whatever he does, he might go and sit in the street for all I know" in relation to his daily run. SOs who did not participate in activity with their partner expressed some caution in providing a complete, detailed verification of their partner's participation. Even though specific details could not be described, however, these SOs still painted a picture of a very active partner. They suggested that their information was generated through conversations and periods when more time was spent together such as holidays and weekends.

The relationships described in the Phase One interviews were mostly supportive and accommodating of the exercise participation. Minkler (1981) noted that exercise regimes were more likely to be successful when there was a supportive network of friends. This is in contrast to the belief that ED negatively impacts on SO relationships (Morgan, 1979; Rudy & Estok, 1990). In some cases, exercise was a central part of the relationship and was as important as time spent together:

... we eat a lot ... we watch a lot of films, we go clubbing, social activities, all those kind of things, yeah. The relationship is based on alcohol and dancing but we both do enjoy that yeah ... [exercise] is a big part of our relationship. It's a big part, yeah.

(Fran)

We met centred around exercising and running so it's been an absolutely essential part of our relationship.

(Ivan)

There was strong evidence in the interviews that the exercise participation was a celebrated part of the relationship for all couples. The relationship, therefore, *accommodated* the exerciser's participation. There was no evidence that the exercise had a negative impact on the relationship. There were times when it generated *conflict* but these instances were minor and did not seem to threaten the stability of the relationship.

7.6.1 Accommodation

Accommodation of the exercise behaviour was true for both the ED and the non ED individuals. Accommodation was offered to different degrees, such as support and interest. Support was a form of behaviour employed to encourage the exercise participation. Examples of support were participating in exercise together and watching the exercise:

I always ski tour with Duncan. (Anita)

Particularly in the summer when the nights are long I would just go and watch. (Cath)

I do all my exercise with Chris. (Sam)

We go and watch as a family if he competes. (Tracey)

Interest was demonstrated by the acknowledgement that the activity was discussed within the family unit such as "he talks about it" (Cath) and:

... it's not that I have to encourage him much anyway ... it's not that I say 'oh, how about doing this' but what I will do is kind of support provide alternatives 'oh, OK how about that place for cycling or how about this other place'... and then it takes off from there ...

(Fran)

Alternatively, interest was also demonstrated by knowledge of the exercise such as "there aren't many gyms that do decent free weights so that would annoy him more than anything ..." (Cath). In one example support of the exercise participation was enjoyed because participation created time for Duncan to enjoy his own activity:

... so on a Sunday I'm actually used to her not being here on Sunday for part of the day which gives me a chance to catch up on my work and things and read the newspapers

These results concur with research reported by Heinzelmann & Bagley (1970) and Wankel (1985) who noted that those exercisers who acknowledged spousal support were more likely to maintain exercise activity. In addition, similar qualitative research on the impact of a manager's career on the wife's life indicated that support was a significant factor in the success of the career (Corbin 1971).

The data from this study, *unlike previous research*, indicated that the research participants employed strategies of accommodation to enable maintenance of the exercise commitment within the relationship. The two strategies were 'justification' and 'sacrifice'. Justification referred to attempts to justify exercise behaviour on the grounds of appeals to self-identity, the role that the exercise played within the relationship, and that it was behaviour established before the onset of the relationship:

That's who I am.

(Anita)

She was like that when I met her so I mean I was used to that anyway.

(Duncan)

It's a part of him ... it's who he is.

(Tracey)

Sacrifice, however, referred to SOs' accounts of their accommodation of the exercise participation:

Sometimes I think that it would be nice if she was here for Sunday dinner but it's not often that that happens ...

(Duncan)

... she'll sit on the couch and our guests are sitting on the other side of the room and one of them is talking about something and I look over and she is asleep. Now that's bad ... and it's because her day is shifted forward and erm everybody else's day is on a different time table and we have to try and find friends who have the same ... erm same time schedule as that, or ... and because the day is shifted forward and ... everybody else's day is on a different timetable.

(Sam)

Although there was evidence within the data that the SOs accommodated the exercise participation, there was also evidence that reciprocal forms of accommodation of the relationship occurred. Exercisers would change exercise habits in order to accommodate new aspects of family life such as children:

... I stopped the distances, the long distances ... was when I had the children. You couldn't fit it ... Wasn't justifiable doing that ... 'I'm going for a run, I'll be back in two hours'

(Carl)

Accommodation was, therefore, a strategy used by both exercisers and SOs.

7.6.2 Conflict

Occasional negative references to the exercise regime were made in some interviews. The conflict that was expressed was minor and usually just a source of irritation. This was sometimes linked to concern about the frequency of participation. For Chris it was advice about when was an appropriate time to exercise: "Is this supposed to be healthy because I think that taking *that* time and sitting quietly would be more healthy" (Sam). For Nigel, this was concern about the impact of the participation on his physique (see Appendix I). Both Anita and Duncan referred to minor instances of conflict but Anita was the only participant who referred to Duncan's irritation: "I have been assured that I make people cycling widowers and there has been quite a bit of resentment about that on and off ..." (Anita).

Descriptions of running widows have been noted in previous research (Robbins & Joseph, 1980). Anita's description of cycling widower was not a term that Duncan used. When he was asked about this image he replied: "I wouldn't use the term widower anyway ... I can understand that, yeah". Duncan did explain the sources of his irritation in detail:

It's irritating sometimes, not that she is out cycling because that's fine erm but the bicycle is here. The bicycle gets cleaned in the lounge or on the kitchen table. The irritating thing is that she spends more time cleaning the bike than she ever does doing the housework and she will do it on the kitchen table which is a mild source of irritation, or that you traipse over and walk and step into the bike ... I used to get ang ... it irritated me but I don't do it anymore, I just think 'oh, well' ... whatever ... and the other thing is the storing of the bike actually used to get stored in here. I've got a cover for the bike and even then it is always in here.

He checked the word 'angry' and replaced it with 'irritated' which prompts further points. It may be that the word is replaced with a less intense emotion due to the public presentation of his family life, where irritation is perceived to be a more acceptable sentiment than anger. Alternatively, it may also be expected that emotions have changed over time and the original feelings of anger have been superseded by irritation as suggested by Anita's comment of "resentment ... on and off".

For Sam, the adoption of a discouraging role was a deliberate choice that was made to balance out Chris's participation: "I would be more towards the discouragement side because I do feel that Chris is a bit compulsive and I know that even if I am discouraging Chris will still do a heck of a lot". Other examples of conflict were:

I've felt you stupid person you expect me to come and find you when your ankle has given way.

(Jenny)

I mean the main thing is going out on Sundays ... is having a cup of tea and a teacake somewhere. Which you might as well have had at home as *people keep telling me*.

(Anita)

Chapter Three highlighted the potential for ED to cause conflict as a negative feature of relationships. The findings of this project indicate that although there is conflict in these relationships it is not permanent nor long lasting. The negative moments are transient.

The previous suggestion that exercise dependence affects personal relationships (Morgan, 1979) has not been fully supported by this research. The exercise participation did cause tension, and on occasion conflict, within the relationship. Except for extreme cases, however, exercisers and their SOs managed to accommodate to the exercise behaviour within their relationship, supporting the

findings of Estok and Rudy (1986). Partners in the longer-term relationships adopted strategies that allowed both parties to reconcile the exercise routine with the needs of the relationship. In some cases the participation caused no tension within the relationship at all.

One conclusion that could be drawn from this is that accommodation is actually mirrored within the exercise pattern itself. Evidence from the life histories, for example, indicated that exercise regimes reduce in both frequency and duration when the decision to start a family is taken. Not only do long-term partners employ strategies of accommodation but also exercisers adopt accommodating strategies within their exercise regime in order to maintain their relationship. One conclusion from this research project is that a SO relationship involving an individual who is dependent on their exercise will either accommodate to the exercise participation or be unsuccessful. In order to achieve a successful relationship the individual who is dependent upon exercise will also need to accommodate the relationship or family during particular moments of their life history. It is thus more likely that ED, except for extreme cases, will have a greater effect upon casual relationships, such as friends, acquaintances and colleagues, than it will on long-term relationships.

7.7 Phase Two Interview Schedule

Dependent individuals clearly identified an element of their self with their exercise. The construction of this dependent self was strongly intertwined with an identity as a 'runner', 'cyclist' or 'exerciser'. For the individuals presented within this study it was evident that their construction of self-identity was carefully linked to their participation in exercise and the importance and significance of this. As in previous research, the exercisers in this study had to participate in their activity in order to maintain their self-identity and, consequently, certain individuals learnt to "anchor their perceptions in sport" (Snyder, 1986 p 212).

Interestingly, although the sample included male and female participants, the dependency process and the construction of the self was similar. Women referred more to ED than gender as integral to their self-identity. This corresponded with the findings of Henderson, Bedini & Hecht (1994) whose participants were more inclined to base their identity on their disability than their gender. Only one female participant had small children within the family home but both Tanya and Ivan managed to protect some time for physical activity after the birth of their children. They achieved this by running alone more frequently than before and by using a grandparent to help with childcare duties. Ivan clearly valued participation in exercise and, therefore, assisted Tanya to maintain her participation.

Adler & Adler's (1989 after Hughes, 1945) notion of role repertoire and the development of the 'master status' have clear implications for the construction of the dependent self-identity. Although levels of participation fluctuated for all exercisers throughout their life histories their identities as exerciser, runner, cyclist or skier remained central to them. This maintenance of identity, therefore,

allowed the individual to either reduce or increase participation according to priorities within their lifestyle because they were confident that their core identity would remain. Although exercise levels may have fluctuated throughout their life history, the dependent self remained unchanged and was, in reality, the residual self or Adler & Adler's (1989) 'master status'. For dependent individuals although activity levels may have changed throughout their life history the dependent self remained the residual self and was allowed to emerge and re-emerge according to environmental and situational influences.

A set of Propositions emerged from the analysis of these Phase One interviews provided. They became the skeleton for Phase Two interviews. These Propositions represent a framework for a sociological understanding of ED in relation to subjective life histories (see Table 7.3).

Table 7.3 Propositions Identified from Phase One Analysis

One	An exercise dependent individual has a fluctuating association with exercise throughout their life history. This is characterised by moments of change. At times they are dependent upon exercise whereas at other times they are not. This will be determined by the priority assigned to exercise during that life episode.
Two	These moments of change are related to other life events such as change of job, career, geographic move, onset of relationship, or the birth of children.
Three	An individual who is dependent upon exercise differs from non-dependent individuals in that a salient part of their social self-identity is constructed through their exercise participation.
Four	This self-identity is a conglomerate of three different identities: the physical self, the critical self and the social self (which includes features such as 'public status' and 'life essential').
Five	Exercise dependence does not necessarily have a negative impact on a SO relationship.
Six	A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful.
Seven	An individual who is dependent upon their exercise may accommodate to the significant other relationship or family during moments of their life history and consequently change their exercise behaviour.

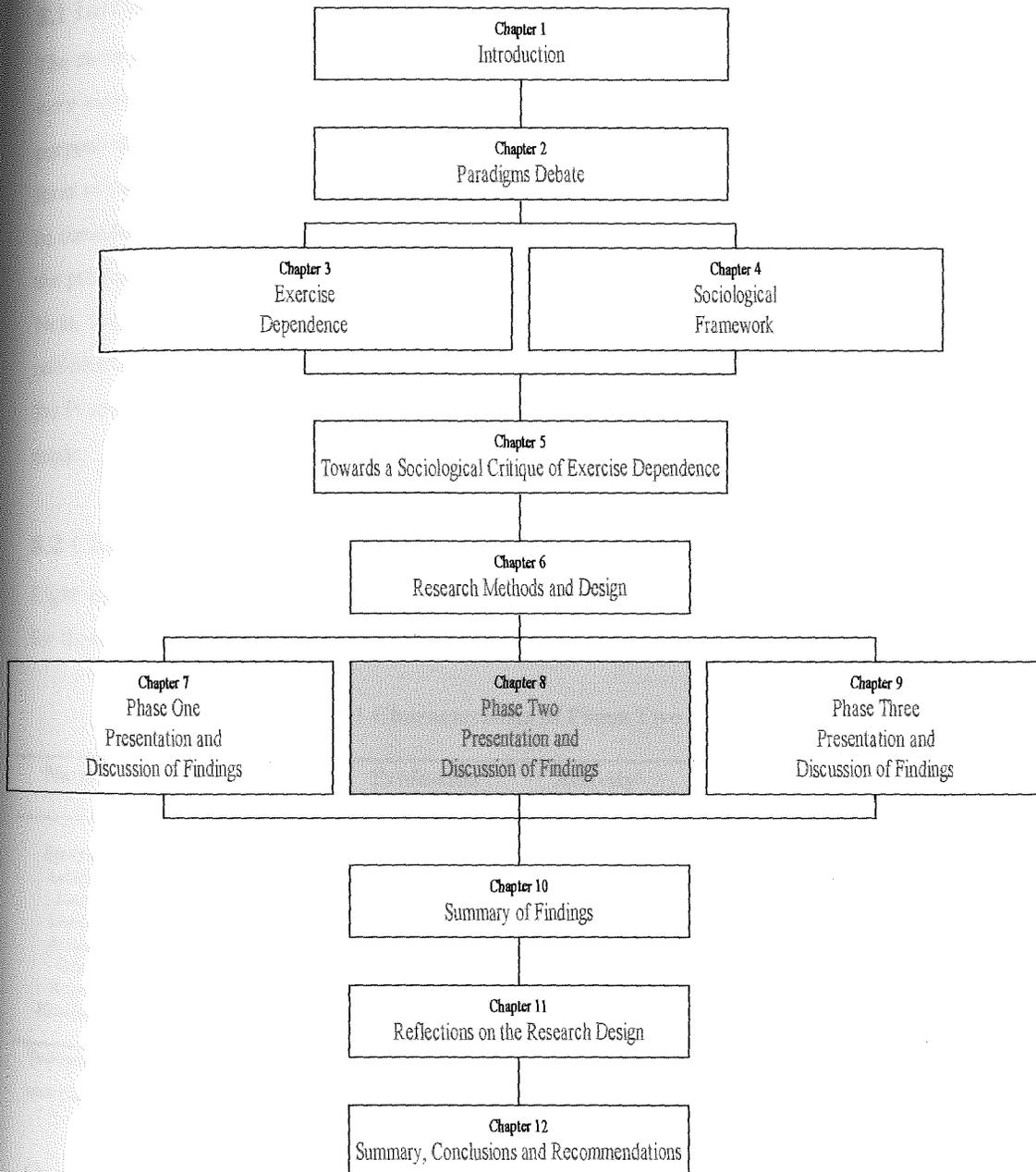
Phase Two interviews used the Phase One interview schedule plus an extension. The extension consisted of a presentation of the above Propositions that allowed the participant to comment on and discuss the authenticity of the Propositions in relation to their own life experiences.

7.8 Summary

This chapter has explored the analysis and results of the interviews undertaken in Phase One. Phase One consisted of 16 interviews of eight exercisers and their SOs. The data from these interviews were then analysed, presented and discussed. The results were discussed in relation to the changes throughout the life history, the construction of a self-identity and the impact of ED on relationships.

Seven Propositions were identified as the basis of the Phase Two interviews. Exercisers in Phase Two were asked to comment on these early findings in terms of their own subjective accounts. The results of Phase Two are presented in the next chapter.

Figure 8.1 Outline Map of the Thesis Highlighting Chapter Eight



CHAPTER EIGHT

PRESENTATION AND DISCUSSION OF FINDINGS FROM PHASE TWO

8.1 Introduction

The same sampling method as described in Chapter Six (see p. 84) was used for Phase Two. There were eight exercisers, five of whom described themselves as exercise 'addicted' or 'dependent'. The purpose of the Phase Two interview was to allow the exercisers to comment on early findings and is a form of member checking (Henderson, Bedini & Hecht, 1994). This process enabled the exercisers to be consulted and contribute to the refinement of ideas. The format of this chapter is similar to that in the previous chapter. First, the life histories are divided into ethnographic episodes and life sketches. Next, the collective life histories are analysed. Evidence to support the construction of a dependent self-identity is presented, followed by a discussion of the impact of ED on SO relationships. Finally, the Propositions are examined in the light of the findings from Phase Two and some modifications are made.

8.2 Characteristics of the Exercisers

Eight exercisers contributed to the Phase Two data collection. Table 8.1 outlines the characteristics for these individuals.

Table 8.1 Characteristics of Phase Two Exercisers

Name	Age Category	Rel ¹	Profession	Activity ²	Term Used	Contact ³
Frances	20s	No	Education	running/gym	dependence	approached
Lesley	20s	No	Leisure	triathlon	addiction/dependent	snowball
Jane	40s	Yes	Leisure/student	gym	addiction	snowball
Derek	30s	Yes	Manual	running/gym/rugby	addiction/dependent	advertisement
Arthur	50s	No	Education	gym	addiction	snowball
Dan	40s	No	Manual	gym	commitment	advertisement
Roger	40s	Yes	Professional	cycling	obligatory exercise	gatekeeper
Elizabeth	50s	Yes	Retired/Education	running/gym/swim	commitment	approached

¹Indicates whether a participant was involved in a relationship with a SO at the time of the interview. ²Indicates the most frequently undertaken form of activity. ³Indicates the method by which the exercisers were initially contacted.

One contact was made through an advertisement in a sports injuries clinic. The physiotherapist originally responded to the advertisement on behalf of one of his clients, Roger, so in this instance the physiotherapist acted as a gatekeeper. The five individuals who referred to themselves as being exercise 'addicted' or 'dependent' were Frances, Lesley, Jane, Derek and Arthur. Their life histories explore the ethnographic episodes in their exercise participation. Although Roger chose a term that is commonly associated with ED within the research field, obligatory exercise, his description of that term did not follow previously accepted definitions:

I think you have got to exercise to keep your body and to keep yourself in shape so you are obliged to do it you are not going to keep yourself in shape, give you the best chance of fitness levels by sitting in a chair and doing nothing so you are obliged to do because that's the only way you are going to keep yourself in shape.

(Roger)

Roger is categorised, therefore, with the non-ED exercisers and his ethnographic episodes are not examined but a descriptive life sketch is presented instead. For the remainder, Dan and Elizabeth, their life histories are presented as a series of descriptive life sketches. As with the previous chapter the descriptive life sketches of Dan, Elizabeth and Roger are presented in Appendix I.

8.3 Life Histories of the Exercisers

Following the format established in the previous chapter, individual exercisers' life histories are presented as either a series of ethnographic episodes or descriptive life sketches (see Appendix I) and these are then analysed collectively.

8.3.1 Ethnographic Episodes

Frances

Frances was in her mid 20s and lectured in sport. She participated in a wide range of activities including running, swimming, going to the gym and badminton. She had achieved high standards in badminton and had grown up in a family environment in which badminton was a central activity. She had always been involved in sport and physical activity since her school days but her participation had fluctuated during that time. At the time of her interview Frances was not involved in a SO relationship but had previously ended her long-term relationship with Gregory. Frances's life history was characterised by four episodes.

Episode 1: Establishing activity

Badminton was established within the family because both Frances's parents were badminton players and coaches in the sport. Frances explained that:

Mum and Dad they played badminton and we used to go down to the club every Friday night or something and they ... I don't remember, but they tell me that they used to take me down in the cot and put a net over the top so I wouldn't get hit by shuttles and things ... and then Mum used to coach on a Monday night and so when my brother and I used to get home from school we used to go with her ... and then we started playing so when I was about seven I started playing badminton and got coaching and then I just really enjoyed sport.

The extension of badminton as an activity that included the whole family had two main effects on Frances's establishment of exercise within her lifestyle. First, badminton became a salient focus for her goals and ambitions within a sporting environment. Secondly, exercise in general became an

important element of her lifestyle. After her love of badminton developed: "everything that I seemed to do was sports orientated ... playing hockey and trampolining ...".

In addition to her badminton commitments Frances played club hockey but eventually she had to choose between the sports because of the commitment required at the standard she had achieved. It was inevitable that badminton would be Frances's first choice because of the family influence:

I suppose my main sport is badminton and it was definitely ... I have been thinking about it, it was because Mum and Dad were coaches because John [brother] played as well, we were both indoctrinated into badminton [laughter].

The influence of parents' addictive behaviour has been examined in previous ED literature (Manning & Morrison, 1994) but the effect of parental encouragement has not been identified in previous ED literature.

Episode 2: Becoming a Badminton Player

During Frances's school and college years she continued to participate in badminton and reached national standard. This had two effects on her. First, she had to commit considerable amounts of time and energy to her training in order to achieve her performance goals. This was an intensive time in relation to Frances's commitment to exercise:

When I was ... playing a lot of badminton I was playing high standard of badminton, I was training. I was playing badminton every single day and I was training in the morning, before I went to school, to college. I would do a circuit session or something like that but I never ever saw that as being addictive that was because I needed to be fit to be able to play badminton and that was kind of expected by my coaches and people like that.

(Like Fran, Frances's use of 'addictive' was not independent but was triggered by a realisation of the key concept underlying the interview). The second effect was that participation at this level resulted in her being marginalised by her main friendship group. Frances's school friends did not participate in sport and consequently:

(I) associated my sports participation with things that are negative because of what things that I had experienced at college and the things like ... and none of my friends, when I was in the sixth form played sport and because I was ... I was good at sport, surprisingly it was a negative thing like. The lads were always quite supportive but the other girls were possibly quite jealous and didn't like the fact that I was good ... and so would take the piss and I suppose that stopped me. I used to limit what I could do and just so that didn't happen I would not get as involved or not do anything that I could.

The main group of friends that Frances developed during this time were, unsurprisingly, other badminton players. This reinforces Minkler's (1981) view that a network of friends is important in

the maintenance of exercise participation. If Frances had not developed friendship groups with other badminton players it is possible that she may have ceased the activity completely. She had a close group of badminton playing friends and it was through this group of people that she met her boyfriend Gregory:

... the circle of friends that I was involved with outside of my school friends were all badminton players ... and my best friend at the time, Lynsey, and I got on very well with a group of three blokes Mark was one of them and erm Gregory lodged with Mark and that's how I met him.

Frances started to achieve her desired standard in badminton at the age of 18 when other life changes were occurring.

Episode 3: The Gregory Years

Frances's relationship with Gregory lasted for approximately five and a half years. During this time her pattern of exercise changed considerably, from the extreme commitment required by national standard in one sport to a wider variety of activities at a more recreational level. Although other life events also impacted upon Frances's lifestyle during this time, such as a move away from home and the onset of degree studies, she believed that it was Gregory's influence that had most influence on her participation.

Her relationship with Gregory started just before Frances left her hometown to start University. Gregory was also physically active mainly participating in triathlon. She explained that, although their relationship had lasted for quite a long time, it was unusual in that they spent little time in each other's company. For example, they spent four and a half years of their relationship living in different cities. Despite the fact that Gregory was also physically active he was unsupportive of Frances's activities:

He was very well trained, he was a triathlete and so I would have described him as an exercise addict. He was ... he trained every day to the point of excess but with him he was hypocritical because he didn't want me to ... and I would go through the routine with me going over there at the weekend on a Sunday for Sunday dinner ... and badminton was on a Sunday night and so it meant he didn't like me to go to badminton because I would then ... that would mean that I didn't get to their house until 9 o'clock which wasn't suitable to his mum really, but ... and the dinner. Whatever, so throughout the whole relationship, I would say that I became less and less involved in sport because he didn't like ... I was limited for several reasons. One was that which seems like quite a trivial thing and it was because he was very jealous very possessive and ... didn't like the fact that I might be doing it for somebody else. Which was completely wrong because that wasn't the reason ... It was for *me*, but he could never understand that ...

Although Frances kept playing badminton during this episode she did not play club badminton and, therefore, did not play at a high competitive level. The conflict between her and Gregory became the main reason why she reduced the intensity of her activity:

I didn't play club when I was with him and ... he really didn't like, he wanted ... always used to say like 'Are you training because you want to make yourself attractive to other people?' like men. So I suppose part of me stops wanting to do that because it just causes conflict erm so I didn't train much and I only played badminton once a week.

In a different part of her interview Frances analysed her own reaction to Gregory's lack of support and obvious objection to her participation:

... whereas it became problematic within that relationship so I guess I was the one that made the compromise ... no, not even made a compromise, I just stopped doing it because it was easier. He carried on doing it and that was fine, I had to accept that. I never did have a problem with it. I just couldn't understand why he did and I didn't challenge it within the relationship which is something that I probably should have done but I guess you just get used to not doing it ...

This conflict between Frances and Gregory, caused by Frances's exercise participation, is frequently reported in previous literature but is atypical within this research project. Social constraints of traditional roles expected of women have previously been considered in relation to ED (Masters & Lambert, 1989). These authors believed, however, that these constraints may account for women's greater reporting of ED in comparison to men. Rudy & Estok (1990) and Robbins & Joseph (1980) noted that marital dissatisfaction was reported more by male partners of female runners.

Other factors in Frances's life at the time probably also had an impact on her decision to change the nature of her participation. Importantly, she had become dissatisfied with the demands of elite level performance:

I think the pressure just got too much. I was playing every day and coming straight from, getting my work done from college and going straight to training and I just felt that was it worth it? It's not worth feeling like that for a start off coming to university.

These feelings, combined with her views of a particular coach, who was unsupportive, together with the move to University, resulted in Frances downgrading the importance of badminton in her life. Life at university was an easy time to make changes to her sporting activities because the badminton club was organised on a different campus to the one on which Frances resided. In addition, she made new friends who participated in a wider range of activities:

... when I was at University as well we would just go and get in a group and when we were in halls we would just go and do things, a variety of sports because all my friends have different sporting interests. So we would just go and do everyone's sport once a week or whatever ...

It was easier to invest in the activities undertaken on campus with friends because these did not seem to interfere with her relationship with Gregory. It would have been easy to disguise these activities as part of her course requirements and she may even have concealed these activities from him. During Frances's relationship with Gregory it is clear that her exercise participation reduced considerably and she held him responsible for this.

Episode 4: A Time for Change

Frances's relationship with Gregory gradually dissolved and eventually they made the decision to part. This was a catalyst for Frances's most involved episode with exercise:

I knew that the relationship was not right or where I finally admitted it to myself because I had probably known for quite a while. Then to go and exercise was something that I had wanted to do for a long time and now I have the opportunity to do and there is not going to be any repercussions. I wasn't gonna feel guilty because I had missed going to Sunday dinner or I didn't have to explain why I was going for a run or why I wanted to do some sit-ups or that sort of stuff. It's just that it was easy and nice to do that exercise without being questioned. To get back to the way that I had been prior to that relationship.

Her participation in badminton resumed at club level and, at the time of her interview, Frances had just been asked to play at county level once again. She had begun to supplement her training with other activities including running, swimming and gym work. Frances recalled that the reason why she started training in this way was because her relationship with Gregory had dissolved giving her an opportunity to train harder:

... much as I hate to admit it ... I think that was why. Because it was a big part of my ... when I kind subconsciously realised that the relationship was going to finish that meant that I could start doing what I wanted to again without it causing conflict and it wasn't a problem in that the relationship was gonna end and I suppose that was it.

After starting a more intense training regime, however, Frances discovered that her activities brought about three additional benefits that she really enjoyed. First, she was fitter for badminton and, therefore, more effective on court and less likely to become injured. Secondly, she was able to improve her play to an elite standard. Finally, she lost weight. Although weight loss was not a primary objective it was a benefit that she particularly enjoyed:

I think there was a stage where people were saying to me 'you look too skinny'. It wasn't ... I don't train because I really want to look skinny but that was kind of a by-product and there was nothing that I could do. I wasn't making a conscious effort to look thin I was eating big meals and er that sort of thing but because I was training so much, I probably wasn't taking in the right amount of calories or whatever.

Frances maintained a strict regime that involved some form of exercise every day and, on some occasions, twice a day. Frances had another relationship that was relatively brief in comparison to the Gregory years but it had another significant impact on her exercise participation. The relationship caused Frances to feel unsupported and become very self-critical. These feelings of uncertainty were directed into her exercise participation. During this time she also felt unsettled in her working environment and consequently exercise became a method of trying to replace the stability that her life was lacking:

I was unhappy because of reasons of ... I was working a lot, I didn't feel that I was getting any support from the people that I really wanted support from ... the relationship that I was in, wasn't what I wanted and I wasn't getting anything from that particularly and that was ... I felt quite hurt about that so there were a lot of things that I felt weren't going right. And I am quite self critical, that I could just knock myself further and further down. The training was ... one environment ... the gym really was one environment where I felt I could be quite happy and I suppose in a way it was like I felt that I had taken on too much and that it was my problem that I wasn't happy and it was a way of it sounds very strange ... punishing my body or punishing myself almost of in the way that this sounds [laugh] sounds quite psychotic.

The unhappiness that Frances felt during this time seemed to contribute to a great need in her to exercise daily and to be intense and strict about that regime. This was partly to achieve the "punishment" that she described and also to change her body physically:

I think I was unhappy and felt that the only way that I could become confident again to think that I was ... filled this stereotype I suppose sort of like very waif like or very thin person and I felt that I would be more confident and I wasn't. It didn't make me any more happier and it didn't make me any more confident.

So, although weight loss was not an initial motivating factor for Frances's increased participation, it grew in importance and became a key motivator in driving the exercise. Frances became consumed by the vision of her 'performing self' (Featherstone, 1982) and the desire to change and shape this self became central to her exercise participation. This period of most intensive exercise lasted approximately six months. It was during this time that Frances referred to her participation 'addiction'.

Episode 5: Reassessing Priorities

The last episode of Frances's exercise history was a recent transition away from her period of "addiction". She described the change as occurring about three and a half months prior to her interview for this project. Two elements contributed to the change. The more weight that Frances lost, the more comments she received from those around her to take care with her excessive exercise regime. This had a negative impact on her confidence and made her question her participation: "... it made me feel less confident because people were saying, 'oh, you are skinny you will have to watch it'". She also had suffered a back injury, which resulted in a reduction of her daily routine to avoid

certain exercises, which would have been too painful. Overuse injuries have been considered in relation to ED because of the probability that increased participation may result in a greater likelihood of injury (Lyons & Cromy, 1989; Wichmann & Martin, 1992). Together, the negative comments and the back injury resulted in a change to Frances's exercise participation:

... it was a conscious decision when all those things that were happening inside were crescendoed and that was the point when I stopped training as much or as fanatically ...

Frances still participated in exercise and still trained regularly but she limited her training to only once a day and felt that she had a better perspective about it. Similar to research by Lyons & Cromy (1989) and Wichmann & Martin (1992), therefore, Frances's injury was an indicator of the excessive demands she had placed upon her body. She no longer attempted to replace lost sessions and accepted this without concern. She felt that her change of priorities gave her a healthier attitude to exercise:

... the reason why I had got the injury was because of doing too much particularly badminton. It had made me realise that it can be bad for you. I had always thought of exercise addiction or sort of becoming compulsively exercising as quite a positive addiction in the fact that it can't do you any harm. But then when you realise that that can be whether that was direct or indirect it made me have a reality check kind of ... 'I shouldn't be doing quite as much' rather ... a negative kind of addiction.

Frances engaged in the positive/negative debate about ED (Pierce, 1994) and could clearly identify with both arguments from her own life history.

Lesley

Lesley was in her mid 20s at the time of her interview. Her exercise participation had originally involved mainly tennis, in which she competed to quite a high level. She had reduced the nature and intensity of her competition, however, during her undergraduate years in order that she could complete her studies. During her mid 20s her activity had become more diverse and expanded into cycling, running, weight training and triathlons.

She was not involved in a relationship with anybody and still shared the family home with her parents and grandmother. Lesley's parents were physically active in their younger days. Her father had been a rower on a club team and her mother was a dancer, performing in shows when Lesley was growing up. Her mother was still active on a daily basis, undertaking one hour of exercise a day in her bedroom. Lesley lived within the vicinity of a tennis club and her parents had been instrumental in encouraging her to join the club at an early age. She worked in a local gym as a personal trainer. Lesley's life was characterised by four episodes.

Episode 1: Establishing Activity

Lesley had been a member of many school teams, including netball and hockey, when she decided to join the local tennis club. She was encouraged to join the club by both her parents and her PE teacher. In her early teens she also participated in dancing and maintained links with the netball and hockey teams at school. Eventually, however, she discovered that she could not keep up the commitment required by all of these activities and her love of team sports resulted her dropping the dance lessons:

Yeah, because I got onto the school team and we had matches. So I mean we used to have matches after school but, I mean, I couldn't do that and then come back because I would have missed the dance lesson. They used to start half past six I think something like that. So yeah, I think being on a team you sort of think, 'oh, this is good, being on a school team' quite good sort of thing.

She maintained her commitments to the hockey and tennis teams until eventually achieving county standard in both sports. At this level, however, she was unable to satisfy the commitment and requirements for the two teams and, like Frances, found herself having to make a choice. She chose tennis in favour of hockey because: "I was playing in different tournaments. So I kind of liked that because you got to travel. So I liked travelling round different tournaments". Lesley's participation in tennis was particularly successful with her achieving national standard at the age of 16. Lesley continued her participation in tennis throughout her adult life and her commitment to the sport established physical activity as a major element of her lifestyle.

Episode 2: The Competitive Years

The establishment of physical activity as a major element in her lifestyle influenced Lesley's original decision to move away to university and study sports science. This plan was changed when she realised that it was possible to use her standard of playing to gain a sports scholarship to the USA. She spent a total of six years combining the requirements of her tennis squad with the demands of her degree course:

... when I was in America because I really got into the ... well out there well my game improved a lot out there a) you've got the weather plus the facilities are better than over here for tennis ... it's a bit clubby sometimes you know and my game improved a lot and the Americans go over the top on everything anyway they had team tracksuits, sponsors Wilson, and tennis rackets and you sort of really get into it. You think Steffi Graff [laugh].

Part of the attraction of the scholarship in the United States was the opportunity to visit other parts of the country by playing in tournaments and matches: "... because you got the opportunity to travel and it's always good to travel just to get the experience sort of thing".

Lesley's university was not on the mainland and, therefore, any competition involved longer periods of travel. This often resulted in an absence of two weeks. During the last year of the degree course she felt that these frequent absences were interfering with her academic progress and she made the decision to sacrifice tennis in order to complete her studies:

... so I had to stop the tennis and I thought I've had enough now. You get a little bit burnt out and er I thought I will just concentrate on my degree here ... It wasn't until the last year that I quit the team.

Like Steven in Phase One, Lesley made a decision to prioritise her work in favour of her tennis (Robbins & Joseph, 1980). The decision to leave the tennis squad and concentrate on completing her degree resulted in Lesley entering a new episode.

Episode 3: Changes

Although the work required by the degree had become a higher priority for Lesley, she still maintained physical activity within her lifestyle. She replaced intense tennis participation with aerobics and roller blading:

So I would put my music on and roller blade ... there was like a big circle round the campus ... I would do that for about an hour because I would really get into the music ... and you get your exercise sort of thing you know ... and then I got into aerobics and I enjoyed that because it was all music stuff so like you are not really exercising because you are getting into the music.

As she completed her studies, Lesley felt the need to be professionally involved in some form of physical activity. She considered, and tried, a variety of opportunities including tennis coaching and aerobics instructing, in addition to a non-active position in English teaching, but was dissatisfied with all of these. Eventually, she made the decision to supplement her coaching with the role of personal trainer:

... now I am working in the gym so I have found what I like doing. A) because it is something I am interested in. Afterwards I get to use the gyms free of charge and that's pretty good because that sorts out my training ... and yeah it's not very stressful getting up ... didn't want to get into like a stressful job if I could help it.

The move into professional personal training impacted on Lesley's own training because of the accessibility that the job granted and also her desire to be an appropriate role model:

Probably mainly got into doing more exercise too because my job you've got to like ... look fairly fit too so that when other people come in the gym you sort of think 'ooooh if I can work I can look like that' or whatever you know. If you look all fat and over weight they probably think 'oh, what's she doing here?' But then keeps you going too. Sort of thing.

It was clear that Lesley's role and the presentation of her physical trained self was an important factor driving her exercise participation.

Episode 4: Becoming a Triathlete

Lesley's decision to start participating in triathlons coincided with her decision to become a trainer and occurred approximately one year prior to the interview. This led to her undertaking an intense regime of activity that involved participation on a daily basis. She combined running, swimming, yoga, cycling and gym sessions throughout the week. The sessions in the gym were usually completed after she had finished her shift at work and most activities were undertaken three times a week. Her weekly rest day from physical activity involved a yoga routine.

Lesley's first competitive triathlon event was an illuminating experience because she expected to be more successful than she was:

... and I realised from doing that one you think, 'oh, god' because I am sort of competitive like. I like to not come last, I like to do sort of fairly well sort of thing, because I am quite competitive with the tennis sort of thing ... I think from doing that, anything I do, I want to do it well. As well as I can sort of thing, you know. So I think since doing that triathlon, I think, 'oh, I must do a bit more training sort of thing' you know and I just started doing it from there sort of thing and I guess it has just become a routine now so ...

After her first event, Lesley competed in triathlons during the short season from April to September. She participated in sprint distance triathlons and hoped, at some point in the near future, to undertake an Olympic distance triathlon.

Jane

Jane was in her early 40s at the time of her interview and her main participation involved gym work. She had grown up in a "sporty" family in which both parents had participated. She had competed in bodybuilding for many years but had eventually decided to cease the competitive element and continued just at a recreational level. She had been encouraged to participate in bodybuilding by her father who had also been a serious competitor. Jane and her brother had started this activity during their late teenage years and her brother still competed. She lived with her second husband and her two children. Jane and her husband had been married for about six years.

Jane's husband was not active and lived a very sedentary lifestyle. Jane had been a personal trainer but did not have any clients at the time of the interview. She had recently made the decision to return to college and had embarked on a sports studies degree programme at a local college. Jane's life history was characterised by three episodes.

Episode 1: Establishing Activity

Jane was active from an early age and was involved in the school teams and clubs. She was encouraged into activity by her mother and father who were a badminton player and body builder respectively: "... so we have always been in a sporty environment although not competitive sport ... and ... Dad said it's our family's need to want to be well and fit." At the time of the interview, Jane's parents were 63 years old and still participating in aerobics and body building.

Jane was supported by a sporting family environment and enjoyed participating in activity. Jane was a member of the school netball and hockey teams, achieving county standard at hockey during her mid teens. This enjoyment and support established activity as an element of the lifestyle, just prior to her only sedentary period.

Episode 2: Weight Gain

Jane stopped participating in most activities when she left school. Reasons attributed to a short period of non-participation, between the ages of 16 and 19, were leaving school, ill health and a related increase in weight. This occurred at a "very nasty time in my life really sort of 16 ... something like that. Puberty ... boys ... age".

Episode 3: Being a Body Builder

During Jane's late teens she lost the weight that she had gained three years earlier. This resulted in Jane being very slim but having "no shape". Her father, the body builder, encouraged both Jane and her younger brother to start using weights in order to make changes to their lives:

Paul's 18 months younger than me. We both started on the weights roughly about the same time of our lives really. He was very, very thin and I think he had one or two dust ups when he was younger and thought like, 'right, I'm not going to be duffed up any more' and I think that's how he progressed.

I had lost all my tone with the weight. I mean you could see my tone when I had got all my weight on but I was just ... you could see the tone in my body but most of it had gone and that's how it started really ...

From the age of 19 until the day of the interview Jane had continued weight training, body building and gym work. She described that the development of her training regime was not a gradual process but rather she had trained at a very similar intensity from the onset:

I don't mess about, I either train or I don't. I don't very often have bad training days not very very often at all I would have to be ... I know when I shouldn't train and I know when I should train and I might make a few mistakes but I don't normally make mistakes, don't normally make mistakes about when I should train and when I shouldn't train.

During the 20 years of training she had undergone a brief spell as a competitive body builder. After 18 years of training she had decided to enter competitions it took two years to achieve "competitive form". This required dieting and reshaping her body. This clearly corresponds with Featherstone's (1982) shaping of the performing self. It was important to Jane to physically represent herself in a particular way and this representation was a mechanism by which she shaped meaning and her identity.

Despite her reduction from a competitive regime to a recreational regime Jane viewed her exercise involvement as setting her apart from other people. She described herself as "not normal":

J: I don't class myself as a normal person as far as exercise and eating even now. I try not to eat ...

KB: In what way would you describe yourself as not a normal person?

J: Because I eat, live exercise really. Not because I eat live exercise really, not because, because its healthy, I have to say competitive body building isn't healthy I think ... then it depends what you call a normal person really. I call a normal person someone who drinks now and again, smokes now and again and doesn't really do any exercise. I class that as a normal person ... but that's how I class a normal, but a friend of mine over the road Alison she goes to the gym, maybe now and again. She goes out for a drink, they eat rubbish, to a certain extent, what I call rubbish erm and I class that as normal and I don't think I am normal. My husband is fairly normal [laugh] my kids, I wouldn't think that they are normal kids either, because how I live is how they live.

Jane regretted that she had not worked professionally in the area of sport or physical activity. Although she described herself as a qualified personal trainer she did not have any clients. She wished that she had been a PE teacher but felt that it was too late for her to train to become one. At the time of the interview she had recently started a degree programme in sports studies and business and believed that this would provide professional opportunities and a way of combining her interests with a need to support the family.

Derek

Derek was in his early 30s and his main activities were running, gym work and rugby. He was a tool maker and lived with his wife, Mary. Their relationship had been ongoing for approximately 10 years and they had a small son (aged approximately five years old). Derek described his life as always active although he had not grown up in a family environment. He was brought up in a children's home and was encouraged to be active during this time. He started running during his late teens, competed at club level and still ran to maintain fitness levels for his participation in rugby.

His wife was sedentary at the onset of their marriage but she was fully involved in exercise at the time of the interview. He described this change as a result of his influence:

I started her running you know like ... when I first got Mary out for a run she couldn't walk. She run from here to the tree outside and she was wheezing her head off. Bright red in the face and now her could, well we regularly do 10k runs together you know these little ... runs and things like that. We do them together.

Well, I have been very manipulative you see because when I met Mary she never did a day of exercise in her life. She was one of those girls who if her could bunk off PE her would, sick notes every time. Now I manipulated her into becoming an exercise freak herself and she now is very much so ... I have basically turned her into being like that and now I've got a woman who because she is like it herself, she understands me.

Their son was also encouraged to be active and had been to the gym with his father on the day of the interview. Derek's life history was characterised by four episodes.

Episode 1: Establishing Activity

Derek described his early life as consisting of long periods of time playing football in the streets of a city. At the age of 10 he was sent to live in a children's home and "the staff in the homes were very sport motivated". They participated in many physical activities and Derek was encouraged to join a local Sunday League football team. This established activity as part of his lifestyle and he extended the league football to include school football, cricket and, eventually, Saturday League football.

Upon leaving school at the age of 16 Derek started an apprenticeship with a local firm. As part of this he was contractually required to participate in a range of physical activities. This included two hours of training every morning and two evenings spent in the leisure centre playing games or swimming. By his late teenage years Derek was fully adjusted to physical activity on a daily basis.

Episode 2: Contradiction

The episode of contradiction in Derek's life occurred between the ages of 16 and 19. During this time period he described his level of participation as "you tend to sort of ... lose ... not lose interest but tail off a little bit between the ages of 16 and 19 and then it picks back up again". When he was asked to account for his different attitude during this time he explained:

I think a lot of it was because as an apprentice we were forced to. We had to do it because if we didn't do it we would get sacked, young lad you rebel! I think that was a lot of it. We actually had, I remember, we had lecture theatres at the training school and as I say between the ages of 18-20, no it was probably 16-19, but we had lecture theatres then and there were 30 of us apprenticeships and we had a sit in the one night because we thought it was terrible of them forcing us to go swimming in our own time. Forcing us to go to "Midlands Town" centre. I would give my right arm now to be forced to do something like that ... To go to work and to be forced to do that for the first two hours every morning. Brilliant! Wonderful! You know I mean?

It could be accepted that, even though Derek was physically active on a daily basis during this time, his enthusiasm diminished because of the coercive nature of his work environment in promoting physical activity. The contradiction arises from his onset of running during this time.

Derek's factory placement at the age of 18 resulted in him being introduced to a group of runners and the establishment of running as part of his weekly routine. He ran with the running group at lunch times, used running as a means of transportation to and from work and started running competitively for "City" Harriers. At the age of 18 he was running approximately 60-70 miles a week.

The age of 18 was, therefore, clearly a transition year. During the years between 16 and 17 Derek lost his intrinsic motivation for participation because of the forced schedule. His enthusiasm returned quickly, however, once he started a new activity that was personally chosen.

Episode 3 Being a Rugby Player

Derek had been a league football player since he was a schoolboy and still enjoyed being a member of the club in his late teens. It was through his teammates that he became introduced to the sport of rugby:

... the chaps who I play football with on a Sunday they play rugby on a Saturday and I was brought up totally football, I didn't touch a rugby ball until I was about 18 and erm ... I was in the back of the car once and they were talking about rugby and they suddenly turned round and thought 'yeah'. They turned round and looked at me still they were talking about rugby and there's me not taking the blind bit of notice and then they know they said "How do you fancy coming and having a game of rugby?" and I have just never looked back.

He had been playing rugby for approximately 15 years and had played county standard in the last three seasons. He had also moved to a semi-professional club in a nearby city but maintained that it was not a move that was related to money: "we haven't got two half pennies to rub together".

Episode 4: A Total Way of Life

In addition to his rugby commitments Derek undertook running and weight training. He commented in his interview that his enthusiasm for rugby had recently begun to wane slightly:

It tailed off I wasn't training as hard as I felt I should have been. I wasn't running as far as I should have run or as fast as I should have run. But I think part of that was because I had joined a club with a high standard of rugby the training was that hard, the training on a Tuesday and a Thursday as well as playing on a Saturday, that ... You can train you can get to a point where ... you train that hard that ... you tend ... the enjoyment goes out of it. You know what I mean? ... and you probably ... not my interest but the enthusiasm does wane a little bit but I think that's purely the rugby but because my enthusiasm did wane with that ... I just felt more determined to go down to the gym more, yeah.

He had started weight training for aesthetic reasons: "if you look good, you feel good". He described both his weight training and his running as a habit that was "as hard to kick as smoking". In his description of his activities, his routine and his participation, however, he explained that it was "a total way of life":

It's ... it's just a way of life for me, sport is a way of life for me. Physical activity it's a way of life and it always has been it has never been any different since an early age.

For Derek his participation clearly provided an identity that he has maintained from an early age.

Arthur

Arthur was in his early 50s at the time of the interview. He taught in a residential special school but had not entered teaching from a traditional qualification route. He had grown up in a family in which his father and older brother participated in sport but he did not feel particularly encouraged to participate in sport by his upbringing: "I was brought up with ... you've got to have a job rather than going into sport you know. Sport was like a social type thing". As a younger man his exercise participation was focused upon rugby, in which he had achieved a high standard. He no longer played at the local club but did engage in club life through coaching and first team support duties.

