Gatekeeping Processes;

Grounded Theory, Young People and Physical Activity

by

Michael John Waring

A Doctoral Thesis submitted in partial fulfilment of the requirements

for the award of

Doctor of Philosophy of the Loughborough University of Technology

September, 1995

ACKNOWLEDGEMENTS

CONTENTS

CHAPTER 7 SUMMARY AND RECOMMENDATIONS

References

Appendicies

ABSTRACT

This thesis has two purposes: firstly, to develop grounded theory methodology and secondly, to apply it in order to establish and further investigate those processes which structure young peoples' participation in physical activity. To satisfy the first of these aims, the Helix Model was created to provide a systematic framework to the grounded theory analysis. This Model was then employed to address the second aim, as it was used to analyse interviews conducted with a mixed sex sample of twenty nine very active and very inactive children and their parents. These young people were selected as a result of completing, on four occasions, a 24 hour self-report questionnaire specifically designed for them.

The grounded theory analysis identified a series of interrelated 'gatekeeping processes' which construct those opportunities for young people to participate in physical activity. Several evolving processes, varying according to the context and nature of the physical activity, interrelate with one another to create a complex causal web. The gatekeeping processes are consciously, as well as unconsciously, manipulated relative to the social and physical context in which the young person and the other gatekeeping agents (parents, school, peers) exist and find themselves. The interrelationships between these agents, especially the young person and their parents, work through compromise and coercion to satisfy each of their personal agendas. The nature of each agenda is based on the definition associated with the three roles which gatekeepers adopt (guardian, facilitator, enforcer). The definition of each role affects the manner in which young people individually, as well as collectively with the gatekeepers, construct networks to accomplish an evolving combination of: independence, maximisation of the available resources, rewards, and care and control. The interrelationship between these factors and the extent to which participation in physical activity can achieve them, is what determines the likelihood of the young person's participation in that activity. However, physical activity has to compete with a myriad of the other activities the young person is involved in. These are activities, which for the more sedentary young person, are perceived to be more successful at providing the desired rewards.

LIST OF FIGURES

LIST OF TABLES

PUBLICATIONS

Parts of this thesis have been reported in the following publications;

Cale, L., Waring, M. & Almond, L. (1993) A Review of the Physical Activity Levels of Young People. <u>6th ICHPER Europe Congress Proceedings, Physical Activity For Better Lifestyle in a New Europe</u>. Prague, Czechoslovakia, July 15-19, 1992.

Cale, L., Waring, M. & Almond, L. (1993) The Problem of Time Perception in Self-Report Measures of Physical Activity. <u>6th ICHPER Europe Congress Proceedings, Physical Activity For Better Lifestyle in a New Europe</u>. Prague, Czechoslovakia, July 15-19, 1992.

Waring, M., Almond, L. & Buckley, C. (in press) Grounded Theory In Physical Education. <u>Proceedings AIESEP World Congress, 'Physical Education and Sport 94: Changes and Challenges'</u>. Berlin, 24-28 June.

Buckley, C., Almond, L. & Waring, M. (in press) Socio-cultural Factors Affecting British Children's Involvement in Sport and Physical Activity - Implications for Educational and Leisure Policies. <u>Proceedings AIESEP World Congress, 'Physical Education and Sport 94: Changes and Challenges'</u>. Berlin, 24-28 June.

CHAPTER 1

INTRODUCTION

1.1 The Purposes of this Research

The importance of regular participation in physical activity from an early age is no longer an issue of establishing proof. The World Health Organisation and FIMS (WHO/FIMS Committee on Physical Activity for Health, 1995) and the American College of Sports Medicine and Centre of Disease Control (Pate et al., 1995) have all made statements which highlight the compelling accumulation of scientific evidence which demonstrates the health benefits from regular participation in physical activity (Bouchard and Deprés, 1995; Vuori, 1995; Pate, 1995; Shephard, 1995). What is more of an issue is the extent of such participation and the processes involved in influencing individuals' , especially young people,[1] involvement in physical activity.

Sallis and Hovell's (1990) contention that exercise behaviour is the result of a complex causal web of factors, is one that is potentially applicable to physical activity. The interacting *processes* which potentially create the decisions young people make over participation in physical activity remain relatively unexamined above the level of mere description. This study addresses the issue by moving beyond the predominantly descriptive work through the application and development of grounded theory methodology.

Some of the issues and the processes which envelope them, as identified in this thesis, may appear obvious and common place to the reader, especially to those of whom are parents. This is not to say that the theoretical findings of a grounded theory are insignificant because of their obviousness. They may already be well-known phenomena to those of whom are involved in the context under investigation, however, the important thing is that the grounded theory constructs a coherent amalgamation of issues and processes supported by an evidence base. Common sense understanding and lay interpretations arc given the necessary formalised evidence base by using the grounded theory, which gives it credibility away from the realms of lay theories and anecdotal folklore.[2] Alternatively, these lay interpretations may not

---

[1] The Allied Dunbar National Fitness Survey reported that lifelong physical activity is most likely to be started in childhood. Yet despite a wide acknowledgement of the desirability of physical activity in youngsters, we know relatively little about their physical activity patterns. (Armstrong, 1993: 35)

[2] See Furnham (1988) for a very good discussion of lay theories, and the way in which these informal, common-sense explanations people give for particular behaviours, differ from formal 'scientific'

be well known to those outside of the research context. The grounded theory findings are significant because they not only reflect the change and movement between the processes involved as identified by the researcher's interplay with the data, but in so doing they create a fundamentally important aspect of any grounded theory, that it has an empathy for and does not exclude, from its appreciation and understanding, in any guise those who have been investigated. Unfortunately, a significant proportion of these processes have previously either been ignored completely or resigned to what is generally considered the insignificant realm of anecdotal evidence. This has resulted in their dismissal from serious discussion and analysis. However, this is changing with the advent of clearer naturalistic-interpretive research procedures. These changes are being used in conjunction with a real acknowledgement that a better understanding of the processes which underpin decisions to participate in physical activity are an essential component of the research agenda on physical activity. This agenda remains predominantly positivistic in nature. It is the interpretation of the processes and the meanings associated with them for each individual that have to be differentiated in order to understand the situation. What is significant for one is not necessarily significant in the same way, if at all, for another individual relative to their personal definition of the situation and context.

There is a growing body of literature which identifies the inactivity patterns of young people in England (Armstrong et al., 1990, 1990b, 1991; Sleap & Warburton; 1990; Cale, 1993). It also appears to be an international problem (Saris et al., 1980; Gilliam et al., 1982; Hebbelinck & Shephard, 1986; Gortmaker et al., 1987; Ross et al., 1987; Cale & Almond, 1992; Bouchard, Shephard & Stephens, 1994). This was the starting point for a research programme for Cale (1993) who developed a self-report questionnaire specifically for use with young people in order to monitor their physical activity patterns. This research provided quantitative data on the amount and kind of physical activity young people participated in. However, it could not provide any insights into why young people participated in physical activity or avoided it. Relatively very little research has been conducted into this area.

> Little is known about the determinants and health outcomes of physical activity patterns among school-age children and youth. This is perplexing because it has become increasingly clear that the roles of habitual physical activity, exercise and physical fitness in public health cannot be understood or facilitated unless research and program intervention with school age groups are accelerated. (Takanishi, Deleon & Pallak, 1984)
> (Dishman & Dunn, 1988: 156)

---

explanations of what actually happens. However, he emphasises that one should not replace the other, but be used to compare and contrast structures, functions and implications to maximise understanding.

2

If we are going to inform strategies to promote the health gains of physical activity this is undoubtedly a fruitful area of research. It represents a starting point for this project.

This thesis addresses a complex reality, and by its very nature has to simplify it in order to identify and clarify processes.[3] Such processes are forever evolving, continually being reconstructed relative to the changing circumstances in a myriad of social, political and physical ways. However, in so doing it makes what has been abstract something more concrete relative to those young people, contexts and situations under investigation.

1.2 Structure of the Thesis

The structure of this thesis is in-keeping with the grounded theory methodology which it has adopted and developed. The recognised formal structure adopted in most theses has been put to one side in order to acknowledge the way in which grounded theory methodology starts from a position that dismisses the notion of the verification of a preconceived theory. Hence, even though there is a review of the potential determinants of physical activity literature prior to the presentation of the processes influencing young peoples' participation in physical activity, there is a second review of literature within the grounded theory. The author had to make a significant decision regarding the position of this second review. The continual formulation and verification of categories and concepts, and the mini-hypothesis generated on the basis of them, resulted in the collection of relevant literature on a similar ongoing basis. Acknowledging this, it was inappropriate for the second review of literature to come after the presentation of the processes influencing participation in physical activity. This was supported by the fact that its injection into chapter six did not detract from the presentation of such processes.

1.3 Outline of Contents

In order to keep faith with grounded theory the content of the thesis will be as follows. The paradigmatical underpinnings and nature of theory in social research will be discussed in chapter two. This discussion involves establishing the way in which different paradigms make sense of reality based on their ontological and

---

[3] In reality and despite the extensive research attentions of the author, the reasons why young people participate in physical activity are ones which are far too complex to be entirely addressed by this work.

epistemological assumptions and the methodological implications. The aim of this chapter will be to locate the study within a particular paradigm, with no claim being made that one paradigm is better than another. However, it will be emphasised that this project adopts the assumptions and implications associated with the interpretive paradigm. Identified as a framework rooted in symbolic interactionism, the incentives which gave rise to its variation and the method called *grounded theory* will be considered. Methodological implications associated with grounding the theory in the empirical world under study will then be emphasised, as they apply to the aforementioned philosophical assumptions which are adopted. In conclusion to this chapter, the distinction between substantive and formal theory, as well as the variable conceptualisation of truth and trustworthiness associated with the given paradigmatical position and point of view will be considered.

The data gathering technique of interviewing employed in the project will be outlined and discussed in chapter three. The various forms of interviews will be identified prior to a discussion of the appropriateness of the structure of each interview technique and the philosophical underpinnings associated with each of them. Consequently, the use of unstructured and semi-structured interview techniques will be identified as the predominant techniques selected for use in this project. After addressing the challenge of equity in consistency and flexibility in the interviews, linked to the preferred interview technique and its assumptions, the conceptualisation of the interview will be discussed. The notion of validity and reliability in a form which is appropriate to unstructured interviewing will be considered. Once the dynamics of the interview have been addressed, the interview schedule and protocols will be described and presented, along with those issues that had to be addressed. The use of the computer management tool (N.U.D.I.S.T.) and its productive, as well as inhibitive, aspects influencing the grounded theory analysis of the data will then be addressed. To conclude the chapter, the evolving ethical considerations made throughout the research, which are interrelated to the many of the issues previously identified, will be discussed.

The interpretation of grounded theory methodology which was employed and developed within this project is presented in the following chapter. Moving from the theoretical perspectives from which the methodology evolved and which underpin it, there comes the illustration of the Helix Model. This Model was constructed by the author to create a framework which systematically structures grounded theory and guides the use of interviews and the rest of the investigation. After discussing the notion of progression in the Helix Model, each of its constituent parts are considered. While its systematic nature is reinforced by the way in which each of its constituent

parts are described separately and in an orderly manner, their relationship is one which is far more complex. However, there will also be an emphasis on the way in which the structure of the Helix Model allows for manipulation and a degree of flexibility relative to the researcher's understanding and familiarity with the methodology and the research setting. The many varied interpretations of grounded theory methodology which have arisen from certain intrinsically problematic aspects, and which made it necessary to identify constituent parts and their complex interrelationships, will be identified and examined. The comparison of interpretations of grounded theory will be extended to involve what has become a very intriguing debate between the two originators of grounded theory methodology, Strauss and Glaser, who have allegedly developed divergent opinions over its interpretation. Several aspects considered to be contentious in the nature of grounded theory are subsequently discussed. In conclusion to this chapter the reasons for employing grounded theory methodology in this project will be stated.

The potential determinants of physical activity in adults and young people as identified in the literature will be investigated in chapter five. This is a long chapter which attempts to capture the complex potential interrelationships among determinants. The fragmented character of this review identifies the dearth of information which currently exists.

Chapter six presents the grounded theory constructed from the use of the methodology discussed in the previous chapter. In this chapter those *gatekeeping processes* which create opportunities for young people to participate in all forms of activity, including physical activity, are presented. The boundaries to such opportunity and participation for each young person are constructed and manipulated by one or more of the gatekeeping agents (parents, peers, school), and the young person themselves. *Gatekeepers* are those people who have the ability either directly or indirectly to facilitate or inhibit the physical activity a young person is involved in. The framework for opportunity created by one or more of the gatekeepers is extremely complicated with none of them existing in complete isolation. Six gatekeeping processes are discussed: negotiated independence, safekeeping, rationalising rewards, networking strategies, reprioritisation and vacuum strategies.

Chapter 7 concludes the project by highlighting and reinforcing key points explored in the previous chapter. Comments on the potential developments associated with grounded theory in the future will then be made, along with recommendations for future research on children and physical activity.

CHAPTER 2

PARADIGMATICAL UNDERPINNINGS
AND THE NATURE OF THEORY

2.1 Introduction

This chapter will address the background assumptions which underpin grounded
theory, as well as the implications that these have on the use of methodology and the
subsequent interpretation of events. In order to do this the main paradigms, which
provide different philosophical and conceptual frameworks, are described in the form
of their ontological, epistemological and methodological assumptions. It is the nature
of these attendant assumptions which categorise them as existing within a given
paradigm. In so doing this study is located under the umbrella of 'interpretivism'.
Following a description of the ontological, epistemological and methodological
assumptions and the relationship with each other relative to the paradigms identified,
the focus will be on the interpretive paradigm in which this study is located. The
focus becomes narrower as the general methodology of grounded theory is positioned
within this interpretive framework as a derivative of symbolic interactionism. After
identifying the background and emergence of grounded theory, as well as those
incentives which governed its development, the implications of its background
assumptions and how they manifest themselves in the methodology will be addressed.
Similarly the nature of theory in grounded theory is discussed relative to the
procedural nature of the methodology, as well as a distinction between substantive
and formal theory. The conceptualisation of 'truth' which varies with the
paradigmatical position and point of view will also be considered.

2.2 Competing Paradigms in the Debate.

Over recent decades there has been, and continues to be, a debate and competition
over the foremost set of beliefs which will inform and guide inquiry above and over
all others. The debate will not be continued or reiterated to any great extent, instead
the emphasis is on the philosophical and technical location of this study and not on
the justification of a particular paradigm, as this is implicit in its adoption.[1] Its
purpose here is to identify a number of principal paradigms, their assumptions and
implications; initially locating this project within one of them and so aligning it to the

---

[1] For a fuller representation of the historical background and paradigmatic debate see Tesch, 1990;
LeCompte et al., 1992; Sparkes, 1992; Denzin and Lincoln, 1994.

appropriate accompanying beliefs which give them coherence. On this foundation a more specific discussion of the nature of theory and the nuances of grounded theory can then take place.

2.2.1 The Nature of Paradigms - Making Sense of Reality

Kuhn (1962) is commonly associated with the notion of paradigm. He believes it is a set of interrelated assumptions about the social world which provides a philosophical and conceptual framework for the organised study of that world.[2] Over time numerous authors have similarly defined it as a set of 'belief systems' (Guba and Lincoln, 1989), a 'world view' (Patton, 1978; Guba and Lincoln, 1994) and a particular 'lens for seeing and making sense of the world' (Sparkes, 1992), all of which emphasise the many definitions that mark out a paradigm.

A paradigm represents a person's conception of the world, its nature and their position in it, as well as a multitude of potential relationships with that world and its constituent parts. Therefore, as the person brings along with them the 'baggage' of their previous life experiences and knowledge base, it is this very amalgamation which constructs their competence and credibility as a member of any given research community,[3] as well as their answers to certain fundamental questions which will determine such acceptance in and of that community.

Proponents of any given paradigm can summarise their beliefs relative to their responses to three fundamental questions;

1 *The ontological [4]question;*What is the form and nature of reality and, therefore what is known about it?

2 *The epistemological [5]question;* What is the nature of the relationship between the known or would-be knower and what can be known?

3 *The methodological [6]question;* How can the inquirer (would-be knower) go about finding out whatever he or she believes can be known?

---

[2] See Barnes (1986) for a more detailed review of Kuhn's work.

[3] See Sparkes (1992) for a fuller discussion on this.

[4] Ontology refers to issues concerned with being and what people believe and understand to be the case (Hitchcock and Hughes, 1989).

[5] Epistemology refers to the origins of knowledge, the question and the nature of knowing. This involves the basis of knowledge, the form it takes and the way in which such knowledge is communicated to others (Maykut and Morehouse, 1994).

[6] Methodology refers to the frames of reference, the models and ideas which shape the selection of a particular set of data gathering techniques (Hitchcock and Hughes, 1989).

These assumptions are so interrelated that answers to one constrain answers to the others. This can be represented diagramatically as shown in Figure 2.1:


```
┌─────────────────────────────────────┐
│       ONTOLOGICAL ASSUMPTIONS        │
│            giving rise to            │
└─────────────────────────────────────┘
                   │
                   ▼
┌─────────────────────────────────────┐
│    EPISTEMOLOGICAL ASSUMPTIONS       │
│             which have               │
└─────────────────────────────────────┘
                   │
                   ▼
┌─────────────────────────────────────┐
│    METHODOLOGICAL IMPLICATIONS       │
│           for the choice of          │
└─────────────────────────────────────┘
                   │
                   ▼
┌─────────────────────────────────────┐
│     TECHNIQUES OF DATA COLLECTION    │
└─────────────────────────────────────┘
                   │
                   ▼
┌─────────────────────────────────────┐
│  INTERPRETATION OF FINDINGS & WAY    │
│   WRITTEN AND ORALLY PRESENTED       │
└─────────────────────────────────────┘
```

Adapted Hitchcock and Hughes (1989)
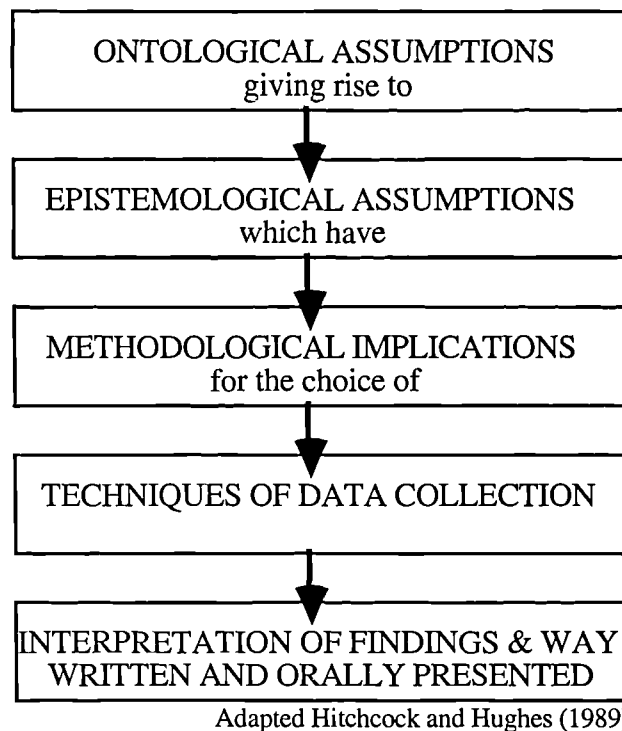
Figure 2.1 The Interrelationship between responses to fundamental questions of belief.

Guba and Lincoln (1994) similarly acknowledge the nature of this hierarchy of questions and assumptions that are made. The fundamental beliefs which underpin the researcher's work are considered prerequisites prior to a discussion of methodology.

> Questions of method are secondary to questions of
> paradigm, which we define as the basic belief system or
> world view that guides the investigator, not only in choices
> of method but in ontologically and epistemologically
> fundamental ways.
> (Guba and Lincoln, 1994: 105)

At this point, a humanistic aspect to this discussion also needs to be acknowledged, along with its associated error.[7]

> An interpretive researcher cannot come to a study with a
> pre-established set of neutral procedures but can only
> choose to do some things as opposed to others based on

---

[7] This is particularly pertinent to this project based within the interpretive paradigm, which commonly places the researcher at the centre of the research process treating the researcher as the 'research instrument par excellence' (Hammersley and Atkinson, 1983: 18).

what seems reasonable, given his or her interests and
purposes, the context of the situation, and so on.
(Smith, 1989: 157)

No construction for the interpretivist researcher is or can be incontrovertibly right
(Guba and Lincoln, 1994). It is all a matter of coherence, with the basis of truth or
trustworthiness for the interpretivist researcher judged on social agreement at any
particular time or place (Sparkes, 1992; 1992b). Sparkes (1992) refers to this as a
coherence theory of truth. Therefore, truth stems from any given proposition being
in-line and coherent with an overall scheme of propositions that exists and works at
any given time and place. Hence, it is a matter of coherent internal relations rather
than any degree of correspondence with some external reality.

For interpretive inquiry, the basis of truth or trustworthiness
is social agreement; what is judged true or trustworthy is
what we can agree, conditioned by time and place, is true
and trustworthy.
(Smith, 1989: 386)

The researcher's tendency to selectively observe and record certain data at the
expense of other data is a source of bias and error that should be taken into account.
Within grounded theory methodology this is partially addressed by a situation where
informants are interviewed and categories filled until they are saturated. 'Validity and
reliability are provided for by the use of constant comparative method and the search
for alternative hypothesis or negative cases' (Hutchinson, 1988: 116). On this basis
the bias of the researcher can be reduced.

Those background assumptions in response to the three questions of an ontological,
epistemological and methodological nature which all researchers address, are
complex and varied, however, it is only when they become clustered within a
paradigm that they are given coherence (Sparkes, 1992). Whatever the paradigm, it
simply represents the most informed and sophisticated view that can be devised by its
proponents, given their responses to the questions associated with ontology,
epistemology and methodology identified.

Table 2.1 outlines those basic responses which proponents located within each of the
three major paradigms (positivist, critical theory and interpretive[8]) would make in

---

[8] The term *interpretive* was employed because it is not only a more eclectic term, enabling the
inclusion of many others, but it moves away from the notion that it is non-quantitative which the
adoption of qualitative would imply (and which is certainly not the case). Finally, it emphasises the
clarification and critique of the central interest which is human meaning and social life (See Erickson,
1986).

Table 2.1
Basic Assumptions Fundamental to the Positivist, Critical and Interpretive Paradigms.

Assumptions	POSITIVISM (*1)	CRITICAL THEORY	INTERPRETIVISM (*2)
Ontology	**External-realist** Basic posture is reductionist & deterministic. Knowledge of 'the way things are' is conventionally summarised in the form of time- and context-free generalisations, some of which take the form of cause-effect laws	**External-realist or Internal-idealist - (Sparkes, 1992) Historical realism (Guba and Lincoln, 1994)** Assumption of an apprehansable reality consisting of historically situated structures (based on social, political, economic, ethnic, and gender factors) that are in the absence of insight, taken as 'real' that is natural and immutable. For all practical purposes the structures are a virtual or historical reality.	**Internal-idealist, relativist (local and specific constructed realities, holistic and dynamic)** Realities are apprehendable and mind-dependent.(*4) There are multiple realities with the mind playing a central role by determining categories and shaping or constructing realities. We cannot see the world outside of our place in it. There is no separation of mind and object since the two are inextricably linked together - the knower and the process of knowing cannot be sparated form what is known, and facts cannot be sparated from values.
Epistemology	**Dualist objectivist.** The investigator and investigated 'object' assumed to be independent entities; Inquiry takes place as if in a one-way mirror - investigator does not influence nor influenced by the object. Replicable findings are 'true'.	**Subjectivist, transactional, interactive** Rejection of any notion of value freedom in terms of the research process. The investigator and the investigated object are assumed to be interactively linked, with the values of the investigator (& the situated others) influencing the inquiry. Findings are, therefore, value mediated.(*3)	**Subjectivist, transactional, interactive** The investigator and the object of investigation are assumed to be interactively linked so that the 'findings' are literally created as the investigation proceeds. Therefore, conventional distinction between ontology and epistemology dissolves.(*3)
Methodology	**Nomothetic, experimental, manipulative: verification of hypotheses** Questions and/or hypotheses are stated in propositional form and subjected to empirical test to verify them; possible confounding conditions carefully controlled (manipulated) to prevent outcome from being improperly influenced	**Ideographic, participative, transformative** A dialogue between the investigator and the subjects of the inquiry is dialectical in nature, to transfor ignorance and misapprehensions (accepting historically mediated structures as immutable) into more informed consciousness (seeing how the structures might be changed & comprehending the actions to effect change).	**Ideographic, dialectical, hermeneutical** The variable and personal nature of social constructions suggests that individual constructions can be elicited and refined only through interaction between and among investigator and respondents. Conventional hermeneutical techniques used in interpretations and are compared and contrasted tough a dialectical interchange. It is not a matter of eliminating conflicting or previous interpretations, but to distil a more sophisticated and informed consensus construction.
Inquiry aim	**Explanation, prediction and control** Over time attempt to increasingly explain so that ultimately one can predict phenomenon be they human or physical.	**Emancipation, critique and transformation** Enabling people to gain knowledge and control of their own lives	**Understanding, interpretation and reconstruction** Over time, everyone formulates more informed and sophisticated constructions and become more aware of the content and meaning of competing constructions.

(Based upon Guba and Lincoln, 1994; Sparkes 1987;1992)

KEY - *1 Elesewhere (Denzin & Lincoln, 1994) a post-positivist paradigm has been added to breakdown further the paradigms. There has also been the use of the term contructivism rather than interpretivism.
- *2 The term 'interpretivism' has been chosen because as, Sparkes (1992) has identified, it refers to a whole family of approaches which are in direct contrast to a positivist sense of social reality.
- *3 The dashed line represents the challenge which such a posture represents between ontology and epistemology; what can be known is inextricably linked with the interaction between a particular investigator and a particular object or group.
- *4 Mind-dependence here does not mean that the mind 'creates' what people say and do, but rather that how we interpret their movements and utterances - the meaning we assigne to the intentions, motivations, and so on of ourselves and others - becomes social reality as it is for us. In other words social reality is the interpretation. (Smith, 1989: 74 in Sparkes, 1992: 27)

reaction to those fundamental assumptions being made. This table is not intended to be a comprehensive representation, designed to match the complexity of all the research processes and the assumptions that are made relative to each and all the paradigms. It is, however, a framework which offers the basic beliefs of extreme positions to aid in discussion.[9]

It is discerning, while at the same time encouraging to know, that other researchers similarly experience and acknowledge confusion over the terminology employed in this whole paradigmatical debate (Locke, 1989; Cohen and Manion, 1989). Tesch (1990) identifies a multiplicity of labels which have been attached to interpretive research resulting in a confusion over the meaning and conceptual level of such terminology. 'Sometimes it is difficult to distinguish clearly labels that denote an epistemological stance and those that refer to method (Tesch, 1990: 58)[10]. By the same token, Sparkes (1992) acknowledges this confusion and the way in which it exacerbates the fundamental confusion with regards to epistemological assumptions underpinning the researcher and the research. The researcher's ontological and epistemological assumptions influence all aspects of research, as previously identified. Consequently, to say that the nature of the *problem* of the research will determine the overall approach and the methods of investigation, is misguided. It is a clear, but all too common, example of the perpetuation of the confusion over terminology associated with the methodological and philosophical issues. The confusion relates those issues pertaining to the methods which are best suited in comparison to one another, and the ontological and epistemological assumptions creating the appropriate foundations for the study of society.[11] Existing within this interpretive paradigm are many research traditions (symbolic interactionism, ethnography, hermeneutics, case study, ethnomethodology, constructivism, and more), all of which have differences and similarities. This array of traditions under the umbrella term 'interpretivism' have added to the general conceptual and technical ambiguity and disorder regarding the interpretation and application of terminology.

> Ethnomethodology or symbolic interactionism are 'general conceptions...the nature of explanations of social activity.'

---

[9] The author supports Tesch (1990), Sparkes (1992) and Guba & Lincoln (1994) when they acknowledge that the construction of such framework of the paradigms is in itself a human construction which can be accepted or dismissed accordingly.

[10] In an attempt to bring a measure of order and differentiation to this confusion, many authors, Tesch (1990: 72/3) included, have produced graphic overviews of 'qualitative research types'. These should be considered as heuristic devices and mobile structures, much like figure 2.1. However, there remains the potential for manipulation by the researcher who proportionally perpetuates the ambiguity and confusion associated with terminology and its interpretation within such a heuristic framework.

[11] A straight forward identification of categories for philosophical and methodological aspects is not always possible. For example, grounded theory can be seen to be a set of assumptions about the production of knowledge and a set of guidelines for empirical research work.

(Halfpenny, 1981: 565) at the same time as embodying
directions for appropriate research strategies.
(Tesch, 1990: 58)

Patton (1990) dismisses the philosophical aspects when adopting conventional
measurement terms like validity and reliability as key quality dimensions of
qualitative data (Greene, 1994), by remaining clear of and removed from the idea that
inquiry paradigms frame or delimit methodological choices.

> Rather than believing that one must choose to align with
> one paradigm or another, I advocate a paradigm of choices.
> A paradigm of choices rejects methodological orthodoxy in
> favour of methodological appropriateness as the primary
> criterion for judging methodological quality. The issue
> then becomes...whether one has made sensible methods
> decisions given the purpose of the inquiry, the questions
> being investigated, and the resources available.
> (Patton, 1990: 38/39)

For Patton (1990), the design and implementation of evaluation methods should be
flexibly based on practical need and situational 'responsivements', rather than on the
compatibility of a set of methods with any particular philosophical paradigm.[12] Even
though others, such as Guba and Lincoln (1981) and Guba (1990), support the
interaction of many different methods at the methodological level, such an approach
is considered unacceptable at the paradigmatical level. This stance is supported by
the argument that one cannot simultaneously adhere to the objectivist stance of
positivism and the subjectivist involvement of interpretivism. There are also those
who believe that the paradigms are fundamentally incompatible, however, they still
seek dialectically enhanced inquiry benefits through a pluralistic acceptance of
multiple ways of knowing. Salomon (1991) is one such researcher who maintains
that those extremely complex social issues require the complementary use of both a
systematic and analytic approaches to inquiry across studies, simply because of their
complexity. The tension between the philosophical paradigm and practice is likely to
remain contested (Greene, 1994). However, the foundational stance of each
paradigm and their assumptions as illustrated in table 2.1 remain the heuristic
framework for use in this discussion.

Even with a demise in the 'paradigmatic mentality' (Hammersley, 1984a; Woods,
1992) nurtured by the unproductive and increasingly redundant qualitative versus
quantitative debate (Bryman, 1988), as well as an increase in the dismissal of
'paradigm affiliation' (Patton, 1990; Denzin and Lincoln, 1994), the debate continues

---

[12] This is supported by numerous researchers. See Bryman (1988), and Pitman & Maxwell (1992).

to occupy a considerable portion of the research literature (Patton, 1990; Pitman and Maxwell, 1992). Even Kuhn (1962) acknowledged that the concept of paradigms may not always be strictly applicable to all situations, especially where there are numerous competing views in which none are dominant.[13] The qualitative versus quantitative debate is one which researchers are moving beyond, especially those predominantly qualitatively based. However, the location of those fundamental beliefs within a paradigm remain extremely useful to clarify exactly where a researcher is fundamentally coming from. This project is firmly established within the interpretive paradigm and as such adopts its attendant ontological and epistemological assumptions, rejecting those of the positivistic paradigm.

2.2.2. Existing within an Interpretive Paradigm

In interpretivism, social reality is viewed as significantly socially constructed, based on a constant process of interpretation and reinterpretation of the intentional, meaningful behaviour of people - including researchers (Smith, 1989: 85). The *contextualised meaning* fundamental to the interpretive paradigm contrasts with that of the positivist paradigm, with the interpretivist logic rejecting the primacy of scientific realism (House, 1991), as illustrated in table 2.1. Reality within the interpretivist paradigm exists in that interaction between the subjective mind and the objective external world (Guba, 1990; Barone, 1992). Hence, there is no separation between the researcher and the researched, with social inquiry being 'mind dependent' (Smith, 1989).[14] As a research instrument[15], the researcher does not mirror reality, discovering those qualities of an independently existing reality, but instead, contribute to making social reality. There are 'no facts without values, and different values can actually lead to different facts' (Smith, 1989: 111). All methods, therefore, including statistical procedures, cannot be interpretation-free because of the notion that social reality is mind-dependent. Hence, knowledge which is claimed and supported by methods cannot be interpretation free.

Once again, this project, located within the interpretive paradigm, adopts its attendant assumptions with regards ontology, epistemology and methodology. This should not

---

[13] This is in contrast to his conceptualisation of a mature paradigmatic discipline in the natural sciences which is characterised by a single dominant paradigm whose principles define what 'normal' science is in that domain during any particular historical period (Sparkes, 1992: 50).

[14] Mind dependence here does not mean that the mind 'creates' what people say and do, but that how we interpret their movements and utterances - the meanings we assign to the intentions, motivations, and so on ourselves and others - becomes social reality as it is for us. In other words social reality is the interpretation (Smith, 1989: 74. in Sparkes, 1992: 27).

[15] This metaphor is useful in that it emphasises the fact that the researcher cannot achieve their objectives without using a broad range of their own experience, imagination in ways that are various and unpredictable (McCracken, 1988).

imply that any one paradigm is fundamentally better than the others. It is to acknowledge that a preference for the interpretive paradigm has been made and adopted in this project. The nature of the paradigms which underpin the interrelated philosophical and practical nature of research generally[16], as well as more specifically to this project with its location in the interpretive paradigm have been established. It is now appropriate to discuss the location of the methodology employed (grounded theory) in that interpretive framework.

2.3 Locating Grounded Theory

Grounded theory has been described as a simultaneous set of assumptions about the production of knowledge and a set of guidelines for empirical research work (Tesch, 1990: 58). Elsewhere it has been defined as a *general methodology* for developing theory that is grounded in data systematically gathered and analysed (Chenitz and Swanson, 1986; Layder, 1993; Glaser, 1992; Strauss and Corbin, 1994). It is only one of many interpretive methods that share the common philosophy of phenomenology.[17] Even though there are many similarities within interpretive methods, the frameworks underlying these methods do differ. Table 2.2 identifies some similarities and differences between grounded theory and other modes of interpretive research.

The framework for the grounded theorist is rooted in symbolic interactionism wherein the investigator attempts to determine what symbolic meaning words, gestures and objects have for groups of people as they interact with each other (Stern, 1994). Consequently, the investigators in such a position attempt to construct the social world of those people.

---

[16] The connections between philosophic assumptions and methods do not fit a simple linear model in which one mirrors the other. Instead, these relationships are context-dependent and, as such, allow for numerous possibilities from one study to the next within the overall domain of qualitative evaluation (Pitman and Maxwell, 1992: 752).

[17] The phenomenological approach is a focus on understanding the meaning events have for persons being studied. The phenomenological approach to inquiry includes qualitative research but also has under its umbrella such areas in inquiry as ethnomethodology, symbolic interactionism, hermeneutic inquiry, grounded theory, naturalist inquiry and ethnography (Patton, 1991). Bryman (personal communication, 23.9.93) has suggested that it is perhaps more appropriately located as operating within what might be called the Americanised 'weak or soft' phenomenological approaches taking the perspective of the actor and immersion of the researcher, rather than the 'full blooded approach of Husserl'.

Table 2.2
Similarities and Differences Between Grounded Theory and Other Modes of
Interpretive Research

SIMILARITIES	DIFFERENCES
• Sources of data - interviews, participant observations, diaries, video tapes, letters, biographies, historical accounts newspapers and other media materials. • Use quantitiative data and/or a combination of qualitiative and quantitative techniques of analysis (See Glaser & Strauss, 1967:185-220) • Redefinition of scientific canons for the purposes of studying human behaviour moving away from translated positivistic critiria. • Interpretations are sought to understand the actions of individuals or groups being studied. Therefore, the perspectives and voices of those who are being studied must be included. • Acceptance of responsibility for their interpretation of roles. It is not sufficient merely to report or give voice to the viewpoints of those being studied.	• Emphasis on the role of systematic theory-building (both substantive and formal) as an integral element of research. • It stresses the importance of sampling as part of the emergent nature of the research and the theory. Regarless of the level of theory, there is a integral interrelated and simultaneous collection of data and theoretical analysis, leading to verification of hypotheses (constant comparisons) throughout the course of the research, thus creating greater conceptual density and considerable meaningful variation.

2.3.1 Symbolic Interactionism

Symbolic interaction is a theory about human behaviour (Chenitz and Swanson, 1986). It is derived from the Chicago School[18] of sociology of the 1920's and 1930's, with G.H. Mead (1934) being one of the chief exponents of its ideas and their implications.[19] His work was popularised by people such as Blumer who first coined the term 'symbolic interactionism' (Woods, 1992).

> Symbolic interactionism provides the essential for
> provocative philosophical scheme that is peculiarly attuned
> to social experience.
>
> (Blumer, 1969: 21)

---

[18] The hallmark of the Chicago School, according to Bulmer (1984: 3) was a 'blending of firsthand inquiry with general ideas, the integration of research and theory as part of an organised program' (Woods, 1992).

[19] Mead (1934) postulated a social process whereby a biological organism develops a mind and a self and becomes, through social interaction and society, a rational being (Chenitz and Swanson, 1986).

Symbolic interactionists reject the usefulness of general theories believing that 'society' is something that is lived in the here and now, in the face-to-face and mediated interactions that connect persons to one another. Interactionists believe they should write about how people are constrained by the constructions they build and inherit from the past (Denzin, 1992: 23). Society, like interaction, is an emergent phenomenon (Blumer, 1981: 153), a framework of the construction of diverse forms of social action (Blumer, 1990: 133).

> It makes no sense to write a grand theory of something that is always changing. Interactionists, accordingly, study how people produce their situated versions of society. They see these situated versions of the social everywhere, from encounters to friendships to interactions in small groups to economic exchanges in the marketplace to the interactions that occur when a television viewer argues with a President's speech.
>
> (Denzin, 1992: 23)

When Denzin (1992) discusses 'interactionism's history' he divides the main theoretical formulations in symbolic interactionism over the last one hundred years into periods. These phases are as follows;

1. The *canonical phase* (1890-1932)
2. The *empirical/theoretical* period (1933-50)
3. The *transition/new texts* period (1951-62) (third generation)
4. The *criticism/ferment* period (1963-1970) (fourth generation emerges)
5. The *ethnography* period (1971-1980)
6. The *diversity/new theory* period (1981-1990) (the greying of interactionism)[20]

What is useful from this chronological breakdown of symbolic interaction's past is the place occupied by the originators of grounded theory, Anselm Strauss and Barney Glaser. Strauss (along with others) is considered by Denzin (1992) to have radically altered the perspective during the *transition/new texts* period (1951-1962), because it 'grounded the theory in mid-century empirical work, which spoke simultaneously to the Chicago tradition, Mead's social psychology, and the increasing presence of symbolic interactionism as a counter-theory to structural functionalism' (Denzin, 1992: 10). In the *criticism/ferment* period (1963-1970) Glaser and Strauss within the general symbolic interactionist tradition became the originators of what was considered a new Chicago method called *grounded theory* (Glaser and Strauss, 1967). The emergence of this approach was symptomatic of the new generation of derivatives of the Chicago School, all of which shared the common approach of 'getting their hands dirty' and developing theory out of their research (Woods, 1992).

---

[20] For a more detailed discussion of each of these phases see Denzin (1992).

Grounded theory was first presented by Glaser and Strauss in *The Discovery of Grounded Theory* (1967). It had three main purposes:

1. To 'close the embarrassing gap between theory and empirical research,' by providing a rationale for theory that was *grounded*, simultaneously generated and developed in the research process.
2. To suggest the logic for and specifics of grounded theories.
3. To acknowledge the importance and valued position of careful qualitative research.

Over time grounded theory has become a well-known methodology, especially in North America and Britain, aided by the publication of numerous methodological texts by the originators (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987; Glaser, 1992, 1993, 1994; Strauss and Corbin, 1990, 1994).[21] The variety of phenomena investigated using grounded theory has been diverse, reflecting its adaptability as a general methodology for thinking about and conceptualising data. However, Strauss and Corbin (1994) are concerned that because of its popularity it 'now runs the risk of becoming fashionable' (p277), with important aspects of the methodology being misunderstood through ignorance.[22] However, as Tesch (1990) identifies, 'some types of research and some labels catch on more strongly than others or already have longer tradition than others. But basically, there is only one requirement for research: that you can persuade others that you have indeed made a credible discovery worth paying attention to' (p71).

2.3.2 Methodological Implications

As Woods (1992) emphasises, the most important premise for a grounded theory is that inquiry must be grounded in the empirical world under study.

> By the 'empirical social world' is meant the minute-by-
> minute, day-to-day social life of individuals as they interact
> together, as they develop understanding and meanings, as
> they engage in 'joint action' and respond to each other as

---

[21] For a fuller explication of the historical development of the evolution and use of grounded theory see Strauss and Corbin (1994).

[22] For example, basic processes may be discovered, however, they are not developed conceptually, because the researcher has missed the importance of variation which gives the grounded theory its conceptual richness. 'People who think they are doing ground theory studies often seem to concentrate on coding as this methodology's chief and almost exclusive feature, but do not do *theoretical* coding. (Theoretical codes conceptualise how the substantive codes may relate to each other as hypotheses to be integrated into a theory, Glaser, 1978: 72) (Strauss and Corbin, 1994: 277). A more detailed discussion of the potential misinterpretation of grounded theory takes place in chapter 4.

they adapt to situations, and as they encounter and move to
resolve problems that arise through their circumstances.
(Woods, 1992: 348)

When investigating young people's participation in physical activity, this might
involve the study of what young people, their parents and peers *do* in a physical
activity setting; how do they themselves experience and perceive it; how do they
undergo certain processes such as the social construction of matters of physical
activity experience, for example, competition, competence in the activity, the nature
of the activity, construction and development of relationships; what and how are
decisions or policy made by the young person and others involved, directly or
indirectly, in the physical activity; the organisation of clubs and the home and their
influence on participation in physical activity. These are all lived experiences which
exist in real situations and which are at the heart of the kind of problems of social
science, regardless of the level of abstraction. In order to *discover* this reality those
research methods adopted also have to respect the nature of that reality.[23] Hence
there is an emphasis on naturalistic, unobtrusive methods and on *grounded* theory.
The grounding of the whole research process is essential in order to remain faithful to
the world under study. In addition to this, in order to maintain the respect of the
empirical world under study, a minimal amount of *a priori* assumptions need to be
made about it.[24]

Unfortunately, a great deal of the verificational work which was conducted in the past
has received criticism during the unproductive 'positivism versus interpretivism'
debate, not because it was verificational in nature, but because it was fundamentally
flawed in that those theories that were being tested were not 'grounded' in the
empirical world they attempted to explain. The contrasting epistemological
assumptions between the 'testing' and the 'generating' of theory associated with the
positivist and interpretivist stances respectively, is supposedly becoming increasingly
less a matter of concern, especially for the qualitative researcher who employs
techniques to both generate and test theory (LeCompte et al., 1992).[25] However, this
dismissal of epistemological assumptions has been contested by others (Bryman,
1984; Sparkes, 1987), who state that an amalgamation of paradigms is acceptable
only on a technical level where it would eventually result in more superior research.
However, at 'the level of philosophical issues the two paradigms are most certainly

---

[23] The research method does not contain the reality it is merely a tool to discover it.
[24] This is a matter of contention and a potential criticism of grounded theory methodology. It is
discussed in greater detail in Chapter 4 - Criticisms of Grounded Theory.
[25] Woods (1992: 381) notes that the emphasis in fieldwork research to date, has mainly been on the
generating of theory, which has 'largely been guided by the work of Glaser and Strauss (1967).'

18

not' compatible (Sparkes, 1987: 40). The commitment of the researcher to a particular epistemological position orientates them to formulate and develop the research problem within its particular philosophical parameters, which are fundamentally incompatible. Hence, the link between the epistemological and the methodological issues is one that cannot be ignored.

> If the research problem is one which directly emanates
> from a particular epistemological position then the question
> of the appropriateness of a research technique is significant,
> for the technique must properly reflect the epistemological
> framework in which the research is embedded. (Bryman,
> 1984:83)
>
> (Sparkes, 1987: 41)

2.4 The Nature of Theory in Grounded Theory

All theories by nature are symbolic constructions of reality (Kaplan, 1964), consisting of concepts and propositions about the relationships between concepts.[26] Grounded theory is a highly systematic research approach for the collection and analysis of qualitative data for the purpose of generating explanatory theory that furthers the understanding of social and psychological phenomena (Chenitz and Swanson, 1986: 3). Grounded theory was developed as a corrective response to the overemphasis of the verification of theory and the 'resultant de-emphasis on the prior step of discovering what concepts and hypotheses are relevant for the area that one wishes to research' (Glaser and Strauss, 1967: 2). Grounded theory methodology is designed to guide researchers in producing theory that is 'conceptually dense' - that is with many conceptual relationships (Strauss and Corbin, 1994).[27] Theoretical conceptualisation emphasises the interest of the grounded theorist to identify patterns of action and interaction between different actors. Therefore, based on the claim that the discovery and elaboration of theory are distinct and separate enterprises from its verification, grounded theory focuses on the process of discovering (constant comparison) and elaborating (theoretical sampling) complex theory (Glaser and Strauss, 1967; Glaser, 1978; Strauss, 1987; Strauss and Corbin; 1990 and 1994). The creation of theory should not be considered to be more important than any other mode of interpretation.[28] It should, however, be grounded in the interplay between the data

---

[26] Concepts are theoretical terms used to denote abstract material or phenomena and are related to the facts at the empirical level and to the abstract constructs about those facts at the theoretical level. Propositions in theory are used to denote relationships (Chenitz and Swanson, 1986: 4).

[27] These relationships are stated as propositions and almost always presented in discursive form: They are embedded in a thick context of descriptive and conceptual writing (Glaser and Strauss, 1967: 31; Strauss, 1987: 263; Strauss and Corbin, 1994: 278).

[28] Qualitative modes of interpretation exist from theory formulated at various levels of abstraction, to more loosely developed theoretical models and frameworks, theme analysis and on to just 'let the informant speak and don't get in the way' (Tesch, 1990).

and developed through the course of the research (Cohen and Manion, 1989; Strauss and Corbin, 1994). Grounded theory methodology is designed to further this development of effective theory *from* the data rather than some ad hoc prior conceptualisation.

> *(in grounded theory)* Theory consists of plausible
> relationships proposed among concepts and sets of
> concepts.[29] (Though only plausible, its plausibility is to be
> strengthened through continued research.)
>
> (Strauss and Corbin, 1994: 278)

Having said that theory is based in the data, and not in the existing body of theory, the theory may '...shed new perspectives and understandings on other theories and highlight their process. Other theories are neither proved or disproved, they are placed, extended and broadened.' (Glaser, 1978: 38) This emphasis on 'theory as process' is important to Glaser and Strauss (1967) because it stresses the idea of theory as being continually modified and extended, rather than a perfected end product. Therefore, theory is viewed as a constant and flexible accompaniment to the incremental collection of data and the unfolding nature of the research (Layder, 1993: 45). Strauss and Corbin (1994) emphasise two other distinguishing features of grounded theories, regardless of their level of abstraction:

> First, theories are always traceable to the data that gave rise
> to them - within the interactive context of data collecting
> and data analyzing, in which the analyst is also a crucially
> significant interactant. Secondly, grounded theories are
> very 'fluid'...Because they embrace the interaction of
> multiple actors, and because they emphasise temporality
> and process, they indeed have a striking fluidity.
>
> (p278/279)

Therefore, the development of the theory proceeds in a rigorous way, primarily by means of comparative analysis.

2.4.1 Generating Theory

Grounded theory methodology is designed to guide the researchers in producing theory that has numerous conceptual relationships that are stated as propositions and presented in discursive form. They are embedded in a thick context of descriptive and conceptual writing (Strauss, 1987: 263).

---

[29] 'A coherent group of general propositions used (provisionally) as principles of explanation for a class of phenomena' (Stein & Urdang, 1981: 1471).

> Discursive presentation captures the conceptual density and
> conveys descriptively also the substantive content of a
> study far better than does the natural science form of
> propositional presentation (typically couched as 'if -then').
> (Strauss and Corbin, 1994: 278)

It is those *patterns* of action and interaction between people which grounded theory research is interested in discovering, not particularly the creation of theory about individual actors as such.[30] This insight is not a magical feat, fundamentally it is a matter of the knowledge base of the researcher, the organisation of their mind and the data. Therefore, even though this process of data analysis remains one which is generally poorly described in the literature, the premise that creativity is a matter of being prepared is one which to a greater extent remains true. The structure which is required to facilitate this foundation is based around the constant comparison of instances over time and in a variety of situations. Theorising begins with the very first data that is collected, when the search for significant events or words, as well as negative cases to invalidate them or create alternative arguments begins. Through the categories created by coding and the use of theoretical sampling the direction of the research is determined. This process is one which is far more complicated than this cursory presentation, as identified and explained in chapter 4. However, attention has been paid to it here simply to acknowledge the presence of the comparative process within the generation of theory.

2.4.2 Substantive and Formal Theory

Glaser and Strauss (1967) encourage the use of substantive and formal theories in the cumulative development of theory. They distinguish between substantive and formal (general) theory in that the first of these is a theory which is grounded in research on one particular situational context and taken to apply to that specific area. The latter theory, formal theory, is one that emerges from a study of a phenomenon examined under many different types of situations. Glaser and Strauss (1967) continue by emphasising that;

> Substantive theory is a strategic link in the formulation and
> generation of grounded formal theory. We believe that
> although formal theory can be generated directly form data,

---

[30] The criteria for a good grounded theory include a strong degree of fit with the data it purports to explain; explanatory power, accounting for the relationships among the elements under specific conditions, thus being able to predict outcomes under what circumstances; relevance, in being directed toward central concerns of the area under examination; flexibility, in being a capable of taking into account new and different material; density, were the theoretical construct are few but encompass a large number of properties and categories; and integration, indicating a strong relationship among the constructs (Glaser and Strauss, 1967; Hutchinson, 1988; Woods, 1992).

it is more desirable, and usually necessary, to start the
formal theory from a substantive one. The latter not only
provides a stimulus to a 'good idea' but also gives an initial
direction in developing relevant categories and properties
and in choosing possible modes of integration. Indeed it is
difficult to find a grounded formal theory that was not in
some way stimulated by a substantive theory.
(Glaser and Strauss, 1967: 79)

Both types of theory exist on distinguishable levels of generality which differ only in
degree (Strauss, 1978; Glaser, 1992). However, simply generalising to different types
of situations from the study of one phenomenon in one situation does not constitute
the move from substantive to formal theory. To make the move to formal theory
different kinds of substantive cases and their theories have to be employed. It is not
the level of conditions that makes the difference between substantive and formal
theories, but the variety of situations studied (Strauss and Corbin, 1994). Glaser
(1992: 99) refutes this statement by saying that;

'The distinction between substantive and formal is not
based on how many situations are sampled. The situations
either are in the same substantive area for substantive
theory or in varied substantive areas for analysing a
concept. In varying substantive areas one can still stay on
the same substantive level, e.g. professional education in
nursing, pharmacy and medicine. Then the analyst
produces a general substantive theory, not a formal theory.'

Therefore, according to Glaser (1992), Strauss and Corbin's (1994) comment that it is
the variety of situations studied which makes the difference between substantive and
formal theory is patently inaccurate, 'since the distinction is substantive versus
concept' (p99). He suggests that the distinction between substantive and formal
theory is;

...a substantive theory as a theory about a substantive area
of inquiry such as pain management, science careers,
patient care and professional education. It is theory that fits
the substantive area's main problems and works in
predicting outcomes in the area; it is very relevant to the
people in the area. In contrast, a formal theory is a theory
developed or discovered for a conceptual area of inquiry -
such as status passage, social stratification, formal
organisation, or stigma. This distinction is very clear,
although it does vary on a conceptually ordered level of
generality which differs only in terms of degree.
(Glaser, 1992: 99)

This project is an attempt to generate what Glaser (1992) defines as a substantive
theory. Theory that explains observations and predicts what will happen in similar

circumstances may be the desired end-product of positivistically oriented research, however, this is dismissed by the grounded theorists who are in favour of studying the nature of the social world and the 'meanings' that are constructed. The interactionist emphasis on process, flux, voluntarism, inconsistencies, contradiction, dilemmas and strategies makes it difficult to think in terms of 'causes' and 'truth' (Woods, 1992: 390). The whole notion of 'truth' is one that requires further discussion.

2.4.3 Truth and Reality

Grounded theorists, rejecting the positivistic position, follow the general stance that emphasises consequences and the antecedent conditions that precipitated them, urging the abandonment of what is considered to be an impossible quest for truth. A theory is not considered to be the formulation of some discovered aspect of a pre-existing reality 'out there' (Strauss and Corbin, 1994: 284). It is, however, believed to be enacted, with theories being interpretations made from those perspectives as adopted by researchers. In such a situation there is the potential for multiple, individually coherent interpretations of the same subject under study. Therefore, there is an attendant fallibility with such interpretation, however, this is not to discard the fact that judgements can be made about the soundness or probable usefulness of it.[31] The provisional nature of interpretations, changing as they do over time and conditions, means that they should not be 'set in stone', they face continual qualification and evolution. Contemporary social reality (constructed by current ideas and feelings within certain situations and contexts) influences and contributes to the researcher's interpretations and, therefore, the nature of the theory which they construct. Hence, changing conditions and contexts within this reality make theories inappropriate to the evolved situation, requiring various degrees of qualification up to rewriting.

> In short, theories are embedded 'in history' - historical
> epochs, eras, and moments are to be taken into account in
> the creation, judgement, revision, and reformulation of
> theories. The interpretive nature of grounded theories
> means that such conceptualizing is an intellectual process
> that extends throughout the entire course of a given
> research project.
> (Strauss and Corbin, 1994: 280)

---

[31] See Athens (1984) who proposes three scientific criteria for the evaluation of qualitative studies - *theoretical import* (the contribution which they make to the development of new concepts or theories or the refinement and further development of existing ones - the notion of formal and substantive theory is a useful one used for this purpose), *empirical grounding* (empirical grounding exists only if they are consistent with (not identical to) the empirical observations or cases from which they were ostensibly developed) and *scientific credibility* (this is not an ascribed quality of study, but rather an achieved one. The way a researcher makes a study credible is by supplying an adequate account of his or her research along with the description of its results) all of which are an attempt to make more explicit the basis for determining the value of qualitative studies.

23

It cannot be known which of the many internally coherent interpretations of reality is the 'right' one. 'Within such a framework there is always the possibility of one interpretation of reality coexisting with another interpretation of reality because with its anti-foundational assumptions there can be no independent, absolute or external criteria on which to decide between two plausible cases' (Sparkes, 1992: 34). As this author continues to explain, this does not mean that 'everything goes' and all interpretations are accepted. Regardless of their relativist stance, judgements have to be exercised. Grounded theorists do not hold with the view that propositions do not have the property of being true. It is believed that judgements of truth are relative to the particular framework, paradigm or point of view. So when one proposition is 'true' for an individual in one context it may be false for individuals in another.

> In a world of multiple realities, multiple truths can exist,
> and this means that for interpretive researchers the
> meanings associated with the term validity are very
> different form those of positivistic researchers. Indeed,
> notions of validity as used by positivists may be
> meaningless to interpretive researchers, implying, as they
> do, some impersonal, automatic truth.
> (Sparkes, 1992: 36)

Therefore, 'valid' is a term which has different meanings and is conceptualised in different ways by those within the different paradigms and their associated ontological and epistemological assumptions.[32] These different conceptualisations of validity do not need to be contested against each other, but they should be viewed in accordance with their own terms when judgements of their research are being made. For example, the interpretivist researcher believes that we are unable to see the world outside of our place in it and that the technical procedures encompassed by methods cannot guarantee 'truth'. Whereas the positivistic stance emphasises the independence of the research instrument from the object or attribute being measured, so that the social world, which is external to individuals and which is real and made-up of hard and tangible facts, can be measured. The assumption is that the results of such research are automatically 'true' if the appropriate technical procedures within the methodology have been employed. This disparity emphasises the whole point of this chapter, to locate grounded theory within a particular research paradigm and identify its attendant assumptions and implications to enable informed decisions to be made, based on the evidence presented.

---

[32] See Mishler (1990) who also acknowledges this when he reformulates validation as a process for interpretive research.

2.5 Summary

The complex interrelated ontological and epistemological assumptions associated with the interpretive, positivistic and critical paradigms identify fundamentally different conceptions of the nature of reality and knowledge which each adopt, regardless of the ambiguity which exists over the terminology used. Even with the demise of the 'paradigmatic mentality' which has segmented the research community into particular paradigms and consumed so much of the research literature, this discussion remains useful in that it serves to clarify exactly where the researcher is fundamentally coming from.

Located firmly within the interpretive paradigm, this project adopts the position that reality exists between the subjective mind and the objective world, with the conceptualised meaning of this socially constructed view based on a process of interpretation and reinterpretation of the intentional behaviour of people. As a general methodology grounded theory developed and evolved from symbolic interactionism which holds the belief that society is an emergent phenomenon of diverse forms of social action. The main emphasis and premise for a grounded theory is that it is 'grounded' in the empirical world which is under study. Unfortunately, too many theories in the past have failed to achieve such grounding, which has added to the debate over the 'testing' and 'generating' of theory in research and a call for the dismissal of epistemological assumptions. The fundamentally contrasting epistemological assumptions underpinning the 'testing' and 'generating' of theory (positivistic and interpretive stances respectively) are a matter of discussion in what is an ever decreasing debate, especially for the interpretive researcher who it could be said, both generates and tests theory. Not all researchers agree with the complete relaxation and dismissal of the significance of ontological and epistemological assumptions. At a technical level there appears to be little contention against the amalgamation of the paradigms. However, at a philosophical level, there is no such agreement, with the researcher's orientation towards their research considered to be fundamentally incompatible with other paradigms.

The grounded theorist is interested in a 'conceptually dense' theory which emphasises the patterns of action and interaction between actors. Through constant comparison (discovering) and theoretical sampling (elaborating) complex theory can be generated, something which is quite distinct from the verification of theory. It is a process of theory extensions and development which builds on appropriately grounded data rather than preconceived 'ad hoc' notions. It is not the actors who have theory created

specifically about them as individuals, it is those processes of action and interaction between actors which the grounded theory is most interested in discovering through a systematic process of comparative analysis.

Linking with this is the distinction which Glaser and Strauss (1967) make between substantive and formal theory and the increasing degree of generalisation of 'process' and 'meanings' which are their distinguishing characteristics. It is not the level of conditions that make the difference between substantive and formal theories, but the variety of situations studied. The construction of reality and the notion of truth associated with it, become important considerations at this point. With the emphasis in grounded theory being on the contemporary nature of theory, changing as it does over time and conditions and given the researcher's interpretation (given their perspective), there is the potential for multiple, individually coherent interpretations of the same subject under study. However, regardless of these 'multiple truths' they remain useful in that they face continual qualification and evolution. The question of 'validity' then becomes one which can be conceptualised in different ways and have different meanings for alternative paradigms and their accompanying assumptions. It must be seen for what it is and judged within the overall paradigmatic framework and its assumptions, so that informed decisions can be made on the appropriateness of those conclusions given the acknowledged orientation of the researcher.

This has not been an either/or debate, it has merely served the purpose of locating grounded theory within a general research paradigm so that its background assumptions are made clear, along with certain issues in order for them to be appreciated and compared with alternative interpretations that may contrast and contradict them.

CHAPTER 3

INVESTIGATION USING INTERVIEWS

3.1 Introduction

Interviewing was the predominant mode of data collection employed in this project. This chapter addresses the wide variety of interviewing techniques that are potentially open to the researcher, however, specific attention is paid to the unstructured and semi-structured interview forms employed in this project. After outlining the interview type, justifying its use, as well as its potential limitations within the conceptualisation of the interview employed in this project, the discussion turns to the issues surrounding validity and reliability. The make-up of the research population and the selection procedures involved, the means of establishing access to those young people under scrutiny and the modes of recording adopted are then identified. A presentation of the interview schedule and protocols follows, before addressing the issues related to management of the immense amount of data collected by using the aforementioned interviewing techniques. Finally, ethical considerations and attempts to ensure the well-being of the interviewees are highlighted.

3.2 Various Interview Forms

The purpose of a grounded theory study is to understand the concerns, actions and behaviours of a group and explain these patterns of behaviour at a higher level of abstraction (Chenitz, 1986: 79). In order to gather the indepth information required to do this, numerous forms of data collection are employed which include interviews. Interviewing has a wide variety of forms and a multiplicity of uses, and their extensive use in all forms of research acknowledges them as a key technique of data collection. Consequently, there has arisen a variety of forms and styles of interviewing, along with the products of such interactions.[1] Even though there are variations in the extent of the interviewer's control over the interview, the nature of the questions asked, the number of participants and the position of the interview in the research design, there remain broad categories which consume such diversity. These very broad categories exist on a continuum from the structured to the unstructured interview.

---

[1] The most common type of interviewing is individual, face-to-face verbal interchange, but it can also take the form of face-to-face group interviewing, mailed or self-administered questionnaires, and telephone surveys (Fontana and Frey, 1994: 361).

3.2.1 Structured Interviews

Close to a questionnaire in the assumptions underlying it and in its form (Hitchcock and Hughes, 1989), the structured interview creates a situation in which the interviewer asks pre-established questions with a limited set of response categories (Fontana and Frey, 1994). The control exerted over the interview by the interviewer is governed by the standardised and methodical manner in which they address each of the questions in the list they have pre-established. There is little, if any, flexibility in the interview relative to the way in which the questions are asked or answered. If there is any room for modification within such interviews, it is specified in advance.

To employ this form of interview at the beginning of this grounded theory project was inappropriate due to its highly structured and *a priori* nature which would have stifled the discovery process. However, a more structured nature to the interview format was increasingly acceptable towards the end of the research process as categories became saturated and when there was virtually no variation in the responses of the interviewees.

3.2.2 Unstructured Interviews[2]

In contrast to the *closed* situation of the structured interview, the unstructured interview is far more *open*, giving greater flexibility and freedom (Cohen and Manion, 1989). Within the unstructured interview there is the opportunity for the interviewer to introduce new questions into the social interaction, and in doing so, allow the interviewee to respond to questions in their own way. Consequently the relationship between the interviewer and interviewee, important in all interview forms, is even more crucial to the success of this form of interview. The rapport and underlying relationship between the interviewee and the interviewer is fundamental to the success of the interaction involved in the unstructured interview. Familiarity with the contextual and biographical features of the respondent are important prerequisites to understanding 'where the person is coming from'. Without this background it is difficult to establish the necessary depth of rapport and empathy required to elicit indepth responses and perspectives from the creation of a situation which ideally is envisaged by both parties to be an equal relationship between the interviewer and the interviewee. The interviewer cannot ignore their previous experiences, prior

---

[2] 'Unstructured' is an extremely unsatisfactory term because as Whyte (1982: 111) notes 'a genuinely non-directive interviewing approach is simply not appropriate for research.' There must remain some structure even with the so called unstructured interview. The question becomes one of negotiation to incorporate into the interaction new or alternative questions which previously have not been identified. The unstructured interview allows this as a matter of course unlike the more structured interview.

knowledge or opinions associated with the area under investigation. Human interaction is based upon a culturally derived structure of meanings that are to some extent shared (May, 1991). Hence, it was unreasonable to expect the interviewer to start from a completely neutral position in this project.[3] The emphasis needs to be placed on the interviewee to give their perspective on the subject under investigation, so that the author could discover and understand their perspective. This was achieved by making the initial interview something of a 'guided conversation' (Schatzman and Strauss, 1973).

> In reality, the investigator's initial approach may be informed by previous knowledge, observations and experience, but these sources of information are carefully subordinated to the process of discovering the informant's perspectives on the topic of interest. The informant's story then serve to 'structure' the interview as it unfolds. Early interviews are likely to be more unstructured, with increasing structure developing as analysis of informants' stories begins. (May, 1991:191)

3.2.3 Semi-Structured Interviews

Located between the two extremes previously described, the semi-structured interview is a more flexible version of the structured interview. It is organised around areas of particular interest while still allowing for expansion and probing of the interviewees responses within an interview schedule (Polit & Hungler, 1987; May, 1991). This form of interview was progressively adopted throughout the project as the focus for questions became clearer. This clarity was facilitated by categories becoming more sophisticated as a result of the move to saturate them (make them more dense). In this process the categories and concepts evolve as much through the identification of differences as they do through similarities.

3.3 On the Appropriateness and Degree of Structure

Interview techniques located towards the unstructured end of the interview continuum were predominantly employed in this project. This was not a rigid stance, as it was necessary to move backwards and forwards along the continuum of interviewing techniques within each interview to secure the interviewees perspective. Such movement allowed the interviewer to identify and develop categories, disclaiming or accepting them while directing and conducting further investigations through which the existing ones were established and new ones evolved. At times, in order to justify

---

[3] This is consistently raised as a criticism of grounded theory and so is dealt with in greater detail in chapter 4.

previously identified categories, it was necessary to adopt a more focused approach and its relative increase in structure, to enhance their relevance. However, it remained important to maintain an unstructured component to the interviews, as this continued to allow new categories to emerge which could be incorporated into the study and traced in future interviews. To facilitate this, unstructured and semi-structured interviews were predominantly employed in this study. The adoption of these forms of interviews also allowed the author to comply to a remit established by the ontological and epistemological assumptions they had accepted, the requirements of grounded theory methodology, as well as their implications for the nature of data gathering. As the project developed, however, the increase in the use of more focused interviews reflected the increasingly limited variance in respondents answers with the move towards accomplishing saturation of categories. Hence, progression in the research process instigated greater structure in interviews, developing to become increasingly focused, as a more sophisticated and complete view and knowledge of the interviewee's world evolved. Increasing familiarity with the area, the ongoing data collection and analysis used to identify relevant aspects, and follow-up new avenues of relevance and interest, created a situation where there was progressively increased control over the identification of topics which were selected for conversation as the analysis developed.

Regardless of the interview technique employed there remains an innate structure to any interview. However, it is the degree of this structure which determines the interview technique and its appropriateness within the research process at any given time. A need for each type of interview technique remained throughout this project, however, the balance in their use changed from predominantly unstructured to more structured techniques as the grounded theory became more sophisticated. As Sparkes (1987) points out, the structure to interviews is one which cannot be ignored regardless of the desired starting point of the research;

> The crucial point to be made is that there is no
> presuppositionless research, and whilst we are not slaves to
> our framework, we are tied to them. Hence, even in the
> unstructured interview the researcher has certain themes in
> mind that he/she wishes to cover.
>
> (Sparkes, 1987: 93)

This was inevitably the case within this research, where unstructured interviews were guided by initial open ended questions. There were, however, selected on the basis of

the researcher's 'theoretical sensitivity'[4] (Strauss, 1978; Strauss and Corbin, 1990) and relevant grounded literature in the area.

3.3.1 Equity in Consistency and Flexibility

May (1991) points out the continual challenge for each researcher to achieve and maintain a balance between flexibility and consistency in data collection. Both of these are important. Flexibility is required to facilitate discovery of the interviewee's perceptions. Consistency in the depth of detail, the types of questions asked, the amount of exploration and conformation covered in interviews is essential to draw appropriate conclusions.

> ..An important challenge in qualitative research interviewing is maintaining enough flexibility to elicit individual stories, which are likely to vary a great deal (at least at first glance), while gathering information with enough consistency to allow for comparison between and among subjects.
>
> (May, 1991: 192)

This project involved a sole interviewer, the author, so the problem of equity between flexibility and consistency was initially something of a latent issue, unlike those studies which might employ numerous interviewers. With numerous interviewers the demands of flexibility and consistency need to be outwardly addressed almost immediately.[5] However, even as a sole interviewer, the author found the balancing of these two aspects a significant challenge throughout the project. At different stages in the process of data collection it was important for a variety of questions to be asked of all interviewees to inform subsequent interviews in the grounded theory process. This did not require the author to ask exactly the same questions of each interviewee, however, he had to ensure that sufficient information was gathered from each interviewee to facilitate a comparison of the major elements being identified in the overall analysis. The general movement from unstructured to more focused semi-structured interviews aided in this, by allowing the interview data collected at a given time or phase on an interviewee to be compared with other information from that time or phase on other interviewees. Aspects which were neglected or missed in a particular interview, but not in others, meant that comparisons could not be made. To

---

[4] 'Theoretical sensitivity' is defined as 'sensitive thinking about data in theoretical terms' (Strauss, 1987) or as 'the personal quality of the researcher' (Strauss and Corbin, 1990). It is discussed in greater detail in chapter 4.

[5] The presence of numerous interviewers means that each of them will be exploring issues, and with no check on the direction in which each of them go, they are likely to move in alternative as well as similar directions, as well as addressing them to varying degrees. Thus, the potential for a confused and awkward project is created from the start.

remedy this, specific questions were asked in subsequent interviews covering the missing data from any given interviewee creating evidence which would then be compared.

It is difficult, as May (1991; 195) acknowledges, to adequately describe interview procedures as it 'does not necessarily get easier once the project is complete and findings are ready for dissemination. Detailed explanations about the various adjustments that were made in the interview procedures may require more manuscript space than is available.......However, overly brief descriptions may give the appearance of slipshod work and become a source of confusion and credibility over the work.' Without over elaborating in this section, the nature of the interviews employed have been described as they locate and fit practically into the project structure. This manifestation of the interviews will now be set against their conceptual underpinnings.

3.4 Conceptualising the Interview

In their discussion of the interview Cohen and Manion (1989) identify three major conceptions of it presented by Kitwood (1977);

- pure information transfer.
- transaction which inevitably has bias, which is recognised and controlled.
- an encounter necessarily sharing many of the features of everyday life.

They go on to comment about the particular implications of each view. The first, a commonly held view, acknowledges that if the interviewer is accepted by a motivated, sincere interviewee and a suitable rapport established between them, accurate information may be obtained from the interview. 'In its fullest expression, this view accords closely with that of the psychometricians, who apparently believe that there is a relatively permanent, consistent, 'core' to the personality, about which a person will give information under certain conditions' (Kitwood (1977) cited in Cohen and Manion, 1989; 311). This view emphasises that the interpersonal nature of the transactions between the interviewer and interviewee should be minimised if not removed, for they prevent sound research. It is an opinion which is shared by the second conception of the interview, which accepts the variety associated with the ways in which everyone defines the interview situation, but which must be delimited and controlled as much as possible.[6] The third conception of the interview which this

---

[6] For example, have a range of interviewers all of whom will have different biases so that they can cancel out the variety in interviewee, definitions of the situation.

32

project acknowledges as the most acceptable, is also advocated by Cicourel (1964). Discussing the 'interview complex,'[7] Cicourel identifies that the acceptance and emphasis on the objective approach to data collection, as espoused by these first two views of the interview, founded in positivistic assumptions, is unacceptable. It is rejected because it demands ignorance of and the dismissal of the socially constructed and organised interactions in the interview, something which they consider has to be managed to orchestrate what will then become an unbiased interview. This relationship between the interviewer and interviewee is one that cannot be concealed, dismissed or ignored, and is one which is far from unproblematic. To ignore it is to be insensitive to the whole dynamics of the social context of the interview, inclusive of the interviewer/interviewee characteristics, the area under investigation, suitability of questions and the mode of recording. The adoption of 'unstructured' interviewing techniques espouses a completely different set of paradigmatical assumptions, as identified in chapter 2, which counteracts these discrepancies and contradicts the positivistic nature underpinning the structured interview techniques. The emphasis in this project is transferred towards rapport, empathy and understanding between the interviewer and interviewee. Specification of appropriate questions was not always possible or desirable when investigating a particular interviewee. Sparkes (1987) adds to this discussion by advocating realist perspective in his work. He acknowledges a point by Jones (1985) who suggests that bias, rather than being something which should be avoided at all costs, is something to be used creatively, contingently, and self consciously.

> ...Social meanings are complex and not unequivocally revealed by a dictionary-like translation of 'responses' to prearranged 'questions' which can then be mechanically 'coded' to reveal patterns for subsequent analysis and generation of theory. Underlying these criticisms are the personal qualities and interactional skills of both the interviewer and respondent.
> (Hitchcock and Hughes, 1989:85)

3.5 Issues of Validity and Reliability

In most forms of research, validity[8] and reliability[9] are established through the use of certain procedures for data collection and analysis. With the positivistic stance associated with the first two conceptions of the interview as outlined in chapter two, it

---

[7] That is the relationship and interaction between question, interviewer, interviewee responses and response interpretation (Hitchcock and Hughes, 1989: 84).

[8] Validity refers to the problem of whether the data collected is a true picture of what is being studied. Is it really evidence of what it claims to be evidence of? (McNeill, 1990: 15)

[9] If a method of collecting evidence is reliable it means that anyone else, or the same person using it at a different time, would come-up with the same results. The research could be repeated and the same results would be obtained (McNeill, 1990: 14).

33

is the neutralisation of the researcher by removing potential bias and contamination, and the treatment of the interview as a mere research method, which uncovers facts that are context free. This is acceptable in a positivistic conception of reality, however, for the interpretive researcher there can be no such definition of validity of the interview. The evidence gained within the social interactions of the interview context are situated and appropriate to that context, with the relationship between the interviewer and interviewee, whatever bias it may create, being a part of the evidence.

However, Kitwood (1977) identifies conflict between the traditional conceptions of reliability and validity, 'where increased reliability of the interview is brought about by greater control of its elements, this is achieved, he argues, at the cost of reduced validity.' (Cohen and Manion, 1989: 318).

> In proportion to the extent to which 'reliability' is enhanced
> by rationalization, 'validity' would decrease. For the main
> purpose of using an interview in research is that is it
> believed that in an interpersonal encounter people are more
> likely to disclose aspects of themselves, their thoughts,
> their feelings and values, than they would in a less human
> situation. At least for some purpose, it is necessary to
> generate a kind of conversation in which the 'respondent'
> fells at ease. In other words, the distinctively human
> element in the interview is necessary to its 'validity'. The
> more the interviewer becomes rational, calculating, and
> detached, the less likely the interview is to be perceived as
> a friendly transaction, and the more calculated the response
> also is likely to be.
> (Kitwood, 1977 cited in Cohen and Manion, 1989: 319)

Many qualitative researchers see the need to incorporate a series of checks such as triangulation,[10] in the research to confirm the comparability of data collection in order to enhance its validity. These checks, however, are undermined by the notion of validity as it exists relative to the conceptions of the interview. Considering those three conceptions of the interview presented earlier in this chapter, there exists two quite distinct solutions to the problem of reliability and validity. With the conceptualisation of the interview as either pure information transfer or a transaction which inevitably has bias, the suggested solution to the problem of reliability and validity is a 'judicious compromise'.[11] However, with the third conception of the interview (an encounter sharing many of the features of everyday life), notions of reliability and validity become redundant because every interpersonal situation can be

---

[10] 'Triangulation' refers to the use of more than one method of data collection within a single study (Hitchcock and Hughes, 1989:104). Alternative terms for the same thing have included 'mixed method', 'multi-method' or 'multiple strategies' (Burgess, 1982). However, it could also be that other sources of data are employed to facilitate similar comparative situations.

[11] See Cohen and Manion (1989) for a fuller response.

said to be valid regardless of what might be expected for others elsewhere in similar situations. Sparkes (1987:107/8) makes the same point, emphasising the centrality of accounts as 'real' rather than the 'truth' of the content of the accounts;

> ...We need not hear interview responses simply as true or
> false *reports* of reality, but instead, they can be treated as
> *displays* of perspectives and moral forms.

> ...social structures are real in the sense that they are
> reflected in social relationships which may be hidden from
> the perceptions of the individual. Therefore, interview data
> displays cultural realities which are neither biased or
> inaccurate, but simply 'real'.

Consequently, by adopting the third notion of the interview as presented by Kitwood (1977), this project accepts that the notion of validity and reliability as defined by those adopting a positivistic stance is not appropriate. In so doing the importance of those aspects which influence the 'cultural reality' constructed in the social relationships which make-up the accounts of individuals become paramount. Factors influencing them therefore, need to be acknowledged and parameters identified to appreciate further their construction. Socially constructed responses to questions in the interview are the joint product of the perception of the interviewee and the interviewer within that context. The most crucial components of the social situational circumstances affecting this process is the interviewer, therefore, the dynamics of the interview will now be discussed.

3.6 Dynamics of the Interview

The interview involves a complex set of social interactions which cannot be underestimated or dismissed. A myriad of factors contribute, independently as well as collectively, to the complexity of this interaction and its unique manifestation in any given situation. Therefore, what are presented here are only general categories of influence which can either inhibit or enhance the context of the interview. Listed separately only for the sake of clarity, these categories are very much interrelated to construct the situation. The first of these concerns to be addressed are the interpersonal skills of the interviewer.

> Essentially skilful interviewing is characterised by the
> extent to which the investigator can establish rapport, elicit
> information without excessively controlling the nature or
> the flow of that information, and record it accurately.
> (May, 1991: 195)

3.6.1 Stating the Obvious - Interpersonal Communication

The direct involvement of one person (interviewer) with another (interviewee) in an interview situation inevitably means that the presence of the researcher is likely to have some form of influence on the results. The fundamental questions regarding 'researcher effect' (Hitchcock and Hughes, 1989), surround the extent of the involvement of the interviewer and the nature of that involvement. The use of structured interviews was previously dismissed because of the extent and nature of the *a priori* assumptions which have taken place before the interview, as well as the almost completely rigid structure in which the interview data can ultimately exist, potentially destroying the meaning of those aspects which one wants to be discovered. However, even with the use of unstructured interviews, which facilitate greater freedom within the interview, they are not without their critics and potential biases. The main source of influence and bias are the personal characteristics of the interviewer.

Characteristics of the interviewer

The interviewer must have the skills and information to gain access to the respondents, gain their respect and understand the interview topic (Gorden, 1975; Swanson, 1986). Therefore, such factors as the age of the interviewer can influence those interactions with the interviewee. The question of age can be a double edged sword. The relatively young age of the interviewer facilitated a rapport with the young people who considered him, despite his role as interviewer, to be less of a threat. Alternatively, interaction with the parents could not be enhanced in the same way. Therefore, another important considerations became the attire of the interviewer which was appropriate to a given setting. While in a school context it was important to maintain a professional appearance as the representative of a higher education establishment and as a serious researcher within that setting. However, it was equally important that those young people being interviewed did not feel threatened and overpowered by this appearance. Therefore, a somewhat conservative, semi-formal attire was adopted in a school setting. McCracken (1988) emphasises the same necessary compromise in the presentation of self within the research settings:

> A certain formality in dress, demeanour and speech is
> useful because it helps the respondent cast the investigator
> in the role of a 'scientist,' someone who asks very personal
> questions out of not personal by professional curiosity.
> This formality also helps to reassure the respondent that the
> investigator can be trusted to maintain the confidentiality
> has been promised the respondent. A certain, balanced,

> informality is useful because it reassures the respondent
> that for all of his or her professional training, the
> investigator is not a cold, distant creature unacquainted
> with or indifferent to the complexities and difficulties of the
> respondent's lifeworld.
>
> (McCracken, 1988: 26)

Similarly, a situation arose with the transition from interviewing in the school to the home context. Prior to interviewing young people in the home, the only contact the researcher had with the parents was through correspondence by letter and by telephone.[12] Hence, there was a definite significance to that impression given to the parents at the first physical meeting, because it would potentially influence subsequent interviews in and access to the home situation.[13] Once again the attire remained conservative and semi-formal in order to exude a degree of professionalism which was acceptable without being too threatening. A measure of continuity was also facilitated by the young person, who had begun to build a relationship with the interviewer on the basis of this semi-formal attire and to change it could have influenced or altered their perspective. This is closely aligned to a second aspect of the researcher, their gender. This dimension was seen as equally influential as age, considering the lone male interviewer, and was clearly identified as such in correspondence with those parents who responded to the follow-up interviews. They were concerned about the location, as well as the time of the interview. Any problems with this were removed by allowing the parent and young person to select the venue and the time of the interview. The other acknowledged aspect to this gender dimension was the potential intimidation of having an interviewer of the opposite sex, when sensitive questions were being asked, such as those about their partners, drugs and sex.

Characteristics of the interviewee

Age, gender and ethnicity factors are similarly applicable to the interviewee as they were to the interviewer. All of these factors, individually and collectively, contribute to the interpretation the interviewee constructs of the interview content and their relationship with the interviewer. The contribution of each to this interrelationship is determined by the particular context and agents, however, what is clear is that the researcher needs to be aware of them.

---

[12] This contact was significant in itself, because the conversation over the phone was a contributory factor to the construction of the impression of the interviewer by the parents.

[13] By this time a rapport was being established with the young people and appearance was not as great an issue as in the first instance. However, it was considered sensible to maintain the same appearance so that the relationship did not alter because of it.

Within this project young people and their parents were interviewed, which created two categories of social relationships with which to contend and within which the author and the interview had to exist. As an interviewer, the author attempted to be respectful, attentive, sensitive, thoughtful, considerate, showing genuine interest.[14] It remained important to establish a situation where the interviewee felt they wanted to give the author an account of themselves, based on the fact that what they had to say was important and significant. Schatzman & Strauss (1973: 74) encapsulate this when stating, 'There is no more important tactic...than to communicate the idea that the informant's views are acceptable and important.' This emphasis has been made elsewhere (Stenhouse, 1984), but it does mean that the responses to the interview are neither 'right' or 'wrong.' In this project the researcher not only accepted this, but conveyed it to the interviewee. This issue is discussed in a later section on gaining access and transferring from the school to the home, as well as under the ethical considerations which were made.

The vast number of possible relationships that the interviewer can have with the interviewee are shaped by 'the knowledge each has of the other, the relative status and standing of the interviewer and subject, the outlooks of each and the degree of friendship between the two' (Hitchcock and Hughes, 1989: 91). What becomes important are the perceived identities of the interviewer, as well as the interviewee. The more unstructured the nature of the interview the greater the number of potential factors which are considered influential on the interviewer - interviewee relationship. Factors such as the social, cultural, institutional and linguistic factors are important as they construct the view of themselves and others involved in the interview, changing for each party as they do, with greater familiarity of each other. The background of these encounters and situation exist in each person's past and so are influential. However, they are temporally located within the interview context, which itself is a reaction to other social, cultural and political factors, and so have to be taken into account.

3.6.2 The Context

Regardless of the interview technique employed the interview remains an unusual situation in which the interviewee finds themselves. This unfamiliarity exists on a physical and emotional level, both of which influence the other. The physical

---

[14] The experiences of the author as a teacher aided in the achievement of such a situation. See Stenhouse, (1984) and Chenitz and Swanson (1986) for a further discussion of the most desirable qualities of an interviewer.

organisation of the context can create anxiety which further increases the interviewees sensitivity to their environment. Similarly the opposite can apply with a positive orientation to the context facilitating a more relaxed atmosphere. The importance of the physical context and the spatial relations on the social interactions constructing the interview have received a great deal of research attention, however, it has been dismissed by far too many researchers, especially those who inappropriately consider the interview to be context-free (Burgess, 1988). The placement of the tape recorder in relation to the interviewee and the interviewer is crucial to the construction of a positive interview situation. To place it too close or to introduce it in an inappropriate manner may intimidate the interviewee creating a poor interview situation.[15]

3.6.3 Modes of Recording

In this project it was possible to tape-record all those interviews conducted with young people and their parents.[16] Therefore, a complete and accurate picture of all responses was available for interpretation and reinterpretation by the author and by others. This 'auditability' (May, 1991) of data was considered favourable as it removed any filtering effect on the data as a consequence of selective recall and summarisation by the interviewer. Coding of the transcripts provided not only accurate evidence for the interviewer to inspect and locate evidence within the research as a whole as well as in localised aspects of it, but allowed others to do the same so they could compare their own interpretations with those of the researcher.[17] As Sparkes (1987:99) puts it, '...it provides first order constructs from which second order constructs may be obtained and examined, which allows the adequacy of the researcher interpretation to be judged.' Patton (1990) supports the use of the tape-recorder referring to it as 'indispensable equipment' for the researcher. However, its acceptance is not unanimous amongst researchers. Lincoln and Guba (1985; 272) have emphasised that it should not be used 'unless there are legal or training reasons for doing so.' It is the author's opinion, even taking into account the potential bias that the presence of the tape recorder may have,[18] that its use was essential to the success of the data analysis and therefore the whole project.

---

[15] The preferred introduction of the dictaphone to the interviewee and its use in those interviews conducted in this project are outlined in the protocol discussed later in this chapter and displayed in Appendix F & G.

[16] This is not always an appropriate approach to take, since the setting as well as the extreme sensitivity of the research question can make it inappropriate.

[17] The organisation of the data and its coding is discussed in detail under section 3.8 of this chapter and chapter 4 respectively.

[18] The presence of the tape recorder was minimal. It was placed between the interviewee and the interviewer and was the same size as a personal audio cassette. The operation of the device was minimal with one switch operating the record which meant minimal disruption to the interview situation. In collaboration with the sympathetic approach of the interviewer and the sensitive wording

In addition to the use of a dictaphone to record all the verbal interactions, an interview diary was kept to record non-verbal cues such as the particular facial expressions of the interviewee relative to certain aspects, the organisation of the interview situation, comments on the nature of the home environment the space made available for what activities, as well as the display of awards and trophies. In addition any feelings the interviewer had during or after the interview had taken place were recorded. It was frequently the case that incorporated into the interview diary were summaries of those verbal interactions which took place after the dictaphone had been switched off. Another informal discussion between the interviewee and interviewer frequently began again after the conclusion of the formal interview situation when it would have been inappropriate to the fluency of the interaction, and self-consciousness of the interviewee, to turn the tape recorder back on again. A further notebook was kept which consisted of general notes regarding thoughts and comments associated with every aspect of the research.

3.7 Interview Schedule and Protocols

Multiple interviews conducted with the same sample of young people were the principal indepth source of data. The first interview incorporated a review of each young person's biographical background and interests. In addition to these, general questions were asked about their perceptions of self and other behaviour. The nature of these initial questions were determined by a pilot group interview conducted with a sample of young people of the same age range. The construction of broad categories to initiate the interviews with these young people should not be considered as constraining, it facilitated the opposite situation. As a consequence of these questions and the foundation it created, additional questions were formulated in response to the issues raised by the interviewee rather than the interviewer's preconceived set of *a priori* assumptions. The general questions asked in each phase of interviewing are presented in Appendix E.

The interview schedule of this project will now be described along with a discussion the issues of gaining sufficient access to the research population in two different settings and the ethos consuming the nature of the interviews as determined by the general interview protocols employed.

---

of the introduction, it proved to be only an initial distraction, which was soon ignored as the interview progressed. Even when a situation such as the end of one side of the cassette was reached there was minimal interruption to the interview. In fact it usually offered a suitable break within the interview (which would be 45 minutes long at this point) for the interviewee to stop talking for a moment.

3.7.1 Gaining Access

Gaining adequate and consistent access to the sample population is a major concern in any research project. Those young people selected in this project were initially contacted and interviewed in a school setting as part of a previous research project. This had certain positive and negative implications associated with it. The author was involved in this prior study to establish the physical activity levels of young people (Cale, 1993), and as such was able to become familiar with some of the sample of over 200 young people as they identified those among them who were physically extremely active and inactive. While prior contact was positive, in that it sensitised the researcher to many issues and improved their interviewing skills, it did mean that the relationship with some of the children was based on a different research agenda and had begun sooner than those who the researcher had not been in contact with. As a consequence this may have influenced future interactions in a different manner to that of the others. However, in future interviews there were no negatively oriented or antagonistic relationships between the interviewer and any of the interviewees, especially once outside the school when the second round of interviewing took place in the home. Contributing to this, in addition to the sensitive approach of the interviewer previously outlined, was the fact that the young people and their parents were consistently given the choice to drop-out from the research interviews.[19] Therefore, everyone who was involved at any stage remained motivated to do so.

The interviewees selected for interviews in this project consisted of the very active and very inactive young people identified from the initial research project (Cale, 1993).[20] These sections of this population were selected for further interview on the basis that they would exhibit extreme positions and create a more obvious contrast to each other, which potentially could be more productive in the identification and analysis of the processes and procedures associated with their involvement in physical activity.

Figure 3.1 illustrates the interview schedule and participation analysis. This figure is organised to progressively identify the 'respondents' (on the right side) and 'non-respondents' (on the left side) throughout the interview schedule and chronologically depicted from top to bottom. The three tables located on the right side of Figure 3.1,

---

[19] The research outline shows the different stages of contact and the possible points at which permission was gained from various agents to interview. At each of these points there was the option to drop-out of the research.

[20] Appendix I identifies the classification of intensity and the kind of activity associated with each.

NON-PARTICIPANTS AND NON-REPSONDENTS
(n)

PARTICIPANTS
(n)

Questionnaires administered to 250 children (Yr7 & Yr 9) on four separate occassions

52 children from 14 schools categorised as high activity or low activity according to their level of energy expenditure recorded in the purposely constructed questionnaire

	YEAR 8		YEAR 10	
	HIGH ACTIVITY (HA)	LOW ACTIVITY (LA)	HIGH ACTIVITY (HA)	LOW ACTIVITY (LA)
Boys	10	5	12	3
Girls	1	10	2	9

Letters sent to each of the schools to arrange permission to continue research on the individuls selected

2 children moved away from the region

3 schools denied further access to children

11 schools agreed to continued access to children

(n 9)

(n 43)

Letters sent to 43 Parents via the school (School given letters to give to the children so they could take them home and give to their parent(s)/guardian(s).)

6 parents refused further interviews

No response from 8 parents.

29 parents agreed to further interviews with their children

Follow-up letters sent via school.

5 parents refused further interviews

3 non-respondents

(n 14)

(n 29)

29 children interviewed at their school.

	YEAR 8		YEAR 10	
	HA	LA	HA	LA
Boys	5	3	8	1
Girls	0	8	2	2

Letters given to each child requesting an interview with their parent(s)/guardian(s) as well as follow-up interviews with their child.

2 parents refused

11 non-respondents

16 Parents agreed to be interviewed and allow further interviews with their child.

Follow-up letter sent via the school

	YEAR 8		YEAR 10	
	HA	LA	HA	LA
Boys	3	1	5	1
Girls	0	4	1	1

5 parents refused further interviews

6 non-respondents

(n 13)

(n 16)

16 interviews conducted with parent(s)/guardian(s) at their homes

All 16 agreed to further interviews with their child

(n 16)

16 interviews conducted at their home with each child

(n 16)

16 interviews conducted at their home with each child

(n 16)

Figure 3.1 The Interview and Participation Analysis

42

at the beginning of each major phase of interviewing, identify the make-up of the interview population at that point with regards; age, sex and activity level classification. From a questionnaire administered to 250 young people 52 children were identified as belonging to the very high or very low activity level categories. On the basis of a positive response from headteachers to letters sent seeking permission for access to their schools (See Appendix A), subsequent letters were sent to parents via their child at school, with responses sent to the author (See Appendix B). At a certain date after the dispatch of follow-up letters to those non-respondents (See Appendix C), all acceptances were interviewed at school.[21] At this point each young person was given a letter for their parent(s)/guardian(s) requesting follow-up interviews with their child (See Appendix D). This was a crucial aspect in the interview schedule, for this was the point at which the interview situation would potentially change from the not entirely satisfactory school situation to the home situation. The situation was not always entirely satisfactory because of the physical context in which a lot of the interviews had to take place. While the author adopted the interview protocol identified in Appendix F, the context in which they were applied was variable. It ranged from the most desirable kind of situation which was in a quite room neutral of any connections with the school's senior management, to the least desirable kind, situated in the headteacher's office or the corridor. Any location within a school is liable to interruption be it a ringing telephone, a knock on the door or school noise in general. There was also the issue of the perceived power relations between the researcher and the young person within the school setting. Maykut and Morehouse (1994:98) note that 'an interviewer who communicates, through words and behaviours, that the interviewee is a *collaborator* in the research process begins to reduce the power differential between the two.'[22] Even so there remained unresolved something of an unequal status issue within the school context, which detracted from a truly open nature to the social interaction of the interview in that context. However, this was clearly resolved when the young person was in a setting more favourable to them i.e. when it was conducted in their home. As Mishler (1986; 118) in Maykut and Morehouse, 1994) has commented that a context in which the interviewee-interviewer relationship is collaborative they can work towards the construction of 'coherent and reasonable worlds of meaning and to make sense of their experiences.'

---

[21] It was important to wait for all responses up to a given date because young people from the same school were interviewed on one or at most two occasions. This was purposefully arranged in order to make the organisation for the school as convenient as possible. The author had to ensure that all those young people from the school who were asked to take part had responded to avoid continually returning to the school and interrupting their organisation in order to interview them, and in the process eroding the good nature and co-operation of the school.

[22] The interview protocol to described later in this chapter, emphasises a sympathetic and caring approach to its ethos which was extended throughout the whole of each interview conducted.

3.7.2 Transferring from School to Home

Once the young person was interviewed at school, all parents were given a choice of venue in which to continue the interviews, this included the school if that was most acceptable to them. However, all the parents stipulated their home as the preferred place of interview. This was the most desirable outcome from the author's point of view because it allowed greater access to the young person, as well as being able to investigate and establish their local environment, as well as the attitude and perspective of their parents. Parents were asked the same questions as their child, as well as additional more focused ones constructed from evidence from the interviews conducted at school with their son/daughter. This not only allowed for a comparative check on what the young person had been telling the interviewer, it also highlighted parental awareness and their interpretation of the situation, which enhanced the overall perspective of the research. Once access had been granted by all the remaining parents and a rapport established with each of them, it became much easier and straight forward to gain access to each young person on a basis which could only involve one child at a time, rather than having to interview all the other children in the same school. Therefore, on the basis of independent telephone negotiation of dates and times most convenient with the parent for an interview at home with their child, a further two interviews were conducted with each of the young people. These interviews were conducted in phases. A phase consisted of a broad time scale of approximately a month during which time analysis took place to inform interviews. However, the majority of analysis took place after one phase and before the next, this whole process taking place over a 16 month period.[23] The time span of the interviews may be considered a potential weakness, in that greater variation can occur over time. However, the author interpreted this as a strength, because it allowed differences to present themselves over time and enable the construction of a more dense grounded theory. As the transcriptions to the interviews were completed, they could be analysed. On the basis of this analysis future interviews were informed and the progressive movement from unstructured to more focused interviews began.

---

[23] There was an intentional delay after the previous research project and before re-contacting those schools to be involved in this project. This was due to the belief that having just finished involvement in one project to move straight into another would be considered too much of a burden by the school and so further involvement declined.

3.7.3 Protocols

The responsibility for establishing and maintaining a positive interview climate rests with the interviewer (Maykut and Morehouse, 1994: 98). As Borg and Gall (1983), as well as the author's own teaching experience have identified, great care needs to be taken over initial contact with young people. Consequently, a protocol was constructed for use in organising the interviews with the young person and their parents. The definition of protocol writing offered by Van Manen (1990: 63) is 'the generating of original texts on which the researcher can work,' which reflects the basis for the interaction which these general protocols can offer (see Appendix F & G). They can in no way address all those potential social interactions within the interview context. However, the manner and the ethos of the approach are an attempt to infiltrate and consequently influence all interactions. At all times the interviewer attempted to remain consistent and refrain from hinting to the young person, be it by verbal (tone of voice, specificity of comment, pace of speech, volume of speech) or non-verbal (body position, movement of the head and hands) cues regarding their responses to any of the questions. This was difficult when trying to empathise with the young people as well as probing them to encourage the interviewee to explain and tell more. In order to facilitate both of these desires the author adopted forms of probing suggested by Gorden (1975) and Schatzman and Strauss (1973). Gorden identified the silent[24] and the neutral probe[25], where as Schatzman and Strauss (1973: 73) elaborate on these by stating four types of probes; 'chronology (...and then?; What was that?), detail (Tell me more about that; That's very interesting), clarification (I don't quite understand?; But you said earlier...) and explanation (Why?; How come?).' Through the use of these probing techniques, allied to the extensive previous experience of the researcher interviewing people of all ages in a variety of situations, the neutrality of the interviewer can be considered to have remained consistent.[26] It is becoming clear, as Sparkes (1987) emphasises, that the researcher in the interview situation is trying to achieve a passive neutrality. However, such a position does not mean intellectual inactivity on the part of that researcher. They are in actual fact continually listening and reflecting on what is being said to facilitate all aspects of the grounded theory analysis (theoretical sampling).

---

[24] The silent probe refers to the pausing and waiting for the interviewee to say things and elaborate on them.

[25] The neutral probe is one which shows the interviewee that they have been heard e.g. by using; I see,...ummm,....hummm, and the like.

[26] As Plummer (1983) suspects the skill of interviewing 'can only really be learnt through practice and personal mistake.' Such experience also enhances the probing techniques, for example they are less likely to interpret silence in the 'silence' technique as embarrassing, as a beginning interviewer might. However, there is then the question of the interviewee, who unaccustomed to being interviewed may find it embarrassing. The desired outcome would then be a continuation of their last response from the interviewer's point of view.

3.8 Management of the Data

The product of interviews conducted with young people and their parents, was the accumulation of masses of textual data. All of these interviews were transcribed entirely onto computer disc. This data progressively posed a formidable task for the author simply to organise it. In an attempt to assist in this process a computer software package called N.U.D.I.S.T.[27] was employed. The use of computer software in aiding qualitative analysis has been recognised as beneficial in the way it reduces certain laborious tasks (cutting, pasting and retrieval of transcripts), while others remain (coding of materials) (Bryman and Burgess, 1994). However, the software was intended to consume some, but certainly not all aspects of the analysis. The imagination of the researcher, is an essential component of the analysis and cannot be substituted by such software. It was the very fact that the software had the potential to redistribute the time of the researcher, taking it away from the mundane tasks associated with cutting and pasting and adding it to the imaginative processes of interpreting the data that was so attractive.

3.8.1 N.U.D.I.S.T.

N.U.D.I.S.T. is a software system for managing, organising and supporting research in 'qualitative data analysis' projects (Richards et al., 1992a). It has been designed to aid if not challenge the familiar setting eloquently described by Dey;

> Piles of papers spilling from the desk across the floor and strewn over every available surface: such is the archetypal image of the qualitative analyst at work. Of course, this shrewd paragon of academic virtue knows exactly where everything is an can always find a particular paper within moments: the supposed chaos is more apparent than real.
> (Dey, 1993: 74)

Grounded theory as a framework for the analysis of qualitative data is one which has been frequently cited in the development of computer software. Richards and Richards (1987) and Richards et al., (1992a) emphasise the way in which the development of N.U.D.I.S.T. 'supports grounded theory research'. The emphasis in N.U.D.I.S.T. is on analysis as a process of ongoing exploration of emerging ideas, which is comparable with grounded theory. However, as Bryman and Burgess (1994: 220) have recognised 'it is questionable whether it *(grounded theory)* is employed by researchers in its entirety.' This was not an issue for use of N.U.D.I.S.T. in this

---

[27] Non-Numerical Unstructured Data Indexing, Searching and Theorising.

project, as it was to be manipulated to suit the Helix Model anyway. Bryman and Burgess (1994) continue by exposing a two-fold influence of grounded theory on the development of computer software which emphasise its use. The first of these is that it 'has alerted qualitative researchers to the desirability of extracting concepts and theory out of data' (p220). Secondly, 'grounded theory has informed in general terms, aspects of the analysis of qualitative data, including coding, and the use of different types of codes and their role in concept creation' (p220). As such N.U.D.I.S.T. appeared to be a substantial and flexible software tool that was disposed to many aspects of grounded theory. It could, therefore, incorporate the development of the grounded theory approach taking place within this project (i.e. the development of the Helix Model). On this basis the N.U.D.I.S.T. programme was acquired from Australia for use in this project.[28]

Analysis of interviews requires efficient management of the textual data collected. The N.U.D.I.S.T. package was employed in this project as an aid to achieving this. By creating a *Document System* and an *Indexing System* , N.U.D.I.S.T. is able to support processes such as the coding of textual evidence from a variety of sources, search for actual words or phrases in documents, allow notes and memos about emerging ideas to be located with them, and in the process remain flexible by being able to re-organise and extend the indexing system.

Document System

Any number of on-line textual documents (that is, files on the computer disc) and off-line documents (that is, documents that are not on disk, but existing outside the computer as books, notes, clippings) can be stored in the document system. These on-line and off-line documents are broken down into *text units*. These units can be lines of data, sentences, paragraphs or text segments of any size. Within this project the text units within each document were created on the basis of each interaction. That is each time one person made a comment, be it a word, sentence or paragraph in length this was identified as a text unit.[29] These units are important because they are

---

[28] At this point in time NUDIST was an uncommon software programme for use in analysing qualitative data in this country, unlike other computer software such as Ethnograph and Hypercard. However, on the basis of the close associations with grounded theory methodology the decision was made to purchase it from Australia. Unfortunately, other than the User Manual , Reference Manual and occasional newsletter, there was no other advice or guidance for the author to follow at the time it was required (NUDIST workshops are now coming on-line around the country). This proved to be an important oversight, and a problem which contributed to what the author perceived as a considerable deficit in its user friendliness, and ultimately limiting its use in the project.

[29] It is important to note that when the interviews were being transcribed they had to be done without any returns other than at the end of the interaction. This is because NUDIST when creating the text

referred to in all of the N.U.D.I.S.T.'s operations. Each text unit is given a number to locate it by.

The document system allows access to the data to *study* and *browse* the on-line and off-line documents, as well as any data in the programme about them. The user can text search the documents and associated data, to look for patterns of words or phrases. The data documents can be indexed with whatever categories the researcher desires. There is a header for each document, be it on- or off-line, which describes the contents of the document and which is presented each time the document is accessed or printed. In the case of this project the interview data had the name of the interviewee, the date of the interview, the age of the child, their activity level and whether they were young person or parent.

Index System

The index system stores references to ideas and concepts and facts that arise in the project relative to the text units in the on-line and off-line texts that identify those concepts (*index categories*). There is no limit to the number of *index categories* or the number of *index references* within them, which can be made relative to the text units of each document. *Background indexing* , where unlimited information about an individual document can be stored, means that the information about the interviewee could be stored in it. New categories can be built out of old ones, storing and exploring the references arising from any retrieval. The fundamental components of N.U.D.I.S.T. have been presented here, however, there are many more sophisticated aspects to it.[30]

Limitations

Simply put, N.U.D.I.S.T. can be as sophisticated as the user desires for their analysis. However, the author of this project did not find the 2.3 stand alone version of N.U.D.I.S.T. for use on a Macintosh computer to be particularly user friendly. In fact it was the opposite. Its original development as PC software did not translate well onto the Macintosh.[31] N.U.D.I.S.T. was, however, extremely useful in this project as

---

units uses them to identify the length of the text unit. When the data is entered into the NUDIST programme it must be in an ASCII format to be identified.

[30] See Richards et al., (1992a; 1992b) for a more detailed account of N.U.D.I.S.T. and its sophisticated components and elaborate application.

[31] There are alternative software packages for analysis of unstructured textual data, and perhaps the use of one of these may have been more advisable given hind sight. For excellent up-to-date reviews of computer software and the use of computers in qualitative research see Dey (1993) and Richards & Richards (1994).

a means to hold the primary textual data and sort it out into textual units, i.e. use it as a basic code-and-retrieve package. As Richards and Richards (1994) acknowledges this is one option open to the researcher using N.U.D.I.S.T., the important thing being that they have a choice to make.

> Artificial intelligence research has thus contributed to qualitative analysis powerful techniques for managing not only documents, but also concepts, and for constructing and expressing theories. Many researchers may of course never want these features, and will use computers for enhanced code-and-retrieve for collecting related passages for their contemplation. One needs indeed to avoid the danger that the style of the software one uses can coerce a project along a particular direction.
>
> (Richards and Richards, 1994: 460)

For the author, N.U.D.I.S.T. was not as useful as it was anticipated to be. Many of the initially compelling reasons for its adoption (speed and efficiency of data recovery and comparison of topics) soon became diluted and eventually redundant, as confusion over its operation increased. On this basis, the building of theory was conducted outside of the N.U.D.I.S.T. software rather than within it, as was initially intended. In order to do this extensive use of diagrams and a card indexing system was developed which involved the manual rather than computerised breakdown of the data and employing the numbered text units for each interview which became invaluable when coding. This entailed considerably more listening to tapes and shuffling of papers to generate the familiarity with the textual data that was necessary to make the process of analysis achievable above a snails pace. Unlike the software package which would have made all the connections for the author once they had identified the *node address* of a numbered *node* and given them *node titles*,[32] The author only used the *text units*.[33] These were employed to construct addresses and titles using file cards, which were cross-referenced with diagrams developing the hierarchical nature of the interrelationship between categories and concepts.

---

[32] One central feature of N.U.D.I.S.T.'s index system, is that it permits the user to organise index categories into 'trees' of categories, sub-categories, sub-sub-categories and so forth. The points at the ends and junctions of the trees are called 'nodes'. Nodes can, therefore, be linked hierarchically by the user to construct index trees. The place of these nodes in the N.U.D.I.S.T. programme can be identified in two ways. The first is a node numbering system that defines the place, or 'node address' of the numbered node, and a system of 'node titles' by which the node is described. The node title of the top level node (root node) in the index tree corresponds to a category in the Helix Model.

[33] All interview texts were divided up by N.U.D.I.S.T. into a series of selected units called 'text units'. These are numbered starting at one and displayed on the hard copy of the N.U.D.I.S.T. output to the right of the last line of the text unit. The size of the text units can be from a single word to a whole document. In this project the text units were the length of each interaction between the interviewer and interviewee. Using a coding system the author was able to identify the stage of the interview (1,2, or 3) or a P for the parental interview, the interviewee (a letter of the alphabet), and the text unit of the interview (a number) to locate relevant data e.g. 1/C/336 which depicts a first round interview with interviewee C and the text unit 336 in that interview.

3.9 Ethical Considerations

First of all the researcher has to decide if it is ethical to conduct the research in the first place. The ethical issues connected to interviewing cluster around the need to balance the potential risks to the informant with the benefits of discovery. This is an ever evolving and changing situation. Therefore, compromise and negotiation are key processes, with researchers attempting to come to terms with the aforementioned dilemma by ensuring confidentiality, anonymity and the use of pseudonyms , both for the sake of the interviewee and the interviewer (Burgess, 1985b; Burgess, 1988). McCracken (1988:69) presents a standard ethics protocol addressing these issues in an interview (See Appendix H).

> Since interviewing is essentially a process of human interaction, all of the potential risks of interaction, such as embarrassment, anger, violation of privacy, misunderstandings, and conflicts in opinions and values are likely to arise at some point in a research project.
> (May, 1991; 199)

Woods (1992:380) elaborates on this by establishing that within the interview there is a mutual set-up of 'an interpretive and moral frame that rests on a certain code of conduct involving certain mutual expectations.' Put another way, the social interaction of the interview is bound-up with rules, most of which are implicit and evolve over time.

> The other's behaviour towards you as researcher... rests on the perception of who and what you are, why and for whom you are doing the research, what your interests are, your view of them, and your relationships with them and others.
> (Woods, 1992: 380)

General ethical parameters, as Woods (1992) notes, are worked out in codes of professional ethics applicable to the research community (and represented by the 'me' of the researcher). There are many specific instances which require individual adaptations, all of which depend on the construction of self.[34]

> Ultimately, decisions involved in conducting qualitative research interviews and interpreting the subsequent data must be handled according to the individual investigator's

---

[34] As the research project evolves the researcher's comprehension of self becomes more sophisticated, as they discover equally as much about their own assumptions, beliefs, abilities and aspirations, as they do about those they interview.

<div align="center">(May, 1991: 200)</div>

Anonymity and the use of pseudonyms are the usual guarantees researchers offer to their subjects in order to obtain their co-operation in qualitative research projects (Phtiaka, 1994). The application of this arrangement, however, varies on two levels. The first, which retains its credibility, corresponds to that dissemination of information to a large general audience, where the individuals involved in the research cannot be identified. However, the second level, corresponding to the dissemination of the research to those settings in which the research had been carried out, looses its credibility as the guarantees previously made become useless because of the ease of identification. Within this project interviewees received summary reports of the findings, in which they could readily identify themselves in it. However, there was negligible interaction between each of the young people interviewed outside of the research context, so it did not create any obvious comparisons outside of the home setting which may have compromised the anonymity and confidentiality promised to each interviewee. But, within the family, that is between the parent(s) and the son/daughter, there is greater potential for a dilution of the confidentiality and anonymity offered to each of them because of their familiarity with the research.[35] One has to ask what actually constitutes confidentiality? Does it refer to everything which is said or does it mean that names should not be used or just changed, or should it be kept from certain people but not others? In this project names have not been used and it should not be kept from anyone, especially not those involved in the project.

3.10 Summary

Even with movement along a continuum of variable structure from rigidly structured to unstructured interviews and the variations which were adopted at appropriate stages and nature of the analytical process, it was predominantly unstructured and semi-structured interviews that were employed in this project to help explain the patterns of behaviour at higher level of abstraction. The discussion over the degree of structure associated with each of the three main categories of interview highlighted, with greater structure implying a more positivistic stance to the philosophical underpinnings and assumptions that were being made regarding the conception of the

---

[35] See Larossa & Gelles (1981) who offer a more detailed account of a variety of the ethical dilemmas in family research.

interview, emphasised that all contribute to reinforce the selection of the interview technique in this project with it location in the interpretive paradigm.

The demands for consistency and flexibility in data collection are clearly important to inform the analysis regardless of the number of researchers involved in any given project. Conventional interpretations of validity and reliability associated with the positivistic paradigm were inappropriate relative to this project and its conception of the interview as an encounter sharing many of the features of every day life. The adoption of this concept challenges the notion of validity and reliability by suggesting that they are redundant because this view considers the accounts of interviewees to be 'real' within the context in which they have been gathered, rather than associated with the 'truth' of the content of the interview. On the basis of this, the interviewer retains a paramount importance as they contribute, along with the interviewee, to the construction of the social situational circumstances which are 'real'.

The interview involves a complex set of social interactions which cannot be underestimated or dismissed. There are a myriad of factors contributing to this complexity, however, they were summarised within three broad categories; interviewer characteristics, interviewee characteristics and the context. These categories may be addressed separately, but their manifestation is a consequence of this interrelationship. The more unstructured the nature of the interview, the greater the number of potential factors which were considered influential on the interviewer-interviewee relationship and the resulting data.

Management of the immense amount of unstructured textual data was a significant task regarding not only its organisation, but also its analysis. To assist in both of these processes N.U.D.I.S.T. software was employed. The user friendliness of such a tool was emphasised as a crucial aspect to capitalising on its compelling qualities of speed and efficiency of data management and analysis. Evolving ethical considerations were underpinned by compromise and negotiation, closely allied to the conceptions of the interview. The interaction between interviewer and interviewee contributed to the construction of the nature of the social interactional context of the interview along with the subsequent use of the resulting data.

CHAPTER 4

GROUNDED THEORY: THE FRAMEWORK FOR ENQUIRY

4.1 Introduction

The depth of understanding required by the researcher concerning the configuration of any research methodology they adopt is a rudimentary prerequisite. In the view of Strauss and Corbin (1990; 1994), grounded theory has suffered from misinterpretation and has subsequently been misused by many researchers.[1] The following interpretation of grounded theory methodology intends to clarify its interpretation by offering a sequential model, which was developed for this research, called the 'Helix Model'. One of the purposes of this research was to develop such a model to act as the basis for the conceptualisation and description of the interrelated processes involved in grounded theory, by describing and interpreting its sections.

4.2 The Discovery of Theory from Data

Glaser and Strauss (1967) distinguish their theory from that of others by highlighting the evolutionary nature of the research process through the identification of a set of 'interpreted' procedural steps, rather than the verification of a preconceived theory.

> One does not begin with preconceived ideas or extant theory
> and then force them on data for the purpose of verifying
> them or rearranging them into a corrected grounded theory.
> (Glaser, 1992:15)

Their claim is that data shapes the research process and its product in an innovative way. This allows data that is grounded to be identified, discarded, clarified and elaborated upon (relative to that situation) through simultaneous data collection and analysis. As a result, it differs from those theoretical frameworks which are developed deductively, evolved prior to or in isolation from engagement in the field. From the accumulation of data the researcher develops or 'discovers' the grounded theory (Martin and Turner, 1986: 143). One starts with an area of

---

[1] The term grounded theory has two potential meanings associated with Glaser and Strauss's (1967) work. The first is the notion of grounding 'theory' in accounts, experiences and contexts. Other researchers, have therefore used the term to describe their research as relating to the area under investigation and consequently the research should be held in greater regard. The second, describes method. Method employed to systematically analyse data.

investigation and begins to evolve an appropriate theory from the relevant data specific to the situation under investigation. Thus a grounded theory is;

> ...one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove it. Rather one begins with an area of study and what is relevant to that area is allowed to emerge.
>
> (Strauss and Corbin, 1990: 23)

The analytic procedures associated with this process are;

> (1) Build rather than only test theory.
> (2) Give the research process the rigour necessary to make the theory 'good' science.
> (3) Help the analyst to break through the biases and assumptions brought to, and that can develop during, the research process.
> (4) Provide the grounding, build the density, and develop the sensitivity and integration needed to generate a rich, tightly woven, explanatory theory that closely approximates the reality it represents.'
>
> (Strauss and Corbin, 1990: 57)

The novelty of grounded theory exists not in the mode of the investigation associated with it, but as Turner (1983) points out, in the **manner** in which the information is collected and analysed. This theme is developed further when Martin and Turner (1986) use, quite appropriately, the phrase 'grounded theory *craft*.'. This is why it is necessary to emphasise the logical and informed application of its constitutive elements (See Figure 4.1). The framework of data collection and analysis is systematic, however, within it there is flexibility which increases proportionally to the researcher's understanding and familiarity with the methodology and the research setting.

4.3 The Helix Model

The Helix Model was created by the author to illustrate a systematic framework to grounded theory analysis. The path a grounded theorist is likely to take through their initial analysis of the data is illustrated by the Helix Model (See Figure 4.1). It reflects an isolated 'portion' of the theoretical framework which generates theory from grounded data.

THEORETICAL SAMPLING

OPEN SAMPLING

AS THE ANALYSIS DEVELOPS
AND THE THEORY EVOLVES,
IT INCREASES IN DENSITY
AS IT ULTIMATELY SPIRALS
TOWARDS THE FINAL
GROUNDED THEORY.

OPEN CODING

- LISTING RATHER
  THAN DIAGRAMS
- CODE NOTES
- THEORETICAL
  NOTES
- OPERATONAL
  NOTES

Properties & Dimensions

Concepts

Categories

THEORETICAL SAMPLING

RELATIONAL AND VARIATIONAL SAMPLING

AXIAL CODING

SELECTIVE CODING   E a b c d
                   C D
                 A B

- MEMOS
- CODE NOTES
- THEORETICAL
  NOTES
- OPERATIONAL
  NOTES
- DIAGRAMS

AXIAL CODING

a - Using paradigm model relating
    sub-categories to categories.
    PARADIGM MODEL 1-6
b - Verification of hypotheses against
    actual data.
c - Continued search for the properties
    of categories and sub-categories and
    dimensional locations of data.
d - The beginning of exploration
    of variation in phenomena.
(FOUR DISTINCT ANALYTICAL
STEPS ALMOST SIMULTANEOUS)

THEORETICAL SAMPLING

DISCRIMINATE SAMPLING

SELECTIVE CODING

A - Explication of the story line.

B - Relating the subsiduary category
    around the core category by means
    of the paradigm.

C - Relating categories at the
    dimensional level.

D - Validation of the Dimensional
    level.

E - Filling-in categories that may
    need further development and/or
    refinement.

- CODE NOTES
- MEMOS
- DIAGRAMS
- OPERATIONAL
  NOTES
- THEORETICAL
  NOTES

Figure 4.1   The Helix Model

55

There are no shortcuts in the analytic process, no quick
schemes or fast routes through the grounded theory analysis.
Each phase in the analysis builds to the next: each phase is
necessary to develop a grounded theory.

(Corbin, 1986: 119)

The Helix Model emphasises the systematic nature of grounded theory analysis
through coding, theoretical sampling and memos and diagrams. It spirals down
towards a focus which is 'the' grounded theory. As the researcher follows these
steps, the theory becomes more 'dense' which is indicated by the depth of the
spiral. There can be movement backwards and forwards within the helix to suit the
research situation and expertise of the researcher. This is a basic structure which is
open to change within a broader framework. However, change exists only within
the fundamental introductory framework identified by the Helix Model, because as
Corbin (1986) proposes there are no 'short cuts.'

Grounded theory is complex, and for that reason, as each section of the Helix
Model is introduced and described it is recommended that Figure 4.1 is used as a
constant reference point and guide to enhance conceptualisation and understanding
of grounded theory.

The notion of a helix is central to this interpretation of grounded theory.
Hutchinson (1988) states that the grounded theory method is circular in nature,
allowing the research to change focus and pursue leads revealed by the on-going
data analysis. The adoption of a spiral emphasises the notion of continually
revisiting aspects of the theory, while maintaining progression towards a more
dense end product i.e. the 'grounded' theory. However, as has been pointed out,
theory is a process, an 'ever developing entity, not a perfected product' (Glaser and
Strauss, 1967). This is reinforced by Chenitz and Swanson (1986) when they
identify the fact that the processes of grounded theory research occur
simultaneously rather than in a linear fashion. The coding, sampling and memoing,
and diagramming sections of the Helix Model developed from Strauss and Corbin's
work, require greater description. However, it is necessary to discuss first
'theoretical sensitivity.'

4.4 Theoretical Sensitivity

The term 'theoretical sensitivity' is one which is closely associated with grounded
theory (Glaser & Strauss, 1967; Glaser, 1978, 1992, 1993, 1994; Strauss, 1987;

Strauss & Corbin, 1990). Everyone not only brings to (due to the accumulation of their past experiences and attitudes), but generates within each research context (as a result of an increased awareness of relevant aspects), theoretical sensitivity. This is something that cannot and should not be ignored.

Theoretical sensitivity is defined as 'sensitive thinking about data in theoretical terms' (Strauss, 1987) or more recently as 'the personal quality of the researcher' (Strauss and Corbin, 1990). In their earlier work Glaser and Strauss (1967) emphasise that the researcher should be sufficiently theoretically sensitive to be able to conceptualise and formulate a theory as it emerges from the data. Due to the accumulation of past experiences people bring to each context theoretical sensitivity, which can increase with their exposure to the research setting. Interpersonal interaction is an essential feature of these experiences, therefore, the researcher must not only observe the behaviour of their subjects, but reflect critically on themselves. This necessitates awareness of one's own preconceptions, which Hutchinson (1988) refers to as 'bracketing'. However, the researcher needs to approach the '...research setting with as few predetermined ideas as possible - especially logically deducted, a priori hypothesis' (Glaser, 1978). It would be unrealistic to expect these preconceptions, regardless of how careful the researcher was, to be completely abandoned when entering a research project. Martin and Turner (1986) agree with this;

> Preconceptions cannot, of course, be wholly abandoned,
> and we do not suggest that they should be.
> (Martin & Turner 1986: 142)

The expectation that one enters the field with the mind as a kind of *tabula rasa* has received justified criticism from authors such as Hammersley, (1989, 1992), Hammersley and Atkinson (1983), Sparkes (1987) and Dey (1993).[2] They ask if it is realistic to concentrate solely on an area of research without contaminating thought with pre-existing concepts (prior to the emergence of 'grounded' categories), especially in an area which may already have received a lot of research attention. Glaser and Strauss (1967), however, do acknowledge the construction of theory on existing knowledge which already has claims to being well grounded (LeCompte et al, 1992). Furthermore, Glaser (1978); Strauss (1987) and Strauss and Corbin (1990) have evolved and modified their position in succeeding publications, so that in the latter texts there is a positive emphasis on the

---

[2] This is discussed in more detail along with other criticisms later in the chapter.

researcher's familiarity with the grounded literature associated with the research area.

4.5 The Heart of the Matter - Coding

Assuming that the experiences which construct each person's reality have patterns, grounded theory makes sense of them. Data analysis is the process of bringing order, structure and meaning to the mass of collected data (Marshall & Rossman, 1989: 112). When one considers the complexities of qualitative data i.e. the alternating nature of data collection and analysis with their close interrelationship, such a statement is by no means straightforward.

The analysis portion of grounded theory is referred to as 'coding'. The focus of analysis is *not* merely the collecting or ordering of '...a mass of data, but on *organising many ideas*, which have emerged from analysis of data' (Strauss, 1978: 23). This represents the operation by which data are broken down, conceptualised and put back together in new ways (Strauss & Corbin, 1990: 57). This is developed by Charmaz (1983: 112) when she comments on the way in which codes provide the pivotal link between the data collection and its conceptual rendering. Thus coding becomes the fundamental means of developing the analysis.

4.5.1 Open Coding

Once the researcher has collected their initial set of data, they embark on open coding which is the initial coding that takes place in the research project. During this process Strauss suggests that, 'the point is not so much in the document as in the relationship between it, the inquiring mind and the training of the researcher who vigorously and imaginatively engages in the open coding' (Strauss, 1978). The data that has already been gathered is then broken down, examined, compared, conceptualised and categorised. Glaser (1978) classifies open coding under the heading substantive coding [3], describing the process as 'running the data open.' He defines this as coding the data in every way possible in order to work towards the generation of an emerging set of categories and their properties.