Arthur had been married twice and, through his second marriage, had two sons. At the time of the interview he lived alone and combined working, exercise and fatherhood throughout the week. He was required to assume residential night time duties during the week. Arthur's life was characterised by four episodes.

Episode 1: Establishing Activity

Growing up as a child Arthur was not exposed to activity through his family life. His father had been a footballer and cricketer but he was described as "a lot older" and, therefore, Arthur "never actually saw my Dad do any sport at all". Arthur was introduced to rugby when he was about 12. His first experiences in rugby were instrumental in establishing a pattern of continuation:

I mean rugby has been my main thing ... when I was at school I got into a bit of trouble and to get out of doing the lines they said can you come and play on the house team. So I played and I got knocked about and I swore from that day to this that it would never happen again, so I took it up, in games you see and I started carrying on and I got better and better and that's how I started really. I was a bit of a lad at school.

He also represented the school in field events in athletics but it was rugby that became the activity that he most enjoyed and continued with after leaving school.

Arthur joined the rugby club when he was about 16 or 17. He very quickly achieved county standard and close to National standard. The 'National' standard team that Arthur played in was not technically an England squad. Arthur explained this as was due to the fact that the county of Cornwall was not represented in the squad:

... the reason why it wasn't England because Cornwall wouldn't come into it. But the following year they came and it was an England side then ... that was England to me as far as I was concerned.

Despite the fact that the squad Arthur played for had not technically been an England squad, Arthur developed his own meaning and interpretation of 'National' representation (Blumer, 1969).

It was Arthur's affiliation with rugby that established physical activity as an essential element within his lifestyle. Arthur's participation in rugby also gave him a channelled outlet for his aggression and frustration. He recalled that, during his school years, he was "a bit of a difficult lad when I was at school and I used to be very streetwise at the time".

Episode 2: Being a Rugby Player

Arthur was a very dedicated rugby player between the ages of 17 and 49. He had stayed at the same club during his playing career but there had been two instances when he considered moving to different clubs. These two instances seemed to be the only examples of regret that he expressed regarding his rugby career. One occurred when he was offered a professional position in a league club but, at the time, this suggestion caused conflict between Arthur and his wife and he did not move clubs:

... we had a bit of an argument once because I could have gone to play rugby league professionally and ... she said it wouldn't be the same and we had a bit of an argument over it and in the end I didn't go in for it. It would have been nice to have got paid for doing something that you enjoyed you see. When I look back that's the wrong thing not to have gone ...

Interestingly, if Arthur had become a professional rugby player he would not, according to researchers, have been subject to the same ED processes. The other occasion involved moving to a club on the other side of a local city and Arthur tried to make the change but did not succeed:

I was asked to go to "New Rugby Club". I went training a couple of times but because I was working I couldn't make the training times and it wasn't working out so I came back to "Old Rugby Club". But I was asked three seasons on the trot to go and train there ... but looking back I wish that I had gone and pushed it, I mean today if you go to another club, they'll ... I mean it's ... some of them offer to buy these cars and things don't they? ... to get them there. I mean nowadays ... I was working on a building site at the time and I didn't finish till about seven, well the training session started at seven by the time ... I wasn't driving as well by the time. I had taken two buses ... you know half over with so that didn't work out really. But in those days that's the way it was, your job came first.

Robbins & Joseph (1980) explored whether runners self identified as 'worker' or 'runner'. They found that identification as runner over worker was related to level of commitment. They also acknowledged, however, that younger people tended to have higher expectations of work than older people. Therefore, although Arthur was highly committed to his rugby playing it does not seem unreasonable that he would sacrifice some aspects in favour of work.

When asked why he played rugby Arthur's answer was simple "I enjoyed it". He qualified this with an explanation that he enjoyed the game, the teamwork and the camaraderie. During his playing career Arthur started participating in fitness training. He started to run to provide him with more stamina for the second half of the game and he started to lift weights to boost his strength. When both of these activities were started they were related to his rugby playing but, at his peak, he was running about 48 miles a week and bench pressing 135 kilograms. When Arthur's playing career came to an end he continued his links with the club through coaching and line work.

Episode 3: Injury

Arthur's playing career came to a sudden end through two back injuries. The first injury occurred in 1988. It had to be surgically repaired and took two years for recovery and recuperation. Arthur was unable to work for that time but eventually returned to the club and started to play once more. In 1997, however, a second injury was to result in Arthur's absence from playing and work for 15 months. It was during this second injury that he made the decision that it was "time to pack it in". Throughout this period Arthur maintained links with the club through social contacts and other roles when possible.

Episode 4: Continuing Activity

After he was fully recovered from the injuries Arthur simply replaced his rugby participation by emphasising his other activities. He was unable to run or continue with weight lifting so he started swimming, cardiovascular work and circuits in the gym. In addition to his exercise, Arthur maintained his links with the rugby club:

... it's something that I can't explain ... just I get drawn into the game ... I really enjoy the game you know and the people that are in the game I enjoy their company. I miss playing, I miss ... I mean you used to come off after a game and you used to talk to your mates about how you'd played and that's the side I miss really. But I still talk about the game to the lads that have played and you know ...

Arthur's exercise pattern seemed to be an attempt to replace what he had lost by the cessation of his rugby playing. When asked why he undertook his exercise he replied:

Well because of the injuries that I have had, I have said to myself ... because when I had my back operated on I never thought I would walk again and my attitude was not to give in and I knew that the only way to stay supple and

strong is to keep exercising ... and I do it ... as I said before I do get a little bit down if I don't exercise I start thinking 'oh, I ought to go out and exercise'.

At the time of the interview he was participating almost every day but the shift work associated with the residential school, where he worked, sometimes made that difficult. After the interview had finished Arthur talked openly about the interview process. He explained that he found it very cathartic and that he had not analysed the specific role that exercise had played in his life before. Cathartic experiences gained through the interview process have been previously acknowledged (Corbin, 1971; Whyte, 1991; Gurney, 1995) and Arthur reflected upon a perception of his life story that he had not considered before.

8.4 Analysis of the Life Histories (Propositions One and Two)

The analysis of the life histories in Phase One identified three features that were presented in Propositions One and Two (see Chapter Seven p. 106 and 126):

1. a fluctuating attitude to exercise throughout the life history;
2. referral to a previous time as being more dependent or addicted. Throughout their life histories there were times when the exercisers may have been dependent and times when they may not have been;
3. the relationship to exercise changed according to priorities assigned to exercise in relation to other life elements such as job, career, moving, relationships and onset of family.

These three features are explored with reference to the life histories presented in Phase Two. The analysis concludes with an examination of Propositions One and Two.

Exploration of the ethnographic episodes for Frances, Lesley, Jane, Derek and Arthur further supported the notion of a fluctuating relationship with exercise throughout the life history, as described in the previous chapter (see Chapter Seven p. 106). A pattern emerged from the Phase One life histories of an increasingly intense relationship to exercise followed by a decrease and then a plateau. For some individuals, Chris, Steven, Jane and Frances, there was then evidence of further increase(s) after the plateau. What is unclear from the life histories is whether the pattern of change is sudden and dramatic or whether the pattern is more sustained. This is represented in Figure 8.2.

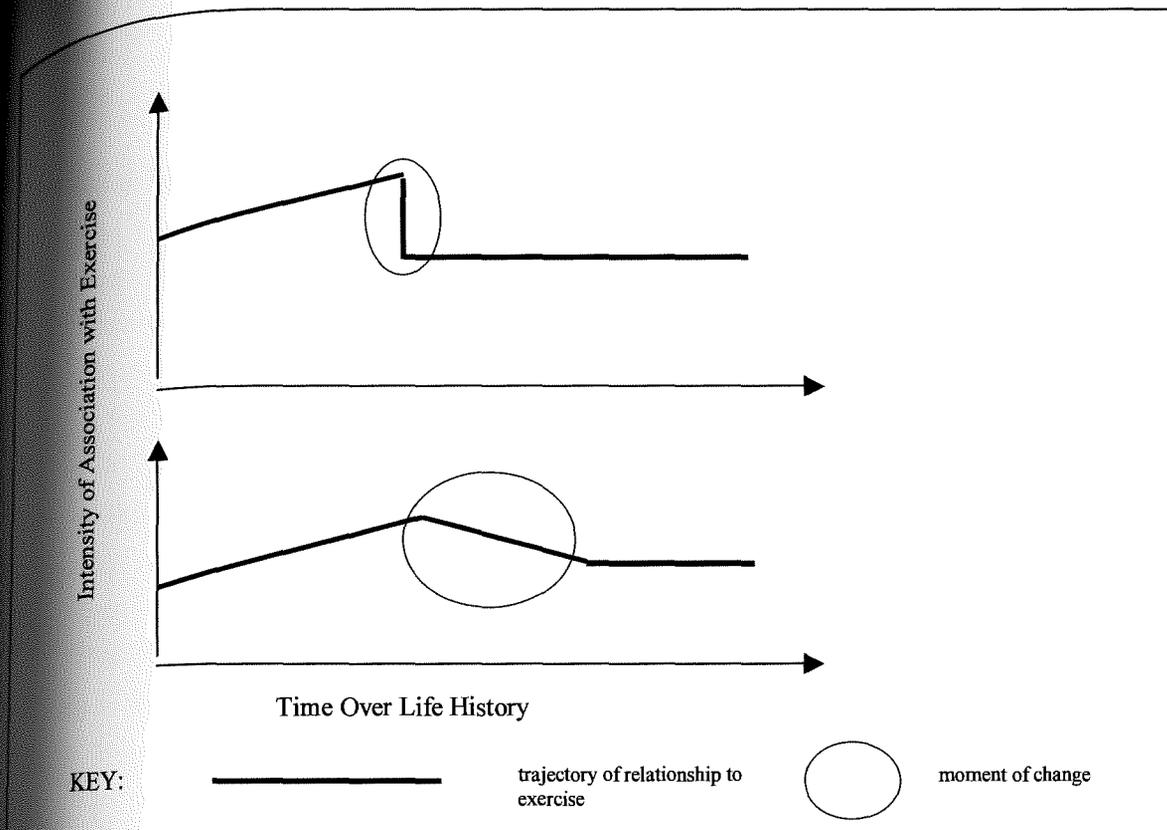


Figure 8.2 Fluctuating Association with Exercise

Figure 8.2 represents both a sudden and dramatic change in the top line and a more sustained change in the bottom line. Although the events described in the life histories are often sudden and dramatic themselves, such as injury, birth of children, house or job moves, the responses to those events are not necessarily sudden. Both Frances and Arthur mentioned the impact of injury and, for Arthur particularly, this had a dramatic effect on his participation:

I have got to the age now where I think I have got a bit of common sense and I don't want to push it to the limit where I go back into hospital again
Arthur

For others, however, the change seemed to be more sustained in nature:

So I have had a couple of serious accidents where I've had physios helping me to improve and I have actually managed to work through it ... I have always been lucky enough to push to the next level and I know that if they had said, 'right, now you've got to take a week off' I would have found that really hard.
Anita

Sort of too old to compete properly now and she doesn't have the time ...
David

Yeah, just the lack of time [with reference to children] ... we tried to do

walking and things with the children ... it is now really, you know, time and finding the time to fit it in with the children.

Tanya

The processes of how individuals move into and out of states of ED have not been documented in previous research. Phase One data analysis highlighted that exercisers referred to a time in their past when they were more 'addicted' or 'dependent'. The same pattern was not mirrored exactly in Phase Two exercisers. Frances and Lesley commented on this feature in their past, for example: "I think I've slowed down a little bit but I did go a bit crazy I think" (Lesley) but it was slightly different for the remainder. For all exercisers, however, there was a distinct shift away from competitive activity which corresponds with a change of intensity e.g. Frances stopped playing club badminton, Lesley stopped playing tennis, Jane stopped body building competitively, Derek put more emphasis on his other activities rather than rugby and Arthur stopped playing rugby altogether. Some individuals viewed their dependence or addiction as being more constant throughout their life history. Jane, Derek and Arthur did not refer to a time in their past when they were more 'dependent' or 'addicted'. It is possible that these individuals may not have yet experienced the crescendo and diminishing effect. It does provide evidence, however, that the sense of dependency is not entwined totally with competition.

Individuals' adherence history was explored in Phase One as a potential explanation for the changing association with exercise throughout the life history. The exercisers in Phase Two also had relatively long histories in relation to intense exercise. The pattern of participating from childhood through adulthood emerged again. Two exercisers were still in their 20s but four were above 40 and two were above 50. Within the ethnographic episodes the same pattern emerged. All individuals who described themselves as 'addicted' or 'dependent' had started activity in their early childhood and maintained participation until the time of the interview. This was the same for those who described themselves as being 'committed' or 'obligatory' exercisers. For these individuals, school was a central institution, which encouraged participation in physical activity. Other influential factors were family members. Although the importance of social support in the *maintenance* of exercise has been documented outside of the ED literature this has not been featured within the ED literature. Rather there has been an emphasis on the *negative impact* that exercise has on relationships. The only exception to this pattern was Elizabeth who did not establish activity at an early age and only started swimming at a relatively late age. Elizabeth obviously did not follow this pattern because she was not active as a child or young person. Once she had started her activity, however, she maintained participation for 20 years.

From Phase One the suggestion emerged that patterns of participation were established in early adulthood resulting in a narrowing of the number of activities undertaken. The reduced number of activities then became the focus for participation during adulthood. The life histories from Phase Two support this, examples being Lesley's focus on tennis, Roger's focus on cycling and Arthur and

Derek's foci on rugby. In addition, it is evident that the exercise pattern changed again in later life. Activities became more diverse and individuals often participated in a larger number of activities than they had done in their early adult life. Table 8.2 indicates the diversification of activities as undertaken by Phase Two exercisers.

Table 8.2 Diversification of Phase Two Exercisers' Activities

Name	Initial Activity	Additional Activities
Frances	badminton	running, swimming, gym
Lesley	tennis	running, swimming, gym, cycling, triathlons
Jane	gym	body building, gym
Derek	rugby	running, gym
Arthur	rugby	running, swimming, gym
Dan	football	running, martial arts, gym
Roger	cycling	squash, skiing, gym
Elizabeth	swimming	running, gym

It can be seen that all exercisers expanded their repertoire of activities in later adulthood. So the pattern of adulthood participation seems to expand again in later life after the initial narrowing. This is in contrast to Veale's (1995) proposition that ED individuals narrow their repertoire of activities, a conclusion possibly drawn due to the lack of life history narratives.

The reasons why individuals started to undertake different activities appear to be individualistic. Frances experienced a time of stress and wanted to improve her fitness for badminton; Lesley stopped playing tennis and wanted to replace it with some other activity; Dan was inspired by a social milieu; Roger stopped cycling and wanted to find alternatives; Derek and Arthur started to improve their efficiency on the rugby pitch and Elizabeth wanted to become fitter. What appears to be common to all is their perception that stopping one activity and not replacing it with another did not seem to be an option. It is possible that all these exercisers had established an identity based on exercise and physical activity generally rather than on a specific sport or activity. Physical activity was thus an ingrained and essential element of their lifestyles. This corresponds with the findings of Gauvin & Szabo (1992) who noted that the range of activities in their sample suggested that addiction was not necessarily specific to one activity.

Phase One interviews indicated that the changes in the nature and intensity of exercise were often linked to the priority that exercisers assigned to exercise. Priorities identified from Phase One, which resulted in changes in the nature of participation, were competition, stress and children. All the exercisers from Phase Two who described themselves as being exercise 'addicted' or 'dependent' had a competitive element in their exercise participation. There was no evidence in any Phase Two interview, however, that the competitive time corresponded exclusively with the time associated with exercise addiction or dependence. For Frances, her description of the addiction was quite separate

and not linked to her competitive performance at all. It was her participation in gym, swimming and running that she described as "addiction" whereas her competition was derived from playing badminton. For other games players, Derek made no distinction between his rugby and the other activities in terms of his addiction. For Arthur, at the time of the interview, he was no longer playing rugby and, therefore, his description of himself was more closely associated with his other activities. It cannot be concluded, however, that he did not have the same self-perception when he was playing rugby. Therefore, although a competitive element is a common feature in the life histories of exercise dependent individuals, the competitive period does not always correspond with a perceived addiction or dependence. What seems more consistent here is the *need* for competition within the individual and their lifestyle.

Times of change characterised by stress were evident in Frances's life history. In one case she increased the amount of exercise because of the breakdown of a relationship: "that was kind of a big part of my life that was ... so ... to replace it I suppose with going to the gym". The extra training brought benefits on the badminton court and her improved performance helped Frances to feel better about herself. Frances made another link between increased participation and dissatisfaction with a relationship: "I was unhappy because of reasons of ... I was working a lot, I didn't feel that I was getting any support from the people that I really wanted support from, erm the relationship that I was in ...". Clearly for Frances, therefore, the changes in her exercise participation were strongly linked to times of stress, especially that associated with relationships. Although this feature was very strong in Phase One this link was not evident in any other Phase Two exercisers.

The association between the birth of a child and change in exercise participation was difficult to explore in Phase Two. Only three exercisers had children still living within the family home: Derek, Roger and Jane. Elizabeth had a mature daughter and her participation had begun after her daughter had become an adult. Roger's child was a new born baby and, therefore, it was difficult for him to assess the impact that the child would have on his cycling. The impact of motherhood on Jane's participation was diverse. She explained that she had continued to train during both pregnancies. Her competitive years were undertaken after she had the children and during those competitive years she "spent a lot more time in the gym" but also said "although it didn't actually change the way I trained you did have to work harder". She emphasised in her interview, however, that she disliked leaving her children alone or even with other adults, with the exception of her husband.

Training in the gym and maintaining her responsibilities at home seemed to require constant juggling by Jane. Additional factors that exacerbated this were that Mark was her second husband and not the children's father, and also that she had recently started a degree programme, which required study and assignment commitments. The impact of this greatly influenced the time of day that she went to the gym and the nature of her enjoyment whilst at the gym. At one point she was asked why she enjoyed going to the gym:

... when I am in the gym I don't really think about any of the other things so it's a total break really. But when you have got kids and a house and you take on lots of responsibilities, which I do I do ... tend to take on all the responsibilities ... when I go to the gym its not until you come home that you think 'oh, I've had an hour off then'. It's not necessarily enjoyment as just a total break of the hustles and bustles.

At another point in the interview, however, Jane explained that even when she was exercising she was also thinking about the family life and, therefore, at these moments, the experience was not a "total break". The combined pressure of family relationships and her new course resulted in Jane having to attend the gym during the daytime. She would have preferred to use this time to concentrate upon her studies:

I mean, ideally, I should go to the gym at night particularly now that I am on this course because I need all the time I have got when I am on my own so I can ... I think this time that I spend on my own when the girls are at school and Mark is at work I should be here swotting rather than going to the gym. But then I don't like to leave Mark with the kids because we have a bit of, it's not a brilliant relationship for all four of us. So it's hard, it's hard hassle most of the time, so I do try and tend to fit in what I want to do when it fits in with everybody else.

I should have spent some time doing the evaluation but then that means going off to the gym at six o'clock for a couple of hours and leaving Mark with the girls I don't think ... I would rather shut myself into my little office upstairs and do it while they are all fighting down here and then I am here if there is a serious fight. So I do tend [laugh] ... to do ... my exercise is last really. Although it is first on my list it is last on everybody else's.

Jane therefore felt that, although her exercise was a priority for her, she had to make sacrifices around her participation for the benefit of the family:

... my exercise fits in where nobody else needs me if you know what I mean. So maybe here is an underlying reason isn't it? I go out there to prove to me that I can fit in what I what to do when nobody else is around ...

Jane's experiences of motherhood and exercise can be contrasted with Derek's account of the impact of the birth of his child on his exercise. In response to the question whether the birth of Anthony, his son, had interfered with his activities he replied:

No, no, no, no, no because I mean a run you can have a good run in 20 minutes to half an hour you can always find time for that ... Running is very cheap. It's a very inexpensive sport. As long as you have good running shoes a pair of shorts and a 't' shirt there is no one ever to stop you running. You will always find the time for it. As long as you have got it up here a positive mental attitude and you can focus you can do it. You can do anything you like ...

The impact of children within the family unit created different experiences for Jane and Derek. Clearly, Jane felt that a great responsibility for caring for her daughters rested with her, whereas Derek's paternal responsibilities did not affect his participation. Several things could account for this. Parental roles still largely fall upon women with the home and mothers are more likely to sacrifice their needs for the needs of the family (Anderson, 1998). Jane's children were not her husband's children and it is probable that she felt that it was necessary for her, rather than her husband, to cater for their needs. In contrast, it is possible that Derek did not encounter the same amount of tension between parenthood and exercise because he was actively encouraging his young son to participate in similar activities.

The analysis of the role of exercise in the life history of the Phase Two individuals has provided some evidence for Propositions One and Two (see Chapter Seven p. 126). Proposition One stated:

An exercise dependent individual has a fluctuating association with exercise throughout their life history. This is characterised by moments of change. At times they are dependent upon exercise whereas at other times they are not. This will be determined by the priority assigned to exercise during that life episode.

Two of the Phase Two exercisers provided evidence for this proposition, Frances and Lesley, but for the others there was little change in their interpretation, understanding and relationship to a dependency process. For Jane, Derek and Arthur exercise dependency remained constant even at times when the amount or intensity of the exercise diminished. During these episodes, even though the commitment to exercise was less, the priority assigned to exercise remained constant. Therefore, for these individuals, exercise dependency was constant throughout their life history. This contrasts with the work of Sachs & Pargman (1984) who stated that if commitment towards the activity reduced then the dependency experience would shift away from dependency. Individuals could not remain dependent without considerable commitment to the activity (Sachs & Pargman, 1984). In the light of the Phase Two data, Proposition One is therefore modified as follows:

An exercise dependent individual has a fluctuating association with exercise throughout their life history. This is characterised by moments of change. *Subjective interpretations of the dependency process are determined by the priority assigned to exercise during that life episode.*

Proposition Two stated:

These moments of change are related to other life events such as change of job, career, geographic move, onset of relationship, or the birth of children.

Phase Two interviews offered evidence for this. With Frances moments of change were strongly related to her relationships; Lesley prioritised the completion of her degree; and Arthur's experiences with injury dramatically altered his participation. These other life events had a critical impact upon

exercise participation in that they changed the nature of participation. In many cases, these events were also critical for other facets of the exercisers' lifestyles. Proposition Two is, therefore, modified as follows:

These moments of change are related to *critical* life events such as change of job, career, geographic move, onset of relationship, or birth of children.

The term 'critical' replaces 'other' because of the impact of change in many facets of lifestyle brought about by this event.

8.5 The Construction of a Self Identity (Propositions Three and Four)

Phase One analysis identified four features of ED that were outlined in Propositions Three and Four (see Chapter Seven p. 126):

1. a salient part of the self identity is constructed through participation in exercise;
2. the development of a 'body project' is an element of that identity (physical self);
3. a drive for high standards of personal achievement is an element of that identity (critical self);
4. participation in a social setting is an element of that identity (social self);

These are explored in relation to the Phase Two interviews. The analysis concludes with an examination of Propositions Three and Four.

During the Phase Two interviews the possible role of exercise in identity formation was explored. Exercisers were asked to comment on this in the light of their own experiences and gave considerable evidence to support the notion:

Yes, you are absolutely right there with respect to ... I do see myself as a rugby player. I do see myself as a rugby player. As I say the running and the weight training is obviously more important ... Erm but you do see yourself as a rugby player. If something takes up so much of your life you became it ... I ... suppose don't you? You become a rugby player ... and people look at me, 'oh, he's a rugby player'. I know that. You know what I mean? You do become an identity. Yeah, it does it's like er ... a body builder. It's an identity isn't it? An eight stone runner, again it's an identity. It is an identity yeah. I would agree with that.

(Derek)

Each of the elements of identity - the physical self, the critical self and the social self (see Chapter Seven pp. 113-119) were explored in the Phase Two interviews as part of the process of member checking. Responses to this are analysed in the following section.

8.5.1 The Physical Self

All the exercisers in Phase Two made reference to their participation in relation to a body project. For example, several said they were trying to achieve a particular body shape, or to lose weight:

... and I mean my mum was quite big and so I do know that I have to keep my weight down you know ... I think I have inherited it from my mum.

(Arthur)

I do hate to admit it really ... I am ... I have become very body image aware ... I have a feeling that I might get fat and I do hate to admit this and it's something that I think probably contributes to those feelings of guilt.

(Frances)

I think there is a perfectionist in me because ... I'm not likely to be a fat slob nothing against fat ... I know a lot of really nice fat slob but its not for me you know what I mean.

(Roger)

In these examples the exercisers were concerned about the sculpting of a particular body shape. Shilling (1993) suggested that the body is a conduit through which social meanings are ascribed. For these individuals their meaning is strongly developed through a trim, lean shape. In contrast, other exercisers said that the aim of the exercise was also to keep the body in a state of health or fitness:

I would hate to be fat. I look at fat people now and I think ... it's very naughty but I think it's horrible. How can you be like that sitting there eating cake? ... but some people are happy. I know that I could get run over by a bus or but don't they think about their hearts or the healthy side of it more than anything. I mean how unhealthy is to carry around all that blubber? It's gross. It is ... it's disgusting. I can't understand how people can be happy like that ... I can't comprehend, I think it's very ... I mean alright there are probably 20% of the people who can't help who they are for one reason or another but I don't think ... I mean how people can say they are happy?

(Jane)

I thought about the fact that I tended to spend a lot of time drinking, eating and dancing but I don't do so much dancing these days and I certainly don't do so much drinking. So he ... sort of crystallised ... really health things ... health matters really I suppose ...

(Elizabeth)

Derek believed that, despite extensive participation in exercise, his body imposed certain social limits because of the image created by his physicality:

It's a bit annoying really because I mean even though ... you wouldn't believe if you clocked up the amount of hours I've had ... exercise since day one ... it's immense, you are looking at a billion hours of training one way or another and I look like a fat prop. I do. It's me, it's the way I am you can't stop that. It's ... it's, my body has become what I have used it for, you know what I mean. I am sure if I was purely just a weight trainer I am sure that I would look like Arnold Schwarzenegger by now but I am ... erm barrel chested. Thick neck and I look like what I do.

Derek believed that his body elicited certain responses from others. The physical representation of the body was, therefore, an important element of participation. This was regardless of whether the

individual described themselves as being 'addicted' or 'dependent' upon their exercise. The exercisers agreed that the need to sculpt and develop the performing self (Featherstone, 1982) was an important part of their exercise participation.

8.5.2 The Critical Self

When the critical self was explored in interviews Phase Two exercisers agreed with a drive for high standards of personal achievement and a role played by the critical side in the achievement of those standards:

Yeah I would, definitely I think that's one of the ... yeah ... one of my major weaknesses that I am extremely self-critical.

(Frances)

Because like if I do the weights or something if I know I've got to do 20 and know I've done 18. I think, 'I've got to do two more so I can't stop yet.' So I have to achieve my goals that I have set out sort of thing, you know.

(Lesley)

I'm very ... if ... I have to have my hair all right. If my hair is not right that's not good either that could ruin the evening.

(Jane)

Incredibly so, very much so yeah. Yeah I mean with rugby for instance, I always strive to play the highest level I can and ... I have done that in gradual steps. Hard work steps by going from, starting at "Four Rugby Club" on ... and er I was their fifth team replacement and I have done that for quite a few years now ... and I have thought I am better than this I am a lot better than this. It's incredible what I can do. I used ... applied PMA and I have ended up playing the best standard of rugby in the West Midlands bar Moseley and playing for the county for the last three years.

(Derek)

The Phase Two interviews provided evidence for a sense of identity that was personally critical. This critical self was illustrated in a drive in the chosen activity. Perfectionism is a term frequently referred to in sport psychology literature (Frost *et al.*, 1990; Frost & Henderson, 1991; Gould, 2001). The critical self differs from perfectionism, however, because it is socially constructed. The individuals in this project were driven to achieve high standards by constantly comparing their achievements with others. This was best explained by Tracey in a Phase One interview when she described Carl: "... he compares himself with others ... checking himself." The processes by which the critical self actually achieved continued participation, however, needed to be further unpacked and explored. Exercisers were, therefore, asked how these processes worked.

The critical side of the exercisers drove the exercise participation because of the personal standards that they had set themselves. This could be as simple as feeling better about oneself: "because I know that if I am not going to exercise I am not going to feel good about myself" (Roger). Alternatively, it could be more specific to idealised body shape and size:

So the critical side is that I don't want to ... I've always got a thing as well I hate getting back fit when I haven't been doing anything for a while. So you know I suppose it's a coward's way but if I don't let my fitness level drop that much it isn't going to hurt me that much to get back. But even now I ... you know ... I like to ride at a good speed and that's the perfection side. I don't want to be seen going out on my bike over weight and going like an old man

(Roger)

It's that need isn't it? ... to carry on to ... If I stopped training I would probably lose weight which is a bit silly but you would. It would take a long time for me to lose that tone. If I couldn't go to the gym I'm not going to change myself am I. I mean if I dieted, dieting's got a lot to do with it but going to the gym if I stopped going to the gym I would never be able to ... burn a bit more off round your backside ... some people say it's vain ... I don't think it's vain it's just ... that's self need to look somewhat decent. I suppose it's different in all sports isn't ... how would this conversation be if it was a footballer? Or a ... no that's different as well I think body builders are totally different to sports men.

(Jane)

The relationship between the critical self and exercise was sometimes described as being less tangible, however:

...probably like when I am doing the skipping, I think I have got to do 10 minutes at this. So I do five even if my calves start hurting I think well I've got to carry on and do 10s and things like that just motivates you and keeps you going

(Lesley)

Lesley provided a clear explanation of how the critical self and the need to be perfect manifested itself in further or continued exercise, but it was Frances who gave the clearest explanation of the processes by which the critical self fuelled exercise participation:

Because nothing is ever right. It's being about ... I suppose there is a stage where my body just wasn't right I wasn't happy with the way that I looked. I wasn't happy with the way ... I just generally wasn't happy erm and one of the ways that I could glean a little bit of happiness was if my body felt right but the critical ... the critical side of me was never gonna let that happen. It was *never* gonna be right. If I spent an extra 10 minutes on this, then it may be getting closer so it sort of snowballed erm and that critical self contributes to every aspect of my life in that nothing is ever right and given the opportunity I would spend forever doing things because I don't ever think that I will ... although I would say I aspire perfection I don't think that I ever will ... in any sense

Phase Two exercisers gave evidence for both the physical and critical selves. In their explanations of how the critical self contributed to further exercise it became apparent that these two identities were closely entwined and working together than conceptualised in Phase One analysis. The critical self was driving the physical self to achieve the desired sculpted form.

8.5.3 The Social Self

Although there was some evidence to support the notion of a social self, the responses to this were mixed. Both Frances and Lesley felt that, because their professions were interlinked with exercise, it was important to be seen to be exercising and to achieve status through that participation:

... so I think in a way for the students to see ... and again this is self indulgent and I hate to admit that I am seen to be exercising then they see that, or they may perceive that I am committed to sport and that erm that I suppose that a knock on effect is that I kind of physically represent sport ... and, therefore, maybe I get respected more which is completely mad because that is not what I mean but I think that it is just the representation of sport I think that ... erm the way that we present information, regardless of sex is what we see as important but I think if you represent it, you automatically start off on a higher plane ...
(Frances)

I think so, yeah, because if I went into like a business type job you would be sitting down more. I think I would still go to the gym but not ... I would just have to see really, it might only be three times a week or something but yeah, because I am a personal trainer you sort of get into it a) I think I've got to try out different things so I can actually tell people who you know their fitness levels are lower what it feels like or what's the best results to do different things
(Lesley)

Some of Frances's additional anxieties were caused by being a woman and some of them were caused by being a younger member of staff. An awareness of these anxieties made Frances more enthusiastic about being "seen to be exercising":

... they shouldn't take me, they shouldn't take what I am saying as being as credible as those people who have got all this experience that you know my colleagues that all got more experience in sport and in life and everything ... and so, therefore, I have to try and make sure that I have all this experience in sport and life and everything so, therefore, I have to try and make sure that I can all fill all these stereotypical images that I have of what a sports lecturer should be. So that I guess that I am not going to get as questioned ... give myself a little bit more confidence in what I am talking about and what I am.
(Frances)

Derek's sense of the social self was constructed around the social activities he enjoyed as a result of his participation:

It's a nice side of it for me. Because I do like to socialise but I do have my own equipment in the garage. Which is ... if I can't go up the gym I use my own equipment ... and that is me on my own me with the mirror you know what I mean. That is a big part of it. Rugby especially. Rugby socialising in rugby is massive. It's a lot of it. The social life.

It was interesting to note that, although both Derek and Lesley had gym equipment in the garage, they both preferred to go to the gym. The equipment in the garage was only used when there was no

alternative of going to the gym. This corresponds to Smith, Hale and Collins' (1998) comment that body builders construct their participation around the social environment in which it occurs. Further Hurst *et al.* (2000 p. 431) noted that body builders identified strongly with the "body building role".

There was a mixed response from the exercisers about their need to participate with others and to sustain friendships through participation. Roger explained the role that exercise played in terms of social activities:

... because of my job ... I speak to people all the time, so now it's nice to go get into sport and get away from people, you see. I think really that could be something into why you actually exercise and so a lot of people exercise because they are going to a gym with a lot of other people, so it's a social sort of thing you know. For me erm ... it's both really. I do associate with other people who are fit sort of thing. It's no good coming on a ride with me if you are not fit erm so I get an identity there erm but I don't need people to exercise with.

Although Jane enjoyed the social side of attending the gym she felt that her exercise participation actually isolated her socially:

Yeahhh there aren't many about that are like me, in fact I don't know any women. I know men, but no women who are like me. I don't know anybody that's like me that's sad isn't it? Very sad. I don't know anybody that is like I am, my sport and everybody that knows me, knows that I am absolutely ... people say to me 'oh, where are you going, don't tell me I know where you are going'. You know if I wear clothes 'oh, where the hell are you going' because they always see me in, so it's just me ... I don't know anybody like me.

Dan explained that he enjoyed talking to others at his classes and that he occasionally met with people with similar interests to talk about the martial arts:

When I do my boxercise class on a Monday there are friends there from Tae Kwon Doe and Jiu-Jitsu and stuff like that and we socialise and stuff like that. There are probably one or two that do.

Although Arthur enjoyed the social life of the rugby club and he enjoyed being a member of a team he did not place importance on public status or the need to establish friendships. The development of the social self clearly involved different processes within these narratives.

In relation to the second property of 'life essential' exercise, two exercisers were in their mid 20s and were unconcerned about the ageing process and the life essential element of participation. In contrast, however, Arthur, the eldest Phase Two participant, was especially concerned about the process of ageing on his participation: "it's obviously going to diminish isn't it? That does worry me". The use of exercise in order to delay the ageing process was mentioned by others:

I mean I'm 43 and I feel that I am doing more now than say I was doing 10 or 15 years ago ... I think I am fitter than a lot of people even the ones that are a lot younger than me.

(Dan)

It is for me. Not for vain reasons, I think I mean with respect I look at old fashioned people, I mean I know that I am 40 but I don't care. I do care but I don't care for 40 I don't look too bad and my husband is 12 years younger than me ...

(Jane)

Phase One analysis identified a link between 'life essential' exercise, ageing and the physical (see p. 119). In other words the importance that physical activity had for delaying the effects of ageing and death. This relationship was previously noted in the ED literature (see Chapter Three p. 31). Some Phase Two exercisers were able to identify with this from their own experiences:

... one guy who retired earlier said, 'you can forget your waist line now' because you know. But I always said at an early age that I would never sort of ... I have seen guys my age and they are out of shape and even in my 20s I said, 'that will never happen to me' sort of thing. So although I am probably doing ... what I do now is all designed ... so I do probably look as I want to look, I don't want end up with a pot belly and I don't want to look out of shape. So a lot of that is designed in it, it's all part of it, it keeps me ...

(Roger)

... because I think a lot of people get fatter as they get older and then they become depressed with the way they look and I think I would just like to stay the way I am

(Elizabeth)

In relation to the construction of a self-identity through participation there was some evidence from the Phase Two interviews to support the idea of a role of being an 'exerciser'. There was clear support for the physical and critical selves but the evidence for the social self was mixed. There was evidence to suggest that 'public status' and 'life essential' were properties of this, but less evidence to support the salience of relationships with exercisers (see Chapter Seven pp. 117-119).

The Propositions that related to the notion of a self-identity created through exercise participation were (see Chapter Seven p. 126):

- Three An individual who is dependent upon exercise differs from non-dependent individuals in that a salient part of their social self-identity is constructed through their exercise participation.
- Four This self-identity is a conglomerate of three different identities: the physical self, the critical self and the social self (which includes features such as 'public status' and 'life essential').

There was evidence within the Phase Two interviews to support both these two Propositions. The social self needs to be changed, however, to remove the description of relationships from the property of 'public status'. The social self properties, therefore, remain as public status and life essential.

8.6 Impact on Relationships (Propositions Five, Six and Seven)

Three features emerged from the Phase One analysis of the impact of the exercise on SO relationships that were identified in Propositions Five, Six and Seven (see Chapter Seven p. 126):

1. the exercise participation does not have a negative impact on the relationship;
2. the exercise participation is supported within the relationship;
3. the exercise participation changes in order to accommodate certain aspects of the relationship, such as the birth of children.

These features are explored in the discussion of the Phase Two interviews. The analysis concludes with an examination of Propositions Five, Six and Seven.

At the time of the interviews four of the exercisers were involved in a relationship (Jane, Derek, Roger and Elizabeth) and four were not (Frances, Lesley, Arthur and Dan). The impact of exercise on the SO relationships was discussed during the interviews but, in some cases, the discussion was based upon a reflection of past rather than current relationships. Lesley was unable to comment about the impact of her exercise on SO relationships because it had been a long time since her last relationship and "I haven't really got into the relationships because I have always been exercising". The fact that exercise constrained the onset of relationships also affected Lesley's development of friendships: "well I find that I don't have any friends because that's why I am always exercising". Lesley then described exercise as her "friend". Although Lesley enjoyed her exercise and did not want to change her exercise pattern, she explained that:

With the loneliness sometimes and then I'm not really a person who says, 'oh, I've got to be in a relationship' but sometimes it gets you down if you are single or whatever ... and you think, 'oh, I need to meet somebody' or something you know and ... I just do the exercise and stuff.

Lesley imagined that if she became involved in a SO relationship she would probably reduce the amount of time she spent exercising in order to accommodate the relationship. Dan also commented on the impact of exercise on starting a relationship:

... but I couldn't meet anybody now like because it would be really difficult, they wouldn't understand why I need to train like five or six nights a week or why I do it like if you are not earning ... if it's not your living or anything like that why?

Impact of ED on SO relationships was categorised into two themes 'accommodation' and 'conflict' (see Chapter Seven p. 122 and 123).

8.6.1 Accommodation

Frances, Jane, Derek and Arthur all had experiences of SOs accommodating their exercise participation. Frances's experiences of accommodation were quite limited in comparison with others due to the nature and length of her relationships. She attributed the accommodation to the fact that these boyfriends were also involved in the same activity:

... previously all my friends and my previous boyfriends had been involved in badminton so I stayed with ... the involvement in badminton and the amount that I was playing wasn't a problem because they were too ...

Frances was asked to comment on accommodation in the light of her own experiences. When discussing the relationship that she had had during her "addicted" phase she explained that:

... although I have had a relationship I don't think it's been the type of relationship that has had to deal with it. He never expressed any problems with me training the amount that I was training ... it wasn't even really ... it wasn't even an issue apart from the occasional comments again in that period ... probably where it did become ... in what I would say would be negative in the fact that I was too thin in the fact that he would make comments about that ... But I guess it was never a relationship that was never close enough from his respect or strong enough again from his perception of it that would have to deal with it.

The individuals who were involved in SO relationships gave examples of accommodation. These ranged from participation together (Derek), sharing friendships made through the exercise (Elizabeth), understanding different eating patterns (Jane) and allowing time and space to participate (Roger). The level and nature of accommodation was similar for exercisers who described themselves as exercise 'dependent' and those who did not. Of all the exercisers in the study, Derek experienced the greatest amount of support and accommodation from his wife. His wife changed her behaviour and also became an exercise participant. He acknowledged that, as a result of this, he had benefited (see earlier p. 142).

Jane emphasised the need to be understanding and accommodating in order to sustain a relationship. She said the notion of accommodation was not unique to exercise but was central to the building of a good relationship:

I don't think it's just anything to do with exercise. I think if you have got a good basis for a relationship, what you say is right you will accommodate. I don't think ... I think these days it is too easy to make excuses for a bad relationship and sport or an addiction to sport ... I think over long periods of time it could, but short periods like I incur ... I don't think. I mean if Mark said to me 'you're not going to the gym any more' he knows damn well that he will have a terrible life after that so I think if you ... it would be like me saying to him 'you are never having a drink again' and you can't take that off somebody can you? ... and so the relationship I think would be 10 times worse if you didn't accommodate but then ... what about professional footballers and stuff like that? ... that's all money though isn't it? I mean with professional

footballers ... your career for a relationship that would ... well you would end your wife wouldn't you? I think it depends on how much of a part it plays in your relationship ... I really think it depends on what sort of person you are. I mean ideally I would have been better off being married to a body builder wouldn't I? ... I think it depends on the level of sport ...

One of the interesting points here is Jane's differentiation between professional sport and her own amateur participation. If the goal of the participation is tangible then this appears to justify the participation more than if the goal is purely for intrinsic motives. This is expanded in greater detail in Section 8.7 (see p. 166).

Roger also commented on accommodation in both his personal relationship experiences and those of others:

I mean I have been in my sport for a long time now and I have seen guys before they were married ... and I generally find that most sort of ... people that take competitive sport or exercise seriously normally seem to be attracted to partners that are similar. What does happen without a doubt, I mean I am not talking about me here this is life experiences sort of thing if they get with a partner that is not that way, something goes. Either the partner goes or the exercise goes. Because I think if you are that keen on exercise you have to be tolerated by the environment that you live in. If it isn't, something has got to go.

Roger believed that it was necessary for a committed exerciser to establish a relationship with a "similar" individual.

In order to maintain their participation in an activity the SO is required to accept a certain "selfish" attitude:

... if you are very keen on sport then you are a very selfish person ... not a selfish person but you have to be selfish to sustain what you have to do ... keep it up.
(Roger)

Roger acknowledged his "selfish" time spent exercising and believed that his wife accommodated to it. He stated that if Ann did not tolerate his exercise "I wouldn't have one [relationship]".

8.6.2 Conflict

In contrast to the findings presented in Phase One, many of the exercisers from Phase Two had experienced conflict, within relationships, over their exercise participation. Of the exercise dependent individuals Derek's and Jane's conflicts were relatively minor and outweighed by accommodation. Derek's wife, Mary, ran both with him and also on her own but he did admit that she often "complained" about his participation. Jane explained that her husband had "tried" to show interest in her bodybuilding but she was not driven by a need for him to be more interested.

Examples of conflicts between the exercisers' relationships and their exercise were: interference of the exercise in the family routine, the amount of time spent exercising and the use of exercise to attract other individuals. When asked if his participation had ever caused conflict within a relationship Arthur explained: "I'm divorced twice so it could have done, yeah". He believed that intense participation often interfered with personal relationships and stated "I mean I have often thought that if I had met somebody that is sporty ... then perhaps you know it could have worked out better". In one example, conflict was illustrated by the participant's dissatisfaction with her SO's sedentary lifestyle "I might have complained the other way. About his non participation and putting on weight but only on a very slight level not too extensive" (Elizabeth). This illustrates how previous conceptions of conflict in SO relationships is documented from the perspective of the SO. Elizabeth's comment highlights how sedentary SOs can cause conflict in an exercise committed individual. The conflicts that Frances experienced in her relationship with Gregory were outlined earlier in her ethnographic episodes. At a later stage in the interview Frances reflected on the restraint of participation as a result of the conflict " ... yeah, I do regret it and I think I would never like to let myself get to that point again and be that ... almost controlled, I suppose".

The conflict expressed in these interviews was more significant than that expressed in the Phase One interviews. There appears to be a dynamic interrelationship between exercise participation and SO relationships. Three individuals, Lesley, Dan and Arthur, all expressed concern about establishing a relationship because of their exercise participation. Roger believed that successful relationships depended upon the extent to which SOs were similar to their active partners. Table 8.3 lists the exercisers from both Phases One and Two and their SOs' exercise participation.

Table 8.3 Significant Other Relationships and Exercise Participation

Phase	Name	Participating Sig Other	Sedentary Sig Other	None	Term
One	Anita	<u>Duncan</u>			addicted
	Carl		<u>Tracey</u>		dependent
	Chris	<u>Sam</u>			dependent
Two	Frances			✓	dependent
	Lesley			✓	addiction
	Derek	Mary			dependent
	Arthur			✓	addiction
	Jane		Mark		addiction
One	Nigel	<u>Cath</u>			commitment
	Tanya	<u>Ivan</u>			not sure
	Norman	<u>Fran</u>			commitment
	Bob		<u>Jenny</u>		commitment
Two	Dan			✓	commitment
	Elizabeth		Robin		commitment
	Roger		Ann		obligatory exercise

Steven is omitted from this table because of the issues surrounding his SO (see Chapter Six). Individuals who identified themselves as being 'addicted' or 'dependent' are at the top of the table whilst individuals who described themselves as not being 'addicted' or 'dependent' are at the bottom of the table. It can be seen that, of the dependent individuals, only two had relationships with sedentary individuals. This can be compared with 'committed' individuals of whom only three had relationships with sedentary individuals. When contrasting this with the lifestyle of other dependent individuals, five had either a participating SO or no relationship at all. This same contrast can be seen with non-dependent individuals, of whom five had either a SO relationship or none at all. From the top of the table only Carl and Jane had sedentary SOs in comparison with those who had participating SOs or none at all. Most of the ED individuals had either a participating SO or no SO relationship. This corresponds with Robbins & Joseph's (1981) findings that running partners of runners were least likely to express dissatisfaction with the relationship.

In summary, the evidence from this study supports the proposition that ED individuals have support for exercise from their SO *if their relationship is to be successful*. Propositions Five, Six and Seven were:

- Five Exercise dependence does not necessarily have a negative impact on a SO relationship

Six A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful.

Seven An individual who is dependent upon their exercise may accommodate to the significant other relationship or family during moments of their life history and consequently change their exercise behaviour.

Proposition Six does not account for instances of conflict within the relationship. Therefore, this proposition is modified as follows:

Six A relationship, which includes one partner who is exercise dependent, will either accommodate to the exercise participation or be unsuccessful. *The accommodation may include moments of conflict.*

Propositions Five and Seven remain unchanged.

8.7 Deviance and Labelling

The notion of ED as a disease, as presented by previous researchers (see Chapter Three), is questioned in this thesis. Similar to the findings of Bamber *et al.* (2000) an alternative suggestion is offered because the individuals in this study do not demonstrate behaviour that is *pathological*. Rather, using Peele's (1985) criticism of traditional concepts of addiction, their intense involvement with exercise is facilitated through particular situations and times. It is possible, therefore, those individuals who exercise intensely are subject to a labelling process. This section examines the relationship between ED and labelling and draws upon examples from both Phase One and Phase Two interviews.