Breaking down the data in order to conceptualise it refers to the process of taking an observation, a sentence or a paragraph and giving each of the individual events,

---

[3] That which conceptualises the empirical substance of the area of research, as opposed to theoretical coding i.e. that which conceptualises how the substantive codes may relate to each other as hypotheses to be integrated into the theory (Glaser, 1978: 56).

ideas and incidents that exist in it, a name that represents that phenomenon. Every incident is compared and contrasted with others as the conceptualising process develops. This allows the researcher to take similar phenomena and give them the same conceptual names. When 'labelling the phenomena' in this way (Strauss and Corbin, 1990), the researcher must endeavour to conceptualise the data. This is more than using the remnants of sentences that are being analysed, it requires conceptualisation. For example, rather than 'enjoys playing football on their own', 'singular participation' would be better. Due to the degree of abstraction of such a phrase, those instances when the child is involved in whatever physical activity on their own and where ever the venue may be, could be recorded under this heading. Strauss and Corbin (1990) refer to this grouping of concepts around particular phenomena as 'categorising'. Figure 4.2 illustrates the point that the degree of abstraction associated with the concepts is less than with the categories in which they are grouped.
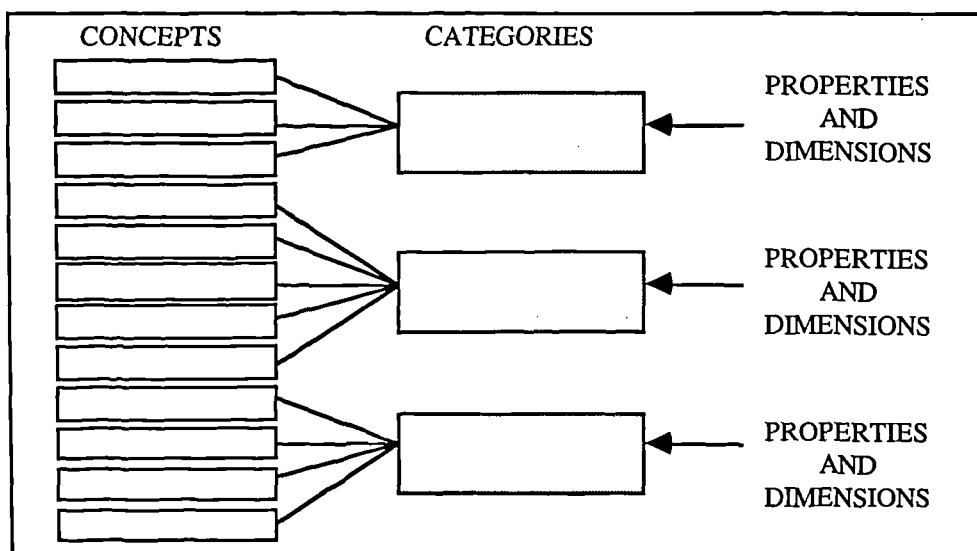
Figure 4.2 The Relationship Between Concepts, Categories and the Properties and Dimensions of Categories.

Properties and Dimensions of Categories

Having begun to identify concepts and then create categories in this open coding portion of the Helix Model, the next section of it deals with the properties and dimensions of the categories. Relationships between categories need to be discovered so that the researcher can move towards a single category. The basis on which this is done is the systematic development of their properties and

dimensions.[4] By considering a category such as 'physical activity', the following could be considered to be some of its 'general properties'; intensity, type, organisation, numbers, equipment.[5] Each of these general properties exists along a continuum (a dimensional continua), for example, intensity (high to low), type (individual or team), organisation (highly organised club competition to casual play in the garden), numbers (large groups to individual), equipment (extensive to non required). Having identified the dimensional continua many specific instances identified within a general property can exist at different points along it. This gives rise to the notion of a 'dimensional profile.' As Strauss and Corbin point out;

> Several of these profiles can be grouped to give you a
> *pattern*. The dimensional profile represents the specific
> properties of a phenomenon under a given set of conditions.
> (Strauss and Corbin, 1990: 70)

As can be seen in Figure 4.1 open sampling is conducted along side open coding.

Open Sampling

Consumed under the notion of theoretical sampling[6], open sampling maintains a high degree of flexibility while attempting to uncover as many potentially relevant categories (and their related properties and dimensions) as possible[7]. The 'openness' within this form of sampling is derived from the fact that the researcher gathers, from numerous sources, data which they feel will be most relevant to the phenomena they are investigating. The researcher must remain open to all possibilities at this stage because all the sources (places, people, circumstances) which yield the necessary evidence for concepts will not be fully appreciated.

---

[4]Properties are the characteristics or attributes of a category...dimensions represent locations of property along a continuum. The process of open coding stimulates the discovery of not only categories but also of their properties and dimensions (Strauss and Corbin, 1990: 69).

[5] General properties pertain to a category regardless of the situation in which the category is found (Strauss and Corbin, 1990: 70).

[6] Theoretical sampling is sampling on the basis of concepts that have proven theoretical relevance to the evolving theory. Proven theoretical relevance indicates that concepts are deemed to be significant because they are repeatedly present or notably absent when comparing incident after incident, and are of sufficient importance to be given the status of categories (Strauss and Corbin 1990: 176).

[7] There is a definite balance between consistency and discovery. That is, there is a balance between systematically gathering relevant data and the discovery of new categories, properties and dimensions.

Memos and Diagrams (the product of analysis) in Open Coding

The written forms of abstract thinking about data are known as memos. There can be virtually no limit to the kind of memos written in open coding. They can be as uncertain as the researcher likes i.e. the noting of first impressions and any other thoughts they have had. These should not be considered as 'the' answer, for if they were, there would be no need to do the research in the first place. In Figure 4.3, three kinds of memos are identified,[8] all of which can appear within the same memo. However, such a situation would diminish the potential value of each of them, because of the ambiguity it would create.

CODE NOTES → THEORETICAL NOTES → OPERATIONAL NOTES
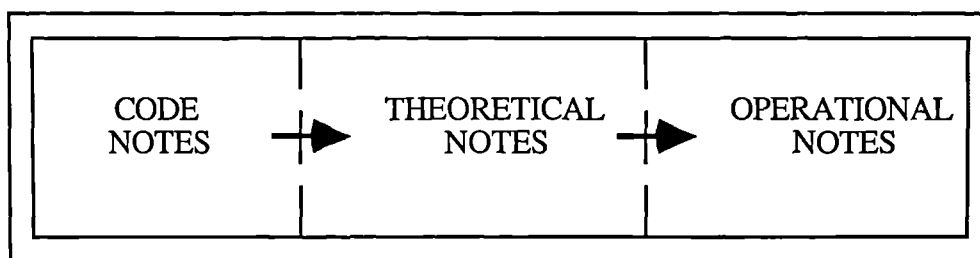
Figure 4.3 Memos in Open Coding

Diagrams are the visual representation of relationships between concepts. Two kinds of diagrams are employed in open coding; logic diagrams and integrative diagrams. These visually identify relationships between categories and the analytical thinking with conceptual linkages respectively. However, due to the limited number of relationships identified between concepts during this stage of analysis their is little to illustrate using the diagrams. Therefore, a list of the categories, their properties and dimensions is drawn to create the foundation for the logic diagrams that will be developed in axial coding.

Theoretical notes extend code notes. Even though they are provisional and in need of verification, these notes can increase the theoretical sensitivity of the researcher. They do this by making them ask more questions about the categories (their properties and dimensions) generated in the interview and/or observational data. Literary sources such as articles can be used to achieve the same results.

---

[8] Code notes - memos containing the actual products of the three types of coding, such as conceptual labels, paradigm features and indications of process.
Theoretical notes - theoretically sensitising and summarising memos. these contain the products of inductive or deductive thinking about relevant categories, their properties, dimensions, relationships, variations, processes, and conditional matrix.
Cperational notes - memos containing directions to yourself and team members regarding sampling, questions, possible comparisons, leads to follow up on, and so forth (Strauss and Corbin, 1990: 197).

Importantly, from theoretical notes the researcher can manoeuvre and direct further sampling. For example, having pursued certain questions in one interview the researcher can identify that which appears to be relevant to their work and worth further investigation. Operational notes direct questions and avenues of enquiry in future interviews, representing the point where theoretical notes lead to sampling notes.

Even though the procedures for open coding have been identified and made distinct from axial coding (and selective coding), in reality one alternates between these forms of coding when analysing data. The process of open coding and sampling could be perpetuated indefinitely, however, once the categories and sub-categories have been sufficiently reinforced by subsequent interview(s) and/or observational data the researcher will move into the axial coding phase. The Helix Model illustrates the four distinct analytical phases of coding that are conducted almost simultaneously.

4.5.2 Axial Coding

The procedures of axial coding enable the data to be 'put back together' in new ways after open coding and consists of four distinct analytical stages applied almost simultaneously. Once again this is conducted at the same time as sampling procedures (relational and variational sampling), and the development of memos and diagrams.

The Paradigm Model

The paradigm model illustrated in Figure 4.4, enables systematic thinking about the data, which generates more complex relationships between the subcategories and categories. The action/interactional strategies identified within the paradigm model allow the relevant specific aspects in the area of research to be identified thus enabling a more clear focus to be achieved. It also facilitates the aim of research using grounded theory to explain relationships rather than simply describe phenomenon.

By asking questions and making comparisons (i.e. those basic analytic procedures mentioned in open coding) links between categories and their development takes place. Within axial coding this process becomes much more complicated because there are four quite separate analytical steps conducted almost simultaneously as

illustrated in Figure 4.1. The whole process of relating sub-categories to categories in axial coding is one which requires complex inductive and deductive thinking, facilitated by asking questions and making comparisons.

A

CAUSAL CONDITIONS

Events, incidents, happenings that lead to the occurrence or development of a phenomenon.

B

PHENOMENON

The specification of a category. What is the data referring to? What is the action/interaction all about?

C

CONTEXT

The specific set of properties that pertain to a phenomenon; that is, the locations of events or incidents pertaining to the phenomenon along a dimensional range. Context represents the particular set of conditions within which the action/interactional strategies are taken.

D

INTERVENING CONDITIONS

The structural conditions bearing on action/interactional strategies that pertain to a phenomenon. They facilitate or constrain the strategies taken within a specific context.

E

ACTION/ INTERACTION STRATEGIES

Strategies devised to mangage, handle, carry out, respond to a phenomenon under a specific set of perceived conditions.

F

CONSEQUENCES

Outcomes or result of action and interaction.

(adapted from Strauss & Corbin, 1990)

Figure 4.4   The Paradigm Model

Relational and Variational Sampling

As shown in Figure 4.1 theoretical sampling during the second phase of the Helix Model takes the form of relational and variational sampling. Relational and variational sampling maximises differences at the dimensional level. The researcher has a choice of two approaches to achieve this aim as they sample on the basis of theoretically relevant concepts. Firstly, because of the limitations of time, access and availability, a highly systematic approach would need to be employed. This would involve a predetermined list of situations/people/documents to be visited. Secondly, the opposite situation may arise, where no such preconceived restrictions exist. This allows for a deliberate selection from a variety of sites, documents and/or people which are believed to be the most appropriate as the research

continues. Figure 4.5 illustrates not only the aim of this portion of sampling, but the two possible approaches that can be followed to achieve it.
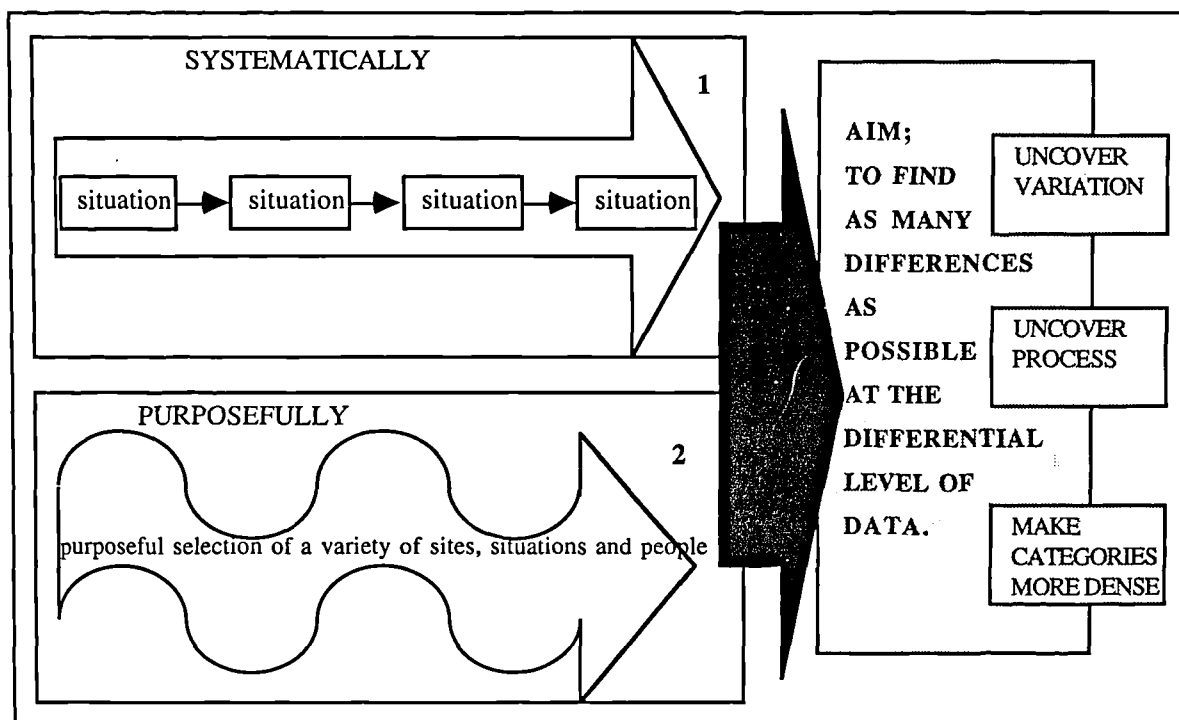
Figure 4.5 Two Approaches in Relational and Variational Sampling

Memos and Diagrams in Axial Coding

The verification of relationships between a category and its sub-categories promoted in axial coding is mirrored in the kind of memos used. They identify all the attempts made to associate each different aspect to the paradigm model. The sophistication of the code notes and theoretical notes increases as the theoretical sensitivity of the researcher develops. The subsequent directness and ability to focus on the most relevant context, people and places highlights this. Operational notes develop in much the same manner, suggesting particular categories to focus upon when conducting further sampling, or to investigate those hypotheses generated and in need of verification in future interviews. As with the memos, the diagrams used in axial coding start by being simplistic in nature i.e. in the form of a table of rows and columns of certain aspects, but they become much more complex over time.

4.5.3 Selective Coding

In the Helix Model selective coding follows axial coding, but they only really differ in terms of their more abstract level of analysis; axial coding is the foundation on

which selective coding takes place. It involves the selection of a core category and systematically relating it to other categories. Figure 4.1 illustrates how this involves the simultaneous use of five stages, together with discriminative sampling and associated memos and diagrams.

Integrating Categories

Strauss and Corbin (1990) suggest that there are systematic guidelines that can be used to achieve what is a difficult and complex part of the research; that is 'the final leap between creating a list of concepts and producing a theory.' The steps suggested are:

(i). Explication of a story line; - write thoughts down on paper
            - use an existing or create a new category
             which is abstract enough to consume all
             that which has been described in the story
             (this category is the core category)[9]
            - determine properties and dimensions of
             the core category.

(ii). Relating the subsidiary categories around the core category by means
   of the paradigm.

(iii). Relating categories at the dimensional level.

(iv). Validating these relationships against data.

(v). Filling-in categories that may need further development and/or
   refinement.

As indicated earlier in Figure 4.1, these steps occur at the same time, with movement back and forth between them.

(i) Explication of a story line.
Conceptualisation of a story line into a core category is difficult because commitment towards a particular story line is challenged by the wealth of data that the researcher is engrossed in. Everything may be considered important, in fact it should all be relevant data. However, it is a matter of selecting or generating the single phenomenon which stands out. What is required is a very general and somewhat conservative description of the story, guided by questions about the most obvious aspect of the research. Establishing the main problem and a descriptive

---

[9] The central phenomenon around which all the other categories are integrated (Strauss and Corbin, 1990: 116).

overview initiate movement towards greater conceptualisation i.e. the story line. Categories are now examined to see if a particular one can consume that which is described in the story. If a category exists that can already satisfy this, it can be classified as the 'core category' . However, if a category does not exist one has to be created that consumes all the other categories. It can be given any name, so long as it allows the central phenomenon described to conceptually fit the story it represents. Strauss and Corbin propose that:

> Once the properties of the core category are identified, the **next step is to relate the other categories to it,** thereby making them *subsidiary categories.*
> (Strauss and Corbin, 1990: 123)

(ii) Relating the subsidiary categories around the core category by means of the paradigm.

The existing categories are matched to relevant portion(s) of the paradigm, i.e. either to conditions, context, strategies or consequences. This may appear straight forward, however, those conditions which influence the action/interactional strategies ('intervening conditions') make it complicated. For example, an enthusiastic and physically talented girl wants to move from casual involvement in a particular sport to more regular participation at a club. The only club she can attend is in a neighbouring city an hour away. Not only does she have to take into account the distance and time to travel, but the mode and cost of transport she can use on a consistent basis. Therefore, some of the intervening conditions here would be distance, time and money.

These variables or intervening conditions are important because they justify an individual's rationale and its associated outcomes. Relating this rationale and its outcomes to other conditions will help to explain why one person makes certain choices whilst another does not. If it becomes too difficult to relate the categories, it may be that something is wrong with the logic of the story and it will need to be re-drafted.

(iii) Relating categories at the dimensional level.

During selective coding, the categories that were integrated in axial coding by identifying the matrix of conceptual relationships existing between them, are refined further through the juxtapositioning between asking questions, generating hypotheses and making comparisons as a result of the inductive and deductive thinking going on. This refinement is necessary to enable the theory to cover what

will occur in given instances within the research setting. Strauss and Corbin emphasise the importance of this;

> It is very important to identify these patterns and to group the
> data accordingly, because this is what gives the theory its
> specificity. One is then able to say: Under these conditions
> (listing them) this happens: whereas under these conditions
> this is what occurs.
>
> (Strauss and Corbin, 1990: 131)

By asking more questions and making further comparisons grouping is done along the dimensional ranges of their properties relative to the discovered patterns. If this occurs data can be related at the property and dimensional levels as well as at the broad conceptual level.

Strauss and Corbin (1990) suggest some ways in which these patterns might be discovered;

- they may simply emerge during analysis,
- knowing the properties of the central phenomenon various combinations can be deduced,
- fortuitously patterned differences may come across.

(iv) Validating the relationships against data.

The grounding of the theory is completed once it is validated against the data. This is achieved by drawing or writing memos which represent the theory, then writing statements about the relationships between categories in a variety of contexts which are validated against the data.

(v) Filling in categories that may need further development and/or refinement.

This is necessary in order to achieve *conceptual density* in the theory and to promote *conceptual specificity*. When considering the patterns that have been formulated in the analysis it may become apparent that one of the categories is poorly developed in comparison to others. If this is the case the researcher can go back to the research situation and collect evidence to 'fill-in' any gaps that exist in the theoretical framework.

Discriminate Sampling

The sampling that occurs in selective coding is known as discriminative sampling and it is used for verificational purposes.

> In discriminate sampling, a researcher chooses the sites,
> persons, and documents that will maximise opportunities for
> verifying the story line, relationships between categories,
> and for filling in poorly developed categories.
>
> (Strauss and Corbin, 1990: 187)

The result being that the researcher moves to investigate new people, sites, documents and/or revisit old ones where they suspect the necessary verificational data can be gathered. Something may be discovered which does not fit the story line and those relationships that have frequently been found. If this situation occurs those factors leading to the occurrence of such an instance must be uncovered to determine whether or not it is due to incorrect thinking or an instance of a variation.

Satisfying certain circumstances enables categories to be theoretically saturated[10] and so make the theory conceptually adequate. These circumstances are;

- When there is no more relevant data emerging or new data regarding a category.
- When each category has been linked with the paradigm model and each of its elements are catered for, as well as the variation and process.
- Relationships between categories are well established and validated.

Sampling continues until the researcher can theoretically saturate each category.

Memos and Diagrams

Memos at this stage of the analysis are complex, illustrating depth of thought that mirrors the evolving theory. Code notes in the context of selective coding relate mainly to the filling-in role i.e. filling-in those categories which are not sufficiently saturated.

Theoretical notes on the other hand are much more extensive during this period of the analysis. 'It is in the form of theoretical memos that we write the first descriptive rendition of what the research is all about.' (Strauss and Corbin, 1990) These memos enable the researcher to identify the core category and its host of sub-categories, as well as elaborate these relationships as hypotheses. The operational notes during this phase are very much more succinct. The exploration phase is now over, and it is a matter of validating and refining the theory.

---

[10] When additional analysis no longer contributes to discovering anything new about a category (Strauss, 1987: 21).

68

Diagrams also reflect complexity at this stage. The transference of this complexity from writing to an accurate, but concise, graphic format (a diagram) is difficult. However, the process of doing this aids the classification of many of the relationships between the core category and other categories. Hence, this diagram will not only clarify the theory to other people, but act as a guide to enable the researcher to keep the nature of the relationships clear when writing the theory. General reading of the memos leads to the writing of a descriptive story, which is translated (using the categories) into an analytical one.

In this analysis of grounded theory the components of Figure 4.1 have been outlined. However, the main portion of grounded theory methodology identified by the Helix Model needs to be put into the context of the complete fabric of a grounded theory methodology. This has been attempted in Figure 4.6. Filters identify the inverse relationship between any pre-existing biases and hypotheses of the researcher and the enhancement of theoretical sensitivity. In this context the filters represent the exclusion of as many unwanted biases as possible at various stages throughout the research project. As the researcher becomes more theoretically sensitive then the filter becomes finer as their awareness of the research situation and of biases develops. Even though Glaser (1978) uses the term 'filtered' in a different fashion, his interpretation of the issue is exactly the same as the author's, i.e. that the preconceived biases and hypotheses must be identified to their fullest extent from the start and revised throughout the research project, so as to prevent interference with an open-mindedness of attitude on the part of the researcher.

Compromise is essential, the researcher requires a grounded background knowledge and information in order to make initial judgements. However, they must at all times endeavour to maintain, as much as possible, an open mind to allow that which is relevant to their grounded data to emerge. This can then be used to contradict and enhance other concepts and categories.

The filter (as shown in Figure 4.6) becomes progressively more refined as the researcher collects and analyses more data (in conjunction with the experiences and technical literary knowledge they already bring to and develop along with the research project); and as they become progressively more aware of the relevant aspects of data.

The arrows linking each phase in Figure 4.6 are purposefully graduated to increase in size. These represent the development of theoretical sensitivity in the researcher

PHASE 3

THIRD PHASE
DATA COLLECTION

PHASE 2

SECOND PHASE
DATA COLLECTION

PHASE 1

INITIAL DATA
COLLECTION

THE
RESEARCH
PROBLEM
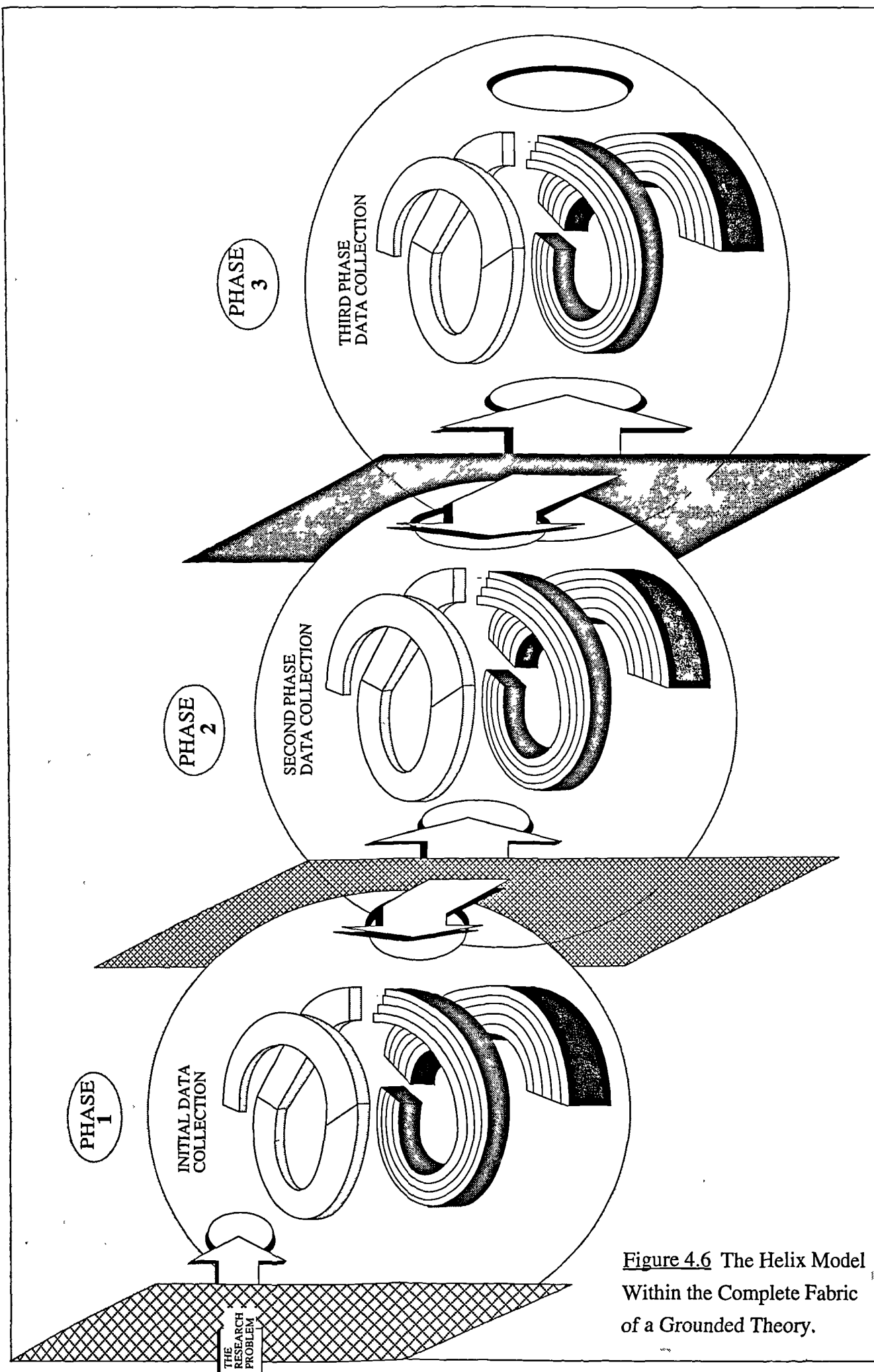
Figure 4.6 The Helix Model
Within the Complete Fabric
of a Grounded Theory.

throughout the research process. All of the phases exist within a spiral that consumes the whole process of a grounded theory. Each bubble encapsulates the spiralling phases of coding and sampling that take place in each of the interlocking phases of data collection and in each of the different portions of data analysed. It is important that the phases interlock, because it represents the point that, while a researcher is simultaneously collecting, coding and analysing particular data within one phase, the process is repeated with other areas/sets of data. The focus of further investigations and analysis of data is achieved as a result of the coding of the previous data. This will not only refine, reinforce or discard categories, but will cause new ones to be discovered. Within this continual process of discovery, reinforcement, refinement, and/or removal of concepts, there has to be movement towards new sources of data to facilitate the process. Equally important is the need to revisit previous data to verify the relevance of newly discovered concepts that have emerged from the coding of more recently gathered data. These concepts may not have been acknowledged during previous phases of coding, but are now seen to have relevance. Therefore, one must appreciate the notion of movement both ways in the spirals within each phase, between phases and within the main spiral of the whole theory. Each phase is by no means discrete from the others, they are interactive not only with the adjacent phase(s) but with any of the 'n' number of phases of data collection that are used in the research process. Figure 4.7 illustrates this complete relationship.
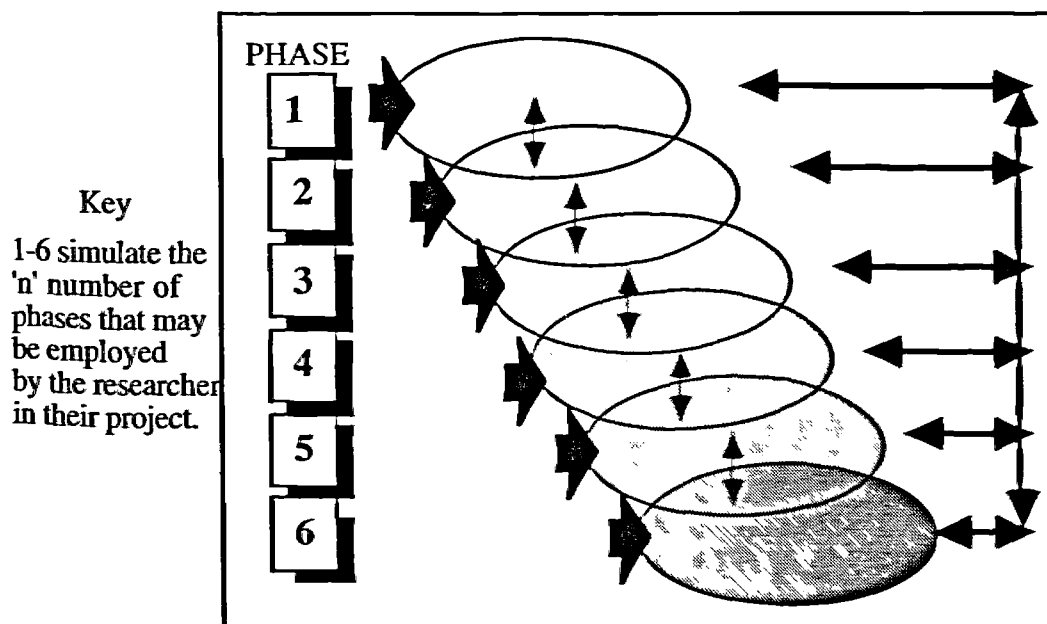
Figure 4.7 The Interrelated Nature of the Phases of Data Collection and Associated Coding.

4.6 Writing the Grounded Theory

> Writing a grounded thesis 'right' is, on the face of it, even
> more complicated than writing up the more usual types of
> qualitative research.
>
> (Strauss and Corbin, 1990: 233)

Even though 'writing' has been left late in this discussion, this certainly does not reflect its
position within the context of grounded theory methodology. Writing in grounded theory
is a continual process throughout the analysis i.e. coding, memos, field notes. However,
there comes a point when analytical writings need to be translated into a written form that
can be digested and understood by its designated audience.

> In this final stage grounded theory methodology, writing, is
> a 'write up' of piles of ideas form theoretical sorting.
>
> (Glaser, 1978: 128)

Charmaz (1990) develops this further when she comments '...writing and rewriting
actually become crucial phases of the analytic process.' Therefore, analysis never really
stops and it would be wrong to suggest that it did when one comes to write the final
document. 'With a grounded theory the outline for writing is simply an emergent product
of sorting of memos. Put another way, as memos sort themselves out, the outline for
writing emerges and the analyst just follows it' (Glaser, 1992: 113). Glaser previously
pointed out that:

> Since writing sums up all the preceding work, it cannot be
> left uncontrolled, perhaps to scuttle it. Rather writing must
> capture it.
>
> Glaser (1978: 128)

Numerous questions arise during the writing up phase such as; What is to be
communicated? What order should it take? and Who is to be its audience? Strauss and
Corbin (1990) suggest four things which writing a grounded theory text requires: (1) a
clear analytic story; (2) writing on a conceptual level, with description kept secondary; (3)
the clear specification of relationships among categories, with levels of conceptualisation
also kept clear; (4) the specification of variations and their relevant conditions,
consequences, and so forth, including the broader ones.

Stern (1980) identifies the fact that the written report for a grounded theory investigation
presents the substantive theory, sustained by supporting data from the investigation. The
audience to which the theory is being presented is also very important, because it will help
to determine its format. For example, when writing a 'thesis', something of a standardised

format is usually expected i.e. introduction, review of literature, methodology, analysis, discussion, conclusion/implications. This would make the third of the procedures suggested by Strauss and Corbin (1990) (clear specification of relationships among categories, with levels of conceptualisation also kept clear) much more difficult when writing up a grounded theory investigation.

> The research report gives a clear and precise picture of the
> theory, which is substantiated by the data and the existing
> relevant literature.
>
> (Stern, 1985: 159)

Some useful suggestions for a structure when writing up a grounded theory report have been made by a variety of authors, for example May (1986: 150) proposes:

> (1) Clear statement of the major research question and key
>   terms defined
> (2) Literature review section (presents the pertinent literature
>   in the area)
> (3) Methodology section (the process of grounded theory)
> (4) Findings Section (includes the presentation of the
>   theoretical scheme)
> (There is not usually a separate 'discussion section' as there
> is with most hypothetico-deductive studies because in the
> course of presenting the theoretical scheme, findings are
> usually presented in sufficient detail.)

May (1986) emphasises the need for an 'integrative outline'. This integrates all the major memos which show the theoretical scheme in skeleton form. While writing, the grounded theorist is continually going back to their memos and/or actual pages of data to give examples so they can write in depth.

Returning to the audience of the written theory, Strauss and Corbin (1990) suggest it will be those that comprise the research population. However, May (1986) suggests that it will be those who are unfamiliar with the field. It will be both, however, it is a source of potential confusion and misinterpretation. The language employed in the theory will be loaded with certain meanings and interpretations. It is, therefore, the unenviable task of the grounded theory writer to not only accommodate the contextual meaning in the form of terms (categories/concepts) for the researched audience, but to do so in a way that others outside of the context can appreciate their meanings, interpreting them in the way they were intended. There is a very delicately drawn line between 'coining a term and inventing jargon' (May, 1986).

There are other issues that need to be emphasised. What, from the enormous amount of data that has been generated by the grounded theorist, should be presented when writing it up? It should not be pure description, despite the fact that there is a significant quantity of quality descriptive data available to them.

> In strict terms the findings are the theory itself, i.e., a set of concepts and propositions which link them. To present the findings one must present the theoretical scheme.
> (May, 1986: 148)

There is a difference between writing grounded theory and writing pure description. The specific details of pure description may or may not be generalisable to a wider population. However, a grounded theory can always be applied to a more diverse population. So regardless of the 'too good to throw away' mentality that may accompany the use of purely descriptive data in weak grounded theory work, it should only be used selectively in order to substantiate the theory. The best way to learn to write a grounded theory is to read them (Glaser, 1978, 1992; May, 1986; Strauss, 1987). The more the researcher can read and appreciate the variation in grounded theory writing the greater is the likelihood that they will produce a quality grounded theory.

> Writing is a careful, systematic "construction job". It does not merely flow from a witty mind, no matter how much wit may help. Readers who wish to write grounded theory should look at several monographs to discover their little logics and their properties such experience gives an armamentarium of ideas on how to write a monograph effectively without committing the errors of colleagues.
> (Glaser, 1978: 130)

4.7 Comparing Interpretations of Grounded Theory

The dissemination of grounded theory methodology has predominantly taken place through methodological texts, rather than, as Stern (1994) would suggest, the eminently superior personal mentoring of the methodology to students. This has rendered many of the interpretations of grounded theory incomplete or unacceptable to a variety of people, as the translation of texts go unqualified by their authors. This all contributes to a confusing mass of ambiguity. What is astonishing with this situation is that the confusion and ambiguity has permeated down as far as the originators of the grounded theory methodology - Glaser and Strauss. Therefore, it is appropriate to involve comparisons between the terminology employed by a variety of authors to try and reduce this confusion. In addition, specifically Glaser's and Strauss's current writings will be explored to illustrate what appears to

be a heated debate and major schism between the two authors and their interpretations.

4.7.1 Ambiguity In Terminology

Although corresponding accounts of grounded theory may not be identical, closer examination reveals that they are similar, if not the same as one another in many respects. For example, Martin and Turner (1986, p147) uses the terms 'abstract categories' (used by Glaser and Strauss (1967) and Glaser (1978)), and 'labels' (used by Turner, 1981) interchangeably, both of which generally refer to 'concepts'. Figure 4.8 identifies several interpretations of grounded theory. The main phases of the theory as interpreted by a particular author have been listed below their name. The first column is the interpretation of the phases of grounded theory methodology developed in this project. All the other interpretations have been interpreted in relation to this 'model'.

Even though the phases identified appear to have been put into a hierarchy, this is not necessarily the case. It identifies a general progression in the theory, and as the researcher becomes more experienced and comfortable with the methodology movement through these phases may manifest itself in a variety of ways.[11]

The phases of grounded theory methodology and their sub-components have been coded to allow for a more obvious visual comparison of the different interpretations. Even so this remains a complex interpretation which requires close examination for clarification. For example, a particular shading of a component, labelled with (1a) denotes 'open coding' (the initial coding that takes place). Those aspects of other interpretations of grounded theory shaded the same and with the code (1a), are those which correspond to this aspect even though the names or positions in each interpretation may not be the same. Where a variety of shades and codes exist for a particular phase, it denotes that there are components similar in interpretation to a number of elements described in the author's model, but which exist under a single heading for the comparative author. By cross-referencing these 'models', common links between terminology and interpretation can be identified, thus reducing the confusion.

---

[11] Some of the phases in this list have sub-components. They should be considered as taking place simultaneously within each phase.

Figure 4.8 — Various Interpretations of the Stages in Grounded Theory

WARING, 1995 (based on Strauss and Corbin, 1990)	GLASER & STRAUSS (1967)	GLASER (1978)	TURNER (1981)	STRAUSS (1987)	HUTCHINSON (1988)	CHARMAZ (1990)	PIDGEON, TURNER & BLOCKLEY (1991)
THEORETICAL SENSITIVITY / **1** a - OPEN CODING, / b - OPEN SAMPLING, / c - MEMOS & DIAGRAMS	Comparative analysis is not in itself their goal. It is, however, subsumed under their goal; '...In generating theory it is not the fact upon which we stand but the conceptual category (or a conceptual property of the category) that was generated from it.' (p105)	**THEORETICAL SENSITIVITY** / COLLECTION OF RESEARCH DATA / OPEN CODING OF DATA (1b) / THEORETICAL SAMPLING: ...as much saturation as possible (1c) (2b & c)	DEVELOP (1a) CATEGORIES / SATURATE CATEGORIES (1a) / ABSTRACT DEFINITIONS (1 a & c) / USE THE DEFINITIONS (1 b & c)	CONSTANT INDICATOR MODEL (based on indicator to indicator) / DATA COLLECTION	**THEORETICAL SENSITIVITY** / DATA GATHERING / DATA RECORDING	RESEARCH QUESTIONS & PROBLEMS / DATA COLLECTING	*DATA PREPARATION* / DATA COLLECTION / DATA STORAGE
2 a - AXIAL CODING, / b - RELATIONAL & VARIATIONAL SAMPLING / c - MEMOS & DIAGRAMS		GENERATE CONCEPTUAL CATEGORIES & PROPERTIES. Researcher constructed codes and those abstracted from the research situation. (1a) / MEMOS (theoretical notions) (1c)	EXPLOIT CATEGORIES FULLY (1a) (2a) / NOTE, DEVELOP & FOLLOW-UP LINKS BETWEEN CATEGORIES (1a) (2a) (3a) / CONSIDER THE CONDITIONS UNDER WHICH LINKS HOLD (2a & c) (3c)	CODING / OPEN CODING (1a) / AXIAL CODING (2a) / SELECTIVE CODING (3a) / CORE CATEGORIES a category that is central to the integration of theory	LEVEL 1 CODING (1a) / LEVEL 2 CODING (2a) / LEVEL 3 CODING (3a) / * MEMOING (1,2,3) / * THEORETICAL SAMPLING	INITIAL CODING (1a) / MEMO WRITING - RAISING TERMS TO CONCEPTS (1c) / DATA COLLECTION/ FOCUSSED CODING (2a)	*INITIAL ANALYSIS* / CODING (1a,b,c) / *CORE ANALYSIS* / REFINE INDEXING SYSTEM (2a, 3a) / CATEGORY LINKING (2b,3b) / MEMO WRITING (2b)
3 a - SELECTIVE CODING / b - DISCRIMINATE SAMPLING / c - MEMOS & DIAGRAMS		COMPARING INCIDENTS APPLICABLE TO EACH CATEGORY 1. incident with incident; 2.incident with properties of categories / MEMOS (1c) / THEORETICAL SAMPLING (2b) / INTEGRATING CATEGORIES AND THEIR PROPERTIES / MEMOS ? / THEORETICAL SAMPLING (2b) (3b) / DELIMITING THE THEORY (occurs at two levels - the theory - the categories) / THEORETICAL SAMPLING (3b) / WRITING THE THEORY (4)	MAKE CONNECTIONS WHERE RELEVANT TO EXISTING THEORY / USE EXTREME COMPARISONS TO THE MAX. TO TEST EMERGING RELATIONSHIPS (3)	* THEORETICAL SAMPLING / * COMPARISONS / * THEORETICAL SATURATION (relevant to each of the coding procedures) / * INTEGRATION OF THE THEORY / * THEORETICAL MEMOS / * THEORETICAL SORTING	Even though her temporal model does not show this, sampling decisions are made during the entire research process / SORTING (3a & c) (2c) / SELECTIVE CODING (3a) / * SATURATION / LITERATURE REVIEW / WRITING THE THEORY (4)	MEMO WRITING - REFINING CONCEPTUAL CATEGORIES (2c) / * THEORETICAL SAMPLING / THEORETICAL MEMO WRITING AND FURTHER REFINING OF CONCEPTS (3c) / SORTING MEMOS (3c) / INTEGRATING MEMOS (3c) / WRITING FIRST DRAFT (4) / FURTHER THEORETICAL SAMPLING	*OUTCOMES* / CORE PRIMITIVES / DEFINITIONS (3c) (4) / EXTENDED MEMOS (3c) / PROPOSITIONS (3b) / GRAPHICS (3c) / MODELS (4)
4 - WRITING THE THEORY		-SAMPLING (2b) (3b) / -CODING (2a) (3a) / -MEMOING (2c) (3c) / THEORETICAL SORTING: -MEMOS (1a) SORTED INTO THEORETICAL FRAMEWORKS: (1) by chapter (2) by chapter sections (at this stage coding almost saturated) (2a,b,c) / THEORETICAL WRITING - WRITING UP (& possibly more sorting) - REWORKING FIRST DRAFT - MANUSCRIPT FINALISED FOR PUBLICATION (4)					

* THIS DENOTES INVOLVEMENT IN ALL SEGMENTS OF THE MODEL

Figure 4.8 Various Interpretations of the Stages in Grounded Theory.

The limitations and the somewhat superficial nature of figure 4.8 must be accepted and appreciated. Authors do elaborate in far greater detail, in their corresponding texts, on the interrelationships between elements, unfortunately this is something which an illustration such as Figure 4.8 cannot do adequate justice to. This figure is only designed to allow for comparisons in terminology, and should not be used to deduce any temporal comparisons or the corresponding breadth of each phase. However, all of the authors in Figure 4.8 appreciate and acknowledge in their textual interpretations, if not in their 'models', that the phases do not exist separately and in a completely linear manner. Where an author has mentioned an element which is involved in all the phases of their model, it has been identified by coding it with a particular shade and the notation (*).

When examining Glaser and Strauss's (1967) and Glaser's (1978) accounts they appear somewhat limited and disjointed respectively. However, they need to be appreciated as complementary to one another, because Glaser (1978) in his work was primarily addressing elements neglected and poorly developed in the earlier reference.

> 'One purpose of this current monograph is to update the
> original publication (*The Discovery of Grounded Theory*),
> by detailing *only what is new* in the methodological
> processes of generating grounded theory. ...Thus this book
> is a supplement to DISCOVERY.
>
> (Glaser, 1978: 1)

However, the complementary nature of Glaser and Strauss's interpretation of grounded theory has ceased to be acknowledged in recent publications (Glaser, 1992, 1993, 1994).

4.7.2 Straussian versus Glasarian Grounded Theory

When one reads Glaser's letters to Strauss in Glaser's book 'Basics of Grounded Theory Analysis', asking him to pull his book called the 'Basics of Qualitative Research' (See Appendix I), it is obvious that Glaser is completely dissatisfied with Strauss and Corbin's interpretation of grounded theory. It was Strauss and Corbin's book which facilitated a great deal of the organisation and formulation of the Helix Model presented in this project, therefore, it was interesting and important to identify and acknowledge Glaser's comments.

Strauss (personal communication 21.11.94.[12]) reminded the author that the position of each of Glaser's and Strauss's interpretations of grounded theory methodology is acknowledged in the 'Discovery of Grounded Theory' and 'Basics of Qualitative Analysis' respectively. Strauss believes that Glaser has remained methodologically the same since the publication of the Discovery book. It was from long discussions and debates between these two about the Basics of Qualitative Analysis when it was published, which urged Strauss to suggest to Glaser that he writes his own version of grounded theory methodology, and let readers decide what was or wasn't useful for them. So this is the position the author, along with many others, finds himself.

In this context one cannot address all of the specific corrections to Strauss and Corbin's interpretation which Glaser makes in a series of three books (Glaser, 1992, 1993, 1994). Therefore, a frame of reference for his comments will be made. It suffices that the reader be made aware of such criticisms and in the process be empowered to interpret the 'Helix Model' presented in this project in their own way and make, where they feel appropriate, informed and acknowledged alterations, as others have done to the methodology. The important thing is that it is acknowledged and there is an informed choice to be made.

The founding premise of Glaser's argument and dissatisfaction with Strauss's interpretation is that it does not continue with the logic of discovery and emergence of integrated theory, but focuses on preconceived, forced conceptual description.

In response to Glaser's general criticism, Strauss points out that prior to the publication of 'Qualitative Analysis for Social Scientists' (Strauss, 1987), there had been, 'no offering of procedures that we found essential or useful' (Strauss personal communication, 21.11.94). Strauss sees the 'Basics of Qualitative Analysis' as a pedagogical tool for use especially by those who are new to the methodology, with contributions emphasising the ethos and 'how' the methodology works made by the 'Qualitative Analysis for Social Scientists' book. He continues to emphasise that it is useful in as much as a manual is useful but, 'not to be taken as a book of exact recipes' (Strauss, 21.11.94).

In addition to Glaser's dissatisfaction, Stern (a former student of Glaser), concerned at the 'muddling of methods'(Morse, 1994: 214), also acknowledges a distinction between Glaserian and Straussian grounded theory.

---

[12]See Appendix N.

> In Glaser and Strauss we have two brilliant men who both
> do important work. But they go about it in different ways.
> The crux of the dichotomy is, I think, that Strauss, as he
> examines the data, stops at each word to ask, 'What if?'
> Glaser keeps his attention focused on the data and asks,
> 'What do we have here?' Strauss brings to bear every
> possible contingency that *could* relate to the data, whether it
> appears in the data or not. Glaser focuses his attention *on*
> the data to allow the data to tell their own story. Strauss
> takes on a professorial tone as he suggest that although
> Glaser has been away form academia for 14 years, he has
> continued to do research and that is only natural that he and
> the method would evolve (A. Strauss, personal
> communication, March 24, 1993). For his part, Glaser is
> adamant that Strauss' evolution is more correctly a departure
> from the original method, which makes no scholarly sense
> (B. Glaser, personal communication, February 12, 1993).
> In other words, to Glaser, the Straussian school represents
> an erosion of grounded theory.
> (Stern, 1994: 220/21)

Glaser emphasises the evolution of grounded theory from the data, something the author thinks every grounded theorist would agree with, however, there is a very minimal amount of 'real' structure to the process he advocates for the researcher. This may have contributed to the confusion over grounded theory's use and description in the past and is something which Strauss (1987), and Strauss and Corbin (1990) have attempted to address and rectify. While thoughts and positions change over time, Glaser (1992) thinks that this has taken place at a fundamentally ideological level concerning Strauss's interpretation.

Glaser (1992: 17) has stated that, 'proficiency in doing grounded theory comes with continued study and practice.' However, the fundamental question remains: What is the interpretation of grounded theory in the first place? If it is that they practice incorrect grounded theory (whatever that may be) they will continue to practice incorrect grounded theory only more proficiently. Some procedures are required to maintain a consistent interpretation of the methodology, however, these must remain flexible for use in the particular research/researcher's situation. Hence, the author can appreciate that there should not be a completely rigid confinement to set procedures when adopting grounded theory methodology (for this would remove a great portion of its essence and attraction), but it is extremely useful when being introduced to grounded theory research to have some guidelines for action. The problem, if there is one, is to what extent do you establish guidance/procedures? As Strauss (personal communication 24.11.94) emphasises, 'At heart, the methodology means; (1) theoretical coding, since theoretical

interpretation is the aim; (2) constant comparative analysis, and (3) theoretical sampling.' The guidelines to procedures are useful, however, they remain guidelines not absolutes.

Glaser is very critical of the 6 C's in Strauss's work.[13] Strauss (2.3.94 personal communication) has stated that the 6 C's, 'have never been useful to my work.' The Paradigm Model is a significant element and very useful being implicit, if not explicit in all explanatory work, however, 'for the complexity of analysis, the matrix discussion in Basics is there to guide those who really want complexity!' (Strauss, 2.3.94. personal communication) However, Glaser believes the Conditional Matrix to be devoid of scholarship and not least what he considers to be any resemblance of grounded theory. The Conditional Matrix[14] exemplifies for Glaser the essence of preconceived forced conceptual description.

> Grounded theory has been left far behind by Strauss's zeal
> to see all the conditions, types of conditions and
> consequences of any phenomenon or core variable. He has
> lost all sense of relevance which comes from emergence in
> accounting for the continual resolving of a main concern, in
> favour of the relevance he presumes for full conceptual
> description.
>
> (Glaser, 1992: 96)

The author had difficulty locating the Conditional Matrix satisfactorily within grounded theory methodology, even Strauss (personal communication 2.3.94.) emphasises that there is a need to rewrite this section of his book, with too many people misreading it as too structural. However, this rewriting would involve extending its complexity still further, which compounds Glaser's argument and the author's confusion. The author agrees with Glaser's comment that he, 'did not know that it (*grounded theory*) has to be "tightly woven",' and that '...it depended on the substantive study and what emerged (Glaser, 1992: 97). Strauss and Corbin's notion of a transactional system within the conditional matrix is one which the author is uncomfortable with, feeling that it delimits the emergent and inductive nature of grounded theory methodology, hence its exclusion from the Helix Model. In response to this, Strauss emphasises that the statement made about generalisation in the Conditional Matrix is, 'meant to emphasise both variation (something he thinks most social science texts and studies ignore) and to warn against too readily

---

[13] The 6 C's: Causes, Contexts, Contingencies, Consequences, Covariances and Conditions (Glaser, 1978: 74).

[14] See Appendix K for a brief description of the Conditional Matrix. For a detailed account see Strauss and Corbin, 1990.

generalising without taking specific variation of conditions into account' (personal communication 21.11.94).

Glaser is equally dismissive of the Paradigm Model, saying it too is forced conceptual description, based on a clear neglect of the previous formulations in Theoretical Sensitivity. It does not do the scholarly work of changing the notion of theoretical coding, based on subsequent work, to show how it should be changed to better the grounded theory method.[15]

Regardless of whether one should be considered 'right' or 'wrong', or whether grounded theory has evolved or been eroded, Glaser sees in Strauss and Corbin's work a fundamental change in the grounded theory methodology. However, Strauss and Corbin (1994) emphasises that such change is inevitable with such a popular methodology. Glaser (1992: 124) emphasises that the interpretation espoused by Strauss is:

> 'another method. It is not distorted and wrong, it is just not discovery of grounded theory.'

On this basis it is up to the reader to take what they see as appropriate and use it as they may, whether it is referred to as grounded theory depends on their interpretation.

4.8 Criticisms of Grounded Theory

Grounded theory has weaknesses like any other method, some of which will now be discussed. Charmaz (1990), has emphasised that a number of criticisms of grounded theory stem from an incomplete understanding of the logic and strategies of the method. For example, most authors discussing grounded theory have drawn attention to the *tabula rasa* view of inquiry which grounded theory espouses (Bulmer, 1979; Sparkes, 1987; Hammersley, 1989, 1992; Charmaz, 1990; Woods, 1992; Layder, 1993; Henwood and Pidgeon, 1993; Sanger, 1994). Glaser and Strauss (1967: 33) advocate that the researcher goes into the research setting 'without any preconceived theory, that dictates prior to the research, "relevancies" in concepts and hypotheses.' Bulmer (1979: 667) has said that this *'tabula rasa* view of inquiry is open to serious doubt,' even if one accepts the fact that it might be desirable to have a delay in researcher's correspondence with the literature, the notion of theory-neutral research remains problematic, it is pure induction.

---

[15] See Glaser (1992) for a fuller discussion of all aspects of Glaser's comments on Strauss and Corbin's work.

Grounded theory is not pure induction it is a matter of 'maintaining the balance between the two logics (*inductive and deductive*)' (Glaser, 1978: 90), even though it is inductive as a theory emerges after the data collection has started. However, deductive work guides theoretical sampling. Sparkes (1987) notes that inductive theory formation is open to criticism centring around the notion of 'underdetermination'. The inductively derived theory can be challenged on the basis that there are multiple interpretations for any given set of facts. However, this criticism can be levelled at any theory whether it is inductively or deductively derived.

> Every act of theory development whether grounded or a
> priori, is creative in nature, going well beyond the empirical
> data or conceptual imaginings that suggested it. Equally, no
> process is ever completely reliant upon either induction or
> deduction...[16]
>
> (Sparkes, 1987: 138)

Stanley and Wise, (1983: 152) have also described grounded theory as a form of 'inductivist positivism.' Similarly, Hammersley and Atkinson (1983) have been extremely critical of this apparent affinity with positivism. In addition to this, Roman and Apple (1990) have criticised the unrealistic nature of the *tabula rasa* view saying it is impossible to expect a researcher to achieve such a position by dismissing their prior assumptions. Something which Woods (1992) agrees with when he reminds us that the researcher is a finely tuned instrument with considerable skills, but he or she is a person no less, with values, belief and self. This remains a fundamental problem, 'theory cannot simply emerge from the data, because all observation is pre-interpreted in terms set by existing concepts and theory' (Henwood and Pidgeon, 1995: 117). There are two important factors here. The first is the perspective of the researcher (their theoretical sensitivity), and the second is their skill in interpretation. Both of these interrelate to establish the ability of the researcher to entertain alternatives in the construction of a more dense theory. Even Glaser and Strauss (1967: 3) acknowledge in a footnote the use of existing knowledge, as long as it is well grounded, by saying that, 'Of course, the researcher does not approach reality as a *tabula rasa*. He must have a perspective that will help him see relevant data and abstract significant categories from his scrutiny of the data.' This would appear to collaborate Hammersley's (1992) contention that there is too much ambiguity in grounded theory methodology. However, Charmaz (1990: 1163) emphasises the delay and not the complete

---

[16] The author certainly moved between induction and deduction when using grounded theory within this project. This movement was determined by the phase of the research.

removal of the literature review from the whole process, as well as stating that, 'Once the research has developed a fresh set of categories, he or she can compare them with concepts in the literature and can begin to place ~~the~~ his or her study appropriately within it.' Within this project this was the way in which the literature reviews were conducted, making sure that any literature used merited a place in the analysis through its fit and relevance. The later texts of Glaser and Strauss address more successfully the role of the researcher and the associated criticisms levelled at the *tabula rasa* view they apparently espoused (Glaser, 1978; Strauss, 1987; Strauss and Corbin; 1990). In actual fact what Glaser and Strauss were trying to do in the first place was to guide the researcher away from the potentially undesirable blinkering effect of pre-existing theory, however, they failed to explain in detail the role of the researcher, which created the ambiguity and confusion. This explication becomes apparent in Glaser's (1978) later work;

> Sensitivity is necessarily increased by being steeped in the literature that deals with both kinds of variables and their associated general ideas that will be used. Thus the analyst's sensitivity, while predominantly of a single field and an areas or two within it, is surely not so limited. By familiarity with ways of constructing variables in other fields he may imbue his theory in a multivariate fashion that touches many fields.
> (Glaser, 1978: 3)

However, the question then becomes, as Henwood and Pidgeon (1993, 1995) ask, What grounds grounded theory? Henwood and Pidgeon (1993: 22) see the resolution to this as viewing any 'emergent theoretical account as the result of a constant interplay between data and conceptualisation, a 'flip-flop' between ideas and research experience (Bulmer, 1979)'. This interplay shows how grounded theory differs from the hypothetico deductive method in a number of ways, rendering Hammersley's (1992:20) criticism that grounded theory is an ineffective 'attempt to apply the hypothetico-deductive method' redundant. For example, there is the assumption that the relationship between theory and data will be ill-defined. There is also the need to be tolerant of, and to expose and investigate, any ambiguity created in such a relationship when constructing categories that are relevant to the problem *and* that fit the data. It also encourages the researcher not to accept and to avoid premature closure of categories leading to inadequate theory.

> In practice, the researcher at first perceives only unstructured chaos in the data, as if looking through unfocused conceptual lenses. But as analysis proceeds, and order is generated, the lenses become more sharply focused.
> (Henwood and Pidgeon, 1993: 22)

Hammersley's (1989; 1992) identification of inconsistency and confusion in Glaser and Strauss's (1967) work is founded in the fact that it has both a positivistic and phenomenological emphasis (reflecting the stance of the two authors respectively), which has caused it to be interpreted relative to two different sets of notions. As Hammersley (1992) states it does not comply very well with the hypothetico-deductive nature of positivistic research. The emphasis confronting and starting with the issues of the real world acknowledges a phenomenological component. The positivistic component is emphasised in the way in which they suggested, 'the method takes on a life of its own, independent of its proponents and independent of the researcher' (Charmaz, 1990: 1164).

> Our approach, allowing substantive concepts and hypotheses
> to emerge first, on their own, enables the analyst to ascertain
> which, if any, of the existing formal theory may help him
> generate his substantive theories.
> (Glaser and Strauss, 1967: 34)

The assumption being made is that the researcher is dispassionate, as the theoretical categories derive from the data. This implies that the presence of the researcher has little or no effect on the context, something the author disagrees with, as advocated in chapters 2 and 3. Glaser's and Strauss's comments are inexplicable, something Charmaz (1990: 1164) finds similarly confusing; 'Whether they intended to do so or simply had a theoretical lapse in the midst of methodological claims-making, is itself open to construction.' This may have been true of these initial texts, but in later texts such as Strauss (1987) and Strauss and Corbin (1990), the researcher is most certainly actively involved in the construction of categories and concepts, as they were in this project.

Strauss and Corbin (1990) facilitate creativity within a systematic analysis by suggesting that the manipulation of categorised data is a creative enterprise. This creativity involves an open minded, generative approach, which not only entertains alternative notions, but is able to cope with them in its framework relative to the perspective of the researcher and their interpretive skills. However, as Sanger (1994: 179) notes, 'their view conflates creativity with 'theoretical sensitivity.' Catering for this creativity is a compromise not only for Strauss and Corbin (1990), but for this project between a systematic structure and freedom. To systematise this creativity, however, runs the risk of the criticism that one might as well adopt a computer programme that categorises key words and phrases. Within this project

the adoption of such computer software was purely for data management purposes, allowing for creativity not constituting it.

Another criticism levelled at grounded theory is the lack of rigor associated with it (Emerson, 1983; Katz, 1983; Hammersley, 1989). Once again this is a misinterpretation. There is no rigid divorce between discovery and verification, as Katz (1983)[17] and Emerson (1983)[18] would like to believe. Yes, Glaser and Strauss (1967) do contrast the discovery and verification approaches, but this was to emphasise the desire and need to develop new avenues of theoretical development. As identified previously grounded theory specifically, and qualitative research generally, does not employ the hypothetico-deductive verification model. It emphasises inductive, open ended, intuitive approaches to data gathering. Grounded theory does provide a rigorous method, however, it must be assessed from internal logic of its own method (Charmaz, 1983) and not by criteria found in and appropriate to other methods.

How researchers use the method remains a completely different issue than whether the method itself possesses rigor and logical consistency (Charmaz, 1990: 1164).

> Most criticisms of grounded theory turn on misunderstandings or misuse of the method. However, the major problems with the grounded theory method lie in glossing over its epistemological assumptions and in minimising its relation to extant sociological theory. The relation between subjectivist and objectivist realities and levels of explanation remains unspecified. And ways in which grounded theorists use their prior theoretical perspectives remain somewhat ambiguous.
> (Charmaz, 1990: 1164)

Addressing this point the author and grounded theory is located within the interpretive paradigm as a derivative of the general symbolic interactionist tradition. In so doing it adopts the ontological and epistemological assumptions associated with it as outlined in chapter 2.[19]

---

[17] 'Discovery and elaboration of theory are distinct and separate enterprises from its verification' (Katz, 1983: 95).

[18] '...Grounded theory glorifies and tries to further generate theory in its own right it also treats discovery as a stage prior to verification. This lends support to the critique of fieldwork as insightful but not rigorous' (Emerson, 1983: 97).

[19] The author clearly locates their interpretation of grounded theory in chapter two, addressing this criticism of grounded theory identified by Charmaz (1990).

There are other weaknesses of the grounded theory method such as: generating jargon; premature commitment to categories; lack of clarity with regards terms such as saturation and theory. However, the majority of these are created by the misuse of the method and are not inherent weaknesses in it. Misuse has be created by the ambiguity over the methodology and its complexity, however, the Helix Model structures the method in such a way that the researcher can conceptualise it more readily, potentially removing these weaknesses. Even then Hammersley (1984) has suggested that even with tape recording of interviews and the like, the time needed to transcribe them, may render the complex grounded theory framework almost impossible to achieve.[20]

4.9 Why Grounded Theory?

Grounded theory was selected in this project for two basic reasons. The first was that the methodology suited the manner in which the author preferred to address research and the analysis of data. As Knafl (Morse, 1994: 210) notes, 'This is so important, but is something that we never talk about. The fit between the method and the person, and the style, and what you are, and how you think and what your work style is.'

The second, was that the area of investigation, young people and the processes determining their participation in physical activity, is one which is relatively unexplored. On this basis, there was a reduced risk from contamination by established theories, while developing a theory which could be appreciated by those involved in the study. This was important because it had ramifications for potential interventions they and others may wish to make to enhance participation in physical activity.

4.10 Summary

Methodology in grounded theory is complex. It requires the application and manipulation of many interrelated processes simultaneously. This necessitates a sound understanding if it is to be correctly applied by the researcher. The Helix Model and the other illustrations presented here have been offered as a visual representation of the processes involved to enhance conceptualisation and understanding. It is believed that the Helix Model will be most beneficial for those being introduced to grounded theory. However, it also remains relevant for those

---

[20] Yes it is difficult.

more experienced grounded theorists who require clarification of their interpretation of aspects of the methodology.

Illustrations such as the Helix Model create their own inadequacies simply because of their basic nature when compared with the complexities of the methodology it interprets. However, their ability to encapsulate numerous variables, as well as extend the movement towards more informed qualitative research practices override these.

As a consequence of the discussion of grounded theory methodology predominantly through publications, it has been interpreted in a variety of ways. A comparison of these interpretations reveals that even though there are variations in terms creating ambiguity (which has permeated even its originators), there remain similarities in definition.

The split between Glaser's and Strauss's interpretations of grounded theory are evident from their most recent publications. Glaser's dissatisfaction and argument with Strauss's evolved interpretation of grounded theory methodology, is that it is not grounded theory at all it is another method, forced conceptual description, because in all aspects he sees it as failing to continue with the logic of discovery and emergence of integrated theory. Regardless of the 'erosion' or 'evolution' stance on this matter of grounded theory interpretation, the fact remains that there are a variety of interpretations. What is always important, is that the reader is informed of the researcher's interpretation of the methodology, which must be made explicit to them. In so doing the reader is in a position to accept or dismiss it relative to that particular study. They can then make an interpretation in their own research, which should be similarly judged.

Criticisms of the methodology range from the ambiguity associated with terminology, its complexity of application, as well as the unrealistic expectations associated with the *tabula rasa* view expected of the researcher. However, some of the criticisms are a consequence of misinterpretation and misuse of the method, rather than inherent weaknesses in it. On the basis of its fit with the researcher and the relatively unexplored area of investigation this project involves, grounded theory was selected as an appropriate method.

CHAPTER 5

POTENTIAL DETERMINANTS OF PHYSICAL ACTIVITY

5.1 Introduction

The relative position of this section of the review of literature and its second section incorporated in the next chapter is significant, because it identifies the interrelationship between aspects of the research process and the creation of a grounded theory. Prior to constructing questions to ask in the initial interview, it was necessary to conduct a preliminary literature review of the determinants of physical activity along with other grounded literature. It was essential that the grounded nature of the evidence used to construct the questions was maintained to establish a 'grounded' foundation to the grounded theory. In so doing, those initial questions asked reflected the general areas identified.[1] Only research conducted on determinants, with no anecdotal information, has been included in this review. Unfortunately when the limited quality and quantity of research in the determinants literature, which is littered with anecdotal evidence, is considered it contributes to a review which is divided into numerous sections, some of which are more extensive than others. While this may appear fragmented, it is merely a reflection of an evolving and developing research area that is desperate to remove ambiguity and the anecdotal tag it has deservedly been labelled with in the past.

> Although over 200 studies on exercise determinants
> research have been published, our knowledge of
> determinants is rudimentary and imprecise.
> (Sallis & Hovell, 1990: 327)

Very few variables have actually been isolated as 'causes' of physical activity, therefore, the word 'determinants' is an inappropriate one for most of the literature to use. Instead they should be considered more as correlates, 'potential determinants' (Martin & Dubbert, 1985; Sallis & Hovell, 1990), 'pre-disposing factors' (Wooley, 1995), or 'facilitators' of physical activity and so should be accepted as such throughout this review relative to each of the populations reviewed.

The literature associated with the potential determinants of participation in physical

---

[1] As well as other questions which were generated as a consequence of the researcher's theoretical sensitivity.

activity, sport and exercise in adult populations will be reviewed first.[2] This review will address *supervised* and *free-living* activity contexts relative to each of the probable determinants identified.[3] Potential determinants of physical activity associated with younger populations will then be addressed. In so doing, it will be shown how those determinants associated with research on adult populations have been translated to those even more limited studies on young people. However, this translation cannot be applied automatically to children, simply because of their physical and psychological differences compared to adults (Horn & Claytor, 1993a). After summarising the general categories of potential determinants identified in the research literature for young people, international trends and perspectives on young people and physical activity will be compared. Finally, a composite model of exercise behaviour will be discussed.

5.2 Potential Determinants of Physical Activity in Adult Populations

The majority of the research conducted on the potential determinants of physical activity in adults has focused on vigorous leisure-time activity, rather than moderate or low level physical activity.[4] Therefore, when one considers the changing nature of what is believed to be an appropriate level of physical activity to accrue health benefits (instigated by a growing body of evidence to support the benefits of participation in light and moderate physical activity (American College of Sports Medicine, 1990,1991; Cale and Harris, 1993; Cale, 1993).), it is apparent that there are immense gaps in the determinants literature. The potential determinants of physical activity in adults will now be reviewed.

The majority of authors addressing the probable determinants of physical activity have shown a preference for their segmentation into certain factors and characteristics. Unfortunately, they fail to distinguish their influence relative to the phases of the natural history of exercise (See Figure 5.6) i.e. adoption, maintenance,

---

[2] The nature of the physical activity and its context is extremely important when considering those determinants associated with it. The reader should be aware of the particular context in which each piece of research has been conducted and from which reviews have taken material. The definition of physical activity employed in chapter 6 is an all encompassing one which incorporates sport and exercise and all levels of activity, however, within the literature it is more confined, usually only incorporating sport and/or formal exercise.

[3] Within a supervised activity setting variables such as time, activity, place and type of participant are much more restrictive than in the free-living context.

[4] This may well have increased understanding of the determinants of vigorous physical activity. However, the assumptions being made are that determinants remain constant for all vigorous activity producing certain physiological outcomes. It may be that the physiological consequences of participation in certain physical activities are similar eg. aerobics compared to jogging, however, the reasons for participation and the set of determinants creating such participation in each of these, could be completely different. Even a statement such as this requires much more research evidence in order to support or refute it.

dropout and resumption of activity.[5] This reflects the uncertain nature of the current research. Many interrelationships between factors and characteristics are only expected to exist with only little or no research evidence to define any relationship. Hence, the literature displays an ambiguity and uncertainty concerning the majority of the potential determinants of physical activity for adults, and especially young people. Consequently, the multidimensional nature of the potential determinants of physical activity remain for the time being in their infancy, with a limited understanding of how and when factors and characteristics interact with an individual's physical activity career. Table 5.1 compares categories of classification of potential determinants of physical activity presented in major review articles.[6] This section of the chapter adopts a similar classification to identify the potential determinants, using the following categories:[7]

- Personal Characteristics
- Environmental Factors (physical)
- Social and Cultural Factors
- Psychological Factors
- Physical Activity Characteristics

The distinction between supervised and free-living activity is made in some of the literature on determinants is significant, because the nature and extent of the influence exerted by determinants on a person's participation in physical activity can be dissimilar when comparing each context. However, this variability is in some cases created by a disparity in the relative amount of research conducted on each determinant in each context and the different populations used. It is enlightening, therefore, to illustrate research on each category of probable determinants in both the supervised and free-living contexts. The reader is then able to identify the nature of their influence of each probable determinant, and acknowledge the weight of evidence to support such relationships.

---

[5] Even though studies emphasise the need to distinguish between adoption, maintenance, drop out and resumption factors influencing participation in physical activity (See Sallis and Hovell, 1990), most studies only examine maintenance and dropout from physical activity.

[6] The reviews illustrated in Figure 5.1 formed the basis on which figures 5.2-5.6 were created.

[7] These should not be considered as heirarchical in order.

Table 5.1
A summary of reviews on the potential determinants of physical activity in adults

Hendry (1976)

PERSONAL FACTORS
- personality
- attitude
- physique
- skill
- level of fitness
- body self-esteem/self-concept
- past experiences of events/movements and situations

SOCIAL CLASS

EDUCATIONAL FACTORS
- intelligence

TYPE OF GAMES (given to play)

Martin & Dubbert (1985)

SUBJECT FACTORS
- self-motivation
- perceived benefit of the exercise
- self-efficacy
- pre-existing psychological/personality and behaviour patterns

BEHAVIOURAL FACTORS
- smoking
- blue collar vocational status
- inactive leisure time pursuits
- type A behaviour pattern
- poor credit rating

BIOLOGICAL FACTORS
- overweight
- cardiac problems
- bio-psychological handicaps (anxiety, low self-motivation)

SOCIAL/ENVIRONMENTAL FACTORS
(Exerciser's personal and social environment)
- social support
- spouses support
- family problems
- job/residence instability
- job conflicts

PROGRAMME FACTORS
- reinforcement
- individualised activity
- group activity
- convenience of facilities
- intensity of exercise

Dishman, Sallis & Orenstein (1985)

PERSONAL CHARACTERISTICS
- past programme participation
- past extra programme activity
- past free-living activity
- school athletics (1 sport)
- school athletics (>1 sport)
- blue collar occupation
- smoking
- overweight
- high risk for coronary heart disease
- type-A behaviour
- health, exercise knowledge
- attitudes
- enjoyment of activity
- perceived health
- mood disturbance
- education
- age
- expect personal health benefit
- self-efficacy for exercise
- intention to adhere
- perceived physical competence
- self-motivation
- evaluating costs and benefits
- behavioural skills

ENVIRONMENTAL CHARACTERISTICS
- spouse support
- perceived available time
- access to facilities
- disruptions in routine
- social reinforcement (staff, exercise partner)
- family influences
- peer influence
- physical influences
- cost
- medical screening
- climate
- incentives

ACTIVITY CHARACTERISTICS
- activity intensity
- perceived discomfort

Dishman (1990)

PERSONAL ATTRIBUTES
- past programme participation
- past free-living activity
- contemporary program of activity
- school sports
- health behaviours
- blue-collar occupation
- smoking
- overweight (fatness or body mass index)
- type a behaviour
- high risk for coronary heart disease*
- health and exercise knowledge
- health locus of control
- attitudes
- enjoyment of activity
- perceived health or fitness
- mood disturbance
- education (yr)*
- age*
- expect personal health benefit
- value of exercise outcomes
- self-efficacy for exercise
- intention to be active
- active self-schemata
- self-motivation
- behavioural skills (goal setting, self-monitoring, self-reinforcement, relapse planning)

PHYSICAL ACTIVITY CHARACTERISTICS
- activity intensity
- choice of activity type (perceived)
- perceived effort

ENVIRONMENTAL FACTORS AND INTERVENTIONS
- spouse support
- perceived lack of time
- facilities access or convenience
- disruption in routine
- socil reinforcement or support (staff. exercise partner)
- past family influences
- physician influence
- school programmes
- cost
- medical screening or fitness testing
- climate (or geographical region)*
- contracts, agreements, contingencies
- stimulus control and reinforcement control
- benefit and cost decision analysis
- relapse prevention training

King et al. (1992)

DEMOGRAPHIC FACTORS
- gender
- age
- race and ethnicity
- occupation
- education
- smoking status
- income
- family aggregation
- biomedical status

KNOWLEDGE, ATTITUDE & BELIEFS
- of health benefits of physical activity
- perceptions of being in poor health
- self-efficacy
- perceived access to facilities
- lack of time
- exercise intensity/perceived exertion
- perceived exercise enjoyment & satisfaction

PSYCHOLOGICAL/BEHAVIOURAL ATTRIBUTES AND SKILLS
- attributes (psychological traits, self motivation)
- skills (self motivation)

PROGRAMME/REGIMIN FACTORS
- complexity and convenience of physical activity regimen
- monetary costs
- location, format, costs and time

ENVIRONMENTAL FACTORS
- physical and social environmental factors
- family participation and support
- parents level of physical activity
- social support from friends
- perceived beliefs
- distance to travel

Dishman & Sallis (1994)

PERSONAL ATTRIBUTES

Demographics
- age
- blue collar occupation
- childless
- education
- gender (male)
- high risk for heart disease
- income/socio-economic status
- injury history
- overweight/obesity
- race (nonwhite)

COGNITIVE VARIABLES
- attitudes
- barriers to exercise
- control over safety
- enjoyment of exercise
- expect health and other benefits
- health locus of control
- intention to exercise
- knowledge of health and exercise
- lack of time
- mood disturbance
- normative beliefs
- perceived health or fitness
- self-efficacy for exercise
- self-motivation
- self-schemata for activity
- stress
- susceptibility to illness
- value exercise outcomes

BEHAVIOURS
- alcohol
- contemporary programme activity
- diet
- past free-living activity during childhood
- past free-living activity during adulthood
- past programme participation
- school sports
- smoking
- sports media use
- type A behaviour

ENVIRONMENTAL FACTORS

social environment
- class size
- exercise models
- group cohesion
- physician influence
- social isolation
- past family influences
- social support; friends/peers
- social support; spouse/family
- social support; staff/instructor

Physical environment
- climate / season
- cost
- disruptions to routine
- access to facilities; actual
- access to facilities; perceived
- home equipment

PHYSICAL ACTIVITY CHARACTERISTICS
- intensity
- perceived effort

5.2.1 Personal Characteristics

Figure 5.1 illustrates those factors associated with personal characteristics. The extent and nature of the evidence associated with each characteristic as it influences adult participation in physical activity, relative to supervised and free-living contexts are presented.

Age

According to Dishman (1990) even though demographic variables have a strong association with physical activity (Dishman, 1988b; King et al, 1992), they are not a causal determinant. Instead he believes them to be a selection bias.

> Prospective comparisons of age effects on activity between birth cohorts and cross-sectional age groups in Harvard Alumni and the Cooper Aerobic Centre in Dallas Texas indicate age is a selection bias, not a cause of inactivity.
> (Dishman, 1990: 79)

Within the potential determinants literature it has been repeatedly stated that there is no association between the age of an individual and the likelihood of their participation and adherence to physical activity in a supervised activity setting (Oldridge, 1982; Dishman et al, 1985). However, Stephens et al. (1985) identify that decreasing proportions of the population are classified as physically active with increasing age, however, this is not necessarily an inevitable outcome of age. If one considers the general decline in participation in physical activity with increased age (Unkel, 1981; Sports Council & HEA, 1992; Anderssen, 1993; Cale, 1993) a contention such as Dishman's may well be questionable. Focusing on clinical populations it has been identified that younger cardiac patients have lower attendance records than older ones (Oldridge and Jones, 1983) and they are less likely to adhere to physical activity programmes (Oldridge et al., 1992).

> If the intensity of the activity is standardised for declining cardiovascular fitness (a product of both senescence as well as inactivity), the proportion of men reporting regular intense activity increases around retirement (i.e. ages 60-65 yrs), and remains relatively stable through age 80. In contrast, the proportion of women reporting regular and intense activity continues to decline in older age groups.
> (King et al., 1992: S223)

The negatively oriented age of participants in a free-living activity context is acknowledged in figure 5.1. Age is an intervening and interrelated factor relative to
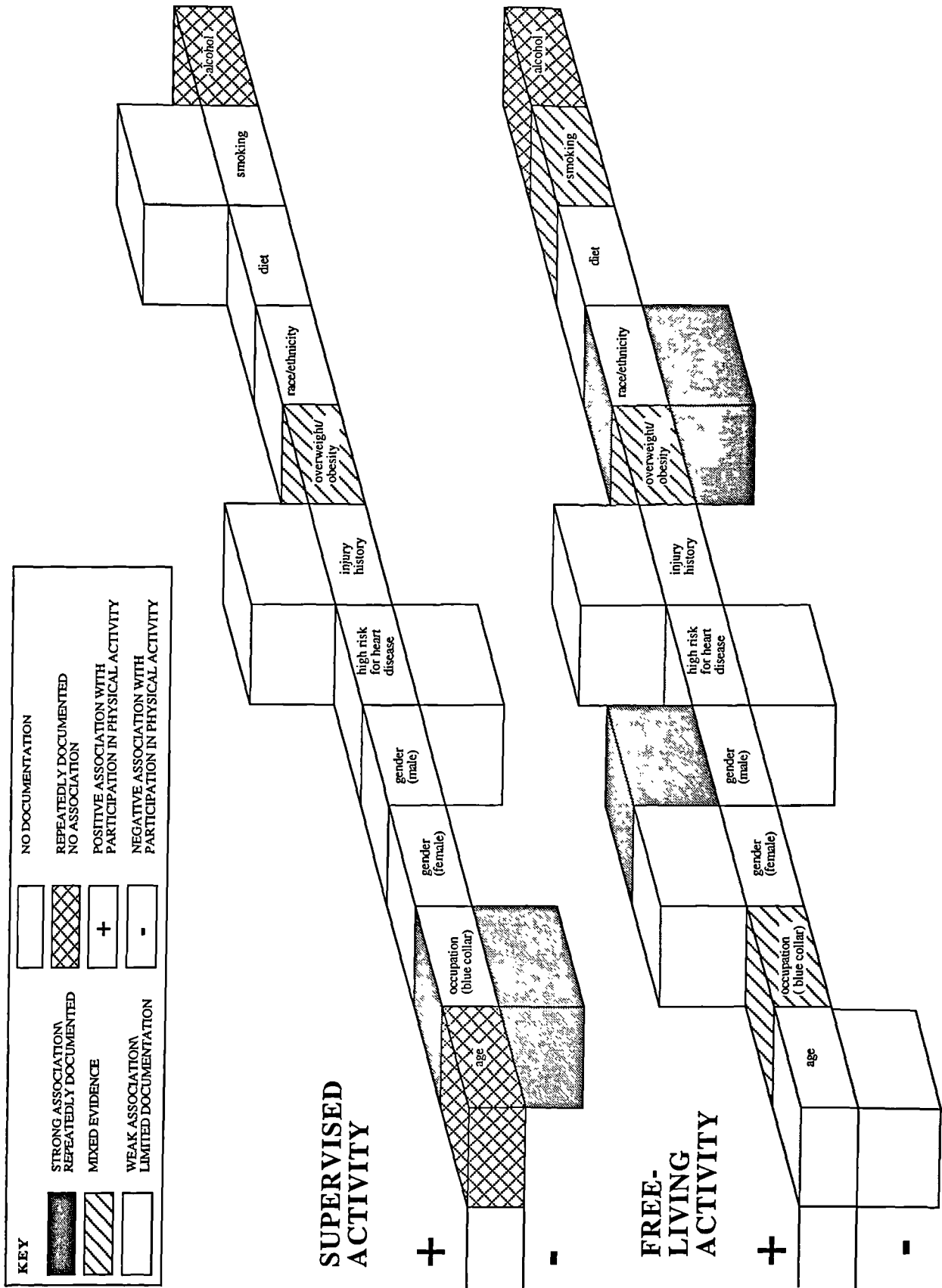
Figure 5.1
Potential Determinants of Physical Activity:
PERSONAL CHARACTERISTICS

many of the factors to be discussed in this and other categories, e.g. biomedical aspects such as obesity/overweight complicates the inverse relationship between physical activity and age.

Occupation[8]

When considering occupation as a potential determinant of physical activity there is mixed evidence concerning the free-living activity context. It has been shown that occupational status is unrelated to the leisure-time physical activity participation of adults (The Miller Lite Report, 1983; The Perrier Study, 1979). This has been refuted by other studies which identified blue collar workers as being less likely to participate in leisure-time physical activity when compared to white collar workers (White et al., 1987; King et al., 1988).[9] A study on supervised activity in a clinical setting, revealed that blue collar employees were increasingly more likely than white collar employees to show poor adherence during and following coronary rehabilitative exercise programmes (Oldridge et al., 1978,1983; Oldridge, 1982, 1988). In addition, blue collar employees have been found to be less likely to make use of work-site exercise facilities (Godin and Shephard, 1983; Conrad, 1987; Shephard, 1988).

Gender

Physical activity participation patterns differ between men and women. Most studies identify disproportionate levels of physical activity between men and women (Unkel, 1981; Hoferek, 1982; Colley, 1984; Folsom et al., 1985; Lirgg, 1991; Ainsworth, 1993; White and Duda, 1994). It has repeatedly been shown that women have lower levels of physical activity than men at all ages (Schoenborn, 1986; Stephens and Craig, 1990). Sallis et al. (1985) not only confirms this pattern using a seven day recall procedure, but also emphasises its relationship with age, by identifying that the younger the age group (20-34 years) the greater the disparity in levels of activity between each sex, when compared with older adults (50-74 years). The Canada Fitness Survey (1983) contradicts these repeatedly documented findings, by indicating that 18-19 year old Canadian women are more active than Canadian men.

---

[8] Occupation has been classified as a personal characteristic as an addition to the socio-economic status category identified in the social and cultural factors, for even though there will be a direct financial link between the two, it is also the nature of the work and the work envirnoment rather than the financial renumeration which is a probable determinant.

[9] When the overall level of physical activity of individuals in blue and white collar occupations are compared, it is the blue collar occupations which have the greater level of physical activity. (King et al, 1992; 134 King 92)

94

However, the majority of the research evidence supports the higher level of activity of men over women.

When considering the eight national surveys (6 in the U.S.A. and 2 in Canada)[10] that Stephens et al., (1985) reviewed, the difference in the overall level of physical activity of each gender group is considered to be 'inconsequential' (p150), when one takes into account the standard error characterised by most of the surveys. The nature of the physical activity classification can influence the relationship between genders and their comparative activity levels. If the classification involves only vigorous activity, or purely sporting activity, then males are more likely than females to be classified as physically active. However, if light, moderate and vigorous activity are considered together, the gender difference disintegrates. Significantly this identifies the kinds of activities which each sex most often participates in.

Within clinical samples variations in attendance at cardiac rehabilitation programmes has been lower for women than for men (Oldridge, 1988). This relationship is reversed when comparing the adherence of women exercising to prevent osteoporosis (King et al., 1992), with men in cardiac rehabilitation settings (Oldridge, 1991). With such a comparison there is a much greater adherence rate over two years for the women. A similar situation has been identified in worksite populations (Brill et al., 1991).

High Risk from Heart Disease

In a retrospective study conducted by Dishman (1981), adult males (n=362) were selected to investigate the ability of certain biological variables to discriminate between exercise participants on the basis of exercise adherence and symptoms of coronary heart disease. This study showed that even though men appreciated that they were in a high risk category for heart disease they would still be less likely to enter wellness programmes or adhere to fitness regimes than those who had already suffered a heart attack or had documented heart disease. King et al., (1992) contrasts these findings with those from a study conducted by Oldridge (1982), which showed that circulatory limitations and/or a decreased metabolic tolerance for physical

---

[10] President's Council on Physical Fitness and Sports (1974)
   National Health Interview Survey (1975)
   Fitness and Amateur Sport Canada Survey (1975)
   The Perrier Study (1979)
   The National Survey of Personl Health Practices and Consequences (1979)
   The Canada Fitness Survey (1983)
   The Miller Lite Report (1983)
   The Behavioural Risk Factor Survey (1984)

activity are not reliable predictors of adherence to clinical exercise programmes. Women have been seriously neglected as a focus of research relative to this particular aspect. Consequently, there is inadequate data with which to establish any associations with participation in physical activity (Haskell, 1994b).

Injury History

Injury influences the maintenance and drop-out from regular physical activity (Sallis & Hovell, 1990). Hofstetter et al., (1991), using a sample of over 2,000 adults (mean age 47.8 years) from San Diego, U.S.A., identified that individuals whose physical activity was inhibited because of illness and/or injury, still reported substantial amounts of physical activity. However, these ill or injured individuals were much less likely to participate in vigorous activity than those individuals who reported no activity constraints. Hofstetter's et al., (1991) study concluded that there may be different patterns of determinants of exercise operating within the short- and long-term illness and injury groups studied.[11] Macera's et al., (1989) study on a mixed sex sample of 5,582[12] 20-70 year old adults using questionnaires, showed no age or gender effect on the occurrence of orthopaedic problems, and that moderate increases in activity for older persons was not a matter of concern. However, increases in physical activity were clearly associated with an increase in the risk of orthopaedic problems. This is partially reinforced by Pollock et al., (1991) study of 57 healthy volunteers of both sex, aged 70-79 years. Eight of 14 subjects (57%) incurred injuries while jogging and only one of 21 (4.8%) were injured while walking. However, they identified a gender variation, suggesting that older women are more susceptible than older men to injury in jogging activities. While it is difficult to generalise these findings to the whole population, they are particularly applicable to those individuals participating in structured leisure-time activity, because they reflect the moderate and low physical activity levels which unfortunately have been neglected by those researchers who mainly focus on elite populations.

Obesity

Excess weight is a barrier to physical activity (Dishman, 1990), with overweight or obese adults being less likely to participate in physical activity than normal weight individuals (Massie and Shephard, 1971; Dishman, 1981; Young and Ismail, 1981;

---

[11] This has implications for programmes designed to increase the level of vigorous activity or walking becasue they will have to take the stage of illness and/or injury into account when designing it.
[12] This sample was selected from a larger sample of 12,000 adults attending a preventitive medicine centre at least once between 1974 and 1982.

Martin and Dubbert, 1985; Shephard, 1988). King and Tribble (1991) in their discussion about exercise and weight regulation, identify that obesity has emerged as an important and reliable predictor of participation and drop-out from physical activity in adults, something which Sallis and Hovell (1990) reinforce. An inverse relationship between obesity and the overall physical activity levels of adults has been claimed (Council for Scientific Affairs, 1989), however, other studies have found no difference in the physical activity participation of obese and normal weight individuals (King & Tribble, 1991). Based on recent evidence Dishman and Sallis (1994) support this:

> Pre-1988 studies found that the obese were generally less active than those with normal weight. However, the more recent studies were relatively consistent in finding no association between obesity and physical activity.
> (Dishman & Sallis, 1994: 222)

When one considers the clinical setting and those factors which contribute to an individual's increased risk from heart disease, obesity is a familiar factor and one which has to be considered as interrelated. Actually, King and Tribble (1991), along with others (Dishman & Gettman, 1980; Ward & Morgan, 1984; Martin & Dubbert, 1985), emphasise the interrelationships between environmental, physiological and psychological factors and obesity, all of which contribute in varying degrees to an individual's situation and circumstance, subsequently influencing their participation in physical activity. Identifying the interrelationships between factors reveal a complexity of association that has in the past, especially in the free-living context, served to create confusing evidence regarding obesity and its association as a potential determinant of physical activity. However, as figure 5.1 illustrates, there is a need to investigation further both settings, given the inconsistent evidence generated.

Race and Ethnicity

Evidence of research in supervised activity settings is lacking, however, within the free-living context there is limited research available. White women have been found to be more active than black women (White et al., 1987; Folsom et al., 1991; Ford et al., 1991; Heath et al., 1991). However, the evidence related to men is somewhat variable (Schoenborn, 1986). While non-Hispanic whites may emerge as being more physically active than other ethnic communities, it is extremely difficult if not impossible to 'disentangle the effects of ethnicity and socioeconomic status' (Dishman

& Sallis, 1994). A sentiment reinforced by King et al., (1992: S222), ' comparisons by race are confounded by socioeconomic status and level of education.'

Sallis et al., (1985) using a sample of 2,126 individuals from California, U.S.A., found that when non-occupational levels of physical activity were considered, Mexican Americans had lower levels of physical activity than those levels for whites, blacks and other ethnic groups. Alternatively, Brill et al., (1991) found that there was a negligible difference between Hispanics and non-Hispanics concerning the compliance of school district employees to an exercise programme.

Diet

In a comprehensive review of physical activity involvement and dietary practices,[13] Wankel and Sefton (1994) acknowledge that mixed relationships have been found. The relationships found in population surveys (Montoye et al., 1976, Rotevatn et al., 1989 - positive; Garçia-Palmieri, 1982 - neutral) and intervention studies employing self-report measures (Nieman et al., 1990) have been particularly confusing. Observational studies of selected groups have illustrated a strong positive association between the amount of physical activity and increase of caloric intake (Blair et al., 1981; Smith et al., 1982; Pate et al., 1990). The strongest evidence of a positive relationship between physical activity and nutrition comes from controlled studies where energy expenditure and intake are closely measured within metabolic wards (Wankel & Sefton, 1994). However, the close relationship between increased energy intake and increased energy expenditure may not be replicated in the everyday contexts of individuals, when other factors become influential in determining caloric intake and physical activity;

> Leisure-time physical activity is not just meeting energy
> input demands! These are both complex leisure behaviours
> that satisfy multiple human motives.
> (Wankel & Sefton, 1994: 530)

Pi-Sunyer and Woo (1985) dicovered a complete lack of consistency with regards obese individuals weight changes associated with participation in exercise. Consequently, they have suggested that with obese individuals it is the sensory characteristics of the diet rather than the demands of participation in the physical activity which become dominant.

---

[13] Dietary behaviour practices that have been studied with respect to physical activity involvement include caloric intake, nutrient composition, and various nutritional practice measures such as eating a good breakfast, following food guidelines, or heart-healthy practices. (Wankel and Sefton, 1994: 538)

The sample population is significant, in that certain groups e.g. elite athletes, are more likely to pay attention to all factors that can potentially influence their performance and health, and create an increasingly more positive relationship than that associated with a sample of the general population.

> ...The relationship of physical activity to nutritional practices, both in terms of intake and composition, is somewhat mixed. A number of nonsignificant results are reported but on the whole, the strongest evidence based on more recent research tends to support a positive relationship. Whether these more positive results reflect better measurement approaches or temporal changes is not known.   (Wankel & Sefton, 1994: 540)

Smoking

Some of the literature identifies a weak negative relationship (Holme et al., 1981; Blair et al., 1985; Dishman et al., 1985; Bandura, 1977, 1986; Salonen et al., 1988; Marti et al., 1988,1989; Stephens and Craig, 1990; Wankel & Sefton, 1994[14]), or no relationship at all (Bruce et al., 1980; Epstein et al., 1980; Caspersen & DiPietro, 1991), between smoking status and physical activity participation. However, others have shown that the more intense the physical activity the greater the negative relationship between smoking and the physical activity (Folsom et al., 1985; Sallis et al., 1989). Smoking behaviour has been found to be increasingly negatively related to the increased intensity of physical activity involvement (Dishman et al., 1985). Even so, smoking status may not be associated with overall physical activity levels (King et al., 1992). Poor adherence to physical activity by individuals as part of cardiac rehabilitation programmes, as well as the maintenance of physical activity after such programmes, has consistently been associated with the individual's current smoking status (Oldridge et al., 1983; Conroy et al., 1986; Fontana ct al., 1986; Stegman et al., 1987; Oldridge & Streiner, 1990).

Alcohol

The majority of studies conducted since 1988 to investigate the relationship between physical activity and alcohol consumption have reported a non significant relationship between the two behaviours (Wankel & Sefton. 1994).

---

[14] See Wankel and Sefton (1994) for a more detailed review of the evidence for the relationship of physical activity involvement and smoking.

5.2.2 Environmental Factors (physical)

Physical environmental variables are consistently identified as being influential determinants of physical activity (Martin and Dubbert, 1985; Dishman, 1990; Sallis and Hovell, 1990; King et al, 1992; Dishman and Sallis, 1994; Dishman, 1994). However, despite this acknowledgement the research conducted on it, and on which this sentiment is based, is somewhat limited. Unease over the acceptance of these conclusions has been expressed by those who consider the self-report questionnaires, which have generally been employed to measure environmental determinants, not to have satisfactorily addressed issues of objectivity, reliability and validity. As such the nature of the origin of the environmental determinants might be somewhat questionable, is it the environment or is it the individual? Dishman (1990) has requested that more stringent application of research methods are employed and questions addressed before intervention strategies are adopted. Aware of the uncertainty of the origin of determinants, those aspects identified in figure 5.2 will now be discussed.

Access to Facilities

Dishman and Sallis (1994) make a distinction between perceived and actual access to facilities, each having varying levels and a different nature of association with physical activity.[15] Access based on aspects of facility convenience, that is where perceived convenience of the activity setting (Andrew et al., 1981; Gettman et al., 1983), and the physical distance of the individual's home/workplace and activity venue (Gettman et al., 1983) is persistently identified as an influential factors determining an individual's participation in physical activity.

> Access to facilities is a necessary, but not sufficient,
> facilitator of community sport and exercise participation
> (The Perrier Study, 1979: 85)

From investigations mainly of individuals in cardiac rehabilitation groups, actual and perceived convenience of access are positively[16] associated with participation in physical activity in the supervised setting (Massie & Shephard, 1971; Bruce et al., 1976; Oldridge, 1978; Andrew et al., 1981; Dishman, 1990; Dishman &

---

[15] Supervised activity; Access to facilities - perceived = weak positive association/limited documentation. Access to facilities - actual = strong postive association repeatedly documented. Free-Living activity; Access to facilities - perceived = mixed evidence. Access to facilities - actual =weak positive association/limited documentation.

[16] Positive in that the greater the access and convenience to such activity facilities the greater the likelihood of adopting or maintaing participation in the physical activity.
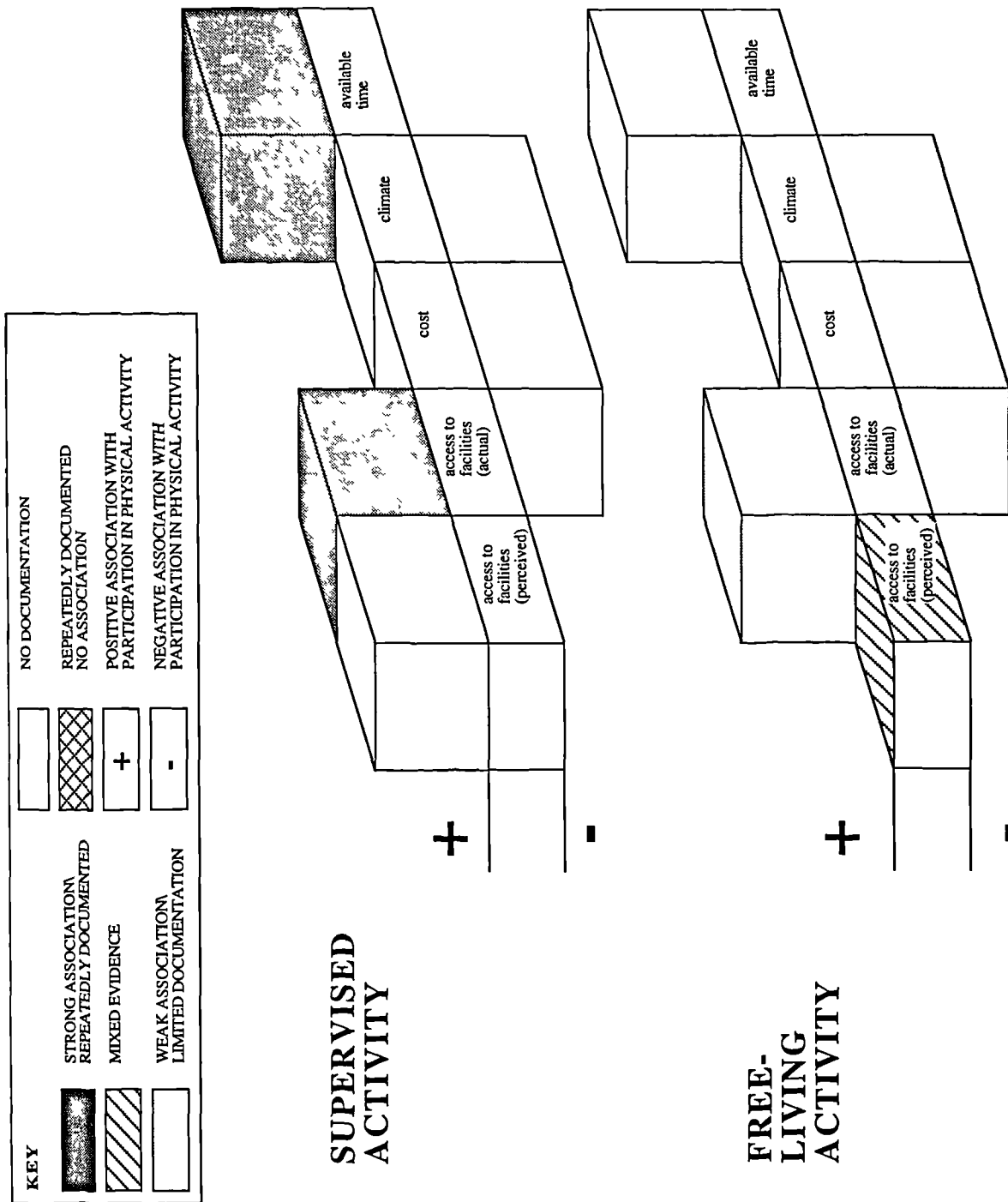
Figure 5.2
Potential Determinants of Physical Activity:
ENVIRONMENTAL FACTORS (physical)

Sallis, 1994). Actual access to facilities in the free-living context is similarly perceived (Sallis et al., 1989; Sallis et al., 1990). There is, however, mixed evidence regarding the perceived access to facilities in this free-living context (Gettman et al., 1983; Dishman, 1990). The Perrier Study (1979) identified that the physically inactive are 50% more likely than physically active adults to perceive increased access to facilities as enhancing their participation in physical activity. Based on the evidence available to them at the time, which has not been extended a great deal, Martin and Dubbert (1985) suggested that 'smaller self-contained neighbourhood or work-site exercise facilities might promote fitness over the long run better because of their much greater convenience to exercisers' (p143).[17]

Climate

Climatic variations have been noted as probable determinants of physical activity, especially regarding outdoor physical activity (Dishman, 1990). Stephens et al., (1985), and The Perrier Study (1979) have identified differences in the physical activity levels of individuals associated with different regions in Canadian and American populations respectively. However, Chubb and Chubb (1981) have noted that these variations may equally demonstrate that it is a manifestation of age and socio-economic conditions in each region, as it is of climatic variations.

Time

A lack of time (perceived or actual - Dishman, 1990) has been cited as the most important and common reason for dropping out of supervised activity settings (Oldridge et al., 1983; Dishman et al., 1985; Martin & Dubbert, 1985). Such a negative association has also been identified in a free-living activity context (Dishman, 1990; King et al., 1992; Dishman & Sallis, 1994). The Perrier Study (1979) identified that the perception of time as a barrier to physical activity was as common in physically active people as it was in physically inactive individuals. When the occupation/working status of different family members were considered in the General Mills American Family Report (1979 in Dishman, 1990), working women were found to be more regular exercisers than non-working women. However, there remains an uncertainty and ambiguity over the current research conducted on aspects of this factor.

---

[17] King et al., (1992) also interrelate this with another aspect when they propose that factors related to neighborhood safety may be an important consideration which needs greater investigation related to access to facilities and the physical environment in general.

> It is not yet clear whether time and facility convenience
> truly represent environmental determinants, perceived
> determinants, or poor behavioral skills such as time
> management or whether they simply are rationalizations of
> a lack of motivation to be active.
>
> (Dishman, 1990: 85)

5.2.3 Social and Cultural Factors

Family Influence/Support

Family influence and spouse support are sometimes segregated and addressed separately when reviewing the probable determinants of physical activity in adults. However, in this context family influence is treated as an overall descriptive term which encapsulates parental, spouse and sibling support.

> Social support from family and friends is consistently
> related to physical activity in cross-sectional and
> prospective studies
>
> (Dishman & Sallis, 1994: 222)

King et al., (1992) note a modest family aggregation of physical activity levels, but the aspects (physical and behavioural) which influence this are unclear. However, they do say that the available evidence on social support relative to the adoption and maintenance of physical activity, identifies many different sources of support. Massie and Shepherd (1971), along with Wilhelmsen et al., (1975) have found a significantly poorer long-term maintenance of physical activity in those who exercised alone without the support of a group. Sallis et al., (1992b) identify that the adoption of physical activity by a family member can be predicted by the degree of family support for the exercise.[18] Martin and Dubbert (1982) confirm the positive influence of this 'social' support from the home environment, reinforcing the exerciser's maintenance of physical activity. The positive relationship for family support identified in figure 5.3, for both supervised and free-living contexts is highlighted by Heinzelmann and Bagley (1970). They identified that active positive reinforcement from the spouse created greater maintenance of physical activity participation. Not only was a spouse, who was negatively oriented towards their partners physical activity participation, seen to inhibit maintenance of that physical activity, but equally a neutral stance from the spouse had the same consequence. The interrelationship between this factor and other probable determinants of physical activity has been highlighted by Andrew and

---

[18] The greater the support the greater the likelihood of adoption of physical activity.
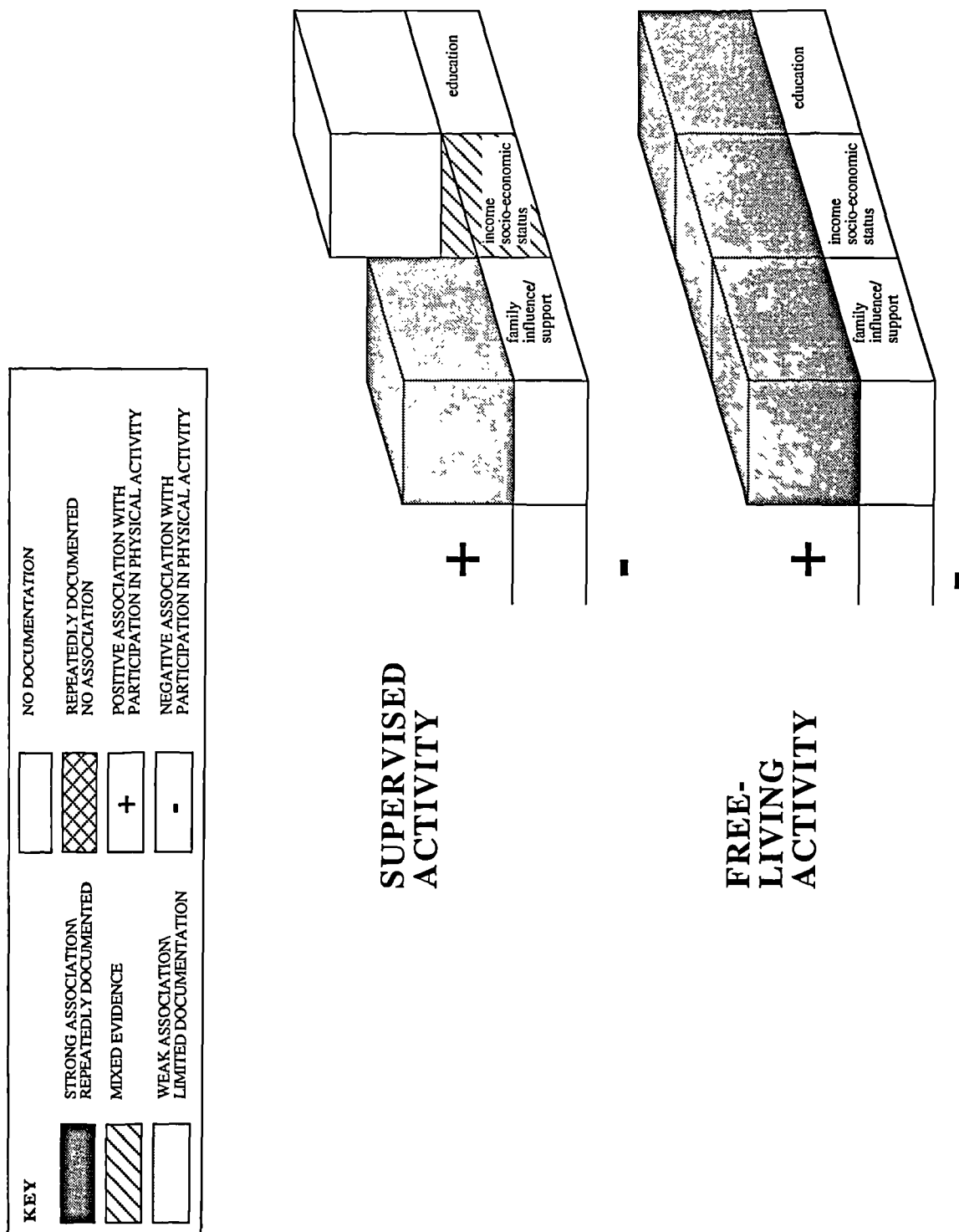
Figure 5.3

Potential Determinants of Physical Activity:
SOCIAL AND CULTURAL FACTORS

Parker (1979), when they state that those cardiac patients who did not receive spouse support during an exercise rehabilitation programme were nearly three times more likely to drop out of the programme than those who received positive spouse support.[19] King et al., (1992) also identify the importance of perceived beliefs about rehabilitation on the part of significant others e.g. spouses. It has been demonstrated elsewhere to be a good predictor of adherence following myocardial infarction (Andrew et al., 1981; Daltroy & Godin, 1985; Ebbesen et al., 1990). However, it has also been shown by others not to be a predictor (Dracup, 1985; Hillbert, 1985).

Socio-economic Status

King et al., (1992) has identified a modest relationship between leisure-time physical activity and income. This is supported by Stephens et al., (1985) who also consider there to be a modest positive relationship between income and activity level of each individual. With all of the six surveys studied to arrive at this conclusion, the higher income groups were always more physically active than the lower income groups. Ford et al., (1991) confirm this finding, as well as identifying that higher socio-economic status men engage in a greater portion of total physical activity in their leisure time, unlike lower socio-economic men whose non-leisure activity constitutes a greater portion of their total physical activity. In addition, Stephens et al., (1985) identified that the nature of the physical activity was a significant factor, because if only sports were considered then the previously identified activity-income relationship was more evident.

Education

The more education an individual has received the more likely they are to participate in leisure-time physical activity. The most educated group of people are 1.5 to 3.1 times more likely to be active as the least educated group, and only 30-60% as likely to be sedentary (Stephens & Caspersen, 1994: 210).[20] These conclusions about the level of education and the positively associated leisure time physical activity are repeatedly identified in other studies (Folsom et al., 1985; Stephens et al., 1985; Schoenborn, 1986). However, King et al., (1992) citing Brill et al., (1991), identifies

---

[19] However, a degree of caution must be exercised over these findings because it was not always clear what the definition of support was for each participant and the information was gathered purely from self-report data with no observational or experimental evidence to support it.

[20] Such a statement as this is problematic because they fail to distinguish the levels of education associated with high and low activity levels. Secondly, the data they are comparing from different international studies is not age standardised making comparison awkward, if not impossible.

a neutralisation of the differences in outcome associated with varying educational levels, when participation is conducted in a formal physical activity programme.

Investigating the variations in physical activity patterns of college educated women and men at different stages of their adult life cycle, Unkel (1981) identified similar findings to those associated with less educated populations i.e. mean participation is lower for females than for males, mean participation declines with increasing age and there are major differences in terms of variety and intensity of participation between males and females in team sports. Makes having greater variety and experiencing more intense participation.

5.2.4 Psychological Factors

As Dishman (1990) has identified, it is important to know if stable or tansient psychological constructs are causal determinants of physical activity:

> Psychological constructs can account for variability in behavior within population segments that are demographically homogeneous and across settings that differ in place and time. Because these constructs can reflect past behavior history but exist in the present, they offer promise for more precise predictions of physical activity than do the determinants considered up to this point. (Dishman, 1990: 82)

Attitude

An individual's attitude towards physical activity appears to have no bearing on their participation in physical activity (Brownell et al., 1982; Martin & Dubbert, 1985). Dishman and Gettman (1980) support this conclusion, having identified that positive attitudes towards personal physical activity participation exist within sedentary individuals. Despite these findings, however, figure 5.4 identifies that there is mixed evidence associated with the research conducted in a free-living context and a weak positive association in a supervised activity setting.

Enjoyment over Exercise

King et al., (1985;1992) and Wankel (1985), have shown that both women and men who have higher perceived exercise enjoyment and satisfaction associated with physical activity, have greater adherence and participation levels in that activity
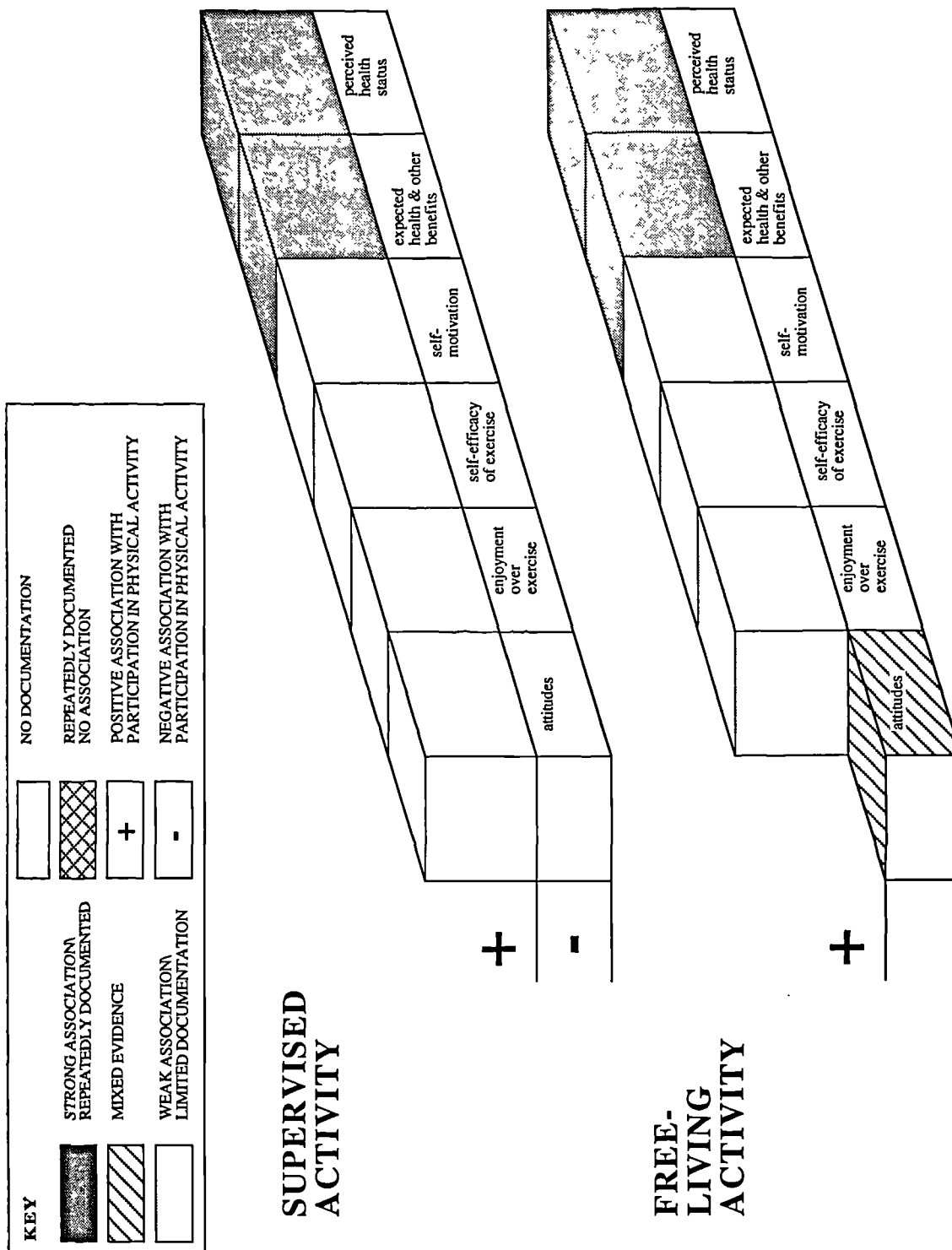
Figure 5.4
Potential Determinants of Physical Activity:
PSYCHOLOGICAL FACTORS

over time. This is reinforced by Shepherd (1988), when he states that enjoyment is a strong motive for continued participation in work-site exercise programmes.

Self-efficacy for Exercise

> Self-efficacy receives the most support as a cognitive determinant in both (free-living and supervised) types of studies. However, the lack of prospective studies that control for physical activity habit limits our confidence over how much of the observed relationship between self-efficacy and activity is causal and how much reflects a selection effect; that is, active individuals report high self-efficacy due to past success.
>   (Dishman and Sallis, 1994: 222)

There are mixed findings from both supervised and free-living settings about the role of efficacy as a determinant of physical activity (Dishman, 1990: 84). Positive associations between an individual's participation in physical activity in both of these activity settings and their self-efficacy have been established (Sallis et al., 1989; Dzewaltowski et al., 1990; Hofstetter et al., 1991; McAuley & Jacobson, 1991).[21] The nature of the physical activity which people participate in and their self-efficacy has also been investigated. These showed that the self-efficacy of women and men in both of these settings is positively related to the adoption and maintenance of moderate activity (Sallis et al., 1986; Weinstein-Garcia & King, 1991). The same positive association has been discovered for males relative to vigorous activity (Sallis et al, 1986). When personal characteristics such as heart disease are considered, self-efficacy regarding physical activity has predicted adherence to exercise prescription programmes (Ewart et al., 1986).

Self-Motivation

Self-regulating skills such as goal setting and self-reinforcement have been found to be influential factors for maintaining physical activity (Martin & Dubbert, 1984; Dishman et al., 1985). This is something which causes King et al., (1992) to suggest that self-motivation reflects the presence of such skills. Dishman (1982;1990) supports this contention by drawing attention to the fact that, in a variety of settings,[22] self-motivation has discriminated between those who dropout and those who maintain participation in the physical activity. Alternatively, it has been shown by Knapp

---

[21] Self-efficacy describes a person's confidence to be able to successfully perform a specific activity or behaviour (Bandura, 1977).
[22] Corporate fitness, cardiac rahabilitation, preventive medicine, athletic conditioning and commercial spas (Dishman, 1990: 83).

(1988) and Sonstroem (1988), that there is no such difference between participants in interscholastic sports and adult fitness programmes. The link between increased compliance to prescribed exercise offered to coronary heart patients and increased self-efficacy of these patients, makes Martin and Dubbert (1985) suggest that another link may exist between the achievement of exercise goals and the maintenance of exercise related self-motivation. It has been found by Danielson and Wanzel (1977), that those exercisers who failed to attain their own exercise goals dropped out roughly twice as fast as those who did attain them (p141). Other studies have found that previous success in terms of participation in leisure time physical activity is associated with an increased probability of participation in that activity (Oldridge & Spencer, 1985; Conroy et al., 1986; Shephard, 1987; Oldridge & Streiner, 1990).

Expected Health and Other Benefits

The expected health benefits from participation in physical activity have been identified as positively influential in the adoption and resumption of physical activity for both women and men (Sallis et al., 1986; Dishman, 1990). However, such a relationship has been inconsistently identified with regards the maintenance of physical activity (Daltroy, 1985; Sallis et al., 1986). In some studies a negative association has been identified between the expected health benefits of exercise in cardiac patients who may deny the seriousness of their heart health, subsequently showing poor adherence to physical activity programmes (Sanne et al., 1973). Drop out and infrequent participation are exhibited by those individuals who perceive physical activity to have little if any health benefit for themselves (Dishman & Gettman, 1980). This is especially the case with those individuals who believe that the health results of physical activity participation are outside of their control (Dishman & Steinhardt, 1988). Alternatively, positive attitudes towards the health outcomes from participation in physical activity can influence the individual's intention to be physically active, however, intentions have failed to predict subsequent participation (Dishman, 1990).

Perceived Health and Fitness

Oldridge and Spencer (1985) identify that perceptions of poor health manifest themselves in reduced exercise participation amongst cardiac rehabilitation patients. Sallis et al., (1986) and Dishman (1990) acknowledge the same findings associated with community exercise programmes.

KEY

STRONG ASSOCIATION\
REPEATEDLY DOCUMENTED

MIXED EVIDENCE

WEAK ASSOCIATION\
LIMITED DOCUMENTATION

NO DOCUMENTATION

REPEATEDLY DOCUMENTED\
NO ASSOCIATION

POSITIVE ASSOCIATION WITH\
PARTICIPATION IN PHYSICAL ACTIVITY

NEGATIVE ASSOCIATION WITH\
PARTICIPATION IN PHYSICAL ACTIVITY

+

-

SUPERVISED ACTIVITY

perceived effort and discomfort

activity intensity

+

-

FREE-LIVING ACTIVITY

perceived effort and discomfort

activity intensity

+

-

Figure 5.5

Potential Determinants of Physical Activity:\
PHYSICAL ACTIVITY CHARACTERISTICS

110

5.2.5 Physical Activity Characteristics

> Of the possible determinants of physical activity
> participation, characteristics of physical activity have
> received the least study. They are fundamentally critical,
> however, for establishing desirable participation goals.
> (Dishman, 1990:85)

Activity Intensity

The intensity of the physical activity is consistently associated, in the limited
literature, with lower adherence to the activity (Pollock et al., 1977; Martin and
Dubbert 1985). Figure 5.5 identifies the negatively associated relationship between
participation in physical activity and exercise intensity.

Perceived Effort and Discomfort

The self-reported discomfort of participation in physical activity has been associated
with dropout from endurance activities such as fitness programmes for college
women (Ingjer & Dahl, 1979). However, Pollock (1988) identifies that most exercise
programmes for adults in the supervised activity context show no association between
dropout and the individual's perception of exertion/intensity. It has become accepted
that the trained individual perceives standard physical activity as less of an effort than
the untrained individual (Dishman, 1990). Chronic fatigue is commonly associated
with participation in physical activity by sedentary, unfit individuals who are most
likely to have negative personal characteristics such as being a smoker (Chen, 1986;
Kohl, et al., 1987). This must be taken into account. However, as Dishman (1990:
86) identifies:

> ...It is not known whether chronic fatigue creates a barrier
> to participation or whether alleviation of chronic fatigue
> with increased fitness is an incentive for participation.

5.2.6 Summary of Potential Determinants of Physical Activity for Adults

Even though there are increasingly more studies being conducted on the potential
determinants of physical activity for adults, there remains a limited and imprecise
knowledge base. Personal characteristics maintain a common association as a
determinant of physical activity, however, it has been suggested (Dishman, 1994a)
that some of them could be considered selection biases rather than causal
determinants. The relationship between environmental factors as a determinant of

physical activity is a weak one in these few studies which have been conducted. There is equally limited evidence on the potential influence of social and cultural factors on physical activity. Numerous psychological factors have been studied, however, it remains unclear as to whether they are causal in nature, or a reflection of a selection bias. Intensity of, and perceived exertion during, physical activity seem negatively oriented to participation. At present it remains an assumption, but it is likely that a variety of determinants potentially interrelate with each other to create the climate for participation in physical activity.

> Progress has been made in clarifying differences and
> similarities between determinants of moderate leisure
> physical activity and vigorous exercise related to fitness in
> supervised and free-living settings. Progress has also been
> made toward establishing that sport history, and age are
> probably selection biases, not true causes of contemporary
> inactivity. Family and peer influences, socioeconomic
> status, and educational level may be selection bias effects,
> yet they have potential as true determinants.
> (Dishman & Sallis, 1994: 233)

The focus of this discussion now turns to the probable determinants of physical activity in young people. After a brief introduction a similar format to that used in the previous sections will be employed to review each of the probable determinants of physical activity in young people.

5.3 Potential Determinants of Physical Activity in Young People

> Little is known about the determinants and health outcomes
> of physical activity patterns among school-age children and
> youth. (Takanishi, Deleon & Pallak, 1984)
> (Dishman & Dunn, 1988: 156)

Before establishing the evidence on young people and the potential determinants of their participation in physical activity, it is necessary to highlight certain problems which confront this particular reviewing process. Considerable ambiguity exists over the terminology employed to describe this population. For example, comparisons made in discussions conducted over different pieces of research must take into account variations in the age of each of the samples. Unfortunately, this is not always acknowledged, resulting in an ambiguity over the terminology associated with different age ranges. Table 5.2 illustrates the variation in age and terminology associated with different studies. It is evident that there is no consistency regarding what constitutes a definition by age of children, adolescents, youth or young people. Conscious of this factor the term employed in this project is 'young people', and it relates to an age range of 11-16 years. If the term 'children' is used, it will refer to those below the age of 11 years.

Table 5.2
Variations of age and terminology in studies on young people.