The relevance of theories of deviance and labelling for an understanding of ED needs further analysis. The concept of deviance focuses upon the construction of rules and a societal understanding as to when those rules have been broken (Becker, 1973). Exercise, unlike drug taking, is a form of behaviour that is socially acceptable and positively encouraged. Therefore, participation in exercise does not appear to contravene social rules but, rather, being sedentary seems to contravene the rules of a healthy lifestyle. Two individuals may undertake almost exactly the same exercise regime, one may be a professional athlete and one may be a recreational athlete or exerciser. Although their behaviour may be identical, societal reaction towards that behaviour may be different, resulting in one person being admired for their professional status, and one person labelled as exercise dependent and therefore deviant. Tanya was clearly aware of social labelling in relation to her exercise. When explaining that she enjoyed the feelings of exercising she stated "I do like the feeling of ... not in a fanatical way ... but I do like to feel ..." emphasising awareness of certain negative labels associated with participation.

There are some basic differences, therefore, between exercise, which is categorised as dependent and that which is categorised as non-dependent. It is these differences that construct the social rules by which exercising individuals are judged as being deviant or not. The differences are: the frequency, intensity and duration of participation; the priority assigned to the exercise, and the expected outcome of the exercise.

In order to achieve professional or elite standards, exercisers have to train on a regular basis and follow an intense and demanding training schedule. Physical activity, therefore, has a high priority with the individual's lifestyle. This schedule may require daily training that spans the majority of the day, especially when competition is imminent. Both the training, and the priority, is accepted without question *on condition* that the outcome of the participation can be measured by a recognisable elite or professional standard. If the same behaviour is undertaken for less tangible, or more personal intrinsic rewards, then the behaviour becomes subject to a label of deviant participation.

There were other examples from the Phase Two interviews of evidence that indicate that a labelling process is at work. Jane made reference to accommodation within a relationship and suggested that, if the relationship involved a professional athlete, then this would change the balance between accommodation and conflict. Frances, like Tanya, was aware of the labels associated with her exercise participation. She also mentioned the word "fanatic" but also took this one stage further by commenting "punishing my body or punishing myself almost ... in the way that this sounds ... [laugh] sounds quite psychotic". She also asked if everyone sounded as "psychotic" as she did. The basis of Frances's concern is better understood in the light of her explanation of the difference between competitive and recreational participation. She explained that, when competing at elite levels in badminton, she trained extensively but did not consider that, during that period of her life, she was 'addicted' or 'dependent' upon exercise:

I would do a circuit session or something like that but I never ever saw that as being addictive. That was because I needed to be fit to be able to play badminton and that was kind of expected by my coaches and people like that.

(Frances)

She later qualified this:

I think if you have a purpose for your training er like a physical purpose so a competitive purpose, then it legitimises it ... it's legitimised. Not necessarily by the person who is doing the training but being compulsive exercise or exercise a lot it's always got to be legitimised in some way. But in other people's eyes ... so I guess because of the people, my coaches and everyone didn't necessarily know that I was training that much because I didn't say anything. I just knew that I was fit enough so I could legitimise it ...

According to Frances, the reason for the participation and the associated reward changes 'societal' opinions about the acceptability of the extent of participation. Other examples from the Phase One and Two interviews were:

... they wouldn't understand why I need to train like five or six nights a week or why I do it like if you are not earning ... if its not your living or anything like that why?

(Dan)

I mean with professional footballers ... your career for a relationship that would ... well you would end your wife wouldn't you? I think it depends on how much of a part it plays in your relationship ...

(Jane)

This project was focused on determining how individuals made sense of their own exercise participation and, therefore, whether they would admit to the labels of 'addicted', 'dependent' or 'committed'. Nine individuals chose either an 'addicted' or 'dependent' label and seven did not. Most mentioned a time in their past when they had been more 'committed', 'dependent' or 'addicted' to exercise. Therefore, there appeared to be either a process of denial at work, or a change in their attitude towards exercise. SOs in the study confirmed the exercisers' accounts, which suggests that this self-labelling of the past was not attributed to denial but was rather, an accurate description of the changing attitude to exercise.

A disease-based approach to ED has developed in the literature in parallel with the concept of deviant participation. Together these views imply that individuals have chosen to participate to excess in exercise because there is essentially something biologically wrong with them. Attempts to medicalise emotional and moral problems have also been mirrored in the general understanding of alcoholism, in which a disease-based approach has dominated twentieth century thinking (Peele, 1985). It is important to remember that physiological arguments for narcotic and alcohol dependence are relatively new. Even in psychological writings about ED the diseased-based approach is prevalent in either the construction of the phenomenon or in the desire to measure, treat and prevent.

Conventional wisdom has resulted in a failure to develop a full process model of dependence and dominance of a product approach to the 'measurement' and analysis of dependence. The notion of withdrawal has been criticised by Peele (1985) on the grounds that it is merely a process of self-labelling. Individuals noted the changes that occurred within the body and determined the process to be problematic. This is then translated into a desire for more drugs (Peele, 1985). Alternative approaches to the understanding of dependence are based on the concept of time and situation, which are more closely related to the life histories of those described within this project. There is little evidence from both the literature base and the data gathered in this research project that ED has significant negative impacts on individuals' lifestyles. It is possible, therefore, that the research community is labelling individuals as deviant who engage in activity in a particular way. Elite or

professional athletes do not become labelled deviant because the outcome of their participation has societal, public rewards. The outcomes for an ED individual are less tangible, subjective and personal, therefore their participation becomes labelled as deviant. The public once again is dominant over the private. Thus, an additional proposition is added for investigation within the Phase Three interviews:

- Eight Exercise participation that is considered to be extensive and without extrinsic reward is socially labelled as dependent and, therefore, deviant. Exercise participation that is considered to be extensive but in pursuit of an extrinsic reward is socially labelled as elite or professional and is celebrated.

8.8 Phase Three Interview Schedule

The purpose of the Phase Three interviews was to undertake member checking with some of the original participant group. The exercisers for Phase Three interviews were, therefore, all Phase One exercisers. The Propositions had been modified, however, as a result of the Phase Two interviews. The Propositions that were the basis for the semi-structured dialogues in Phase Three are outlined in Table 8.4.

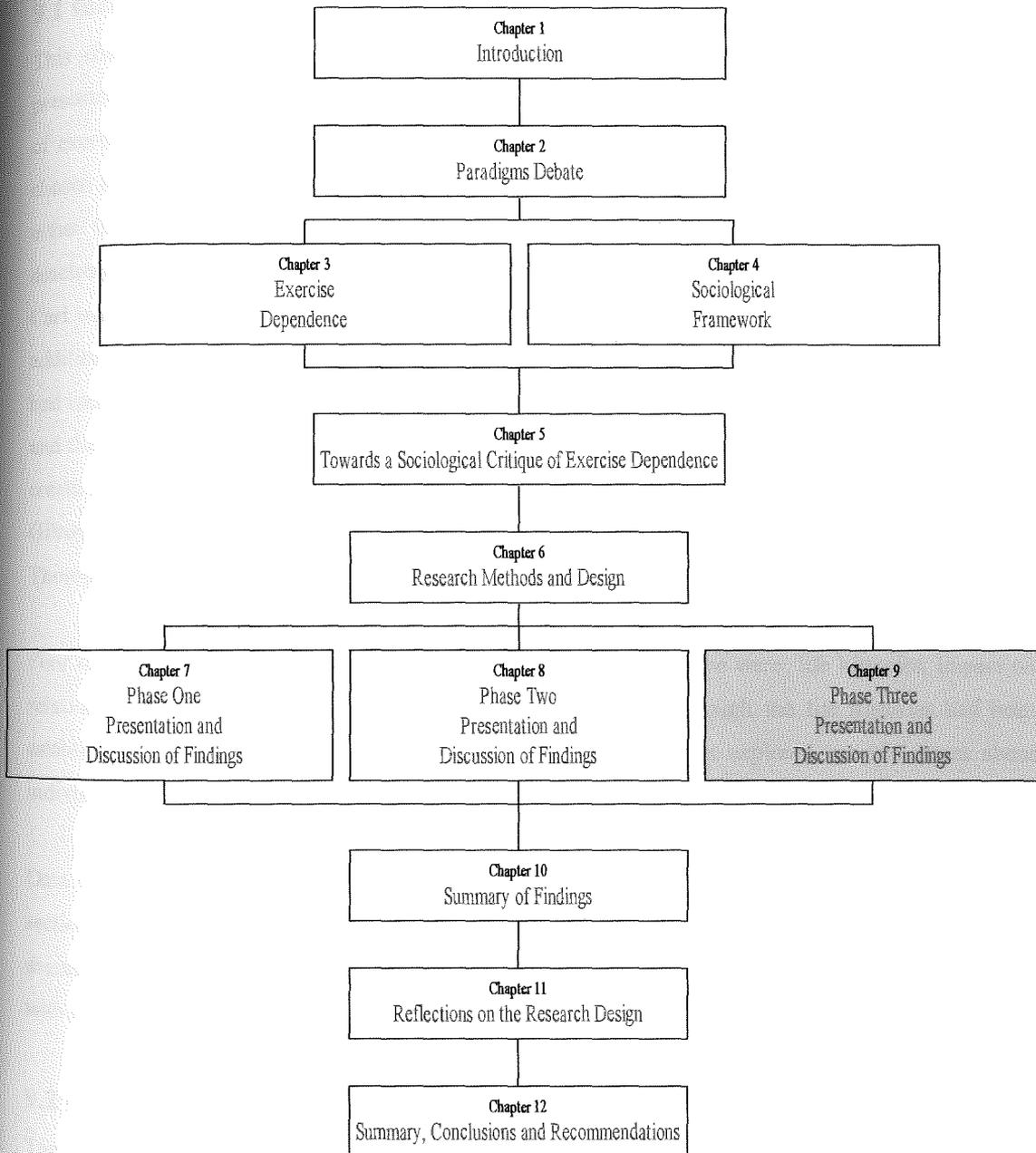
Table 8.4 Propositions Identified from Phase Two Analysis

One	<i>Changed</i>	An exercise dependent individual has a fluctuating association with exercise throughout their life history. This is characterised by moments of change. <i>Subjective interpretations of the dependency process are determined by the priority assigned to exercise during that life episode.</i>
Two	<i>Changed</i>	These moments of change are related to <i>critical</i> life events such as change of job, career, geographic move, onset of relationship, or birth of children.
Three	Unchanged	An individual who is dependent upon exercise, differs from non-dependent individuals in that a salient part of their social self identity is constructed through their exercise participation.
Four	Unchanged	This self-identity is a conglomerate of three different identities: the physical self, the critical self and the social self (which includes features such as 'public status' and 'life essential').
Five	Unchanged	Exercise dependence does not necessarily have a negative impact on a SO relationship.
Six	<i>Changed</i>	A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful. <i>The accommodation may include moments of conflict.</i>
Seven	Unchanged	An individual who is dependent upon exercise may accommodate to the significant other relationship or family during moments of their life history and consequently change their exercise behaviour.
Eight	<i>Added</i>	<i>Exercise participation that is considered to be extensive and without extrinsic reward is socially labelled as dependent and, therefore, deviant. Exercise participation that is considered to be extensive but in pursuit of an extrinsic reward is socially labelled as elite or professional and is celebrated.</i>

8.9 Summary

Phase Two interviews were conducted with eight different individuals from those in Phase One. During Phase Two interviews the preliminary analysis was discussed with the exercisers, enabling them to comment upon the Propositions. Seven Propositions formed the basis for the second part of the Phase Two interviews. From the analysis of the Phase Two interviews, three Propositions were modified and a new one was added. Therefore, Phase Three interviews were based on the exploration of eight Propositions in total.

Figure 9.1 Outline Map of the Thesis Highlighting Chapter Nine



CHAPTER NINE

PRESENTATION AND DISCUSSION OF FINDINGS FROM PHASE THREE

9.1 Introduction

This chapter discusses the findings from Phase Three, during which Phase Two findings were presented to Phase One exercisers so they could comment and contribute further ideas. The selection of exercisers for Phase Three was based upon whether 'dependent' or 'addicted' status had been chosen by them in Phase One. Four individuals: Steven, Anita, Carl and Chris, and their SOs, used either the 'dependent' or 'addicted' term in their Phase One interviews. Of these, Steven was deselected on the grounds that his SO was not the person with whom he lived (see Chapter Six p. 83). Carl was unable to contribute to this phase because of personal problems (see Chapter Six p. 86). In addition to the remaining exercisers, Tanya was selected in order to provide data from someone who had used non-dependent terminology. Phase Three interviews were conducted with both the exerciser and their SO simultaneously, unlike Phase One interviews. The purpose of this interview style was to create a dialogue between the two interviewees, which would facilitate discussion (Burgess, 1984; Gilroy, 1997; Cox & Thompson, 2000) and to encourage greater honesty of response (Cox & Thompson, 2000; Gilroy, 1997).

Four main areas were explored in the Phase Three interviews. These were: life histories, impact on relationships, the construction of self-identity, and labelling. Although the life histories had been established through the earlier interviews, Phase Three interviews explored specific issues about individual life histories in greater detail.

Data from the three main areas explored in the Phase Three interviews are presented in separate sections in this chapter. The features identified through previous analysis are presented and then discussed in relation to the evidence gathered from these final interviews. Each section concludes with a final consideration of the Propositions.

9.2 Life Histories (Propositions One and Two)

The previous analyses of the life histories identified five shared features which were outlined in Propositions One and Two:

1. the intensity of the associated to exercise fluctuates throughout the life history;
2. reference is made to a previous time of greater dependence or addiction. Throughout the life history there are times when exercisers are dependent and times when they are not;
3. the relationship to exercise changes according to priorities assigned to exercise in relation to other critical life events such as job, career, moving house, relationship and having children;

4. participation in exercise activities is often narrowly focussed in early adult life and then expanded in later adult life;
5. there is uncertainty about whether the priority afforded to exercise changes in a very sudden and dramatic manner or more gradually.

These features were discussed in the Phase Three interviews. They are explored through the analysis of data and then are considered in relation to Propositions One and Two.

9.2.1 Fluctuating Association with Exercise

The fluctuating association with exercise was established from the first interview when exercisers were asked to reflect upon the changes in their lives. Anita clearly identified a pattern in her life history and referred to "phases" in her life, which were very similar to the episodes identified in Chapter Seven:

... probably it has gone through certain phases so ... so I had the kind of things that I used to do when I was at university which aren't the same ... before I was cycle racing and that was a regular pattern ...and then that developed into starting to cycle seriously and starting to cycle race and that was a distinct pattern and then I think I did ... I remember a distinct pattern for that whole period and then I stopped racing ... I have probably had a pattern since then and I guess you could say that there are the three phases, really.

At the time of the Phase Three interview, Chris acknowledged a further change in exercise participation since the previous interview. The reasons for this change were due to new accessible facilities at her place of work and were highlighted in Chapter Seven. The latest episode in Chris's life history is interesting for two reasons. First, it is another example of the changing prioritisation of exercise throughout her life history. Secondly, it is a clear example that the individual, having lapsed, can resume intense participation patterns that were experienced earlier. Sam was "aware" that Chris had started additional physical activities but did not seem to be fully aware of the shift to a need for more exercise participation. This need was described by Chris:

... but I think you can move into it ... for me I found that I can move into it depending on my physical and mental needs but I can also move further away from it ... and so, like you know I have said that at the moment I am feeling as if I am more in need of it than I was at the first interview.

Tanya outlined three episodes in her life when her exercise participation was distinctly different. During college and her early teaching years she undertook the most intensive exercise of her life. This was the episode in her life that Ivan retrospectively described as "possibly addicted". When asked about this in her Phase Three interview she replied:

I'm trying to think really, I'm trying to think back ... perhaps more so then ... I think because I was running so much it would have been a big change in my lifestyle not to have done it. In fact my lifestyle was based on it particularly ... I

was more dependent on it particularly, when I first went off teaching and I didn't know anybody anyway and it was a good way of not sitting in my caravan on my own ... I didn't know a soul down there and a lot of it then was you know take any opportunity to go out and do something and quite often I was out five, six times ... yeah ... possibly then.

There was also a period when she worked on a boat and therefore was unable to exercise on a regular basis. This sedentary episode was sandwiched between the two most active times. Tanya mentioned that, upon her return home, she was "a bit porky" and this concern was what prompted the revival of her exercise regime.

9.2.2 Critical Life Moments

Anita immediately identified with the notion of a link between the different episodes of exercise and critical life moments, acknowledging that the changes in her exercise participation corresponded with other life changes. Anita developed this theme and explained that "underneath" these critical life moments exercise provided a mechanism for coping with stress. She outlined her need for exercise to remain constant in her life in order that she could deal more effectively with stressful occasions:

But ... underneath all that sports kind of helped to keep me sane through all the changes that have gone on ... so when you hear people talking about how moving or changing jobs or other things happening and they just can't find the time to do sport. I always find time to do it because that's what keeps me going.

If, as for Anita, exercise is a coping mechanism for stress then it is not surprising to find that some individuals increase their activity during times of stress. This relates to Robbins & Joseph's (1985) 'therapeutic and mastery hypothesis' of running. They found that some runners continued exercise because of the positive psychological benefits gained as a consequence. Through controlling the running aspect of their lives, exercisers were able to feel in greater control of other more stressful elements of lifestyle (Robbins & Joseph, 1985). This is mirrored in Anita's comments about her exercise participation.

The significance of stress in relation to the changes in exercise participation was an issue that Chris considered fully:

I think they are definitely ... I would say they are related to stress but I think they are actually more related thinking back ... more related to emotional maybe almost lifestyle changes that occur. Because I have gone through periods of quite high levels of work stress in which I haven't necessarily developed the need to increase the amount of exercise whereas if I think back to the times when I was probably most exercise dependent there were huge emotional changes that were going on and I think that was probably ...

Although Chris acknowledged this impact of stress, she made the link between the stress and critical life moments very clearly. For both Chris and Anita, it was the two aspects of stress and lifestyle change brought about from a critical life moment that created the change in exercise participation.

If the continuum process model of ED is accepted, it is possible that Chris may have instigated a pattern of behaviour, by increasing exercise participation, that could lead to her previous state which she described as being "more addicted". Presumably, from Chris's descriptions, if a critical life moment occurred that was combined with the experience of additional emotional upheaval she could return fully to the 'addicted' state. Sam reflected on earlier changes that had occurred during Chris's life history:

I remember Chris's attitude in general ... and it is much more confident and I can appreciate that now because it was ... a different place ... if she was more compulsive and demanding of herself it was because she was less secure ... I don't think that the exercise compulsion has changed. I think that it is has remained constant but I think that the changing ... can make you more confident and the experiences she has had ... she has gained in confidence.

(Phase One interview)

It is significant that Sam made a link between life experiences and exercise participation. Sam acknowledged that although Chris's exercise behaviour and other life circumstances changed, these changes did not have any impact on the 'compulsion'. The compulsion remained constant and unchanging.

Critical life moments often resulted in a change of lifestyle priorities. Altered priorities frequently impacted upon the level of exercise participation. The addition of children to the family had a dramatic impact on the nature and intensity of Tanya's participation. This change was described by both Tanya and Ivan in terms of priorities. Before the birth of her children exercise had a high priority within Tanya's lifestyle:

I think because I was running so much it would have been a big change in my lifestyle not to have done it. In fact my lifestyle was based on it particularly ... I was more dependent on it, particularly when I first went off teaching.

Ivan acknowledged that "she is quite active but not as active as she was before the children" (Phase One interview). When Tanya and Ivan decided to start a family time had to be assigned to the children and they became a priority within the relationship, which altered the dynamics of the family unit. This prioritisation of the children over exercise resulted in a change in Tanya's attitude to exercise. She explained that: "priorities have all changed and things to fill my time ... I can still feel good about myself with not having to do that much".

9.2.3 Rationalisation of Activities

The analysis presented in the previous chapters showed that the number of activities often fluctuated throughout the exerciser's life history. From the collective life histories a very similar pattern emerged. This pattern indicated that exercise was established when still at school, with involvement focusing on one or two activities during early adulthood and then multiplying again during middle age or later adulthood. For exercisers over the age of 30 (n=13) this pattern is found in all life histories except Elizabeth's. (Elizabeth's differences are discussed on p. 149). Decisions about the number and types of activity undertaken were not *ad hoc* but were deliberate strategies employed to maintain participation. Activity was an essential part of these individuals' lifestyles and, in order to maintain participation, it was occasionally necessary to change the type of the activity. As Anita explained: "although it will mean shifts and changes in planning ...". This was further supported by Sam who stated:

It's an intrinsic association between your physical body and exercise ... then I think you are in for life and maybe it fluctuates to some extent but basically you will always be an active person ... you may change your activities according to your circumstances.

This fluctuation in the number of activities undertaken conflicts with Veale's (1987, p. 736) criteria for exercise dependence which included the "narrowing of repertoire of activities which leads to stereotyped routine pattern". Although Veale reconsidered these criteria (Veale, 1991; 1995) the stereotyped pattern remained. Evidence from this study indicates that, when considering a longitudinal pattern of participation across the life history, the repertoire of activities will change because the essence is to maintain exercise itself rather than the specific activity.

9.2.4 Nature of Change

Whether changes in participation were sudden or gradual was considered in the previous chapter (see Chapter Eight p. 148). The evidence collected to that point indicated that these changes were gradual rather than sudden. Further evidence from the Phase Three interviews supports this. For example, Chris mentioned a "process of change" and Anita referred to the changes as "shifts".

After the analysis of the Phase Three interviews, further evidence was gathered to support the proposition that the individuals within this study had a changing association with exercise throughout the life history. This association with exercise often changed according to priorities assigned to exercise in relation to other critical life moments. If a stressful critical life moment occurred it was then that changes in exercise participation were most likely. Changes in exercise pattern seemed to be gradual but exercise remained a constant feature throughout the life history. A strategy employed by exercisers in order to maintain participation was to change activities throughout the life according to other situational factors. Subjective interpretations of exercise participation indicated that exercisers considered themselves 'dependent' at some points but not at others.

In the light of this, therefore, Propositions One and Two remain unchanged:

- One An exercise dependent individual has a fluctuating association with exercise throughout the life history. This is characterised by moments of change. Subjective interpretations of the dependency process are determined by the priority assigned to exercise during that life episode.
- Two These moments of change are related to critical life events such as change of job, career, geographic move, onset of relationship, or birth of children.

Finally, it is apparent that the Propositions listed thus far do not represent ED explicitly as a process. A ninth Proposition is therefore added:

- Nine ED is best conceptualised as a process model in which exercise intensity varies on a continuum from low to high.

9.3 The Construction of a Self Identity (Propositions Three and Four)

The role of exercise in the construction of a self-identity emerged from the Phase One data analysis. The presentation of these ideas to Phase One exercisers, therefore, allows a process of 'member checking' to determine the accuracy of the emerging ideas (Henderson, Bedini & Hecht, 1994). There was support from the members for the idea that self-identity is constructed in multiple layers and based on exercise participation. However, there was not always evidence for the details of those identities. The three selves are explored and then discussed in the light of Propositions Three and Four.

9.3.1 The Physical Self

All Phase Three exercisers agreed with the notion of the physical self and the importance that this identity played in the continuing participation in exercise. The physical self was a manifestation of a need to sculpt the body to a socially desirable shape and size:

... how I think I am which is how I am now ... and I think ... I quite like ... I imagine myself and I quite like the fact that other people see me as somebody who clearly does sport and that's how ... that's how my self image and how I like my self image to be ... perhaps less so now because it used to be obvious that I was a cyclist when I was racing and yeah that was really how I would define myself it suited me to be like that.

(Anita)

Yeah, I like to feel that I look good ... but you know ... to me... I like it when I consider that I am looking ... trimish ... don't like to look sort of ...

(Tanya)

I do like my body more when I am exercising and I have certainly found that ... lifting in particular gives me much more shape. So I can go out and run or swim a lot and it wouldn't necessarily provide me with the shape that lifting does because it tones the muscles. (Chris)

Chris felt that the physical shape achieved was actually a compromise:

I could have a much better body shape so ... to me there is always a bit of conflict there in terms of yes, my physical body is quite important and I don't like it when it gets flabby but it's obviously not important enough to me to overcome some of my other needs to be eating certain foods or certain amount of foods. I wouldn't like my body if I wasn't exercising at all. I have been there and done that.

For Chris the physical self was an important motivator of exercise participation but the sculpting was a compromise between a need for exercise and the enjoyment of food. Chris's sense of physical self was different from Anita and Tanya because it enabled Chris to balance other needs in her life. For Anita and Tanya, however, their sense of physical self was more related to the construction of a specific shape or body:

... as you are getting older as well you start to think whether you have got any choice about it anyway, as your body starts to fall apart ... and that's quite nice as well to be able to still feel that you have a body that you still have some self control over ... you know ... I don't imagine myself going on wild diets and things but to have a choice ... to actually have a body that you can go out running and without even thinking about it and you can do things and you look OK as well

(Anita)

I'm lucky I am sort of fairly ... I don't fluctuate weight much anyway I'm lucky in that respect. I don't have to do an awful lot but I do like ... it's just ... we eat what we want ... erm no, I do like to feel I look good and you are the same aren't you?

(Tanya)

These comments clearly indicate that the construction of the physical self was an important aspect for the Phase Three exercisers.

9.3.2 The Critical Self

Evidence for the idea of a critical self from the Phase Three exercisers was mixed. Anita and Duncan identified most strongly with the notion of the critical self in Anita's participation. They were asked to explain how the critical self drove Anita's exercise:

I don't know what it is really. It's erm it's partly about ... thinking if I want to be doing an involvement in a particular sport I want to be doing it ... well enough to be ... yeah I guess it's about looking stylish.

(Anita)

The need to be stylish in her performance had already been emphasised by Duncan both in his Phase One interview and earlier in his Phase Three interview. For Duncan, Anita's critical self was strongly linked with her gender: "So I would also say that ... gender here or ... I don't know what you would call it but I think Anita gets a kick out of that she is a woman doing that with all these geezers".

This link between her critical self and her gender was discussed by Anita in relation to the fact that her main activity, cycling, is a male dominated sport. Her physical self-representation as a woman in the sporting environment was important enough to Anita for it to be a motivator within her critical self.

I have chosen a sport where there are very few women and I am always delighted when there are other women around and there aren't many of us and sometimes they do come on the A run but not very often ... but what I don't want ... what I definitely want to avoid is that I am dismissed as yet another woman who either isn't good at doing it ... I want to be seen as women can do it and they can do it well and they can be successful ... and I feel like I am definitely a woman who is representing women in that respect, really and can say, 'yeah, we can do it too' ... and we can do it well, as well. So that's important so I think that part of it drives it as well.

For the other exercisers, however, there was less acceptance of the critical self. Chris initially accepted the critical self:

Yeah, I mean I guess I have high expectations ... I push myself hard based on those expectations I am sure the exercise is part of that ... I would say that that's all part of a critical self and maybe that's all related to the dependence ...

but Sam had difficulty in accepting that description of Chris. Sam suggested that an individual strongly driven by the critical self would keep detailed records and logs of their participation. The keeping of detailed training logs was noted by Joseph & Robbins (1981) in their analysis of committed runners and Sam felt that the critical self would require Chris to keep such logs, when in fact she did not.

In the Phase Three interview they felt that the critical self was more applicable to Sam more so than Chris. This can be contrasted to the Phase One interview in which Sam indicated that Chris is a perfectionist:

Not to the point of destructive behaviour towards others or herself in other words if she doesn't get it right or if someone else that she is working with doesn't get it right ... she is able to make adjustments and ... show compassion. So she is a perfectionist but she is warm in her perfectionism.

The critical self is not an expression of perfectionism, it is socially constructed rather than personality based. It is driven by the needs and desire of high personal standards and expectations when compared to others in a social setting.

After the discussion about training diaries, Chris became more reflective of earlier comments about the critical self:

This really still confuses me because you know I am very good at suggesting to others that they set goals ... and this is what they can be doing to achieving this and I don't care diddley squat for myself I really don't.

This last statement suggested that Chris was beginning to question the nature of the critical self in her own identity.

Tanya and Ivan had even more difficulty in recognising the critical self in Tanya. Tanya explained that, earlier in her life history, achieving high standards was important but that this was no longer important. The dialogue between Ivan and Tanya indicated their reflections on how the critical self was not now identifiable in Tanya's participation:

T: I suppose that was a little self test, yeah ... I suppose we don't get that much opportunity now to really push ourselves now do we?

I: You don't. There is plenty in the tank as far as Tanya is concerned.

T: I mean you go out for a run sometimes don't you and you just flog yourself to bits don't you and come back ...

I: But I am different, very different to you, I sprint up hills and things but you don't ...

T: Trudge along.

...

I: ... You see you are quite funny Tanya because I mean I can see ... everything you [to KB] say I can see me ... you know the social part that's shared the sense of identity is very strong for me.

...

I: But not for Tanya at the moment.

T: No.

The conversation between Tanya and Ivan illustrates some important features of Tanya's exercise participation and the way it was perceived within the relationship. By the end of the conversation they concluded that the critical self did not apply to Tanya even though both Ivan and Tanya believed that she set high standards and had high expectations. Tanya thought this comment about her identity

was more applicable to the past rather than the present. For example, she admitted that she had had high expectations of herself in relation to hockey, particularly in the past, but these were no longer applicable because she now had other priorities in her life. In the initial interview Ivan explained that Tanya had high standards and expectations. In the example above, however, he mentioned that he personally identified with Propositions about self-identity and this seemed to change his previous acceptance of Tanya's high standards.

9.3.3 The Social Self

As with the critical self, the evidence for a 'social self' was mixed. The most direct evidence for this construction came from Anita and Duncan who agreed with the properties of 'public status' and 'life essential' exercise (see p. 117-119). Anita confessed that she preferred to participate with other people and that the social side of exercise was important to her. She did not believe that being a member of the club was important to her but Duncan disagreed with that:

D: ...well you spend ... as well as cycling on a Sunday you spend half your time talking to people don't you?

A: Well, yes.

D: ... and you like ski leading because you have a whole captive audience ... don't you?

A: [laugh] a club of people to talk to ... skiing, yeah.

D: For people like Kate and John it is true because it is a social thing and you know other people like Julie Murphy, cross country skier, it is a social thing you talk about it. You know where you've been, where you're going, gear things ... I know that you don't do that quite so much as me and bicycles. Cyclists do "sprocket talk" don't they when they get together?

Thus, although Anita acknowledged that her social life did not revolve around her cycling club, she reluctantly agreed that being associated with a particular set of people gave her considerable satisfaction. Participation in a group also had the added benefit of maintaining her standard of performance:

... in an ordinary way on a Sunday that means you will tend to do a certain distance and you tend to kind of ... your speed will be a certain speed particularly in terms of cycling. You kind of take in turns to go in the front so that kind of keeps the speed at a reasonable pace ... but ... and that's just kind of getting there and coming back which is slightly different to being on your own ... but also cycling in particular you chase the signs and you sprint for this and that and the other and if you going up a hill then you give each other a hard time because ... that's what you do ...

(Anita)

Tanya also enjoyed the social element of exercising with other people. This was especially significant with regard to the hockey, which is a team sport. Tanya and Ivan also ran with other groups of people

and this was also described as enjoyable for Tanya. Both Anita and Tanya had extensive friendship choices, including people who were active exercisers.

Chris did not have the same motivation to exercise in groups. She explained that "I can go and exercise by myself, I won't necessarily need anyone else to do it". The swimming and aerobics sessions that were undertaken twice a week were within a group environment. Chris also undertook much of her exercise regime with her SO. Although she did not describe herself as having a "need" to exercise with other people, she rarely participated alone.

Tanya and Chris rejected the possibility that they exercised because they wanted to be seen as exercisers. Chris explained:

So, I don't necessarily need other people to see me doing it. It's important for me, if I see me doing it not that other people necessarily do it.

Tanya similarly rejected the idea that she needed to be seen participating. She used the same explanation as Chris: "I don't think that I would be doing it just to be seen to be doing it ... it's something I want ... I want to do". Although both rejected the importance of being seen to participate there was other evidence to suggest this element was important to them. Both worked professionally in sport and, when questioned about the significance of being a role model, both agreed that that was important:

Yeah, I do feel it's important to be a role model I mean I do get upset if I see people who are within a sporting environment, involved in a sporting environment who are unfit, overweight, smoking because I just don't feel that that's the image that I like in sport so ... and maybe that's part of the reason why I am choosing to exercise at work because I feel that it maybe providing a positive role model for the students.

(Chris)

Erm, yeah ... I mean it's nice to feel ... erm ... yeah ... it's nice to be fit and nice to be seen to be fit ... but it ... but I think as a PE teacher I should be ... that's the image I want to portray ... I suppose ... as soon as I feel that I can't do that I will give up probably.

(Tanya)

The need to fulfil this role was confirmed by both Sam and Ivan. Sam made earlier reference to the possibility that there was "an obligation to be seen using" a sports facility at work, which was linked to Chris's professional role within sport. Chris did not deny this statement thus implying acceptance. So, although Tanya and Chris struggled to accept this side of the 'social self' there was evidence it within their narratives.

The final element of the social self involved the 'life essential' exercise, the suggestion that exercise was so central to identity that life would not be possible without it. Strong links were made between this and the physical self especially by Anita:

I haven't been consciously thinking, 'oh, you know I need to keep on doing sport because I'm getting older' or whatever. Or I need to do this because I'm getting older ... but it is a shock sometimes when you see people who are the same age as you and you realise that because they are not doing any activity or very little activity the effect is actually quite dramatic. Now that I am in my 40s, that the people the same age are beginning to look completely different and I wouldn't be at all happy if that was how I was looking ... partly it's looks and partly it's the thought that you are actually becoming less capable of doing certain things that you couldn't just decide that you are going to jump up and do this and that or the other and the idea of not being able to do that is at the minute certainly I would be thinking, 'oh, I don't want that to happen'.

Chris explained that the process of ageing and the impact of that process on the body was not conscious in her decision to exercise but all other Phase Three exercisers and SOs explained that ageing was an important element of the exercise process:

... absolutely ageing is very important ... reason for me to continue exercising.
(Sam)

Yeah and for our age as well I mean we are 40 now and we ... I feel we do a lot more than people who are a lot younger ... I like that to be honest ... I wanna be like that.

(Ivan)

... because I am getting older I want to keep active.

(Tanya)

These data support the link between life essential and the physical body. This element bridges the social and the physical self and so, rather than remaining a property of the social self, it is better placed as a property of the physical self.

Through a process of member checking further evidence for the construction of a self-identity through exercise was gained in the Phase Three interviews. Anita's experiences of ED throughout her life history provided most support for this interpretation of self-identities. Chris acknowledged similarities in most areas but did not accept the social self so easily. There was evidence within the data, however, to support the concept of the social self. Least support came from Tanya's life experiences. Eventually Ivan stated "everything you say I can see me ... but not for Tanya". As Tanya did not describe herself as 'dependent' or 'addicted', at the time of the interview, it is unsurprising that she struggled to identify with the construction of the three self-identities within her own life history.

The first Propositions relating to the self-identity, therefore, remain the same:

Three An individual who is dependent upon exercise differs from non-dependent individuals in that a salient part of their social self-identity is constructed through their participation to exercise.

The second Proposition relating to self-identity is slightly modified:

Four This self-identity is a conglomerate of three different identities: the physical self (*which includes the feature of 'life essential'*), the critical self and the social self (*which includes the feature of 'public status'*).

9.4 Impact on Relationships (Propositions Five, Six and Seven)

The features identified from the analysis of the previous chapters were:

1. exercise participation does not necessarily have a negative impact on SO relationships;
2. exercise participation is usually supported within the relationship;
3. the strategy of accommodation is a two way process. The relationship accommodates to the exercise participation and the exerciser accommodates their participation to the relationship;
4. accommodation may have elements of conflict;
5. there is less conflict in the relationship if the SO is not sedentary.

These features have emerged from the data gathered during Phases One and Two and were presented in Propositions Five, Six and Seven. The relationships of the Phase Three individuals have already provided evidence that supports these features. In Phase Three interviews, therefore, questions explored specific relationship issues that had arisen from the Phase One analysis.

All Phase Three relationships involved a physically active SO. One of the areas for further exploration, therefore, was relationship process when participating together. Duncan's exercise was based on specific times during the week and the year i.e. during weekends and vacations. Consequently, Anita undertook most of her exercise throughout the week either alone or with other individuals. This resulted in certain conversations about exercise:

KB: Do you tease Anita about this? [referring to the way in which exercise is discussed within the relationship]

D: Not really, no ... I don't actually, do I?

A : Yes, you do actually.

D: Yeah, I do.

[laughter]

A: Sometimes with the names you call me and the things that you say ... yeah ... 'Did you have a good workout?' 'Have I done my exercise?' 'Then it will keep me going for the day' and ...

D: Yeah, that's true.

A: 'Couldn't cope' ... and, 'yes, do go out for a run because you won't cope otherwise, will you?' ... things like that.

D: It's not teasing though, it's just ...

A: Statement of fact?

D: Yes, indeed.

All the exercisers talked about the importance and significance of exercise within the relationship. Anita and Duncan discussed the importance of their choice of friendships and the role that exercise played in their weekend activities:

I mean I certainly ... erm you know wonder what to do with friends if they don't do any activity because what are you going to do if you go and visit them? You can't go cycling or walking or anything else with them ... so ...

(Anita)

When asked specifically to comment on whether the exercise was accommodated or a source of conflict, Duncan explained that it was only occasionally a minor conflict: "I don't see it as being ... very occasionally it's a conflict ...". The elements of conflict were balanced out by strategies of justification (see Chapter Seven p. 122):

I knew that that would be the case so I mean maybe it is because I am so easy going ... (pause) What irritates me is if she is hassling me to do sport, a lot more than her doing sport and she doesn't do that very often. So I don't think it's ... sometimes it is slightly irritating but it's not an issue at all, it's what Anita is, it's a part of who she is and anyway if she didn't do it she would be a pain in the arse ... so there we are ...

This strategy of justification was utilised by Anita herself who added:

A: I think as well you knew that I was a cyclist and do things when we started this relationship ...

D: Yes ...

A: You knew that if you got me you got the rest of it as well.

Duncan believed that mutual exercise participation helped the processes of accommodation:

D: Because we do things together I think that that makes a big difference. If we didn't do that ... well we wouldn't be together probably.

A: Yeah, that would be hard wouldn't it?

Exercise participation seemed to be even more integral to the other two relationships. In Chris and Sam's relationship exercise was described as the 'norm'. When asked to clarify what that meant the reply was:

Well there aren't too many other things that are in our relationship that occur every day. I mean eating I suppose does ... but it occurs every day so it is a core part of our day.

(Sam)

The lack of conflict and the extent of the accommodation was acknowledged by Chris who believed that the relationship "incorporated their love of exercise".

This incorporation of exercise into the relationship was also experienced by Tanya and Ivan. Ivan explained that they undertook many different activities together both as a couple and as a family: "we do spend a lot of our leisure time engaged in fairly intensive walking or running" (Ivan). He then clarified the importance of both the activity and the time it took in the development of the relationship:

I ... so we've actually spent a lot of time together shared time which actually helps to build a relationship sort of ... stabilise it ... and if we didn't have the exercise at all then you would almost have to learn what to do ... find something else and it would be a real change for both of us wouldn't it ... and you might not like the person.

T [laugh]

I You know what I mean ... it would be a big change because every weekend we do something don't we if we are not running.

For Chris, Sam, Ivan and Tanya, therefore, mutual participation in exercise went beyond the strategy of accommodation. For these couples exercise was not just an interest of one individual that had to be accommodated and tolerated by the other but was a fundamental and important element of the relationship as a whole. Although Anita and Duncan participated in activity together the processes in their relationship were different. Those differences were largely brought about because exercise participation was not a feature of daily life but a feature of weekend or holiday time. The exercise was not as instrumental, therefore, in grounding the relationship but was important in providing a basis for shared experiences.

When comparing the various relationships, there are no apparent differences between those who are dependent and those who are committed. There are more similarities in the role of exercise in Chris's and Tanya's relationships than Chris's and Anita's. Common to all three relationships, however, is that exercise is valued within the family unit and that all individuals participate in activity with their SO.

Propositions Five, Six and Seven stated:

- Five Exercise dependence does not necessarily have a negative impact on a SO relationship.
- Six A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful. The process of accommodation may include moments of conflict.
- Seven An individual who is dependent upon exercise may accommodate to the significant other relationship or family during moments of their life history and consequently change their exercise behaviour.

The evidence gathered in this phase provides support for these Propositions.

9.5 Deviance and Labelling (Proposition Eight)

The possibility that ED had been constructed around a deviant perception of exercise participation was presented to the Phase Three exercisers. All six of the Phase Three exercisers believed that deviance and labelling was a societal reaction to excessive exercise undertaken for recreational and intrinsic purposes.

Anita acknowledged that her competitive foundation in the sport had given her more security because of societal acceptance of this type of participation. She felt more accepted because she had once competed:

... perhaps doing the competitive side of it gives me an excuse as well ... 'oh, yes she is somebody who does compete so that's why she is still doing all this ... all the training and that's why she is like she is'.

This was similar to the comments made by Frances about competition legitimising training. Chris believed that individuals who exercised for no extrinsic reward were subject to labelling as deviant. She included herself in that:

I suppose it's to do with societal expectations in that if you have someone whose talent is within the sporting arena and they are choosing to push that to their potential then that's what their whole life revolves around and their goal is to be achieving that aspect. Whereas if someone is ... shall we say just exercising then yes, people will look at them pretty weirdly like, 'well, get a life person' ... like this isn't the real world it's not gonna get you the gold medal at the Olympics which is ... people can then attach something to the reason for exercising. You don't get a gold medal at the Olympics, you can't attach anything to it ... it's like well 'I can't see the point in it' so I think yeah. I am probably pretty deviant ...

Sam also agreed that labelling occurred and felt “we are guilty of labelling people because we, as a society, we say well you are not balanced”. This was emphasised more than once:

S: Society says, ‘it’s OK, you can exercise till you fall on your face if you are good’ and elite and good enough that there is a chance that you are going to represent your country or your university or something. But if you are just Joe Bloggs and you act like that ... I think you know you ... are not well [laugh] you don’t have ...

C: That’s right you don’t have balance.

S: You are not balanced.

Tanya and Ivan also had similar opinions and acknowledged their own role within the labelling process:

I have seen people doing lots of exercise and I always think ‘what’s his problem, what’s he doing that for?’ ... my period of most intensive exercise was when a relationship broke down ... and then I was just at an extreme ... so I do think yeah, you do question and I do think that quite often there is a problem.

(Ivan)

... but it’s wrong to label everybody like that.

(Ivan)

... you quite often find with body builders and things like that and not for competition ... I think that’s enough anyway but you do wonder why and what they are doing it for. I always think of them as extreme cases.

(Tanya)

The Phase Three exercisers accepted the concept, therefore, that ED is not necessarily pathological or diseased behaviour but rather a societal response to particular kind of exercise behaviour.

Proposition Eight stated:

Eight Exercise participation that is considered to be extensive and without extrinsic reward is socially labelled as dependent and, therefore, deviant. Exercise participation that is considered to be extensive but in pursuit of an extrinsic reward is socially labelled as elite or professional and is celebrated.

This Proposition remains unchanged. The complete set of Propositions is presented in Table 9.1

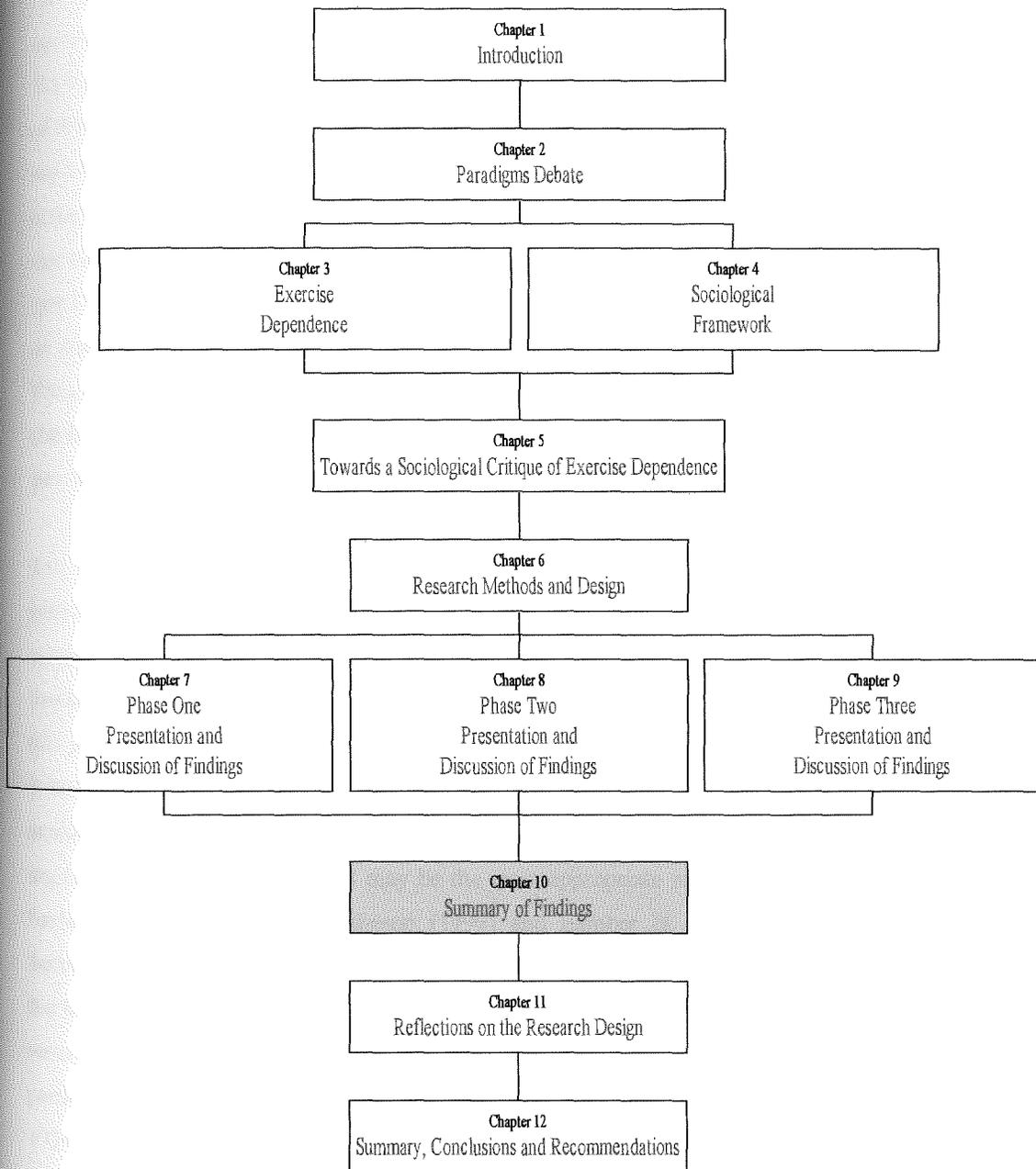
Table 9.1 Propositions Identified from Phase Three Analysis

One	Unchanged	An exercise dependent individual has fluctuating association with exercise throughout the life history. This is characterised by moments of change. Subjective interpretations of the dependency process are determined by the priority assigned to exercise during that life episode.
Two	Unchanged	These moments of change are related to critical life events such as change of job, career, geographic move, onset of relationship, or birth of children.
Three	Unchanged	An individual who is dependent upon exercise differs from non-dependent individuals in that a salient part of their social self-identity is constructed through their participation to exercise.
Four	<i>Modified in its description</i>	This self identity is a conglomerate of three different identities: the physical self (<i>which includes the feature 'life essential'</i>), the critical self and the social self (<i>which includes the feature 'public status'</i>).
Five	Unchanged	Exercise dependence does not necessarily have a negative impact on a SO relationship.
Six	Unchanged	A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful. The process of accommodation may include moments of conflict.
Seven	Unchanged	An individual who is dependent upon exercise may accommodate to the relationship or family during moments of their life history and consequently change their exercise behaviour.
Eight	Unchanged	Exercise participation that is considered to be extensive and without extrinsic reward is socially labelled as dependent and, therefore, deviant. Exercise participation that is considered to be extensive but in pursuit of an extrinsic reward is socially labelled as elite or professional and is celebrated.
Nine	<i>Added</i>	<i>ED is best conceptualised as a process model in which exercise intensity varies on a continuum from low to high.</i>

9.6 Summary

This chapter has explored eight Propositions in relation to the data collected in Phase Three. The exploration addressed four main areas of life history, the construction of a self-identity, impact on relationships, and labelling. Seven Propositions from the previous chapter remain unchanged after this final analysis and one proposition has been modified. A new proposition has been added in this phase. The next chapter summarises the overall results and discusses the nine Propositions in their entirety.