AUTHOR	AGE OF SAMPLE	NAME OF SAMPLE
Andersen et al. (1978)	6-17 yrs	children
Smoll & Schutz (1980)	9-11 yrs	children
Gilliam et al. (1981)	6 & 7 yrs	children
Perusse et al (1989)	M=14.5 yrs	children
Dishman & Dunn (1988)	school age (6+)	children
Simon-Morton et al. (1990)	8 & 9 yrs (grades 3 & 4)	children
Tinsley (1992)	5-16 yrs	children
Moran (1992)	5-16 yrs	children
Duda et al. (1992)	M=10.5	children
Slaughter et al. (1994)	10-17 yrs	children
TOYA & Education (1993)	13-21 yrs	children & young people
Godin & Shephard (1986)	12-14 yrs grades 7 - 9	young students
Andersen et al. (1978)	13-15 yrs	adolescents
Adeyanju & Creswell (1987)	14-18 yrs	adolescents
Reynolds et al. (1990)	grade 10	adolescents
Thorlindsson et al. (1990)	15-16yrs	adolescents
Sallis & Hovell (1990)	pre-school & school aged	children & adolescents
Janz et al. (1992)	7-17 yrs	children & adolescents
Anderssen & Wold (1992)	M=13.3yrs	young adolescents
Kibler (1993)	12-19 yrs	adolescents
Gill et al. (1981)		youth
Chisholm (1993)	18-25 yrs	youth
Sallis et al. (1992)	7yrs+	youth
Weiss & Hayashi (1995)	7-16 yrs	youth

Another problem reflected in all determinants literature is the difficult, if not impossible task of disentangling the degree of interrelationship between the various factors in each category of potential determinants. For example, ethnicity with socio-economic status (Dishman & Sallis, 1994). While the categories of potential determinants are addressed separately, they are most likely interrelated with each other on many different levels. However, many of these associations extend beyond the bounds of current knowledge and understanding and so remain expectations.[23]

> The need to study determinants of exercise in children has been recognised (Dishman & Dunn, 1988), but very few studies in this area could be located.
> (Sallis & Hovell, 1990: 315)

Studies on the potential determinants of physical activity in children and young people are limited, with insufficient conclusions being drawn to enable many informed statements on potential determinants to be made (Stucky-Ropp & DiLorenzo, 1993; Sallis, 1994). Research in different settings (free-living and supervised) shall be acknowledged where ever there is research to support them. Table 5.3 identifies three papers which have categorised the potential determinants of exercise and physical activity in young people. The categories which have been investigated on young people are similar to those associated with the investigation of adult populations. Sallis (1994) extends the categories and variables associated with each of these factors by identifying the nature of their relationship to physical activity (See table 5.4). The remainder of this section will concentrate on providing evidence relative to each category associated with the probable determinants of physical activity in young people.

5.3.1 Personal Characteristics

'Only a small number of the possible personal influences on physical activity have been studied in children' (Sallis, 1994: 32). Despite this, the following section will present evidence on the following factors; age, gender, obesity, race/ethnicity, smoking and developmental factors.

---

[23] The aim of this review is not to speculate, it is to identify grounded literature. Therefore, speculation regarding association between determinants is something which has been avoided in the first instance.

Table 5.3
A Summary of review articles on the potential determinants of
physical activity in young people

Sallis et al.(1989)	Sallis et al. (1992)	Sallis (1994)
ENVIRONMENTAL FACTORS	**BIOLOGICAL AND DEVELOPMENTAL FACTORS**	**PERSONAL FACTORS**
- home equipment		**BIOLOGICAL FACTORS**
- neighbourhood environment - convenience of facilities	- motor skills & activity - cardiovascular & musculoskeletal fitness - gender differentials (before and after pubety) - obesity - health status	- gender - age - obesity
SOCIAL FACTORS		**PSYCHOLOGICAL FACTORS**
- modeling history - modeling - media influences - friend support - family support	**PSYCHOLOGICAL FACTORS** - personality characteristics; - achievement motivation, - stress tollerance,	- knowledge of health results - knowledge of how to exercise - cues to be active - barriers to physical activity - perceived susceptability to obesity
COGNITIVE FACTORS	- social adequacy, - movement satisfaction	- intention to be active
- normative beliefs - self-efficacy - exercise knowledge - barriers - benefits	- self-confidence - independence	- attitudes about activity - subjective norms (perceptions of others' beliefs)
	SOCIAL AND CULTURAL FACTORS	- self-efficacy about activity - personality
PHYSIOLOGICAL FACTORS	- socioeconomic status - race/ethnicity	**ENVIRONMENTAL FACTORS**
- age - gender - body mass index - co-ordination	- peer influence - parental influence - significant others - social influences	**SOCIAL FACTORS**
		- peer modeling and support - parent modeling & support - teacher modeling & support
OTHER PERSONAL FACTORS	**PHYSICAL ENVIRONMENT FACTORS**	**PHYSICAL ENVIRONMENT FACTORS**
- education - exercise History - injury history - smoking - alcohol - diet	- time and place factors - seasonal variation - TV viewing - Acces to physical activity, facilities, and programmes	- day of the week - season - setting - organised programmes - TV and video games

115

Age

Sallis et al., (1993b), using self-report methods with over 100 young people from the age of 10-16 years, has shown that levels of physical activity decrease with age. This has been substantiated by other researchers using heart rate monitors on young people from the same continent (Sallis et al., (1989) in North America), as well as from Europe (Verschurr et al., 1985; Armstrong et al., 1990). Aaron et al., (1993) identified a significant decrease in the amount of physical activity from 12-14 years in girls, however, no association between age and physical activity was identified with males. It has been hypothesised by Erikson (1963) that the age of the young person would determine the extent of the influence parents have on them. The relationship is that the younger the child the greater the influence would be, however, while some studies have supported this (Godin et al., 1986; Buhrmester & Durman, 1987), others have not (Sallis et al., 1988). Throughout this section on the potential determinant of physical activity in young people, the interrelationships between variables becomes apparent, age is no exception.

Gender

The literature identifies gender as an important personal characteristic and potential determinant of physical activity, however, it is unable to determine whether it is a reflection of cultural and/or biological factors. Even though Eaton & Enns (1986) identified minimal differences in levels of physical activity in infants associated with their gender, they become different as they get older in pre-school (Kucera, 1985; Poest et al., 1989; Sallis et al., 1988), and as young people (Hovell et al., 1978; Gilliam et al., 1981; Sunnegardh et al., 1985; Fuchs et al., 1988; Ross & Pate, 1987; Sallis et al., 1992; Cale, 1993; Endicott, 1993). Males have been found to be more physically active than females (Gilliam et al., 1981; Wold & Aarø, 1985; Sunnegardh & Bratteby, 1987; Dickenson, 1987; Northern Ireland Fitness Survey, 1990; Thirlaway and Benton, 1993; Aaron et al., 1993; Cale, 1993; Sallis, 1994). Aaron et al. (1993) not only identified a disparity in the level of physical activity associated with each gender, but they also identified a difference in the nature of the physical activity in which they were involved. Males (11-16 years) were more than twice as likely to report participation in hard exercise and competitive athletics than females of the same age. This is reinforced by Gottlieb and Chen (1985) who state that Black and Hispanic males are less likely than their 'Anglo' peers to engage in aerobic-type sports. Girls on the other hand, have a lower frequency of exercise, although the activities they engage in have more potential for lifelong aerobic exercise (p538). Ignico (1990) studying 119 females and males between the ages 7 and 13 years,

Table 5.4

A summary of the relevance of variables associated with different factors
influencing young peoples' physical activity.

FACTOR	VARIABLE	RELATION TO PHYSICAL ACTIVITY
PERSONAL FACTORS		
Biological Factors	- gender - age - obesity	- boys are more active - activity declines with age - unclear, conflicting findings (obese prefer low-intensity activities)
Psychological Factors	- knowledge of health effects - knowledge of how to exercise - cues to be active - barriers to physical activity - perceived susceptability to obesity - intention to be active - attitudes about activity - subjective norms (perceptions of others' beliefs) - Self-efficacy about activity - Personality	- not related - related - related - related - not related - related - weakly related? - weakly related? - related - probably not related
ENVIRONMENTAL FACTORS		
Social Factors	- peer modeling & support - parent modeling & support - teacher modeling & support	- probably related - related, probably weaker in adolescence - unknown
Physical Environment	- day of the week - season - setting - organised programmes - TV & video games	- probably more active at weekend - most active in summer, least active in winter - more active outdoors - related - probably related

(adapted Sallis, 1994)

showed that gender may be a contributing factor in gender-role stereotyping and that gender-role perception does have an impact on activity preferences and selection.

Obesity

An interesting question posed by Sallis (1994), bearing in mind the fact that physical activity levels generally decrease with age, is 'does the lack of physical activity produce obesity, or are obese children particularly inactive because it is so hard for them to move around? (p33) As Sallis continues to comment, 'Both factors are probably true, but the available studies are in conflict whether obese children are less active than lean children.' In some studies obese children have been found to be less active when compared to normal weight children (Waxman & Stunkard, 1980; Kleseges et al., 1984; O'Connell et al., 1985). Waxman & Stunkard (1980) suggest that parents differentially reinforce physical activity in their obese versus non-obese children in favour of the non-obese. Sallis et al., (1988), however, found no such relationship in children of both sex in an ethnically contrasted sample. Therefore, the data on whether or not obese children and young people are less active than lean children and young people is once again inconclusive (Vara & Agras, 1989). Other studies conducted on obese children have shown that sex, height, fitness and obesity indices are not predictive of adherence to physical activity, although those children involved in low-intensity physical activity regimes showed greater adherence than others (Epstein et al., 1984a; Epstein et al., 1984b). Such findings on intensity link with others finding associated with parental obesity and its negative relationship with their child's level of physical activity, at pre-school age (Kleseges et al., 1990; Sallis et al., 1988), and as older children (Epstein, 1989; Worsley et al., 1984). Once more, as identified in figure 5.8, much of the evidence on obesity and its relation to children and young people's physical activity is unclear and conflicting.

Race and Ethnicity

Race and ethnicity are often confounded with socio-economic status (Gottlieb & Chen, 1985; Sallis et al., 1992; Taylor et al.,1994; Dishman, 1994c). However, even though socio-economic characteristics are often cited as important intervening variables when studying ethnicity and its influence on participation, differences in participation have still been evident when such factors remain constant (McMillen, 1983; Carr & Williams, 1993; Hutchinson & Fidel, 1984). In a study of Mexican- and Anglo-American families Sallis et al., (1988) uncovered greater aggregation of physical activity in Mexican-American families than Anglo-American families. The mothers exercise habits were related to the physical activity of both groups of

118

children being studied (M= 11.4 years & 13.2 years). Even though the effects of the sex of the child and the presence of multiple children in the family were not studied in this instance, the research did comment that the apparent ethnic variations in family aggregation could be induced by the variations in socio-economic status within those ethnic groups studied. The study concluded that there was moderate familial aggregation of physical activity for both Mexican- and Anglo-American samples.[24]

Gottlieb and Chen (1985) found that in a sample of seventh and eighth grade students made-up of Mexican-Americans, Blacks and Anglo-Americans, the Anglo-Americans were more likely to engage in physical activities which were more aerobic, individual and non-competitive. Greendorfer & Ewing (1981) also identify variations associated with different ethnic groups and the people who influenced them. They found that African-American children were influenced more by their brothers, while Anglo-American children reported their fathers as the most important influence. Neither ethnic background in this study identified any peer influence, although teacher influence was seen to be moderately influential. However, Reynolds et al., (1990) found that the influence of friends, in combination with that of the family members, predicted physical activity.

A significant race difference in the total leisure physical activity of over 1200 American males and females (aged 12-16 years), was found by Aaron et al., (1993). The 'white' young people reported greater median hours per week of leisure physical activity (males = 23.3h/wk and females 7h/wk) compared with 'non-white' young people (males = 18.9h/wk and females = 4.9h/wk).[25] Regardless of the overall level of participation between young people of different race, the patterns of their activity were very similar to each other. Yet again the gender variation between choice of activities and participation was emphasised with only half of the activities being the same between each sex.

A study conducted on over 900 individuals from different ethnic minority groups in Greater Manchester, showed that a combination of ethnicity and gender factors significantly influenced participation in physical activity (Carroll, 1993). It was

---

[24] Few studies have attempted to directly measure ethnic/cultural characteristics and identify their role in creating distincitively ethnic styles of outdoor recreation participation. A major reason is how ethnicity has been defined and measured. These studies have treated ethnic groups as homogeneous entities...The result is that important inter-ethnic variation is ignored including cultural origins (eg. differences between Hispanics of Cuban vs Mexican origin), and the degree to which one identifies with his or her own cultural origins. (Carr & Williams, 1993: 23)

[25] Aaron et al., (1993) segregates according to 'white'and 'nonwhite' young people, however, they do not define what 'white' young people are, and only superficially imply that 'nonwhite' young people are African Americans, Hispanics and Asians.

found that those Hindu or Muslim females who rated religion as more important, were less physically activity than others. The low value placed by Asian communities on sport and physical education has the potential of conflict between Asian children and their physical educationalists at school, as well as with parents at home, potentially resulting in a decrease in participation levels for these young people compared to others (Carroll and Hollinshead, 1992; Carroll, 1993).

Many of those studies which have been conducted on ethnicity and physical activity have concentrated on participation rates in certain activities, and while this is a valuable starting point, it remains just that. A greater understanding of the meaning and significance of participation in physical activity associated with ethnic groups is still required (Carr and Williams, 1993).

Smoking

Adeyanju & Creswell (1987) in their study monitoring trends in health behaviour and attitudes of ninety three 'at risk'[26] young people (14-18 years), found that in general there was a positive relationship between health status, health attitudes and behaviour. They identified smoking as a serious problem, increasing in the 4 year research period from 19% to 30%. They did not relate it to participation in physical activity, however, in a study using a national sample of 1200 Icelandic 15-16 year olds Thorlindsson et al., (1990) suggest that sport participation is linked directly (through health related behaviours, psychological distress and disease status) and indirectly (through distress and smoking) to perceived health. However, the direction of this relationship is from participation to health status rather than the other way. Elsewhere a modest relationship between exercise levels and smoking has been reported, with the more physically active 14-15 year old males smoking less (Gentle et al., 1994). Contradicting the negative relationships reported among young people (Escobedo et al., 1993), Zakarian et al., (1994) found a positive relationship between vigorous exercise outside of school and tobacco use. However, because of its contradictory nature compared to the other research, they suggest the relationship of exercise and tobacco use should be examined further. Brannen, et al., (1994) studied 843 15-17 year olds from state and independent schools between 1989 and 1992, using a self-completion questionnaire based on Balding's 'Health Related Behaviour Questionnaire' (Balding, 1989). They found that there was a statistically significant

---

[26] At risk refers to those individuals who were in the top 25% of clinical measures (height, weight, triceps skinfold thickness, blood pressure, body mass index (BMI) and resting pulse) from a total sample of 354 young people.

association between smoking habits of young women and parental smoking, but not between young men and parents.

Developmental Factors

Unlike adulthood, the period of childhood is a time of rapid physiological change in many respects. It is, therefore, apt that these developmental factors are addressed under personal characteristics. Even though at the age of 7-8 years, children are probably playing more games than at any other age with the establishment of their basic co-ordination skills (Cratty, 1986), there remains an unclear relationship between the level of physical activity and their developing motor skills. This is because as these motor skills are refined, the level of physical activity declines as they move towards adulthood. Gender variations associated with the activities selected by each sex may have physiological origins, in as much as the superior balance and co-ordination exhibited by girls over boys prior to puberty alters as they gain more fat mass after puberty and boys gain more muscle mass (World Health Organisation, 1978; Sallis et al., 1992; Toole & Kretzschmar, 1993; Horn & Claytor, 1993).[27] Hence activities may be selected by children on the basis of likelihood of competence associated with these physiological characteristics (Eaton & Enns, 1986). Pate et al., (1990) have shown a moderate correlation between physical activity and cardiovascular fitness in childhood. However, as Sallis et al., (1992) identifies, 'aerobic power per kg of body weight remains stable during childhood even as physical activity is decreasing, suggesting fitness may not be an important influence on activity levels' (pS249). Despite the amount of research which has been conducted on personal characteristics as potential determinants of young peoples' participation in physical activity, they remain limited in number and accuracy.

> In summary boys tend to be more active than girls, and
> gender differences in motor skills body composition, and
> socialization have all been proposed as mechanisms.
> Definitive research in this area is not available.
>   (Sallis et al., 1992: S249)

5.3.2 Environmental Factors (physical)

Yet again limited investigations have been conducted on environmental factors as they influence the participation of children and young people in physical activity. This is reinforced by Sallis et al., (1992) when they state that, 'conceptualisation of environmental influences is rudimentary, and few measures of physical environment

---

[27] See Horn and Claytor (1993) for a detailed review of developmental factors.

variables exist' (pS250). Environmental variables associated with children and young people can be broken down into components associated with the setting of the activity (inside/outside, supervised/free-living), time factors associated with participation (day/night of the week/end), weather and access to facilities. Attention is drawn to figure 5.8 which summarises some of the variables and their relationship to physical activity. Each of these variables will now be discussed.

Settings

It appears that the majority of physical activity in which young people participate is in a supervised setting (Ross et al., 1985). Kleseges et al. (1990b) have identified that the amount of time which is spent outside by pre-school children is strongly related to the enhancement of their level of physical activity. However, that variable most often mentioned is an indoor activity: television viewing/video games. While there is little documented evidence to support the contention that there are strong associations between television viewing and computer games, and participation in physical activity, the fact remains that such an activity does consume a proportion of each young person's leisure time. From a sample of 18,002 British young people (11-16 years), Balding (1987) concluded that watching television is a major past time, with 61% of males and 54.3 % of females between the ages of 11-12 spending more than 2 hours per day watching television. In addition Balding identified that this viewing profile remained relatively consistent over the 11-16 age range. The Northern Ireland Fitness Survey (1990) identified television viewing as the third most popular activity for females and second most popular for males (11-18 years). Studies from North America reflect similar findings. The National Youth Fitness Survey II (Ross & Pate, 1987) identified a mean value of 122 minutes per weekday for American children. Anderson et al., (1988) found a similar mean value of 131 minutes per weekday, while Sallis, (1994; 1994b) provides a mean of 24 hours per week for each child in the USA. The implication here is that it reduces the time available to do other activities, including physical activity.

Time Factors

Variations in weekend and weekday levels of physical activity have been identified in children 10-12 years (Sallis, 1994). It has been found that those children who did not receive one hour of vigorous physical education in school each day were more active at the weekends when compared with children who did receive such a quantity and type of physical education (Shephard et al., 1980). Studies on young people have identified that a lack of time to exercise is seen as a negative factor and a barrier to

participation (Tappe et al., 1989; Desmond et al., 1990). Tappe and her colleagues investigated the differences in barriers to exercise among 236 American young people (M=15 years 9 months), relative to their gender and self-reported levels of physical activity. The major barriers to exercise discovered in this study were; time constraints, unsuitable weather, school and school work and a lack of interest or desire. Those time constraints identified were found to be a significantly greater barrier for females than for males. In yet another study conducted on American sample of 257 ethnically diverse young people (M= 16 years), Desmond et al., (1990) found that a lack of time to exercise was one of seven variables (out of sixteen) which accounted for 52% of the variance between those in good and poor physical condition. However, this applied only to white and not black young people in the sample.

Weather

Ross et al., (1985) identify a seasonal variation in children's physical activity, with children participating in more physical activity in the summer than in the winter. However, this research was conducted on Canadian children and so it has to be considered in relation to that climate. In England, Cale (1993) showed that there were no seasonal variations in the amount of physical activity in which a random sample of 199 young people aged 11 and 13 years participated. Another finding of the Tappe et al., (1989) study discussed previously, was that unsuitable weather was a significant barrier to those young people wishing to participate in physical activity.

Access to Facilities

Many researchers have identified the importance of the geographical location of facilities and the associated accessibility and availability of opportunities for young people to participate in physical activity (Dishman et al., 1985; Stephens & Craig, 1990; Sallis and Hovell, 1990; Sallis et al., 1992; Sallis, 1994; Dishman, 1994). Zakarian et al., (1994) found that availability of exercise facilities was unrelated to the frequency of vigorous exercise and concluded that this was not an important environmental variable for adolescents. However, the discussion continues to be overwhelmed by the anecdotal opinions of researchers rather than by empirically substantiated ones, which unfortunately at this time are not yet available in any numbers. Therefore, a great deal of the discussions over physical environmental factors as potential determinants of physical activity in young people revolve around speculative and anecdotal relationships, e.g. consequences of computer game popularity and participation, socio-economic status of young people associated with

access to facilities, proximity of physical activity programmes and facilities and the relative safety of urban environments for children and so forth. Consequently, they have been omitted from this section.

5.3.3 Social and Cultural Factors

Family influence and Support

The role of the family and its influence on a child's participation in physical activity is a significant factor (Stucky-Ropp & DiLorenzo, 1993), acknowledged by the majority of studies of exercise determinants in young people, investigating various family influences (Sallis et al., 1988). Table 5.5 summarises the main findings of 30 studies conducted between 1979-1994 associated with families and their influence on young people's physical activity. While these studies are by no means all of the research conducted in that period of time, they are representative of the developments and focus which have occurred within the area. Perussé et al., (1989) studied 375 families (n=1,610) in Canada, the mean age of those young people involved was 14.6 years. They revealed that persons of the same family, regardless of their genetic association, may influence the physical activity and exercise behaviour of each member. Sallis et al., (1988) studying 206 families of fifth and sixth grade children from 12 different schools and of mixed ethnic background, support the interpretation that physical activity habits are moderately aggregated within families. However, they also emphasised that there are many forces acting concurrently, even though family influences may be a significant determinant. Parents have consistently been shown to have a strong influence on their child's physical activity (Sallis and Nader, 1988; Sallis et al., 1992; Armstrong, 1993; Brustad, Wiggins and Wyatt, 1995). For example, positive encouragement from parents towards the physical activity in which their child is involved enhances the child's level of participation (Klesges et al., 1984; McKenzie et al., 1991b). Gottlieb and Chen (1985) with an ethnically diverse population of 2,695 seventh and eighth grade students discovered that parental exercise significantly influenced the overall frequency of physical activity of their children. In addition, they found that parental exercise had a stronger influence on the frequency of exercise among the girls than it did among the boys. Gregson and Colley (1986) and Colley et al., (1992) have similarly found a significant association between the sport participation of parents and that of girls. Therefore, the morephysically active the parent the more physically active the child at pre-school (Sallis et al., 1992), as a pre-adolescent (Stephens et al., 1985; Sallis et al., 1993b;

Table 5.5
Characteristics of studies conducted on family and its influence on young peoples' participation in physical activity.

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Anderssen and Wold (1992)	• Norwagen children and adolescents • mean for 3 different ages; 11.5, 13.5 and 15.5 yrs • n=904	• To measure the influence of parents & friends on adolescent's self-reported leisure-time physical activity.	• Children whose parents, siblings and best friends take part in sport, the greater the likelihood those children will take part in sport. • Best friends sport participation is a greater predictor of participation than parents. • Same sex family members have a greater influence on participation than different sex family members. • A child's social network and significant others are interrelated. • Inactive older siblings negative influence on ptcpn. • Peer group: mutual influence to exercise
Brustad (1993)	• American children • fourth grade (m=10.4yrs) • n=81	• To examine the influence of parental socialisation and children's psychological characteristics upon attraction to activity.	• Parents high level of enjoyment gave child more encouragement. • Males received greater encouragement than females. • Parents fitness level not significant • Greater parental encouragement equalled greater perceived competence of child. • Males had greater perception of competence than females.
Chapin et al., (1994)	• Parents of American youth hockey players aged 10-17 years • n= 411	• To examine parental perceptions of the reasons children give for participation in youth hockey.	• Fathers believed that child played hockey for competitive reasons (excitement of competition) • Mothers identified broader range of reasons; to improve skills, to stay in good physical shape, for team spirit, to feel important. • Parents of older hockey players (14-17 yrs) rated reasons associated with recognition and competition as being more important (rewards, challenge) • Parents of younger children (10-13 yrs) believed children played for social & experiental reasons (eg be with friends, to have fun, learn new skills). • Parents who had been a player &/or coach reported social reasons as most important (fun and friends). • Parents with no experience of playing/coaching believed reasons for participation were; to win, stay in physical shape, release energy, to feel important, they like the coach.
Corbin & Laurie (1981)	• American parents of child baseball players • n=214	• To establish parental additudes concerning modifications in baseball for young children	• Majority of parents supported reduced competition and a focus on fun and skill development.

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Colley et al. (1992)	• American children • 9 years • n=60	• To examine the relationship between liking of play activities stereotyped for own or opposite sex, parental sport participation & recreational sport participation.	• Possession of masculine behavioural attributes and parental sports involvement associated with greater sports participation for females but not for males. • Liking masculine play activity was significantly associated with, and significantly predicted recreational sport participation for females, but not for males. • Parental sports participation significantly associated with recreational sports participation for females. • Overall finding indicate masculine behavioural attributes and sports participation in the family are important factors in female sport involvement before and after adolescence.
Crouter et al., (1993)	• white middle-class families • n=152	• To review findings from a longitudinal study of single-earner and dual-earner families with school-age children.	• Maternal employment in and of itself is not associated with particular kinds of outcomes for school-age males and females. • Parental handling of day-to-day activities are significant. • Males require greater structure (parental monitoring maternal involvement in joint initiatives) from parents than females do. • Females and males are equally likely to receive such structure in single- vs dual-earner families.
Finders & Lewis (1994)	• American Latino and low-income Anglo parents	• To understand why parents feel disenfranchised from school settings.	• Negative parental experiences at school. • Economic and time contraints. • Diverse linguistic and cultural practices.
Freedson & Evenson (1991)	• American children • 5-9 years • n=30	• To examine the stability and consistency of the Caltrac Accelerometer and an activity record to assess physical activity in children and adults and to determine if there is a relationship between parents & their children in physical activity level.	• Familial resemblence occured in 67% (father and child) and 73% (mother and child) of the families, using Caltrac Accelerometer. • Familial resemblence occured in 70% (father and child) and 66% (mother and child) of the families, using the activity record. • Children of active and less active parents exhibited physical activity patterns similar to their parents.

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Freysinger (1994)	• Married Euro-American parents • n=337	• To examine the leisure-parental satisfaction relationship	• Sex distinguished factors influence satisfaction with the parental role. For mothers the only significant predictor of parental satisfaction was marital satisfaction; the higher her marital satisfaction the higher her parental satisfaction. • For fathers marital satisfaction and leisure with children was significant predictors of parental satisfaction. That is, the higher a father's marital satisfaction and the more leisure he shares with children, the greater his satisfaction with being a parent.
Gill et al. (1981)	• American children • n=1,138	• To explore the participation motivation of children involved in sport.	• Fun and skill improvement are primary motivating factors. • Reasons for participation may be grouped into factors representing basic orientations; skill development, fun, energy release, success, team, friendship and fitness.
Godin et al. (1986)	• American children • 12-14 years • n=198	• To document children's perception of parental exercise, relating these perceptions to the self-reported parents' habits of exercise, and the children's own activity patterns.	• No significant associations observed between the children's perceptions of parental exercise patterns and their own like habits. • Congruence between the children's perceptions and the self-reported exercise habits of the opposite sex parent differed for boys and girls, increasing for boys and decreasing for girls. • During adolescence parental influences are minimised by other factors; personal or environmental.
Greendorfer & Lewko (1978)	• American children • 8-13 years • n=95	• To examine the role of family members in sport socialisation of children.	• Traditional comparison of family, peers and teachers is not applicable to girls and only slightly to boys. • Parents rather than sibling have a significant influence on males and females. • Examination of each family member's influence revealed that only the fathers served as a significant influence on a child's sport participation.

127

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Godin & Shephard (1986)	• Canadian children • Grades 7 to 9 • n=698	• To examine the influence of personal attributes and family environment upon the exercise intentions of students in grades 7 to 9.	• Attitudes, current physcial activity habits and prior experience of exercise all *contributed* significantly to explaining the variance in exercise intentions. • Over 50% of the total variance in exercise intentions remained unexplained.
Gottlieb & Chen (1985)	• American children • Grades 7 & 8 • m=2695	• To study the cultural patterns of exercise that might relate to future risk of heart disease.	• Heart knowledge, parental exercise, sex, father's occupation and ethnicity all significantly related to the overall frequency of exercise. • Parental exercise has a stronger influence on males than females frequency of exercise.
Hasbrook (1986)	Study One • American high school students • n=340 Study Two • American youth soccer players • 8-16 years • n=273	• To determine if a relationship exists between degree of formal youth participation and social class background.	• Youth sport participation is not associated with the social class background of males but to some extent, it is associated with the social class background of females. • Girls from lower social classes do not participate in youth sport to the extent that girls from the upper social classes do. • Boys from all social classes appear to participate in sport to an equal degree.
Jambor & Weekes (1994)	• American parents of children aged 5-10 years • n=168	• To investigate the combination of psychological, biobehaviorral and social-environmental parental influences, as part of the cost-benefit analysis in pre-adolescent children's adult-organised sport participation (AOSP).	• Parents who believed that AOSP was important, improved child's future life success, and resulted in children learning specific values (psychological), had them participating in sports. • Parents who financially supported child's AOSP, attended children's games and valued coaching behaviours (social-environmental), had them participating in sports. • Parents personal sport and physical activity involvement (biobehavioural) was unrealted to children's AOSP.
Lewko & Ewing (1981)	• American children • 6-12 years • n=319	• To investigate factors which predict a child's involvement in physical activity.	• For males important factors were; fathers level of activity, perceived ability, importance to father to be an active child, and mothers level of activity. • For females important factors were; mother's and father's level of activity, perceived ability, importance to child to be active, and mother doing active things with the child.

128

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Martinek (1994)	• American children • school aged	• To investigate how expectations of parents and teachers influence the self-perceptions of the child.	• Low expectations of parents and teachers equal negative interactions with the child and low evaluation of his or her performance actions. • Over time the low expectations form perceptions of low ability and a sense of uncontrollability over achievement and social outcomes.
Moore et al. (1991)	• American children (and their parents) • 4-7 years • children n=100 • mothers n=99 • fathers n=92	• To investigate the influence of parents' physical activity levels on activity levels of young children.	• Children of active mothers twice a likely to be active as those children of inactive mothers. • The relative ratio of being active for children of active father was 3.5:1. • If both parents active, child 5.8 times more likely to be active compared with a child of two inactive parents. • Important mechanisms for the relationship between parents and child's activity levels are; parents as role models, sharing activities by family members, support by active parents and genetically transmitted factors.
McCullagh et al. (1993)	• American youth soccer players and their parents • 7-14 years (M=10.8) • n=81 (f=22, m=59) (one parent of each child interviewed)	• To examine parental perceptions of their children's motivations and perceived competencies.	• Primary intrinsic motivation for participation for parents and children is fun and feeling good. • Both parents and children rated external reasons as the lowest priorities for participation. • Children rated all the motive subscales more positively than their parent. • No significant relationships were found between perceived competencies and motives.
McElroy & Kirkendall (1981)	• American school boys • n=988	• To investigate the relationship between parent/child differences in sport ability judgements and self-esteem.	• Significant interaction between perceived parental sport ability judgement and sons sport ability judgement. • Significant lower self-esteem when the children perceived their parents judgements of their sports ability to be different from their own. • Impact of differences in parent/child perceptions was not greater for children who highly valued sport.

129

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
McMurray et al. (1993)	• 1,253 American families	• To investigate parental influences on childhood fitness and activity patterns.	• Parents exercise benefits and barriers scale scores were weakly associated with child's VO2 max. • Mothers' association was significant, but fathers was not. • Childrens' self-reported activity scores were not correlated with parents' attitudes or exercise habits.
McGuire & Cook (1982)	• American children • 10-13 years • n=93 (f=47, m=46)	• To investigate the influence of others and the decision to participate in youth sports.	• Children whose choice to participate in youth sport was perceived as totally their own, were less likely to consider thoughts of quitting the sport and more likely to report high self-ratings of skill and ability than those whose choice was perceived as being greatly influenced by others.
Patriksson (1981)	• Swedish adolescents • 16 years • n=479	• To investigate the socialisation process of children and adolescents into sports involvement.	• Various agents of socialisation (peers, siblings and parents) taken separately, did not have any major correlation with the degree of involvement in childhood and adolescence. However, analysis of two extreme groups on which the environment (parents and peers) was positive towards sport and one in which the environment was negative, strongly supported the great importance of the joint effect of a positive or negative environment for primary (active) involvement in sport.
Perusse et al. (1988)	• Canadian families • n=13,440 households	• To assess the degree of familial resemblance in selected lifestyle components of Canadians.	• Evidence of familial resemblance was observed for every lifestyle indicator; leisure-time energy expenditure, times spent on activities, activity level, smoking status, drinking habits, sleeping habits and alcohol consumption.
Perusse et al. (1989)	• Canadian families • n=375 families (1,610 subjects)	• To quantify genetic and environmental determinants of physical activity and exercise participation.	• A genetic effect of 29% was found for habitual physical activity. • For exercise participation a cultural component of inheritance was found. • Non-transmissible environmental factors accounted for most variation 70-80%. • Familial environmental conditions shared by family members were found to contribute significantly to participation levels.

130

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Power & Woolger (1994)	• competitive swimmers • 6-14 years • n=44 (m=20, f=24)	• To investigate parenting practices and age-group swimmers participation in swimming.	• Parental support positively associated with child enthusiasm. • Parental support showed curvilinear association with performance outcome goals and directiveness. • Mother modeling positively associated with child enthusiasm for boys and girls. • Father modeling negatively associated with boys enthusiasm and positive for girls. • Parents who were supportive and provided moderate levels of performance pressure and instruction had children with the greatest level of enthusiasm for the sport.
Ross et al. (1987)	• American children • grades 1-11 (National Children & Youth Fitness Study II)	• To investigate the links between childrens' exercise habits in the context of home and community.	• Exercise and physical activity at home and in the community contribute significantly to the fitness of young children. • Sports teams and leagues attract twice as many boys than girls. • Most community organisations are shared equally by boys and girls. • Parental modeling acknowledged as important, but fewer than 30% of mothers and fathers of 1-4 grade children do not participate in appropriate physical activity. • Mothers and fathers exercise with children less than once a week on average, mothers exercise with equal frequency with sons and daughters, fathers spend much more time exercising with sons. • Strong sex bias in how parents and teachers rate children and how they rate themselves.
Snyder & Purdy (1982)	• American parents of children less than 15 yrs. • n=71 (mothers = 28 fathers = 43)	• To present evidence of the bi-directional parent- and child-effect view of socialisation.	• Parents become more interested and learn about sport though their child's participation in sport. • Degree of reciprocation influenced by parents past experiences/involvement in the sport (greater parental involvement in sport, greater likelihood of parent attending child's sporting event).

131

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Sallis et al. (1988a)	• American families of 5th & 6th grade children • n=206 families	• To investigate the aggregation of physical activity habits in Mexican-American and Anglo-American families.	• The family is an important socialising agent and a significant influence on physical activity. • Moderate degree of aggregation of physical activity for Mexican-American and Anglo-American Families. • Intra-family correlations higher for Mexican-Americans. • Mother - child correlations usually higher than father - child relations.
Sallis et al. (1988b)	• American pre-school children • 0-5 years (M=3.9 yrs) • n=63	• To investigate family variables and physical activity participation in pre-school children.	• The effects of parental role modeling on children's physical activity may extend to free-play settings beyond the confines of the home environment.
Sallis et al. (1992)	• American children • fourth grade • n=297 (m=149, f=148)	• To examine the relationship between parental behaviours and physical activity and fitness in elementary school-aged children.	• Parents reported physical activity was not associated with child's activity or fitness. • Availability of transportation by parents to sports and fitness activities was significant in two regressions for boys and in one regression for girls. • Parents who played with their children had more active boys. • Parental verbal encouragement to be active was found not to be significant.
Stewart & Goldberg (1992)	• American adolescents of parents with documented myocardial infarction • 12-19 years • n=65	• To determine if adolescents of parents with clinically manifest premature coronary artery disease are less physically fit and habitually active, and have less favourable lipid profile and more obesity than children of nonaffected parents, and if aerobic fitness and activity are related to obesity and lipids in adolescents.	• The relationships among parental history of premature coronary heart disease, exercise lipids and obesity may be gender specific.

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Smoll et al. (1979)	• American elementary school children and their parents. • grades 4, 5 and 6. • n=121	• To investigate the parent-child relationships regarding physical activity attitudes and behaviours.	• No significant association between parent's attitude towards physical activity (ATPA) and their children's physical activity attitudes, involvement or performance. • Generally non-significant relationship between the parent involvement domain and the children's attitudes, involvement or performance. • If parent involvement is a factor of consequence with respect to children's physical activity attitudes and behaviours, then it is the degree of shared rather than personal involvement which is important.
Sports Council - TOYA & Lifestyles (1992)	• British elite sports performers and their parents. • athletes 9-17 years • n=282 parents • n=453 athletes	• To study the positive and negative effect of intensive training within four sports (gymnastics, soccer, swimming and tennis).	• Social class and family type exert considerable influence on young people's opportunity to participate in elite sport. • Young athletes perceive their families to be closer more supportive and more adaptable to change than those who do not take part in sport. • Intensive training effected the lifestyle of the whole family as parents become involved in various supporting roles. • Intensive training meant less time spent doing other things eg. television watching. • No effect on making or retaining friendships. • Children involved in intensive training were less likely to experiment with cigarettes and alcohol at an early age. • Despite having to make sacrifices, many parents felt their involvement in sport strengthened family relationships as family members spent more time together.
Sports Council - TOYA & Education (1993)	• British elite sports performers and their parents. • athletes 9-17 years • n=275 parents • n=453 athletes	• To study the positive and negative effect of intensive training within four sports (gymnastics, soccer, swimming and tennis).	• Training has little regular effect on school attendence and truancy. • Homework was completed, however, time to do it was scarce. • Parents concerned about effect of sport participation on academic qualifications and job prospects, except for parents of footballers and tennis players.

133

(Table 5.5 continued...)

STUDY	SAMPLE	PURPOSE(S)	FINDINGS
Thomas (1985)	• English mothers of preschool children • n= 25	• To establish those obstacles to participation in sport in their everday lives.	• Desire to participate in physical activity is not lacking, it is the constraints which are too formidable; limitless range of roles and responsibilities and a crushing routine. • Mothers needs and identity defined mainly in terms of the service they provide for other members of the family. • Framework of their lives dictated by child's and husband's needs/work/leisure, which take priority.

1993c), and as a young person (Willerman & Plomin, 1973). Even though small samples were used in two complementary studies,[28] Kleseges et al., (1984) also provide evidence of parental influence over their child's physical activity participation. They noted that the direction of causality in such support was parent to child, with 82% of the encouragement from the parent to their child resulting in a change in behaviour and an increase in their activity levels. As Stucky-Ropp and DiLorenzo (1993) identify, this implicates parental modelling of exercise as a mechanism in the socialisation of children's lifestyle behaviour. However, the need to investigate them may well have been identified, but it cannot be supported with extensive empirical evidence at this time (Sallis et al., 1992).

> No literature specifically addresses modelling and physical
> activity. The potential for modelling effects within the
> family can be assessable by reviewing the literature on
> potential exercise patterns, parental exercise with children,
> and studied identifying modelling as a variable of interest.
> Such papers provide a conflicting pattern of results.
> (Taylor et al., 1994: 329)

The influence and support from agents external to the family are also recognised as potential determinants of a young person's participation in physical activity i.e. peers, teachers and sports personalities (Taylor et al., 1994). However, especially during adolescence peers are a great source of support and information for young people shaping their behaviour (Godin et al., 1986; Higginson, 1985; Buhrmester & Furman, 1987; Patriksson, 1981). This shift away from parental influence requires further investigation as a potential determinant of a young person's physical activity (Zakarian et al., 1994; Sallis, 1994; Taylor et al., 1994).

> Other people, including siblings, teachers, youth leaders,
> physicians, and sports figures may influence children's
> physical activity, but these potential effects have not been
> studied.
> (Sallis et al., 1992: S250)

Socio-economic Status

The literature on socio-economic status and physical activity in young people (regardless of the fact that a variety of measurement standards for physical activity and socio-economic status have been employed in them) generally agrees that socio-economic status is positively correlated with young people's physical activity (Gottlieb & Chen, 1985; Sunnegardh et al., 1985; Eaton & Enns, 1986). Aaron et al.,

---

[28] Study One - 2 male children aged 20 & 22 months (one normal and one overweight) and their parents, and Study Two - 7 males and 7 females ranging from 24 to 48 months of age and their parents.

(1993) and his colleagues, using a self-report questionnaire, substantiate such a relationship, but only in females. They found no such relationship between socio-economic status and physical activity levels when comparing males from low, middle and high socio-economic backgrounds. Zakarian et al., (1994) in their study of vigorous physical activity in 1,634 young people (5th to 12th grade) from low socio-economic backgrounds identified a decrease in the prevalence of vigorous physical activity with age. The ethnic composition of this study was predominantly young people from ethnic minority groups, therefore, a possible interrelationship between socio-economic status and the ethnicity of young people as a determinant of their physical activity participation may exist.

Education

Kuh & Cooper (1992) identify several childhood attributes from their longitudinal study of physical activity patterns and childhood predictors in over 3,300 adults. One of the most statistically significant attributes having an effect on activity in leisure time and in the work place, was educational attainment.

5.3.4 Psychological Factors

There are a variety of psychological factors studied with regards their influence on physical activity participation in youth. However, young people rather than children have generally been the focus of such research due to that limited cognitive development associated with younger children and/or the lack of satisfactory measures for such psychological variables (Sallis et al., 1992). However, Weiss and Glenn (1992) make an important point when they state that, 'What has been notably missing in this psychological research is consideration of the social context in which self-perceptions and goal orientations are formulated. What is most surprising about this omission is that both theoretical perspectives share the common assumption that social and situational influences mediate the relationships among self-perceptions, goal orientations and participation behaviour' (p144). Bearing this in mind the psychological factors will be reviewed.

In a comprehensive review of psychological considerations in youth sport, Brustad (1993) acknowledges the complexity of such a task, especially when many external but interrelated factors, also have to be considered (e.g. sociological and developmental). Attitudes have usually been found to be weak correlates of physical activity in young people (Sallis, 1994). To some extent, Butcher (1983) supports this with the results of her study on 661 girls aged 11-16 years. She found that personal attributes were not as influential as the socialising agents and socialisation situations (socio-economic status)[30] concerning participation in community organised physical activity. However, another study conducted on grade 7-9 grade students by Godin and Shephard (1986), identified that student attitudes were significantly correlated with their reported and intended exercise behaviours.[31]

Utilising the Children's Attitudes Towards Physical Activity (CATPA) inventory, Smoll & Schutz's (1980) studied, over a two year period, 114 grade 4-6 students in Washington, USA. Their findings oppose the concept of children's attitude to physical activity as an enduring characteristic in boys and girls. There were six sub-domains which constituted the questionnaire, all of which varied over a two year period.[32] Therefore, it was concluded that physical activity attitudes are not stable for young children, and involvement in physical activity (behaviour) relationships are at best moderate (Schutz and Smoll, 1986). Using a similar version of the CATPA questionnaire, Patterson & Faucette (1990) found that there was a significant difference between males and females (grades 4 & 5) relative to the aesthetic and vertigo subdomains. However, they could not offer any reasons for such differences. Smoll et al., (1976) also employing the CATPA questionnaire in a study of 264, 4-6 grade students, implied from their results that children are primarily involved in those activities for which they hold the most positive attitudes. This would appear to be a commonsensical expectation, however, Gentle et al., (1994) studying English 14 and 15 year olds (n=382), found that nearly all pupils had very positive beliefs about the importance of exercise to keep them healthy and fit, something which was almost

---

[29] Attitude in this context is defined as, 'a latent or nonobservable, complex, but relatively stable behavioral disposition reflecting both direction and intensity of feeling toward a particular object, wether it be concrete or abstract.' (Kenyon, 1968: 567)

[30] These are components of Kenyon and McPherson's (1973) model discussed in Butcher (1983).

[31] This study and others (Ferguson et al., 1989; Greenockle et al., 1990) employed the theory of reasoned action to eplain the intention to exercise or the actual physical activity in young people. While the development of psychological models or theories specific to physical activity are needed to expand this whole research area, as Sallis (1994) notes this particular theory is a weak model for explaining young people's participation in physical activity. More is said about this model later in this chapter.

[32] The sub-domains were: social, health and fitness, vertigo, aesthetic, catharsis and ascetic.

entirely independent of their exercise levels. Findings such as this are also in contrast to Godin and Shephard's (1986). Using 9th and 10th grade students, again in USA, Greenockle et al., (1990) discovered that a young person's personal attitudes about activity had less impact on their behaviour than did significant others (particularly their peers). As well as identifying a diminishing correlation between self-esteem and positive health attitude with increased age, Lamarine (1987) identifies an ethnic variation in the increased predictive value of self-esteem as a determinant of health attitude scores among Native American children (grades 2-11) when compared with white children.

Enjoyment over Exercise

'Enjoyment' often used synonymously with 'fun' in those studies conducted on young people,[33] has been cited as an important factor (Fox & Biddle, 1988; Rowland, 1990; Sallis & McKenzie, 1991; Freedson & Rowland, 1992), and motive for young people to participate in physical activity (Scanlan & Simons, 1992; Petlichoff, 1992; Stucky-Ropp & DiLorenzo, 1993). Conversely, lack of fun has been identified as a factor leading to discontinuing participation (Petlichkoff, 1992). Brustad (1988) examined sources of season-long enjoyment with 207 basketball players (male n=107, female n=100), and found that both males and females who perceived less parental pressure reported greater seasonal enjoyment. In a good summary of sport enjoyment and young people, Scanlan and Simons (1992) acknowledge that despite the difficulty encountered through direct comparison of studies, there are certain findings which persistently emerge as sources of sport enjoyment in the literature e.g. perceptions of competence, challenge, social interactions and extrinsic rewards. In 1987, the Athletic Footwear Association (1990) asked 10, 000 10-18 year old young people from 11 American cities, to rank 25 different reasons for liking the sport they played best (inside and outside of school), on a scale one to five (least to most important). They found that 'to have fun' ranked first (12.4%).[34] It is important to acknowledge that some of the findings presented in this section are limited in respect to the fact that the studies were conducted on young people who were participating in organised competitive sport most likely outside of school. For example, Gill et al., (1980) investigated the motives of male (n=720) and female (n=418) young people enrolled for one week at an intensive camp for sport instruction. It is not surprising that the main motivating factor for participation in this sample was to improve their skill

---

[33] This is because young people commonly use the term fun for the concept of enjoyment, which is a positive affective respons to the sport/physical activity experience that reflects generalised feelings such as pleasure, liking and fun. (adapted Scanlan and Simons, 1992).

[34] The definition of fun adopted in this study was; the quest for the balance between challenge and skill. If they are relatively in balance, enjoyment results' (American Footwear Association, 1990: 5)

level. However, fun was considered to be almost as important a primary motivating factor by the young people. Epstein and colleagues (1991) identify a preference in young people for physical activity with low levels of exertion. This is supported by Pollock (1988) and Dishman & Sallis (1994), who identified increased occurrence of injury associated with vigorous activity causing greater drop out rates. They identified a greater drop out rate generally from vigorous activity compared to moderate intensity activity. Even though the enjoyment over exercise section has been addressed independently from the self-motivation of young people, it is probably one of many factors contributing to the participation motivation of the young person, however, its relationship to motivation remains relatively unknown.

> Despite the apparently high ecological validity of a
> construct such as enjoyment, little is known about the
> nature and extent of enjoyment experienced by children in
> sport and exercise. Similarly, the relationship between
> enjoyment and motivation is understood merely at the
> anecdotal level associated with children.
> (Biddle, 1992: 105)

Self-Motivation

Weiss & Petlichkoff (1989) identify four main categories in which the motivational literature on young people's participation in sport can be classified. These are; competence (learning and improving skills), fun, affiliation (being part of a group) and fitness. Elsewhere, Weiss (1993) confidently concludes that, 'these four main areas...mastery of skills, perceptions of competence, supportive social influences, and positive affect are significant contributors to children's motivation to initiate and sustain participation in physical activity and sport' (p206). Gill et al., (1981) found that 365 competitive swimmers (8-19 years) rated fitness, skill improvement, fun, team atmosphere and challenge as their main motives for participation. There was a gender variation identified in this study. Females established friendship and fun as more important than the male swimmers, even though each sex had equivalent achievement-status ratings. Tappe et al., (1989) also identified a gender difference with a sample of 15-17 year old Americans. Females cited their main incentives as appearance, mastery, flexibility, strength and weight management, while males cited strength, mastery, appearance, flexibility and competition. Telama and Silvennoinen (1979) studied the structure and development of 3,106, 11-19 year olds' motivation for physical activity, and discovered that changes with age mean a shift from performance-oriented competitive motivation towards recreational motivation.

Gould and Horn (1984) conclude from their review of research on participation motives of young athletes, that there are diverse motives for young people to participate in sports,[35] and most young athletes have not one, but several motives for participation. In addition they note that various contextual and personal factors create differences in participation motives which are by no means consistent patterns. Conversely, studies have been conducted on young people's motives for discontinuing participation (drop out) in physical activity. Gould et al., (1982) identified that 84% of drop outs from a sample of 50 swimming drop outs (10-18 years), cited 'other things to do' as an important reason for their drop out. Fry et al., (1981) studied approximately 200 drop outs (8 - 16 years) from ice hockey in Canada. They discovered that 31% of them stated conflict with other activities as the main reason for drop out. Other reasons included: a lack of skill (15%), dislike of the coach (14%), too physical (10%) and organisational problems associated with practice and play times (10%). As Biddle (1992) points out the majority of the research on young people has been conducted within the sport setting, with little done outside of it, a situation which needs to be addressed.

Self-efficacy for Exercise

Self-efficacy is an individual's judgement of his or her ability to successfully organise and perform a behaviour (Tappe, 1992). It has been found to be strongly associated, or even predictive of physical activity in young people (Reynolds et al., 1990; Sallis et al., 1992; Taylor et al., 1994; Fox, 1992 & 1994). Contradicting this, however, Stucky-Ropp & Dilorenzo (1993) found that self-efficacy of the young people in their study did not emerge as an important predictor of exercise behaviour. As they acknowledge, this is somewhat surprising considering the previous research in the area. They suggest this variation and contradiction is down to poor assessment of self-efficacy in young people of this age (5th & 6th grade), and that it is simply not a powerful predictor of levels of physical activity at this time because of 'the less stringent requirements for participating in physical activity in this age group' (Stucky-Ropp & DiLorenzo, 1993: 887). The level of physical activity of young people has been shown to be associated with the self-efficacy of the young person (Reynolds et al., 1990). Reynolds and her colleagues found that higher levels of self efficacy were related to higher levels of activity in both males and females. However, gender differences were identified at the four month follow-up assessment of these 10th grade students, with self-efficacy predicted for females and not males. Due to the

---

[35] Such as seeking affilitation, to improve skill, demonstrate power, fun/enjoyment, pursue excellence, be independent, seek excitement, fulfill parental expectations, to win and receive rewards. (Gould & Horn, 1984 : 362)

temporal precedence present in the relationships between predictors, Reynolds et al. (1990) say it is implausible that students rated their level of self-efficacy in accordance with their level of physical activity (p546). Results from Horn & Weiss's (1991) study on 134 young people (52 females and 82 males), ranging from 8-13 years and participating in an summer motor skill instruction programme, provides support for the notion that there are developmental patterns in young people's perceptions concerning their physical competence. However, they agree with many other researchers when they stress the desperate need to conduct further research to clarify the situation.

Expected Health and Other Benefits

It has been suggested by some studies which have investigated exercise knowledge and behaviour in young people, that knowledge of the health effects of physical activity is not an important factor influencing participation in physical activity (O'Connell et al., 1985; Taylor, 1994). The literature consistently identifies a weak or moderate correlation having used various measures to study attitudes towards physical activity in young people (Neale et al., 1970; Godin & Shephard, 1986; Ferguson et al, 1989; Desmond et al., 1990). Sallis (1994) is in agreement with Gottlieb & Chen (1985) and Desmond et al., (1990), when he emphasises that knowledge about *how* to be physically active is more important than the knowledge of *why* be active, as a correlate of young people's physical activity.

> Knowledge, beliefs, and attitudes about physical activity in general are weak or inconsistent correlates, though it remains to be seen if some of these variables could have delayed rather than immediate impacts on activity.
> (Sallis et al., 1992: S249)

However, there remains a question over the use of such knowledge away from the population which generated it. The generalisability of all this research is something which has to be considered, along with the ambiguity and variation in terminology, when making assumptions relative to other populations when comparing studies.

> It is very important to note that the known research on the psychological aspects of youth sport involvement has been conducted in North America, particularly in the United States. Considerable caution is recommended, therefore, before generalizing the findings obtained in this cultural context to youngsters in other cultures.
> (Brustad, 1993: 695)

Many variables remain to be clarified and others identified with regards the potential determinants of physical activity in young people (and adults). However, this preliminary review has the purpose of establishing that evidence which exists, so that grounded questions for use in the initial interviews with young people could be constructed. Sallis et al., (1992) succinctly summarise the feeling and situation with regards research in this area when they state that:

> ...physical activity is determined or influenced by a variety of factors. No one variable or category of variables is expected to account for most of the variance in children's physical activity. Different variables may be particularly important for different developmental periods. Factors are expected to interact, though few interactions have been described. Most of the determinants studies have been cross-sectional, thus variables have found to be 'correlates' of physical activity rather than causally associated. (pS248)

5.4 International Perspectives and Trends

English children are the focus for this project, however, research conducted on children elsewhere in the world requires further attention, so that trends and perspectives which run parallel and/or tangential in different societies can be acknowledged and taken into account when comparing findings. The trends and perspectives associated with other countries will now be identified.[36] National surveys on leisure-time physical activity taken from representative populations are becoming increasingly available, with the methods employed by such surveys becoming increasingly more comparable.[37] Table 5.6 identifies several national surveys of physical activity conducted in different countries.

Kuh and Cooper (1992) identify the lack of physical fitness in the British population as a concern throughout this century, and expressed in a number of public health reports (Great Britain Parliamentary Papers, 1903, 1904; B.M.A. 1934). The emphasis in these Reports was on the population as a whole and not the child sub-component of it. However, recent studies conducted specifically on children in

---

[36] Some comparisons between nations have already been made in the first section of chapter five, however, this latter section addresses participation levels and perspectives adopted by each nation.
[37] This is only a relative improvement, the diversity of methods used to monitor physical activity (especially young peoples' physical activity), the variety in definitions of 'appropriate' levels of physical activity employed and the reliability and validity of such procedures, remain a major limitation and consideration when comparing studies.

Table 5.6
Characteristics of Various National Surveys on Physical Activity

COUNTRY	YEAR	STUDY	AGENCY	AGE	SAMPLE SIZE	METHOD
Australia	1989	Risk Factor Prevalence Study: Survey No.3	National Heart Foundation	20-69	9,328	Questionnaire
Australia	1990-1991	Pilot Survey of Fitness of Australians	Department of the Arts, Sport Environment, Tourism and Territories	18-78	3,384	Personal interview
Canada	1981	Canadian Fitness Survey	Statistics Canada/ Fitness Canada	7+	23,400	Questionnaire
Canada	1988	Canadian Fitness Survey	Canadian Fitness & Lifestyle Research Institute	10+	3,068	Questionnaire
Canada	1991	General Social Survey	Statistics Canada	15+	11,924	Telephone interview
Canada	1993	Health and Welfare Canada		15+	13,792	Telephone interview
England	1990	Allied Dunbar National Fitness Surveys	Sports Council & Health Education Authority	16+	4,316	Personal interview
England	1995	Young People and Sport	Sports Council for England & O.P.C.S..	6-16	4,000+	Questionnaire and interview
Finland	1980-89	Cardiovascular Risks in Young Finns		3-27	3,596	Questionnaire
Finland	1991	Health Behaviour Among Finnish Adult Population	National Public Health Institute	15-64	5,000	Postal questionnaire
Finland	1994	UKK Institute Report	National Public Health Institute	15-64	3,500	Postal questionnaire
Finland	1995	Paaesikunta et al.,	Finnish Gallup	19-65	10,972	Telephone interview
Northern Ireland	1989	Northern Ireland Fitness Survey	Queens University, Dept. of Educ. N.I., Sports Council & DHS N.I.	11-18	3,211	Questionnaire
USA	1987	The National Children & Youth Fitness Survey		10-17		
USA	1990	National Health Interview Survey	National Center for Health Statistics	18+	41,104	Personal interview
USA	1990	Behavioral Risk Factor Surveillance System	CDC	18+	48,745	Telephone interview

(adapted Stephens & Caspersen, 1994 & Oja, 1995)

143

Britain, have consistently reported low levels of physical activity (Hendry, 1978; Dickenson, 1987; Williams, 1988; Armstrong, 1989; Armstrong et al, 1990; Sleap and Warburton, 1992). The same picture of inactivity has also been uncovered elsewhere in the world (Hovell et al., 1978; Gilliam et al., 1981; Sunnegardh et al., 1985; Sallis et al., 1988; Rowland, 1990; Janz et al., 1992; Petlichkoff, 1992). Many studies reinforce the fact that young peoples' levels of physical activity are inadequate to promote the development of their cardiovascular system and the associated health benefits obtained from such development (Gilliam et al., 1981; 1982; Armstrong et al., 1990; 1990b). Table 5.7 summarises some smaller-scale surveys conducted specifically on young people from various countries. On the basis of those findings from studies presented in this and the previous table, certain aspects can be consistently identified across nations relative to young people participation in physical activity:

- Young people are not very active.
- Males are more physically active than females.
- Activity levels of young people decrease with age.

Having established a common association between the findings of international studies of varying size, attention is now directed towards a composite model of exercise behaviour, The Natural History of Physical Activity Model (Sallis & Hovell, 1990). This has evolved along with other theoretical models such as, attitude behaviour models (e.g. Theory of Reasoned Action, Fishbein & Ajzen, 1975; Theory of Planned Behaviour, Ajzen, 1985), The Health Belief Model (Becker et al., 1977), Self-perception Models (Self-efficacy, Bandura, 1986) and the Transtheoretical Model of Behaviour Change (Prochaska & DiClemente, 1984),[38] and all of which have begun to assert an influence on the direction taken by the behavioural research on young peoples' participation motives.

5.5 The Natural History Model of Exercise

One distinct improvement in recent determinants studies is in the application of multidimensional models, theories, and assessment batteries. The recognition of multiple influences allows comparisons between different types of determinants. A continuing shortcoming of the determinants research is that virtually all studies focus on the maintenance/dropout phase or do not discriminate between maintenance and adoption. A very small number of studies addressed the problem of adoption. Because of

---

[38] For a detailed review and critique of these Models see Biddle and Murtrie,1991; Tappe, 1992; Brawley, 1993 and Maddux, 1993.

Table 5.7

Characteristics of studies monitoring young peoples' physical activity levels.

STUDY	SAMPLE	METHOD	FINDINGS
EUROPEAN			
Durnin (1967)	13-15 year old British young people	Diaries	Boys spent 29 mins per day in heavy physical activity & 12 mins in very heavy activity. Females spent 10 mins in heavy & 3 mins in very heavy activity.
Seliger et al., (1974)	11-12 year old Belgiun young people	Heart rate monitor and interviews	3% of the males time spent on moderate or medium intensity activities. At no time did they engage in heavy intensity activity.
Hendry (1978)	15-16 year old Scottish young people	Self-report questionnaire	More than 50% of the males and 66% of the females were classisfied as non-participants.
Saris et al., (1980)	4-6 year old & 8-12 year old Dutch children	Heart rate monitor	The most active experienced activity of appropriate intensity to promote cardiovasular fitness and development for 15 mins in the 4-6 years category and 6 mins for the 8-12 category.
McKuster (1985)	15-19 year old Scottish young people	Interview questionnaires	More than 90% of females and males took part in recreational sport.
Saris (1985)	6-12 year old Dutch children	Heart rate monitor & questionnaire	Males more active than females
Verschuur & Kemper (1985)	13-14 year old Dutch young people	Heart rate monitor, pedometer & interview	A mean of 480 mins per week for males and 421 for females was found doing activities with an intensity greater than 5km/hour.
Wold and Aarø (1985)	11-16 year olds from 11 European countries	Questionnaire	Finding varied according to age, sex and country. Males more active than females and older young people least active.
Kannas et al., (1986)	Austrian, English, Finnish & Norwegian children	Questionnaire	Approximately a fifth of the sample participated in daily physical activity.
Marella et al., (1986)	14-18 year old Italian females	Questionnaire	Between 60% and 70% of the sample did no physical activity in their leisure time.

145

(Table 5.7 continued...)

STUDY	SAMPLE	METHOD	FINDINGS
The Sports Council for Wales (1986)	11-16 year old Welsh young people	Survey questionnaire	Greater than 90% claimed they were actively involved in recreational activities outside of school.
Dikenson (1987)	11-16 year old English young people	Interviews and questionnaire	Between 80 and 85% of young people did less than 5 mins of vigorous activity over the study week. 38.16% of males & 62.16% of females found to be totally inactive during the week.
The Sports Council for Wales (1987)	Welsh teenagers	Survey questionnaire	Less than 50% of males and 19% of the females participated in sufficient amounts of appropriate activity.
Fuchs et al., (1988)	German young people	Questionnaire	95% were found to spend on average two or more hours per week in physical activity.
Williams (1988)	English young people	Questionnaire	52% reported taking part in physical activity outside of shcool.
Armstrong (1989)	11-15 year old English young people	Heart rate monitor	Young people inactive; 50% of females and 25% of males failed to manage a single 10 min period of appropriate activity
HEA Survey (1989)	9-15 year old English young people	Survey questionnaire	Males did more exercise than females per week, 5.2 hours and 4.2 hours respectively. Activity decreased after the age of 12.
The Northern Ireland Fitness Survey (1989)	Northern Irish post-primary school children	Survey questionnaire	32.9% of males and 34.4% of females did no exercise outside of school in the preceeding 7 days.
Armstrong et al., (1990)	11-16 year old English young people	Heart rate monitor	Few children have few periods of physical activity of sufficient intensity and duration to stress the cardiopulmonary system.
Armstrong et al., (1990b)	11-16 year old English young people	Heart rate monitor	Seldom found to experience the intensity and duration of physical activity appropriate to stress the cardiopulmonary system.
Sleap & Warburton (1990)	English primary school children	Activity diaries and observation	Children found to do very little vigorous physical activity.
Armstrong & Bray (1991)	English primary school children (M=10.7yrs)	Heart rate monitor	Few children found to experiences the volume of physical activity associated with an improvement in cardiopulmonary fitness.
Armstrong et al., (1991)	11-16 year old English young people	Heart rate monitor	35.9% of males and 47.8% of females failed to manage a single 10 min period of activity with their heart rates above 139 bpm.
Riddoch et al., (1991)	11-16 year old Northern Irish school children	Laboratory Testing	No significant difference between girls and boys in terms of total activity, boys significantly more vigorously active than girls. A significant negative correlation between age and total activity for boys not for girls.

146

(Table 5.7 continued...)

STUDY	SAMPLE	METHOD	FINDINGS
Sleap & Warburton (1992)	English children	Observaton	A reasonable level of moderate to vigorous physical activity participated in, but it may not have been sustained long enough to produce a cardiovascular training response.
Thirlaway & Benton (1993)	10-16 year old West Glamorgan children	Activity diaries	Activity levels were low, males more active than females and younger children more active than older children.
SCANDINAVIAN			
Sunnegardh et al., (1985)	8 & 13 year old Sweedish children	Questionnaire	Older children less active than younger children. Boys more physically active in each age group.
Telama et al., (1985)	3-6 year old and 9-18 year old Finnish young people	Questionnaire	A large portion of young people found to be physically active
Engstrom (1986)	Swedish young people	Questionnaire and interview	90% of the population took part in light activity (comparable to walking), but little higher intensity exercise.
Sunnegardh & Bratteby (1987)	Swedish young people	Interview questionnaire	Younger children found to be more active than older ones, and males were more active than females.
Tell & Vellar (1988)	Norwegian young people	Questionnaire	Activity levels low. 16% of males and 22% of females reported to take exercise less than 2-3 times per month.
Telama et al., (1994)	3-27 year old Finnish young people	Questionnaire	Physical activity declines considerably after 12 years, but the intensity and strain are increased at the same time.
NORTH AMERICAN			
Hovell et al., (1978)	8-11 year old American children	Observation	Students were found to engage in little exercise during recess.
Shephard et al., (1980)	10-12 year old Canadian children	Activity diary and questionnaire	Vigorous activities accounted for only 0.44 hours per day for Quebec children.
The Canadian Fitness Survey (1981)	7+ year old Canadian children	Questionnaire	Only 3.5% of 10-12 year olds active enough to promote cardiopulmonary health.

(Table 5.7 continued...)

STUDY	SAMPLE	METHOD	FINDINGS
Gilliam et al., (1981;1982)	6-7 year old American children	Heart rate monitor	Children seldom undergo phyical activity of high enough intensity to promote cardiovascular health.
National Children and Youth Fitness Survey (1987)	10-17 year old American young people	Survey questionnaire	Approximately half of American children believed not to perform the weekly requirement of vigorous activity.
Baranowski et al., (1987)	American primary school children	Questionnaire and observation	Children only found to be active for short spurts rather than for the longer periods that might be expected to have a training effect and subsequent health benefits.
Kleseges & Kleseges (1987)	American pre-school children	Accelerometer and observation	66.79% of time spent in minimal intensity activity, 32.9% of time in moderate and 0.31 of time in extreme intensity activity.
Sallis et al., (1988)	3-5 year old American children	Observation	60% of free time spent in sedentary activities, 11% in vigorous activities.
The Campbell's Survey on Well-Being in Canada (1988)	7+ year old Canadians	Survey questionnaire	72% of 10-14 year old males and 49% of females active. 69% of 15-19 year old males & 39% of females were active.
Simons-Morton et al., (1990)	8-9 year old American children	Questionnaire	35.6% of males and females did too little activity to acrue cardiopulmonary health benefit.
AUSTRALASIAN			
Miyashita et al., (1983)	9-10 year old Tokyo males	Heart rate monitoring	The duration of daily exercise was found to be too short to be too short to develop cardiopulmonary health.
The Australian Health & Fitness Survey (1985)	Australian young people	Survey questionnaire	More than 1 in 5 males and 1 in 4 females did no activity outside school in the previous week.
Atomi et al., (1986)	9-10 year old Japanese males	Heart rate monitor	On average males spent 4.7% of their time at heart rates equivalent to 60% of maximal aerobic power.
Wright & Watkin (1987)	Grade 12 New Zealand young people	Self-report exercise diary	33.1% of females and 19.6% of males were in the low level participant category, 36.8% of females & 42.6% of males in medium level catgeory, and 23.6% of females and 32.9% of males in the high level participation category.
Wilson et al. (1993)	15-18 year old New Zealand young people	Questionnaire	Females are almost as active as males, and a substantial proportion of both sexes could be more active.
Gilby & Gilby (1995)	9-10 year old Singapore children	Heart rate monitor	Boys more moderately active than girls on weekdays. No gender difference on weekend. Lean girls more active than obese girls. Both sexes need to be more active.

(Adapted Cale, 1993)

148

the substantial numbers of sedentary adults in the
population it is essential to understand the determinants of
physical activity adoption.

(Dishman & Sallis, 1994: 215)

Figure 5.6 illustrates the phases of the natural history of exercise. It highlights the
transitions between phases of involvement with physical activity and the potential
routes open to young people, as well as the possible variation in determinants
associated with each phase.
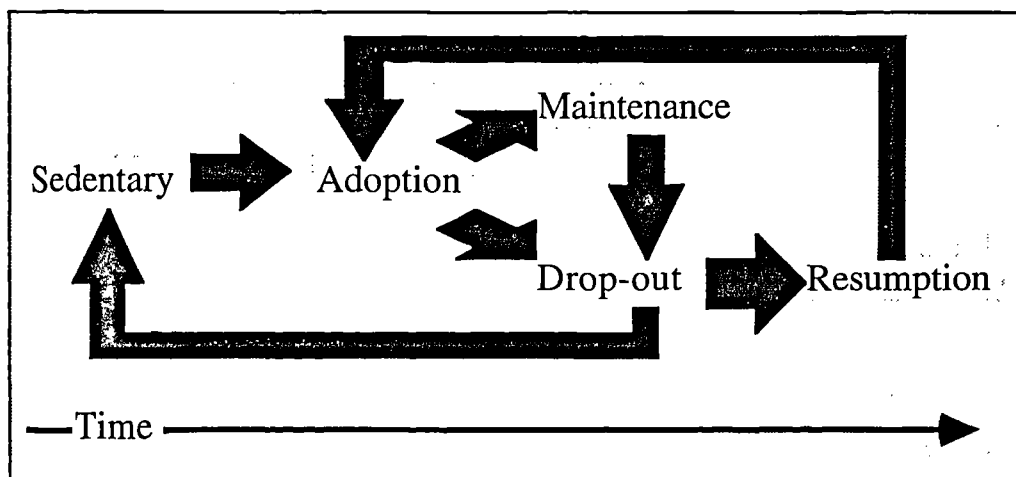
Figure 5.6 The Natural History Model of Exercise (Sallis & Hovell, 1992)

All be it a somewhat simplistic Model, the illustration of the potential junctures and
determinants affecting any transitions the young person may make are of interest.
Unfortunately its simplistic nature creates certain limitations. One of these is that not
all young people will automatically start from a sedentary state. In reality young
people will most likely begin from a variety of situations and be distributed across all
the stages illustrated. Another is that physical activity within the model is treated as a
dichotomous variable. In actual fact it is a continuous variable. The young person's
reasons for participating in a physical activity may vary with the stage of transition in
which they are involved at any given point in time (sedentary - adoption; adoption -
dropout or maintenance; dropout - resumption). It has been suggested that the Model
may only apply to structured physical activity, and not at all to children because of
their sporadic and spontaneous activity patterns (Biddle, 1994). However, it remains
unclear as to what factors determine certain phases, especially relative to a child
population. Therefore, one might legitimately suggest it is applicable, only it is likely
to be much more complicated due to its transient nature and factors such as the
cognitive development of the young person.

149

The best we can apply at this stage for children are models
developed to explain behaviour outside of physical activity,
such as Harter's (1978) competence motivation theory.
(Biddle, 1992: 106)

Yet again the infancy of this area of research is evident. There remain many
unanswered questions.

5.6 Summary

This fragmented literature review acknowledges the limited knowledge base on the
potential determinants of physical activity, especially with regards young people.
Translation to young people, of those assumptions made in each of the five general
categories selected to group potential determinants of physical activity in adults, is
not always applicable. This is due to the data simply not being available or just not
being significant to a younger population. Ambiguity and subsequent confusion as a
consequence of the variety in terminology employed by different researchers has been
identified, with terms being treated as synonymous with one another, inadvertently
creating inaccurate comparisons between significantly different populations. A
similar situation can be created with the use of such composite models as the Natural
History Model of Exercise (Sallis and Hovell, 1992), which may be applicable to the
adult population, but not to young people.

The distinction between the free-living and supervised activity setting generally made
in adult studies, cannot be made in the majority of studies on young people, simply
because of the lack of appropriate data. However, it is clear from the literature that
personal characteristics such as age and gender are strongly related to young people's
physical activity. The effects of the environment (physical) on young people's
physical activity may appear to be an obvious influence, but they have generally been
ignored in the research literature. Therefore, the majority of comments on television
viewing, video games and such like influencing young people's physical activity
remain anecdotal in nature.

A great deal more research has been conducted on the social and cultural factors,
especially on family influences and support. Parental influences are strong, and even
with a young person who is motivated to take part in physical activity, the support
they receive from the family (and potentially from additional significant others) is
important. Over time parental influence decreases as the young person moves into
adolescence and his/her peers becomes more significant and influential.

Psychological variables such as self-efficacy, enjoyment from exercise and self-motivation are important influences on young people's participation in physical activity. General variables of attitude and the expected health and other benefits from physical activity have been found to be weakly correlated with participation. Even though certain categories and factors have received greater research attention than others, the astonishing aspect remains the general lack of understanding created by the limited quality and quantity of research conducted on the potential determinants of physical activity in young people.

The minimal number of national scale studies, as well as those of a smaller scale, on young people's physical activity participation around the world, consistently revealed three common trends: young people are generally inactive, their physical activity levels decrease with age and males are more active than females. However, regardless of the limited research available developments are being made in its quality and quantity. It would be naive and foolish to believe that any one variable is the sole influence on a young person's participation in physical activity.

CHAPTER 6

GATEKEEPING

6.1 Introduction

The *gatekeeping processes* [1] presented in this chapter represent the analysis of interviews conducted with 29 young people of mixed sex and aged from 13 to 16 years and 16 of their parents, using grounded theory methodology to uncover processes influencing young people's[2] participation in physical activity.[3] A breakdown of certain characteristics of the sample population interviewed are displayed in Appendix L. In this chapter those who create the opportunity for young people to participate in physical activity (*gatekeeping agents*), along with the *roles* and *responsibilities* they adopt, will be identified relative to the processes which construct such opportunity (*gatekeeping processes*). The *gatekeeping processes* to be discussed are as follows;

- Negotiating Independence
- Safekeeping
- Rationalising Rewards
- Networking Strategies
- Reprioritisation
- Vacuum Strategies

While these six processes will be addressed separately, they are very much interrelated, declaring that no individual process, even though it may be dominant in a given context or at a particular time, completely determines a young person's participation in physical activity.

---

[1] The gatekeeping processes and their associated definitions and explanations presented in this chapter are generated solely from the grounded theory analysis. Comparable and alternative research, definitions and explanations will be injected where pertinent.

[2] The use of the phrase 'young people' has been awkward for the author. While the age of the population used in this study was 13-16 years, and even though they are school children, the author felt the most appropriate phrase to use was young people rather than children, adolescents or youth.

[3] The interpretation of physical activity enjoyed by the author is one that makes reference to a variety of physical activities from numerous contexts e.g. gardening, sport, work and so on. However, interaction with the interviewee's (young people and their parents) revealed their perception of physical activity to be a very much more focused and a considerably more narrow one, generally conjuring up or involving only a sporting context. This is significant when considering a young person's participation in physical activity because preconceptions such as these can not only inhibit the importance of physical activity as part of their lifestyle (i.e. that it is only for the elite performer), but even if it is given importance, the focus remains narrow initially limiting information on the way they might incorporate and maintain physical activity in their lifestyle.

6.2 Gatekeeping Processes - Passages to Opportunity

Gatekeeping processes create opportunities for young people to participate in all forms of activity, including physical activity. The boundaries to such opportunity and participation for each young person are constructed and manipulated by one or more of the *gatekeeping agents*: parents, peers, school and the young person themselves. *Gatekeepers* are those people who have the ability either directly or indirectly to facilitate or inhibit the physical activity a young person is involved in. The framework for opportunity created by one or more of the gatekeepers is extremely complicated with none of them existing in complete isolation to the others.
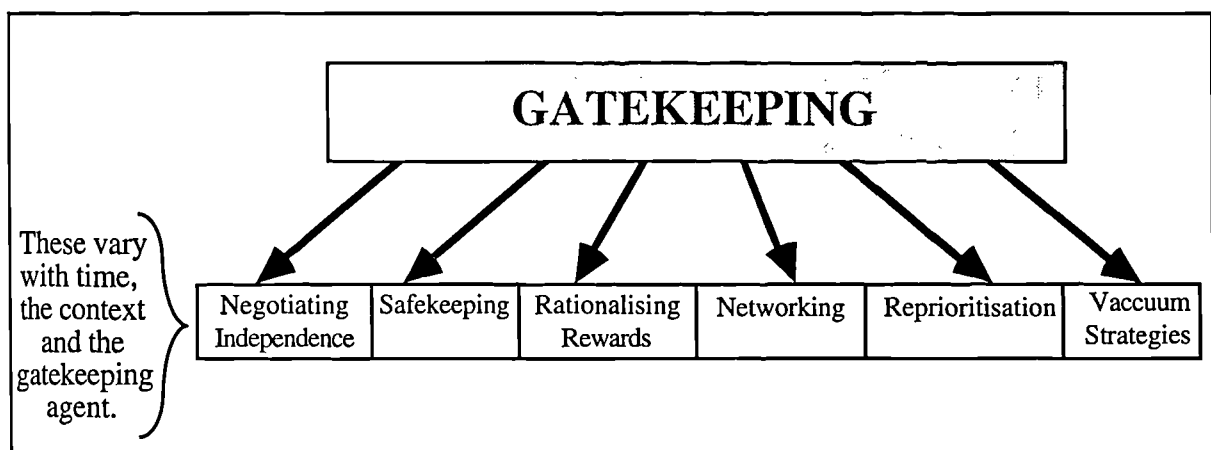
Figure 6.1 *Gatekeeping Processes* generating opportunities for young people to participate in physical activity.

6.3 Roles and Responsibilities

Each of the roles identified and adopted by gatekeepers have different implications for a young person's involvement and participation in physical activity. Every gatekeeper adopts the roles of *guardian*, *facilitator* and *enforcer*.[4] However, at any given time certain of these roles enjoys a relative prominence in a hierarchy over the others. This is constructed as a consequence of the specific situation and contextual circumstances of the young person as well as the other gatekeepers.

---

[4] Each of these roles has certain defining guidelines;
Guardian - to ensure the physical and emotional safety and well-being of the young person.
Facilitator - to provide opportunities to participate in activities.
Enforcer - to ensure behaviour and activity within certain limits identifiable by the gatekeeper.

6.3.1 Conflicting Roles

Even though gatekeepers adopt similar gatekeeping roles, they are defined and consequently manifest themselves quite differently for each gatekeeping agent. The materialisation of the varying agendas of the gatekeepers through their adoptive roles may or may not be compatible with each other, with one gatekeeper's desires potentially inhibiting the fulfilment of the desires of another. This exists between gatekeepers, as well as for the individual gatekeeper. For example, the role and actions of the *facilitator* adopted by a young person's peers, may be classified as far too liberal by the parents (and school) when compared with their definition of their role as *facilitator*. This subsequently creates conflict between the young person and their parent as they challenge each other in negotiations for a position along a continuum of *negotiated independence*. Brannen et al., (1994) acknowledges this same process when they state that 'the major challenge facing them as parents of adolescents is to balance care and concern with some control over young people's behaviour' (p53). Such a process can effect either positively or negatively the young persons involvement in physical activity. Conflict for the individual gatekeeper arises when for example their role as facilitator jeopardises their safekeeping role.[5]

> When young people make bids for independence, parents
> steer a course between care and control. All parents are
> concerned about the quality of their relationship with young
> people but also seek to continue to guide them as they
> move towards adulthood. While most parents want to keep
> close in affect terms, closeness contains other meanings
> where it refers to the work of caring for and regulating
> young people.
>
> (Brannen et al., 1994: 204)

Classification of the young person's involvement in physical activity as either positive or negative, is determined by an involved process of comparing the eventual negotiated position between the young person and other gatekeepers with each of their definitions of each of the roles they adopt at any given time. The closer the eventual negotiated position is to the young person's definition of their roles and subsequent desires, the more positively they perceive involvement in the physical activity. For example, the young person and their peers may feel the parents' (and schools') definition of their gatekeeping roles (based on their relative knowledge of society) are far too conservative, too inhibiting and limit their participation in the physical activity by regulating too closely the type, place, extent and time of the

---

[5] The parental gatekeeper wants to facilitate opportunities for the young person to participate in physical activities, however, they want to do it in such a way which does not compromise the physical or emotional safety of their child.

activity. The parental perception of their gatekeeping roles, however, may be considered contradictory to this and in no way extreme, especially when they take into account the internal compromises which they have made against their child's views and their personally perceived degree of incompatibility between the different gatekeeping roles they feel that they have to adopt. For example, the role of *guardian* and its associated supervision of the young person contrasts with the enhanced freedom associated with the role of *facilitator*, which creates opportunities for involvement in physical activity and the increased independence of the young person. When a particular gatekeeping role has the potential to contradict another in this way, the implementation of an additional gatekeeping role becomes a decisive factor, causing it to move towards either increased control or greater independence. The compromise situation created as a consequence of a contradiction between the *guardian* and *facilitator* roles, is in favour of control once the *enforcer* role is implemented by the parental gatekeeper. However, such a relationship is inversely proportional to the age of the young person.

> ...One has to be acutely conscious of the safety problem.
> Which is one of the reasons why we actually said yes to the
> pony because it's an environment in which she can have
> freedom.[6]

> Well that was the appeal of skating, as long as she
> promised not to go out of the rink I knew I didn't have to
> stay and watch her, she was safe in the ice rink. Again she
> has a secure and limited environment in which to exercise
> her own freedom.[7]

Compromise is an essential component on which most of the relationships between young people and the other gatekeeping agents are built. Regardless of the potentially different knowledge of society which parents and young people may have compared to each other (manifest in their conceptions of independence) such compromise (implicit or explicit), becomes acceptable to young people and other gatekeepers because it allows all those involved the chance to maintain or move further towards the achievement of their own agendas. In order to do this, the situation is continually being reworked and reprioritised, to varying degrees, by each of the gatekeepers. Consequently such relationships and inter-relationships become extremely complex, as are the negotiations that take place between gatekeepers to arrive at what are relatively unstable and transitory positions.

---

[6] P/N/55-56
[7] P/N/65

6.4 Negotiating Independence

For each young person and all gatekeepers there exists a continuum from purely independent action towards a complete restriction of activity. It is the conscious and unconscious interplay between all the gatekeepers that determines each young person's position along this continuum. This position, not fixed or permanent, changing over time and with context, directly influences the physical activities they are likely to be involved in. The degree of independence desired by and acceptable to each gatekeeper is determined to a greater extent, by their predominant gatekeeping role, not only generally, but also at the particular time of contemplation and involvement of the young person in the physical activity. Independence for the young person does not equate to taking complete control over all components of the activities they do, they are quite selective about certain aspects e.g. time allowed in and out, kind of venue, kind of activity. It is an undercurrent, a movement and quasi-challenge to what they consider to be the all-consuming control (that of the parents and possibly the school), that is exercised and which has existed and become increasingly overwhelming to this point in their lives, and which needs to be confronted in some way. Part of their challenge is to facilitate a greater degree of consultation and choice over the rules and routines exerted by gatekeepers (especially the parents). This challenge becomes more overt and radical with age, as the desire to exercise greater control over their decisions increases. The negotiation process between the young person and other gatekeepers, in all of its many guises, constructs this choice.

> Adolescence is typically a time when the childhood
> relationships with parents are re-assessed and re-negotiated
> as young people move towards independence and
> adulthood. During this period of transition, families can be
> both a source of strain and support.
>   (Hendry et al., 1993: 91)

In the following instance the family has recently moved home to a different part of the country, and in so doing the parents have recognised that despite their child's increasing age, the young person requires more freedom than previously given to him, in order to facilitate making new friends. The young person expects increased freedom with their increasing age ('I think they'd start easing off now'[8]), however, he respects this further compromise from their previously more strict approach, and responds with letting his parents know where he is going and what he is doing, which

---

[8] 2/A/165

156

works towards satisfying their *guardianship* role, and nullifying their *enforcement* role.

> Well, now they've started letting me do what I want really.
> They let me go out more, let me stay out late, I think this is
> because they want to let me fit in and get to know more
> people.[9]

Another young person, given definite times to come home, finds it unacceptable even though she has negotiated a later time at the weekends. However, the significant thing is that the parents maintain certain restrictions even with such negotiation and increasing in age of the young person.

> Mum will set a time for me to come in and all my friends
> will be able to stay out later and I want to stay out later, and
> I want to go in when I want to, instead they say I have to be
> back at a certain time....At weekends I'm allowed out until
> 11 to half past if I'm at someone's house.[10]

> They won't let me near the pub. All my friends are allowed
> to go there, I'm not.[11]

The concept of negotiation is a fundamental one, for it does not simply imply as concepts such as bargaining might, that the gatekeeping processes are entirely characterised by conscious and rational consideration of choices and planned actions. There is tension between other actors (gatekeepers) involved in the negotiation process. Negotiation is different from agreement, in that young people can agree without negotiation. However, there is room for negotiation between the young person and the gatekeepers if and when agreement breaks down. In accordance with Finch (1989), 'negotiations can be implicit as well as explicit, and need not necessarily be conducted at the level of conscious strategy.' In support of this Brannen et al., (1994) have constructed a 'Model of Parental Control Strategies and Outcomes for Young People's Autonomy' (See Figure 6.2). It reinforces as well as complements the structure of the negotiated continuum of independence identified in this study. This model locates the continuum of negotiation on the vertical axis with extremes from complete control by applying normative rules to the regulation of young people through communicative strategies (negotiations). The consequences of each strategy are located on the horizontal axis.

---

[9] 2/A/161
[10] 2/G/191 & 199
[11] 2/G/201 & 203

Parents adopting communicative strategies **1**

Young people high autonomy ———————— Young people low autonomy

Parents applying normative rules **2**
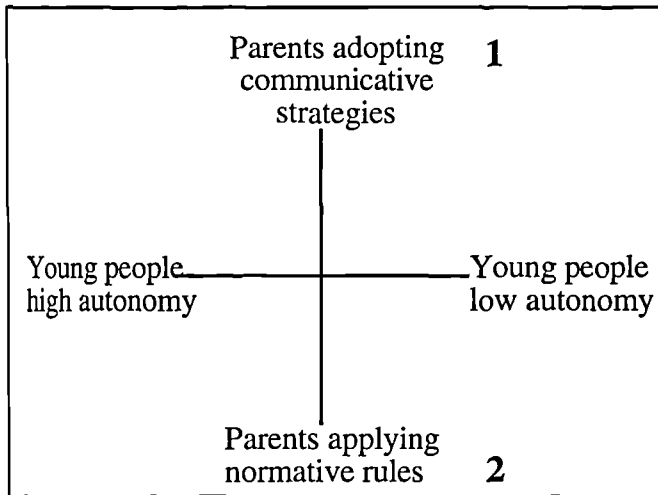
1 Parents who hold an individual developmental view of adolescence, for whom young people's status transitions are individually achieved, and who exercise control by indirect or covert means, and principally through enforcement of communicative strategies.

2 Parents who do not hold an individual developmental model of adolescence, who see young people's status changes as normatively ascribed on the grounds of their belonging to a collectivity, whether of enthnicity or social class, and who exercise control overtly through enforcement of normatively prescribed rules.

(Brannen et al., 1994)

Figure 6.2 A Model of Parental Control Strategies and Outcomes for Young Peoples' Autonomy.

A model initially constructed by Baumrind (1971) and later developed by Hendry et al., (1993) illustrates parenting styles as interactions of parental acceptance and control. The Model illustrated in Figure 6.3 emphasises the dimensions of parental control and parental acceptance which identify authoritarian, authoritative, neglectful and permissive parenting styles. It is generally agreed amongst theorists that

Parental acceptance

←—Low ——————High —→

Low

Parental control

High

Neglectful   Permissive

Authoritarian   Authoritative
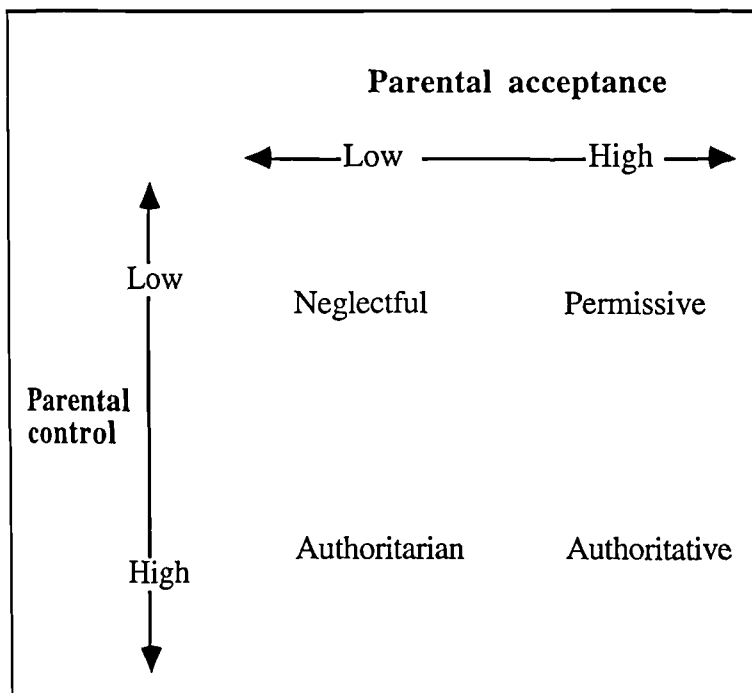
The authoritarian style involves rigidly enforced rules with low acceptance. The authoritative style combines reasoned control with love and affection; i.e. it involves setting firm limits but demonstrating acceptance by explaining the reasons behind policies and by encouraging verbal give-and-take with the child. In studying three of these styles, Baumrind found that children reared with the authoritative style were the most autonomous and content with themselves, while those reared with the permissive style were judged to be the least well developed in these areas. The level of the development of the children reared by authoritarian parents was in between the first two groups. (Hendry et al., 1993: 102)

Figure 6.3 Parenting Styles as Interactions of Parental Acceptance and Control.

moderate levels of cohesion and flexibility about rules and roles, along with clear and direct communication, and an emphasis on the autonomy of the young person, should be encouraged.[12]

The long-term process of individuation is assumed to begin in childhood, with the young person being left to discover their individuality and autonomy (Walerdine & Lucey, 1989). Chisholm (1993) considers this phase of transition, the youth phase, and its potential extension, as a positively constructed phenomenon in which young people can experiment with life and take time to personally develop. However, regardless of the length of this phase and despite the greater autonomy which children enjoy today, and the more relaxed and open relationship with their parents than earlier generations (Ashford, 1987), there are the constant problems associated with achievement pressures and a lack of financial autonomy for the young person. Parents, more specifically the mother, are seen to guide rather than control their children. This notion of guidance and relative freedom are conducive to the process of *negotiated independence*, for it identifies not only the way in which the young people, but the parents and other gatekeepers, are all guided in one form or another, to establish their own independence by slowly articulating a framework which evolves as it is constructed by themselves and others in their evolution as people.

> ...they should regard it as 'good' to let go of their children, and give them the space in which to create adult identities and take up their individual rights of citizenship. By contrast, there are no exit rituals for parents as they leave behind their more onerous responsibilities as parents.
> (Brannen et al., 1994: 136)

However, if one considers Brettschneider's (1992) contention that young people are now producers of their own biography (unlike their parents generation), relative to the apparently diverse and extensive options which young people have available to construct or produce their own lifestyle biographies, the situation becomes problematic.[13] This is something which Tinning and Fitzclarence (1992) similarly imply:

> The emphasis is on the power of personal agency to choose what individuals want to make of themselves in life. Of course their is a significant difference between 'being called on' to produce one's biography and the actual possibilities for doing so. (p296)

---

[12] See Noller and Callan, (1991) for a fuller discussion of this.

[13] Not only is the extent of this choice questionable, the understanding of many researchers interested in studying adolescent physical activity can be inappropriate because it is based on, 'their own (adult) understanding of sport *(and physical activity) which* differs from the adolescent understanding of sport (Brettschneider, 1992: 537. italics added).

159

In a world of greater variety and options, paradoxically
there are fewer real options available from which
adolescents can produce their own biographies. (p297)

The young person's and their parent's understanding of each others physical activity
and how it relates to each of their worlds may be limited because of the potential
mismatch in their interpretations of each.

...Their own (adult) understanding of sport differs from the
adolescents' understanding of sport. PE teachers too will
have difficulties in understanding the various sporting
activities of their pupils and students, firstly, because they
will see adolescent sport from an adult point of view
determined by their own process of socialisation, and
secondly, because their view will usually be restricted by
the school gym and outdated curricula while the
developments outside of school, social change in youth
culture, will often go unnoticed.
(Brettschneider, 1992: 537)

In terms of the young person's participation in physical activity this is a potentially
damaging situation. However, it is one continually highlighted across the
gatekeeping roles and processes, which identify a similar disparity in the definition of
their roles in different contexts. The result being that they often become controversial
and antagonistic towards each other. The process of negotiating independence
consumes and fuels this, helping to construct the reality of young peoples'
participation in physical activity.

6.4.1 Making choices - articulating boundaries and rules

The notion of choice consumes those factors that satisfy independence relative to the
young person's conception of it. Such choice is manufactured explicitly and
implicitly by various boundaries to involvement in activities which are governed by
the rules. These are created by the other gatekeepers, principally the parents, as well
as by the young person themselves. Brannen and her colleagues (1994), make an
important observation regarding rules and their associated expectations, stating that
they are easily conceptualised as 'normative' rather than classified as rules on the basis
of the interviewees' own accounts.[14] This reinforces Cunningham-Burley's (1985)
and Finch's (1989) claim that the inference of normative guidelines from the reported
behaviour of the interviewee is problematic to say the least. The very notion that

[14] Their notion of rules are those parentally constructed ones which create control over their children's
behaviour. These are well summed-up by a term borrowed from Cunningham-Burley (1985), called
'household rules'.

160

behaviour is rule-governed is itself in contradiction to the idea that actions flow from meaning structures which individuals actively create. However, between the two extremes of the 'constrained actor' and the 'free agent,' is the possibility that these theoretical opposites are co-existent aspects of social action.

> To say that rules do not play some part in an individual's negotiation of daily life is not tantamount to claiming to all social actions are determined by external forces. Likewise, to claim that individual action is not constrained by its social environment and hence does not require regulation (whether formal or informal) is to ignore the interactive nature of that individual's environment.
> (Cunningham-Burley, 1985: 423)

This remains an important issue in the research process, however, it is the theoretical sensitivity and expertise of the researcher that is used to separate what actors say they believe, from the way these beliefs may be considered to operate in particular situations. Therefore, it is important to look at the way individual's use rules rather than consider them as having an independent existence as elements of an individual's social environment (Cunningham-Burley, 1985).

Accepting the Essence of Rules

The rules discussed here are not clear cut prescriptions for the behaviour of the young person or the gatekeepers, emphasising the process of negotiation which is fundamental to their form and role. The explanations of rules and the subsequent behaviour take into account the individual's unique perspective and the way in which they define them, as well as the normative order. The process of negotiating independence (and its construction of boundaries and rules), identifies guidelines which have been invoked by the young person and gatekeepers to determine appropriate behaviour relative to participation in physical activity.

Differentiating the Rigour of Rules

The existence of parental rules is related to the likelihood of young people engaging them. Differentiation in the rigour of rules is an essential factor governing the overall success of the negotiation process for all those agents involved. This is regardless of their position along the continuum and, therefore, is indirectly influential on the young person's participation in physical activity. It occurs as a consequence of the gatekeeping processes. It is the interplay between a multitude of variables not only from the particular roles adopted by the gatekeepers, the perceived independence and choice of the young person, but also the different contexts in which the activity takes

161

place. Such differentiation can enhance as well as inhibit participation by gatekeepers creating opportunities in organised environments in which the boundaries of participation and behaviour are clearly established and remain so. However, the opposite may apply when situations are perceived as undesirable by the young person because they are perceived to be too prescriptive and do not exhibit their notion of independence at that time.

Elsewhere rules operated by parents have been categorised as 'strict', 'flexible' or with 'no rules' (Brannen et al., 1994). These rules correspond to a variety of issues such as homework, part-time jobs, smoking, drinking, physical activity, money, friends and coming in at night. The notion that rules have a place relative to most issues and situations is an important one. Contested to varying degrees by the young person and gatekeepers, the place and importance of rules still receives fundamental agreement from them all. While they may not agree on the specific nature of each rule in any given context, the principal is accepted because it allows the young person and the gatekeepers to construct an initial framework for all parties to work around and build their position upon, while engaged in the gatekeeping process.[15]

It is essential from the point of view of the young person that they have choices that are either inter- or intra-activity, or preferably both. For example, choice to make decisions about the kind of activities and the contexts they can go to, as well as the choices that exist within the activity, e.g. within a youth club what alternatives exist? or at a club what other spin-off activities are there to be socially/physically active? However, these are only the explicit choices a young person makes regarding their participation in physical activity. In addition there are implicit choices which are not overtly acknowledged as a consequence of the boundaries created by rules and routines of other gatekeepers. Bargains are made in situations where there is a varying degree of conflict of interest between two or more gatekeepers. This mechanism is used to either achieve compromise between the gatekeepers or to promote the interests of one at the expense of the interests of the other(s). This manipulation can potentially lead to the involvement of coalitions to achieve and/or maintain a situation within a networking framework created in various contexts, be it the immediate family or with various external gatekeeping agents.

---

[15] Safekeeping process are an excellent illustration of the differentiation of the rigour of rules, with the gatekeeping agents differentiating established rules and introducing specific ones, to suit the context and to accentuate a parentally desirable nature to the young person's involvement within such a context. Rules which are otherwise flexible in certain situations become strict with a change in gatekeeping roles and/or context. The negotiation associated with these rules is inversely proportional to their strictness even considering the many intervening variables.

How long have you been allowed to travel independently of
parents on public transport?
Not that long ago. All my friends wanted to go into
Leicester so I asked my Mum and she wasn't too sure about
me going into Leicester because it's big, but she let me in
the end, and she lets me now.[16]

But, regardless of the particular circumstances, the nature of the concept of bargaining
requires the interests of each gatekeeper to be made explicit. However, this fails to
take into account those unconscious, implicit and equally important components
which contribute to an understanding of the processes involved in a young person's
participation in physical activity.

Finch's (1989) comments on the work of Strauss (1978) are particularly relevant not
only because of their clarity, but because of their translation and corresponding
affinity with the gatekeeping roles and processes that have been identified and which
are discussed later.

> The process of negotiation constitutes one of the possible
> ways of 'getting things done' in social life. Other possible
> ways of getting things done include coercion, persuasion
> and manipulation. This seems to me to have particular
> relevance to the study of family relationships, where the
> process of negotiation itself may be intertwined with
> coercion, persuasion and manipulation. Looked at in this
> perspective, negotiations need not imply full agreement is
> reached and all parties go away satisfied at the end.
> Negotiations may be conducted partly *through* these other
> means.
>
> (Finch, 1989: 180/1)

Progressively Negotiable Aspects - Bargaining with Gatekeepers

Choice for young people exists within narrowly defined, but slowly expanding,
boundaries constructed by their commitment to the various rules constructed by
gatekeepers and themselves. As they get older the young person's explicit and
implicit choices multiply, with the fundamental parentally defined boundaries which
they have had to exist within and relate to, becoming increasingly more blurred. This
enhances the young person's relative autonomy. In conjunction with their perception
of increased autonomy and 'choice' comes increased articulation and internalisation of
the young person's motives allied to their apparently increasingly independent actions
(e.g. the rationalisation of rewards process). As Hendry et al. (1993) acknowledge
there is in essence a difference between children and young people relative to 'the

---

[16] 2/D/234

163

nature of the challenges encountered and in the capacity of the individual to respond effectively to these challenges' (p114). The increasing articulation of the young person enables them to present their desires and needs to gatekeepers in an increasingly more coherent manner, and for that matter for the gatekeepers to respond with a similar degree of articulation of their own desires due to the increased ability of the young person to appreciate and comprehend them. All this makes the bargaining portion of the negotiation of independence process a more civil affair. Overall there is a movement away from coercion and the use of sanctions towards more reasoned persuasion and the building of trust in a greater number situations.

> Just go out on Friday nights and they trust me. I mean
> things like public transport, some people aren't allowed to
> do that but they trust me and they know I won't do
> anything, they know the kind of person I am so they can
> trust me.[17]

If the activity is an unacceptable one to the gatekeepers or young person, and if there is not trust, coercion remains and the enforcement role is dominant, making for a very confrontational situation. An increase in the range of choice for the young person (and gatekeepers) may create further opportunities for participation in physical activity. However, it may equally inhibit participation because of the temporal constraints created by wanting to participate in proportionally too many activities at any given time. This remains true in the majority of cases, it does not in all. For individuals involved solely in a particular activity it is a quite different situation, starting with narrowly defined boundaries which can remain narrow.

> I've kept in tennis all this time since I was very young, and
> never done any others.[18]

hoice for the young person becomes somewhat limited because they have not perienced any substantial alternatives to those generated by the particularly rerwhelming context.[19] Commitment to the activity (practice, training, ompetition) consumes so much of her time that the young person is unable to ncorporate other things into her lifestyle. Coakley (1991) talks about a levelopmental tunnel' related to elite adolescent performers. This refers to a narrowing of the social experiences for this level of performer, so that dimensions of

---

[17] 2/K/173

[18] 1/E/42

[19] It does not necessarily have to be a physical activity. It could be any activity or context which inhibits involvement in any other activity the principle remains the same. The motives of the gatekeepers and the young person appear to be more evangelical within the sporting context than in other activities.

their self are narrowed to incorporate only small variations in a specific set of 'desired' experiences.[20] In its most extreme form this creates an identity constriction which is inadequate for life outside of the particular sporting context, as illustrated in 6.4.

Consequently, in the event of any dissatisfaction or long-term non-achievement of the young person's desires from the particular physical activity they have been engrossed in, they are stranded in an awkward situation. They only have limited alternatives that can be generated from the context in which the majority of their experiences have been created.[21] In such a situation the young person is forced to either move outside the activity that they feel they have failed in (relative to those expectations created by themselves and by others), or they can stay within such a context supported by the
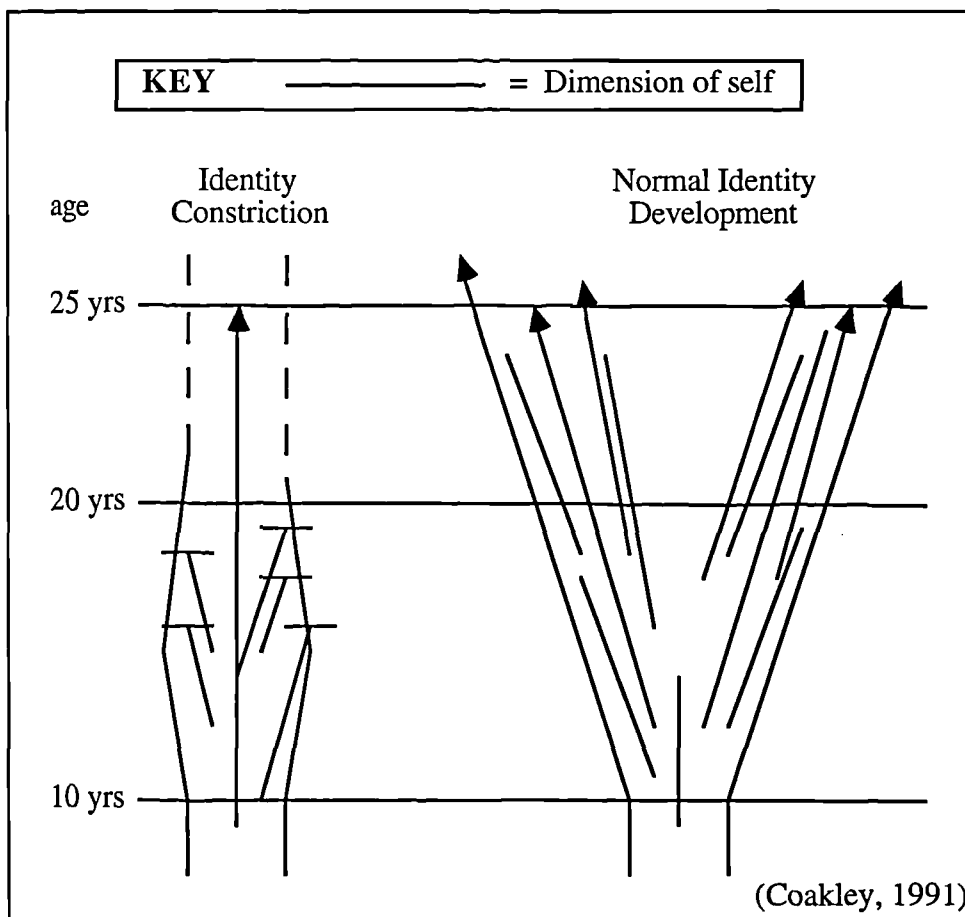
Figure 6.4 'The Developmental Tunnel' and the Constriction of Identity of Elite Adolescent Athletes.

---

[20] In a 'normal' young person these social experiences broaden and branch out as they get older and gain greater experience in a variety of situations and contexts.

[21] The combination of alternatives and investments distinguishes between burnout and dropout here. Young people who 'burnout' perceive their alternatives as less attractive or non-existent, whereas 'dropouts' can elect to switch to an activity that is equally or more attractive than the present one (Schmidt and Stein, 1991).

fact that it remains one with which they are familiar with), however, continued involvement would constitute the adoption of alternative roles that satisfy a redefined and reprioritised set of expectations from the context.

> I probably want to get a coach's award kind of thing so if I
> don't actually become a pro I'd like to coach other people.[22]

6.4.2 Constructing a Blue-Print for Participation

All parents to some degree want their children to benefit from a variety of opportunities and experiences between and within as many contexts as possible, so that the young person may reap physical and especially emotional benefits in later life. Be this an unconscious or conscious strategy, parents direct their efforts in all their gatekeeping roles to facilitate this. Some parental gatekeepers are more able than others to rationalise and direct their efforts effectively and efficiently because of their personal experiences of the particular context. This 'resourcefulness'[23] associated with a knowledge of the context and the ways in which to make adaptations to that context, is an important and relevant one here. Duffy (1988) relates to this when he makes note that the young person's relative interest in physical activity is related to the crucial knowledge of resources which they are presented with in their upbringing. Something which is reiterated by Witt and Goodale:

> There seems to be some advantage in having knowledge of
> resources, knowing how to use resources, and having
> contact with people with whom to participate as a function
> of either training, job related opportunities.
> (Witt and Goodale, 1981: 37)

The underlying intention to give the young person as many experiences as possible remains a constant one for all parental gatekeepers. However, the manifestation of this desire is governed by other factors, one of which is the previous experiences of the gatekeepers in that context. They help to construct a 'blue print' for participation. This 'blue print' increases the young person's familiarisation, as well as focusing involvement and interest, ultimately establishing the most efficient use of resources. The assumption should not be made that these experiences are only positive ones. The opposite also applies, where the negative experiences of the parental gatekeeper also help construct a 'blue print' for participation. This acknowledges such negative experiences and attempts to eliminate or positively cater for them. It has significant

---

[22] 1/E134
[23] See Rapoport and Rapoport (1975)

166

implications associated with the parental rationalisation of rewards process, as it influences the young person's participation in physical activity.

The greater the perceived choice a young person is given in any physical activity context, the greater the likelihood that they will gravitate towards that activity. This is simply because of the rewards it offers or can potentially offer. This choice (and corresponding perceived independence) is greatly enhanced by the variety of activity the young person has experienced in different contexts and situations in their past. Such experiences give the young person (and the other gatekeepers) a form of 'blue print' for participation which helps to reduce or eliminate the negatively perceived 'unknown'[24] aspects associated with participation in an extending or new context. In the process hopefully maintain the young person's involvement into later life.

> She started fairly early on in primary didn't you?
> You preferred the ball games didn't you, netball and all the
> others. Lack of facilities (*caused gymnastics to stop*).
> There was only the sports centre to go to and that was for
> us right into the city which was quite a way and at that time
> although she enjoyed it, she also enjoyed other things,
> anything connected with sport, she would have a bash at
> and she would be reasonably good at.[25]

> It'll help me in later life. More experience, being able to do
> more things and with netball just being able to do more
> sport and being more fit. ...Just being able to, say I can
> play netball now, then I'd be able to join a netball club then
> when I'm older, not just sit and watch TV or whatever.[26]

Generating such experiences for the young person as early as possible creates not only a participation 'blue-print', but an overall empathy for the physical activity and its context. This can facilitate an increased likelihood of maintaining participation in it over time. Having experienced a variety of physical activities the young person has a broad base of activities to select from. There is movement back and forth between different activities at various times of a young persons life in order to explore new boundaries of participation. Given that in essence, a variety of physical activity experiences facilitate a greater choice for the young person and familiarity with different physical activity contexts reduces inhibitions to participate in them, when the young person does explore and potentially extend new boundaries of participation

---

[24] 'Unknown' equates to a lack of understanding and appreciation of any of those expectations from the physical activity context (physical or emotional)by the gatekeeper. This can be extremely daunting for the young person who literally does not know what is expected from them or what they can expect when participating in the physical activity.

[25] P/R/225 & 27

[26] 3/K/61 & 63 & 65

in an activity it is equally likely to be within a physical activity context as in any other, if not more so. One important factor here is the foundation of a variety of experiences that have been established, familiarising the young person and other gatekeepers with different physical activity contexts.[27]

A relatively narrow avenue of choice created by a lack of experiences in physical activity and the consequential lack of familiarisation with the contexts, serves to inhibit participation in physical activity not only because of the lack of variety and associated lack of incentive, but also because they remain unsure about the expectations to be placed upon them as participants and as gatekeepers in such a context. This 'uncertainty' serves to create an environment which, for the young person, can become too threatening to explore. Alternatively, having numerous experiences at an earlier age to draw upon, and situations in which they can experiment with performance criteria, they are in a more favourable position to determine their likes and dislikes.[28] A young person with an established catalogue of experiences in physical activity is much more capable of adopting alternative physical activity to maintain their interest. Activity moves in and out of favour relative to other activities the young person is involved in. This is partially as a consequence of negotiations and its associated juxtapositioning between the young person and the other gatekeepers. The young person inhibited by a limited awareness of alternative activity, has limited choice when frustration and/or dissatisfaction with an activity arises, as it does at various times in the life cycle. Those alternatives which are sought therefore become more and more predictable e.g. television, video games, walking the streets, all of which heighten the feelings of dissatisfaction for the young person. However, the redeemable quality of such apparent inadequate alternatives for the young person is that they are easily adopted when the need arises without any long-term consequences or commitment on their behalf.

6.4.3 Locating Activity to Maximise Appeal

Activity conducted away from their home environment[29] increases the appeal of the activity for the young person; "I think I have got more of a sense of freedom (*away*

---

[27] Another complementary factor here is the nature of the activity which they have experienced. A positive experience facilitates participation much more than negative experiences. This will be discussed in greater deal under the 'Rationalisation of Rewards' in this chapter.

[28] The younger the person the more acceptable experimentation and discovery is perceived to be to them (1/V/77).

[29] That is a context in which parental 'rules' of conduct and choice generally dominate and where the process of negotiation is most difficult for the young person, with negotiations moving along the continuum in favour of the parentally restrictive domain.

from home)."[30] Preference for certain activities also arises as a consequence of a different cast of agents to negotiate their independence with. This is a new and sometimes more successful process of negotiation than that experienced at home with parents and siblings, because they do not bring with them the baggage of past negotiations, but their agendas can be redefined in much the same way.

> Its... just a group decision.[31]

> Well like, if some want to go to the pub, some want to sit down, some want to stay you just do whatever you want. If you don't want to come you don't.[32]

> We all like the same things, like we all smoke and whatever, we all drink, mainly all the people who smoke are friends.[33]

However, in the home context the situation for this young person can be completely different;

> No (*he's not afraid of being unhealthy*) I don't think so because otherwise the smoking would stop. I've tried to frighten him with that.[34]

> ...I don't know how he finances it because its not money I give him. I read the riot act, threaten him, everything, I violently object to smoking.[35]

> The older one smokes as well, none of them smoke in the house because I wont allow it...[36]

The negotiation process regarding the young person's participation in this activity at home has clearly broken down. However, with their peers they gain acceptance, reinforcing the peer culture which helps create that conflict experienced in the home environment.[37] This can become a viscous circle. Rules applied by the parental

---

[30] 2/E/263

[31] 2/N/71

[32] 2/N/75

[33] 3/N/153

[34] P/GG/101

[35] P/GG/41 & 43

[36] P/GG/103

[37] Kunesh, Hasbrook & Lewthwaite (1992) offer a contradictory explanation. They identify a gender difference with girls preferring to develop and construct their socialisation experiences by choosing to involve themselves in some forms of physical activity while avoiding others. They found physical activity socialisation to be context specific with respect to the setting or social situation, home versus school. 'A number of girls appeared to engage in, enjoy, and be attracted to informal forms of activity, particularly within the home/neighbourhood setting... Boys' negative treatment and lack of social acceptance of girls within physical activity may be part of a socialisation process, beginning in childhood, whereby female physicality is constructed as subordinated to male physicality while male dominance in formal sport is established, maintained and reinforced' (p394). Kunesh and her

gatekeepers through coercive or negotiating practices associated with their gatekeeping roles of enforcer and guardian respectively, and those gatekeeping processes utilised, can help to either enhance or reduce the consumption of these substances by reinforcing or breaking the vicious circle of events. For example, enforcement by the parent through coercive practices may inhibit consumption in certain situations, but once they are in situations when the parents are unable to detect consumption they partake of the substance. This seems an acceptable approach for some, who in addition to maintaining their addiction, see in a misguided way their smoking habit being legitimised by their peers addiction, as well as leading the behaviour of others, which further enhances the habit:

> Some young kids try to copy us, some younger people in
> the school, try and start smoking and stuff.[38]

However, negotiation which facilitates some degree of compromise, may create a situation of trust where the young person reduces or stops consumption in certain situations. The incentive for the parents does not appear, in the first instance, to be the health of the child, but the moral judgements put on themselves as parents letting their children do things which may not be acceptable to others. The health issue becomes a secondary factor to substantiate the moral dilemmas they may face.

How does this relate to the physical activity which the young person is involved in? The choices a young person makes within established boundaries can indirectly create barriers to the physical activity in which they want to, or more appropriately can participate in. The young person and their peer group reinforce their smoking and drinking behaviour through each of their positive perceptions associated with its image. Working to reinforce their position within the peer group, the young person alienates any behaviour which deviates from that deemed credible by them (i.e. smoking and drinking). Hence physical activity for young people becomes associated with inappropriate behaviour and so it is relegated to an insignificant position in their hierarchy of activity or dismissed completely.

> Some sporty ones who try to say they smoke but they don't.
> They just reckon they smoke but they don't really, I mean
> just sucking smoke out of the end of a fag and then just
> blowing it out without taking it into your lungs is not really
> smoking.[39]

---

colleagues make it clear, that this is not meant to imply that physicality of all females is subordinate to the physicality of all males, or vice-versa.

[38] 3/N/193

[39] 3/N/161 & 165

Not only does the behaviour have to be seen and acknowledged by those they consider to be the right people (i.e. their peers), it has to manifest itself in a particular way that is credible to the peer group. Kelder et al., (1994) support this when they say that, '...students are indeed changing their behaviour over time but that the change is relative to the behaviour of their peers' (p1125). The consequences of this situation are severe from a health point of view, creating a greater barrier short-term, as well as long-term, to their participation in physical activity. It makes participation progressively more physically uncomfortable, especially relative to aerobic type activity resulting in decreased participation. The kinds of activity which are generally made available to these young people in school, as well as those extensions to their school physical education experiences are predominantly aerobic type team games such as hockey, netball, football and rugby (Sports Council for Wales, 1992). Such a situation is complicated when one considers the level of male and female participation in both outdoor and indoor physical activity, with females having far lower participation rates than males (General Household Survey, 1977; Sports Council, 1982; Northern Ireland Fitness Survey, 1990; Sports Council for Wales, 1992; Cale, 1993; Sports Council, 1994). In addition there is a difference in the range of sports which females and males participate in, as Colley et al., (1987, 1992) have suggested women take part in a more restricted range of sports than men, which reflects the general expectations of sex-appropriate behaviour. This general attitude reflects the gender variation identified in the safekeeping process and which helps to reinforce such a situation.

6.4.4 Inadvertent Limitations on Participation

Given that the young person can exercise decisions over the kind of activities they are involved in, it does not necessarily mean that they will select a physical activity to participate in, even with the most active of them.

> *Why would you stop doing a physical activity?*
> If it's cold outside, or if it was a long distance run or something. Nothing too energetic no. I don't mind a game of basketball or something like that. Well you're stopping and starting in basketball but I just don't like running long distances.[40]
>
> *Is that because of the feelings you get?* Yes.
> *How would you describe a cross country run?* Hell![41]

---

[40] 2/N/129-133
[41] 2/N/135 &136

In this situation, greater independence and choice exercised by the young person away from the home context has manifest itself in limiting rather than expanding participation in physical activity, because of their reaction to feelings they get as a result of the nature of the activity and the way in which they have been coerced to participate in it in the past through the use of direct enforcement processes. This is further compounded while there is little or no negotiation and compromise in the home context in comparison with the peer group, which is self-reinforcing with regards their behaviour.

Away from the home context, that negotiating process which exists in the 'club' context is variable. Clubs are categorised into two kinds; *social* or *representative*. The first of these personifies a situation of evenly balanced negotiation between all those persons involved at whatever level. The overriding consensus is that in order to function as a 'club,' each member needs the other to survive and maintain the all important social context in which the catalyst for comradeship between young people is the physical activity. The relative ability of each young person to the other members in the 'social' club context, directly relates to their negotiation power in that context. This is the ability to perform the physical activity 'well' measured against the competence level of the participants in that particular physical activity context. The greater their relative ability to the rest of the participants in that context the greater their negotiating power.

The second context is the 'representative' club.[42] The overriding emphasis and criteria for inclusion is the ability and performances of the young person. This remains the overriding emphasis, however, a 'social' component becomes increasingly more influential over time.[43]

> I've changed netball teams at the club for another one. That team wasn't very good that I played for and I wasn't getting a lot of experience from it.[44]

> I just really look forward to it, we get told off sometimes when we are stretching for talking too much, because that's the only time we see them because they go to different schools, no one from my school goes so I get all the gossip and stuff. And there's a girl from County who goes to my club so I see her more often.[45]

---

[42] For example, school, town, city, county or country representative teams.

[43] The balance of such an emphasis does begin to change once the young person has established themselves in the context, as they look to develop the social aspects. However, they still remain a secondary aspect to the young person's participation in that context.

[44] 2/G/6 & 8

[45] 2/K/45 & 47

The negotiation process in the 'representative' club context is not as evenly balanced as in the *social* context. The former of these contexts has a coach who has no contact with the young person, other than to identify and develop their performance capabilities. This creates a situation where the young person accepts much more readily, all that the coach asks of them, in order to satisfy their desire to improve their performance and maintain their position in the representative team. The process of rationalisation of rewards (Section 6.4) identifies the way in which the young person alters aspects of their agenda to secure other perceived rewards which they can receive from their involvement in the physical activity in this representative club context. However, this becomes relative to the young person's ability.

6.4.5 Self-Organisation (exercising decisions)

Young people require a degree of self-organisation to allow them to exercise their own choices.[46] The implementation of their decisions are tempered by the agendas of other gatekeepers, who influence the extent to which the young person can exercise decisions over what they do.[47] This becomes a continual source of potential conflict and confrontation between the young person and the gatekeepers regarding any activity the young person is involved in (including physical activity). In such a situation each agent fights for an extreme position along the continuum of independence, because they feel they can increase the likelihood that the eventual compromise position will be more acceptable. The more extreme the negotiating position between them the greater the conflict between those gatekeeping agents involved. However, the final position may be more favourable to one gatekeeper rather than another, depending on the gatekeeping roles that each have adopted to achieve it.

> I'm having battles with him at the moment, because they've complained at school that he's not doing homework, so I have to physically force him to do homework with the threat of being confined to barracks, that's one thing you can get him on if he can't go out at night. It's a battle, yes.[48]

---

[46] Self-organisation refers to the way in which the young person manipulates variables such as time, provision of equipment (short term- borrowing money: long-term - getting a job), as well as the removal of other inhibitive variables such as homework, all of which contribute (along with others) towards creating the opportunity for them to participate in the physical activity of their choice.

[47] For example, articulating rules constructs organisational structures which create a framework for the young person to organise themselves around as discussed in Section 6.4.1 'Making Choices - articulating boundaries and rules'.

[48] P/GG/159.

In the first instance, self-organisation of activities exists more on an ideological than a practical level for the young person. This is the opposite to the parental gatekeepers, especially mothers (Shaw, 1992), who have to match their abstract thought with practical assistance. While young people can appreciate the basic practicalities associated with participation in physical activity such as equipment, money and time, they continually accept that this practical component of the organisational strategy used to accomplish their agenda is a parental obligation. They believe it is one which the parent must continue to regulate and maintain for as long as that activity remains the desired goal of the young person. This is a naive and somewhat self-centred attitude, however, it is continually and inadvertently reinforced by that parental attitude which emphasises the need to strive to facilitate as many opportunities as they can in their child's lifestyle, so they are not missing out on anything which they consider others may experience or which may benefit them in later life.

> As parents, we've always encouraged our girls to have a go
> at anything and we give the backing and if they don't like it
> then fair enough, then they have had a chance at it.[49]

Compromise between those desired goals of the young person and parental gatekeepers and that which is practically possible to achieve becomes an essential regulation for all those agents involved. Not only in order to maintain consistent participation in the activity, but the sanity of the whole family. More variables enter into an already complicated equation when there are a number of siblings in a family, all of whom involved in different activities which the parents attempt to facilitate and maintain. To combat this parents adopt a strategy that attempts to channel their children into similar activity in order to concentrate the organisational variables and time required. This not only facilitates their child's activity, but makes it easier to maintain participation levels. For example, when one considers participation in extra curricular activity, the kind of physical activity is only one consideration which has to be taken into account by the young person. There may be less prescription, greater negotiation and independence for the young person in such an extra-curricular context, however, the organisation and commitment of the young person just to get there can override it. There are also the consequences this participation for the parental gatekeepers (e.g. travel arrangements, money, equipment, time and so forth), all of which have to be satisfied simply to arrive at and leave the physical activity.

---

[49] P/R/29

6.4.6 Resourcing Structures of Participation

The burden of the organisation of resources continually placed on the gatekeepers (especially the parents) by the young person, not only requires a sympathetic set of gatekeepers, but a 'resourced' set of sympathetic gatekeepers. The degree of organisation associated with that 'informal/recreational' activity which is slotted where possible into appropriate irregular gaps of time, is less than that associated with 'formal/serious' activity, which exists in gaps specifically created for them on a regular and consistent basis.