Figure 10.1 Outline Map of the Thesis Highlighting Chapter Ten



CHAPTER TEN

SUMMARY OF FINDINGS

10.1 Introduction

As discussed previously the current body of knowledge about ED is challenged in this research project on several different grounds. The first is the questioning of a disease-based approach (see Chapter Three) that is replaced by a version of dependency based on situation, time and identity. Further, one of the ramifications of the disease-based approach is that it places too much emphasis on a product model of ED (see Chapter Three p. 37). This thesis explores a process model of ED through life history analysis. Secondly, previous research fails to document the subjective experiences of exercisers and consequently reflects a body of knowledge that incorporates only researchers' voices (see Chapter Two p. 13; see Chapter Three p. 33). Finally, previous research is based almost entirely on exercisers' self report data which has only been triangulated in a small number of studies (i.e. Thaxton, 1982; Rudy & Estok, 1990). This criticism is particularly significant when considering the claim that ED has a negative impact on SO relationships. Only Rudy & Estok have previously sought data from SOs to verify this claim.

The data for this research project were collected over Three Phases. A set of Propositions was established after Phase One analysis and was the basis of the interviews for Phases Two and Three. In summary the Propositions that conclude this study (see Table 13.1) offer three new features to the literature on ED. First, they document the subjective meanings of ED for the individuals involved in this project. Peele (1979) criticised previous research into more traditional forms of addiction because it lacked such subjective accounts. This criticism can also be applied to research on ED because few studies are actually based upon the stories told by the exercisers themselves. Although Szabo (2000) argues that interview techniques may be the most appropriate methods for ED research studies by Sachs & Pargman (1979), Matheson (1999) and Bamber *et al.* (2000) are the few examples. Secondly, they explore a relationship between the construction of identity and exercise. For some of the individuals in this study exercise was a central element of their identity. Consequently, exercise remained constant throughout their life history even though changes may have occurred to their participation habits. For these individuals exercise was a central part of the construction of 'I' (Mead, 1934). Wearing (1991) was critical of the lack of research in leisure that took account of Mead's 'I'. She noted that much of the leisure research only accounts for the 'Me' and ignored the 'I'.

Finally, the Propositions describe the connection between ED and SO relationships. This relationship has been discussed extensively within previous research (see Chapter Three) but except for Rudy & Estok (1990) there has been little empirical exploration of it. This study described the processes of supportive SO relationships for ED individuals. This thesis aims to expand the discussion of ED to include sociological theories which have largely been ignored within the research (except for Ewald &

Jobu, 1985; Nixon, 1989; Cole, 1998). This chapter is the last in the results section. It consolidates the main findings and considers the final area for discussion: that of a process or product model of ED. The Propositions are discussed in their entirety.

10.2 Process or Product Model

The final feature discussed in the Phase Three interviews related to whether ED was better conceptualised as a process (continuum of behaviour) or product (all or nothing state). For Chris it was definitely a process of ever changing behaviour:

I think that it will change continually and it's not something you move to a point and you stay there at all. So its a little bit like ... you can move to a certain point and then you might go back according to the circumstances and then move up again so I think dependence ... dependency could well fit along within that same process.

Sam conceptualised the continuum in relation to intrinsic and extrinsic motivation:

I think it can be on the continuum and it can leave your life and never return ... and a lot of athletes, you know, who were getting all this kudos in competing, quit in adulthood. But if it's an intrinsic association between your physical body and exercise ... then I think you are in for life

Sam's link between intrinsic motivation and ED supported previous research which suggests that ED only manifested in non-competitive athletes (Veale, 1991). It is possible, however, that competitive athletes are intrinsically motivated and subject to similar processes of ED.

Anita believed that there was the possibility of two types of dependence allowing for both a process and a product version. In response to the question about process as opposed to product models she replied:

A: Yeah, I think that's true and I think there is possibly a certain set of people where the addiction is perhaps some sort of product where it is an all or nothing thing. I have read for example about ... Liz McColgan and she has talked about her addiction to running and how that was a real problem and she had to do something about because she was just over training like mad and ...

D: She had a baby didn't she? Isn't that what she did about it?

A: Well, that probably came at the same time as her trying to sort it out but certainly she was kind of having to deal with that and ... in fact our friend Christine who is a vet, runs the vets, her coach ... she suspects that she is completely addicted to her training ... and her coach has to write her training regimes for when she is not supposed to be training so that she can prevent her from over training. So I can see that there are certain people who do perhaps, yeah do fit into this all or nothing thing but it is not something that ... for me, and I know lots of people who for them it isn't. That you can stand back and you can work out how it all fits in so, yeah definitely much more of a process

thing and its not an all or nothing or an all controlling thing either you are in control of it and you can decide what you want to do and how it ... and what that looks like ... and it is also integral to other things that you do so it's not taking over from other things which it tends to feel like when it's described ... when it's kind of like a product or all or nothing state.

It was interesting that Anita compared her own experiences with those of elite competitive athletes. Unusually, Crossman, Jamieson & Henderson (1987) undertook their research with high-level competitive athletes. Which is in contrast to most researchers who believe that ED is manifested only in recreational athletes that clearly has implications of labelling. Most other researchers have used sample groups that have included recreational exercisers (e.g. Kagan & Squires, 1985; Anshel, 1991; Ogden, Veale & Summers, 1997) or runners of all levels and descriptions (e.g. Pierce, McGowan & Lynn, 1993; Clingman & Hilliard, 1987; Rudy & Estok, 1989) (see Appendix A).

Anita's example implied that the difference between a product and a process model of ED is based on the element of 'control'. Those who have no control over their exercise are subject to a product model because it is an all or nothing state. She likened her own participation to a process model because she believed that she was in control of the exercise. Her control enabled her to make choices about the participation so that her exercise maintained the stability in her life:

Although it will mean shifts and changes in planning out how I do what, that's the sort of thing that will keep me on an even keel. I won't end up being the sort of person that will give up doing anything for either a year or years ...

The significance of control within the process of dependence was central to Anita's understanding of her exercise participation. This was reflected in the previous literature (Morgan, 1979; Sachs, 1982a; Sachs 1982b).

The issue of control was raised at the beginning of the Phase Three interviews when the terminology from Phase One was clarified:

D: No, it's an addiction because if Anita isn't doing exercise then she has withdrawal symptoms in terms of ... of her state of mind I would say ... i.e. becomes irritable and things like that.

A: I think that that's probably true.

D: Which are the symptoms of an addiction aren't they? A dependence for ... clinical dependence ...

A: They are not an addiction is so far as ... it doesn't then go further in so far as, if I ... for some period if I am say, running ... I usually run for about half an hour, I don't think, 'oh, now I must increase that and I must increase that and I must increase that'. I'm ... so from that point of view ...

D: It's a controlled addiction.

A: Yeah, yeah, that's right. It's not sort of ... it doesn't get sort of more and more and more. I mean I have talked to people for example who have got like serious work addictions, where they have got up earlier and earlier in the mornings or they have got up in the middle of the night and start working I'm not ... I'm not like that at all.

Anita said that because tolerance did not feature in her exercise behaviour it, therefore, limited her application of the term 'addiction'. Anita and Duncan's conceptualisation of ED mirrored some of the medicalised versions of dependence outlined in Chapter Three. The perception that tolerance is a central feature for dependence was outlined in Chapter Three (see p. 27) but it is possible to see that certain definitions of dependence do not require tolerance as a key definition (Allsop & Saunders, 1989; Gossop, 1989). It is not surprising, therefore, that Anita viewed tolerance as significant in her understanding of dependence. Blumer (1969) suggested that individuals react as well as act in the social world. Anita's construction of the meaning of dependence was an example of how she reacted to knowledge about addiction and dependence.

This link between exercise and control has been a feature of previous literature (Morgan, 1979; Pierce, 1994). It also emerged in some of the earlier interviews. Anita, for example, outlined her attitude to control in her Phase One interview:

I think I have worked out now what I need ... and I have got to grips with what that is. But it has kind of been a funny sort of negotiation between it controlling me and me controlling it, I guess ... and then coming to some sort of recognition of what that looks like. So there have been points when I have thought 'I don't want to do as much exercise as whatever' and then realise that I am not happy if I am not. So like doing something every day or nearly everyday suits me better than three times a week which I did for a while ... and at that point yes it controlled me because I was being ... I was hearing this isn't enough. But I worked that out so it's OK and that's worked out as a balance ... and I suppose I control it as well in that I happily recognise that I will do more in the summer when the weather is nice and I am happy not to do so much in the winter. I've got to the point where I have moved away from the point where I have become obsessed with thinking 'oh, it's got to be two hours every evening' and that sort of thing.

It is unsurprising that control was discussed in the Phase Three interview because of Anita's past relationship with controlling her exercise. In the other phases, control had different meanings for different exercisers. Chris, Sam and Lesley all mentioned control in relation to weight: "because it keeps my weight under control" (Lesley). Carl believed that he had lost control over his exercise when he was a runner, in contrast to Bob who believed he had not lost control. Fran thought that Norman was in control of his exercise and gave a specific example from Norman's past. For Frances, however, the relationship between exercise and control was more complex. During her period of unhappiness exercise enabled Frances to feel in control of elements of her life, and exercise "helped

me to control my emotions". Exercise helped to replace support systems that had been lost and, through exercise, control was regained:

... at that time made me feel so almost pathetic I couldn't deal with the way I was feeling. I should not be feeling like that that's not me ... I shouldn't be feeling like this and the exercise kind of gave the control that we talked about earlier and made me feel a bit stronger which is something that I did always used to get from somewhere else ... Mum and Dad or whatever ... I didn't feel that I was coping particularly well with being responsible for my own being I found something that yeah, gave me a bit of strength ...

(Frances)

The relationship between process and product models of ED seemed to be linked with the concept of control. For Anita, a product model was one in which the individual has no control and, therefore, ED is an all consuming state. The evidence from this study indicated that the exercisers have engaged with exercise throughout their life history. At times exercise had different meanings and been assigned different priorities. Some individuals referred to times in their past when exercise had been given a higher priority. This evidence, therefore, supported the idea of a continuum of behaviour.

For the individuals in this study one end of the continuum was marked by *activity*, because activity was deemed to be essential to their lifestyle. A central point was marked by *commitment* and many individuals identified with this stage. A point further along the continuum was delineated by *dependence* in which the individuals felt that their association with exercise was central to their identity. Many exercisers perceived an additional stage, that of *addiction*. Even though WHO (1976 cited in Willis & Campbell, 1992) suggested that dependence should supersede addiction, because of semantic difficulties addiction was conceptualised by the exercisers in this study as being more intense and lacking in control than dependence. Clearly, subjective meanings and interpretations may differ from researchers' knowledge. Subjective, embodied knowledge may lead individuals to different conclusions in comparison to researchers' objective knowledge.

10.3 Concluding Comments

This research project explored the meaning of exercise for 16 individuals throughout their life history. The range of terms that the individuals chose to describe their own exercise behaviour ranged from being 'committed' through to 'dependence' and 'addiction'. There was very little difference between those individuals who described themselves as 'committed' and those who described themselves as 'dependent' or 'addicted'.

The meaning of exercise for the exercisers changed during their lives. These changes in meaning corresponded to changes in the intensity of the exercise regime. Most exercisers were heavily committed to exercise and most had a very similar pattern throughout their life history, Elizabeth was

the exception to this. Perhaps for the individuals within this study the difference between dependence, addiction and commitment was merely a subjective interpretation of their relationship to exercise at the time of the interview. The final exploration of the construction of a self-identity with three individuals suggested that the conceptualised dependent self best fits the two exercisers who described themselves as 'dependent' rather than the exercisers who described themselves as 'committed'. This would be an area for further exploration in another study.

In summary, the Propositions that emerge from this study offer three new features to the literature on ED. First, they documented the subjective experiences of the meaning of ED for the individuals involved in this project. Peele (1979) criticised previous research into more traditional forms of addiction because it lacks subjective accounts. This criticism can also be applied to the research on ED because few studies are actually based upon the stories told by the participants themselves.

Secondly, the Propositions explore a relationship between the construction of identity and exercise. For some of the individuals in this study, exercise was a central part of their identity. Consequently, exercise remained constant throughout their life history even despite occasional changes to their participation habits.

Finally, the Propositions described the connection between ED and significant other relationships. This relationship has been discussed within previous research (see Chapter Three) but there has been little empirical evidence of it, except for Rudy & Estok (1990). This study described the processes by which the ED individual maintains a relationship that supports their exercise behaviour even though the relationship may experience conflict.

The research questions identified at the beginning of this thesis were:

Q.1 What are the social parameters of exercise dependence?

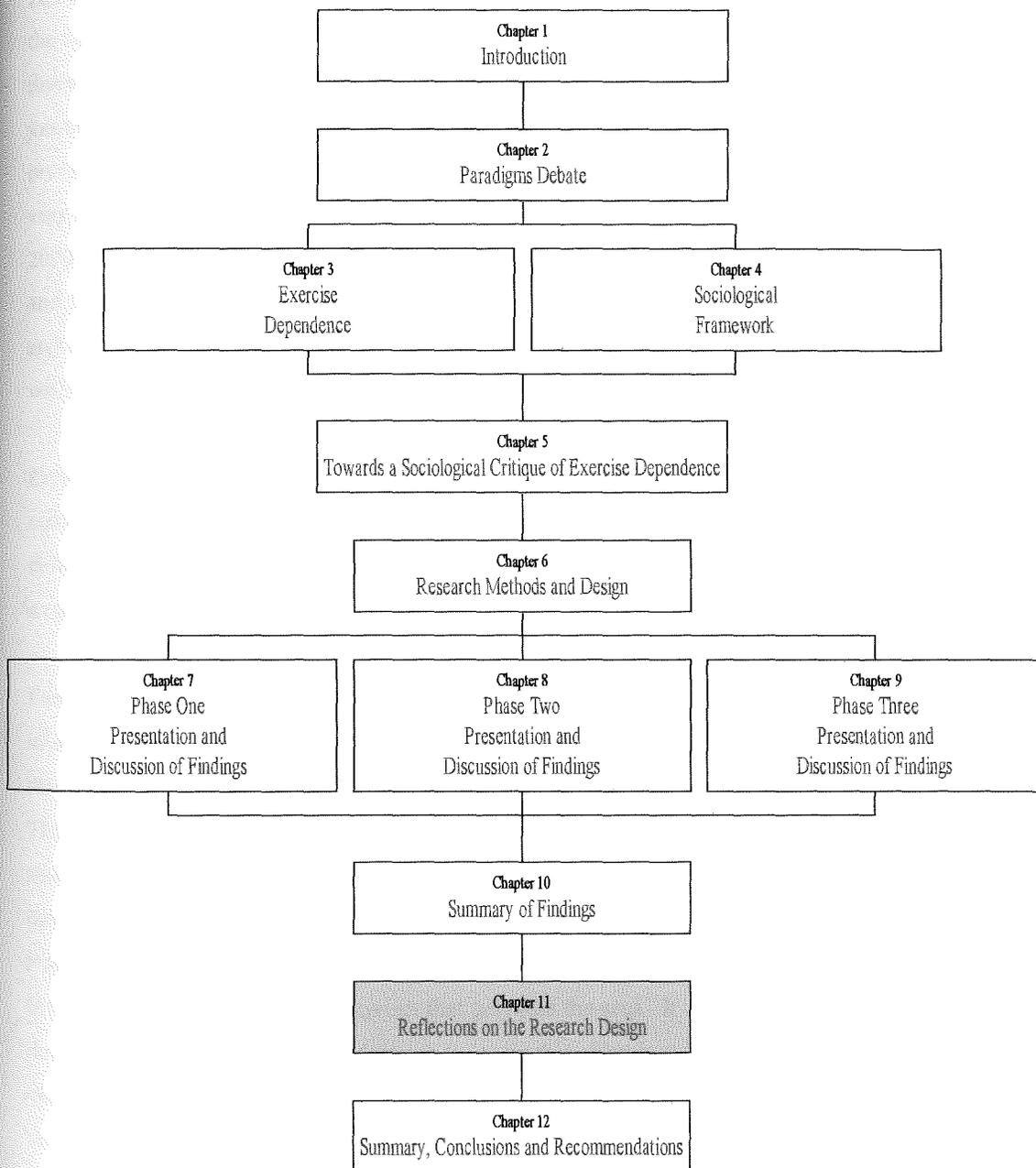
Q.2 How does a sociological analysis enhance the understanding of exercise dependence?

To answer the first question it is necessary to amalgamate key features from the Propositions. Social parameters of ED are identified as: time, situation, changing association with exercise, the development of a social self connected to exercise and labelling. The Propositions in their entirety should be considered as merely a starting point from which to consider ED in a sociological framework. To answer the second question, our understanding of ED is enhanced by the inclusion of exercisers' subjective experiences of their realities and meanings. This is a fundamental epistemological difference between this study and previous ones on ED. The narratives from the exercisers in this study indicate that their experience of ED was not a negative one but more akin to 'positive addiction' (Glasser, 1976). The ED researchers were quick to challenge Glasser's notion of positive addiction but it is only recently that the *pathological* and *extensive* nature of ED has been questioned once again (Bamber, Cockerill & Carroll, 2000; Leedy, 2000; Szabo, 2000).

10.4 Summary

This research project has investigated the area of ED from a sociological perspective, in marked contrast to most of the previous literature on ED. The narratives of individuals have been explored to determine what exercise meant for them. Hemingway (1995) suggested that because meanings of human acts are related to individuals then simple taxonomies become meaningless because they have no subject. This project illuminated the life histories of 16 individuals to demonstrate the process and meaning of exercise *to them*. This study concludes with nine Propositions, which may form the basis of a sociological understanding of ED. The impact of the researcher on the research process is described in the following chapter. The study as a whole is concluded in Chapter 12.

Figure 11.1 Outline Map of the Thesis Highlighting Chapter Eleven



CHAPTER ELEVEN

REFLECTION ON THE RESEARCH PROCESS

11.1 Introduction

Bailey (2000) refers to the movement within sociology to acknowledge, account for and understand the significance of emotions, the self, the personal and the intimate. My approach to ED attempts to throw light on all of these in the narratives of ED individuals. Juxtaposed against this, my research journey follows the same path. The purpose of this chapter is to explore some of these personal processes and to explain the impact that they have had upon the research. The chapter unpacks the very core of the 'private' to make 'public' the nature and purposes of the research project (Bailey, 2000). The chapter charts: the interviewing process, the reading process, the process of the argument and finally the personal process. Unlike other chapters within the thesis I will not sanitise the text and write myself out of the story (Fine *et al.*, 2000). Because the chapter is about me and my role within the research project it is necessary to write myself into the story to acknowledge *my* voice.

Emphasis in this study is on the subjective lived experience of the participants, therefore, a confessional tale is chosen because of the acknowledgement of the importance of voice. By using this defence, however, it could be argued that the whole study should therefore have been written through a confessional tale. A number of reasons contributed to this decision.

First, due to the Positivistic nature of the traditional ED research I believed that a realist tale would be more appropriate for the first part of the thesis. By critiquing an established body of knowledge using the same boundaries associated with that area I felt that my comments would have more credibility. This corresponds with Sparkes' (1995) acknowledgement of the crisis of legitimation of interpretative traditions. This crisis of legitimation is even apparent in the defensive posture adopted in the earlier part of the thesis. The areas of Sports Studies and Sports Sciences are by tradition associated with Positivism (Donnelly, 1999) and because I work professionally within such a department I am influenced by the hegemonic Positivism that pervades the area. It could be assumed therefore that this defensive posture resulted in the decision to locate this chapter at the end of the thesis rather than the beginning but in reality this was due to my desire to emphasise the importance of the participants' voices over mine. Therefore, I chose to place this chapter at the end in order to reflect this.

11.2 The Interviewing Process

Interviews, as a method of data collection, differ from other forms in many ways. One of the most significant differences is how the researcher, as agent, is central to the process. This is the main reason why I chose to use this method of data collection and it is difficult for me to imagine wanting

to collect data in any other way. More recent poststructuralist and feminist forms of interviewing have illuminated the salient interrelationship between interviewer, interviewee and the dynamics that are created through such process. Very few write frankly about their experiences but as a researcher these experiences can be very thought provoking and very illuminating. I found the work of Corbin (1971) fascinating in this respect. This section explores the processes surrounding the interview experiences.

One of the key features of the interview process in this project is inclusion of SOs. This decision emerged as a result of attending the research methods class and was recorded in the diary:

... with regards to a triangulation theory of methods I decided that I needed to talk to other people in this scenario as well, particularly dependents' SOs and those people who may treat the dependents.

(Diary 6 November 1995)

I can recall very clearly the moment when I sat in the lecture hall and thought about this idea. The collection of SO data, I believe, is one of the unique aspects of this research and I am constantly relieved that I made that decision quite early on within the research process. It is interesting to note my interest in "those who may treat the dependents" and how my thought processes have changed throughout the research process. Initially, my thoughts were located much more with the disease-based model and have moved away from that as I became more critical of the existing research.

This form of collecting data did present its own unique problems. First, there were issues of ethics and the confidentiality of the data collected. I could not guarantee confidentiality to the exercisers because I wanted the information to discuss with their SOs and, although I had permission to use the information in this way, it still felt alien to the traditional research protocol:

OK so I am currently thinking quite a bit about the debate surrounding the interviewing of a SO. The ethics, morality and other methodological problems surrounding the notion of confidentiality and other connected issues. The debate focuses both on the knowledge and the ownership of such knowledge. The potential of harm when sharing that knowledge, and the nature of the relationship between the two people who have this partnership. Burgess asked 'if it is so confidential why am I being told it?' Therefore, is there a possibility in the research that I may be seen by the participants as a means of communicating with their partners? So the notions of private, public and semi public are going to probably be fluid within the research and need to be addressed within the methodology.

(Diary 29 October 1998)

My concern with the private and the public preceded even my reading of Bailey (2000).

Another problem identified by Song (1998) in relation to interviewing different members of the family was the notion of allegiance with those who are interviewed or interviewed first. Song recognised that

this could be an issue for researchers and acknowledged potential allegiance within the interviewing process. This was more problematic for her data because she encountered examples of oppositional accounts. The accounts I gathered for this research project were allied, confirmatory accounts, therefore, the issue of allegiance was not important. I acknowledge, however, that the research design reflects an allegiance to the exercisers because they were interviewed first and it is their story that the thesis aimed to document. The research project has a one sided dimension to the representation of the relationships and, therefore, has allegiance to the exercisers rather than the SOs.

Burgess (1984) refers to a situation in the field whereby a school secretary gave him access to files that the school head had specifically noted that he could not have access to. The situation made him feel uncomfortable because it presented him with an ethical dilemma. This reminded me of some of the discomfort I felt when undertaking Phase Three interviews. During Phase One, exercisers were told of the need to use their interview transcripts with SOs but this was not emphasised with SOs. It could be assumed that, because they consented to the Phase Three interview, they consented to discuss the issues from Phase One. The question arises as to whether this was 'informed consent' or not? At times during those interviews I felt uncomfortable because of what I was discussing and with whom.

One of the reasons for my discomfort was that I was acutely aware of the public representation of the family life that I was asking the exercisers to expose (Song, 1998). I have no knowledge of how it felt for the participants to do this but suspected that at times it was awkward for them, especially those who consented to Phase Three interviews. The following is an extract from Tanya and Ivan's interview:

KB: In your earlier interview Ivan ...

I: shushh ...

KB: Did that sound really intimidating?

(laughter)

I: It did actually.

Ivan is clearly concerned by what is likely to be revealed. This situation is different from Burgess's (1984) ethical concern because I had more control over the events but I suspect that the awkwardness of revealing or discovering the secret is very similar. In retrospect I would emphasise the need to discuss the content of Phase One interviews with exercisers and to explain that the agreement to engage in the Phase Three interview will be taken as consent. This would make explicit something that occurred implicitly.

A further issue arising from the use of SO interviews was the question of 'Who counts as a SO?' To define this by marital status marginalises those who choose not to marry, those who are prevented from marriage and those not in a personal relationship. Not to define a SO would have resulted in an additional factor to be considered within the analysis. For these reasons SO was defined as 'someone with whom the exerciser lives'. In all but one case the exercisers lived with an individual who could have been described as a husband, wife or life long partner and it was this type of personal relationship that I was looking for in my selection of exercisers. Interestingly therefore, I imposed my understanding and definition of SO onto the exercisers when perhaps it would have been more in keeping with the epistemology of the study to simply ask the exercisers to identify a SO that I could interview. In addition one SO, Gavin, did not fulfil the criteria identified by myself. I encountered problems in gaining Steven's 'real' SO's consent to undertake the interview (see Chapter Six p. 83) and therefore faced a dilemma within the research process. Locating exercisers to participate in the study was difficult and took a long time due to the criteria I had established and the methods of approach I chose (see Chapter Six p. 100). The discussion with Steven's SO also took more time and, therefore, rather than abandoning Steven's interview I looked for an alternative. I knew that Steven had shared a house with Gavin immediately prior to Steven's interview and made the decision that Gavin could be substituted for a SO. It could be argued that this relationship between Steven and Gavin is, therefore, substantially different from the other relationships represented within the project. For Steven's life history analysis, therefore, Gavin's contribution was more for triangulation than for the impact of ED on relationships.

I wanted to interview particular types of individuals (i.e. people who would fulfil the ED criteria) and, therefore, access to exercisers was a particularly frustrating problem:

Ads have been sent out but no response gained. New ads are going out today with the general move out of the local area to a wider scale, and advertising on a national scale. I have tried to advertise electronically without success. This will be attempted again this week.

(Monthly Report November 1998)

Despite my efforts to advertise extensively and through a variety of sources the adverts brought very little response: "the continued search for exercisers is on going and I am still short for the initial stages" (Diary 23 April 1999).

The need to select only individuals engaged in a relationship for the first phase occasionally resulted in my postponing that interview and conducting it as part of Phase Two. The issue of interviewing SOs also brought problems:

It is easy to make contact with exercisers and they promise the world in consideration with their partners but actually getting partners to agree to that commitment is something else.

(Diary 10 February 1999)

Steven's dissenting other was particularly frustrating and delayed not only his SO interview but also the general shift from Phase One to Phase Two:

The trying to interview SOs has remained problematic throughout. Starting off with issues of ethics and confidentiality towards the problem of blocking and also exercisers agreeing but SOs actually being very reluctant and not wanting to take part. Steven features in this because Sonia refused to meet with me and then even refused a remote interview. Why, I just can't understand it! It is so strange she gives the reason as not being involved from the start. I am going to ask Steven if I can talk to Gavin and hope that he consents so that I have at least additional interview to qualify. Although obviously it will not be ideal. Corbin talks about her issues and some of them are the same such as practical reasons etc. I am going to have to pay for advertisements which I was trying to avoid but it is definitely the next step.

(Diary 23 April 1999)

The use of a home for an interview had the advantages of being more convenient for the participant but does have certain disadvantages. Issues about which is the best room to use, who has access to the interview and personal safety are all within the control of host. Consequently, qualitative researchers have experienced undertaking intended single interviews with on-lookers, partners and children who clearly impact on the research process (Corbin, 1971; Gilroy, 1997). During the collection of data in Phase Two some interviews undertaken in homes were influenced by the presence of others. In one interview Derek's small son, Anthony, played in the room during the interview, which did not seem to adversely affect Derek but did make it more difficult for me to relax. Derek had also scheduled a social engagement very close to the time of the interview and I had to bring the interview to a very rapid conclusion when his wife entered the room and started putting on the child's coat. In other interviews casual visitors, telephone calls and other members of the household interrupted the flow of ideas and experiences. The use of my own home as part of the interview process created different problems such as space and power. Only one research participant was interviewed in my home and, as it was their suggestion, I consented to this venue because of convenience.

The issue of personal safety was an integral part of the research process mainly because exercisers' homes were used on some occasions. Entering strangers' homes to undertake research felt alien and, on occasions, threatening. The threat was never from a consequence of any behaviour by an interviewee but merely from the potential danger I felt I was placing myself in. In the event, all the interviews undertaken with strangers were positive research experiences but, due to the method by which these strangers were identified (they telephoned me in response to an advert), the process was one that caused some concern. My father was a detective, which had two main influences on this story. First, it was instilled in me to be extremely cautious of all human behaviour. Secondly, that I

was exposed to verbal and physical images of what occasionally happens when human behaviour becomes violent.

I had employed the same protocol of advertising and going to strangers' homes in a previous research project (Biscomb, 1994). During these early stages I had to visit a tower block in an uncertain area of a West Midlands town. This was my first encounter entering a male stranger's home for research purposes so I took three friends who were to play the role of my 'heavies' and sat them in the car outside. I explained that the interview would probably take about ½ hour and if I did not emerge after 45 minutes they were to come and knock on the door. During the interview I was very nervous because of the environment and the potential threat that I had placed myself in. I conducted an interview with a very gentle and reflective man but the already established nerves were exacerbated by the possibility that the interview could go well and would, therefore, not be finished in ½ hour and my 'heavies' would appear at the door. The interview was very rushed and the quality of the interviewing was poor. The data subsequently reflected this. I suspect that the man did not enjoy the experience either. That was the worst interview I have conducted and after this experience I dropped the 'heavies'.

Interestingly in this research project, all the strangers who were interviewed as a consequence of replying to an advertisement were male. All the female strangers who were interviewed were identified through snowball technique and, therefore, I felt I had some reassurance of the integrity of those individuals. This concern could be considered to be a gendered concern through the embodiment of the research experience. As a woman entering the home of a male stranger I felt vulnerable to the potential of being physically overpowered. Strategies to deal with this concern were limited so the prospect of going to a male stranger's home to conduct an interview was always a double-edged experience. I was glad to have the opportunity to collect the data and meet the participant but at the same time I was wary of my vulnerability.

Alternative strategies that were employed during this research project included avoiding the home and using the work place as an alternative. If I could not avoid the home I noted the time, date and venue of where the interview was undertaken. This strategy offered no personal protection: it merely documented the event for future reference. So although strategies during this process were employed, these were limited and, apart from using the work place, did not actually offer any real solution to any potential threat.

The use of the exerciser's home, therefore presented, a constant dilemma. It was more convenient, comfortable for the exercisers and placed them in a position of power. I have used the same protocol before, as mentioned previously, and although some strategies in this project were altered, the process of entering a stranger's home remained the same. Throughout both research projects I conducted interviews in all manner of places including exercisers' homes, my home, university buildings, public

bars, places of work. The most satisfactory environment for the exerciser has been their home. As a researcher I am pleased with the quality of data gained when interviewing in this way but, at the same time, I am wary of my own vulnerability. Collecting data in this way will, therefore, remain for me a gendered embodied research experience. The desire to go to a participant's home and the awareness of my own vulnerability will remain as tensions within the research process.

Although the interview process was demanding for the exercisers because of the time required and the emotional investment in the research, there appeared to be a sense of enjoyment from most exercisers. This cathartic impact of interviews has been noted elsewhere (Corbin, 1971; Gurney, 1995; Sparkes, 1998b). Both Frances and Lesley mentioned the cathartic effect in passing during the interview whereas Arthur especially noted, at the end, how helpful he had found it (see Chapter Eight p. 147). So, although I often felt guilty about the time that I was taking from my exercisers, I would like to think that, for most, there were some benefits for them as well.

Collecting data through interview will always be my first choice. Research is about people and this method reflects those individuals and literally gives them a voice in the research. One of the things that strikes me as I think about my data, code it and use NUD.IST is that each snippet of conversation takes me back to that place, that house, with those people. The memories of the interviews are very strong and with parts of the words I can recall peripheral details that are not captured in the words themselves such as the place, the time, the moment in my own life history, being aware of the other people in the house who were moving around, the weather, the journey taken to get to that place, expressions and atmospheres. The data for the reader are usually a collection of words that represent illustrative examples to prove that this work is empirically based. For me the data represent people and experiences of meeting those people. For me the data are so much more than just words. They represent experiences and memories of people.

11.3 The Reading Process

One of the concerns that has been most persistent throughout the whole research process has been the ability to read something and then remember its relevance three or four years later: "I am not sure about reading these things and then being able to write coherently about it in two or three years" (Diary 24 May 1995). It is only much more recently, in the writing up stage, that I have come to accept this is not possible at all. The reading that is done at the beginning guides, shapes and informs our decisions but it is ludicrous to expect oneself to remember everything once read during the writing up.

The process of reading has been mostly an enjoyable part of the project. Difficulties have arisen when I have struggled to understand what I was reading:

I have started with Cohen's book on Structuration Theory and once I have ploughed my way through this one will actually read some of work of Giddens. At present I am aware that I can see an application but do not have enough understanding to be able to articulate it. The books help but are not easy at the moment. This is a very exciting stage in the research and I wish that I knew it all now ...

(Diary 14 October 1997)

The reading has been most influential when it has directly impacted on elements of me and my lifestyle. Examples of this were reading the body literature which was an exercise in self-criticism of the routinisation of one's habitus. I found myself forced to recognise my own boundaries of pollution, of tastes and distinction (in Bourdieu's terms), and of my own slipping into hyperreality, which is the most troubling of all (Frank, 1991).

I went through a similar sort of experience in relation to the exercise dependence literature, most of which was on running. During a sabbatical I needed to replace my regular work-based swimming with something that was more accessible to me at home, so I began to run on a regular basis. I have run in the past, approximately 12 years ago, but I have never enjoyed running. I find it boring, difficult and the pleasure that everyone else writes about has completely passed me by. Nevertheless, I engaged in the practice of regular running because of the need to continue with regular exercise and also a slight desire to be embodied physically within the research process. The selection of running was partly due to the desire to have similar experiences to those I was reading about on a daily basis. At this point, the physical experience of running became an embodied part of the research process. As I ran I would consider the pleasures that others have documented about running as an addictive experience and eagerly sought them in my own running. I was not able to experience this physically, however, and, therefore, the embodied process of entering the research experience never fully materialised. Like the process of interviewing, reading was never just about words. The reading had a greater influence that was determined by how moved I was by the text or how much it impacted on other elements of my life.

11.4 The Process of the Argument

I knew from the onset of the research that I wanted to write a sociological critique of ED. Exactly how I would do this or even what type of questions to ask emerged more slowly:

I am sat here reading *Little Girls in Pretty Boxes* and this one quote has me thinking about the criteria for exercise dependence. "So the gymnast, and the gymnast's coach, will do anything to keep the girl competing, uninterrupted, no matter what." (Ryan, 1995 p. 34). The reference is regarding injury and continuing to compete with injury. Here we have a value statement: if an athlete is competing with injury, in some instances serious injury, and that athlete has elite potential, then to compete with the injury is acceptable. But if the athlete has no elite potential then they fulfil one of the criteria for dependence (Veale). Doesn't this tell us more about the people making these judgements and their values rather than anyone supposedly dependent upon

exercise? In other words, society places a value on elite competition that it does not place upon personal satisfaction. I can compete with injuries if I am representing my country or achieving very high standards but if I compete with injuries simply because I want to achieve my schedule then there must be something wrong with me, I have to be categorised as dependent.

(Diary 6 January 1996)

The session itself was quite useful but during it I was left with another invincible feeling especially regarding the following question 'why is the study of exercise dependence dominated by medical studies?' I think the most critical question to date.

(Diary 15 January 1996)

... methodology – so far the information gathered is very exciting. I have this interesting dilemma between what the research says and what the exercisers are saying and how in some instances the participant does not meet traditional criteria for dependence but believes themselves to be addicted. So I am left with the feelings and thoughts of 'whose knowledge counts?'

(Diary 10 February 1999)

If an interactionist approach is adopted and, therefore, rightly one of my concerns will be about the process of dependence will I be threatening this position if I then go further and continue towards a structural account?

(Tutorial Questions 7 June 1999)

The comment that was written in February 1999 is a key theme that has driven this thesis. The critical thoughts and questions that have formed the basis of the sociological critique span over three years. Understanding deviance and labelling emerged from both the reading and the interview transcripts. The desire to document individuals' experiences and meanings of the ED process emerged from my affiliation to that research method.

The entry written on 10/2/99 was particularly provoked by Carl's interview and typifies one of the themes of the research project 'whose knowledge counts?' I am certain that traditional researchers in the field of ED would consider Carl's frequency, intensity and duration of exercise to be inadequate to qualify as a dependent state, even though these criteria are not rigorously established in the literature (see Chapter Three p. 27 and Appendix A). This concern with the difference between subjective lived experience and researchers' definitions of ED has been expressed by Bamber *et al.* (2000) who noted that some individuals in their study did not show evidence of ED even though they fulfilled the cut off point in a positivistic questionnaire. Carl's experience of his attitude to exercise is one that he and his wife consider as an 'addiction'. Is knowledge constructed through objective scientific research more valid than the personal subjective knowledge experienced by Carl? These questions about the construction of knowledge were posed by Sparkes (1998b) and, as the project has developed I have become more certain of the importance of the personal, the self and the subjective (Bailey, 2000).

The debate about quantitative and qualitative research approaches is another central theme in this research project. The field of knowledge of ED has existed for over 30 years in the natural sciences

but accounts of individual exercisers' narratives have not been explored. Initially, my analysis of Phase One data tried to extend previous conceptions of ED characteristics into properties and dimensions as identified by Strauss & Corbin (1998b). I abandoned this, however, when I realised that even this was underpinned by a disease-based approach to ED. There is currently very little understanding of what exercise dependence or addiction means to individuals. Sparkes (1998a) noted that many meanings do not have a reference point and that, therefore, makes communication across paradigms difficult. I am left wondering exactly what relevance and application the narratives of these individuals will have in the field of ED.

I suggested earlier (see Chapter Six, pp. 87-88) that traditional notions of validity were not appropriate for this study due to the type of data collected and the location of this study in an interpretativistic paradigm. According to Smith (1990) of all of the more recent paradigms, constructivism has sought the establishment of criteria most aggressively. A parallel position of trustworthiness and authenticity as described by Guba & Lincoln (1981) was proposed as an alternative and in this section I intend to reflect on whether I have met this criteria.

I claim that credibility is an appropriate term because of my belief that I engaged appropriately with the research methods used and that those methods were congruent with interpretive inquiry (Patton, 2002). As an interviewer I was fully conversant with my role within the data collection process and make no attempts to disengage myself from that process. My claim for dependability is based on the systematic nature that I approached the research design and collection of data (Patton, 2002). This chapter amongst others clearly indicates my desire to be reflexive within the research process therefore assisting my claim towards authenticity (Patton, 2002; Lincoln, 1990). I have attempted to capture a multiplicity of realities within the study including those of participants, significant others and my own. To extend this further it is possible to examine Patton's (2002 p. 544) exploration of criteria appropriate for social construction and determine how it was addressed within the study:

Table 11.1 Application of Patton's (2002 p. 544) Constructivist Criteria

Social Construction and Constructivist Criteria	Reference within this Thesis
Subjectivity acknowledged	References made to this in Chapter Two, Six and 11.
Triangulation	Attempts to document multiple realities through the interviewing of both participants and significant others. Also acknowledges the researcher's reality.
Reflexivity	Reflection on the research process and the impact of the research process in Chapter 11.
Enhanced and deepened understanding	The documentation of subjective experiences of ED aims to develop a different understanding of ED.
Contributions to dialogue	Widens the ED dialogue towards an interpretativistic understanding and therefore more holistic.

I think there can be little doubt about the location of this work in terms of the paradigm and appropriate criteria. To address each of these in turn, however, and suggest that they have been met is rather simplistic and I would like to evaluate the research in a little more depth.

For this I turn to Marshall (1990 pp 193-195) who extends the goodness criteria debate by suggesting that it is possible to examine the features underlying all tenants of criteria and proposes 20 assumptions upon which qualitative work could be judged. She further acknowledges that a researcher may place more emphasis on one of those assumptions rather than another one depending upon the paradigm a researcher adopts. If all assumptions are then relevant to judging qualitative work it can be questioned as to which assumptions are most important to me?

The method is explained in detail so the reader can judge whether it was adequate or makes sense ...

Assumptions are stated. Biases are expressed, and the researcher does a kind of self-analysis for personal biases ...

There is abundant evidence from raw data ...

The research questions are stated ...

The relationship between this study and previous studies is explicit ...

The study is reported in a manner that is accessible to other researchers ...

Data are preserved for reanalysis ...

Methods are devised for checking data quality ...

The researcher is careful about sensitivity of those being researched ...

The study is 'tied' to the big picture ...

(Marshall, 1990 pp 193-195)

There are 10 of Marshall's assumptions that I believe to be most important to this work and that I believe are addressed adequately within this thesis. It is certain, however, that the notion of criteria is not a simple debate and not easily solved through a checklist approach. It is important to remember therefore that as Smith (1990) points out whatever the criteria used they are open to interpretation and reinterpretation and that the use of one set of criteria will open the discussion to criticism from supporters from a different paradigm (Patton, 2002). As Smith (1990) believes that there is confusion about criteria and that further work needs to be done in this area it seems plausible to acknowledge that such assumptions as suggested by Marshall are appropriate mechanisms to evaluate the quality of work.

The parallel set of criteria established by Guba & Lincoln (1981) and Lincoln & Guba (1986) have been criticised by Smith (1984) for basing the criteria on similar concerns as those expressed by Positivism. It is not surprising that I adopted these criteria then considering both the nature of the research base of ED and the positivistic nature of Sports Studies/Science in general. This was alluded to earlier in this chapter (see p. 209). Whilst I recognise this influence and the impact of this influence on my research I still seem unable to challenge the hegemony outright. I chose a challenge that is tinted with similar structures e.g. Grounded Theory and trustworthiness in the hope that somehow this will make my challenge more justifiable and credible. I chose to present my challenge in a language that is similar to positivistic traditions by sanitising the text and rarely acknowledging my own voice. This reflects positivism because of the aloof and detached nature of the researcher in the reporting of the research process. In my defence I use the words of Lincoln:

... we asked ourselves, can you ever 'forget' what has gone before you, what you knew – stand outside of you historical self? Of course not, but it might well be possible to imagine oneself outside of one's own history
(Lincoln, 1990 p. 71)

Whilst I can acknowledge the hegemony of Positivism in the academic world of sport I have also to a limited extent partially subscribed to it. Perhaps beyond this thesis I will feel more empowered by a successful outcome of this very process to be more forthright in my challenge.

The current position of ED within the research field could be criticised for reflecting cultural hemiplegia (Bourdieu, 1971). Likewise Strauss & Corbin (1998b p. 178) stated in their consideration of the future, that there would be "a continuation of the current trend of antagonism toward anything that goes by the name of science and especially its canons". This study does not, I believe, represent either of these positions. It is not culturally hemiplegic nor does it reject the natural science research in the field outright. Rather it builds upon the existing body of knowledge to include the narratives and the stories of people's lived experience. It brings into the public domain the private world (Bailey, 2000).

11.5 The Personal Process

The personal journey encountered throughout the research project has been significant in as much that the researcher is integral to the research process (Burgess, 1984). Throughout the journey a number of critical life elements have occurred one of which was a change of employment. This caused some concern within my research process because, although it was a position that would be more conducive to research, the impact of a change of job worried me:

As previously stated my Ph.D. is currently taking second place to my job. This will not always be the situation and I am aware of the problem and will correct this but cannot do so at the moment. Teaching will soon finish and once this happens I will need to reorganise my schedule.

(Monthly Report May 1997)

Although the new job (started in 1996) slowed the process at the beginning I eventually became used to the new role and was able to redress the balance. Eventually the new job provided me with opportunities that would not have been allowed in the previous one. The first of these was greater flexibility to rearrange the working day. A change in time management resulted in a more productive approach to work:

Have rearranged the working day so that I am now working on the PhD in the mornings rather than the evenings. This is working out much better than before. I am actually working on it on a daily basis and consequently am much more in tune and feeling that progress is being made.

(Diary 22 October 1998)

The second opportunity was a sabbatical during a crucial writing up stage. Whilst this gave an excellent opportunity to concentrate upon the task it also emphasised the isolating nature of the research. This is something that had already been noted:

I expect that one of the main problems about being a part time research student will be the isolation from others and getting too bogged down in one's own research.

(Diary 10 June 1995)

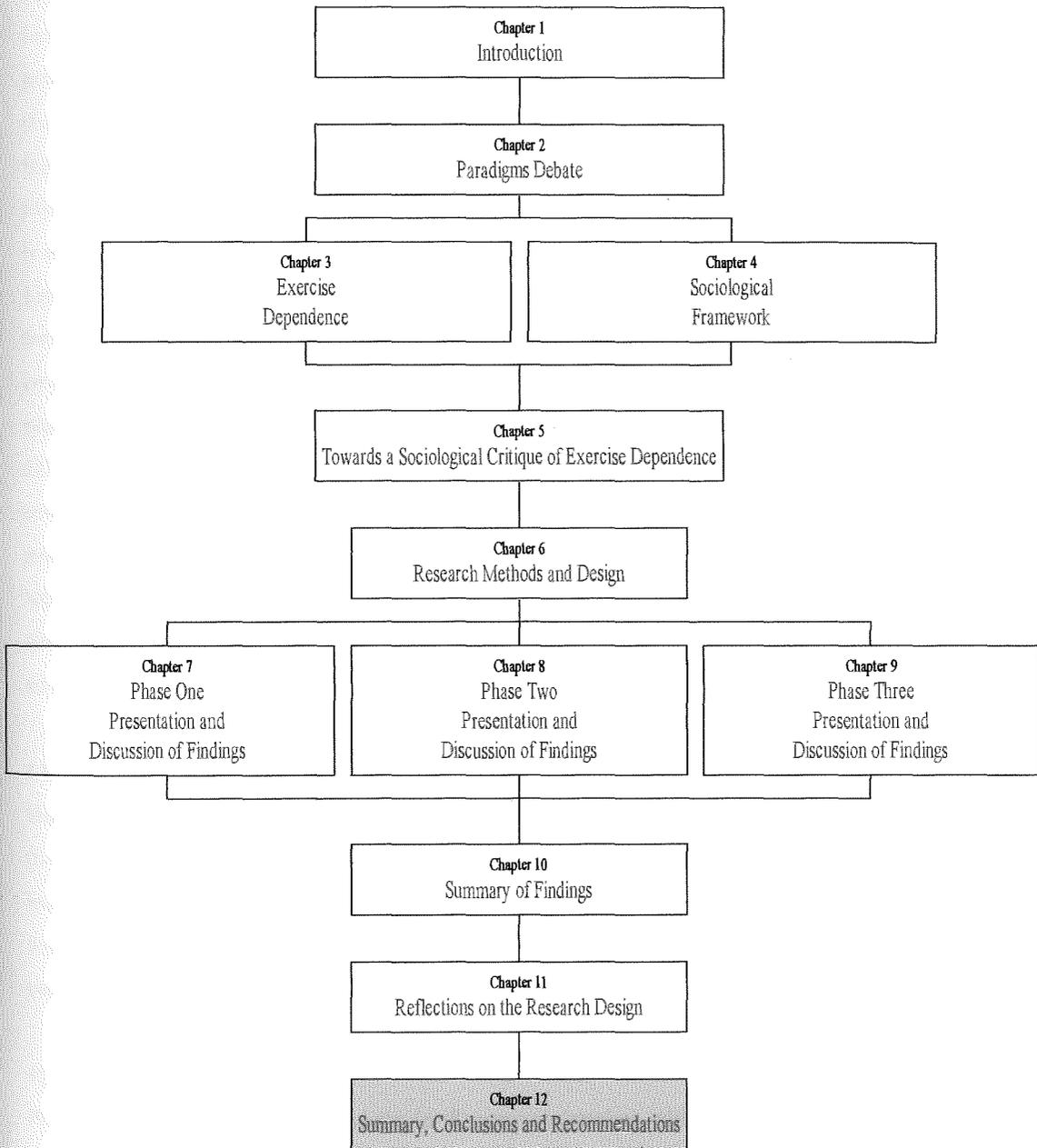
This sense of isolation has driven my interest in reading about the processes of research (e.g. Corbin, 1971; Burgess, 1984; Gilroy 1997; Sparkes, 1998b; Brackenridge, 1999). This reading has enabled me to learn from others but also to connect to an activity and a community undertaking the same activity but 'out there'. It enabled a connection between my private world and the public domain.

11.6 Summary

Like many researchers my research experience has been quite literally a lived and embodied experience. The research has featured in both mental and physical processes. It has impacted on all aspects of my life for six years. Some effects have resulted in specific decisions about the research

process, whereas others have remained as tensions and contradictions to be tolerated and endured. The next chapter concludes the study as a whole.

Figure 12.1 Outline Map of the Thesis Highlighting Chapter Twelve



CHAPTER TWELVE

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

12.1 Summary of the Study

Exercise dependence has been a subject of research for over 30 years but during that time there has been little comment or reflection on it by social scientists. Physiology and psychology provide the forum for academic debate about ED, although it has also featured in popular culture. Partly due to the nature of these influences research methods have emphasised positivistic forms of inquiry, with few studies using qualitative data. This approach had three effects which this study seeks to address. First, although the research field has established mechanisms by which ED can be measured very little is understood about the subjective lived experience of ED and the meaning of it to individuals' lives. Life history narratives, through which knowledge about ED could be developed and understood, have been absent from the research literature. Secondly, apart from a few studies, there has been little emphasis within published research on triangulation of data sources. Many research findings are based exclusively on self-report data. Thirdly, there has been an almost hegemonic acceptance that ED negatively impacts on SO relationships, yet, with the exception of Rudy & Estok's (1990) study consultation with significant others has not featured as part of ED research designs. Within this study, these three concerns are addressed through the inclusion of semi-structured interviews (n=27) with both exercisers and their SOs. The collection of data was organised as a Three Phase research design based on a Grounded Theory approach. Exercisers in the study were identified through advertising, snowball technique and direct approach mechanisms.

12.1.1 Phase One

During Phase One data collection interviews were undertaken with exercisers (n=8) and their SOs (n=8). Interviews were undertaken independently with the exerciser being interviewed first and their interview transcript then being used as the basis of the interview with their SO. The initial analysis from Phase One produced a series of seven Propositions that formed the basis of Phase Two interviews.

12.1.2 Phase Two

Phase Two semi-structured interviews (n=8) were undertaken with a different set of exercisers, some of whom were involved in a SO relationship and some of whom were not. Emergent findings were discussed with them, and then the analysis was subsequently refined. This analysis resulted in the modification of three of the original Propositions and the addition of one further proposition. The resulting eight Propositions formed the basis for the Phase Three interviews.

12.1.3 Phase Three

Phase Three interviews (n=3) were undertaken with a select sample of exercisers and their SOs from Phase One. Unlike Phase One, these interviews were undertaken with both the exerciser and the SO present at the same time. After the analysis of the Phase Three interviews a new proposition was added making a total of nine Propositions which, it is argued, provide the basis of a sociological approach to ED.

12.2 Conclusions

This study challenges the classical notion of a disease-based understanding of ED. It presents nine Propositions, which form the basis of a sociological understanding of ED (see Table 12.1). This alternative understanding of ED is constructed around situation, time and identity. These individuals create an identity through their intense participation. At a societal level this behaviour is conceptualised as deviant because it is not directed towards the achievement of an extrinsic goal. In contrast, the same exercise behaviour directed towards the achievement of a tangible extrinsic goal is socially accepted and even celebrated.

Conclusions from a study of this nature usually focus on the impact of findings on policy, practice and research. The acknowledgement by some researchers that ED is uncommon and that extreme forms are rare (Veale, 1987) makes it seem unlikely that ED is currently considered within the development of policy. Current practice is located in the domain of clinical psychology and sports psychology and due to the sociological nature of this thesis I feel it is inappropriate to comment on such practice. The lack of previous subjective experiences from the narrative of dependence (Peele, 1995) is a starting point for developing a more in-depth sociological understanding. Therefore the conclusions from this study will focus entirely on recommendations for research. Four recommendations for research are presented which, if fully considered and applied would result in further extensive research. Whilst these recommendations are not extensive in nature they are that are practically possible and are intended to guide my further research in this area.

Table 12.1 The Nine Propositions

Proposition	Location in the Thesis	Statement
One	Phase One. Changed in Phase Two.	An exercise dependent individual has a fluctuating association with exercise throughout the life history. This is characterised by moments of change. Subjective interpretations of the dependency process are determined by the priority that the individual assigns to exercise during that life episode.
Two	Phase One. Changed in Phase Two.	These moments of change are related to critical life events such as change of job, career, geographic move, onset of a relationship, or birth of children.
Three	Phase One.	An individual who is dependent upon exercise differs from non-dependent individuals in that a salient part of their social self-identity is constructed through their exercise participation.
Four	Phase One. Changed in Phase Three.	This self-identity is a conglomerate of three different identities: the physical self (which includes the feature of 'life essential'), the critical self and the social self (which includes the feature 'public status').
Five	Phase One.	Exercise dependence does not necessarily have a negative impact on a SO relationship.
Six	Phase One. Changed in Phase Two.	A relationship that includes one partner who is exercise dependent will either accommodate to the exercise participation or be unsuccessful. The process of accommodation may include moments of conflict.
Seven	Phase One.	An individual who is dependent upon exercise may accommodate to the significant other relationship or family during moments of their life history and consequently change their exercise behaviour.
Eight	Phase Two.	Exercise participation that is considered to be extensive and without extrinsic reward is socially labelled as dependent and, therefore, deviant. Exercise participation that is considered to be extensive but in pursuit of an extrinsic reward is socially labelled as elite or professional and is celebrated.
Nine	Phase Three.	ED is best conceptualised as a process model in which exercise intensity varies on a continuum from low to high.

12.3 Recommendations for Further Research

Four potential variations on this research arise from the discussion:

1. It was not a requirement of the study that exercisers from Phase Two had a SO relationship. From the narratives given by Lesley and Dan it is evident that using a SO as a criterion for selection could preclude the inclusion of some accounts. The use of mixed relationships (single,

divorced and SOs), therefore, enabled a range of accounts to be gathered for this study but prevented a more detailed exploration of the impact of the ED on these relationships. Further study on exercisers with SOs could generate more detail about the impact of ED on SO relationships. Additionally, further study on single or divorced exercisers could generate more detail about the influences, positive or negative, of ED on SO relationships.

2. A link between ED and identity has been proposed in this study. There is clearly the potential for further and more detailed work on the interrelationship of identity and exercise participation. It would be particularly interesting to explore identities that are developed through exercise and to compare the identities of those who consider themselves to be exercise dependent with those other regular, intensive exercisers who do not.
3. Exercisers for this study responded to advertisements that had qualitative descriptions of certain criteria for dependence (see Chapter Seven p. 148) but 'dependence' or 'addiction' was not mentioned until the very end of the research interview. The nine Propositions could be explored with a different set of exercisers who are explicitly recruited as being dependent on exercise. This would allow for a different form of 'member checking'.
4. The potential application of Structuration Theory to ED is acknowledged in Appendix C to describe the structure-agency interface but this is dismissed as not suitable. With a greater and richer selection of narratives from exercisers it might be possible to extend the research to examine Structuration Theory in relation to ED.

APPENDIX A

**ADDITIONAL DETAILS ON GENERAL THEORIES OF
ADDICTION AND POSITIVITISTIC RESEARCH ON EXERCISE
DEPENDENCE**

APPENDIX A

ADDITIONAL DETAILS ON GENERAL THEORIES OF ADDICTION AND POSITIVISTIC RESEARCH ON EXERCISE DEPENDENCE

A.1 Explanations of Addiction and Dependence

Section in Text

3.2.1 *Disease-Based Explanations*

According to the disease-based explanation, individuals have some genetic or biological element which makes them intolerant or produces some physiological response that results in the dependence (Peele, 1985; Marlatt, 1985). The disease explanation has been adopted by some significant organisations such as World Health Organisation (WHO) and Alcoholics Anonymous (AA) and is preferred by the medical establishment (Peele, 1985; Marlatt, 1985) but it is important to emphasise that this is not the only approach possible (Wanigaratne *et al.*, 1990). If similarities between gambling addiction and alcohol dependence syndrome can be identified then a more general explanation for these excessive types of behaviour could account for the process rather than a disease-based approach (Orford, 1985).

Disease-based explanations of dependence have been criticised for a variety of reasons. First, there is the paradox of control in which individuals are described as suffering from a biological *cause*, which is why they are unable to exert control over their substance abuse. The paradox, therefore, is that solutions to the problem are based on abstinence and complete control (Marlatt, 1985). Secondly, the notion that the progress of the disease is a gradual seems illogical because either the biological condition is present or it is not (Peele, 1985).

Psychological Explanation

In contrast to the disease-based explanation of dependence, an acquired habit pattern has emerged as an alternative explanation. This is a psychological explanation which includes elements of social learning theory, cognitive psychology and social psychology at its roots (Marlatt, 1985). Marlatt argues that the essential element of this theory is that dependency is a display of behaviour that has reached excessive extremes for a variety of reasons. These may be described as internal sources, such as fear of pain and failure, negative self image, dependency or passivity, values or beliefs, or external sources such as life stages and periods of pain (Peele, 1985). Those who support a psychological explanation promote a moderate lifestyle and relapse prevention as methods of dealing with the dependency (Peele, 1985; Marlatt, 1985).

Psychological explanations may be further categorised into four different theoretical approaches: withdrawal avoidance theories, appetite theories, motivational distortion theories and contagion theories (West, 1991; Orford, 1985). Withdrawal avoidance theories are based on the premise that dependent individuals continue their behaviour in order to avoid the withdrawal symptoms associated with abstinence (West, 1991). The preoccupation with withdrawal symptoms in ED literature (Anshel, 1991; Conboy, 1994; Farrell & Thompson, 1994) indicates that much of this literature is implicitly underpinned by withdrawal avoidance theories.

3.2.2

Characteristics of Addiction and Dependence

Addiction has been historically linked with illicit drug taking behaviour (Rudy & Estok, 1989; Thornabene, 1995). Consequently, much of the early addiction research is associated with narcotics, alcohol and tobacco (Jiba Ja Rusth, 1990) with other addictions going largely unrecognised. More recent work, however, has expanded perceptions of addiction and Marlatt (1985) suggests that it can include any behaviour that has a compulsive habit pattern in which the individual seeks an immediate gratification. Language and terminology within the field have also changed, with a move away from references such as 'morbid appetites', which were popular during the nineteenth century (Orford, 1985), to terms such as 'addiction' and 'dependence'.

With reference to Table 3.1

It is clear that some characteristics, such as tolerance, withdrawal, loss of control, craving and relapse, are common amongst established criteria. According to Allsop & Saunders (1989), in more recent research the notion of relapse has become more prominent than craving and loss of control. Relapse refers to a return to earlier patterns of behaviour which are quickly restored after years of absence (Brown, 1993 cited in Griffiths, 1997). Whilst many characteristics are considered to be applicable to ED, Cockerill & Riddington (1996) do not consider relapse to be applicable here because individuals are unlikely to resume excessive exercise behaviour. They do not, however, fully explain their reasons for this opinion. The notion of relapse has also been considered in relation to eating disorders but has been rejected in this application on the grounds that the term has a tendency to medicalise an element of normal human functioning (Rankin, 1989).

From Table 3.1 it is evident that some researchers still differentiate between terms such as 'dependence', 'addiction' and 'compulsion'. The fact that the American Nurses Association uses the term dependency to describe an addicted person indicates an inherent division between these two phenomena. For some authors, dependency and addiction lie along the same

these two phenomena. For some authors, dependency and addiction lie along the same continuum with one experience, addiction, representing a more extreme involvement or a pathological dependency (Peele, 1985). There is still, then, semantic confusion in the traditional addiction/dependency field and this is clearly reflected in the ED research.

Peele argues that simultaneous positive and negative cycles can be part of individual lifestyles and this may account for partial addictions which are strongly linked to the notion that some behaviour habits may represent positive addictions (such as exercise) in contrast with others that may represent negative addictions (such as drugs) (Peele, 1985; Marlatt, 1985). This simplistic division between drugs as a negative addiction and exercise as a positive addiction has been contested within the ED literature and is discussed in greater detail in Section 3.7 (see p. 45).

The changes adopted by WHO in 1964 have resulted in widening the scope of what is viewed as dependence and to what individuals may become addicted (Rudy & Estok, 1989). The view that dependence is a problem that people have, rather than simply a drug problem, is becoming more commonplace (Peele, 1985). The shift away from the disease-based approach has also widened the scope for research, allowing a more comprehensive view of dependence or "excessive appetitive behaviour" (Orford, 1985 p. 91). One researcher urges caution, however, at the possibility that one theory may be considered 'correct' in comparison with the others:

The two models hold contrasting basic assumptions about the aetiology and the treatment of addiction ... Does this mean that one theory is more "correct" than the other ... or that we are experiencing the beginning of a paradigm shift (cf. Khun, 1970) in our basic understanding of addiction? What seems clear ... is that we are approaching a new synthesis of behavioural, psychological and physiological factors that will give us a broader and more harmonious perspective in the basic nature of addictive behaviours.

(Marlatt, 1985 p. 18)

Marlatt suggests that all approaches should be synthesised rather than viewed in isolation. The embracing of a new paradigm and approach to addictive behaviours has enabled research on exercise dependence to flourish and grow in prominence (Rudy & Estok, 1989).

A.2 Details of Exercise Dependence Characteristics

3.3.1

Terminology

It is interesting to note the historical changes. 'Addiction' and 'commitment' (Carmack & Martens, 1979) were more popular terms during the 1970s; the emergence of 'dependence', maintenance of 'addiction' and a larger variety of terms characterised the 1980s (e.g. 'habitual running': Blumenthal, Rose & Chang, 1985; 'morbid exercising': Chalmers *et al.*, 1985;

'compulsive runners': Diekhoff, 1984) with a distinct shift during the 1990s towards an addiction-dependence split. 'Commitment' was central to the research, especially during the 1970s and 1980s, with many researchers using the Commitment to Running Scale as their research tool (Carmack & Martens, 1979; Corbin *et al.*, 1987; Diekhoff, 1984; Thaxton, 1982; Summers *et al.*, 1982). Thaxton (1982) suggests, however, that commitment and perceived addiction are not interrelated and that may, in part, account for the lack of popularity of this tool in more recent times.

Commitment to physical activity is defined as: "... not only related to involvement in regular physical activity, but also to the individual's feelings concerning the values and benefits of physical activity" (Farrell & Thompson 1994 p. 293). Farrell & Thompson (1994) examine the relationship between commitment and addiction to exercise and eventually conclude that commitment and addiction appear to be similar processes but that different scales are appropriate to measure them. Caution is also expressed about the assumption that over committed athletes are necessarily addicted to their activity. It may simply be that these are high achievers who are pursuing an extremely valued goal (Yates *et al.*, 1994). The difference between committed and dependent individuals is outlined as a matter of priority and organisation:

... exercise dependent persons ... are likely to organise their life round their exercise, while highly-committed, but non-dependent, individuals will organise their exercise round their lives.

(Cockerill & Riddington, 1996 p.121)

Loumidis & Roxborough (1995, p. 45) see the various terms associated with ED falling into three distinct categories reflecting the different perspectives and approaches to ED. These are: those that reflect the compulsive nature of ED (e.g. 'obligatory': Blumenthal, O'Toole & Chang, 1984; Pasman & Thompson, 1988), those that reflect a relationship between ED and eating disorders (e.g. 'analogue to anorexia': Yates, Leehey & Shisslak, 1983; 'running anorexia' Noval, 1980); and those that refer to the phenomenon as an 'addiction' (e.g. Glasser, 1976 and Morgan, 1979). Whilst this categorisation is illuminating it can be criticised for two main reasons. First, it places an over-emphasis on the studies that debate the relationship between ED and anorexia. Chalmers *et al.*, (1985) is an often cited 'study' in this area but this is in fact, merely a letter to *The Lancet* outlining a single case study. The other main researcher is Yates (Yates, Leehey & Shisslak, 1983; Yates *et al.*, 1994) whose research has been heavily criticised by Blumenthal O'Toole & Chang (1984); Blumenthal, Rose & Chang (1985) and Wheeler *et al.* (1986). These critics quite clearly expose the differences between the manifestations of ED and eating disorders and reject a pathological approach. Secondly, the categorisation does not allow representation of the studies that have adopted WHO's preferred term of dependence.

Loumidis & Roxborough (1995) suggest an alternative of 'excessive exercising' that has not been commonly featured within the literature, except in a few examples (e.g. Griffiths, 1997). Their justification for the adoption of a new term is that excessive exercising is generic, shared by all models and can provide an objective measure of the condition (Loumidis & Roxborough, 1995 p.45). Whilst their frustration with the diverse terminology in the field is understandable, the suggestion to adopt a new uncommon term only adds to the confusion.

3.3.2

Adherence, frequency and tolerance

One of the main characteristics of dependence is commitment or adherence to exercise. Only if an individual is exercising regularly can a dependent state become established. Thornabene (1995) suggests that frequency of and commitment to exercise are the most discriminating factors that differentiate between a dependent and non-dependent individual. Adherence (the length of time exercise has been undertaken) and the frequency (how often and individual exercises) are often merged in the literature. Quantifying the level and frequency of adherence has been problematic and is an area of disagreement amongst researchers.

Some researchers explore a correlation between the level of addiction and distance or history of running (Hailey & Bailey, 1982; Corbin, *et al.* 1987; Pierce, McGowan & Lynn., 1993). Higher dependence scores are noted in exercisers who run longer distances or who have longer histories of participation (Carmack & Martens, 1979; Estok & Rudy, 1986; Pierce, McGowan & Lynn, 1993). This is contrast to research which notes high commitment even though exercise levels are described as only "somewhat active" (Farrell & Thompson, 1994 p. 296). Manning & Morrison (1994) argue that ED has more to do with attitude and perception than distance or time. Interestingly, intensity is not featured within the literature.

Tolerance has been suggested by some researchers who report that runners need to run further and further in order to achieve a stable state (Kagan & Squires, 1985) and by other researchers who argue that advanced exercisers need their exercise more than beginner exercisers (Steinberg, Sykes & LeBoutillier, 1995). In contrast, traditional views of narcotic dependence suggest that it is possible for an individual to be tolerant to a drug without being dependent upon it (Littleton, 1991). Some ED researchers (Veale, 1991; Pierce 1994; Griffiths, 1997) contest this view of tolerance not being crucial to the definition of dependence.

Withdrawal

Robbins & Joseph (1985) suggest that psychological causes of withdrawal are based on the concepts of using running as either therapeutic or a controlling mechanism. Somatic withdrawal symptoms commence at the onset of the abstinence period whereas psychological symptoms can be delayed (Morris *et al.*, 1990). Mondin *et al.* (1996) suggest that withdrawal

may be quite short in duration with some return to pre-test mood states after only 48 hours. What is unclear in this study, however, is whether the subjects are displaying adaptation to their lack of exercise or whether their elevated mood level is due to their knowledge that exercise will be resumed the next day (Mondin *et al.*, 1996).

Crossman, Jamieson & Henderson (1987) state that, whilst virtually all athletes report an addicted state, many report more positive than negative moods associated with this. Thus, even though these athletes believe they are addicted to exercise, they do not show the expected mood or anxiety change during withdrawal. Crossman, Jamieson & Henderson do not provide any evidence for unpleasant withdrawal symptoms when the exerciser abstained from exercise. In their examination of withdrawal they sought to provide a lay off period that was both longer than in previous studies and also planned within the training schedule. In addition, their population sample consisted of regional, national and international competitive athletes, which may provide support for the view that competitive athletes do not experience the dependent state (Veale, 1994).

Gauvin & Szabo (1992) report that exercise withdrawal has no significant impact on the psychological well being of their subjects. They suggest an under loaded cue theory to account for withdrawal, in other words, as subjects who are deprived of exercise may find themselves 'under loaded', with more free time and fewer cues competing for their attention so their physical symptoms may have become more salient, making them more likely to be reported. This, in turn, may have affected the subjects' perceptions or withdrawal. They may have actively searched for information that would confirm their beliefs that exercise withdrawal has a negative impact (Gauvin & Szabo, 1992). Summers, Machin & Sargent (1983) provide support for Gauvin & Szabo (1992) by noting that the withdrawal score is higher for those who perceive their running to be addictive. Exercisers may actively search for the information that confirms their belief in the effects of exercise deprivation.

Thaxton (1982) addresses the issues of reluctance to abstain and whether reported behaviour is the same as actual behaviour by having a lay off period for only one day and then measuring a physiological response to withdrawal. Physiological responses to withdrawal have been measured using the galvanic skin response (GSR), which is thought to be a good measure of withdrawal-related tension. Evidence suggests that withdrawal may manifest itself as higher depression and changes in GSR even in the absence of exercise for only one day (Thaxton, 1982).

Variables Highlighted in Table 3.6

Some researchers have aimed to establish whether men and women experience exercise

dependence in the same way (see Table 3.6). Some for example, Summers, Machin & Sargent (1983), suggest that this is because women perceive themselves to be more addicted that they experience withdrawal symptoms. In order to try to explain these gender differences, a social approval theory is explored. This suggests that women may perceive themselves as more addicted than men because of the traditional, historical and social constraints that hinder women's participation in endurance sports. According to Masters & Lambert (1989) these constraints are so ingrained that any woman who participates excessively may consider herself to be apart from the norm and, therefore, addicted. The relationship between women's tendency to perceive dependence and their frequency of reporting withdrawal symptoms is also reported in the work by Gauvin & Szabo (1992).

There is evidence to suggest that male and females spend different amounts of time on their weekly exercise with males spending more time, exercising more frequently (Robbins & Joseph, 1985) and maintaining their exercise regimes for longer than females (Kagan & Squires, 1985). This has implications for a possible correlation between history of participation and increased dependency (Hailey & Bailey, 1982; Pierce, McGowan & Lynn, 1993).

It is interesting to note that some studies examining both male and female athletes have included greater proportions of male athletes (Clingman & Hilliard, 1987; Corbin *et al.*, 1987; Summers *et al.*, 1982) but this has not been acknowledged within the literature. Not surprisingly, therefore, Masters & Lambert (1989 p. 198) reflect this male bias within the research by their comment that their sample had a "disproportionately larger percentage of women" than in other studies even though their sample only contained 37.5% of women and 40% respectively.

Motivation is an area for research because prior to the onset of dependency, individual athletes must be motivated to continue their participation (Sachs, 1984). Some of the previous research has considered elements of motivation particularly assessing whether there are changes to motivation once a dependent state is reached. Veale (1987) and Cockerill & Riddington (1996) suggest that dependent exercisers will not gain as much enjoyment from their exercise as non-dependent exercisers suggesting that enjoyment is not a motivational factor for dependent exercisers.

If an individual engages extensively with physical activity then they are at greater risk of experiencing physical injury than someone who is not and some researchers suggest that an ED athlete is more likely to appear in surgeries complaining of a repetitive sports injury (Morgan, 1979; Veale, 1987; Lyons & Cromy, 1989; Wichmann & Martin, 1992). Details regarding populations and type of activities studied in some of the previous ED research are summarised in Table A.1

Table A.1 Summary of Populations and Activity in Selected Exercise Dependence Studies

Populations	Competitive Athletes	Recreational Participators	Combination	
	Estok & Rudy (1986) Clingman & Hilliard (1987) Griffiths (1997) Pierce, Rohaly & Fritchley (1997)	Anshel (1991)	Robbins & Joseph (1985) Smith, Hale & Collins (1998)	
Type of Activity	Running	Aerobic Activities	Gym Members/ Weight Lifters	Misc
	Abell (1975) Shechan (1979) Sachs & Pargman (1979) Morgan (1979) Pierce, McGowan & Lynn (1993) Pierce, Rohaly & Fritchley (1997)	Clingman & Hilliard (1987) Adams & Kirkby (1997)	Anshel (1991) Matthews (1997) Pasman & Thompson (1988) Smith, Hale & Collins (1998) Pierce & Morris (1998) Hurst <i>et al.</i> (2000) (suggests the term muscle dysmorphia for ED in bodybuilding)	Dancers - Pierce, Daleng & McGowan (1993) Golfers - Sewell <i>et al.</i> (1995) Jiu-Jitsu - Griffiths (1997)

In contrast to the research identified in Table 3.5 (see Chapter Three p.) Veale (1995) takes a much more specific, positivistic approach in searching for 'diagnostic criteria'. These are summarised in Table A.2

Table A.2 Operational Diagnostic Criteria for 'Primary' Exercise Dependence
Source: Veale (1995 p.2)

1	Preoccupation with exercise which has become stereotyped and routine
2	Significant withdrawal symptoms in the absence of exercise (for example, mood swings, irritability, insomnia)
3	The preoccupation causes clinically significant distress or impairment in physical, social, occupational or other important areas of functioning
4	The preoccupation with exercise is not better accounted for by another mental disorder (e.g. as a means of losing weight or controlling calorie intake as in an eating disorder)

The use of the term 'diagnostic criteria' clearly identifies Veale's perspective of ED.

A.3 Explanations of Exercise Dependence

34

Physiological Explanations of Exercise Dependence

Opioid peptide activity within the central nervous system (CNS) is the physiological basis for an explanation of dependence but some researchers believe that there is insufficient evidence to postulate this as the sole explanation (Veale, 1987, Harber & Sutton, 1984). Opioids can be subdivided into endorphins, enkephalins and dynorphins. The endorphin family includes several forms of beta endorphin, alpha and gamma endorphin (Thoren *et al.*, 1990). Endorphin is a term used to indicate any substance that exhibits opiate characteristics when subjected to classic tests (Riggs, 1981). It is the beta endorphin that is relevant to the present discussion. The physiological approach to ED, therefore, suggests that individuals become dependent upon the released endorphins and that the process is very similar to other forms of opiate addiction (Cripps, 1995) because endorphins mimic the analgesic and narcotic elements of morphine and heroin (Pargman & Baker, 1980).

Harber & Sutton (1984) suggest that only if the CNS concentrations of beta-endorphin are shown to increase in response to exercise can endogenous opioids be implicated with the euphoric feelings frequently reported during exercise. Thoren *et al.*, (1990) propose that prolonged rhythmic exercise can activate the central opioid systems. They support the view that rhythmic exercise, either in a single bout or chronically performed, mediates the mechanism that will activate central opioid systems. This produces some of the cardiovascular analgesic and behavioural effects reported after exercise. Measurement of endorphins within the living brain are not possible and, therefore, researchers have to be content with indirect forms of measurement (Steinberg, Sykes & LeBoutillier, 1995). Beta endorphin is released into the blood stream during and after physical activity where it is possible for it to be measured (Steinberg, Sykes & LeBoutillier, 1995).

The endorphin theory is criticised by Pierce *et al.*, (1993) who report a significant increase in beta endorphin levels following aerobic activity among habitual exercisers, but note that ED scores are not related to the changes in beta-endorphin. Veale (1987) suggests that the role of opioid peptides in altered mood states and exercise dependence can only be fully investigated when more specific opiate receptor antagonists become more widely available.

Thompson & Blanton (1987) suggest an alternative to the endorphin hypothesis. They suggest that lethargy, fatigue and decreased sympathetic arousal are due to the adaptation to decreased sympathetic nervous system output, which results from exercise. Thus, the dependent individual is motivated to engage in an increasing pattern of exercise behaviour in order to achieve the same levels of arousal. Therefore, the ED individual exhibits a habituation effect (Thompson & Blanton, 1987). In addition, it is suggested that, when

examining commitment in non-aerobic activities, evidence of negative addiction can be found (Sewell *et al.*, 1995). If the addiction process can be evidenced in non aerobic activities then the link to endorphins may be less important than previously considered. The focus on running and other aerobic activities has led the research field to over-emphasise the endorphin rationale such that biochemical explanations may need to be reconsidered (Sewell *et al.*, 1995).

Other criticism has focused on the inability of this type of research to distinguish between cause and effect (Loumidis & Roxborough, 1995). Although physiological approaches may account for ongoing participation they cannot account for the *onset* of participation (Loumidis & Roxborough, 1995). Biochemical dependence features only at the final stage and is a long-term effect of excessive exercising.

Psychological Explanations of Exercise Dependence

The most common approach to researching ED is a psychological one. However, Sachs & Pargman (1979) conclude, that although a general psychological description may be produced, enough variability exists between the different explanations to deter sweeping generalisations. This section explores the different psychological explanations for ED such as: learned behaviour, motivational theories and a personality trait theory. It outlines these approaches and then considers the different methodological tools that have been developed within psychology to measure and quantify ED.

Psychological Models

The disease-based approach to ED suggests that the individual has a medical condition which accounts for their behaviour, therefore absolving the individual from personal responsibility (Thornabene, 1995). Those seeking to provide diagnostic criteria for ED are clearly approaching it from a practitioners' perspective and suggest that individuals may require help to reduce the degree of dependence (Veale, 1987). The importance attached to withdrawal symptoms in the clinical literature indicates researchers' emphasis on a diseased-based explanation. Considerable evidence suggests that there is a relationship between ED and the experience of withdrawal symptoms when a planned activity session is missed (see Section 3.3.2. p. 32). Indeed, the presence of withdrawal symptoms is often used as the sole indicator of the condition (Veale, 1995; Steinberg, Sykes & LeBoutillier, 1995). Veale (1987) proposes that diagnostic criteria for ED should be used by sports clinicians and future researchers to facilitate recognition. Table 3.3 (see p. 30) outlines the diagnostic criteria suggested by one researcher, (Veale, 1995) originally proposed in 1987 but rationalised by 1995.

A description of ED as a 'clinical disorder', clearly illustrates the approach adopted by one group of researchers (Pierce, McGowan & Lynn, 1993). One year later, however, Pierce changed his perception of the syndrome and characterised it as "a process that compels an individual to exercise in spite of obstacles, and results in physical and psychological symptoms when exercise is withdrawn." (Pierce 1994, p. 149). Veale's major concern is that ED should be differentiated into primary and secondary disorders, where a secondary disorder appears at the same time as an eating disorder such as anorexia nervosa or bulimia. In this explanation of ED, the process of exercise is a means by which the anorexic may achieve greater and more effective weight loss (Veale, 1987). Practitioners are urged by Veale to rule out any presence of anorexia or bulimia before diagnosing primary ED and to clarify the ultimate aim of the exercise for the exerciser. In primary ED the exercise is an end in itself whereas in secondary ED the exercise is a means to achieving a lower body weight (Veale, 1987). The link between ED and eating disorders is a common one and often made on the grounds of the similarities shared between the two groups: exercisers are often concerned about weight loss and anorectics often exercise intensively (Grant, 1988).

Yates, Leehey & Shisslak (1983) claim that anorexic patients and obligatory exercisers share similar personality characteristics such as inhibition of anger, high self expectations, tolerance of physical discomfort, denial of injury or illness. Despite this suggestion Yates, Leehey & Shisslak undertook no measurement of personality. One reason offered for the similarities between anorexics and obligatory runners is the possibility that both groups experienced an endorphin high from their behaviour (Yates, Leehey & Shisslak, 1983; Heubner, 1993). Case studies have been used to explore a link between ED and eating disorders (Lyons & Cromy, 1989; Chalmers *et al.*, 1985; Yates, Leehey & Shisslak, 1983) but these links need larger scale studies before generalisations may be made. Disordered eating is a contemporary popular area for research generally, but the link between eating disorders and ED is limited (some examples include: Yates, Leehey & Shisslak, 1983; Yates *et al.*, 1994; Millard & Hanrahan, 1999; Bamber *et al.*, 2000).

The distinction between ED and eating disorders and the suggested relationship between the two has been extended into four categories, one where they are interdependent, one where they are overlapping, one where they feature as an element of an underlying disorder and one where ED is a variant of an eating disorder (Eisler & LeGrange, 1990). Pasman & Thompson (1988) consider body image as the link between ED and eating disorders. Obligatory runners and weight lifters share some commonalities with individuals with eating disorders, for example, they have higher levels of eating disturbance in comparison with a sedentary control group and their body size estimation is inaccurate (Pasman & Thompson, 1988). Eating disturbance only reflects anorexic tendencies however, and not bulimic tendencies. Also,

female athletes have a higher level of disturbance for both eating and body image (Pasman & Thompson, 1988). The research of Wheeler *et al.* (1986) supports the link between exercise and eating disorders more generally, and suggest that excessive athletes may display some evidence of body image disturbance.

This proposed link between ED and eating disorders is not without criticism, however, on the basis that there are also many differences between the two groups (Grant, 1988). Blumenthal, O'Toole & Chang (1984) acknowledges the link between excessive exercise and anorexia nervosa but reject a disease-based approach in favour of a psychological one. They are critical of the attempts to suggest that obligatory running is an analogue of anorexia nervosa (Yates, Leehey & Shisslak, 1983). First, they criticise the methodology in terms of a failure to report and analyse data. Secondly, they reject the basic similarities between anorexia and obligatory running suggesting that one is a disease and the other a lifestyle (Blumenthal, O'Toole & Chang, 1984). These criticisms are further supported by Wheeler *et al.* (1986) who note that there is no evidence of psychopathology in male runners in comparison to sedentary individuals. Differences between the age range of the two groups is also noted by Wheeler *et al.*. Anorexia is usually associated with a younger, sometimes adolescent, age group whereas, as reported above, most obligatory runners are usually in their third or fourth decade. They conclude that there is not a similar profile between runners and anorexics, which supports the work of Blumenthal, O'Toole & Chang (1984).

As detailed above, Blumenthal, Rose & Chang (1985) reject a psychopathological basis for exercise dependence and suggest, instead, that the phenomenon is a response to learned behaviour. In the positive affect model, the runner limits exercise to times when they are feeling good or want to feel good, therefore using running as a stimulant and used to reinforce feelings of self-esteem, control, boredom or apathy. Negative affect runners run to reduce distress and the physical exercise results in feelings of satisfaction and sedation. When running initially, the runners experience positive affect and also learn that the activity can reduce negative affect. Habitual runners then learn to use running as a control method. Their commitment to running usually occurs at a time of high anxiety or depression. Thus, habitual runners learn that not being able to run increases the negative affect. According to Blumenthal, O'Toole & Chang (1985), Thaxton's (1990) results support the notion that negative affect running is associated with deprivation and thus they conclude that fear of deprivation may motivate habitual runners.

Regular exercise may offer the dependent individual a coping mechanism to deal with the stresses and strains of life. Evidence for this can be clearly seen in the priorities for exercising reported by addicted and nonaddicted exercisers. Reduction of stress is ranked

second by addicted exercisers, whereas nonaddicted exercisers rank the same priority sixth (Anshel, 1991). Male addicts report higher levels of happiness, competence and lower levels of stress than non-addicts and all addicts report less anxiety, depression and anger than non-addicts (Anshel, 1991). This is the basis of the 'mastery hypothesis' of exercise dependence, in other words that the exercise regime is an individual's expression of control or mastery over their body and that it is a reinforcement of their competence and self worth (Joseph & Robbins, 1981; Willis & Campbell, 1992). Those whose identity is based on running rather than work are the more committed runners: "the more one is committed to running the more one feels that he or she can be understood through running" (Joseph & Robbins, 1981 p. 136). They believe that self-identification through running not only reflects a social emphasis but also a deeper, more personal sense of gain from running by some of the more committed runners. According to Robbins & Joseph (1985) the 'mastery hypothesis', abstinence from a temporary cherished activity is central to identity and accounts for feelings of distress that are characterised as withdrawal symptoms (Robbins & Joseph, 1985). Another behavioural suggestion is that running performs some therapeutic role and, therefore, has positive benefits. Thus there is inevitable psychological distress when the exerciser is not able to participate (Robbins & Joseph, 1985).

Pargman & Burgess (1979) suggest that Glasser's work would have been stronger if he had applied theoretical frameworks to underpin his beliefs (e.g. the opponent process model of motivation) and they then utilise this as the basis of their own approach. According to this model individuals become dependent due to the improved sense of physical well being that exercise brings. A combined physiological and psychological explanation thus produces a psycho-biologic rationale for ED.

Some researchers use the opponent process theory of motivation by explaining that the ED individual endures the negative aspects of physical activity in order to enjoy the feelings of pleasure upon termination (Pargman & Burgess, 1979; Thompson & Blanton, 1987). Despite their use of this theory, Pargman & Burgess offer no empirical evidence to support their work.

One must assume that, prior to the dependent state, an individual maintains the exercise regime and is motivated to do so before losing control and assuming the dependent state. They remain motivated and adherent towards their exercise programme. To become dependent, commitment must first develop. The individual passes from an initial stage of committed, but not addicted, through to committed and addicted (Sachs, 1981). Motivational theories try to address the underlying reasons that motivate an individual towards continued participation. Dishman, Ickes & Morgan (1980) developed the Self Motivation Inventory (SMI), as a measurement of motivation, and this is utilised in predicting adherence to exercise

(Garcia & King, 1991). However, in comparison to self-efficacy, self-motivation is not significantly associated with exercise adherence (Garcia & King, 1991). They examine adherence based on a social-cognitive theory in contrast to motivation. When comparing the two models, they found self-efficacy to be significantly associated with exercise adherence, whereas self-motivation is not.

A different psychological approach has adopted a personality trait or characteristic explanation for ED. Research examines the relationship between exercise, personality and other forms of addictive behaviour (Kagan & Squires, 1985), differences between type A and B personality (Hinkle, Lyons & Burke, 1989), personality and injury (Diekhoff, 1984) and distance and personality (Folkins & Wieselberg-Bell, 1981). Although this area of research has not been extensively explored there is some evidence that links the dependency process to personality characteristics and identification of these characteristics may prove useful in a developing a fuller understanding (Loumidis & Roxborough, 1995).

APPENDIX B

SUMMARY OF ED LITERATURE

Author	Date (1970s)	Title (ED)	Terminology	Method	Journal	Results and Comments
Bakeland	1970	Exercise deprivation		Empirical study about sleep deprivation	Archives General Psychiatry	Subjects who exercise daily asserted that they would not stop exercising for any amount of money
Abell	1975	Confessions of a compulsive	Compulsive runner	Not empirical	Runners World	Withdrawal symptoms guilt time identity
Glasser	1976	Positive addiction	Addiction	Not empirical but based on years of psychiatric treatment	Book	Runner's high
Sheehan	1976	Why a runner runs: he must		Not empirically based personal reflection	New York Times	Identity
Sheehan	1979	Negative addiction: a runner's perspective	Addiction	Not empirically based	Physician and Sports Medicine	Suggests that personal growth ought to supersede professional growth
Pargman & Burgess	1979	Hooked on Exercise A Psychobiological explanation	Exercise dependence hooked on exercise	Review of theory	Motor Skills: Theory and Practice	Physiology – withdrawal symptoms tolerance physical well being psychology - drive reduction theory optimal arousal stimulus seeking augmentation reduction model positive addiction theory opponent process model
Sachs & Pargman	1979	Running Addiction: a depth interview examination	Exercise addiction	12 interviews "depth" (23-48) men	Sport Behaviour	Positive/negative debate classic definition association or disassociation whilst running
Morgan	1979	Negative addiction in runners	Running addiction	Not really empirically based some case studies	Physician and Sports Medicine	Positive/negative debate symptoms addictive process withdrawal symptoms hobby jogger serious runner addicted runner 100 miles + runners move inwardly
Carmack & Martens	1979	Measuring commitment to running: a survey of runner's attitudes and mental states	Commitment to running	Questionnaire - n=315(m=250, f=65) 4 groups of runners 5 parts on the quest.	Journal of Sport Psychology	Withdrawal pain & guilt some differences between men and women some differences between subgroups subjective attitudes may be different to involvement reasons for running/perceived outcomes relationship b/w length and CR does not explore why choice of CR
Little	1979	Neurotic Illness in fitness fanatics	Athlete's neurosis	N=44 (male) referred by GPs for psychiatric help. Control n=33 (male) not referred for psychiatric help. Consideration of health record both past and present	Psychiatric Annals	Comparison between 'normal' men, athletic neurotics and nonathletic neurotics 'normal' men occupied a position between the other two groups in terms of athletic prowess

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Ogilvie	1980	A running psychologist speaks of running	Running Addiction	Literature review only two case studies offered as empirical evidence	Symposium on the Foot and Leg in Running Sports	Identifies three categories of runner - novice, committed and competitive link between addiction and personal costs emphasised major symptom of addiction is withdrawal
Pargman & Baker	1980	Running High: enkephalin indicted	Addicting	Review no empirical evidence offered	Journal of Drug Issues	Proposes physiological dependence on endorphins link to runners high quite detailed in description of opioides
Robbins & Joseph	1980	Commitment to running: implications for the family and work	Addiction, Commitment	Running club members running shop employees runners on regular running route n=354 questionnaire	Sociological Symposium	Commitment to running was measured and a typology of runners presented full time runner, part time runner, hobby runner, occasional runner discussion of the conflict experienced between runners and spouses males report complaints in greater proportions than females men generally show higher levels of commitment than women surprising that women runners are not subject to greater complaints by spouses than are men runners possible that recent performances of women in running command respect of partners that overrides existing social roles identification of oneself as runner first and worker second are related to commitment running does seem to be associated with the trend away from work as the sole source of identity, toward the satisfactions of life available in the nonwork hours
Johnson	1980	Marching to Euphorica	Exercise Addiction	No empirical evidence overview	Sports Illustrated	Critical of researchers who use the term dependence emphasis on application only to recreational athletes concept of running as religion is explored
Wagemaker & Goldstein	1980	The Runner's high	None	Reports 5 subjects tested on EEGs by a colleague	Journal Sports Medicine	Suggests that the runner's high experienced after 25-30 minutes may be due to the anti-depressant experiences of running reports the EEG changes after running right left confusion reverses after running this objective measure may account for the subjective experiences described after running

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Folkins & Wieselberg-Bell	1981	A Personality profile of ultramarathon runners: a little deviance may go a long way	Ultramarathoners	46 runners m=42, f=4 MMPI ACL MAACL	Sport Behaviour	No measure of ED ultramarathoners 100 miles in 24 hrs personality profile normal finishers showed higher score on deviant scale
Summers, Sargent, Levey & Murray	1982	Middle-aged, non elite marathon runners: a profile	Positive addiction	363 middle aged non elite first attempt marathoners m=345 f=18 pre-race and post-race questionnaire Addiction-to-running score	Perceptual and Motor skills	Link between high and addiction explored 48% sample experienced in the run higher score on addiction to running more likely to experience a high withdrawal symptoms association & disassociation
Sachs	1982	Compliance and addiction to exercise	Exercise Addiction	No empirical evidence - overview	In Cantu – Exercising Adult	Addiction is a process rather than a condition
Thaxton	1982	Physiological and psychological effects of short term exercise addiction on habitual runners	Exercise Addiction	33 university 24=m 9=f POMS GSR (galvanic skin response) CR scale Carmack & Martens (1979) perceived addiction 0-10	Journal of Sport Psychology	P physiological and psychological measures of stopping regular runners only one day abstinence running group showed evidence of lower depression and GSR scores addiction and commitment not completely interrelated
Hailey & Bailey	1982	Negative addiction in runners: a quantitative approach	Exercise Addiction	60 race runners m=60 Negative Addiction Scale	Sport Behaviour	Contrasting scale to CR to measure negative addiction 14 items score range possible of 0-14 no cut off point indicated grouped runners according to history longer runners had higher NAS score
Sachs	1982	Positive and negative addiction to running	Running Addiction	No empirical evidence offered. Overview with main references to Glasser	Sport in Perspective	Outlines the difference between positive and negative addiction, offers suggestions for therapy, suggests that runners tend to be well educated emphasis on withdrawal symptoms
Bortz	1982	The Runner's High	Addiction	Overview of runner's high	Runner's World	Do endorphins account for the addictability of running?