> I have to be organised or I wouldn't fit it in[50]
>
> I've been busy with rehearsing for a school play, so on Monday I have netball, that's county and after that I go to Scouts. Tuesday I have gym, I used to have gym after school but then I have rehearsing and then dance and then I have netball. Wednesday nothing. Thursday nothing. Friday dancing and acro.. Saturday I usually have a netball match and Sunday nothing.[51]

6.4.7 Progressively Non-Negotiable Factors

Parents negotiate directly with their child and usually indirectly with the school and their child's peers (through the school and other parents), to secure the well-being of their child. This negotiation automatically incorporates a degree of non-negotiable control or *enforcement* by the parent which creates a baseline for the young person and the other gatekeepers not to move beyond. This baseline is established and moves relative to a young person's age, sex and accumulated experiences. There are significant differences by gender, in things such as young peoples' independent mobility and patterns of travel (Hillman, 1993a), which help to create variable baselines for each sex, giving males far greater freedom and scope to participate in physical activity. The older the young person becomes the more negotiable this baseline. However, males retain far greater freedom than females at any given age. This is a consequence of the *safekeeping* processes which are disproportionately applied to each sex and which consume parental actions. This is a factor which some researchers dismiss (Crouter et al., 1990), while others like Coakley and White (1992) with their study on 60 British adolescents (13-23 years old) support and echo;

> ...Parental constraints were mentioned almost exclusively by the young women in our sample. They encountered more constraints than their male counterparts when it came

---

[50] 2/K/105
[51] 2/K/213

175

to making decisions about sport and leisure activities.
Interview data suggested that parents were more protective
of their daughters than of their sons. Girls' schedules were
more closely monitored , and parental expectations were
more clearly stated as to where their daughters could go to
participate in leisure activities, who they could go with, and
when they had to return.

(Coakley & White, 1992: 28)

The school's role in 'loco parentis' reflects the *guardianship* role of parental gatekeepers and their concern over the safety of the young person.[52] However, within the formal curricula time at school the young person perceives little, if any, negotiation between the school and themselves regarding their independence. It is a reflection of the processes a young person faces in the home environment, where the parental rules dominate, only in school where it is the teacher's rules that are dominant,[53] with the negotiation processes once again moving along the continuum in a direction which is generally perceived by the young person to be away from their agenda. The specification of time, place and activity that go with the statutory nature of physical education mean it is really quite a rigid framework for the young person to work within. This automatically inhibits independence on this level for the young person. Other than negotiations that take place within this rigid context, i.e. in an event or game, the young person feels as though they have little room to negotiate any independence. However, unlike home they are able to share at first hand these situations with their friends and peers, and even though they may not be satisfied with the rules' of the situation, a positive aspect salvaged from it is that it is a *shared experience*.[54] This creates a bond of commonality amongst the peers which is cherished and which the young person can build relationships upon.[55]

6.4.8 Conflict limitation

The importance of the parent in all discussions regarding a young person's participation in physical activity, identifies them as the key gatekeeper. While parents continually rework situations in an attempt to maintain their hegenomic superiority over their child, they begin to realise a degree of co-operation with that young person and sympathy with their agenda for independence. If this co-operative approach is not facilitated there is conflict which imbalances the homeostasis. As the balance is

---

[52] Section 6.5 Safekeeping discusses this in greater detail.

[53] The roles of *guardian*, *enforcer* and *facilitator* appear to be defined and addressed in much the same way by teachers as by parents.

[54] See section 6.6 Rationalisation of Rewards for further discussion of 'shared experiences'.

[55] See Bendit, Gaiser and Nissen (1993) for a discussion of the most enjoyable aspects of school life being those in which peer-group relations and activities are central.

lost and a confrontation of interests increases, the parent and the young person retreat to extremes of the independence continuum (parents - conservative, young person - liberal).[56] This can inhibit the young person's participation in physical activity through limiting the mutually acceptable contexts and situations in which such activity can take place. Deviations from the young person's self-constructed list of desirable activities which are compared with , if not selected from, a list of parentally perceived acceptable activity, are created by variables such as a job - giving them the resources (i.e. money) to purchase things that their parent would not have considered buying. However, they would not stop their purchase because they remain within parentally acceptable limits. These deviations are themselves closely monitored in their context by the parent. For example, a boy's parents encourage a part-time job to facilitate a holiday for him that they couldn't or wouldn't pay for.

> On Saturdays I help the milkman, but when it's not school I help him everyday. I've got an everyday paper round and I've got a free paper round on Fridays.[57]

> I'm saving up for my holiday at the moment. I'm going with my mates to Minorca.[58]

> Well, I think I phoned up about the paper round. He decided he wanted one but he didn't know how to go about it so I rang up on his behalf, put his name down and then she rang back when there was a round and it wen t from there. I think once I've helped him but that was all. He's taken an extra one on this week because somebody's left so he's a bit tired. He only does it for the money.[59]

> Well, I initially said it's not fair to take one because they're going abroad without the other... She knew Jess wouldn't want to go anyway with the lads, not her cousins. So in the end we said well you'll have to pay for yourself so he's using the money that way.[60]

6.4.9 Constructing a Hierarchy of Activity

Those young people interviewed were asked to consider all those activities they were involved in, be they physical or otherwise. On the basis of the resulting list, the activities were then ranked by the young person according to the amount of time they spent doing them each day and week. Each of the activities were then ranked again

---

[56] And vice-versa, in situations where the parent wants the young person to experience an activity which they were involved in. However, the young person is apprehensive about it and so becomes relatively conservative.
[57] 1/B/193
[58] 1/B/255
[59] P/C/16
[60] P/C/18

by the young person, independently of the temporal hierarchy and according to which activity they most enjoyed and wanted to participate in the most. The results of this process are illustrated in Appendix M. It is evident in the majority of cases, that the actual hierarchy of activities in which the young person is involved only loosely corresponds with the sequence of their ideal hierarchy. The negotiation and compromise required to establish the hierarchy of activity is an ongoing evolutionary process. While the young person constructs their hierarchy it is done in conjunction with their gatekeepers. For example, parental and peer gatekeepers use the same process to construct their own hierarchy of activity. Everyone's hierarchy of activity depends on that of others, in varying negotiated degrees, to achieve and develop their own ideal status. The construction of the hierarchy is something which is done automatically by the young person and gatekeepers within the context of the negotiation process. These establish much of the form that their participation in physical activity takes.[61] The hierarchy of activities includes things such as smoking, alcohol and drugs. The young person is not necessarily going to experience these activities if their gatekeepers are aware of them. Therefore, they may keep them latent in order to maintain them. The process of negotiation then has hidden consequences , which each side in this negotiation may not be aware of.

The young person's access to physical activity can be directly or indirectly constricted by their parents. Access to any activity away from the home can be limited. Therefore, in order to make the most of the opportunity when it arises, the young person concentrates on the particular activity which they find most rewarding at that time. Making the most of activity away from the home may call for the young person to reform their hierarchy of preferred activity to incorporate any particularly engrossing activity of the moment. The higher the activity in their perceived hierarchy of activity the greater the resources a young person is willing to devote to it. The finite resources of the young person, and those of the other gatekeepers, are then disproportionately distributed across the hierarchy creating increasingly infrequent participation in that activity located towards its base. A situation can then be created where even though the young person enjoys participation in physical activity, their participation in it becomes less frequent because another activity (at any given time or place) is more engrossing and consumes a greater portion of the finite resources available to the young person.[62] Of course, the engrossing activity at the top of this hierarchy of preferred activity could be a physical activity. However, regardless of its nature the principle remains the same. The notion of time is crucial here, involving

---

[61] The hierarchy is a main factor contributing to those process of rationalisation and reprioritisation, emphasising one again the interrelated and interdependent nature of these gatekeeping processes.
[62] See Browne, 1992.

178

much more than the study of the number of hours in a day. The young person's perceptions of available time relate to their ability to overcome challenges to this resource, given that sufficient interest exists. That interest is generated by the gatekeeping processes which establish their hierarchy of activity.

The young person consolidates their hierarchy by using the justification that they feel they have adequately[63] experienced those activities low in the hierarchy, while those above it are newer and far more challenging because they are a relatively unknown entity.[64] The young person moves towards those activities which they perceive offer them challenging new, independent experiences with their friends. In essence it is a movement towards a certain activity rather than a movement away from physical activity. Physical activity remains enjoyable done with friends, however, the challenge from alternative activities becomes a more serious and increasingly successful one with age.

> ..If I wanted to go out on Friday night I'd only be able to go
> with Hannah and I'd probably feel pressurised because
> she'd want to stay out late and that, and I can't really be
> bothered to argue because none of my real friends would
> be able to go anyway, so its not really worth it. I haven't
> really got any mad urge to go I just want to see what it's
> like.[65]

6.5 Safekeeping - Care and Control

Under their *guardianship* role the fundamental consideration for the parent is the 'safety' of their child, ensuring their well-being before, during and after any participation in physical activities.[66]

A gender inequality allied to the ethic of care has been implied by Gilligan (1982) who considers it to be a predominantly female attribute. Shaw (1992) through her initial examination of family leisure draws attention to the work that women do on behalf of other family members seen in terms of this concept.

> The value that women place on family leisure and
> satisfaction that they gain form family leisure experiences
> seem to be strongly related to their care and concern about

---

[63] Adequate can refer to a range of experiences, from participation in the activity on a single occasion, to numerous occasions. It is, therefore, a term defined by the individual at that particular time.
[64] Physical activity could be classified as new, challenging and an unknown entity for the young person when done in a different context or as a variation, as well as a completely new activity.
[65] 2/K/177
[66] Safety principally refers to the physical care of the young person, but also encompasses their emotional welfare.

> family as a source of positive interpersonal experiences.
> Moreover, the work and effort they put into helping to
> create positive family leisure situations is often caring or
> emotional work aimed at making sure everyone is happy.
> (Shaw, 1992: 283/4)

This should not exclude the father from adopting similar caring approaches and
values, which it does not. However, while both parents have the same or similar
outcomes and rewards from the gatekeeping processes and their child's participation
in physical activity, the approaches to achieving it are varied. The mother generally
plans, organises and schedules, physically and emotionally, the family's physical
activity experiences, making them as positive and as successful as they can.
Consequently the mother may experience reduced activity opportunities for herself
because of the lack of time and energy left after her efforts to facilitate experiences
for others. Fathers contribute to this framework, which the mothers have usually
established, on a financial level or practically by transporting children or doing the
activity with them. The ethic of care notion is an important one, offering some
explanation as to why fathers instead of mothers seem to participate more in physical
activity with the young people. However, what are the implications for young
peoples' participation in physical activity? The ethic of care may be associated with a
reduced sense of entitlement in women (Henderson and Braleschki, 1991) which
translates to a loss in the sense of the rights of their own activity, which can be passed
on to other generations creating non-participation over time, especially by females.

Regardless of the particular normative views of adolescence a parent has, if the young
person's physical well-being cannot be secured, especially for girls, the activity is not
a viable one in the eyes of that parental gatekeeper.

> If it was an evening or a night thing, I would take her and
> bring her back. Whenever they go anywhere we take and
> pick up at night, or if they go into town on the bus, that's
> alright during the day but if it's an evening thing when
> they're coming back then we'll pick them up. Unless there
> is a large group of 4 or 5 and they're all going to be together
> all the time.[67]

There has been a tremendous decrease in the freedom of young people to travel
independently when compared with that experienced two decades ago (Hillman,
1993a; Adams, 1993). In 1971 approximately 80% of 10-11 year old children were
allowed to go to leisure places alone, dropping to just over 40% for 10 year olds and
65% for 11 year olds in 1990; the percentage allowed to use buses in 1990 was half

---

[67] P/H/129

180

that in 1971 at 40% for 10-11 year olds; three quarters of children in 1971 were allowed to cross the road on their own, however, in 1990 this figure had become half; the number of accompanied and unaccompanied weekend activities had reduced by almost half in 1990 compared with those of 1971 (Hillman, 1993b). This reduction in young peoples independent mobility is reflected in the changing patterns of their travel, with nearly four times as many young people in 1990 went to school in cars compared with 1971. These changing figures and subsequent increased parental involvement in escorting young people, highlights the concerns of parents and the increasing importance and significance they are placed on the *safekeeping* processes and their *guardianship* role. The primary concerns of parents in a Policy Studies Institute survey (Hillman, 1993a) which compared British with German young people and parents, discovered that the primary concerns of all parents (regardless of nation) were the danger from traffic, children's reliability and fear of molestation. These concerns support the trend of increasing restriction on young people's independent mobility. However, if one considers the accident statistics for British roads, there has been a 50% reduction in children's deaths from road accidents since 1922 (Hillman, 1993). This also has to be considered in the face of a twenty five times increase in the volume of traffic in the same period. This creates a contradiction or does it? Roads have not become as safe as an initial inspection of the statistics may at first imply. The opposite is true, they have become so dangerous that young people are being withdrawn from a context which is physically threatening (Adams, 1993). This being the case children are limited to ever decreasing periods of access and time (due to the safekeeping arrangements i.e. the necessary accompaniment of the parent) to contexts in which they can be physically active in a relaxed, independent and informal manner with few organisational or performance criteria placed upon them. In addition, if one considers the more home-centred lifestyles, facilitated by such things as television, video, satellite and central heating and the like, they become self-reinforcing on all levels for the young person (e.g. comfort, ease of access, easy and quick gratification), and the parental gatekeepers (safekeeping, guardianship, vacuum strategy).[68] All these factors contribute to create a situation which frustrates and inhibits the young person's participation in physical activity away from organised activity venues. Clearly there is association with the negotiation of independence process between the young person and their gatekeepers, who emphasise the *safekeeping* aspects.

Much of the parental behaviour and subsequently that of the young person with their level of participation in physical activity, reflects this. While parental concerns over

---

[68] Social and economic changes may also contribute to the variation in the statistics of 1971 and 1990.

'safety' concentrate predominantly on a young person's physical welfare, their psychological welfare is also considered. A belief in the young person enjoying themselves by 'experimenting' with a variety of experiences in different contexts is high amongst parental gatekeepers. However, it is believed that this should always be conducted in a 'parentally defined safe context'. This context is, to some degree, a manifestation of the negotiation of independence process. It must, however, be consistent and quantifiable with respect to time, venue, organisation and the classification of activity. As Brannen et al., (1994) and her colleagues have identified in support of the way in which parents deal with the transition of their child towards individuation, when the safekeeping role of the parental gatekeeper is considered, it is in essence always located towards the bottom of the vertical axis of their Model presented in Figure 6.2. In such a position the parent is able to structure the autonomy of a young person within boundaries they define. The autonomy of the young person constructed within these boundaries, is something of a covert reduction by parents of factors and agents which they consider expand variables within the context, making it increasingly unacceptable for them relative to their gatekeeping roles. Regardless of any potential lack of communication between parent and young person (as a consequence of the prescription on the boundaries imposed on the young person's participation in physical activity, in-line with the safekeeping and guardianship roles adopted by their gatekeepers), the parental gatekeepers feel they can afford to take this restrictive action, especially with younger people, because autonomy can be given to the young person within the designated context. However, the parents know that there is only a certain range of variables within such a context which can alter the dimensions of participation. Most of the variables would be acceptable anyway. As the trust in the young person increases, the number of potential variables generally increases. However, the number experienced by their child remains relatively small. The important thing for the young person is that the potential is there to be involved, not necessarily to experience it.

> In the case of the parents who regulate young people
> overtly through prescribed norms, communication is not
> demanded from the young people concerning their
> activities and whereabouts, since, by definition, there are no
> boundaries between public and private spheres; whatever
> the context, it is assumed that young people are bound by
> one set of salient, normative rules which apply to the
> collectivity of class, culture and kin.
> (Brannen et al., 1994: 191)

Even though this is something of an extreme position and one which shows an affinity with the one adopted in relation to vacuum strategies discussed in section 6.9, the process remains the same. It is not simply the adoption of one approach and

process for all situations, there is movement by the parent(s) up and down the continuum of negotiation to facilitate their best chance of achieving the arrangement established above, be it covertly or overtly in a given context. However, it does become something of a condensed range between extremes, simply because excessive movement back and forth along this continuum between extreme ideals, seems to make the negotiation/achievement of more extreme positions increasingly difficult if not impossible. This is due to the complexity and potential confusion over the many different nuances of the negotiating positions.

In order to access their child into a context which facilitates freedom of action within certain boundaries for that young person, the parent employs organisational strategies such as the 'taxi service'. If suitable strategies cannot be employed, the consistent participation of the young person in the physical activity becomes doubtful.

6.5.1 The Taxi Service

The 'taxi service' refers to the organisation of suitable transport arrangements for the young person to and from the physical activity venue. The taxi service, highly regarded by parents, allows them to minimise what they consider to be the most high risk component of any of the young person's involvement in physical activity, that is their travel to and from any activity venue.

> ...I wouldn't want her going on a bus to skating because
> she'd have to walk from the Broadmarsh to the rink,
> certainly not it if was getting dark when she was coming
> back.[69]

Parents, therefore, potentially have a great deal of control over the young person's access to environments that facilitate physical activity be it the more formalised sporting club context or the more informal youth club setting. Sallis et al., (1992) and a report for the Sports Council (1992) similarly found that the availability of transportation by parents to sport and fitness activities was a significant relationship in relation to participation in the activity for both boys and girls.

The young person's perception of the taxi service is different from that of their parents, even though each has the same desire to maintain it. The young person acknowledges the fact that they are taxied to and from the physical activity venue away from the family home, with the minimum of hassle at the time of the activity, with no financial cost to themselves, by not contending such a situation when

---

[69] P/N/188

negotiating their independence with their parents. Parents are happy because they are fulfilling their *guardianship* and *facilitator* roles. Therefore, the situation is acceptable to both parties regardless of their completely different agendas and interpretations. In fact the young person works to reinforce the principal concerns and approach of the parental gatekeeper who create this situation, by treating it as a standard expectation in the negotiation process.

> Yes we give my friends lifts where one parent takes us
> there and one brings us back. Yes it is organised...it
> depends if other parents could take us, because my mum
> does a lot of taking people.[70]

As with the self-organisation of the young person, they adopt a mixture of strategies to maintain and improve their overall position along the continuum of independence. Figure 6.5 illustrates this conjunction between similar processes reinforcing, as well as improving their independence.
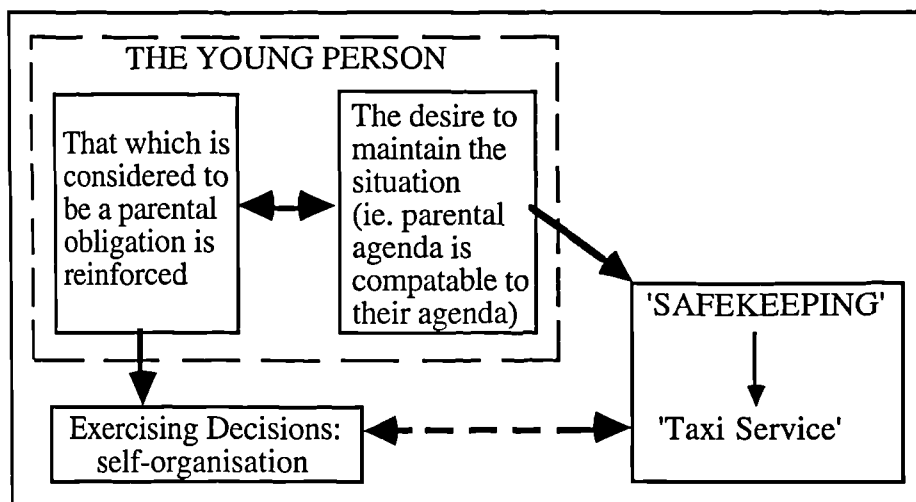
Figure 6.5 The interrelationship between processes reinforcing the level of parental intervention in the 'practical' organisation of a young person's participation in physical activity.

Contention eventually arises, however, when some of the associated practicalities of the parental philosophy interfere with the parameters of the physical activity context i.e. a parentally set time to leave the activity is not consistent with the young person's perceived acceptable time. Initially, mere access to the physical activity context is sufficient reward for the young person, however, after greater familiarisation with it they are more open to experiment with the boundaries placed on participation and so

---

[70] 2/M/311 & 313

184

seek to achieve ways of expanding them e.g. through negotiation and strategies such as *networking*.[71]

> She's wanted her own horse I think almost since she started
> riding. She hadn't been able to get one, but she's wanted
> one. A very subtle move at the beginning of last summer
> holidays, if all of them at school got together could they
> share one between them? And our reaction was no, this
> just wouldn't be viable and I still don't think it would have
> been. But it started us off doing some actual costing
> She sold it very cleverly. That got us looking at costs and
> so on. She was very subtle, very clever. So some of the
> other things went. Some of the money that she spent on
> other hobbies were channelled into the horse.[72]

> I take her after school and my husband takes her if it's later
> in the evening. He comes in at different times so she has to
> fit in, she either does her homework and then goes or goes
> and comes back earlier and does homework, depending on
> what we are doing. I generally take her and then one or
> other of us will fetch her depending on what we're doing.
> She lives there at weekends.[73]

Incorporating the 'taxi service' into the young person's and family's lifestyle requires a great deal of organisation of time and other necessary resources and equipment. The degree of organisation is proportional to the number of variables associated with participation, such as: the amount of activity the young person already participates in, the distance to the venue, regularity of the physical activity, equipment and finance available. These are multiplied by the number of activities that other family members participate in.

Gershuny (1993) asks the very pertinent question; "Who does how much escorting' of young people and children? The findings of this project confirm his research which showed a strong relationship between escorting time and both the number of children and their ages in a family. His research also identifies that the activity done with children between 2 and 11 years of age is concentrated in the household, and that their is a heavy concentration of escorting activity for all ages during the weekdays.

Variety with regards size and age of the family, as shown in table 6.1, identifies an inverse relationship between the contribution made to escorting young people and children made by the mothers and fathers, with the fathers becoming the predominant escorting agent with young people aged 12-18 years. What is also significant, and

---

[71] Networking is discussed in detail later in this chapter.

[72] P/N/11-20

[73] P/N/38

comparable with this study, is that most of the escorting at this age was for recreational purposes.

> ...Fathers' contribution to escorting children to after school activities is very nearly as large as mothers. Proportionally at least, fathers are much more involved in after school activities which in fact account for the majority of their escort time.
>
> (Gershuny, 1993: 65)

One might, therefore, quite credibly assume that in the first instance parental gender is insignificant when it comes to facilitating participation in a physical activity. It is the variation in interpretation which the young person and the parents have of their gatekeeping roles which impacts on the young person's participation in physical activity. It should not be considered an issue of gender. It is fundamentally, the manipulation of those resource constraints placed on the parents and other gatekeepers by their commitments, which are used to create appropriate time intervals.

Table 6.1
Average daily time spent by couples escorting on weekends according to gender, number of children and age of youngest child.

	Couple with no children	Couple plus one child	Couple plus two or more children	Row Average
Age of child	Minutes spent escorting: weekdays			
Youngest under 2 mothers	-	7	19	12
fathers	-	4	8	6
Youngest 2-4 mothers	-	17	41	32
fathers	-	10	11	11
Youngest 5-11 mothers	-	20	21	21
fathers	-	11	14	13
Youngest 12-18 mothers	-	3	6	4
fathers	-	6	13	9
No children mothers	3	-	-	3
fathers	6	-	-	6

(Source: Special tabulations from ESRC 1987 Time Budget Survey in Gershuny, 1993)

It is the synchronisation of contributions made by both parents which is fundamentally important and the significant factor, not the gender of the parent. Together they create a situation which allows them to maintain their guardianship role commitments and their child's participation in an activity.

6.5.2 Resourcing participation

The resources[74] that the young person and family can access, have to be matched against the requirements of the physical activity context. The better the match between the resources that are available and significantly, which can be applied to the context to address the resource requirements of participation in that physical activity, the more likely the young person (and family) will be to experience and maintain participation on a consistent basis. An increase in the number of activities in which the young person and other members in the family are involved creates greater demands on the organisation and the depth of resources required by the parental gatekeepers and the young person.[75] The situation is continually reassessed by the parental gatekeepers and the young person to see if the activity remains sustainable on a consistent basis.[76]

> Me and my older sister both left when we were about 13 or something like that, we both left about that time because it was like we had too little free time, we were also in the swimming club in school and we had very little time to ourselves.[77]
>
> It wasn't just the swimming it was the journey as well, because it would take as long to do the journeys and to get changed as it would to do the swimming, so it might take 5,6,7 hours. Usually 3 or 4 times a week.[78]

Hence, when it comes to participation in any physical activity these variables have serious implications for its maintenance (both positive and negative). The way in which this is perceived by the parent and the young person are once again different. The parental desire to keep their child 'safe' works to restrict the freedom of movement of the young person outside of the home context. Therefore, organised

---

[74] Time, finance (money), transport and equipment.

[75] The opposite also applies, where resources are freed by the termination of the young person's, or another family member's participation in an activity.

[76] Processes such as *networking strategies* (section 6.7) are used to maximise these resources and to maintain a positive orientation to the *rationalisation of rewards* process (section 6.6).

[77] 3/I/73

[78] 3/I/75 & 77

activity at a 'formal' activity venue rather than 'informal', improvised activity in the home,[79] becomes more desirable to the parent.[80] However, priorities such as this create an even greater need to organise transport, money to finance it, as well as the time of the young person and their parents to incorporate the activity into all their lives.

6.5.3 Parental pre-empting

There is a variation in the negotiation process relative to the age and sex of the young person. The younger the person the less of an input and influence they are able to make in negotiations with parents. Much of the young person's activity is selected from a list of 'parentally acceptable' activities constructed on the basis that they satisfy their gatekeeping roles. An increase in a young person's age signifies an increase in the contribution to the negotiations which they can make. This contribution is not merely in saying what portion of an activity they would like to do, but to suggest the activity that they would like to be involved in and instigate contact with such institutions. There is also a significant gender component to the degree of negotiation. Females have far more rigid conditions placed upon their behaviour than similar aged males. Parents expect far more detailed accounts of a daughters movements than those of a son.[81] Coakley and White (1992) identify the distinction in the degree of parental constraint relative to male and female adolescents in Britain. Despite what might be considered changes in the definition of gender roles for both men and women, girls' physical activity schedules are much more closely monitored than that of boys. Greater parental expectations regarding suitable sites for activity, companions in activity and much more stringent temporal constraints exist for girls. This has the effect of making females much more careful when selecting physical activities, let alone deciding to become committed to them.

Parental concern over their child's well being never ceases, however, they are forced by the young person's accumulated experiences, to concede in varying degrees to the young person's increasing desire to do things outside and away from the home and the all too familiar 'prying eyes' of parents and other familiar things. They want to experience 'new' activity independently. This attitude is reflected to some extent by the parents and their *facilitator* role. That relationship, based on increasing compromise between the young person and their parents, openly begins to reverse in

---

[79] For example, going out and walking in the streets with friends.
[80] More desirable because they know what is happening. They have quantifiable answers to their questions associated with their *safekeeping* roles: what, where, how and with whom?
[81] See Hendry et al., (1993) and Brannen et al., (1994).

terms of the distribution of power as the young person's age increases. The parent has to make more concessions in an increasingly larger set of negotiable situations in which their hegenomic superiority is being renegotiated more often. Parents begin to negotiate many more variables, however, they increasingly feel they can only significantly influence a decreasing number of them. If the whole negotiating process between the young person and the parents is not to deteriorate into a situation of complete 'enforcement' by the parent[82], then the parent is 'forced' into a *facilitator* role, conceding more and more in negotiations with the young person. In so doing the parental role as *enforcer* becomes less common, but much more intense when it is adopted.

Given that neither the gatekeeper or young person wants negotiations between them to breakdown, because it is not in the interests of either of their agendas, both sides continue to negotiate. Parents, increasingly so, are put in a position where they need the negotiated continuum to achieve some portion of their agenda. Where possible, in order to bring about participation in the parentally perceived desirable physical activity, parents concentrate on those variables that they continue to have most influence over and which have the most influence on the young persons activities.[83] In so doing they can continue to exert an influence on the young person's participation in the physical activity without overtly appearing to that young person to be too constrictive with regards too many aspects, or making the negotiating process seem an unreasonable one. Parents know full well that control of certain key variables (finance and transport) ultimately controls most of the activity the young person can be involved in.[84] This approach is ideally encapsulated in the phrase 'intimacy at a distance' (Finch, 1989), where a 'proper' degree of independence is overtly respected by the parents and subsequently acknowledged by the young person.[85]

---

[82] Such a situation would lead to the young person to adopt only activity which they alone can resource i.e. informal and improved activities in the local area such as walking around with friends and playground activities. This would contradict parental desires. In such a situation they are unlikely to inform their parents of their actions. This can on the one hand remove concern from a parental point of view because they do not know what is going on. However, it can create more tension because parents do not know what is happening and so because this goes against the requirements of their *safekeeping* role, they show their concern by adopting an *enforcement* role.

[83] Desirability is defined by their gatekeeping roles.

[84] Financial considerations remain the parental gatekeepers strongest negotiating element (and indirectly the taxi service provision) when constructing and maintaining their *enforcement* role.

[85] Even though Finch (1989) is discussing 'intimacy at a distance' relative to the relationship between an adult child and their parents, exactly the same relationship exists earlier in their relationship regarding participation in physical activity.

6.6 Rationalisation of Rewards

Physical activity becomes acceptable to all young people if it offers them the right rewards, i.e. that which emphasises and promotes what they feel is important to them. Reward structures for young people become far more complex than those of children.

> An intrinsic interest in participation in organised games and
> sport may continue from childhood if personal competence
> and the possibility of its improvement is still perceived.
> Also, new forces compel adolescents to look elsewhere for
> their social involvement and interests and the social value
> attached to sport and certain forms of exercise probably
> emerges as a significant factor in participation decisions.
> (Fox & Biddle, 1988: 82)

While rewards vary with the physical activity and context, there remain fundamental aspects which are consistent for all those gatekeeping agents involved in the *rationalising of rewards* accrued from the young person's participation in physical activity. The more positive the rewards are perceived by the young person and gatekeeping agents, the greater the likelihood of maintaining and/or extending participation in that activity. Alternatively, if there is an overall negative perception of the activity, participation in it will be terminated or considerably reduced by the actions of one or more of the gatekeeping agents involved. The rewards for the young person are not necessarily the same as those for other gatekeepers.

6.6.1 Rewards for Young People

Rewards for young people are predominantly self-serving ones. Figure 6.6 simplifies the many complex interrelationships between factors in the *rationalisation of rewards* process. It serves to illustrate those fundamental factors considered by a young person which contribute, along with others, to determine the overall nature of those actual or anticipated rewards from their participation in any given physical activity. Within figure 6.6 two main processes encapsulate the young person's rationalisation *of rewards*; *social processes* and *performance (and competence)* . There is also a *fun* component which infiltrates both of these fundamental processes. The following sections should be read in conjunction with figure 6.6.
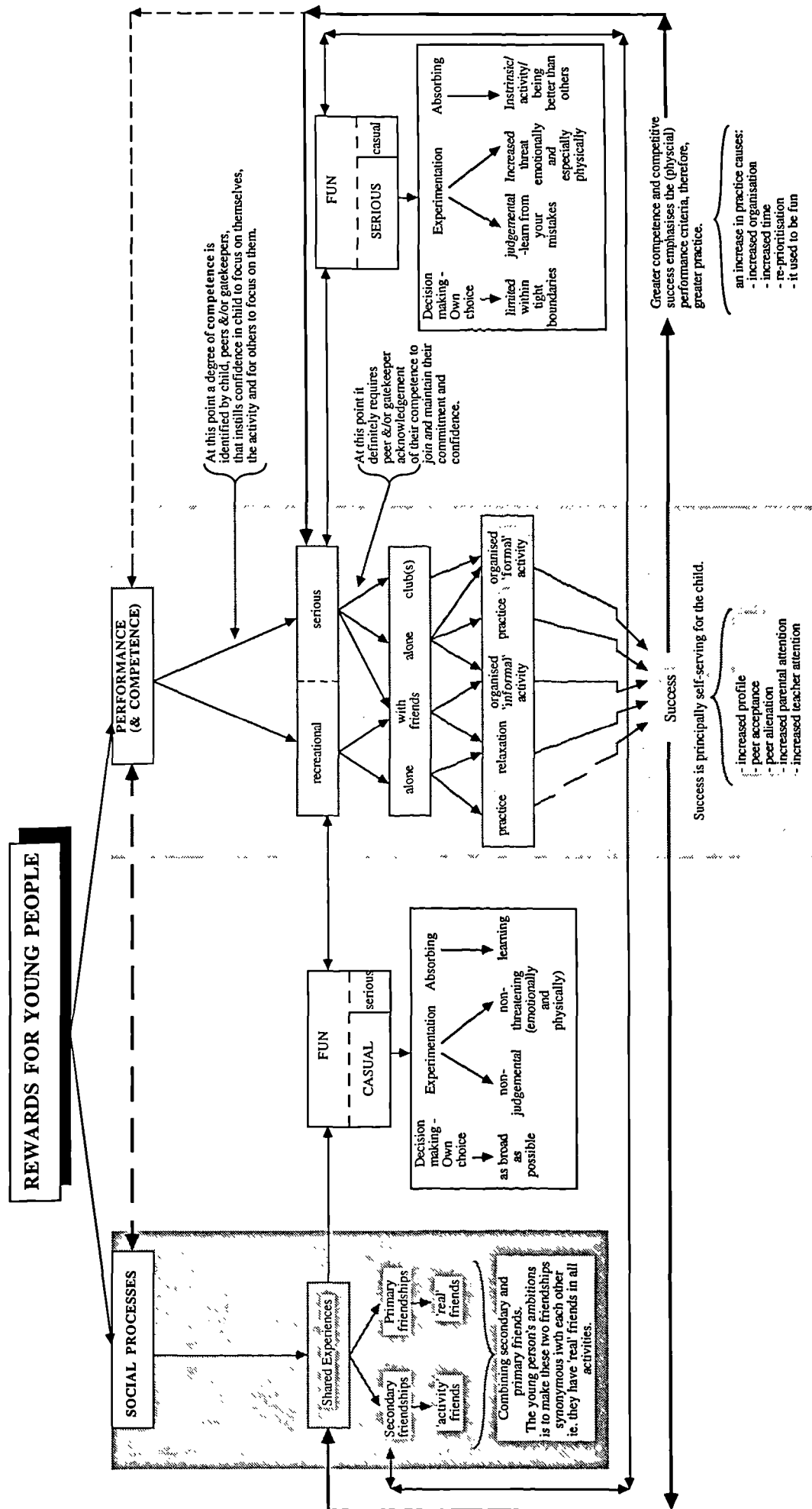
Figure 6.6   Rewards for Young People

Social Processes

The overwhelming consideration and underlying aim of the *social process* is to facilitate a *shared experience* with one or more individuals, such as their peers and/or a member of the family. Regardless of receiving a physically or emotionally positive or negative experience, the aim is to gain any experience that the young person can share and then have in common especially with their peers, and with their family. The preference is for positive experiences, however, negative ones do not negate the process. The perceived cost of an activity can be offset by the positive feelings it produces, and negative affect can be offset by perceived benefits (Ajzen & Driver, 1992). Commonality of experience facilitates a desirable bonding between the young person and their accomplices in the physical activity experience. The facilitation of any *shared experience* through a physical activity is a positive consequence of participation for the young person, resulting in a commitment to the activity which generates them.

Friendships generated through shared experiences exist in two guises. One is *primary friendship* and the other *secondary friendship*. Primary friendships are those that exist despite the activity in which the young person is involved.[86] These friendships are with *real* friends, which means they are readily willing to exchange personal information in great depth with them because of their depth of previously *shared experiences*. Contact with these friends encompasses a variety of contexts and activities. *Secondary friendships* fail to be as all encompassing as primary ones, they are created with individuals whom they interact with on a limited basis in specific situations and contexts. These two forms of friendship may remain separate although the ambition of the young person is to make them synonymous with each other in order to maximise their *shared experiences*. *Fun* as an outcome of this shared experience, is created by the same situations which construct the young person's primary and secondary friendships.[87] This interrelationship is a two way process.[88]

---

[86] The primary friendship may exist prior to or apart from any involvement in physical activity. However, the friendship is enhanced by the involvement of the young person and their primary friend in the same physical activity.

[87] Fun existing in two dimensions (serious and casual), is the enjoyment of the activity and its physical and social consequences in a given situation. The relative importance of which is determined by the context and the agenda the young person takes to it.

[88] *Fun* is discussed in more detail in section 6.6.1.

Performance (and Competence)

Whatever the physical activity the young person is involved in, *performance*[89] and a degree of *competence*[90] are fundamental considerations influencing participation in that physical activity. Performance (and competence) exists on two levels; *serious* and *recreational*.

Performance (and competence) on a *recreational* basis

Recreational refers to a situation where there are no essential predetermined goals other than to achieve *fun* as a consequence of the young persons participation in the physical activity.[91] *Fun* always has two components *casual* and *serious*. It is the context of the activity and the participants in that activity which determine the dominance of one over the other at any given time.[92] Such an activity may be conducted alone or with friends resulting in relaxation, practice or informally organised activity.[93]

The *recreational* nature of the physical activity constitutes its definition of *fun* which is predominantly *casual*, even though it retains a *serious* component to it. Such a *fun* context or situation is exemplified by an environment which allows the young person a broad choice of activity in which to participate (not necessarily doing all of them, but at least allowing for the possibility to do them), and in a way that allows the young person to *experiment*.[94] This experimentation ignores competence levels and

---

[89] Performance is the young person's ability to perform to an acceptable standard (acceptable being the level that is equivalent or better than the perceived average of the group) relative to the particular physical activity.

[90] Competence helps to satisfy the quest for performance. Competence and performance are inextricably linked in a self-fulfilling prophecy of achievement and physical activity or failure and physical inactivity.

[91] The conception of *fun* which young people continually refer to when engrossed in physical activity is one which is different to that of adults, to whom *fun* is jovial and perhaps insignificant. For the young person *fun* encompasses enjoyment in a way which allows the essence of the physical activity to be experienced through participation and which constructs their self only in ways which they find acceptable in that context.

[92] *Casual* and *serious* fun refers to the young person's overall perception of fun in the physical activity context. Casual fun exists in a context where the young person's 'self' is not challenged or confronted. Serious fun, however, exists in a context where the challenge to a young persons self is much greater, but it remains acceptable because it is a means to achieving another end.

[93] *Relaxation* refers to the uninhibited participation where the involvement in the activity is a different and welcome break from other things.

Practise refers to situations where the young person repeatedly performs established or new actions in an attempt to experience them and to improve them.

Informally organised activity refers to situations where young people arrange amongst themselves to participate in a certain physical activity, at a given time, at an improvised venue (i.e. play ground) and following the correct rules. There is a degree of organisation, however, the overall ethos is informal.

[94] Experimentation is where the young person can attempt something without expecting any negative implications from it, either emotionally or physically.

is 'non-threatening' to the young person because they do not perceive it as undermining them in any way physically or emotionally.[95] Consequently, they do not feel as though they are being 'shown up' through participation. The distinction between positive or negative experimentation varies with the young person and their peer group. However, the young person's perceived status within the group and the credentials (physical and emotional) they have already established within it, are important variables, because if these are perceived to be good by the young person the more likely they are to draw out those positive rather than negative aspects from participation. The notion of *fun* associated with these shared experiences remains important, however, so does its alternative for the young person, boredom.[96] As a consequence of the boredom, peer group dynamics can prevail (Williams, 1993).

> Its boring if you haven't got any friends, so you just do it
> because your bored.[97]

Interrelated with recreational performance is the *shared experience* associated with the social process. Shared experience remains a fundamentally important factor determining a young person's participation in physical activity because sharing the experience magnifies its significance to the young person, making it much more rewarding. The *fun* component, while not always fundamental to participation, can increase in importance over time as the activity becomes more predictable and familiar to the young person in a given context. The greater the fun component becomes the more positive the perceptions and the greater likelihood of the young person maintaining participation in that activity.

A physical activity classified by the young person as *recreational* is non-threatening, giving them the feeling of freedom to 'have a go' at the activity without being too concerned about the performance outcome. *Fun* is gleaned from situations where the young person can 'have a go' at the activity without feeling as though a major autopsy of their performance will be conducted by anyone. Mistakes can occur in the performance of anyone and it is the perceived nature of the feedback to the young person which is crucial. A degree of anonymity, while either alone or within a group activity, must be maintained. This is essential to the young person because it allows them the necessary perception of freedom, so they can continue to experiment.

> Yes that was always the thing at the rink. She was quite
> happy to be one of the crowd skating along as long as she

---

[95] Physically - ridiculing their performance. Emotionally - weakening their self-esteem and self-concept.

[96] See Iso-Ahola and Weissinger (1990).

[97] 1/EE/21

wasn't one of the worst and she certainly wasn't going to
stop talking long enough to be one of the best.[98]

Fun alters somewhat when the performance criteria becomes 'serious'. With 'serious'
fun there comes an increased acceptance threshold on behalf of the young person, not
only to accept a greater levels of criticism, but more psychologically and physically
demanding situations.

The coach would put me in a position...I'd just take it and
walk of in a mard. My friends wouldn't really do that, they
haven't got the authority because we are equals.[99]

This is because they perceive it to be beneficial towards achieving their goal. '...I try
to keep going through it so that I can be a better netball player.'[100]

In addition the activity should be absorbing for the young person in the sense that
they feel they are learning something new and adding to or consolidating their
repertoire of skills and knowledge. That is, if it is to be adopted and maintained.

I don't go to that as much (scouts) because there's only
about 5 or 6 scouts there because they've all gone up to
Ventures, because the people I was friends with are older
than me and they've gone now, so I'm on the verge of
giving up and going to Duke of Edinburgh Award instead
because I think I'd be learning more.[101]

What were your reasons for joining the club?
Because we have lectures and things like that and then we
have a lesson as well, so we learn.[102]

A *serious* component of *fun* still exists even in a situation where the overwhelming
nature of *performance (and competence)* and the *shared experience* is *recreational.*
This is epitomised by the adoption of 'organised informal activity'. In this situation
physical activity is organised amongst peers to constitute a notion of *fun* which is
non-threatening, non-judgmental and experimental. It also incorporates an overt
competitive element of winning and losing. The consequences associated with this
'organised informal activity' are in stark contrast to those associated with the
'organised formal activity' at club level, because winning may be important, but it is
not fundamental to the nature of the experience. Organised informal activity is an

---

[98] P/N/72
[99] 2/K/151-153
[100] 2/K/199
[101] 2/K/57
[102] 1/M/46

important transition experience between the 'recreational performance' fun-type activity and 'serious performance' fun-type activity for the young person who has limited and/or developing ability. While shared experiences are linked with 'casual' fun, there is also a link with performance related 'serious' fun as identified in figure 6.2. Here 'secondary' or 'activity' friends may adopt this definition of 'casual fun' as promoted by the physical activity environment.

Performance (and competence) on a *serious* basis

As an alternative to the *recreational* side of *performance (and competence)* there is the *serious* side. Here there is a sharp contrast in focus and consequence to the young person's (and other gatekeepers) involvement in the physical activity. While it may incorporate many of the 'recreational' values discussed,[103] the overwhelming consideration is to become a better performer with the focus on achieving some form of representative honours at a higher level than that which they experience at present. The attention of peers and gatekeepers, while they are involved in this physical activity, helps the young person identify the degree of competence in their performance, which then has relative levels of confidence associated with it.[104] Supporting the importance of this psychological component, Jambor and Rudisill (1992) state that perceived locus of control, along with achievement motivation and perceived competence appear to contribute to the decisions youth make in sports' choices (p36). Nicholls (1984) believes that young people will behave in achievement situations in ways that they feel will maximise and minimise the display of high ability and low ability respectively. This is according to their interpretation of ability which varies with their developmental level, e.g. a child of 7 to 9 years is unable to completely differentiate between effort and ability. Consequently, they generally expect effort to be the cause of achievement outcomes. However, at ages 11 to 12 years young people are able to completely differentiate between these two concepts (Brustad, 1992; Nicholls and Miller, 1984). Therefore, taking into account the performance and competence aspects on a serious basis within the rationalisation of rewards process, the subjective criteria of ability on which their motivation in such achievement situations is fundamentally defined is mediated by a cognitive-developmental factor. If one also considers Raynor's (1978) opinion that there is a significant difference in the perceived locus of control of young people between the ages of 11 and 12 years, with those young people at the age of 12 considering

---

[103] Learning something new, *shared experiences* and *fun*.

[104] The greater the perceived competence the greater the young person's confidence. Weiss and Duncan (1992) found that children who scored high in actual and perceived physical competence and who made stable and personally controllable attributions for sport performance, also scored high in actual and perceived peer acceptance and made stable attributions for successful peer interactions.

196

themselves to be more internally controlled than at the other age, one can begin to associate those psychological changes and changes in participation with regards specific age groups and their sports choices,[105] i.e. at twelve young people are likely to be more independent and the structure and lack of independence within organised settings may become an inhibiting factor regardless of any potential compromises the young person may be willing to make. Ellis (1973) discovered organised sports programmes were perceived by those young people with more internal locus of control as too controlled by an external source (coach), and as such made them feel uncomfortable. This is not conducive to participation in the activity. Of course, there will also be those young people who do not feel constrained because they feel they have less internal locus of control and so are happy with such external sources of control. The question of perceived independence and the whole negotiation process is once more highlighted with the level of internal locus of control being a psychological factor which may contribute to the negotiation process.

Significantly, Jambor and Rudisill (1992) and others (Cale, 1993), identified that females participated less in organised sport than males. While this may be a consequence of fewer opportunities made available for them to participate in physical activity, one must also consider the fact that young people, especially females, show the highest increase in smoking tobacco (Department of Health, 1992b; Fry, 1994). Regardless of the opportunities available, the young people may not be able to participate in physical activity without discomfort. Of course, it may also be attributable to the gender variation in the socialisation process into sport (Lewko and Greendorfer, 1982; Coakley and White, 1986; Brustad, 1992; Coakley, 1993a, 1993b). What remains a constant factor is that many young people are not obtaining enough physical activity each day whichever current guidelines are considered to be appropriate (Simons-Morton et al, 1990). Rather than any one factor it is suggested that each makes a contribution to the situation each individual finds themselves. However, they influence the process of negotiation and the framework on which rewards can be generated by the young females, be it by undermining them or generating them.

Confidence in their physical ability, predominantly associated with a sporting context, allows the young person to focus on themselves and concentrate on an activity. It also allows gatekeepers to focus more on them. Gatekeepers readily make available to those more competent and confident young people, opportunities to develop their

---

[105] These particular studies were conducted on young people relative to a sporting context and not to physical activity in general. Therefore, it becomes questionable to make such statements outside of this sport context.

skills. Those young people who mature early are more likely to excel in physical activities and sporting competitions that require size, speed, strength and co-ordination (Ellis, Carron and Bailey, 1975; Malina, 1988; Brustad, 1992). Consequently it has been suggested that the rate of physical development of the young person influences the level of social support and encouragement received from parents, peers and coaches (Brustad, 1992). This is not only because the physical 'potential' of the young person as a performer is more evident in that young person's performances and competence, but there is also a more defined focus for the young person to concentrate on and develop. It is not a ubiquitous acquaintance with masses of different activities, it is specific to a particular one or two which allows them to seek opportunities within that sphere of involvement without being overwhelmed regarding the organisation, finance, time and so forth. When a young person joins a club there has to be reinforcement of this initial acknowledgement of their competence from their peers and/or gatekeepers, so that they can not only initiate the contact with the club, but maintain their involvement with that physical activity context.

> She did it at school and became quite good and she's played
> all round for various teams and now she plays for a club in
> Derby. Her teacher wants her to play for her team next
> season so I think she says she is going to join them.[106]

Within a 'club' environment and its associated 'organised formal activity', competition is the norm and it is that which is the overt cohesive incentive for the young person's participation in physical activity. The notion of *fun* , which infiltrates this process, changes in this situation from that one associated with 'recreational' performance.[107] As illustrated in figure 6.6, the emphasis on the decision making, experimentation and absorbing nature of the activity which defines its level of *fun*, significantly alters from the predominantly *casual fun* associated with recreational performance type activities. Previously, the choice associated with the kind of physical activity had to be broad to facilitate *fun*, however, within an organised club structure the young person accepts that this choice is much more limited and within much tighter boundaries. However, even within such restrictive boundaries there still must remain some choice of activity for the young person. The nature of the experimentation within this new definition of predominantly 'serious' *fun* moves a great deal from that which is intolerant of a deviation away from a non-judgmental and non-threatening activity, to one which accepts judgements from peers and especially gatekeepers regarding performance and

---

[106] P/R/17
[107] It maintains a *casual* and *serious* component, however, this time the *serious* component is the one which is dominant.

competence in the activity. This is because it is a situation in which they feel 'you learn from your mistakes' in order to improve.[108] It becomes absorbing to the young person (and other gatekeepers) to maintain and improve on their perceived superior ability which they possess, or feel they may have over their peers, or to catch-up with those who are perceived to be more able.[109]

Young people who adopt such a focus and have a high conception of their ability to accompany their competitive goal-oriented traits, engage in what have been called 'adaptive patterns of behaviour' (Roberts, 1993). This is where a person focuses on effort within the context of tasks which they find interesting and challenging, and in which they try hard despite the relative failures or difficulty,[110] maintaining the activity over a period of time (Dweck, 1986; Ames, 1992; Duda, 1992). The consequence of this 'serious' attitude of the young person (and gatekeepers) is that they positively accept an increased emotional and physical criticism of themselves. This constructive criticism increasingly manifests itself relative to the physical rather than emotional aspects, with the young person prepared to put themselves to far greater physical exertion in the 'serious' club context in an attempt to be good at it and revel in that tag of a representative team member and its associated social profile.[111] Coakley and White (1992) have also identified the significance of the perception of competence for young people with high levels of skill. However, they refer to a *participation turning point* which usually comes when the young person decides that their skills have 'reached a peak' and their skill level is not going to improve (p26). The consequence of which is their decreased participation especially when they consider the extensive time demands and energy they have to commit to the physical activity especially given they are likely to have other expanding interests. Directly or indirectly, contact with their peers and gatekeepers gives each young person a perception of their competence. When the young person moves to a context in which there are different peers and gatekeeping agents, whose evaluation of their ability does not match their perceived competence, the result is that the young person drops out of the activity to seek one which is not as openly challenging to, and more accepting of, their perceptions of self e.g. youth club, walking streets, computer games.

---

[108] 1/E/126

[109] A young person feels they can only catch-up if they already have a reasonable amount of ability/competence in performance, which for the less able, poor ability young people removes a great deal of opportunity for them to participate in club (team) physical activities on a consistent basis in many different contexts inside and outside of school.

[110] Dweck (1986) has suggested that the failure or difficulty component remains more fragile than the other factors mentioned in the adaptive behaviour of competitive-oriented young people.

[111] 3/L/353

Activity done alone within the *serious* component of performance emphasises a desire to be better. This cultivates the incentive to practice more in the young person's free time outside of that limited time available in the club environment. 'Organised informal activity' can also be a situation where the young person can maintain links with 'real' friends who do not attend the same club environment. Here the young person can show their ability, maintain their *shared experience* with 'real' friends and do it in a non-judgmental/non-threatening situation (which can be a welcome variation for them).

Location of the young person's home, club and school in relation to each other is important. If they are all located close to one another within the same community the young person is in a position to gel *secondary* and *primary* friends more readily while maintaining club involvement. However, given a situation where the home is located far from the school and/or club location away from one or both of these, there becomes definite distinctions between the *recreational* and *serious* performance activity (and its associated personnel) in which the young person is involved. This includes a distinction between those individuals with whom each activity is conducted and the gatekeeping roles they employ.

> At *(county)* netball I don't have any friends from school, at dancing I do and at orchestra I didn't. [112]

> Two girls from school who go to County netball, and I go dancing with my best friend, both the netball evenings I've just made new friends, so I've got quite a good range of friends, but most of my friends at school I don't do any activities with apart from dancing with my best friend.[113]

> Most of the people who go to my school live in Leicester or Loughborough, whereas I live here so it's quite a long way. Most of my friends in the village go to another school which is about a couple of miles away.[114]

The difference in localities can indirectly segregate involvement in activities so that the requirements associated with each of them become easily identifiable by the young person, as well as by the gatekeepers adopting their role as *facilitator*. This being the case, the young person and parents are able to make clear decisions and take relevant action regarding organisation where necessary and established through negotiation, to allow for maximum participation and any other changes (created by an excess or a need for resources) that are desired. The picture for the gatekeeper and

---

[112] 2/K/55
[113] 3/K/67
[114] 2/I/34

young person becomes far clearer regarding organisation and the many intervening variables if different people and activities are kept separate. Therefore, the changing needs of the young person can be accommodated more readily if activities are segregated concerning venues.[115] That is not to say that there are no interrelationships between activities segregated in this manner, but the nature of the change is determined by these interrelationships. As such, desirable change may not take place as quickly or as smoothly as a young person would like, which is to the detriment of their motivation to maintain participation in the physical activity.

Success

Success is principally self-serving for the young person and is generally classified by them as the maintenance and development of their self-concept in various guises, i.e. increased parental and teacher attention and greater acceptance by their peers. More specifically, success in the performance terms of the young person means greater competence (actual or perceived) in the physical activity and its accompanying competitive achievements. As Roberts (1993) has noted, the achievement context of sport is very likely to engage the ego-involved conception of ability, which directs the young person to develop a competitive achievement goal within sport contexts. Success breeds something of a self-fulfilling prophecy, where in order to maintain their perceived competence, greater practice is required and so has to be incorporated into the young person's lifestyle.[116] The increase in practice helps to develop competence in the physical activity, which in turn increases confidence (due to increases in performance and the acknowledgement of peers and possibly other gatekeepers). This maintains or increases participation in the activity, so increasing the likelihood of achieving continued success. Increases in practice have other implications such as more time needed to spend on it. Therefore, more organisation is required and possibly a reprioritisation of activities in which they or other members of the family are involved.[117]

Social processes are easily quantified as positive or negative by the young person by the number of their *shared experiences* with friends and the consistency of those experiences. Success in achieving *shared experiences* reinforces that behaviour and

---

[115] This creates its own problems. With the use of different venues comes different organisational networks and the probability of more or less resources.

[116] This would need to be assessed by the young person and their gatekeepers relative to the resources available and the *rationalisation of rewards* to be achieved by involvement in the activity.

[117] The young person consistently asks themselves if this particular definition of fun is one which they are still satisfied with? If not attempts are made to alter the situation, be it through negotiation or abstinence of the activity.

activity which created it. Therefore, the young person readily revisits and increasingly establishes their involvement in the activity as identified in figure 6.6.

The degree of *fun* and *success* a young person has in a physical activity can be the incentive for the parent, young person and school to seek additional opportunities for the young person to participate in additional physical activity outside of one particular context. This exists along a continuum,[118] at one end of which is the young person who is a competent performer in the activity not only seeking increased frequency, but an increase in the standard of competition in a formally organised physical activity.

> She did it at school and became quite good. She's played
> all round for various local teams and now she plays for a
> bigger club. Other teams now want her to play for them
> instead next season, so I think she's going to join them.[119]

Access to opportunities outside of one context (e.g. physical education at school), can create further opportunities for involvement in the activity which perpetuates the initial desire to experience a higher standard of performance and competition. At the other end of the continuum is the young person who is dissatisfied with the context. The young person and their parents may acknowledge the importance of physical activity, not because of the health benefits, but as a 'management process' i.e. if they are involved in an acceptable activity, then they cannot be getting into trouble or danger. Consequently they may seek alternative activities to those relatively negative cues experienced in physical education, which can facilitate the same management process in addition to a better chance of success for the young person.

> If she was joining in outside of school activities they would
> not be directly related to physical education, they'd be
> things like drama and that sort of activity, cookery, these
> are the sorts of things that she would get involved in rather
> than something physical.[120]

Regardless of the position along that continuum of success previously discussed, the degree of organisation and commitment on behalf of the parent, school and the young person, is tremendous and cannot be underestimated when considering long term participation in their chosen physical activity.

---

[118] A continuum from the young person who is a good performer in physical activity, achieving high levels of success, to the least able performer who has little or no success.
[119] P/R/17
[120] P/N/91

Fun

> You get excited if you're really near the goal and nearly
> finished or if it's a particularly exciting plot. It's also pretty
> funny sometimes if something funny happens, because the
> aim isn't to actually finish, well I suppose it is, but it's really
> to have fun and enjoy it, there isn't really, on the whole it's
> just a good thing to do, it's the mixture of feelings that
> makes it good.[121]

Fun [122] was a surprisingly difficult concept for young people to define,[123] This is
partially because, as Goudas and Biddle (1993) have noted, '...enjoyment in physical
activity is a broad concept with multiple determinants'. However, it exists as either
predominantly *casual* or *serious* in nature, infiltrating the *social process* and
performance (and competence) in the young person's *rationalisation of rewards*
process, as indicated in figure 6.6.

The relationships between the *casual* components of *fun* which are constructed by the
shared experiences a young person creates, and the nature of their involvement in
recreational performance type activity, can be seen in figure 6.6. It is essential that
such activity remains non-judgmental, non-threatening for the young person as they
exercise a broad degree of choice while learning something new. Alternatively a
completely different notion of *fun*, predominantly *serious* in nature is related to the
serious performance type activity in which the young person is involved. This
activity makes peers and gatekeepers much more judgmental with regards the young
person's performance (physically and emotionally) in the activity, and which exists
within much tighter boundaries of choice. This constructive criticism is counteracted
by the high level of intrinsic motivation of the young person.

The *shared experiences* and *secondary* friendships created by the young person with
their peers who attend the *serious* performance activity (with whom contact is limited
to that context), reinforce the *serious* notion of *fun* generated by *serious* performance
type activity. However, the opposite occurs when the *secondary friendships* created
in a predominantly serious *fun* context can become *primary friendships* and translated
into a *casual fun* context. Having fun in a physical activity is continually cited in the
literature as an integral component of a young persons sustained involvement in that
activity (Rowland, 1990; Sallis and McKenzie, 1991; Freedson and Rowland, 1992;
Weiss, 1993), and regardless of the casual or serious nature of fun, there is a

---

[121] 3/I/121

[122] Young people consider 'fun' to be synonymous with the term 'enjoyment', apparently unable to
create a distinction between them.

[123] See Athletic Footwear Association (1990) and Petlichkoff (1992).

fundamental interaction which takes place between the young person and the setting. The physical activity becomes the social activity which enhances interaction helping to prevent rejection or withdrawal by the young person from the social context (Page et al., 1992). Weiss (1993) reinforces *social process* and *performance and competence* when she emphasises the mastery of skills, perceptions of competence and supportive social influences as contributing to a young person's motivation to initiate and sustain participation in physical activity of any kind.[124]

Fundamentally if the person is having fun it means they are able to locate themselves in or near a state of *flow* in the activity, as Csikszentmihalyi (1975) would say.[125] The Model of the Flow State is illustrated in Figure 6.7. The rationalisation of reward process is part of the conscious, as well as the unconscious, way in which the young person defines the situation to establish their position in the Model of the Flow State for a physical activity. For the actor, the enjoyment of acting in a flow activity justifies the expenditure of time and energy. If the young person can achieve the state of flow, the conscious criteria for which are those established by the social process and performance and competence discussed, then they will be more likely to maintain the physical activity.

When a person believes that his action opportunities are too demanding for his capabilities, the resulting stress is experienced as anxiety; when the ratio of capabilities is high, but the challenges are still too demanding for his skill, the experience is worry. The state of flow is felt when opportunities for action are in balance with the actor's skills; the experience is then autotelic. When skills are greater than opportunities using them, the state of boredom results; this state again fades into anxiety when the ratio becomes too large (Csikszentmihalyi, 1975: 49).

ACTION OPPORTUNTIES (CHALLENGES)

Anxiety

Worry

FLOW   Boredom

Anxiety

ACTION CAPABILITIES (SKILLS)

(Csikszentmihalyi, 1975)

Figure 6.7 A Model of the Flow State.

[124] See also Patriksson (1981) and Stonecipher (1995).
[125] The term *flow* is what anthropologists call a native category - a word frequently used by the informants themselves to describe the experience. It is the holistic sensation that people feel when they act with total involvement. In the flow state, action follows upon action according to an internal logic that seems to need no conscious intervention by the actor (Csikszentmihalyi, 1975: 36).

Social process and *performance (and competence)* should not be divorced from each other. They are not completely independent components in the *rationalisation of rewards* for the young person. A great deal of interaction and many interrelationships exist between these fundamental aspects, the importance and dominance of which are determined by the young person's particular situation and the influence of the other gatekeeping processes.

6.6.2 Parental Rewards

Parental rewards support, as well as compromise those rewards which the young person strives to acquire. The 'challenge' comes from the fact that the young person's and parent's definitions and/or extent of rewards, may not be the same. This potential variation in rewards for parents compared to young people emphasises the importance of the negotiation processes as an essential component to achieve and maintain the young person's participation in all activities, not only physical activity.