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Hosler	1982	Understanding the sport of bicycling	Addiction	Overview	Runner's World	Outlines that many runners are finding cycling to be a second addiction
Yates, Leehey & Shisslak	1983	Running - an analogue of anorexia	Obligatory runners	Clinical interviews = 60, marathon & trail runners, 80km+ no details given 3 case studies presented	The New England Journal of Medicine	Strange methodology no details given obligatory runners resemble anorexic women in terms of family background, socio-economic class, inhibition of anger, extraordinarily high self expectations, tolerance of physical discomfort, denial of injury, depressive tendencies most anorexics women, obligatory runners men 3rd -5th decade share personality characteristics but no measure taken high - endorphins
Burfoot	1983	Compulsive running	Obligatory Running	Critical review of Yates, Leehey and Shisslak (1983) article	Runner's World	Critical of Yates, Leehey and Shisslak work in terms of methodology and conceptual relationship between anorexia and obligatory running
Prescott	1983	Runners' addiction and anorexia are similar	Excessive Running	Review of Yates <i>et al</i> study	Physician and Sports Medicine	Review for the reader
Sachs	1984	Running addiction	Running addiction	Review not empirically based	Psychology of Running	Significant part of life process model literature sparse definition personality use of running therapy anxiety of terminal helplessness process from positive to negative
Lewis	1984	Exercise some athletes let their fix take precedence over everything else	Obligatory Runners	Not empirically based	Women's Sports	Review for reader case study suggested
Epstein	1984	Running and other vices	Runners	Not empirically based	Psychology of running	Estimates American running population talks about capitalism associated with running aging, death pleasure is in the finish

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Diekhoff	1984	Running amok: injuries in compulsive runners	Compulsive Runners	68 runners questionnaire testing (type) A/B personality addiction to running based on work by (Carmack & Martens 1979) and commitment to running (Carmack & Martens 1979) to see if there is any relationship between these scales and injuries reported or incurred	Sport Behaviour	Addicted runners reported more visits to doctors than non addicted runners type A runners reported more injuries
Blumenthal O'Toole & Chang	1984	Is running an analogue of anorexia nervosa	Obligatory runners	43 runners (m=22, f=21) 27 anorectics MMPI (Minnesota Multiphasic Personality Inventory); OEQ (Yates et al 1983)	JAMA	Guilty withdrawal symptoms does not support the notion that there are similarities in personality profiles among anorectics and obligatory runners obligatory runners do not suffer same degree of psychopathology
Caldwell	1984	Runners vs anorectics - no contest	Obligatory Runners	Critical review of Blumenthal, O'Toole and Chang	Physician and Sportsmedicine	Outlines Blumenthal <i>et al.</i> 's criticisms of Yates <i>et al.</i>
Liberman & Palek	1984	Hematologic Abnormalities Simulating Anorexia Nervosa in an Obligatory Athlete	Obligatory Running	Case study on one individual	The American Journal of Medicine	Laboratory data collected in a wide range of blood tests the contention that anorexia nervosa and obligatory running represent interrelated disorders is supported by the patient presented
Sachs & Pargman	1984	Running addiction	Running Addiction	Overview no empirical evidence offered	in Running as Therapy	Running addiction is a process rather than a condition they view commitment to running as synonymous with running addiction

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Hathaway	1984	Running to ruin	Dependence, Obligatory, Fitness Fanatics, Compulsion	Overview	Psychology Today	This kind of compulsivity is fostered to some extent by our culture myth of the athletic champion as a suffering hero who somehow transcends pain is a model for obligatory runners
Robbins & Joseph	1985	Experiencing exercise withdrawal: possible consequences of therapeutic and mastery running	Therapeutic & Mastery Running	345 runners f=40% questionnaire (own)	Journal of Sport Psychology	Suggest that physiological addiction is misplaced offers two psychological accounts therapeutic and mastery running withdrawal these account for withdrawal sensations
Blumenthal Rose & Chang	1985	Anorexia nervosa and exercise. Implications from recent findings	Obligatory running habitual running addictive running	Review not empirically based	Sports Medicine	Rejects disease based approach suggests process psychological approach explores anorexia and running and the differences positive and negative affect addicted runners do not usually require hospital treatment not usually life threatening learned behaviour
Brant	1985	Understanding Addiction	Exercise/running addiction	No empirical evidence case study of one therapy centre	Runner's World	Outlines the characteristics of general addiction outlines the characteristics of exercise addiction views running & exercise as a positive addiction that can assist drug addicts recovery
Gondola	1985	Fitness Juggernauts	Exercise Juggernauts, Super Exerciser, Compulsive Exerciser	No empirical evidence offered	Leisure Information	Outlines characteristics including withdrawal from family, friends and social contacts, likens exercise to a wonder drug, uses a wide range of terms within one paper
Chalmers, Catalan, Day & Fairburn	1985	Anorexia nervosa presenting as morbid exercising	Morbid exercising	Single case study - letter to the Lancet not an empirical study	The Lancet	Single case study of one individual who displayed some symptoms of anorexia but not all increasing public interest in physical exercise may mean that individuals with morbid concerns about shape and weight will turn to exercise rather than dieting

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Kagan & Squires	1985	Addictive aspects of physical exercise	Addiction	573 students m=265 f=308 MacAndrew Scale Compulsiveness Inventory Type A personality Gough Sanford Rigidity Scale Need for Social Approval Hostility inventory	Journal of Sports Medicine	Do individuals who exercise regularly fit addictive personality profiles? those who have been exercising the longest and exercises the most during the week score higher on addictive components of the scales does not show that individuals may be addicted but may be temperamentally suited to becoming addicted those who had running as primary form of exercise showed levels that were equivalent of alcoholic cut off point
Wheeler, Wall, Belcastro, Conger & Cumming	1986	Are anorexic tendencies prevalent in the habitual runner?	Habitual runner	67 subjects divided into HMR, LMR, (high, low mileage runners) no sex indicated 18 sedentary m demographics, attitudes to running H W EAT test Jackson Personality Inventory Body Image test blood sample - hormones	British Journal of Sports Medicine	Life style important over estimation of body image for HMR no evidence of psychopathology weight loss and control only concern for small group of runners runners higher scores on EAT personality test showed no similarities between runners and anoretics no evidence that running interfered with other aspects of life agree with the findings of Blumenthal <i>et al.</i> (1983)
Estok & Rudy	1986	Physical, psychosocial, menstrual changes/risks and addiction in the female marathon and non marathon runner	Addiction	319 runners both marathoners and nonmarathoners questionnaire modification of Rudy & Estok 1983 (self esteem, general anxiety and addiction)	Health Care of Women International	All participants women examining relationship between variables in title evidence that participation did not affect relationships marathon runners more addictive no common running injuries found positive/negative - increased risk of injury but evidence suggests a healthy habit
Sacks	1986	Psychological aspects of exercise	Exercise Addiction	Overview no empirical evidence offered	Sports Medicine Digest	Review of Robbins and Joseph, Little, Yates <i>et al.</i> , and others very treatment focused

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Veale	1987	Exercise dependence	Exercise Dependence	Review not empirically based	British Journal of Addiction	Prefers dependence because does not refer to one particular activity proposed table of criteria for diagnosis mostly likely to present itself as a persistent injury at a sports clinic partial syndrome primary and secondary dependence
Clingman & Hilliard	1987	Some personality characteristics of the super-adherer: following those who go beyond fitness	Super-adherer	290 endurance race athletes PRF (Personality Research Forum) 227=m 63=f swimming - 81 cycling - 34 running - 106 triathlons - 69	Sport Behaviour	Assessing personality of those engaged in physical activity that requires considerable commitment to training differed from general population on seven selected scales super-adherer in everyday life as well some gender differences but mainly from younger women similarities between gender more striking
Corbin, Nielsen, Borsdorf, Laurie	1987	Commitment to physical activity	Commitment	450 university class exercisers 238=m 212=f commitment to running (Carmack & Martens 1979) adapted	International Journal of Sports Psychology	Attempt to see if the CR (Carmack & Martens) is a good measure of general activity rather than just running. Believed that it was a good tool to assess commitment to general physical activity (at a moderate level)
Crossman, Jamieson & Henderson	1987	Responses of competitive athletes to lay offs in training: exercise addiction or psychological relief?	Exercise Addiction	31 runners mood scale and SA questionnaire 15=m 16=f 20 swimmers 12=f 8=m	Sport Behaviour	Competitive athletes not recreational ones no evidence of withdrawal all self reported addicted to activity addiction more in males and higher competing athletes
Thompson & Blanton	1987	Energy conservation and exercise dependence: a sympathetic arousal hypothesis	Exercise Dependence	No empirical evidence offered - discussion of hypotheses and presentation of new one	Medicine and Science in Sports and Exercise	ED is mediated by adaptive reductions in sympathetic output to exercise tasks as a result of training, requiring the individual to engage in heightened levels of activity to produce pre-training levels of physiological arousal

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Pasman & Thompson	1988	Body Image and Eating Disturbance in Obligatory Runners, Obligatory Weightlifters and Sedentary Individuals	Obligatory runners obligatory weight lifters	90 obligatory runners weight lifters control m=15 f=15 in each group OEQ (adapted from Blumenthal et al. 1984), size estimation measure, EDI eating disorders inventory- drive for thinness scale body dissatisfaction & bulimia scale Body Self Relations Questionnaire - physical appearance evaluation scale	International Journal of Eating Disorders	Assessing body image and eating disturbance in obligatory runners, weight lifters and sedentary weightlifters more accurate at estimation no difference in accuracy b/w runners and control females more dissatisfied with body than males type of physical activity may be related to size estimation and body satisfaction runners & lifters more eating disturbance than controls women more eating disturbance than men similarity between obligatory runners and individuals with eating disorders but only for anorexic behaviours not bulimic do not engage in anorexic levels of body image distortion
Grant	1988	The Exercise fix	Addiction	Not empirically based popular type journal	Psychology Today	Review for reader
Masters & Lambert	1989	On gender comparison and construct validity: an examination of the commitment to running scale in a sample of marathon runners	Running Addiction	CR Carmack & Martens 1979 m=30 f=18 entrants into marathon	Sport Behaviour	To analyse the gender aspect of the CR scale larger proportion of women in sample no differences in terms of training regimes women scored higher on CR than men correlation with training and CR for men but not for women social approval theory for possible suggestion
Lyons & Cromy	1989	Compulsive jogging: exercise dependence and associated disorder of eating	Exercise Dependence	Single case study	The Ulster Medical Journal	Male teacher who dropped weight and started running over a two year period priority in life problems with marriage
Nixon	1989	Reconsidering obligatory running and anorexia nervosa as gender related problems of identity and role adjustment	Obligatory Runners	Theoretical discussion no empirical evidence	Journal of Sport and Social Issues	Critiques Yates <i>et al</i> (1983) view of obligatory runners who are men and anorexic women as responses to unstable identities identities created in the American dream society which emphasises individualism, achievement and success

Author	Date	Title	Terminology	Method	Journal	Results and Comments
Steinberg, Sykes and Morris	1989	Exercise addiction: the opiate connection	Exercise Addiction	No empirical evidence offered. Overview of the opiate argument	Sport, Health Psychology and Exercise Symposium	Outlines the following characteristics: it should produce a pleasurable mood, pain thresholds should be raised by exercise, tolerance should occur, stopping exercise should lead to withdrawal symptoms
Rudy & Estok	1989	Measurement & Significance of Negative Addiction in Runners	Negative Addiction	Two forms reported - 1 RAS (running addiction scale Estok & Rudy 1986) 158 runners f=158 2 RAS 220 marathon runners 112=w 108=m Self Esteem Scale (RSE) (Rosenberg 1965) Anxiety Adjective Check List (AACL) Zuckerman 1960	Western Journal of Nursing Research	Attempts to validate a RAS earlier devised (1986) debates positive & negative and comes down on the side of negative runners high good review of other methodologies and scales negative relationship to self esteem and a positive relationship to anxiety

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Rudy & Estok	1990	Running addiction & dyadic adjustment	Running addiction	35 dyads w=22, m=13 marathon runners RAS authors (1986, 1989) Dyadic Adjustment Scale (DAS)	Research in Nursing & Health	Dyadic adjustments marital relationship- well adjusted to maladjusted sample population compared well to previous married relationships no relationship between running addiction and dyadic adjustment runners significant negative relationship between RAS assigned to runners by their spouses and the spouses' dyadic adjustment scores male spouses reporting greatest negative relationship no significant difference in the assessment of running addiction or runners by either member of the dyad spouse perception of addictive running behaviours increase, marital adjustment decreases
Thompson	1990	Too much exercise	Exercise Addiction	Letter	The Physician and Sports Medicine	In response to DeBenedette offers additional factors such as lack of enjoyment dysfunctional family
Morris, Steinberg, Sykes & Salmon	1990	Effects of temporary withdrawal from regular running		40 runners m=40 six w study, group & control, run 2 wks stop 3 & 4 resume 5 & 6 GHQ general health questionnaire Zung anxiety and depression scales	Journal of Psychosomatic Research	Somatic symptoms of withdrawal appeared during both weeks of non participation symptoms of depression appeared in the second week
DeBenedete	1990	Are your patients exercising too much?	Exercise extremists Excessive exercisers	Not empirically based not a review	Physician and Sports Medicine	High on beta endorphin difficulty in quantifying how much is too much

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Chapman & De Castro	1990	Running addiction: measurement and associated psychological characteristics	Running Addiction	Members of the Georgia State university road runners club connected by telephone. m=32 f=17 (contrasted with the 47 reported) RAS running addiction scale (own construct) CR commitment to running scale (Carmack & Martens) Symptom check list locus of control scale running habits questionnaire	Journal of Sports Medicine and Physical Fitness	Dissatisfied with current measures wanted to establish a measure that could distinguish between commitment and dependence addiction and commitment may be the same for men but different for women frequency of running and duration of average run are associated with the RAS score addicted runners tend to run more frequently and for longer relationship between addiction and positive personality characteristics such as low interpersonal sensitivity, phobic anxiety and psychoticism scores a clear positive relationship between running addiction, run frequency, run duration and psychological health they accept their RAS to be a valid and reliable scale RAS and CR are different processes but patterns for men and women were different so for men addiction and commitment are similar but for women they are different they suggest that men and women are running for different reasons and obtaining different benefits
Boone	1990	Obsessive exercise - some reflections	Obsessive Exercise	No empirical evidence offered - overview	Journal of PE, Recreation and Dance	Outlines concerns and warning signs of over exercise with particular emphasis on young people
Veale	1991	Psychological aspects of staleness and dependence on exercise	Exercise Dependence	No empirical evidence, theoretical consideration	International Journal of Sports Medicine	Revises earlier application of WHO criteria and rationalises to 5 suggests that elite athletes will experience staleness rather than dependency
Anshel	1991	A psycho-behavioural analysis of addicted versus non addicted male and female exercisers	Addicted	Own questionnaire n=60 M=30; f=30 addicted v. non addicted all members of same gym	Journal of Sport Behaviour	Adherence; withdrawal; personality; engaged in activity when ill or injured; runners may display more type A; motivation between groups was different; differences between addicted and non addicted but very few between male and female addicted and non addicted; male addicted more happy, and less stressed

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Gauvin & Szabo	1992	Application of the experience sampling method to the study of the effects of exercise withdrawal on well being	Addicted to Exercise	21 students m=14 f=7 12 experimental subjects 9 control group Commitment to Running Carmack & Martens 1979 adapted to say exercise Well Being Questionnaire Maximal oxygen uptake pager sounded 4 x daily for 5 weeks. At the tone had to fill out the questionnaires day 15 experimentation group asked to stop exercising until day 21	Journal of Sport and Exercise Psychology	Withdrawal from physical activity results in the reporting of twice as many physical symptoms in people who are strongly commitment to exercise increase persists for one week following resumption no evidence of impact on psychological well being range of activities suggests that increase in physical symptoms but no psychological ones may be independent of the type of activity but more about the committed to participation may need longer for psychological effects to develop offers two hypotheses cue competition and selective monitoring no indication that subjects were addicted to exercise can not conclude that physical symptoms are a manifestation of withdrawal symptoms
Brehm	1992	The runner's high: glow with the flow	Addicted to Exercise	No empirical evidence offered - brief overview of three different hypothesis	Fitness Management	Fitness boom in the 1970s description of the exercise high such as the runner's high description of the endorphin hypothesis for addiction to exercise description of the monoamine hypothesis
Brehm	1992	Enjoying the exercise high	Addiction	Popular literature	Fitness Management	Dysfunctional family euphoria
Pierce, McGowan & Lynn	1993	Exercise dependence in relation to competitive orientation of runners	Exercise Dependence	137 competitive and non competitive male runners non comp = 33 3 sessions 6 miles n=61 comp ultramarathon trial run n=32 marathoners n=24 5k race NA scale Hailey & Bailey 1989	The Journal of Sports Medicine and Physical Fitness	Marathoners and ultramarathoners showed higher ED scores than 5k racers and non comp runners ultramarathoners higher ED scores than marathoners opponent process Thompson & Blanton guilt tense withdrawal dominant in life affecting interpersonal elements

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Wichmann & Martin	1992	Exercise excess treating patients addicted to fitness	Exercise Addiction	No empirical evidence offered	Physician and Sports Medicine	Based on "expert opinion" no empirical evidence medicalisation of the issue denial
Pierce & Eastman	1993	Beta Endorphin response to endurance exercise: relationship to ED	Exercise Dependence	Hailey & Bailey Blood removed immediately prior to exercise and immediately after and B endorphin assessed n=8	Perceptual and Motor Skills	Scores on ED are not related to changes in plasma B endorphin levels after aerobic exercise. ED scores were not significantly correlated. B endorphin levels were raised after the exercise bout.
Veale	1993	Exercise Addiction	Addiction	Overview no empirical research	Coaching Focus	Withdrawal emphasised, eating disorders, primary, 4 criteria, uncommon amongst serious athletes,
Pierce, Daleng and McGowan	1993	Scores on exercise dependence among dancers	Exercise Dependence	Negative addiction scale (Hailey and Bailey) used on ballet and modern dancers (n=47), running athletes (n=39) and non endurance field hockey athletes (n=16)	Perceptual and Motor Skills	Dancers and distance runners had higher ed scores than the hockey players dancers had higher scores than the runners runners were both marathon and ultramarathon runners link between ed and body image disturbance is explored
Brewer	1993	The Dark side of exercise and mental health	Over adherence	Over view no empirical evidence offered	Congress of Sport Psychology	Outlines the dangers of becoming dependent

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Johnson, Wong & Wainwright	1993	Psychological characteristics of American, German and Japanese Ironman triathletes	Exercise Addiction	Demographic questions CSAI-2 POMS PSIS (Psychological skills for sport) SSQ (social support) exercise addiction (TESS)	Congress Sport Psychology	There were no differences among the groups on exercise addiction
Davis, Bewer & Ratusny	1993	Behavioural frequency and psychological commitment: necessary concepts in the study of excessive exercising	Excessive Exercising	Commitment to exercise scale (constructed) Frequency of Physical activity Weight preoccupation Addictiveness Obsessive-compulsive personality % Body fat inventories and then an interview followed by body composition measurements	Journal of Behavioural Medicine	Dissatisfied with the current descriptions of exercise dependence questions whether it is addiction/dependence or rather obsessive-compulsive personality characteristics study aimed to establish factor structure for the items to assess ED over a range of activities participants were located through advertising and recreational and more serious athletes were used adverts were placed in health and fitness clubs, YMCAs and around the university factors for commitment to exercise scale were identified as obligatory, pathological these two factors were moderately correlated but related to differentially to independent variables weight preoccupation was related to both factors of the CES scale weight preoccupation strongest predictor of exercise for both men and women obsessive-compulsive was positively related to obligatory aspects of exercise but only among men
Pierce, Eastman, Tripathi, Olson, Dewey	1993	Beta-endorphin response to endurance exercise: relationship to ED	Exercise Dependence	8 women completed a ED scale (Hailey & Bailey) prior to 45 min exercise session Plasma beta endorphin was measured prior to and following the session, t test conducted	Perceptual and Motor Skills	The ED scores were not related to the changes in beta endorphin levels after aerobic exercise endorphin levels were significantly elevated after exercise

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Furst & Germone	1993	Negative addiction in male and female runners and exercisers	Exercise and Running Addiction	Negative addiction scale (Hailey & Bailey 1982) runners (n=98) exercisers (n=90)	Perceptual and Motor skills	Repetition of Hailey & Bailey (1982) with female participants as well as male and with exercisers as well as runners no differences in addiction scores across age, gender or type of activity longer involvement in physical activity was associated with higher addiction scores 1 year was noted as the length of time which developed higher addiction scores
Yates, Shisslak & Crago	1994	Over commitment to sport: is there a relationship to the eating disorders?	Compulsive athlete, addicted	Review no empirical evidence offered	Clinical Journal of Sport Medicine	Explores the relationship between dependence and eating disorders women diet individual sports no evidence of pathology in dependent athletes does not fit into a disease model situational, sociocultural, psychological and biological factors at work most at risk - persistent, perfectionist, high achieving, who are sensitive to cultural values of thinness, fitness or both studies to compare athletes and eating disordered individuals are flawed over committed athletes may not be addicted
Pierce	1994	Exercise dependence syndrome in runners	Exercise Dependence	Excellent review of other researched work	Sports Medicine	One of the best pieces of writing in the field considers methods positive/negative debate continuum looks at habituation withdrawal and personality as three characteristics to be able to state dependence

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Farrell & Thompson	1994	The Relationship between addiction and commitment to exercise in adult fitness participants	Addiction	164 84=PE students; 80=fitness participants no gender specified demographics AI -activity index calculated CPA commitment to physical activity (Corbin et al 1987) PAA physical activity addiction scale (modified from RA scale developed by Chapman & De Castro	Conference proceedings	Sach's definition of dependence majority of subjects scored higher on both CPA & PAA scales no evidence that fitness participants more committed than PE students relationship between PAA score, CPA score, perceived addiction, AI and withdrawal scores strong correlations between reasons for beginning to exercise and continuing to exercise CPA withdrawal and AI are all predictors of physical activity addiction commitment & addiction appear to be similar processes subjects did not show expected withdrawal symptoms
Conboy	1994	The effects of exercise withdrawal on mood states in runners	Dependence	Joggers & serious racers n=61 q 1 n=59 q 2 m=51 f=10 questionnaire (own) CR scale Carmack & Martens 1979 POMS	Sport Behaviour	Examination of withdrawal to test Sachs & Pargman's model of commitment/ dependence grouped runners according to model into 4 groups all runners showed more dysphoria on no run days middle to high socioeconomic background runners perceived a difference in their mood felt their mood to be better when running did not support the hypothesis that high commitment high dependence would result in more withdrawal supports addiction as a two factor phenomenon something other than dependence is involved in withdrawal withdrawal more likely when commitment and dependence interact all runner groups showed withdrawal

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Manning & Morrison	1994	Excessive exercise, family environment and perception of family environment	Excessive Exercise Exercise Dependence	Exercise Enjoyment Questionnaire (EEQ) Perceived Family Environment Questionnaire (PFEQ) n=811 112 triathletes 185 Ironman competitors 520 health club members	Proceedings for the 10th Commonwealth and International Scientific Congress	ED not related to distance or time but related to attitude and perception. Family environment and parental behaviours will have an influence on offspring. Heavier exercisers had more parents with addicted behaviours lower level exercisers having less. The more addictive behaviours in which the exerciser had participated in the greater numbers that parents had participated in.
Multi authors	1995	Exercise addiction motivation for participation in sport and exercise	Range of terms due to the number of authors	Range of methods at least one interview	British Psychological Society Publication	Too many results to mention in detail managed as references in terms of letters
Johnson	1995	Exercise dependence: when runners don't know when to quit	Exercise Dependence	Review not empirically based	Sports Medicine and Arthroscopy Review	Adopts a continuum connection discusses physiological arguments - endorphin & catecholamines outlines characteristics typologies, high anxiety, volume, frequency, duration, men and women, withdrawal, personality components clinical diagnosis treatment
Szabo	1995	The Impact of exercise deprivation on well-being of habitual exercisers	Addiction	No empirical evidence offered - review	Australian Journal of Science and Medicine in Sport	Discussion of the impact of deprivation on addicted and non-addicted exercisers suggests that a non-addicted exerciser may experience distress during periods of non-exercise because of social deprivation, inability to give time to the self, inability to cope with stress, inability to control weight, involuntary changes to lifestyle review provides evidence that exercise deprivation adversely affects subjective states
Kirkby & Adams	1996	Exercise dependence the relationship between two measures	Exercise Dependence	306 aerobic people 158=instructors 46=competitors 102= participants 44=m 262=f NA hailey & Bailey 1982 CR Carmack & Martens 1979	Perceptual and Motor Skills	Assessment of the tools of measurement scores significantly correlated but whilst there is some commonality tests measure different qualities and therefore care should be taken when comparing results

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Mondin, Morgan, Piering, Stegner, Stotesbery, Trine, Wu	1996	Psychological consequences of exercise deprivation in habitual exercisers	Habitual Exercisers	14 n=6 n=8 habitual exercisers (minimum of 45 min d 6-7 d wk) jogging = 10; cycling = 8; swimming = 8 5d experiment 1d exercise, 3d no exercise 1 day resume POMS total mood disturbance STAI DACL	Psychology and Social Sciences	Evidence of mood disturbance on three days of non exercise middle day most evidence some evidence of return to normal states by 4th day don't know if this is adaptation or the knowledge that exercise is permitted next day supports the work of Thaxton
Cockerill & Riddington	1996	Exercise dependence and associated disorders: a review	Dependence	Review	Counseling Psychology Quarterly	Considers addition/dependence ED and eating disorders measurement of ED
Ogden, Veale & Summers	1997	The development and validation of the exercise dependence questionnaire	Exercise Dependence	n=131 developed original questionnaire n=449 validated EAT POMS	Addiction research	Subjects recruited through ads 4 hours a week and a variety of activities those who exercised more than they thought they ought to had higher EDQ than other groups continuum some evidence for secondary dependence EDQ conceptualises dependence in both traditional biomedical and psychosocial perspectives
Griffiths	1997	Exercise addiction: a case study	Exercise addiction - Excessive Exercising	Single case study *	Addiction research	Uses Brown (1993) addictive components of salience, tolerance, withdrawal, euphoria, conflict and relapse explains why Joanna is addicted outlines three approaches as described by Murphy thermogenic hypothesis, catecholamine hypothesis, endorphin hypothesis very critical of research basis very poor paper

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Adams & Kirkby	1997	Exercise dependence, injury and anxiety in aerobics participants	Exercise Dependence	306 (m=44, f=262) aerobic instructors, general participants, aerobics competitors Negative addiction scale (Hailey & Bailey, 1982) EPQ-R (Eysenck & Eysenck 1991) questions on previous injury, gender, age, exercise category, length of involvement, level of activity, involvement, days missed from injury, level of education relating to physical activity	Innovations in Sport Psychology	NAS scores were predicted by N scale on the RPQ-R, number of years of participation, number of classes and injury within the last 12 months ED scores were higher for those with an injury in the last 12 months increased levels of reported injury could be predicted by elevated scores on the N scale of the EPQ-R
Clark	1997	The Compulsive athlete	Compulsive Exercise	No empirical evidence offered - overview	Palaestra	Links compulsive exercise and compulsive eating distinguishes between the dedicated and compulsive athlete mentions the impact on personal relationships references to childhood scars
Pierce, Rohaly & Fritchley	1997	Sex differences on exercise dependence for men and women in a marathon road race	Exercise Dependence	m=18, f=14 marathon road race Hailey & Bailey Negative addiction scale	Perceptual and Motor Skills	Women reported significantly higher scores than men but there was no significant difference in training volume between these two groups
Cole	1998	Addiction, exercise and cyborgs: technologies of deviant bodies	Addiction	Theoretical consideration no empirical evidence	Sport and Postmodern Times	Consideration of free will vs compulsion just do it vs just say no work of Derrida, Foucault and Sedgwick addicted body pivotal concern over reluctance of sporting world to accept drugs in performance enhancement
Pierce & Morris	1998	Exercise dependence among competitive power lifters	Exercise Dependence	Competitive power lifters (n=14) m=14. Exerciser dependence scale (Rudy & Estok, 1989)	Perceptual and Motor Skills	Mean score = 20.2 a high category of ED comparisons made between endurance athletes and the power lifters

Author	Date	Title (ED)	Terminology	Method	Journal	Results and Comments
Loumidis & Wells	1998	Assessment of beliefs in exercise dependence: the development and preliminary validation of exercise belief questionnaire	Exercise Dependence (but uses addiction in brackets)	Semi-structured interviews (n=13) to develop the items questionnaire devised (m=7, f=6) Exercise Beliefs Questionnaire (EBQ) n=201 f=52.2% validation of the above scale n=120 78 students were given the scale twice 6 weeks apart also given the following in the validity exercise Beck Depression Inventory (Beck, 1978) OEQ (Pasman & Thompson, 1991) Reasons for Exercise Inventory (Cash, Novy & Grant 1994) EDQ (Ogden, Veale & Summers, 1997) State Trait Anxiety Inventory (Spielberger, Gorsuch & Lushene, 1970)	Personality and Individual Differences	Three separate studies were reported - developing the scale, testing the scale and validating the scale four factors of ED emerged: social desirability, physical appearance, mental and emotional functioning, vulnerability to disease and ageing critical of the current field for not accounting for why Olympic athletes are not dependent concern over existing instruments because they may not account for those who exercise for shorter periods of time or for those who exercise in more than one form of exercise wanted to develop a scale that was unique to negative mood with exercise men were older and had exercised for longer than women critical of previous literature for including frequency and duration as criteria of pathological exercising as behaviour cannot distinguish between competitive athletes and depressed athletes
Brown	1998	Diary of an Exercise Junkie	Exercise Addiction	Personal case study	Women's Sports and Fitness	Description of personal experiences

Author	Date (2000s)	Title (ED)	Terminology	Method	Journal	Results and Comments
Bamber, Cockerill & Carroll	2000	The Pathological status of exercise dependence	Exercise dependence	Inventories used for screening and allocating participants to groups – Primary exercise dependence (n=43) Secondary exercise dependence (n=27) Eating disorder (n=14) Control (n=110) Questionnaires on – psychological morbidity, self esteem (RESE), weight and body shape dissatisfaction (BSQ), personality (EPQ-R) and exercise beliefs (EBQ), health (GHQ – 28), ED (EDQ), eating disorders (EDE-Q)	British Journal of Sports Medicine	Primary ED group only had menstrual abnormalities but other than that appeared very similar to control group secondary ED had higher levels of psychological morbidity, neuroticism, dispositional addictiveness, impulsiveness
Bamber, Cockerill, Rodgers & Carroll	2000	“It’s exercise or nothing”: a qualitative analysis of exercise dependence	Exercise dependence	Semi-structured interviews undertaken (n=16) with 4 in each group as identified above.	British Journal of Sports Medicine	Only those individuals who had an eating disorder in conjunction with ED displayed history of pathological distress those with in control, secondary or primary with no eating disorder did not show evidence of pathological symptoms used a devised interview schedule EXDI (exercise dependence interview) uses grounded theory constructivist approach to data analysis
Hurst, Hale, Smith & Collins	2000	Exercise dependence, social physique anxiety, and social support in experienced and inexperienced bodybuilders and weightlifters	Exercise dependence	Experienced body builders (n=35), inexperienced body builders (n=23) Body building dependence scale, athletic identity measurement scale, the social physique anxiety scale, adapted version of the social support survey-clinical form	British Journal of Sports Medicine	Noted the importance of the social environment for body builders

Author	Date (2000s)	Title (ED)	Terminology	Method	Journal	Results and Comments
Leedy	2000	Commitment to distance running: coping mechanism or addiction	Addiction	Questionnaire designed from DSM-IV criteria for anxiety, Rudy & Estok's (1989) running addiction scale Non-runners (n=37), 239 runners Women (n=62.2%) Men (n=56.1%)	Journal of Sport Behaviour	Supports the notion that committed runners does not necessarily mean a negative addiction quite critical of previous research for assuming that the negative addiction is always the case and is quite prevalent
Szabo	2000	Physical activity as a source of psychological dysfunction	Addiction and dependence	Review	Edited book	Suggests the primary ED is a non frequent occurrence outlines the differences between primary and dependence supports the notion that commitment and addiction are different outlines the measurement tools outlines the characteristics

APPENDIX C

STRUCTURATION THEORY AND ITS ROLE IN THIS THESIS

APPENDIX C

STRUCTURATION THEORY AND ITS ROLE IN THIS STUDY

Section in

Text

4.4 Postmodern Critiques of Symbolic Interactionism

Symbolic Interactionism was popular especially in US sociology during the 1950s and 1960s (Joas, 1994). In more recent years, however, concerns over a purely micro-social approach and a need for a historical context have resulted in the development of competing schools of thought. Furthermore, Symbolic Interactionism has been criticised for neglecting issues of power and domination (Joas, 1994). The essence of postmodernism has been the questioning and the legitimisation of knowledge (McGuigan, 1999). An approach that focuses solely on the agent does not, therefore, engage in issues surrounding the construction of epistemology. These alternative critical approaches have adopted a combination of structure and agency, such as Structuration Theory.

Structuration Theory

Structuration Theory was developed from the work of Anthony Giddens on the basis of three main criticisms or rather observations of confusion over existing schools of social thought (Giddens, 1984). These three confusions are firstly, that most schools of thought emphasise reflection and action within human behaviour to the extent that structure in any form as a force upon this behaviour is rejected. Secondly, language is given considerable emphasis to the extent that it is both part of and constitutes day to day interaction. Thirdly, the philosophies of natural science have declined to a position of reduced significance whereas it is arguable that these philosophies need to take into account the nature of language and the interpretation of meaning (Giddens, 1984). Giddens (1984), therefore, proposed his Structuration Theory to try to address the dualism of agency versus structure and objectivism versus subjectivism that is evident from previous schools of thought. His proposal was that these two dichotomies, agency/structure and objectivism/subjectivism, needed to be reconceptualised as dualities.

Structuration theory seeks to reject both the singular study of individual experiences and the understanding of total social systems. In the place of these Structuration Theory intends to develop an understanding of social practices across space and time. Key features of Structuration Theory, therefore, are the agent and agency, social praxis, practical consciousness, structure, system and duality of structure (Giddens, 1984). Each of these is now discussed.

The Agent and Agency

In 1984, human agency was conceptualised by Giddens as an ongoing process of behaviour and reflection. This is depicted in the stratification model of the agent, represented in Figure C.1.

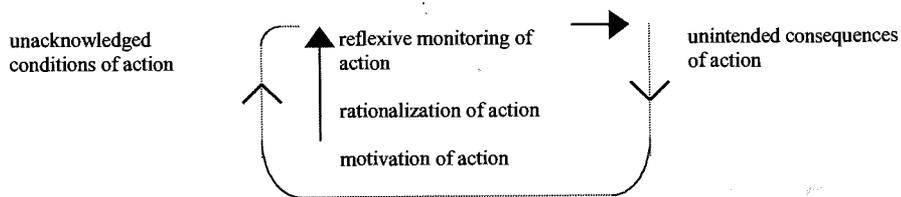


Figure C.1 The Stratification Model of Human Agency

Giddens (1984 p. 5)

In the sense that they monitor their behaviour and consequently continue to understand the grounds of their activity, individuals undertake reflexive monitoring of action. Distinctions are made by Giddens between reflexive monitoring, rationalisation and motivation of action. He suggests that motives only impinge on action as a potential and are not related to continuity of action. In contrast, monitoring and rationalisation are related to continuity of action.

Social Praxis

In the development of Structuration Theory, Giddens was influenced by the notion of meaning in relation to social interaction and communication that lies at the heart of Symbolic Interactionism (Cohen, 1989). His ideas, however, although acknowledging the role of communication, shifted towards a conceptualisation of agency that is based on power (Cohen, 1989). The essence of this view is that actors have the power to intervene in social interaction, that is to express agency.

Structuration Theory and a Sociology of Action

According to Frank (1991) a sociology of the body needs to consider the corporeal form in relation to institutions. It is not surprising, therefore, that one of the recurring themes in sociology of the body has been the interrelationship between the body and institutions. This interrelationship has been explored in some detail by Frank who proposes a Structuration theory of the body in society (Frank, 1991). Here, embodiment is not understood as a consequence of social organisation but rather social organisation is a reflection of embodiment (Frank, 1991). Only bodies can be given and undertake tasks, whereas systems and structures do not have tasks (Frank, 1991):

The theoretical problem is to show how social systems are built up from the tasks of bodies which then allows us to understand how bodies can experience their tasks as imposed by a system.

(Frank, 1991 p. 48)

Symbolic Interactionism instead of Structuration Theory

One of the features of this thesis has been to explore a detailed approach to the participation in physical activity over the course of a life history. It has been suggested that such a deconstruction of the life course is symptomatic of postmodernism (Featherstone & Hepworth, 1983). If this assumption is accepted then a tension within the thesis becomes apparent. First, the framework of

Symbolic Interactionism has been identified as the favoured framework within the thesis but because the debate is extended to an emerging social behaviour then some account of structure should be explored. Furthermore, Symbolic Interactionism is dated and has been developed into a more recent and postmodern theory. Indeed, postmodern ethnography (Travers, 2001) is arguably a more suitable method for presenting the narratives within this thesis. Structuration Theory, therefore, may seem a more suitable framework upon which to build this study. Symbolic Interactionism remained my choice, however, because I wanted to fill compensate for the lack of exercisers' narratives. This task alone would be sufficient to extend the paradigm of ED beyond a positivistic one.

The reasons for this are explained as follows. When adopting a holistic approach to ED across a range of activities it is difficult to clearly identify the structure or institution. To identify the structure as any one of: sport, exercise, gym or club could alienate at least one of the exercisers within this study. The use of Goffmanesque forms of interaction, which combine face work with order, has previously been legitimated in the research on gyms (Sassatelli, 1999). Indeed, the notion that gyms are places in which identity is created, nurtured and fostered, is common in the literature (Klein, 1989; Mansfield & McGinn, 1993; Gilroy, 1997; Sassatelli, 1999). Although this thesis is not limited to the gym *per se* many of the activities that are undertaken by the exercisers do occur within the gym or gym setting and therefore similarities can be drawn. Only two of the exercisers within this study do not use a gym as part of their exercise routine. All exercisers engage in physical activity, but the intention is to examine ED across a range of activities, consequently the structure differs from individual to individual. As Frank explains:

The point of a sociology of the body is not to theorise institutions prior to bodies, but to theorise institutions from the body up. Rather than postulating more about institutions now, it is preferable to let them emerge from the actions of bodies ...

(Frank, 1991 p. 49)

An interactionist approach is favoured in this investigation because of the emphasis given to individual, subjective accounts, merely a different type of knowing:

... it has now become a battleground, a source of tension between two opposing forces that of the powers that be and of submission to social codes on the one hand, and that of the lived experience and of concentration on the self on the other ...

(Berthelot 1986 p. 393)

Therefore, this thesis starts with a sociological critique of ED through an analysis of the detailed accounts of individual exercisers meanings of their own exercise participation and Symbolic Interactionism is considered to be more appropriate. Beyond this, it may be possible to extend the research to consider a Structuration Theory of ED.

APPENDIX D

PROMPT CHART USED IN INTERVIEWING

PARTICIPATION IN EXERCISE OR PHYSICAL ACTIVITY

commitment to running (exercise)	exercise dependent
(exercise) running addiction	exercise addiction
addiction dependent	obligatory exercise

APPENDIX E

**ORIGINAL ADVERTISEMENT USED FOR CONTACTING
EXERCISERS**

Do you experience withdrawal symptoms if you are unable to exercise, train, participate in sport or physical activity? Does your participation take up a great deal of your life and have you ever continued to exercise against advice? Would you be willing to assist with research?

Please telephone Kay Biscomb on

Does your participation in sport, exercise or physical activity take up a great deal of your life? Do you train every day or almost every day? Have you ever continued to exercise against advice? Would you be willing to assist with research?

Please telephone Kay Biscomb on [REDACTED]
[REDACTED]

APPENDIX F

INITIAL DETAILS SENT TO EXERCISERS

School of Sports, Performing Arts & Leisure

**EXERCISE PARTICIPATION
RESEARCH**

DETAILS FOR PARTICIPANTS
Phase 1



IEW

EXERCISE PARTICIPATION
RESEARCH

DETAILS FOR PARTICIPANTS

phase 1

EW

RESEARCH OUTLINE

Thank you for agreeing to help with this project. Some of your questions are answered below. Hopefully, this should give you some idea of the project that you have agreed to help with. If you are still unsure about anything please contact Kay Biscomb on 01902 323260 to discuss it.

What is the purpose of the research?

The research that you have agreed to participate in is part of a PhD study.

What is the topic or area of study?

The focus of the study is individual people's experiences in sport, physical activity or exercise. The types of people that are being interviewed however, are people for whom exercise is a significant and important part of their life. One element of the research is listening to how these people talk about their involvement and what they might call it.

How does my interview help?

In this study the primary method of collecting data is from interviewing people. Your interview is an essential part of the research and without it the research could not be undertaken. It is your time and thoughts that will become critical within the finished project. Another element of the research is not only are the people who participate being interviewed but also their partners are being interviewed. This is a very important stage in the research. The two interviews should be about a week or two weeks apart. It is important that during this time you do not discuss with your partner the interview. After the interviews have finished however, it is ok to discuss them.

Thank you for your time and help in completing this project.

ROLE OF THE PARTNER FOR PARTICIPANTS

In this study the partners of an exerciser will be interviewed as well as the exerciser themselves. This is a very critical part of the interview process and here are some points for you to think about before the interview

- **you will need a partner for this study. A partner is defined as someone you live with, and with whom you have a significant relationship. These people may be husbands, wives, lovers or partners. It does not matter what you call your partner. For the purposes of this study they are called significant others.**
- **you will be interviewed first and your partner will then be interviewed a few days later.**
- **your interview transcript will be sent to you prior to your partner's interview. The issues that will be discussed with your partner will be highlighted on your transcript. If you do not wish them to be discussed with your partner you will be given an opportunity to say so. It is important that you do not discuss your interview with your partner or show them your transcript prior to their interview. You may however, wish to discuss the interviews after they are both finished.**
- **at the end of your partner's interview they will be given a questionnaire about the interview process. Ideally, both you and your partner will consider the questions before returning the questionnaire.**
- **your interview will be kept confidential within the scope of the research.**

Many thanks for your time and help in the completion of this project.

FOR PARTICIPANTS

In order to comply with research ethics it is important to show that you have been informed of the nature of research and that you have agreed to take part in the process. Please read the statement below and sign to indicate your consent. If there is anything that you are not happy with and would like to discuss please do not hesitate to do so.

I understand that my contribution in the research project will mainly consist of an interview. I am aware that various aspects of my interview may be discussed with my partner. Other than these disclosures I am aware that the information I will give will remain confidential. My identity will remain a secret throughout the project and in any written material produced from it.

I agree to take part in the exercise research project.

Signed _____

Date _____

PHASES OF THE RESEARCH

The research project has three different phases.

Phase 1	Participants and their partners
Phase 2	Participants
Phase 3	Participants and their partners

You are currently assisting with phase 1 and therefore I would like to interview you and shortly afterwards interview your partner.

School of Sports, Performing Arts & Leisure

**EXERCISE PARTICIPATION
RESEARCH**

DETAILS FOR PARTICIPANTS
Phase 2

PRINTED BY
UNIVERSITY OF WOLVERHAMPTON PRESS



EXERCISE PARTICIPATION
RESEARCH

DETAILS FOR PARTICIPANTS

phase 2

RESEARCH OUTLINE

Thank you for agreeing to help with this project. Some of your questions are answered below. Hopefully, this should give you some idea of the project that you have agreed to help with. If you are still unsure about anything please contact Kay Biscomb on 01902 323260 to discuss it.

What is the purpose of the research?

The research that you have agreed to participate in is part of a PhD study.

What is the topic or area of study?

The focus of the study is individual people's experiences in sport, physical activity or exercise. The types of people that are being interviewed however, are people for whom exercise is a significant and important part of their life. One element of the research is listening to how these people talk about their involvement and what they might call it.

How does my interview help?

In this study the primary method of collecting data is from interviewing people. Your interview is an essential part of the research and without it the research could not be undertaken. It is your time and thoughts that will become critical within the finished project. Another element of the research is not only are the people who participate being interviewed but also their partners are being interviewed. This is a very important stage in the research. The two interviews should be about a week or two weeks apart. It is important that during this time you do not discuss with your partner the interview. After the interviews have finished however, it is ok to discuss them.

Thank you for your time and help in completing this project.

PHASES OF THE RESEARCH

The research project has three different phases.

Phase 1	Participants and their partners
Phase 2	Participants
Phase 3	Participants and their partners

You are currently assisting with phase 2 and therefore there will be no need to interview your partner.

FOR PARTICIPANTS

In order to comply with research ethics it is important to show that you have been informed of the nature of research and that you have agreed to take part in the process. Please read the statement below and sign to indicate your consent. If there is anything that you are not happy with and would like to discuss please do not hesitate to do so.

I understand that my contribution in the research project will mainly consist of an interview. I am aware that various aspects of my interview may be discussed with my partner. Other than these disclosures I am aware that the information I will give will remain confidential. My identity will remain a secret throughout the project and in any written material produced from it.

I agree to take part in the exercise research project.

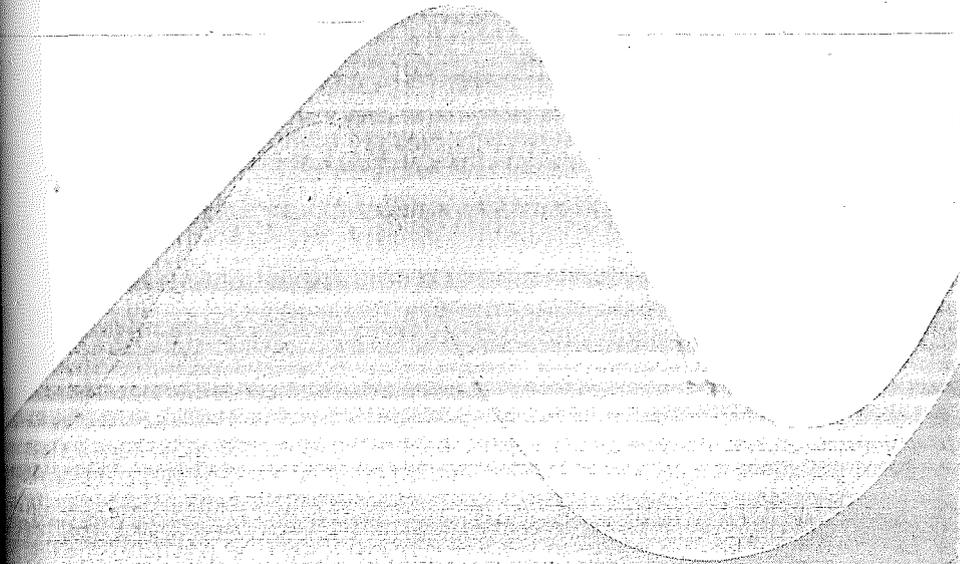
Signed _____

Date _____

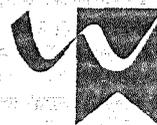
School of Sports, Performing Arts & Leisure

**EXERCISE PARTICIPATION
RESEARCH**

DETAILS FOR PARTICIPANTS
Phase 3



PRINTED BY
UNIVERSITY OF WOLVERHAMPTON PRESS

 UNIVERSITY OF
WOLVERHAMPTON

EXERCISE PARTICIPATION
RESEARCH

DETAILS FOR PARTICIPANTS

phase 3

RESEARCH OUTLINE

Thank you for agreeing to help with this project. Some of your questions are answered below. Hopefully, this should give you some idea of the project that you have agreed to help with. If you are still unsure about anything please contact Kay Biscomb on 01902 323260 to discuss it.

What is the purpose of the research?

The research that you have agreed to participate in is part of a PhD study.

What is the topic or area of study?

The focus of the study is individual people's experiences in sport, physical activity or exercise. The types of people that are being interviewed however, are people for whom exercise is a significant and important part of their life. One element of the research is listening to how these people talk about their involvement and what they might call it.

How does my interview help?

In this study the primary method of collecting data is from interviewing people. Your interview is an essential part of the research and without it the research could not be undertaken. It is your time and thoughts that will become critical within the finished project. Another element of the research is not only are the people who participate being interviewed but also their partners are being interviewed. This is a very important stage in the research. The two interviews should be about a week or two weeks apart. It is important that during this time you do not discuss with your partner the interview. After the interviews have finished however, it is ok to discuss them.

Thank you for your time and help in completing this project.

PHASES OF THE RESEARCH

The research project has three different phases.

Phase 1	Participants and their partners
Phase 2	Participants
Phase 3	Participants and their partners

You are currently assisting with phase 3 and therefore I would like to interview you again with your partner present.

FOR PARTICIPANTS

In order to comply with research ethics it is important to show that you have been informed of the nature of research and that you have agreed to take part in the process. Please read the statement below and sign to indicate your consent. If there is anything that you are not happy with and would like to discuss please do not hesitate to do so.

I understand that my contribution in the research project will mainly consist of an interview. I am aware that various aspects of my interview may be discussed with my partner. Other than these disclosures I am aware that the information I will give will remain confidential. My identity will remain a secret throughout the project and in any written material produced from it.

I agree to take part in the exercise research project.

Signed _____

Date _____

APPENDIX G

EXAMPLE OF A TRANSCRIBED INTERVIEW

APPENDIX G
SAMPLE OF TRANSCRIPT - 'NIGEL'

KB THERE WERE TWO AND THEY WERE SLIGHTLY DIFFERENT. I DON'T KNOW IF YOU REALISED?

NW I did

KB OF THE ADS ... BUT WHICH ONE WAS MORE RELEVANT FOR YOU?

NW Er ... erm ... both really ... but this one, I do feel a bit, a bit like I'm sort of losing a bit if I'm not actually training, if you know what I mean. Not losing my mind [laugh] just like you feel as if you are sort of going back on yourself. If you don't train.

KB AND YOU ACTUALLY WORK HERE AS WELL?

NW Yeah. So the taking up a great deal of my life I wouldn't actually say it's to that extent because I can sometimes get involved actually working. So I don't tell anyone [laugh]. Erm ... yeah, I train about four times a week and I'd say twice of that is when I've got all my work done. I think I'll just nip in there and do a session. It's mainly weights and heavy weights as oppose to cv work. I have done a bit of cv work over the weekend, actually ... erm ... I did about 45 minutes on Sunday and I did 25 minutes last night but that's not what I normally train for. I like to stick in running every now and again say once or twice a week for half an hour or so but that's about it on the cv.

KB IN WHAT CAPACITY DO YOU WORK HERE?

NW Erm ... at the moment I am acting manager because the manager has been made up to operations manager so she is over all the sites. So ... my job title is actually recreation officer ...

KB SO YOU'RE ... IN THAT CAPACITY YOU HAVE TO SUPERVISE OTHER PEOPLE AS WELL?

NW Erm ... I'll be honest with the majority of the time is admin., placing orders ... erm ... passing invoices, sending out invoices for use of AstroTurf and things like that. We've got fitness instructors here but the aerobics and the gym sessions. If someone comes in at two or three in the afternoon and we haven't got a gym instructor which we don't normally and I will sort of drop in and show them round the gym just give them the basic programme just sort of ... three sets of 10 what exercise to do ... back, shoulders, shoulder press, bench press you know, just regular.

KB OK. I'D LIKE TO START ACTUALLY BY TALKING ABOUT YOUR CHILDHOOD AND YOUR FAMILY WHEN YOU WERE A YOUNG BOY. ERM ... AND COULD YOU TELL ME A LITTLE BIT ABOUT YOUR PARENTS WHETHER THEY WERE SPORTY OR NOT?

NW Yeah, oh yeah. Mother, not so much, but dad yeah. He used to play tennis erm ... well club level really but he was ... erm ... I don't whether you know but apparently it was Premier 1, Premier 2, then there are about nine leagues below. He used to play in Premier 1 tennis. Erm ... always used to cycle back wards and forwards to work ... erm. Most sports really, badminton, ... erm ... table tennis, he used to play on a table tennis team. Erm ... swimming. Most sports really.

KB AND WHEN YOU WERE ER ... SORT OF ... GOING TO VERY EARLY MEMORIES THE EARLIEST YOU POSSIBLY HAVE, HOWEVER OLD YOU WOULD BE, THREE, FOUR I DON'T KNOW, WHERE YOU AWARE RIGHT FROM THE VERY BEGINNING THAT YOUR DAD WAS QUITE A SPORTY PERSON?

NW Yeah, yeah. I swam my first width at the age of three. Swam for the region and at club level. Swam for 'Midland Town' schools and all that sort of thing ... erm ... when I finished swimming I took up tennis and badminton and table tennis. More or less sort of followed him, you know, what my dad used to do. Played tennis for the county, tennis has dropped off a bit now. I think last year I only really played matches ... erm ... play for Bilston tennis club. Even though, I only play at quite a low level but I didn't lose a match all season which is quite an achievement seen as I wasn't training or anything ... I was ... once or twice a month I was actually playing apart from matches ... and the matches were ***

KB DO YOU HAVE ANY SIBLINGS?

NW I've got a sister, yeah.

KB AND IS SHE OLDER, YOUNGER?

NW She is older. Four years older.

KB WAS SHE SPORTY AT HOME?

NW Erm ... she was. She did a bit at school, yeah. Played a bit of tennis but she never really took it seriously. Just for a bit of enjoyment. She is a decent swimmer. She used to swim at club level. Erm ... she played in junior team at tennis. As soon as she was 16 it was out clubbing and stuff like that. I mean I've done all that but I still kept my sport up.

KB YEAH, YEAH. ERM ... AND YOUR MUM WASN'T VERY SPORTY AT ALL?

NW Erm ... not really. She is in the aerobics class at the moment. Yeah, she does two classes a week. Two aerobics classes a week. But I think that that is just to pass a bit of time. My dad died about two years ago and she looks for things to do. She does a bit of voluntary work at different places, aerobics and she has started playing golf. But this is all since dad passed away. So yeah, she is now.

KB AND YOUR DAD WHEN YOU WERE YOUNGER HE ACTIVELY ENCOURAGED YOU TO TAKE UP SPORTS?

NW Yeah, yeah.

KB HE DID? HOW DID HE DO THAT?

NW Erm ... basically getting us enrolled in swimming lessons. Erm ... yeah, he got us enrolled in swimming lessons obviously we took that up and progressed from swimming lessons to training ... and then tennis we just ... I don't know just ... it was 50-50 really. He wanted me to play and I wanted to play. So there was no ... no pressure really. I mean he encouraged us a lot but I wouldn't say it was pressure. You know if you get into any sport you wanna go for it. Well I do! So yeah, I think my sister just played it for enjoyment. She swam at club level obviously, but you know maybe it was just to enjoy it really.

KB SO HOW OLD WERE YOU WHEN YOU STARTED PLAYING TENNIS?

NW Erm ... about 12, 13

KB AND YOU DON'T PLAY AS MUCH NOW, SO THERE WAS A POINT AT SOME POINT IN THE PAST WHEN IT BECAME LESS IMPORTANT?

NW Yeah, erm ... this is going to sound like I was pressured. Erm ... my dad, when he passed away I was working in London so it was about 10 months leading up to when he died ... erm ... I moved down there to work and ... erm ... I think the majority of my social hours was travelling up and down the motorway. I never really settled down there because my dad was ill at the time. So I didn't get

chance to join a tennis club where I was working sort of, well it was a 37 hour week but to get my work load done I was working more. So I had sort of gone down there and ... erm ... assistant manager I was. But the manager was fairly new ... erm ... about three or four months before I got there, so basically we had inherited a place that was, you know, there was no systems. It was just totally useless. So everyone was complaining, so you know more time was spent on the job, but ... erm ... when I came back up I took it up again but not to the same degree as what I was doing before. Plus, I was playing for 'Midlands Small Town' which is like the other side of town. I live in 'Shropshire Village' now ... erm ... I don't think that the standard of tennis is that good in Shropshire so I still travel to 'Midlands Small Town' plus it's a great social side down there. And the guy who runs the tennis is a good friend, so I feel more indebted to him, to him to actually play for him. He arranges all the matches around my shifts so I can play, so you know, I feel indebted to him to get down there.

KB ERM DID YOU SAY YOU WERE A SWIMMER?

NW Yeah

KB HOW OLD WERE YOU WHEN YOU WERE SWIMMING?

NW Erm ... I sort of started swimming lessons before I started school. I would say about the same time as I started school actually but I was actually in the pool beforehand if you know what I mean. With my parents and their encouragement. Erm ... started lessons when I was about five, five or six went on eight or nine training and being taught that sort of thing.

KB AND WHEN DID YOU STOP SWIMMING?

NW Roughly, the same time as I started playing tennis. I found that swimming is so isolating. I know that you are in the pool with a group of other people but you know it's like tennis ... in-between points you can have a chat and still take it seriously ... whereas swimming you know you've got your head in the water and that's it. It's just yourself.

KB YOU CAN'T TALK WHEN YOU ARE SWIMMING CAN YOU?

NW No that's it [laugh]. It's difficult.

KB SO YOUR CURRENT SORT OF EXERCISE IS THE FITNESS AND WEIGHT TRAINING. WHEN DID YOU TAKE THAT UP?

NW Erm ... I started a YTS at the 'Fitness Club' years ago. Do you remember it on Broad Street? What it was, was taking people round and giving them a basic programme. And I just started ... they allowed me to train during the day time, so you know I did a bit of weights and I just kept it up really. When I left I thought, 'well, what's the point in doing it for those six months and stopping now?' so I have always kept it up since. So that's since about the age of 17, 17 going on 18. So I've kept it up since then.

KB AND YOU LIKE TO TRAIN FOUR TIMES A WEEK DID YOU SAY?

NW Yeah, yeah. I've got a routine which is ... erm ... Monday back and legs, Wednesday chest and shoulders, Friday arms, biceps and triceps and Saturday just ***. So I do that, and do it on a nine week cycle. The first two weeks I do warm up sets and then two sets of 10 on not maximum but say five or 10 kilos below. The next week warm up sets and then two sets of 10 with a little bit of extra weight on. Third week down to eight with a little more weight on and two sets of eight heavy. Fourth week five, two sets of five, fifth week 10, sixth week five and then onto the last week which will be two sets of five again for a maximum, like you know the heaviest weight. Personal best as it were.

KB AND THAT'S EVERY NINE WEEKS. THAT CYCLE?

NW Yeah, yeah.

KB HOW LONG HAVE YOU BEEN DOING THAT?

NW I started that about ... I'm about my third cycle of that. Erm ... it's a relatively new programme to me. I have the benefits out of it. It's better as opposed to just going in the gym and doing the maximum full out. Two sets of 10 warm up and then putting more weight on a dropping it to eight putting more weight on and dropping it to five and then perhaps a little bit more and then do two or three ... erm ... I think it's too much to do a maximum every time you train that body part, you've got give it a bit of a rest.

KB ERM ... AND SO WHEN YOU ARE DOING CARDIOVASCULAR WHAT WHAT RATIONALE DO YOU USE? LIKE YOU SAID THAT YOU DID SOME THIS WEEKEND?

NW Yeah, well I used to ... I train at 'New Fitness Club' in 'Shropshire Town' because the manager's, the operations manager's husband is a manager over there, so there are some free passes and I use a cross trainer you know the live fitness one? I use one of those and it's got a pulse rate on there, so I try and keep my pulse between 150 and 70 and ... er ... that's what I go to really. Erm ... on the bike in here it hasn't got any any thing to add to the pulse bar so I put one of those polar straps on or just try and keep it at 12. And just go for that.

KB SO ROUGHLY HOW LONG ARE THE SESSIONS THAT YOU SPEND EXERCISING?

NW Erm ... with weights I try and get it all done and spend, do about two or three exercises for each body part and try in and out within 45 minutes because I think if you are doing sort of an hour an hour and a half you get bored of it and I don't like to be bored I just like to get in and do the thing and get out. I think legs and back will probably be the longest routine to be an hour and fifteen, that's two major body parts in there so they are really heavy on the squats with dead lift and things like that.

KB DO YOU READ ABOUT WEIGHT LIFTING?

NW Erm ...

KB IN MAGAZINES OR JOURNALS?

NW Not really. Not really. The odd time I mean if there are magazines lying around I will pick them up and read them but I don't go out and buy them. I think ... I find a lot of the stories that I have read are not relevant you know ... whenever you read something in the paper it's just a load of rubbish. You know if you read about ... I have never took steroids and I would never want to. But if you read you know something like that about 26 years ago about steroids and it's just total rubbish. I don't know who writes that sort of stuff, but obviously the magazines you read are more informative and ... erm ... I pick up bits from time to time in magazines but I'm not ... I don't sort of go out and buy them.

KB DO YOU KEEP ... DO YOU KEEP A LOG BOOK OF WHAT YOU DO?

NW Erm ... I sometimes put it in my diary just to keep an eye on the weights and how they are going on, erm ... like the first week what I've done this. So I try and step it up just a little bit. So you know you last week you do actually achieve a personal best that sort of thing. That's about it really. I've got a pretty good memory so I know what I pushed the last time so ...

KB SO IN THE AD ONE OF THE THINGS THAT IT MENTIONS IS WITHDRAWAL SYMPTOMS WHICH WE STARTED OFF TALKING ABOUT. DO YOU WANT TO TELL ME A LITTLE BIT MORE ABOUT THOSE?

NW Erm ... well I had flu the other week about three weeks ago and I just really felt like that I wanted to train. I nearly sort of, well I was off sick from here and I nearly found a gym and trained anyway. But I did leave it and I just feel like deteriorating. You know everything I have achieved is sort of dwindling away sort of thing. It's not. I mean if I go away on holiday, I went to Kenya at

Christmas I found a gym there which normally I don't. Normally I leave it but I was sort of training intensely every time I trained a body part but ... erm ... before I found that when I went away for two weeks I came back and I was a little bit stronger. So it sounds a little bit mad but it you know I was getting an extra rep out or you know something like that. That's the main feeling really. Going backwards.

KB AND ARE YOU, DO YOU TRAIN WITH SOMEONE OR HAVE YOU HAD SOMEONE CLOSELY LINKED WITH YOU?

NW When I am doing bench press or things like that or something that is dangerous I will ask someone to give me a spot in the gym. Or if someone comes in I will try and train along side but not actually train with the same routine. No it's normally ... I normally train alone.

KB SO IT'S NOT, WHEN YOU SAY TALK ABOUT THIS FEELING OF DETERIORATION IT'S NOT A SORT OF COMPETITIVE THING THAT OTHER PEOPLE ARE GOING TO BE BETTER THAN YOU ARE?

NW No it's just a personal thing.

KB HAVE YOU EVER EXERCISED AGAINST MEDICAL ADVICE?

NW Erm ... no. I very rarely get ill. Erm ... I mean if am off two or three days in a working year that's a lot for me. So no, not really. I mean I have ... I sprained my ankle and I was on crutches for a week but I was still going down the gym just training up the body so you know. It didn't make any difference it was all bench work, erm ... it was sitting down so there was no pressure or anything. So not really no.

KB SO DO YOU EVER TRAIN THROUGH AN INJURY? ... WHEREAS THE SPRAINED ANKLE WAS NOT REALLY RELATED TO THE EXERCISE THAT YOU WERE DOING HAVE YOU EVER TRAINED THROUGH AN INJURY WHERE IT IS RELATED TO THE EXERCISE?

NW Erm ... the most I have done really is played tennis when I have had tennis elbow. But that's like what I've said before I feel like I am letting the team down if I don't play but it normally sort of dies after a couple of days anyway so it's never really given me a great deal of pain.

KB HAVE YOU ... ERM ... IS YOUR PARTICIPATION IN EXERCISE EVER AFFECTED ANY OF YOUR WORKING RELATIONSHIPS OR WORKING COMMITMENTS?

NW No, I always make sure I've got my work done first ... erm ... if I haven't got my work done I will train when I have finished work. But then again if I've got work I'll make sure that that's done before I go in the gym so everything gets done. I still do my training still find time for my training and still get my work done basically.

KB WHAT ABOUT YOUR PARTNER? HAS YOUR PARTNER EVER COMPLAINED ABOUT YOUR EXERCISE?

NW No. As I said before she works at the NEC at the moment and erm she leaves the house at 7.30 in the morning and gets in at 7 o'clock on the night so its like a 12 hour day ... so ... I work shifts as well, so sometimes I train before my shift so she's at work anyway. And if I am working 9-5 I can do my work, train and still get home before she does. It's not really a problem in the relationship. In other relationships that I've had as well. The last serious girlfriend I had she trained quite a lot as well so she would either come down the gym with me or she wouldn't mind.

KB DID YOU MEET YOUR EX-GIRLFRIEND THROUGH TRAINING?

NW Through work really. Yeah, she works at ... she is a life guard at 'Town' baths. I met her there.

KB WHY DO YOU DO YOUR EXERCISE?

NW Where?

KB WHY?

NW Oh, why! Erm ... (long pause) I will be honest vanity I suppose comes into it to a certain degree. Erm ... also I like to ... it's like not competitive with other people ... with myself ... I like to get better push more weight. Yeah, I would say I have got a bit of a gut but if I started to get overweight and that obviously I would get back on the bike and on the trade mill and that sort of stuff. I would say it's 50-50 between the two. Being a bit competitive with myself and vanity. I would disagree with anyone that said they weren't you know all the blokes that come in here.

KB ARE YOU TRYING TO ACHIEVE A PARTICULAR SHAPE?

NW Erm ... not really no. Just achieve more weight just push more weight.

KB AND THE LOOK OF YOUR MUSCLES IS THAT IMPORTANT?

NW Erm ... I like a balanced look. Yeah I don't like huge chests and little thin arms you know that would look stupid as well ... that's well that might be down to vanity again. But yeah, I like a balance, a balanced sort of look. Just want to do everything in training. There is a lot of people that leave legs out. Because they just want to look good on their upper half. So I like a balanced look.

KB WHAT'S YOUR SORT OF GOAL? WHAT ARE YOU TRYING TO ACHIEVE IN THE SORT OF VERY LONG TERM?

NW Erm ... not deteriorating. Erm ... I look at people that I went to school with now and ... er ... in fact one of the guys, one of the architects on the new building ... and he was in my year at school and he came in ... the receptionist said 'how do you know him?'. I said 'I went to school with him he was in my year'. She said 'you're joking he looks about 40'. I said like 'cheers'. Yeah, I try erm ... and not stay young looking just stay in shape. Obviously, I know I am going to get to a point where I am not going to be able to push more weights and perhaps it may go backwards after that, but you know I would like to just keep it up that's why I only get in for 45 minutes I get my work done and I get out so I don't find it boring so I keep it up. You see a lot of lads come here and they will come in like three times a week train two hours a day but they have never trained before and they keep it up for a bit and that's it they knock it on the head. You never see them again. I don't want to be doing that. I just want to keep it up sort of.

KB SO YOU REALLY ENJOY YOUR EXERCISE?

NW I do yeah. I mean this gym it's great I mean I go to other places, I won't name them, but the body building gyms and the steroids it's just attitude and everyone is sort of looking at each other and posing in the mirror. That's not me really. I mean the guys that come here it's more a social thing as well ... because in between sets you are having a chat and sort of everyone gets on really well. You haven't got the body building elements in here. So, yeah.

KB THROUGHOUT THE TIME THAT WE HAVE BEEN TALKING I HAVE NOT ACTUALLY GIVEN YOU THE NAME OF WHAT IT IS I AM RESEARCHING AND WHAT I AM RESEARCHING IS EXERCISE ADDICTION. WHAT I WOULD CALL EXERCISE ADDICTION OR EXERCISE DEPENDENCE. NOW OTHER RESEARCHERS HAVE GIVEN IT ALL SORTS OF DIFFERENT NAMES AND THESE ARE SOME OF THE NAMES THAT OTHER RESEARCHERS HAVE GIVEN IT. ER ... YOU KNOW. WOULD YOU DESCRIBE YOUR INVOLVEMENT WITH EXERCISE LIKE ANY OF THESE?

NW (long pause) ... Er ... I suppose like you say they are all different descriptions of the same thing really. Er ... I would say I am 'addicted' to it because I wouldn't want to stop.

KB YOU WOULD SAY YOU WERE?

NW Yeah, yeah. 'Commitment to weight training' really.

KB IF SOMEBODY WAS TO SAY ... 'YOU ARE ADDICTED TO EXERCISE' YOU WOULD SAY ... YOU WOULDN'T HAVE ANY PROBLEMS WITH THAT AND YOU WOULD SAY 'YEAH, THAT DESCRIBES ME'?

NW Yeah. I mean, I am not addicted to you know the extent that some people are but I make sure that I get in four times a week without fail. And I feel like I am deteriorating if I don't. So yeah.

KB AND YOU ARE HAPPY WITH THAT YOU DON'T WANT TO CHANGE?

NW No, no. I don't get problems with my weight if I'm not training. You know some people eat a sandwich and they've got to go and run it off on the treadmill. I'm not like that. I just make sure that I get my weights done. Four times a week with a bit of cv on top. Just to keep a relative level of fitness.

KB WHAT DOES 'COMMITMENT TO WEIGHT TRAINING MEAN TO YOU'?

KB DO YOU GET ANY ASSOCIATED FEELINGS WITH YOUR EXERCISE?

NW Yeah When you say any associated feelings, in what respect?

KB WELL, SOME PEOPLE GET REALLY HIGH WHEN THEY ARE EXERCISING FOR EXAMPLE. SOME PEOPLE GET QUITE LOW WHEN THEY ARE EXERCISING BECAUSE THEY ARE SO IF YOU LIKE ADDICTED TO IT AND OBLIGATED TO IT THEY HAVE LOST CONTROL OVER IT. THEY DON'T REALLY WANT TO DO IT BUT THEY HAVE TO DO IT. SO IT'S THOSE SORTS OF FEELINGS.

NW Sometimes if I am shattered after working and that's about the only feeling that I get. Like but I still make sure that I do my training. I am in there yawning and that but I might do the session quicker or drop a certain exercise. But I make sure I am still doing it.

KB DO YOU ENJOY IT WHILST YOU ARE DOING IT?

NW Yeah, yeah. I get in a bit of a high if I get another couple of reps out or a bit of extra weight. So yeah I do enjoy it.

KB THAT'S GREAT. AND ... ERM ... WHAT I WOULD LIKE TO DO NOW IS TRANSCRIBE YOUR INTERVIEW AND I WILL HIGHLIGHT THE BITS THAT I WANT TO TALK TO YOUR PARTNER ABOUT AND WILL SEND IT TO YOU SO THAT YOU KNOW WHAT IT IS AND THEN HOPEFULLY I WILL THEN TALK TO YOUR PARTNER OR IF IT'S A PROBLEM BECAUSE SHE IS VERY BUSY ...

NW No, if you phone after 7 o'clock that's fine. She's out tonight, we are out Friday, she's out Saturday. So phone next week or Sunday it's up to you. Do you want the number?

KB YES PLEASE. THE THING WITH TALKING TO YOUR PARTNER ABOUT YOUR INTERVIEW THERE ARE ISSUES OF ETHICS INVOLVED IN THAT AND I WANT YOU TO BE HAPPY WITH WHAT IT IS I AM GOING TO TALK TO YOUR PARTNER ABOUT.

KB BASICALLY I WILL JUST BE ASKING HER ABOUT YOUR EXERCISE AND HER PERCEPTIONS OF IT THAT'S ALL. ERM ... AND IF YOU DO KNOW OF ANY OTHER PEOPLE I WOULD BE REALLY INTERESTED IN TALKING TO THEM BUT I PREFERRED IT IF YOU DIDN'T MENTION THE WORDS EXERCISE ADDICTION OR WHAT IT IS BECAUSE I WANT TO KNOW WHAT PEOPLE WILL TALK ABOUT IT THEMSELVES. RATHER THAN

ME SAY WELL THIS IS WHAT IT IS. ERM ... AND IF IT'S POSSIBLE FOR YOU NOT TO TALK TO CATH ABOUT WHAT WE'VE TALKED ABOUT BUT WHEN I HAVE FINISHED YOU CAN OBVIOUSLY TALK ABOUT IT THEN.

NW Any particular age? That would want?

KB ERM ... PREFERABLY PEOPLE OVER ABOUT 25.

NW There are older people 40s or 50s

KB YEAH, I DON'T MIND THAT END BUT YOUNGER PEOPLE SORT OF UNDER 25 OR SO IT'S SLIGHTLY DIFFERENT SO I DON'T REALLY WANT TO GET INTO THAT.

NW OK, I will pass it round, can I take a copy of that?

APPENDIX H

INITIAL DETAILS SENT TO SIGNIFICANT OTHERS



UNIVERSITY OF
WOLVERHAMPTON

EXERCISE PARTICIPATION RESEARCH

DETAILS FOR PARTNERS

What is the purpose of the research?

The research that you have agreed to participate in is part of a PhD study.

What is the topic or area of study?

The focus of the study is individual people's experiences in sport, physical activity or exercise. The types of people that are being interviewed however, are people for whom exercise is a significant and important part of their life. One element of the research is listening to how these people talk about their involvement and what they might call it.

How does my interview help?

In this study the primary method of collecting data is from interviewing people. Your interview is an essential part of the research and without it the research could not be undertaken. It is your time and thoughts that will become critical within the finished project. Another element of the research is not only are the people who participate being interviewed but also their partners are being interviewed. This is a very important stage in the research. The two interviews should be about a week or two weeks apart. It is important that during this time you do not discuss with your partner the interview. After the interviews have finished however, it is ok to discuss them.

- you are involved in this study because your partner exercises. A partner is defined as someone you live with, and with whom you have a significant relationship. These people may be husbands, wives, lovers or partners. It does not matter what you call your partner. For the purposes of this study they are called significant others.
- your partner will be/has been interviewed first. Ideally, the interviews will be about one/two weeks apart.
- your partner has been told of the need to discuss their interview with yourself. They have been given an opportunity to remove any thing from their interview that they do not wish to be discussed. A transcript of their interview has been sent to them. Please do not look at this or discuss their interview prior to yours. You may however, discuss the interviews after they are both completed.
- because of the nature of the interviews there may be questions that you feel uncomfortable about answering. Please do not hesitate to say that you do not wish to answer that question.
- your interview will be kept completely confidential. Your partner will not be aware of anything that you discuss within your interview.
- at the end of your interview you will be left with a questionnaire and an envelope. Please consider the questions with your partner and return the questionnaire by post.

Many thanks for your time and help in the completion of this project.

FOR PARTNERS

In order to comply with research ethics it is important to show that you have been informed of the nature of research and that you have agreed to take part in the process. Please read the statement below and sign to indicate your consent. If there is anything that you are not happy with and would like to discuss please do not hesitate to do so.

I understand that my contribution in the research project will mainly consist of an interview. I am aware that various aspects of my partner's interview will be discussed with me. I am aware that the information I will give will remain confidential. My identity will remain a secret throughout the project and in any written material produced from it.

I agree to take part in the exercise research project.

Signed _____

Date _____

APPENDIX I
DESCRIPTIVE LIFE SKETCHES

APPENDIX I

DESCRIPTIVE LIFE SKETCHES

Descriptive Life Sketches of Phase One Exercisers and Their Significant Others

Nigel and Cath

Nigel was in his early 30s at the time of his interview and his participation focused on weight training in the gym. He had grown up in a family where exercise and sport were undertaken predominantly by his father. Nigel had always been involved in sport since starting extra curricular activities in school. In the past his main sports had been swimming and tennis. Although he still played tennis his emphasis had transferred to gym work. He worked in a gym as an assistant manager and much of his activity was undertaken in this gym. He would occasionally, however, go to a different gym to exercise particularly if he was on holiday or off work with illness.

Cath was professionally employed in the finance sector. She had been involved in a relationship with Nigel for approximately three and a half years having lived together with him for approximately 18 months at the time of her interview. Physical activity was a valued feature of their relationship evidenced in two ways. First, Cath made reference to being physically active herself. Secondly, she acknowledged that she would occasionally watch Nigel when he played tennis.

Cath mentioned “going to the gym” with Nigel on only a few occasions and stated that she did not enjoy it as much as he did. She tried to maintain an active lifestyle by attending a different gym on her own. Even though Cath was encouraging and supportive of Nigel’s exercise participation she also expressed concern during the interview that, at one point, she thought Nigel had become “too muscley”:

I did say something to him at one stage but I didn’t moan about it. Wasn’t like ‘you look too muscley and I don’t like it’ kind of thing. It was just like, ‘you know you don’t really need to do that much because you are quite big as it is’ kind of thing, sometimes. But what I do tend to do is, when I see huge muscular men that you can immediately tell that they are on steroids, they look ridiculous, the hair doesn’t grow on the chest the muscle won’t let it grow kind of thing, I do make a point of saying, ‘I don’t like that’ ... and the same with the women I don’t ... I just don’t like them for that.

Although both Nigel and Cath enjoyed physical activity, it was Nigel who was more committed to regular participation.

Bob and Jenny

Bob was the oldest of the exercisers, in his 60s at the time of the interview, and was a retired Civil Servant. He had grown up with a father who was a club runner but he described his mother as “not a sporting person”. Throughout his adult life Bob had participated in sporting activities from school days until his early 30s when he predominantly played rugby. He resumed activity in his 40s when he started rambling with the Rambling Club and he started running at the age of 59 for health reasons. He liked to run at least every other day but preferably every day, and ran a series of consistent routes that he mapped out.

Jenny was a retired schoolteacher and their relationship had lasted approximately 40 years, the longest time of all the exercisers in the study. They had grown up children (ages approximately 32 and 35) who no longer lived in the family home. Although Jenny occasionally went rambling with Bob she did not participate in any other form of activity. Jenny was able to talk knowledgeably about Bob’s running but she did not mention any exercise participation of her own except for the rambling.

Tanya and Ivan

Tanya was 40 and had been encouraged by her family to participate in physical activity. Although her parents were not particularly active themselves participation in physical activity had been valued in the family home. Consequently, Tanya had always participated in some form of physical activity since her school days and described her past as:

I always was in every team and did everything. I’ve also done a variety of sports and ... I mean at the moment I tend to be just doing a lot of running and hockey but in the past I’ve been involved in other things. Done a lot of walking and cycling, tennis, badminton the different sort of things ... and then from school ... well I was about 14 when I started playing club hockey and got involved in that from my PE teachers and was involved in an athletics club erm and various other ... camping, walking and others through school and then I went on to do PE at college.

At the time of the first interview Tanya’s main focus for participation was her running. She had just resumed playing club hockey after a period of non-participation. Participation in running, however, had remained constant throughout her adult life except for two short sedentary periods during her pregnancies. Tanya worked professionally within sport and exercise and was a PE teacher in a secondary school. Tanya and Ivan had been in a relationship for five years and had lived together for most of that time.

Ivan was also a teacher but taught a different subject in a different school. They had small children so Ivan worked full time and Tanya worked part time. A grandparent assisted with child care duties. They participated in physical activity together including running, fell walking and cycling. Consequently, activity was a central part of both their relationship and family activities. The salience

of activity in their relationship was confirmed by Ivan who explained that they met through running: “because we met through a blind date and it was ‘oh, I know a chap who does a lot of running’ so we met up and we actually started to take part together, which was good”. Their participation level had initially suffered after the birth of their children but, at the time of the interview, it was beginning to increase once again. The children were described as demanding both on time and energy thus preventing some of the opportunities that they had enjoyed prior to their births.

Norman and Fran

Norman had just turned 30 at the time of his interview and, like all the other exercisers in Phase One, he had been active since his school days. For most of his adult life he had participated in some form of physical activity but there had been a range of different activities and regimes. Within his childhood family home his parents had not participated in any activity but his older sisters had been given opportunities to participate in swimming, martial arts and athletics. Norman was not given the same opportunities:

It's strange really, they had erm ... they had swimming lessons ... and they also had judo lessons and I think that I just kept missing it because they started swimming lessons and then packed them in and I didn't get to go ... and then they had judo lessons and erm packed it in and I didn't get to go ... and erm I think they went to “North Town” Harriers as well ...

He had participated in football at school and still played with a group during the week. As a teenager Norman had started fell walking with a school friend and he had maintained this form of activity throughout his adult life. He had also complemented this with cycling, which was his main focus of exercise at the time the interview. The majority of his cycling had been undertaken as a recreational outdoor activity but just before the interview he had started to compete in a form of competitive cycling. Unlike some of the other exercisers there was no link between Norman's physical activity and his profession. He worked in the purchasing side of a large national government organisation.

Fran was also in her 30s and worked professionally for the local council. They had been in a relationship for eight years and had lived together for most of that time. Fran was also physically active, participating in outdoor activities with Norman, and team activities in other social groups. Fran and Norman participated in walking and cycling together at the weekends but Fran did not participate in the competitions that had become a recent feature of Norman's cycling.

Descriptive Life Sketches of Phase Two Exercisers

Dan

Dan was a factory worker in his 40s. He had grown up playing football for the school team and a local youth club. After leaving school year he continued his football in the local Saturday and Sunday

of activity in their relationship was confirmed by Ivan who explained that they met through running: “because we met through a blind date and it was ‘oh, I know a chap who does a lot of running’ so we met up and we actually started to take part together, which was good”. Their participation level had initially suffered after the birth of their children but, at the time of the interview, it was beginning to increase once again. The children were described as demanding both on time and energy thus preventing some of the opportunities that they had enjoyed prior to their births.

Norman and Fran

Norman had just turned 30 at the time of his interview and, like all the other exercisers in Phase One, he had been active since his school days. For most of his adult life he had participated in some form of physical activity but there had been a range of different activities and regimes. Within his childhood family home his parents had not participated in any activity but his older sisters had been given opportunities to participate in swimming, martial arts and athletics. Norman was not given the same opportunities:

It's strange really, they had erm ... they had swimming lessons ... and they also had judo lessons and I think that I just kept missing it because they started swimming lessons and then packed them in and I didn't get to go ... and then they had judo lessons and erm packed it in and I didn't get to go ... and erm I think they went to “North Town” Harriers as well ...

He had participated in football at school and still played with a group during the week. As a teenager Norman had started fell walking with a school friend and he had maintained this form of activity throughout his adult life. He had also complemented this with cycling, which was his main focus of exercise at the time the interview. The majority of his cycling had been undertaken as a recreational outdoor activity but just before the interview he had started to compete in a form of competitive cycling. Unlike some of the other exercisers there was no link between Norman's physical activity and his profession. He worked in the purchasing side of a large national government organisation.

Fran was also in her 30s and worked professionally for the local council. They had been in a relationship for eight years and had lived together for most of that time. Fran was also physically active, participating in outdoor activities with Norman, and team activities in other social groups. Fran and Norman participated in walking and cycling together at the weekends but Fran did not participate in the competitions that had become a recent feature of Norman's cycling.

Descriptive Life Sketches of Phase Two Exercisers

Dan

Dan was a factory worker in his 40s. He had grown up playing football for the school team and a local youth club. After leaving school year he continued his football in the local Saturday and Sunday

leagues. As part of his football training he ran and, as a consequence of his running, he entered his first marathon in 1984. After the first marathon he started to take his training more seriously and ran in marathons more regularly. His marathon running came to an end in about 1988.

During the 1970s Dan became inspired by Bruce Lee and started participating in martial arts. This was initially karate but eventually included Jiu-Jitsu and Twae Kwan Doe. Although he participated in martial arts for many years he did not initially engage in the belt (i.e. grading) system. At the time of the interview he had only just started the necessary routines to progress through the belt system and was regretful that he had not done so earlier. He combined his martial arts with boxercise classes, gym work and badminton. Dan lived alone and was divorced.

Roger

Roger was in his late 40s and lived with his wife, Anne, and they had been involved in a relationship for approximately 10 years. They had a small baby who was approximately under one year old. Roger worked shifts in one of the emergency services. He described himself as coming from a "sporting family" which included grandparents as well as parents. His father was a professional football player and his mother was a sprinter. He believed that he "probably went into it" because it was "expected of you [sport]". At school he was a member of some school teams including football, cross country and hockey. He started cycling when he was 15 or 16 and rode competitively until he was 30. He achieved high standards whilst he was competing.

At the age of 30 Roger stopped cycling completely but began skiing and playing squash instead. His skiing was limited to vacations but he tried to ski approximately three times a year. He resumed recreational cycling when he was 40. A cycling club reunion prompted him to resume and he was still cycling at the time of the interview. He aimed to cycle about four times a week and each ride would last between two and three hours. On the days that did not include a cycle ride Roger would undertake a work out at the gym.

Elizabeth

Elizabeth was in her early 50s and she lived with her partner Robin. Elizabeth's life history was distinctly different from those of the other exercisers in the study due to the age that she started participation in exercise. She did not grow up in a family that encouraged participation. The family business required assistance from all members of the family and, therefore, Elizabeth was actively discouraged from any commitments that would take her away from home life:

I wasn't a naturally athletic person ... I didn't have any encouragement of that nature at home and in fact my mother wouldn't have been pleased if I had been in teams on a Saturday because I used to help her with the shop ... I used to play netball at college but it was only just like because you had to do it ...

Elizabeth did not, therefore, have the common experience of establishing activity as an essential part of the lifestyle during the early school years. She established activity as part of the lifestyle at a much later age:

... it was only when I was in my 30s. I had learnt to swim in my late 20s and I knew that I wasn't fit and I wanted to be fit and then I met a woman whose daughter was a runner and ... I think it was the era when running was just coming in and this woman I met she was a runner as well and so she ... we just started running together. I was very self conscious when I started off ... you know I didn't have the proper clothes I just had like cut off jeans and if anyone saw me I would stop. So that was how I got into actually running and then ... so I always ran and swam ...

Elizabeth's running and swimming eventually extended to include gym work. She had a routine that combined all three activities in a regular cycle. Elizabeth was semi-retired and undertook work on a casual basis. Her routine, therefore, had to be shaped around the work commitments to which she had consented. She tried to have a rest day at least once a week. Despite her late introduction to activity and her self description as not an "athletic person", Elizabeth explained that she fully enjoyed her activities.

BIBLIOGRAPHY

- Abell, R. (1975) Confessions of a compulsive, *Runner's World Magazine*, vol 10, no 8, pp 30-31.
- Adams, J. & Kirkby, R.J. (1997) Exercise dependence, injury and anxiety in aerobics participants in Lidor Bar-Eli, M. (ed)(1997) *Innovations in sport psychology: linking theory and practice*, Wingate institute for PE and sport, pp 56-58.
- Adler, P.A. & Adler, P. (1989) The gloried self: the aggrandisement and the constriction of self, *Social Psychology Quarterly*, vol 52, no 4, pp 299-310.
- Allsop, S. & Saunders, B. (1989) Relapse and alcohol problems in Gossop, M. (ed)(1989) *Relapse and addictive behaviour*, London: Routledge, pp 11-40.
- Anderson, J. (1998) The changing role of the mother on family holidays, paper presented at 1998 *Leisure Studies Association Conference held at Leeds Metropolitan University*, 14-17 July 1998.
- Annett, J., Cripps, B. & Steinberg, H. (1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society.
- Anshel, M.H. (1991) A psychobehavioural analysis of addicted versus non-addicted male and female exercisers, *Journal of Sport Behaviour*, vol 14, no 2, pp 145-154.
- Armour, K.M. (1997) Developing a personal philosophy on the nature and purpose of physical education: life history reflections, *European Physical Education Review*, vol 3, no 1, pp 68-82.
- Arnold, P.J. (1977) The physical aspect of self: physical education and the creation of identity, *Momentum*, vol 2, no 2, pp 24-37.
- Baekeland, F. (1970) Exercise deprivation, *Archives of General Psychiatry*, vol 22, pp 365-369.
- Bailey, J. (2000) Some meanings of 'the private' in sociological thought, *Sociology*, vol 34, no 3 pp 381-401.
- Bakhurst, D. & Sypnowich, C. (1995) *The social self*, London: Sage.
- Bamber, D., Cockerill, I.M. & Carroll, D. (2000) The pathological status of exercise dependence, *British Journal of Sports Medicine*, vol 34, no 2, pp 125-132.
- Bamber, D., Cockerill, I.M., Rodgers, S. & Carroll, D. (2000) "It's exercise or nothing": a qualitative analysis of exercise dependence. *British Journal of Sports Medicine*, vol 34, no 6, pp 423-430.
- Bartky, S.L. (1998) Foucault, femininity and the modernisation of patriarchal power in Weitz, R. (ed)(1998) *The politics of women's bodies. Sexuality, appearance and behaviour*, Oxford: Oxford University Press, pp 25-45.
- Becker, H.S. (1960) Notes on the concept of commitment, *American Journal of Sociology*, vol 65, pp 32-40.
- Becker, H.S. (1973) *Outsiders. Studies in the sociology of deviance*, 2nd ed. New York: Free Press, Macmillan.
- Benyo, R. (1990) *The Exercise Fix*, Champaign, Illinois: Leisure Press.

- Berger, B. (1999) *Personal meaning in physical activity: a heuristic view. Proceedings of the 1999 European Congress of Sport Psychology held at Charles University, Prague, 7-10 July 1999*, FEPSAC (1999), pp 93-95.
- Berthelot, J.M. (1986) Sociological discourse and the body in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 390-404.
- Biscomb, K. (1994) *Exercise dependence: a sociocultural view*, Unpublished MA thesis, University of Warwick.
- Blair, S.N., Kohl, H.W., Paffenbarger, R.S. & Clark, D.G. (1989) Physical fitness and all cause mortality, *Journal of the American Medical Association*, vol 262, Nov., pp 2395-2240.
- Blum, A.F. (1971) The corpse of knowledge as a normative order in Young, F.D. (ed)(1971) *Knowledge and control: new directions for the sociology of education*, London: Collier-Macmillan, pp 117-132.
- Blumenthal, J.A., O'Toole, L.C. & Chang, J.L. (1984) Is running an analogue of anorexia nervosa?: an empirical study of obligatory running and anorexia nervosa, *Journal of the American Medical Association*, vol 252, no 4, pp 520-523.
- Blumenthal, J.A., Rose, S. & Chang, J.L. (1985) Anorexia nervosa and exercise implications from recent findings, *Sports Medicine*, vol 2, no 4, pp 237-247.
- Blumer, H. (1969) *Symbolic interactionism: perspective and method*, Berkley: University of California Press.
- Blumer, H. (1972) Society as symbolic interaction in Manis, J.G. & Meltzer, B.N. (eds)(1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon pp 145-153.
- Bordo, S. (1990) Reading the slender body in Jacobus, M., Keller, E.F. & Shuttleworth, S. (eds)(1990) *Body/Politics: Women and the discourses of science*, London: Routledge, pp 85-112.
- Boone, T. (1990) Obsessive exercise - some reflections, *Journal of PE, Recreation and Dance*, vol 66, no 7, pp 45-49.
- Bortz, W. (1982) The runner's high, *Runner's World*, vol 17, no 4, pp 58-88.
- Bourdieu, P. (1971) Intellectual field and creative project in Young, F.D. (1971) *Knowledge and control: new directions for the sociology of education*, London: Collier-Macmillan, pp 161-188.
- Bowen, S. (1998) Diary of an exercise junkie: she has worked out everyday for almost four years, *Women's Sport and Fitness*, vol 2, no 1, pp 126-129.
- Brackenridge, C. (1999) Managing myself: investigator survival in sensitive research, *International Review for Sports Sociology*, vol 34, no 4, pp 399-410.
- Brant, J. (1985) Understanding addiction, *Runner's World*, vol 20, no 8, pp 42-78.
- Brehm, B.A. (1992a) The runner's high: glow with the flow, *Fitness Management Magazine*, vol 8, no 1, pp 26-27.
- Brehm, B.A. (1992b) Enjoying the exercise high, *Fitness Management Magazine*, vol 8, no 1, p 28.

- Brewer, B.W. (1993) The dark side of exercise and mental health, *VIII World Congress of Sport Psychology*, Lisbon, pp 531-534.
- British Sociological Association (1996) *Guidance notes: statement of ethical practice*, Durham, BSA.
- Brooks, C.M. (1989) Sport/exercise identity theory and participation marketing: theory formation and theoretical justification, *Sport Marketing Quarterly*, vol 7, no 1, pp 38-47.
- Brownell, K.D., Marlatt, G.A., Lichtenstein, E. & Wilson, G.T. (1986) Understanding and preventing relapse, *American Psychologist*, vol 41, no 7, pp 765-781.
- Burfoot, A. (1983) Compulsive running, *Runner's World*, vol 18, no 10, pp 92, 97, 166-168.
- Burgess, R.G. (1984) *In the field. An introduction to field research*, London: Routledge.
- Caldwell, F. (1984) Runners vs anorectics - no contest, *The Physician and Sportsmedicine*, vol 12, no 8, pp 21-25.
- Carmack, M.A., & Martens, R. (1979) Measuring commitment to running: a survey of runners attitudes and mental states, *Journal of Sport Psychology*, vol 1, no 1, pp 25-42.
- Chalmers, J., Catalan, J., Day, A. & Fourburg, G. (1985) Anorexia nervosa presenting as morbid exercising, *Lancet* (letter), vol 1, no 8423, pp 286-287.
- Chan, C.S. & Grossman, H.Y. (1988) Psychological effects of running loss on consistent runners, *Perceptual and Motor Skills*, vol 66, no 3, pp 875-883.
- Chapman, C.L. & De Castro, J.M. (1990) Running addiction: measurement and associated psychological characteristics, *The Journal of Sports Medicine and Physical Fitness*, vol 30, no 3, pp 283-290.
- Charmaz, K. (2000) Grounded theory. Objectivist and constructivist methods in Denzin, N.K. & Lincoln, Y.S. (eds)(2000) *Handbook of qualitative research*, London: Sage, pp 509-535.
- Christie, M.J. & Chesher, C. (1982) Physical dependence on physiologically released endogenous opiates, *Life Sciences*, vol 30, no 14, pp 1173-1177.
- Cimons, M. (1988) Futile attraction, *Runner's World*, vol 23, no 7, pp 38-46.
- Clark, N. (1997) The compulsive athlete, *Palaestra*, vol 13, no 3, pp 14-15.
- Clingman, J.M. & Hilliard, D.V. (1987) Some personality characteristics of the super-adherer: following those who go beyond fitness, *Journal of Sport Behaviour*, vol 10, no 3, pp 123-136.
- Coakley, J.J. (1993) Sport and socialisation, *Exercise and Sport Science Reviews*, vol 21, pp 169-200.
- Cockerill, I.M. & Riddington, M.E. (1996) Exercise dependence and associated disorders: a review, *Counselling Psychology Quarterly*, vol 9, no 2, pp 119-129.
- Coffey, A. & Atkinson, P. (1996) *Making sense of qualitative data*, London: Sage.
- Cohen, I.J. (1989) *Structuration theory: Anthony Giddens and the constitution of social life*, London: Macmillan.

Cohen, R. (1995) Video interviews: hooked on exercise in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 54-60.

Cohen, S. (1972) *Folk devils and moral panics: the creation of the mods and rockers*, London: MacGibbon & Kee.

Cole, L. (1998) Addiction, exercise and cyborgs: technologies of deviant bodies in Rail, G. (ed)(1998) *Sport and postmodern times*, Albany State University: New York Press, pp 261-275.

Conboy, J.K. (1994) The effects of exercise withdrawal on mood states in runners, *Journal of Sport Behaviour*, vol 17, no 3, pp 188-203.

Cooley, C. H. (1922) *Human nature and the social order*, New York: Charles Scribner's Sons.

Corbin, C.B., Nielsen, B., Borsdorf, L.L. & Laurie, D.K. (1987) Commitment to physical activity, *International Journal of Sports Psychology*, vol 18, no 3, pp 123-135.

Corbin, J. (1971) Problems and procedures of interviewing in Pahl, J.M. & Pahl, R.E. (eds)(1971) *Managers and their wives: a study of career and family relationships*, Harmondsworth: Pelican, pp 286-306.

Cox, B. & Thompson, S. (2000) Multiple bodies: sportswomen, soccer and sexuality, *International Review for the Sociology of Sport*, vol 35, no 1, pp 5-20.

Crews, D.J. & Landers, D.M. (1987) A meta-analytic review of aerobic fitness reactivity to psychosocial stressors, *Medicine and Science in Sports and Exercise*, vol 19, no 5 pp S114-S120.

Cresswell, J. W (1994) *Research design. Qualitative and quantitative approaches*, London: Sage.

Cripps, B. (1995) Exercise addiction and chronic fatigue syndrome: case study of a mountain biker in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 22-23.

Crossman, J., Jamieson, J. & Henderson, L. (1987) Responses of competitive athletes to lay offs in training: exercise addiction or psychological relief?, *Journal of Sport Behaviour*, vol 10, no 1, pp 29-38.

Curry, T.J. & Weaner, J.S. (1987) Sport identity salience, commitment and the involvement of self in role: measurement issues, *Sociology of Sport*, vol 4, no 3, pp 280-288.

Davis, C., Brewer, H. & Ratunsky, D. (1993) Behavioural frequency and psychological commitment: necessary concepts in the study of excessive exercising, *Journal of Behavioural Medicine*, vol 16, no 6, pp 611-628.

DeBenedette, V. (1990) Are your patients exercising too much?, *The Physician and Sports Medicine*, vol 18, no 8, pp 119-122.

Denzin, N.K. (1989) *Interpretative biography*, London: Sage.

Denzin, N.K. & Lincoln, Y.S. (1994) *Handbook of qualitative research*, London: Sage.

Denzin, N.K. & Lincoln, Y.S. (2000) *Handbook of qualitative research*, London: Sage.

Deschamps, J.C. & Devos, T. (1998) *Social identity international perspectives*, London: Sage.

- Diclemente, C.C. & Prochaska, J.O. (1982) Self-change and therapy change on smoking behaviour: a comparison of processes of change in cessation and maintenance, *Addictive Behaviours*, vol 7, no 2, pp. 133-142.
- Diekhoff, G.M. (1984) Running amok: injuries in compulsive runners, *Journal of Sport Behaviour*, vol 7, no 3, pp 120-124.
- Dishman, R.K. (1988) *Exercise adherence: its impact on public health*, Champaign, Illinois: Human Kinetics.
- Dishman, R.K., Ickes, W. & Morgan, W.P. (1980) Self-motivation and adherence to habitual physical activity, *Journal of Applied Social Psychology*, vol 10, no 2, pp 115-132.
- Donnelly, P. (1999) Gulliver's travels: a sport sociologist among the labcoats, *Journal of Sport and Social Issues*, vol 23, no 4, pp 455-458.
- Dowling Naess, F. (2001) Sharing stories about the dialectics of self and structure in teacher socialisation: revisiting a Norwegian physical educator's life history, *European Physical Education Review*, vol 7, no 1, pp 44-60.
- Drummond, D.C. (1991) Dependence on psychoactive drugs: finding a common language in Glass, I.B. (ed)(1991) *The international handbook of addiction behaviour*, London: Routledge, pp 5-10.
- Dunning, E. (1986) Preface in Elias, N. & Dunning, E. (ed)(1986) *Quest for excitement, sport and leisure in the civilizing process*, Oxford: Blackwell, pp 1-18.
- Dunning, E. (1996) On problems of the emotions in sport and leisure: critical and counter-critical comments on the conventional and figurational sociologies of sport and leisure, *Leisure Studies*, vol 15, pp 185-207.
- Dunning, E. (1999) *Sport matters. Sociological studies of sport, violence and civilization*, London: Routledge.
- Edwards, R. & Ribbens, J. (1998) Living on the edges. Public knowledge, private lives, personal experience in Ribbens, J. & Edwards, R. (eds)(1998) *Feminist dilemmas in qualitative research*, London: Sage, pp 1-23.
- Eiser, J.R. (1989) Attitudes and learning in addiction and relapse in Gossop, M. (ed)(1989) *Relapse and addictive behaviour*, London: Routledge, pp 209-230.
- Eisler, I. & LeGrange, D. (1990) Excessive exercising and anorexia nervosa, *International Journal of Eating Disorders*, vol 9, no 4, pp 377-386.
- Eitzen, D.S. (1988) Conflict theory and deviance in sport, *International Review for the Sociology of Sport*, vol 23, no 3, pp 193-204.
- Elias, N. & Dunning, E. (1986) *Quest for Excitement, sport and leisure in the civilizing process*, Oxford: Blackwell.
- Epstein, J. (1981) Running and other vices in Sacks, M.H. & Sachs, M.L. (eds)(1981) *Psychology of running*, Champaign, Illinois: Human Kinetics, pp 176-185.

- Estok, P.J. & Rudy, E.B. (1986) Physical, psychological, menstrual changes/risks and addiction in the female marathon and nonmarathon runner, *Health Care Women International*, vol 7, no 3, pp 187-202.
- Ewald, K. & Jiobu, R.M. (1985) Explaining positive deviance: Becker's model and the case of runners and bodybuilders, *Sociology of Sport Journal*, vol 2, no 2 pp 144-156.
- Farrell, J.M. & Thompson, T. (1994) The relationship between addiction and commitment to exercise in adult fitness participants. *Proceedings for 10th Commonwealth & International Scientific: Access to Active Living*, University of Victoria, pp 292-297.
- Featherstone, M. (1982) The body in consumer culture in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 170-196.
- Featherstone, M. & Hepworth, M. (1983) The mask of ageing and the postmodern life course in Featherstone, M., Hepworth, M. & Turner, B.S.(eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 371-389.
- Fielding, N.G. & Lee, R.M. (1998) *Computer analysis and qualitative research*, London: Sage.
- Fine, M. Weis, L. Weseen, S. & Wong, L. (2000) For whom? Qualitative research, representations and social responsibilities in Denzin, N.K. & Lincoln, Y.S. (2000) *Handbook of qualitative research*, London: Sage, pp 107-131.
- Fishwick, L. (1998) Be what you wanna be: a sense of identity down the local gym. Paper presented to the British Sociological Association Annual Conference, Scotland. *Sociology of Sport Online* [cited 14 June 2001]. Available from URL: <http://physed.otago.ac.nz/sosol/vli2/vli2aal.html#fishw>
- Folkins, C. & Wieselberg-Bell, N. (1981) A personality profile of ultra marathon runners: a little deviance may go a long way, *Journal of Sport Behaviour*, vol 4, no 3, pp 119-127.
- Fontana, A. & Frey, J.H. (2000) The interview: from structured questions to negotiated text in Denzin, N.K. & Lincoln, Y.S. (2000) *Handbook of qualitative research*, London: Sage, pp 645-672.
- Fontaine, K.R. & Shaw, D. (1995) Effects of self efficacy and dispositional optimism on adherence to step aerobic exercise classes, *Perceptual and Motor Skills*, vol 81, no 1, pp 251-255.
- Foucault, M. (1979) *The history of sexuality - Vol.1*, London: Allen Lane.
- Foucault, M. (1987) *The history of sexuality - Vol.2: The use of pleasure*, London: Penguin.
- Fox, K. (1999) Self Esteem and Quality of Life in Exercise and Sport. *Proceedings of the 1999 European Congress of Sport Psychology held at Charles University, Prague, 7-10 July 1999*, edited by FEPSAC (1999), pp 1-12.
- Frank, A.W. (1990) Bringing bodies back in: a decade review, *Theory, Culture & Society*, vol 7, no 1, pp 131-162.
- Frank, A.W. (1991) For a sociology of the body: an analytical review in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 36-102.
- Frost, R.O. & Henderson, K.J. (1991) Perfectionism and reactions to athletic competition, *Journal of Sport and Exercise Psychology*, vol 13, no 4, pp 323-335.

- Frost, R.O. Marten, P., Lahart, C. & Rosenblate, R. (1990) The dimensions of perfectionism, *Cognitive Therapy and Research*, vol 14, pp 449-468.
- Furst, D.M. & Germone, K. (1993) Negative addiction in male and female runners and exercisers, *Perceptual and Motor Skills*, vol 77, no 1, pp 192-194.
- Gabe, J. & Bury, M. (1991) Drug use and dependence as a social problem: sociological approaches in Glass, I.B.(ed)(1991) *The international handbook of addiction behaviour*, London: Routledge, pp 25-33.
- Garcia, A.W. & King, A.C. (1991) Predicting long term adherence to aerobic exercise: a comparison of two models, *Journal of Sport and Exercise Psychology*, vol 13, no 4, pp 394-410.
- Gauvin, L. & Szabo, A. (1992) Application of the experience sampling method to the study of the effects of exercise withdrawal on well-being, *Journal of Sport & Exercise Psychology*, vol 14, no 4, pp 361-374.
- Giddens, A. (1984) *The constitution of society*, Cambridge: Polity Press.
- Gilroy, S. (1997) Working on the body in Clarke, G. & Humberstone, B. (eds)(1997) *Researching women and sport*, London: Macmillan Press, pp 96-112.
- Glaser, B.G. & Strauss, A.L. (1967) *The discovery of grounded theory: Strategies for qualitative research*, Chicago: Aldine.
- Glasser, W. (1976) *Positive addiction*, New York: Harper Rowe.
- Godin, G. & Shephard, R.J. (1985) Psycho-social predictors of exercise intentions among spouses, *Canadian Journal of Applied Sport Sciences*, vol 10, no 1, pp 36-43.
- Goffman, E. (1968) *Stigma: Notes on the management of spoiled identity*, Harmondsworth: Penguin.
- Goffman, E. (1959) *The presentation of self in everyday life*, Harmondsworth: Penguin.
- Gondola, J.C. (1985) Fitness juggernauts, *Leisure Information*, vol 11, no 3, pp 10-11.
- Goode, E. & Ben-Yehuda, B. (1994) *Moral panics and the social construction of deviance*, London: Blackwell.
- Gossop, M. (ed)(1989) *Relapse and addictive behaviour*, London: Routledge.
- Gould, D. (2001) The psychology of Olympic excellence and its development in Papaioannou, A., Goudas, M. & Theodorakis, Y. (eds) *Proceedings of the 10th World Congress of Sport Psychology held at Skiathos, Greece, May 28th – June 1st 2001*, vol 4, pp 51-61
- Graham, W.F. (1979) The anxiety of the runner: terminal helplessness, *The Christian Century*, Aug 29-5 Sept., pp 821-823.
- Grant, E. (1988) The exercise fix: what happens when fitness fanatics just can't say no, *Psychology Today*, vol 22, no 2, pp 24-28.
- Griffiths, M. (1997) Exercise addiction: a case study, *Addiction Research*, vol 5, no 2, pp 161-168.
- Grossman, A. (1985) Endorphins: 'opiates for the masses', *Medicine and Science in Sports and Exercise*, vol 17, no 1, pp 101-105.

- Guba, E. & Lincoln, Y. (1981) *Effective evaluation*, San Francisco: Jossey-Bass
- Gurney, C.M. (1995) *Meanings of home and home ownership: myths, histories and experiences*, Unpublished PhD thesis, University of Bristol.
- Haggard, L.M. & Williams, D.R. (1992) Identity affirmation through leisure activities: leisure symbols of the self, *Journal of Leisure Research*, vol 24, no 1, pp 1-18.
- Hailey, B.J. & Bailey, L.A. (1982) Negative addiction in runners: a quantitative approach, *Journal of Sport Behaviour*, vol 5, no 3, pp 150-155.
- Hall, C.R. (1995) The motivational function of mental imagery for participation in sport and exercise in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 15-21.
- Harber, V.J. & Sutton, J.R. (1984) Endorphins and exercise, *Sports Medicine*, vol 1, no 2, pp 154-171.
- Hathaway, B. (1984) Running to ruin, *Psychology Today*, vol 18, no 7, pp 14-15.
- Hawkes, N. (1994) Addicted to exercise, *The Times Newspaper*, October 24th, p 16.
- Heather, N. & Stallard, A. (1989) Does the Marlatt Model underestimate the importance of conditioned craving in the relapse process in Gossop, M. (ed)(1989) *Relapse and addictive behaviour*, London: Routledge, pp 180-208.
- Heinzelmann, F. & Bagley, R. W. (1970) Response to physical activity programmes and their effects on health behaviour, *Public Health Reports*, vol 85, no 10, pp 905-911.
- Hemingway, J.L. (1995) Leisure studies and interpretative social inquiry, *Leisure Studies*, vol 14, pp 32-47.
- Henderson, K.A., Bedini, A. & Hecht, L. (1994) 'Not just a wheelchair, not just a woman': self-identity and leisure, *Therapeutic Recreation Journal*, vol 28, no 2, pp 73-86.
- Heubner, H.F. (1993) *Endorphins, eating disorders and other addictive behaviours*, New York: Norton.
- Hinkle, J.S., Lyons, B. & Burke, K.L. (1989) Manifestation of type A behaviour pattern among aerobic runners, *Journal of Sport Behaviour*, vol 12, no 3, pp 131-138.
- Holzner, B. (1982) *The sociology of knowledge*, London: Sage.
- Hosler, R. (1982) Understanding the sport of bicycling, *Runner's World*, June 17, vol 6, pp50-52.
- Hughes, C.E. (1945) Dilemmas and contradictions of status, *American Journal of Sociology*, vol 50, pp 353-359
- Hurst, R., Hale, B., Smith, D. & Collins, D. (2000) Exercise dependence, social physique anxiety, and social support in experienced and inexperienced bodybuilders and weightlifters, *British Journal of Sports Medicine*, vol 34, no 6, pp 431-435.
- Ingham, A.G. & Donnelly, P. (1990) Whose knowledge counts?, The production of knowledge and issues of application in the sociology of sport, *Sociology of Sport Journal*, vol 7, no 1, pp 58-65.
- Jacobs, L.W. (1990) *Running as an addiction process*, Unpublished PhD dissertation, University of

Alberta.

Jarvie, G. & Maguire, J. (1994) *Sport and leisure in social thought*, London: Routledge.

Jette, M. (1975) Habitual exercisers: a blood serum and personality profile, *Journal of Sports Medicine*, vol 3, no 1, pp 12-17.

Jiba Ja Rusth, M. L. (1990) *The development of a psychosocial risk profile for becoming an obligatory runner*, University Microfilms International, Ann Arbor Michigan.

Joas, H. (1994) Symbolic Interactionism in Outhwaite, W. & Bottomore, T. (eds)(1993) *The Blackwell dictionary of twentieth century social thought*, Oxford: Blackwell, pp 656-657.

Johnson, J., Wong, V. & Wainwright, T. (1993) Psychological characteristics of American, German and Japanese ironman triathletes, *VIII World Congress of Sport Psychology*, Lisbon, pp. 928-932.

Johnson, R. (1995) Exercise dependence: when runners don't know when to quit, *Sports Medicine and Arthroscopy Review*, vol 3, no 4, pp 267-273.

Johnson, W.O. (1980) Marching to Euphoria, *Sports Illustrated*, vol 53, no 3, pp 72-82.

Johnston, L.H., Corban, R.M. & Clarke, P. (1999) Multi-method approaches to the investigation of adherence issues within sport and exercise: Qualitative and quantitative techniques in Bull, S. (ed)(1999) *Adherence issues in exercise and sport*, Chichester: John Wiley & Sons, pp 23-45.

Jones, S.B. & Jones, D.C. (1977) Serious jogging and family life: marathon and sub-marathon running. *Annual Meeting of the American Sociological Association, Chicago, 5-9 Sept, pp 1-19.*

Joseph, P. & Robbins, J.M. (1981) Worker or runner?, The impact of commitment to running and work on self identification in Sacks, M.H. & Sachs, M.L. (eds)(1981) *Psychology of running*, Champaign, Illinois: Human Kinetics, pp 131-146.

Kagan, D.M. & Squires, R.L. (1985) Addictive aspects of physical exercise, *Journal of Sports Medicine*, vol 25, no 4, pp 227-237.

Karp, D.A. & Yoels, W.C. (1990) Sport and urban life, *Journal of Sport and Social Issues*, vol 14, no 2, pp 77-102.

Kirby, R.J. & Adams, J. (1996) Exercise dependence: the relationship between two measures, *Perceptual and Motor Skills*, vol 82, pp 366.

Klein, A. (1989) Pumping irony: crisis and contradiction in body building, *Sociology of Sport Journal*, vol 3, pp 112-133.

Kostrubula, T. (1984) Running and therapy in Sachs, M.L. & Buffone, G.W. (eds)(1984) *Running as therapy*, Lincoln: University of Nebraska Press, pp 273-287.

Kuhn, T.S. (1970) *The structure of scientific revolution*, 2nd ed. London: University of Chicago Press.

Kuhn, M.H. (1972) Major trends in Symbolic Interactionism theory in the past twenty five years, in Manis, J. G. & Meltzer, B.N. (1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon, pp 57-75.

Lasch, C. (1979) *The culture of Narcissism. American life in an age of diminishing expectations*, New

York: Warner.

Lash, S. (1984) Genealogy and the body: Foucault/Deleuze/Nietzsche in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 256-280.

Leedy, M.G. (2000) Commitment to distance running: coping mechanism or addiction?, *Journal of Sport Behaviour*, vol 23, no 3, pp 255-270.

Lefever, R. (1988) *How to identify addictive behaviour*, London: Promis.

Leonard II, W.M. & Schmitt, R.L. (1987) Sport identity as side bet-towards explaining commitment from an interactionist perspective, *International Review for Sport Sociology*, vol 22, no 4, pp 249-262.

Lesieur, H.R. (1987) Deviance in sport: the case of pathological gambling, *Arena Review*, vol 11, no 1, pp 5-14.

Lewis, R. (1984) Exercise addiction, *Women's Sports*, vol 6, no 1, pp 14-17.

Liberman, R.B. & Palek, J. (1984) Hematologic abnormalities simulating anorexia nervosa in an obligatory athlete, *The American Journal of Medicine*, vol 76, no 5, pp 950-952.

Lincoln, Y. & Guba, E. (1986) But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. In Williams, D. (ed) (1986) *Naturalistic evaluation*, San Francisco: Jossey-Bass, pp 73-84.

Lincoln, Y. (1990) The making of a constructivist: a remembrance of transformations past, in Guba, E. (ed) (1990) *The paradigm dialog*, Newbury Park, California: Sage, pp 67-87

Little, J.C. (1969) The athlete's neurosis – a deprivation crisis, *ACTA Psychiatrica Scandinavica*, vol 45, pp 187-197.

Little, J.C. (1979) Neurotic illness in fitness fanatics, *Psychiatric Annals*, vol 9, no 3, pp 49-51; 55-56.

Little, J.C. (1981) Addendum to "The athlete's neurosis: a deprivation crisis" in Sacks, M.H. & Sachs, M.L. (eds)(1981) *Psychology of running*, Champaign, Illinois: Human Kinetics, pp 126-137.

Littleton, R. (1991) Drug dependence as pharmacological adaptation in Glass, I.B. (ed)(1991) *The international handbook of addiction behaviour*, London: Routledge, pp 11-14.

Lorber, J. (1998) Believing is seeing. Biology as ideology in Weitz, R. (ed)(1998) *The politics of women's bodies. Sexuality, appearance and behaviour*, Oxford: Oxford University Press, pp 12-24.

Loumidis, K.S. & Roxborough, H. (1995) A cognitive behavioural approach to excessive exercising in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, BPS, pp 45-53.

Loumidis, K.S. & Wells, A. (1998) Assessment of beliefs in exercise dependence: the development and preliminary validation of the exercise beliefs questionnaire, *Personality and Individual Differences*, vol 25, no 3, pp 553-567.

Lyons, H.A. & Cromy, R. (1989) Compulsive jogging: exercise dependence and associated disorders of eating, *The Ulster Medical Journal*, vol 58, no 1, pp 100-102.

Maguire, J. & Stead, D. (1996) Far pavilions?, Cricket migrants foreign sojourns and contested identities, *International Review for Sport Sociology*, vol 31, pp 1-21.

- Major, W.F. (1995) *Series running an interpretive analysis*. Microform Publications, University of Oregon, Eugene.
- Manis, J. G. & Meltzer, B.N. (1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon.
- Manning, T. & Morrison, C. (1994) Excessive exercise, family environment and perception of family environment in Bell, F.I. & Van Gyn, G.H. (eds)(1994) *Proceedings for the 10th Commonwealth and International Scientific Congress*, pp 108-112.
- Mansfield, A. & McGinn, B. (1993) Pumping irony; the muscular and the feminine in Morgan, D. & Scott, S. (1993) *Bodies in a social landscape* in Morgan, D. & Scott, S. (eds)(1993) *Body matters*, London: Falmer Press, pp 49-68.
- Marlatt, G.A. (1985) Relapse prevention: theoretical rationale and overview of the model in Marlatt, G.A. & Gordon, J.R. (eds)(1985) *Relapse prevention*, New York: The Guilford Press, pp 3-70.
- Marlatt, G.A. & Gordon, J.R. (1985) *Relapse prevention*, New York: The Guilford Press.
- Markula, P. (2001) Beyond the perfect body. Women's body image distortion in fitness magazine discourse, *Journal of Sport and Social Issues*, vol 25, no 2, pp 158-179.
- Marshall, C. (1990) Goodness criteria: are they objective or judgment calls? In Guba, E. (1990) *The paradigm dialog*, Newbury Park, California: Sage, pp 188-197.
- Masters, K.S. & Lambert, M.J. (1989) On gender comparison and construct validity: an examination of the commitment to running scale in a sample of marathon runners, *Journal of Sport Behaviour*, vol 12, no 2, pp 196-202.
- Matheson, H. (1999) Obligatory exercise questionnaire and training profiles of Ironman triathletes for 1996 and 1997: Does repeated participation increase the incidence of becoming exercise dependent?, *Proceedings of the 1999 European Congress of Sport Psychology held at Charles University, Prague, 7-10 July 1999*, edited by FEPSAC (1999), pp 44-46.
- Matheson, H. & Biscomb, K. (1998) Differences in attitudes towards sport and physical activity by sports studies and non-sports studies students who are designated obligatory and non-obligatory exercisers: A Qualitative Study. *Paper presented at BASES conference, Worcester 1998*.
- Matthews, J.K. (1997) *The impact of planned and unplanned layoffs from training on withdrawal symptoms of exercise addicted individuals*, UMI: Ann Arbor Michigan.
- McCall, G.J. & Simmons, J.L. (1966) *Identities and interactions*, London: Free Press.
- McGuigan, J. (1999) *Modernity and postmodern culture*, Buckingham: Open University Press.
- McMurrin, M. (1994) *The psychology of addiction*, London: Taylor and Francis.
- McNeill, P. (1990) *Research methods*, London: Routledge.
- Mead, G.H. (1934) *Mind, self, and society: from the standpoint of a social behaviourist*, London: University of Chicago Press.

- Meltzer, B. (1972) Mead's social psychology in Manis, J.G. & Meltzer, B.N.(eds)(1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon, pp 4-22.
- Meltzer, B. N. & Petras, J.W. (1972) The Chicago and Iowa schools of symbolic interactionism in Manis, J. G. & Meltzer, B.N. (eds)(1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon, pp 43-56.
- Merton, R.K. (1957) *Social theory and social structure*, London: Free Press of Glencoe.
- Miles, M.B. & Huberman, A.M. (1994) *Qualitative data analysis*, 2nd ed. London: Sage.
- Millard, H.C. & Hanrahan, S.J. (2000) Excessive exercise and eating disorders: which is the chicken & which is the egg?, *Sport Health*, vol 17, no 2, pp 16-19.
- Minkler, M. (1981) Applications of social support theory to health education: implications for work and the elderly, *Health Education Quest*, vol 8, pp 147-165.
- Mondin, G.W., Morgan, W.P., Piering, P.N., Stegner, A.J., Stotesbery, C.L., Trine, M.R. & Wu, M. (1996) Psychological consequences of exercise deprivation in habitual exercisers, *Medicine and Science in Sports and Exercise*, vol 28, no 9, pp 1199-1203.
- Morgan, D. (1993) You too can have a body like mine: reflections on the male body and masculinities in Morgan, D. & Scott, S. (1993) Bodies in a social landscape in Morgan, D. & Scott, S. (eds)(1993) *Body matters*, London: Falmer Press, pp 69-88.
- Morgan, D. & Scott, S. (1993a) *Body matters*, London: Falmer Press.
- Morgan, D. & Scott, S. (1993b) Bodies in a social landscape in Morgan, D. & Scott, S.(eds)(1993) *Body matters*, London: Falmer Press, pp 1-21.
- Morgan, W.P. (1979) Negative addiction in runners, *The Physician and Sports Medicine*, vol 7, pp 57-70.
- Morgan, W.P., Brown, D.R., Raglin, J.S., O'Connor, P.J. & Ellickson, K.A. (1987) Psychological monitoring of overtraining and staleness, *British Journal of Sports Medicine*, vol 21, no 3, pp 107-114.
- Morris, M., Steinberg, H., Sykes, E.A. & Salmon, P. (1990) Effects of temporary withdrawal from regular running, *Journal of Psychosomatic Research*, vol 34, no 5, pp 493-500.
- Murphy, J.K., Williamson, D.A., Buxton, A.E., Moody, S.C., Absher, N. & Warner, M. (1982) The long term effects of spouse involvement upon weight loss and maintenance, *Behaviour Therapy*, vol 13, pp 681-693.
- Nixon, H.L. (1989) Reconsidering obligatory running and anorexia nervosa as gender related problems of identity and role adjustment, *Journal of Sport and Social Issues*, vol 13, no 1, pp 14-24.
- North, T.C., McCullagh, P. & Tran, W. (1990) Effect of exercise on depression, *Exercise and Sport Science*, vol 19, pp 379-415.
- Noval, J.D. (1980) Running anorexia (letter to the editor), *South African Medical Journal*, vol 27, p 1024.
- Ogden, J., Veale, D. & Summers, Z. (1997) The development and validation of the exercise dependence questionnaire, *Addiction Research*, vol 5, no 4, pp 343-356.
- Ogilvie, B.C. (1980) *A running psychologist speaks of running. Symposium on the foot and leg in running*

sports. Coronado, California, pp 167-173.

Orford, J. (1985) *Excessive appetites: a psychological view of addictions*, Chichester: John Wiley & Sons.

Paffenbarger, R.S. & Hyde, R.T. (1989) Exercise adherence coronary heart disease and longevity in Dishman, R.K. (ed)(1989) *Exercise adherence: its impact on public health*, Champaign, Illinois: Human Kinetics, pp 41-73.

Pahl, J.M & Pahl, R.E. (1971) *Managers and their wives: a study of career and family relationships*, Harmondsworth: Pelican.

Pargman, D. & Baker, M. (1980) Running high: enkephalin indicted, *Journal of Drug Issues*, vol 10, no 3, pp 341-349.

Pargman, D. & Burgess, S.S. (1979) Hooked on exercise: a psycho-biological explanation, *Motor Skills: Theory into Practice*, vol 3, no 2, pp 115-122.

Pasman, L. & Thompson, J.K. (1988) Body image and eating disturbance in obligatory runners, obligatory weight lifters and sedentary individuals, *International Journal of Eating Disorders*, vol 7, no 6, pp 759-769.

Patton, M.Q. (2002) *Qualitative research and evaluation methods*, London: Sage

Peele, S. (1979) Redefining addiction II. The meaning of addiction in our lives, *Journal of Psychedelic Drugs*, vol 11, no 4, pp 289-297.

Peele, S. (1981) *How much is too much? Healthy habits or destructive addictions*, Englewood: Prentice Hall.

Peele, S. (1985) *The meaning of addiction. Compulsive experience and its interpretation*, Lexington, Mass.: Lexington Books.

Peele, S. (1995) *Diseasing of America*, San Francisco: Jossey-Bass Publishers.

Pierce, E.F. (1994) Exercise dependence syndrome in runners, *Sports Medicine*, vol 18, no 3, pp 149-155.

Pierce, E.F., Daleng, M.L. & McGowan, R.W. (1993) Scores on exercise dependence among dancers, *Perceptual and Motor Skills*, vol 76, no 2, pp 531-535.

Pierce, E.F., Eastman, N.W., Tripathi, H.L., Olson, K.G. & Dewey, W.L. (1993) Beta-endorphin response to endurance exercise: relationship to exercise dependence, *Perceptual and Motor Skills*, vol 77, no 3, pp 767-770.

Pierce, E.F., McGowan, R.W. & Lynn, T.D. (1993) Exercise dependence in relation to competitive orientation of runners, *The Journal of Sports Medicine and Physical Fitness*, vol 33, no 2, pp 189-194.

Pierce, E.F. & Morris, J.T. (1998) Exercise dependence among competitive power lifters, *Perceptual and Motor Skills*, vol 86, no 3, pp 1097-1098.

Pierce, E.F., Rohaly, K.A., Fritchley, B. (1997) Sex differences on exercise dependence for men and women in a marathon road race, *Perceptual and motor skills*, vol 84, no 3 (part 1), pp 991-994.

Prescott, L. (1983) Runners' addiction and anorexia are similar, *The Physician and Sportsmedicine*, vol 11, no 8, pp 26-27.

- Rail, G. & Lefebvre, M. (1999) Sculling cyborgs: scientific discourses and the effacement of Silken Laumann's subversive potential, paper presented at *North American Society for Sport Sociology Conference held at Marriot Hotel, Cleveland, Ohio, 8-11 November 1999*.
- Rankin, H. (1989) Relapse and eating disorders: the recurring illusion in Gossop, M. (ed)(1989) *Relapse and addictive behaviour*, London: Routledge, pp 86-95.
- Reiger, J.F. (1993) Part of my life, part of my identity. Hunting, fishing and the development of Jimmy Carter's conservation ethic, *Journal of Sport History*, vol 20, no 1, pp 43-47.
- Riggs, C.E. (1981) Endorphins, neurotransmitters, and/or neuromodulators and exercise in Sacks, M.H. & Sachs, M.L. (1981) *Psychology of running*, Champaign, Illinois: Human Kinetics, pp 224-230.
- Robbins, J.M. & Joseph, P. (1980) Commitment to running implications for the family and work, *Sociological Symposium*, vol 30, pp 87-108.
- Robbins, J.M. & Joseph, P. (1985) Experiencing exercise withdrawal: possible consequences of therapeutic and mastery running, *Journal of Sport Psychology*, vol 7, no 1, pp 23-39.
- Rock, P. (1993) Labelling in Outhwaite, W. & Bottomore, T. (eds)(1993) *The Blackwell dictionary of twentieth century social thought*, Oxford: Blackwell, p 315-317.
- Rudy, E.B. & Estok, P.J. (1983) Intensity of jogging: its relationship to selected physical and psychosocial variables in women, *Western Journal of Nursing Research*, vol 5, no 4, pp 325-336.
- Rudy, E.B. & Estok, P.J. (1989) Measurement and significance of negative addiction in runners, *Western Journal of Nursing Research*, vol 11, no 5, pp 548-558.
- Rudy, E.B. & Estok, P.J. (1990) Running addiction and dyadic adjustment, *Research in Nursing and Health*, vol 13, no 4, pp 219-225.
- Ryan, J. (1995) *Little Girls in Pretty Boxes. The making and breaking of elite gymnasts and figure skaters*, New York: Double Day.
- Sachs, M.L. (1980) On the trial of the runner's high a descriptive and experimental investigation of characteristics of an elusive phenomenon. Microform Publications University of Oregon, Eugene.
- Sachs, M.L. (1981) Running addiction in Sacks, M.H. & Sachs, M.L. (eds)(1981) *Psychology of running*, Champaign, Illinois: Human Kinetics, pp 117-125.
- Sachs, M.L. (1982a) Compliance and addiction in exercise in Cantu, R.C. (ed)(1982) *The exercising adult*, Lexington: Collamore Press, pp 19-28.
- Sachs, M.L. (1982b) Positive and negative addiction to running, in Partington, J.T., Orlick, T. & Salmela, J.H. (1982) *Sport in perspective*, Ottawa, Sport in Perspective Incorporated and Coaching Association of Canada, pp 154-155.
- Sachs, M.L. (1984) The runner's high in Sachs, M.L. & Buffone, G.W. (eds)(1984) *Running as therapy*, Lincoln: University of Nebraska Press, pp 273-287.
- Sachs, M.L. & Buffone, G.W. (1984) *Running as therapy*, Lincoln: University of Nebraska Press.
- Sachs, M.L. & Pargman, D. (1979) Running addiction: an in-depth interview examination, *Journal of*

Sport Behaviour, vol 2, no 3, pp 143-155.

Sachs, M.L. & Pargman, D. (1984) Running addiction in Sachs, M.L. & Buffone, G.W. (eds)(1984) *Running as therapy*, Lincoln: University of Nebraska Press, pp 231-252.

Sacks, M.H. (1986) Psychological aspects of exercise, *Sports Medicine Digest*, vol 8, no 12, pp 1-3.

Sacks, M.H. & Sachs, M.L. (eds)(1981) *Psychology of running*, Champaign, Illinois: Human Kinetics.

Samdahl, D.M. (1987) A symbolic interactionist model of leisure, *Leisure Sciences*, vol 10, no 1, pp 27-39.

Sassatelli, R. (1999) Interaction order and beyond: a field analysis of body culture within fitness gyms, *Body & Society*, vol 5, no 2-3, pp 224-266.

Saunders, B. & Allsop, S. (1987) Relapse: a psychological perspective, *British Journal of Addiction*, vol 82, no 4, pp 417-429.

Schmitt, R.L. & Leonard II, W.M. (1986) Immortalizing the self through sport, *American Journal of Sociology*, vol 91, no 5, pp 1088-1111.

Schnirring, L. (2000) When to suspect muscle dysmorphia: bringing the 'Adonis complex' to light, *Physician and Sportsmedicine*, vol 28, no 12, pp 19-20; 23; 26.

Schur, E. M. (1971) *Labelling deviant behaviour*, New York: Harper Rowe.

Sewell, D.F., Clough, P.J. & Robertshaw, L. (1995) Exercise addiction, mood and body image: a complex inter-relationship in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 34-39.

Sheehan, G. (1979) Negative addiction: A runner's perspective, *Physician and Sports Medicine*, vol 7, no 6, p 49.

Shilling, C. (1993) *The body and social theory*, London: Sage.

Smith, D.K., Hale, B.D. & Collins, D. (1998) Measurement of exercise dependence in bodybuilders, *Journal of Sports Medicine and Physical Fitness*, vol 38, no 1, pp 66-74.

Smith, J. (1984) The problem of criteria for judging interpretive inquiry. *Educational Evaluation and Policy Analysis*, vol 6, pp 379-391.

Smith, J.K. (1990) Alternative research paradigms and the problem of criteria in Guba, E. (ed) (1990) *The paradigm dialog*, Newbury Park, California: Sage, pp 167-188

Snyder, E.E. (1986) Athletics and higher education: a symbolic interaction perspective in Rees, C.R. & Miracle, A.W. (eds)(1986) *Sport and social theory*, Champaign, Illinois: Human Kinetics, pp 211-226.

Song, M. (1998) Hearing competing voices in Ribbens, J. & Edwards, R. (eds)(1998) *Feminist dilemmas in qualitative research. Public knowledge and private lives*, London: Sage, pp 103-118.

Sparkes, A. (1992) The paradigms debate: an extended review and a celebration of difference in Sparkes, A. (ed)(1992) *Research and PE and sport exploring alternative visions*, London: The Falmer Press, pp 9-60.

- Sparkes, A. (1992) Validity and the research process: an exploration of meanings, *Physical Education Review*, vol 15, no 1, pp 29-45.
- Sparkes, A. (1993) Challenging technical rationality in physical education teacher education: the potential of a life history approach, *Physical Education Review*, vol 16, no 2, pp 107-121.
- Sparkes, A. (1994) Self, silence and invisibility as a beginning teacher: a life history of lesbian experience, *British Journal of Sociology of Education*, vol 15, pp 93-118.
- Sparkes, A. (1995) Writing people: reflections on the dual crisis of representation and legitimation in qualitative inquiry, *Quest*, vol 47, no 2, pp 158-195.
- Sparkes, A. (1997a) Reflections on the social constructed physical self in Fox, K. (ed)(1997) *The physical self from motivation to well being*, Champaign, Illinois: Human Kinetics, pp 83-110.
- Sparkes, A. (1997b) Ethnographic fiction and representing the absent other, *Sport, Education and Society*, vol 2, no 1, pp 25-40.
- Sparkes, A. (1998a) Validity in qualitative inquiry and the problem of criteria: implications for sport psychology, *The Sport Psychologist*, vol 12, no 4, pp 363-386.
- Sparkes, A. (1998b) Reciprocity in critical research?, Some unsettling thoughts in Shacklock, G. & Smyth, J. (eds)(1998) *Being reflexive in critical educational and social research*, London: Falmer Press, pp 67-82.
- Sparkes, A. (1998c) Athletic identity: an achilles' heel to the survival of self, *Qualitative Health Research*, vol 8, no 5, pp 644 - 664.
- Sparkes, A. (1999) Exploring body narratives, *Sport, Education and Society*, vol 4, no 1, pp 17-30.
- Sparkes, A. & Templin, T.J. (1992) Life histories and physical education teachers: exploring the meanings of marginality in Sparkes, A. (ed)(1992) *Research and PE and sport exploring alternative visions*, London: The Falmer Press, pp 118-145.
- Stebbins, R.A. (1999) Educating for serious leisure: leisure education in theory and practice, *World Leisure and Recreation*, vol 41, no 4, pp 14-19.
- Stebbins, R.A. (2000) A contextual analysis of the idea of serious leisure: a study in the sociology of knowledge, *World Leisure and recreation*, vol 42, no 1, pp 4-9.
- Steinar, K. (1996) *Interviews - an introduction to qualitative research interviewing*, London: Sage.
- Steinberg, H., Sykes, E.A. & LeBoutillier, N. (1995) Exercise addiction: indirect measures of 'endorphins'?, in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 6-14.
- Steinberg, H., Sykes, E.A. & Morris, M. (1989) Exercise addiction: the opiate connection. *Sport health Psychology and exercise symposium*. The Sports Council, pp 161-166.
- Strauss, A.S. & Corbin, J. (1998a) Grounded theory methodology. An overview in Denzin, N.K. & Lincoln, Y.S. (eds)(1998) *Strategies of qualitative inquiry*, London: Sage, pp 158-183.
- Strauss, A.S. & Corbin, J. (1998b) *Basics of qualitative research. Techniques and procedures for developing grounded theory*, London: Sage.

- Stryker, S. (1968) Identity salience and role performance: the relevance of symbolic interaction theory for family research, *Journal of Marriage and the Family*, vol 30, pp 558-559
- Stryker, S. (1980) *Symbolic interactionism. A social structural version*, Menlo Park, CA: The Benjamin/Cummings Publishing Company.
- Summers, J.J., Sargent, G.I., Levey, A.J., Murray, K.D. (1982) Middle aged, non elite marathon runners: a profile, *Perceptual and Motor Skills*, vol 54, no 1, pp 963-969.
- Summers, J.J., Machin, V.J. & Sargent, G.I. (1983) Psychosocial factors related to marathon running, *Journal of Sport Psychology*, vol 5, no 3, pp 314-331.
- Sutton, S. (1987) Social-psychological approaches to understanding addictive behaviours: attitude - behaviour and decision - making models, *British Journal of Addiction*, vol 82, no 4, pp. 355-370.
- Swanson, G. E. (1972) Mead and Freud: their relevance for social psychology in Manis, J. G. & Meltzer, B.N. (eds)(1972) *Symbolic interactionism: A reader in social psychology*, Boston: Allyn & Bacon, pp 23-42.
- Szabo, A. (1995) The impact of exercise deprivation on well-being of habitual exercisers, *The Australian Journal of Science and Medicine in Sport*, vol 27, no 3, pp 68-75.
- Szabo, A. (2000) Physical activity as a source of psychological dysfunction in Biddle, S.J.H., Fox, K.R. & Boutcher, S.H. (eds)(2000) *Physical activity and psychological well-being*, London: Routledge, pp 130-153.
- Tierney, W.G. (2000) Undaunted courage: Life history and the postmodern challenge in Denzin, N.K. & Lincoln, Y.S. (ed)(2000) *Handbook of qualitative research*, London: Sage, pp 537-553.
- Thaxton, L. (1982) Physiological and psychological effects of short term exercise addiction on habitual runners, *Journal of Sport Psychology*, vol 4, no 1, pp 73-80.
- Thomas, J.R. & Nelson, J.K. (1996) *Research methods in physical activity*, 2nd ed. Champaign, Illinois: Human Kinetics.
- Thompson, C.F. (1990) Too much exercise, *The Physician and Sports Medicine* (letter), vol 18, no 12, p 26.
- Thompson, J.K. & Blanton, P. (1987) Energy conservation and exercise dependence: a sympathetic arousal hypothesis, *Medicine and Science in Sports and Exercise*, vol 19, no 2, pp 91-99.
- Thoren, P., Floras, J.S., Hoffmann, P. & Seals, D. (1990) Endorphins and exercise: physiological mechanisms and clinical implications, *Medicine and Science in Sports and Exercise*, vol 22, no 4, pp 417-435.
- Thornabene, L.L. (1995) *Factors which discriminate between addicted and non-addicted runners as measured by the running addiction scale*, UMI, Knoxville: University of Tennessee.
- Travers, M. (2001) *Qualitative research through case studies*, London: Sage
- Tsang, T. (2000) Let me tell you a story: a narrative exploration of identity in high performance sport,

Sociology of Sport, vol 17, no 1, pp 44-59.

Turner, B.S. (1982) The discourse of diet in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 157-169.

Turner, B.S. (1984) *The body and society*, Oxford: Blackwell.

Turner, B.S. (1991) Recent developments in the theory of the body in Featherstone, M., Hepworth, M. & Turner, B.S. (eds)(1991) *The body: social process and cultural theory*, London: Sage, pp 1-35.

Veale, D. (1987) Exercise dependence, *British Journal of Addiction*, vol 82, no 7, pp 735-740.

Veale, D. (1991) Psychological aspects of staleness and exercise dependence on exercise, *International Journal of Sports Medicine*, vol 1, no 12, pp S19-S22.

Veale, D. (1993) Exercise addiction, *Coaching Focus*, vol 22, pp 17-18.

Veale, D. (1994) Interview and personal communication.

Veale, D. (1995) Does primary exercise dependence really exist? in Annett, J., Cripps, B. & Steinberg, H. (eds)(1995) *Exercise addiction motivation for participation in sport & exercise*, British Psychological Society, pp 1-5.

Wagemaker, H. & Goldstein, L. (1980) The runner's high, *Journal of Sports Medicine*, vol 20, no 2, pp 227-229.

Wanigaratne, S. (1990) *Relapse prevention for addictive behaviours*, Oxford: Blackwell Scientific Publications.

Wankel, L.M. (1985) Personal and situational factors affecting exercise involvement: the importance of enjoyment, *Research Quarterly for Exercise and Sport*, no 56, no 3, pp 275-282.

Watson, G.G. & Brien, A. (1984) Physical activity and identity formation among inactive married women, *Australian Journal of Science and Medicine in Sport*, vol 16, no 1, pp 17-24.

Wearing, B. (1991) Leisure and women's identity: conformity or individuality?, *Society and Leisure*, vol 14, no 2, pp 575-586.

Weitz, R. (1998) A history of women's bodies in Weitz, R. (ed)(1998) *The politics of women's bodies. Sexuality, appearance and behaviour*, Oxford: Oxford University Press, pp 3-11.

West, R. (1991) Psychological theories of addiction in Glass, I.B. (ed)(1991) *The international handbook of addiction behaviour*, London: Routledge, pp 20-24.

Wheeler, G.D., Wall, S.R., Belcastro, A.N., Conger, M., Cumming, M.A. & Cumming, D.C. (1986) Are anorexic tendencies prevalent in the habitual runner?, *British Journal of Sports Medicine*, vol 20, no 2, pp 77-81.

Whyte, W.F. (1991) Interviewing in field research in Burgess, R.G. (ed)(1991) *Field research: A sourcebook and field manual*, London: Routledge, pp 111-122.

Wichmann, S. & Martin, D.R. (1992) Exercise excess treating patients addicted to fitness, *The Physician and Sports Medicine*, vol 20, no 5, pp 193-201.

Willis, J.D. & Campbell, L.F. (1992) *Exercise psychology*, Champaign, Illinois: Human Kinetics.

Wolcott, H.F. (1994) *Transforming qualitative data*, London: Sage.

Yates, A., Leehey, K. & Shisslak, C. (1983) Running - an analogue of anorexia?, *The New England Journal of Medicine*, vol 308, no 5, pp 251-255.

Yates, A., Shisslak, C., Crago, M. & Allender, J. (1994) Overcommitment to sport: is there a relationship to the eating disorder?, *Clinical Journal of Sports Medicine*, vol 4, no 1, pp 39-46.

Young, F.D. (1971) *Knowledge and control: new directions for the sociology of education*, London: Collier-Macmillan.

Yukelson, D. (1991) Psychological factors associated with exercise adherence, *Sports Medicine Digest*, vol 13, no 9, p 7.