For the parent (as with the independence of the young person) there is a process of negotiation and an associated balance between them and the young person over what come to be regarded as those acceptable rewards for the parent from their child's participation in a physical activity. These are:

- the safety of their child.
- bonding with their child (teaching and learning).
- Pride in their child's achievements.
- ' I had it, they should have it'/I didn't have it they should...' attitude.
- Endowment of human capital.[126]

The emphasis on the safety and care of the young person has already been established in the safekeeping process. Its presence as a component of parental rewards serves to emphasise its importance in the gatekeeping processes. Once again the *guardianship* role of the parent moves to the fore with their *enforcement* role becoming increasingly influential. As long as the parent has knowledge and possibly personal experience of the activity and its context, they can appreciate the parameters to their child's involvement in the physical activity. Given that these parameters, from a parental point of view, are compatible with their guardianship role. The physical activity in that particular guise becomes an acceptable one for the young person to participate in. The reward for the parent is that they have maintained their child's safety and facilitated activity which is occupying, if not completely engrossing, the young

---

[126] This term is used to denote the investment of resources in the care of children in order to provide a wide range of experience and interest (Gershuny, 1993: 69).

person. Those activities which satisfy this parental concern are most likely situated within organised club structures where recognisable and consistent parameters to involvement and participation can be identified by all parties involved (i.e. the young person and the other gatekeepers). The young person may attend such contexts independently as part of independent initiatives with their peers (as a consequence of the process of *negotiated independence*).

> I don't do a lot of organising at home but at school
> because... like with my friends at school. I went to the
> American Adventure, we organised it all but it never went
> to plan and we missed all the buses.[127]

> I went against them *(parents)* and I wish I hadn't because I
> joined a pretty poor team and I could have done better.[128]

They may also be introduced to such activities as a consequence of parental initiatives (directly or indirectly[129]).

> *Who introduced you to the (football) club?*
> My Dad because he's the Chairman.
> *And what about the fishing club?*
> My Dad was already in the club anyway.[130]

> He's started doing karate actually. The girl on the corner
> she's been going a little while and they asked him if he'd
> like to go and see how he got on....I was talking to the chap
> down there who runs it and he said he seems a it of a
> natural so it's given him a bit of a push to keep going.[131]

tunities created at the place of parental employment to participate in physical activity for the work force can subsequently involve the young person in those activities. Parents participate in the activity on offer and as part of their own agenda (*rationalising of rewards process*) to facilitate *shared experiences* with the young person, to enhance a *bonding* process between them (as the young person does with their peers). This is in addition to the reward of maintaining their own level of physical activity. In so doing this serves as an introduction for the young person (and potentially for the parent[132]) to a physical activity context which they can begin to

---

[127] 2/M/231

[128] 2/M/193

[129] Indirectly the parent facilitates participation in the physical activity by providing such things as the 'taxi service' for the young person. Directly, the parent initiates the contact and participation in the physical activity at a club.

[130] 1/A/53-56

[131] P/H/125

[132] The parent may be experiencing the situation for the first time with the young person. In such a situation they also acquire new knowledge and those experiences together. This creates an even more intense *shared experience*, which enhances the *bonding process*.

develop and decide whether or not to translate it to other environments. This translation occurs when they are familiar with a context which creates no trepidation for them.[133] All of which enhances the likelihood of the young person participating in physical activity.

> I don't find *(squash)* that very interesting really, hitting a
> ball against a wall. Well my Dad keeps on saying stuff to
> me, like I'll beat you and all this, and I go to prove him
> wrong.[134]

Parental desires (especially father's) to teach their child 'what they know' about the physical activity and give them the benefit of their experiences are great. This makes-up a greater portion of the *rationalising of rewards* process for the parents who have been physically active in their past, usually in a 'sporting' context.

> We go swimming, he *(father)* helps with football and he's
> teaching me tennis at the moment.[135]

Bonding situations may not be created on a frequent basis between the parent and the young person, however, when they do occur they are significant events especially to the parents if not for the young person.

> Yes we have *(son and father played squash)* since we've
> come up here because at the power station they've got a
> couple of squash courts and we had a game against his
> *(father's)* cockney mate as well.[136]

As with the young person's *rationalisation of rewards*, *shared experiences* are a reward for the parental gatekeeper. Within the context of the family, social incentives can be a powerful motivator of physical activity (Taylor et al., 1994). The *shared experiences* in this instance are between the young person and parent, with no external agents to the family unit involved. However, unlike the *shared experiences* discussed relative to a young person's *rationalisation of rewards*, the *shared experiences* between parent and young person need to be positive ones if they are to be maintained. However, it remains fundamentally a *shared experience* that is accepted or rejected together, building 'companionship' and enhancing the *bonding*

---

[133] Translation of experiences to other environments by the young person depends in the first instance on the perceived nature of the original experience (positive or negative). The nature of this experience is vital to the young person's adoption of the physical activity. If it is a negative experience they may well be aware of the context, however, the desire to be involved in such a context is non-existent. The opposite can also apply.

[134] 1/A/98 & 100

[135] 1/F/86

[136] 2/A/231

process between them.[137] There are many intervening conditions to such shared involvement, not least the organisational consequences/arrangements associated with parent and young person participating in the same activity at the same time.[138] There is also the commitment of both parties to maintaining such involvement on the same or a compatible basis, especially considering the variations in the way each may perceive the experience and rationalise the associated rewards. Any disparity in importance placed on these kinds of *shared experience* by the parent and young person may or may not be reflected in the infrequent manifestation of them. It does reflect, however, the negotiation between the gatekeeper and the young person and that the activity has to be acceptable to both agents. Shared experiences for the parent allows them to share their knowledge with the young person and/or acquire knowledge together.

> He *(father)* didn't ride when he was younger or anything,
> he's never ridden or anything like that but he's picked it up
> so quickly coming out here...[139]

The *bonding* process facilitated and shared in these experiences is usually more significant to the parent than the young person, therefore, continued or alternative activities are usually suggested by the parent. The incentive to facilitate physical activities for their child can originate from the parents personal participation or perception of participation in the physical activity.[140] The rewards which they experienced are considered by them to be valuable enough to create the desire for their child to echo them if they wish to.

> He's *(father)* given up the football, he used to play four
> times a week but his Achilles tendon's gone now.[141]

> Well they *(father and young person)* go playing football at
> the local cricket club, he's been a big help to them, getting
> them interested in that.[142]

> We have consciously encouraged her to take part in
> physical activity because the natural direction she would
> take is to be a basically sedentary existence we think.
> Given our background, she would naturally end up doing

---

[137] In the majority of instances it was the father rather than the mother who generated such situations with their children regardless of the sex of the young person.

[138] Even if they do not participate in the activity together at the same time, they can still participate in the physical activity and it can be the activity as opposed to the situation which they have in common and so can share that.

[139] 3/L/211

[140] This is commonly physical activity in a sporting context of some kind, which the parent perceives as positive. See also Jambor & Weekes (1995).

[141] P/FF/113

[142] P/FF/17

something intellectually based rather than physically based. She follows on from us really. We took ends to make sure she had an early experience of physical activity counter balancing the mental activity.[143]

The opposite also applies where those parental experiences of physical activity which have been negatively orientated, have been enough for them to limit their own as well as their child's contact with such activity. The *guardianship* role becomes dominant once more, for they do not want their child to experience such negative experiences as they did.

A distinction between the parental role of *facilitator* and *enforcer* can become difficult in certain situations when rationalising the rewards of the young person's involvement in physical activity. The role of *facilitator*, adopted by the parent to enable the young person to participate in physical activity (because it is felt that "it is good for them," reinforced by a "I had it and it was good," kind of attitude), can be overcome by an *enforcement* role when the young person does not reciprocate such enthusiasm for the activity. The young person can be 'made' to participate in the activity through the organisation of the situation, continually being put in a context where they have to participate by continually being taken to a club/team and/or being emotionally forced through not wanting to let their parent down.

A second and far more common succession of one role over another, is where the *enforcer* role supersedes the *facilitator* role of the parent. This is created in situations where there is a lack of empathy between the young person and the parent. For example, the success achieved by a young person as a consequence of their performance (and competence)[144] results in the rewards previously discussed for the young person. It also facilitates an increased sense of 'pride' for the parent. A situation can develop where the young person expresses no need to increase participation or practice in the activity in order to maintain or improve on the rewards they have achieved and so has no motivation to do so. However, the parent may perceive a need. By exercising these feelings, parents through organisation of opportunities and situations can force their child into participation. In so doing their role as *enforcer* supersedes in importance that of *facilitator*. The school adopts a similar strategy to ensure that the young person participates in activity which they want them to i.e. they are made to participate in other activity, if they want to be allowed to participate in others which they enjoy more.

---

[143] P/N/78 & 80
[144] As well as parental organisation.

209

I play football for school, play rugby and cross country. I
hate cross country because my sports teacher he forces me
to do it. I just hate cross country but he makes me do it.[145]

With my clarinet and piano I'm not forced to do that - they
(parents) said I could give it up but I just don't want to give
it up because I've played it for so many years and if I did
give it up I would feel I was missing something even
though I don't practice it very much. I have clarinet lessons
at school and that means that I'm forced to go into the
school orchestra which I don't like at all.[146]

Therefore, the dominant role of the parent in this instance is one of *enforcer* rather
than *facilitator*. The extent to which the enforcement role is employed depends on
the negotiations between the young person and parents regarding this, other activity
and the associated cumulative compromises relative to each of their agendas. In
summary of parental rewards, figure 6.8 illustrates those rewards for parents and the
associated gatekeeping roles used to achieve them relative to each.

REWARDS FOR PARENT			
SAFETY (safe and sound)	BONDING (shared experience)	IT IS GOOD FOR THEM	PRIDE IN CHILD'S ACHIEVEMENTS
GUARDIAN	FACILITATOR (enforcer and guardianship)	ENFORCER	FACILITATOR (enforcer)
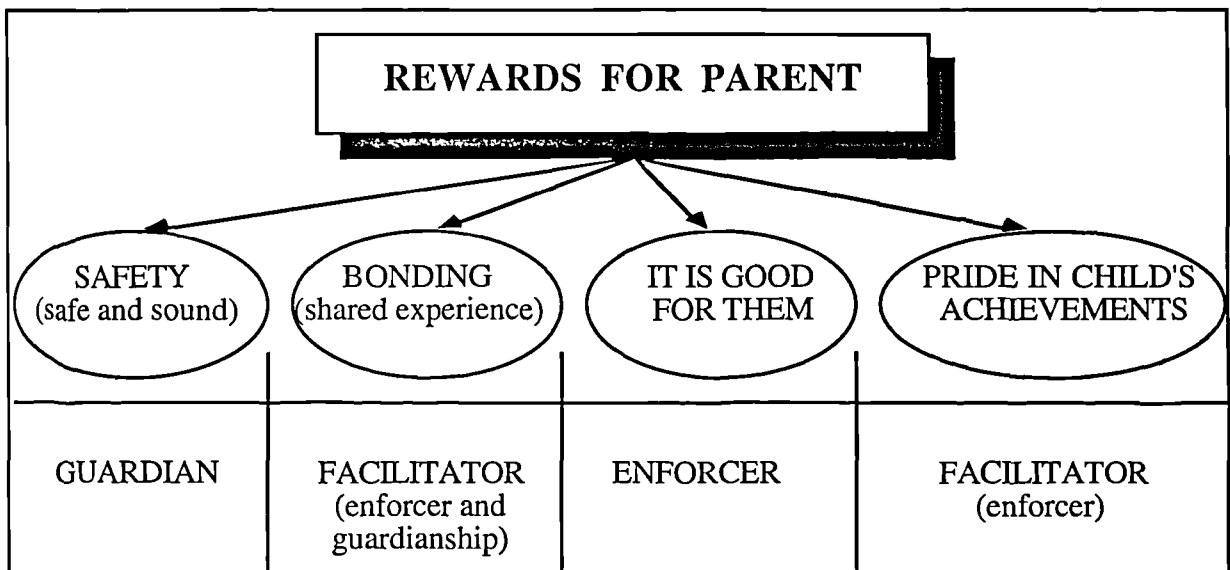
Figure 6. 8   Parental Rewards and Gatekeeping Roles Associated
with them. (Bracketed gatekeeping roles are secondary ones that
may also be involved.)

A comparative illustration of the young person's and parental rewards from that
young person's participation in physical activity, are shown in figure 6.9. The safety
rewards of the parent (their highest priority) is the only reward which is not reflected
by the young person's rewards. Similarity between rewards makes the negotiation
process between the young person and parents much easier.

[145] 3/M/285 & 287
[146] 2/K/ 181 & 183

210

PARENTAL REWARDS

YOUNG PERSON'S
REWARDS

Safety

Social Processes

- shared experiences

- fun (casual)

Bonding

Performance (& Competence)

Pride in their
child's achievements

- recreational

- serious

- fun (serious)

It is good for them

Success
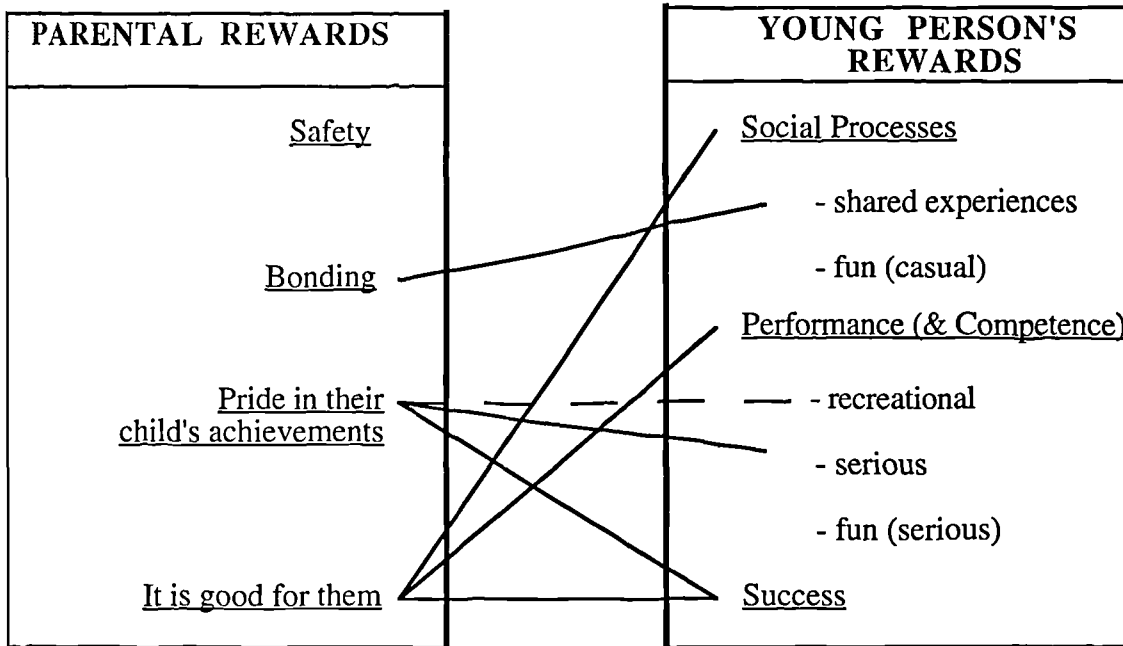
Figure 6.9 Compatibility between rewards achieved by
gatekeeping agents as a consequence of the young person's
participation in physical activity.

6.7 Networking Strategies

Networking[147] between the gatekeeping agents maximises not only the provision of
physical activity for the young person, but also maintains those parentally established
and negotiated criteria which make an activity acceptable. That is in terms of a
clarification boundaries to their child's participation (i.e. it has the necessary
supervision and/or transport for their child to safely experience and maintain
participation). Consequently these strategies are closely allied to the *safekeeping*
processes.

6.7.1 Maintaining Participation

Networking strategies can be initiated by either the young person or the parental
gatekeepers and exist from within or outside of the family. The young person in
conjunction with their peers, may plan the networking arrangements prior to each set
of parental gatekeepers confirming its acceptability.

How do you usually get to the club?

---

[147] *Networking* is the process whereby parental gatekeepers establish links with other gatekeeping
agents in order to distribute the 'burden' of the resources and organisation required to enable the young
person to participate in physical activities.

> With a friend. I walk down to their house and they give me
> a lift. They always take me.[148]

Weiss and Glenn (1992) discuss networking in relation to social support networks which include the joint and individual effects of parents, siblings, peers, teachers and coaches upon participation in physical activity. Along with Weiss and Duncan (1992), they identified that boys (8-11 years) had a larger social network than females of the same age. This has positive and negative implications respectively, for their involvement in physical activity. Weiss and Glenn (1992) in part, attributed this difference to the larger circle of friends that was formed by boys from belonging to more sports teams. Therefore, it is the young person's involvement in organised club activities which appears to be the significant factor, however, the gender of the young person indirectly effects the level of such participation. Hence, it is not the fact of being female...which is a constraint (on participation), but rather the way in which this social location is experienced in society. (Shaw, Bonen and McCabe, 1991).[149]

If the young person's friends are already involved in the physical activity, the organisational arrangements which have already been established, can be employed to accommodate the young person. The young person joining the activity may have the opportunity to join in with, and complement the organisational arrangements and resources that can be utilised in the network (e.g. sharing the taxi service), as long as it does not interfére and alter too much such arrangements. Alternatively, the young person may remain independent from this enhanced networking opportunity, if they have the resources and organisation within their family network.[150]

> The teachers took me to the trials and my friend was in it
> (netball team) the year before so she told me about it.
> Because there is two of us we take it in turns to take to
> where we get picked up from if it's an away match.[151]

The decision to do this is determined by the relative availability and access to the necessary resources required for participation in the activity (i.e. transport, money, time). However, as Finch reminds us;

---

[148] 1/J/46-50

[149] This is something of a chicken and egg scenario. The gender of the young person influences the social location , so Shaw et al., (1991) are being somewhat naive when making their point.

[150] Independent refers to the adoption of 'internal' networking within a family unit rather between families. For example "With most of the friends she would want to see, it can't be spontaneous because we then have to arrange them coming on the bus with her making sure that one of us is available to take them home. She asked someone over for Friday between school and going off to riding, well she had to check with me because of running her friend home. Of course she does spend a lot of time at the stables so squeezing anything else in is a bit difficult." P/N/43

[151] 1/Q/ 93 & 95

212

> ...the support that young people give to their relatives is
> governed to a considerable extent by the prevailing social,
> economic and demographic conditions at any particular
> point in time. We cannot understand support in families
> simply as a matter of individual preferences and choices. It
> is a product of wider social processes, at least in part.
>
> (Finch, 1989: 86)

Snyder and Purdy (1982), Hayashi and Smith, (1994), and Weiss and Hayashi (1995) caution against the assumption that the initial socialisation into a physical activity is a unidirectional process from the parent to the young person. They support the findings of this study when they suggest that the reverse and reciprocal nature of the socialisation process is also possible.

> Changes in family life include scheduling leisure and work
> to attend contests, providing transportation to practices and
> events, changing meal times, rearranging vacation plans,
> and providing the necessary costs of participation. These
> family activities associated with youth sport participation
> may be interpreted as parental encouragement and support
> for the child's involvement in sport (parent-effects). On the
> other hand, the direction of influence may be reversed.
> That is, the child's initial participation in sport may be
> instigated by peers or coaches, and his/her continued
> participation becomes a factor in socialising his/her parents
> into sport (child-effects) - at least in a passive role - in the
> form of attending contests, providing transportation and
> other parental adjustments in life. Additionally, the
> socialisation process may be of a reciprocal nature. For
> example, the parent may assist the child in learning a sport
> and the child's participation further promotes the parent's
> involvement - at least in the form of increased interest and
> knowledge about the sport.
>
> (Snyder and Purdy, 1982: 263)

If the parental gatekeepers rather than the young person/peers initiate contact with a particular physical activity context, then the parent interacts directly with other parents through their child and their friends. When the 'taxi service' is established and shared between families, the parents of the 'on duty' family become responsible for the transportation of the young people. For parental gatekeepers it remains appropriate for older siblings, regardless of their generally infrequent support, to transport their own siblings to venues. However, the responsibility to take the children of another family is one which the parents only accept for themselves. This automatically reduces the number of resources available to the family (i.e. a reduction in time), to facilitate physical activity. This may limit or negate participation in other activity because of their relative position in the hierarchy of importance. However, such *networking* arrangements can create greater consistency of access for the young

person into the physical activity context because of the maintenance of components such as *safekeeping*.

> Both of us are out somewhere or other, if its not with the horse it's with the other two *(children)*. And we're both involved in the PTA at school so we're pretty busy in that respect.[152]

> *Do you share transport with other people?*
> Oh yes we do share, share in the village, yes.
> There's probably no more than 3 of us, probably 4 in all, although there's a large group there's only about 4 who go around taxing.[153]

> Yes there's also ad hoc share arrangements to bring them home from school because they have to rely on school buses to bring them home from school. Yes because more often than not, after school there's always some form of sport activity or music activity so we've had to rely on our friends, haven't we?[154]

A *networking strategy* not only serves to indirectly enforce the *safekeeping* processes, but enhances the value of the activity for the young person by extending the realm of those *shared experience* for them and their peers. Overall the distribution of organisational factors between parental gatekeepers and the reduction in the total number and extent of the resources required for the young person to participate in the physical activity, make them more manageable and realistic to maintain over time and on a consistent basis through adopting *networking strategies*.

> Normally we transport him, but that's as much to do with were we live, it's not easy to get anywhere. It can be a pain when you have three of them doing different things and sometimes it is not possible. Sometimes we share with other parents.[155]

6.7.2 Supporting Involvement

> There is quite a bit of evidence that the support of the family is crucial to adolescents, and that those who do not have strong support from parents are more likely to become involved in undesirable behaviours.
> > (Noller and Callan, 1991: 123)

---

[152] P/R/84
[153] P/R/88
[154] P/R/96 & 97
[155] P/W/65-71

Hellstedt (1995) reinforces this when he states that 'the family is the most important influence on an athletes life.' It is the primary social environment where the young person can develop an identity, receive encouragement, discipline and support, but it can also foster an atmosphere of rigid rules and unrealistic expectations.[156] *Networking* helps to distribute the 'burden' of organisation for the parent (and young person), not only to facilitate new commitments but to enable those commitments to be maintained by family members who also demand the same attention and commitment from the parental gatekeeping agents. Consequently, it becomes an organisational juggling match where the parent tries to 'kill two birds with one stone' at every opportunity.

> And on Thursdays when her Mum comes over for keep fit,
> she drops her off here and then picks her up at 9.30 when
> she's finished.[157]

Even though its multi-directional nature has been established, the 'flow of support', that enables the young person to participate in physical activity, is predominantly from the parents to the young person. Finch (1989) suggests a difference in the support between siblings and the support between parents and their children. Firstly, sibling support is much more of a two-way process. Secondly, it 'appears less reliable' in the sense that support can only be expected in the most trivial of matters. Whether support is offered at other times by the sibling is dependant upon the personal liking and personal circumstances of each sibling. This continues to be the case concerning participation in physical activity, be it on a regular or irregular, serious or casual basis. As the 'taxi service' has shown, the support between parents and the young person is an essential component to facilitate participation. However, to a greater extent, regardless of the reciprocation of that support, the parent continues to give it to their child because of the many gatekeeping processes which are working in unison to maintain such a situation e.g. *safekeeping* and their *rationalisation of rewards*. The support between siblings is inconsistent. For example, the initial desire to participate in a physical activity in the home context usually comes from one sibling and given that the other one has less appealing commitments, they join-in with them for the time-being. If this occurs in an organised physical activity setting such as a club, there is usually a great deal of personal liking between siblings. The shared experiences which are created between siblings participating in activities together increases (and can potentially decrease) their personal liking of each other. As Finch (1989) has stated, this is an important factor promoting support between them. It may also be that regardless of the level of personal liking the siblings have the same

---

[156] See Hellstedt (1995).
[157] 2/G/63

215

goal/agenda in mind, which means that they may need to support each other to achieve it. In so doing they overcome whatever their level of personal liking may be, as well as convincing parental support not to be directed elsewhere.

If all the responsibilities for organising and executing organisational activities rest with a single parent in the family, even with some distribution of the burden amongst a network of parents, the choices for the young person remain relatively limited. This is because of the constant organisational pressure and preparation placed on that parent by their child's involvement in physical activity. Parental organisation of the numerous variables is a key component that helps determine the amount of physical activity a young person has access to on a consistent basis. The greater the organisational skills of the parents, the greater the support they are able to offer and the greater the likelihood of consistent physical activity in a young person's lifestyle. Situations created by parental commitments mean that all members of the family have to be organised and co-ordinated. This creates the need for networking within the family.

> I work shifts which doesn't make life easy. I work late on
> Thursday, Friday and Saturday nights 4 'till midnight. On a
> Monday and Wednesday I do a day shift and I have
> Tuesday and Sunday off. This is bliss to what my shifts
> used to be because they were all mixed up. My wife works
> on Mondays 'till 8 at night, Tuesdays she works 'till 5.30pm
> home for 6pm, on Wednesdays she works 'till 5.30pm home
> for 6pm, on Thursdays she works in the mornings so she's
> home in the afternoon, but I'm off to work at 3.30pm, on
> Fridays she's not home until 6 again. So evening meal is
> usually some time after 6pm, 6.30-6.45 by the time we've
> finished clearing away and that's the time we relax if you
> like. In the summer when the weather's better the kids tend
> to go out with their mates outside, in the winter its more TV
> and computer. We do our best so that the kids aren't on
> their own for very long. The lad goes round to a friend
> who lives just down the road from us if neither of us are in
> when he gets home from school, my daughter (*13 years*) is
> on her own in the house for about 2 hours and normally
> she's got homework to do. During the holidays it works
> quite well because my wife is at home in the mornings most
> of the time and I'm at home afternoons and evenings
> sometimes, and we try to interweave all the shifts. Most of
> her activities (*daughter*) centre around the local community
> centre.[158]

Consequently the daughter in this example participates in activity which is close to home and requires minimal transport and time disruption for her parents. However, many other influential variables such as 'purchasing power' (how much money is

---

[158] P/H/97

available to finance physical activity and the provision of suitable, acceptable clothing and equipment, as well as to access to facilities) have to be added to the equation.

> As parents, we've always encouraged our girls to have a go
> at anything and we give the backing and if they don't like it
> then fair enough, then they have had a chance at it.[159]

While this is an admirable approach by this parent, it is dependent on those economic and temporal constraints they (and all other gatekeepers) have to operate within and maintain.

> ...A range of social, economic and demographic
> factors...shape the structural context within which family
> support is worked out....These cannot be seen as
> 'determining' patterns of support in any direct sense, still
> less direct determining beliefs and values about family
> responsibility and duty, but that they are going to provide
> for each other. These are limiting conditions in the sense
> that they help to shape both people's need for support from
> their relatives and their capacity to provide it.
> (Finch, 1989: 113)

6.8 Reprioritisation

At various points in time it becomes necessary for the young person, as well as their gatekeepers, to reprioritise the activities which they are all involved in to allow for the most desirable ones to be maintained and/or others to be incorporated into their lifestyles. The form of this reprioritisation is based on an auditing process conducted by the young person and their gatekeepers.

6.8.1 Auditing Participation

The relationship between those gatekeeping agents involved in the 'auditing' of a young person's involvement in physical activities (parents, peers, young person), are identified in figure 6.10. Interpretations of the sections identified in this figure vary with each gatekeeping agent, however, the fundamental processes remain consistent. All of these processes are consumed by a degree of compromise which is negotiated between the other gatekeeping agents and the young person relative to each of their respective agendas. It is a cyclical process where each section influences the following one in a clockwise direction. 'Commitments' represent *all* activity (physical

---

[159] P/R/29
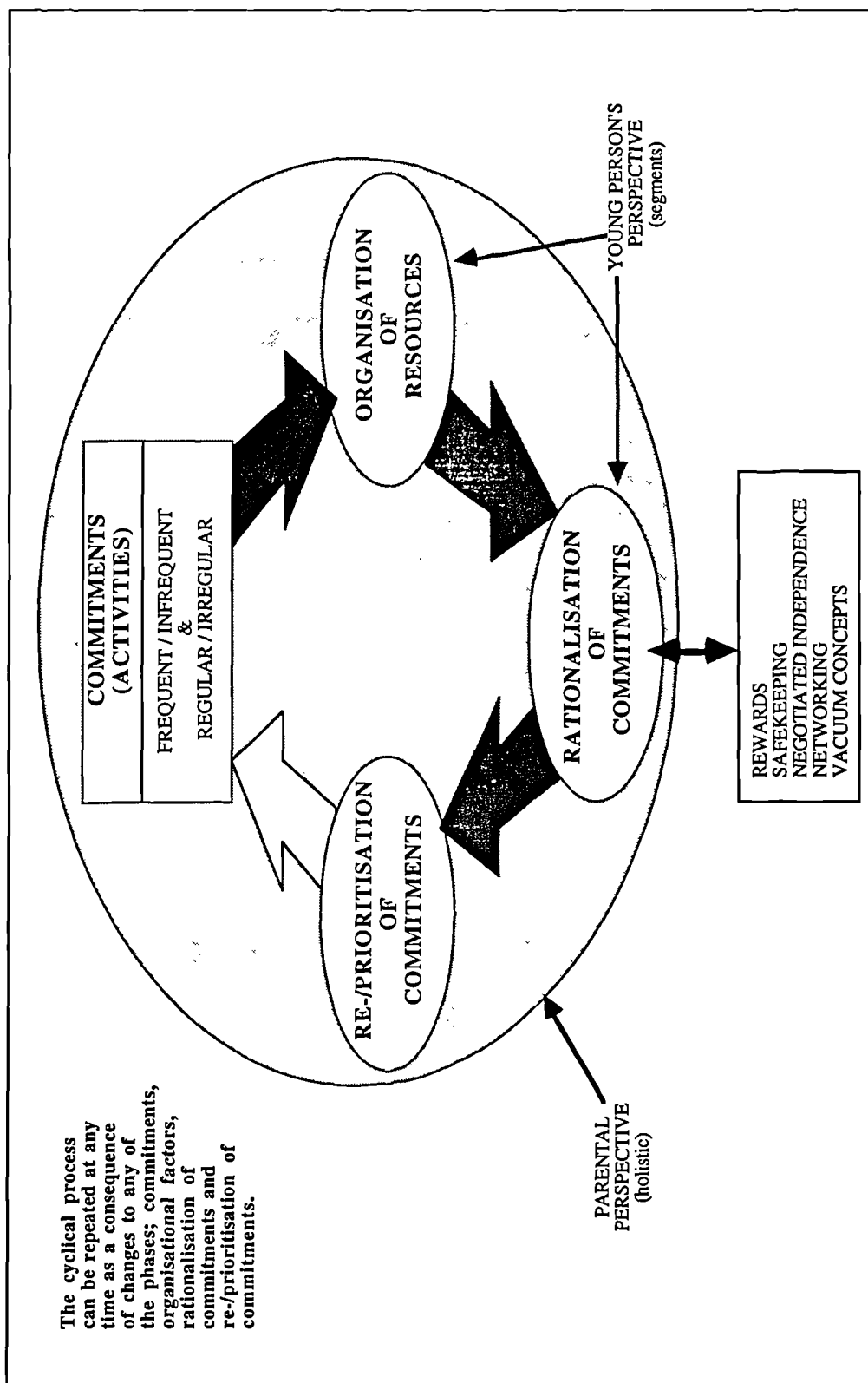
Figure 6.10   Auditing Participation

or otherwise) which the young person and all members of the family and peer group are involved in on a frequent/infrequent or regular/irregular basis.

6.8.2 Organising Resources

'Organising resources' refers to the way in which those resources available to the gatekeeping agents are utilised to facilitate the young person's participation in physical activity. Time is a fundamental resource. Competition for this time to help facilitate participation in physical activity (which includes organisational time) becomes a major organisational issue regardless of the other resources that are available.

```
┌─────────────────────────────────────────────────────────────────────────┐
│                         ┌─────────────────────┐                           │
│                         │   ORGANISATION      │                           │
│                         │     OF TIME         │                           │
│                         │                     │                           │
│                         │ 'Fitting Everything In'│                        │
│                         └─────────────────────┘                           │
│                                    │                                      │
│                                    ▼                                      │
│                          Competition for time                             │
│                                                                           │
│   Parent          Child            Peers              School              │
│  - job          - homework       - homework        - curricular work      │
│  - relaxation   - play           - play            - extra-curricular work │
│  - hobbies      - job/chores     - job/chores      - extended curriculum  │
│  - gatekeeping roles - school    - school                                 │
│    taxi-service etc. - hobbies   - hobbies                                │
│                 - physical activity - physical activity                   │
│                 - pets           - pets                                    │
│                                                                           │
│ (These all interrelate with each other, which makes the organisation required considerable) │
└─────────────────────────────────────────────────────────────────────────┘
```

Figure 6.11   Factors competing for the time of each gatekeeping agent.

Numerous variables have to be considered, arranged and organised in order to incorporate physical activity into the lifestyle of the young person. The more children there are in the family, the more variables have to be considered when organising participation in an activity. A potential strategy employed by parental gatekeepers is to channel their children towards the same or similar activities in order to concentrate the organisational variables they have to contend with in their role as *facilitator*. In such instances the age and choices of the older siblings in the family become very influential regarding the younger siblings subsequent participation in physical

activity. The choices made by the older child (created through negotiation with the gatekeepers), to participate in a particular activity creates an organised network for participation in that activity and familiarisation with the context (as identified in the networking strategies section).

> Yes, especially at school because he's done it all before me and I just ask him.[160]

> ...Because I'm the youngest I've probably got the best deal because my parents are sort of a bit more flexible because my brothers are allowed out, but my best friends are, not set in their ways but, like Sarah, she's got a little brother so her parents aren't probably, they don't want her to go.[161]

Therefore, the addition of another child to the family can be readily incorporated into such a framework with minimal organisational hassle. However, the age of the older child relative to the younger one is significant. If the time elapsed between the birth of the older one and the younger one is too great, this transfer is not created in the same way as it might have been. In such a situation the process of selection of activities and their negotiation between gatekeepers begins a new. However, the gatekeepers still have past experiences to inform future negotiations and involvement in physical activity, which is a positive factor aiding involvement.

The nature of the activity and the sex of the siblings are also important factors. For example, an older boy has two younger sisters, through his involvement in swimming they too became involved in it.[162] The influence of older brothers on younger sisters is also interesting, with the girl seeking more physically oriented activity at clubs and at home.[163] However, such a transfer fails to occur outside of the home context with a younger boy and older sisters, who are involved in activities such as dancing and aerobics.[164]

Certain activities remain priorities over others, positioned in the hierarchy of activity created through negotiations between the young person and the other gatekeepers. Negotiation allows those priority aspects for the young person (and other gatekeepers) to remain as consistent as possible in their lifestyle. The lower down this hierarchy an activity is located the greater the likelihood that it will become more infrequent and less consistent due to the higher order activities (which are considered to be more

---

[160] 2/M/217
[161] 2/K/69
[162] 3/L/71-73
[163] 'I (sister) didn't actually copy them (older brothers) I just played with them.' 3/K/145
[164] 1/II/151 & 152

important at that time) being accommodated before them and consuming a greater portion of the finite resources. Therefore, the position in this negotiated hierarchy of physical activity (as well as the young person's personal hierarchy of activity), will help to determine the likelihood and frequency of a young person's participation in such activity.

As with *safekeeping*, the distribution of the organisation relative to each parental gatekeeper in their facilitating role is similarly disproportional in this context. Mothers are far more likely to organise situations and experiences for their family than fathers. However, the application of the organisational work involves comparable amounts of effort from both parents. The disproportionate distribution of certain roles within the family has also been identified by Horn (1989) who discusses 'asymmetrical parenting roles' in family activities, and by Shaw (1992) who comments:

> Organising family activities and creating environments and
> situations conducive to family takes effort and work, and
> this work falls disproportionally to women.
> (Shaw, 1992: 283)

The negotiation of practical aspects to facilitate physical activity exists proportionally more between the mother and the young person, than it does between young people and their fathers. However, it would appear that there is an equivalent parental contribution made to the initial philosophical/moral negotiation of the appropriateness of the activity.

6.8.3 Purchasing Power

An additional influence on this hierarchy of activity is the application of other resources such as money. Money (*purchasing power*) can create opportunities for greater access, as well as inhibit them.[165] It can create greater independence for the young person as they are more able to purchase access to facilities, transport and equipment which subsequently generates more time for them as they progressively move away from the time constraints created by such things as parental gatekeepers who have to incorporate their own jobs, other care responsibilities and their own hobbies and activities, in addition to the young person's activity.

70% of those young people interviewed in this study received pocket money ranging from £3 to £15 per week. Denscombe and Aubrook (1990) in their study of the levels

---

[165] See Sports Council (1992).

221

of income and the consumption of alcohol among 1009 15- to 16-year-old young people in twelve Leicestershire schools, showed similar results regarding pocket money, with 40% of them receiving £10 or more a week and one in seven having £20 a week to spend. In addition to this source of money, young people derive purchasing power from other sources, in particular part-time jobs. The national trend in England for 15-16 year old young people supplementing their income from part-time jobs is one which involves approximately half of them (Balding, 1989).

Given that a significant portion of these young people can generate a relatively high disposable income, the question of the nature of expenditure can become an increasingly negotiable matter between the young person and the parental gatekeepers.

> She gets £10 a week, and she saves £2 a week out of that because she's going to Malta on a netball tour in March next year, so we said because she's already been skiing with the school...she had to save that, and the rest she has and she spends either on the cinema, deodorant spray, those sorts of things, school uniform and main clothes and bus fare we give her that.[166]

The young person is put in a situation where they have freedom to spend their money on whatever they like, as long as it is within parentally approved boundaries. Hence, it becomes part of the interrelated gatekeeping processes associated with the *negotiation of independence*, *safekeeping* and *rationalisation of rewards*.

Not only does this disposable income generate increased purchasing power for the young person to facilitate participation in physical activity, it does so for all activities. For example, it has been suggested that there is a strong correlation between the price of alcohol and alcohol consumption. When the price of alcohol falls relative to the levels of income there tends to be an increase in the levels of consumption (Denscombe & Aubrook, 1990). Alcohol consumption in Britain has been on the increase since 1985 as levels of income have risen (General Household Survey, 1989). Therefore, activities such as smoking, drinking, drugs and video games can be more easily incorporated into their lifestyle on a consistent basis taking into consideration the financial situation. As discussed relative to the negotiation of independence process, participation in such negative health behaviour negates, to varying degrees, participation in physical activity. A viscous circle of non-participation in physical activity can be created through the subsequent physical

---

[166] 1/R/216

222

discomfort of participation in physical activity, as well as the relative position which the activity occupies within the young person's hierarchy of activity.

There is an increase in the relative independence and autonomy of the young person when they can inject their own financial contribution. It generates a stronger negotiating position for the young person in the negotiation process concerning existing or new activities they participate in. However, this increase in independence is minimal in most cases. In essence it serves to reinforce the covert parental domination of the negotiation process, while the young person perceives themselves to be more autonomous and independent from their parents. The boundaries to participation remain relatively constant, it is the source of the resources which has altered and generated the notion of increased independence for the young person. this may change later as they leave school:

> Parental acceptance of young people's autonomy is likely to
> be greater when young people move into the labour market,
> and achieve some financial independence.[167]
>
> (Brannen et al., 1994: 174)

With an increase in age of the young person there is the increased possibility of relative independence for them. However, this also creates greater responsibilities with the potential for a 'catch 22' scenario to arise. The adoption of a part-time job by the young person increases their financial independence and makes it easier to subsidise desirable activity, given that in the first place they have managed to secure parental approvement to do it. However, additional time is required to incorporate this into their lifestyle which may mean that another activity has to be dropped and/or there remains too little time to participate in that activity which generated the motivation to work in the first place.

> I used to go lifesaving, but they stopped doing that and I
> just went to normal swimming lessons but I thought, well I
> can swim so I won't bother doing it anymore. So that
> stopped me and I've just completed all the badges and stuff.
> But no, I think money would stop me. Like synchronised
> swimming, if I had to pay for something else instead like a
> trip for school, then I'd miss out on the swimming and then
> go another week.[168]

---

[167] Brannen and her colleagues make this statement relative to full-time employment, however, regardless of the extent of employment of the young person the balance of the power relations still remains with the parental gatekeepers in the home context.
[168] 2/D/148

Hence, the hierarchy of activity once more becomes unstable and so is reworked to create a more satisfactory one. After renegotiations between gatekeepers and the young person, the activity can be reprioritised or removed from the hierarchy according to the level of the disillusionment and negotiated importance of the activity. The hierarchy of activity constructed through negotiation can change, but equally it may remain the same. The hierarchy of activity (physical or otherwise) does not necessarily represent the 'ideal' one desired by the young person (or parent), but it is the best negotiated position relative to their 'ideal'. This once more emphasises the negotiation processes. The young person can purchase increased transport opportunities (such as alternative transport: bus, taxi, train), which helps to eliminate the burden on the parental 'taxi service' which facilitates access to physical activity. In the process the young person is also put in a position where they increasingly make decisions over the application of such resources which increases their perceived independence. *Purchasing power* allows certain time constraints placed upon the parent and young person to be removed or reduced, this frees the gatekeepers to facilitate further or different activities for their child(ren) (and themselves), so making it more acceptable.

Purchasing power is an influential organisational variable in the networking and rationalising processes which are used to facilitate participation in physical activity for the young person. Access to purchasing power can be direct or indirect in nature as indicated in figure 6.12. Direct purchasing power is the provision of 'hard currency' used by the young person to participate in an activity. Indirect purchasing power refers to the way in which certain variables requiring money are neutralised by gatekeepers, so that hard currency is not a direct requirement of the young person (but it is for the gatekeeper e.g. for the taxi service - car and petrol). Sources of 'direct' purchasing power are the parent giving the young person money and, as previously identified, the young person doing a job or paid work of some kind. Sources of 'indirect' purchasing power are the parent/family, school and peers. All of these have the potential to provide access to resources free of charge to the young person. The form of *purchasing power* influences the independence of the young person and therefore, given their age the maintenance of such activity.[169] Hard currency, especially that gained from a job is used by the young person to access contexts which require more and more independence. If the activity is initially identified and more importantly supervised by the parents, this greatly limits the young person's perceived independence and makes it a much less acceptable activity for them to participate in. However, if the young person identifies and it is supervised by

---

[169] Parental gatekeepers give the younger child boundaries which they must stay within. These do expand with age to potentially incorporate more and more contexts and experiences.

Establishing Access to Purchasing Power

| sustained access | periodic access |

- parent
- job/work → Direct ← → Indirect ← - parent/family
- peers

hard money/currency

Other resources

money -
go do and
organise
the activity
yourself.

money - go do
parentally
organised and
supervised
enrollment/
participation

- 'taxi service'
- spin-off from
  parental activity

greater
perceived
independence
of action for
child.

initiallly   constantly

constraint on
independence

increasingly   maintained
removed over
time

limited independence
during activity with parent,
however, it can lead
to greater independence
as consequently they become
aware of the nature of
opportunities at alternative
venues.

Figure 6.12 Accessing Financial Assistance to Facilitate Participation in Physical Activity.

gatekeeping agents disassociated with the home context it becomes increasingly more acceptable. Such constraints on independence of the young person may subside with time as the parents become satisfied with the context (the *safekeeping* role is satisfied). However, the younger the child, the more questionable the suitability in the location of the activity from a parental gatekeepers point of view, and a limited or lack of a networking framework, the longer the constraints would be maintained and enforced.

6.9 Vacuum Strategies

Certain situations are created to 'force' young people to adopt or move away from physical activity. This process of *coercion* is either direct or indirect in nature, as shown in figure 6.13.
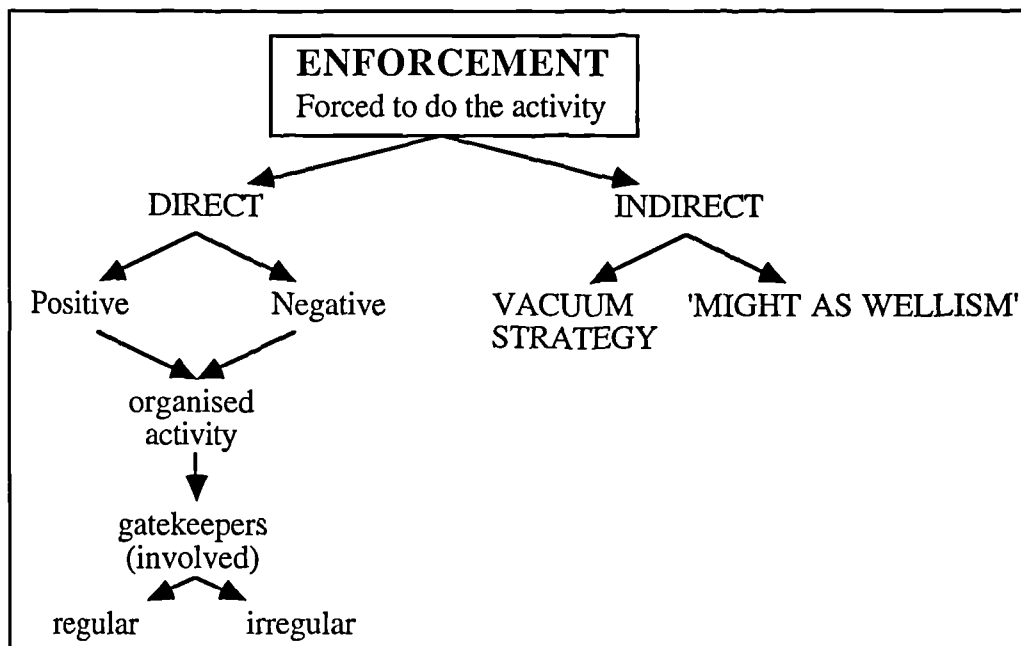
Figure 6.13 Factors forcing young people to adopt or reject participation in a physical activity.

6.9.1 Direct Coercion

This is when a young person is told which physical activity they will participate in. It can be perceived by the young person as either positive or negative. The negotiation process in a formally organised activity is negated or removed to varying degrees by the gatekeeper who invokes such a situation. If the activity fails to facilitate the rewards that the young person desires, they will perceive it negatively. Alternatively, the young person may acquire rewards from the activity even though the initial

impetus to be involved is through *enforcement*. For example, involvement in the activity may generate secondary friendships that in time translate into primary friendships. Such situations may be created on a regular or irregular basis depending on the particular context and the young person's perception of their importance.

6.9.2 Indirect Coercion

Indirectly a young person may be forced to participate in a physical activity because of '*might as wellism*.' The desire to achieve *shared experiences* leads them into an activity that otherwise they would not have considered. Consequently the desire to drop activity may be paramount if it does not facilitate it with 'real' friends. However, it may be that the physical activity offers the young person performance rewards which then overcome those rewards that were initially sought. Hence, the physical activity is maintained even though the initial incentive/stimulus has become a secondary consideration or dissolved completely. For example, a young person initially participates in a physical activity with their 'real' friends who are the primary reward and incentive for them to participate. However, over time the young person may become more competent at the activity and begin to adopt a more performance (and competence) orientation to their rewards from the activity. This subsequently leads to them attending another club which can offer them higher performance standards (and the other rewards associated with representative involvement). They also begin to make *secondary friendships*. As the young person establishes themselves in this context *secondary friendships* can be translated into *primary friendships* and the process is in a position to evolve again.

The *vacuum strategies* linked with this and adopted by the young person are those strategies employed to fill gaps of free time that infiltrate their lifestyle activities at various times and for a number of reasons. Williams (1993) has uncovered a similar principle in the life of street children in India known by the phrase 'time pass.' It characterises the extremes the children face from short periods of intense hard work and vast spaces of empty inactivity, and the things they do to fill-in time. Ellis and Rademacher (1987) have developed a typology of free time activities for young people. Their typology consists of socialising activities, sports and games, television watching, music listening, art and hobbies, reading, thinking, rest and napping, eating and studying. Other researchers have identified similar clusters of activity which correspond to these activities. For example, 'slow living' activities (McKechnie, 1974), which correspond to the 'maintenance' activities of eating, resting and napping. By the same token, Allen and Donnelly's (1985) 'Intellectual Activities' incorporating

writing and reading correspond to Ellis and Rademacher's 'productive' activity of studying. The creation and filling of gaps of free time is seasonally affected.

> In the summer everyone used to all go down the park and there'd be about 50 of us playing football. But not it gets dark early, and it's dark before I come home sometimes. When we do to youth club it's pitch dark and that's only 7 o'clock, and you can only play basketball then, well basketball, pool, table tennis and go on the computer and stuff like that.[170]

With winter comes a confinement and increase in the boundaries on participation which are increasingly compatible with and acceptable to the *safekeeping* role of the parents (and its associated criteria). This concentrates the young person's involvement into the home and/or club environment e.g. Early nights means they don't play out as much, however, these boundaries are extended once again in the summer months when the opportunity for the young person to 'play out' increases. Therefore, the kind of activity that they can use to fill any 'gaps' of free time (the vacuum), are respectively confined or expanded given each season. These activities may be physically active or sedentary, however, there are certain characteristics that will determine which it is most likely to be. Any periods of available time are filled-in by the young person adopting activity which can satisfy the gatekeeping roles and processes. The frequency of these gaps of available time may be increased as a consequence of the roles adopted by gatekeepers e.g. *guardian (safekeeping)* role, i.e. if they cannot go out and they have to stay in. In addition the nature of the activity used to 'fill the vacuum' must also satisfy and/or conform to the criteria associated with the gatekeepers' roles and each of their agendas. For example, young people are prevented from going out into their neighbourhood to 'play' because of parental concerns over their safety. Activity is therefore, confined to either organised/club activity (which requires a great deal of time and other resources, organisation and so forth), or the home environment where the context can be clearly defined by the parental gatekeeper and young person, with clear boundaries to the young person's participation which are easily monitored (i.e. the home is only so big and it can only accommodate certain kinds of activity which fall within parentally acceptable boundaries. Unfortunately the nature of such activity is usually sedentary rather than physically active in nature.)

A young person's involvement in any kind of activity must therefore conform to these considerations. Consequently, those activities which become most acceptable are

---

[170] 2/O/77

those which require minimal organisation and supervision and generate maximum control of the variables (for the parental gatekeeper). Hence, involvement in activities such as television watching and computer games become most acceptable to parental gatekeepers. In addition to the convenience factor there are the accessibility and enjoyment factors which are significant and help to explain the tendency of young people to select sedentary rather than physical activities (Janz, Phillips and Mahoney, 1992; Tannehill and Zakrajsek, 1993). The *purchasing power* required to acquire a computer game has considerably decreased, this has made access to them so much easier, something which enhances the acceptability of such games. Another important consideration is the networking of resources the sharing and passing on of different games which furthermore enhances the interest of the young person in computer games, reduces the cost to the parental gatekeeper to provide such 'acceptable' activity, and provides a *shared experience*.

> ...I've got a friend who's got literally thousands *(of computer games)* and we just copy theirs. Everyone round here's got the same sort of computer. There's about five Omegas in this street so everybody's got the same games as well.[171]

If the home environment is one which does allow for physical activity it is usually on an individual or one to one basis (basketball hoops, throwing or kicking ball against wall/to each other, play in garden with friend or sibling). This requires a great deal of intrinsic motivation on behalf of the young person to maintain when they are alone. With a friend it requires appropriate conditions of organisation (not too much hassle to organise) and associated resources (easily obtained).

In complete contrast to the parental justification associated with the adoption of vacuum strategies, the young person has a different set of underlying reasons to support the same situation. To the young person the whole concept of the computer game allows for numerous variables to be experienced and manipulated again and again on a 'quick fix' basis.[172] The consequences of their actions while immediate with no delay, significantly have no long lasting effect. Experimentation is maximised by the nature of the computer games, which create a perceived 'safe' environment for the young person's self because it is seen as non-threatening to them. This enhances the 'fun' element for the young person, because the computer games serve as a source of *shared experiences* with their peers and parents (especially father), which can be compared and contrasted either directly (playing with them at

---

[171] P/H/137

[172] Quick fix refers to an immediate response/gratification from the activity.

229

the same time) or indirectly (talking about it). In addition, there is variety created by the number of computer games and their immediate reward system.

A standard, established in response to such 'quick fix' experiences by the young person, is that any other activity in which the young person participates has to provide the same instant quality of experience. If the activity cannot facilitate the same degree of immediate reward for them, it will most likely be dropped or relegated to be classified as less important in the activity hierarchy of importance in preference to the computer games. Therefore, physical activity must facilitate a 'quick fix' experience if it is to be accepted and maintained by the young person. Unfortunately, it can not always achieve this. While the more able performers are capable of gaining greater success and rewards from physical activity, the less able person does not experience this component to the same extent, finding it increasingly difficult and hard work to achieve (that is if they are able to achieve it at all from their participation in physical activity). Therefore, physical activity is unable to compete with the relatively easily generated rewards offered from playing the computer games.[173]

Most computer games are based on some form of physical activity and are conflict biased in nature. They allow the young person regardless of their actual physical capabilities to access the desired rewards with a degree of anonymity and experimentation which maximises the 'fun' component, as well as setting a competitive challenge which makes them irresistible to the young person.[174] There is also a high degree of 'risk-taking' within the game context which has absolutely no long term consequences for the young person another extremely attractive aspect to them. The association between the player and their manipulation of the computer character can become so great that the creation of those on-screen physical performances to some extent are accredited to the person holding the control panel, which makes the experience even more absorbing, making the actual physical effort associated with the achieving similar rewards in a physical activity are much less, if at all, appealing to the young person.

Roberts and Brodie (1989) acknowledge a general trend towards home-centred and television dominated leisure which they consider to have held back sport participation over recent decades. However, they are optimistic, despite the fact that home entertainment equipment has been Britain's fastest growth area in leisure spending

---

[173] This argument can not be reversed because the computer context is one which encourages experimentation and risk taking in a 'self-concept safe' way. Performances in physical activity are much more open to criticism and judgement by everyone.

[174] This is exactly the kind of attraction that computers are designed to create!

during the 1980's, that this trend will eventually exhaust itself and sport and physical activity in general can then initiate a revival. Tinning and Fitzclarence (1992) acknowledge television has become more than entertainment, it trivialises public discourse and 'it has become even more powerful as a key influence in how adolescents (and adults) define themselves in the world and project to the future. (p296) This may suggest that the optimism of a substantial relative revival, as expressed by Roberts and Brodie (1989), should be more tempered.

6.10 Summary

Figure 6.14 identifies the three gatekeeping roles adopted by the gatekeeping agents and the associated gatekeeping processes. A negotiated continuum of independence created by gatekeepers to establish each agents own agenda regarding choices of activity, is continually being challenged and reassessed over time relative to the changing perspectives associated with the different and changing gatekeeping roles. The notion of choice consumes those factors that satisfy independence relative to the young person's conception of it, the greater the perceived choice the greater the likelihood that the young person will gravitate towards those activities. Choice is perceived to increase away from the home context where negotiations with a different cast of agents establishes greater independence for the young person.

Challenges for greater independence are influenced by the young person's self-organisation. Greater management of resources through organisation makes the young person's negotiating position increasingly strong. However, compromise between the young person and the other gatekeepers is negated to an extent by the parent adopting an *enforcement* role.

> Control (parental) is exerted through communicative strategies whereby the separation of the public and private spaces in which young people operate is acknowledged, together with the young people's right to traverse the boundaries. At the same time parents seek to regulate the young people's activities across these boundaries by covert means. In practice this means requiring young people to communicate openly concerning their whereabouts as a trade-off for their freedom. However, the mode of control is to deny its regulatory function, from the perspective of parent if not from that of the young person.
> (Brannen et al., 1994: 204)

The parental gatekeeper is the key gatekeeper, however, the school's role 'in loco parentis' reflects the *guardianship* role of the parents, with their main concern being the psychological and physical welfare of the young person. However, there is a

	PARENTS	YOUNG PERSON	SCHOOL	PEERS
GUARDIANSHIP	Negotiated Continuum of Independence - choice Rationalising Rewards - safety (- bonding) Safekeeping - safety Networking - taxi service		Negotiated Continuum of Independence - choice Rationalising Rewards - safety Safekeeping - safety	
ENFORCEMENT	Negotiated Continuum of Independence - choice Rationalising Rewards - It's good for them (- pride) Vacuum Strategies - direct (positive and negative)	Vacuum Strategies Rationalising Rewards - shared experiences Reprioritisation - purchasing power	Rationalising Rewards - it's good for them - You will do it (club) Negotiated Continuum of Independence - choice (extra-curricular)	Vacuum Strategies Rationalising Rewards - shared experiences Reprioritisation - purchasing power
FACILITATION	Negotiated Continuum of Independence - choice Reprioritisation - organisation - purchasing power Rationalising Rewards - bonding - pride Networking - taxi service	Reprioritisation - organisation - purchasing power Negotiated Continuum of Independence - exercising decisions Rationalising Rewards - performance (& competence) - shared experiences - fun - success Networking - taxi service	Networking - agencies/clubs	Reprioritisation - organisation - purchasing power Negotiated Continuum of Independence - exercising decisions Rationalising Rewards - performance (& competence) - shared experiences - fun - success Networking - taxi service

FIGURE 6.14   The relationship between the gatekeeper, their gatekeeping roles and the gatekeeping processes related to them.

232

disparity of interpretation associated with some gatekeeper's roles and their application. This is highlighted by the 'taxi service' created by *safekeeping* and *networking strategies*. The young person does not equate the creation of the 'taxi service' for their safety, as the parent does, but instead it is a very convenient and cheap means of transporting them directly to the activity venue. While there is common acceptance with regard the consequences of gatekeeping processes, all be it with differing motives, the negotiation process between the gatekeeping agents is positive and easily constructed. However, over time disparity of interpretation can create serious conflict rather than compatibility.

Young people rationalise the rewards which they receive from the activity. The *rationalisation of rewards* for young people identifies two main processes; *social process* and *performance (and competence)*. Both of these are infiltrated by a fun component as well as interrelating with each other. The overwhelming consideration of *social process* is to facilitate *shared experiences* with other people. *Performance (and competence)* exists on two levels: *recreational* and *serious*. *Recreational* activity takes place in an environment which allows the young person to 'have a go' at the activity with out being inhibited by criticism or judgement over their performance. *Serious* activity emphasises performance and competence criteria where involvement in the activity is determined by the ability of the performer and their associated confidence levels.

Success is principally self-serving for the young person and is generally classified by them as the maintenance and development of their self-concept in various contexts. Social process is considered successful by the young person relative to the number of *shared experiences* with friends and the consistency of these experiences. Success in achieving *shared experiences* reinforces that behaviour which created it, therefore, the young person readily revisits and increasingly establishes their involvement in that activity. *Fun* existing as either predominately *serious* or *casual* in nature, infiltrates *social process* and *performance (and competence)* in the young person's *rationalisation of rewards* process, to create a more positive perception of the activity for the young person and so maintain their involvement in the activity in that particular guise.

Parental *rationalisation of rewards* exist not only to support, but to challenges those rewards which the young person strives to acquire and which are interpreted quite differently compared to the parents. For the parent the rewards from their child's participation in a physical activity are:
- the continued care and safety of their child in a controlled environment.

- the increased likelihood of creating situations to bond with their child (teaching and learning).
- Pride in their child's achievements.
- it satisfies the ' I had it, they should have it' / I didn't have it they should...' kind of attitude.
- endowment of human capital.

The *guardianship* role of the parent moves to the fore with their *enforcement* role becoming increasingly influential when rationalising rewards. *Shared experiences* are also a reward for the parental gatekeeper. However, unlike the *shared experiences* associated with the young person's rationalisation of rewards, those between parent and young person must be positive ones if they are to be maintained. There are many intervening conditions and an increasing number of variables to such involvement, not least the organisational arrangements and consequences associated with parent and young person participating in the same activity at the same time. *Shared experiences* for the parent allows them to share their knowledge with the young person and/or acquire knowledge together.

A distinction between gatekeeping roles can be difficult for the gatekeeper to make when one role is subsumed by another, as in the case of the parental role of *facilitator* adopted to enable the young person to participate in physical activity because "it is good for them" and "I had it and it was good" kind of attitude, can be overcome by an *enforcement* role when the young person fails to reciprocate enthusiasm for the activity.

Networking between the gatekeeping agents maximises not only the provision of physical activity for the young person, but also maintains those parentally established and negotiated criteria which make an activity acceptable in terms of clarification boundaries to their child's participation. Consequently these strategies are closely allied to the *safekeeping* processes. *Networking strategies* are initiated by either the young person or the parental gatekeepers to create greater consistency of access for the young person into the physical activity context by maintaining the *safekeeping* components and the necessary resources. It also enhances the value of the activity for the young person by extending the realm of the 'shared experience' for them and their peers.

Parental organisation is a key component that helps determine the amount of physical activity a young person has access to on a consistent basis. The fundamental processes of organising resources, rationalisation of commitments and reprioritisation

of commitments constructing the cyclical model of *auditing participation* in the *reprioritisation* process, remain consistent even though there are variable interpretations of its elements by different gatekeepers. All of these processes are consumed by the compromise position negotiated between the young person and other gatekeeping agents.

A changing hierarchy of activities is created through negotiation between the young person and other gatekeepers. This helps to determine a young person's participation in activity, the higher the activity in the hierarchy the more consistent and regular the participation in it. *Purchasing power* creates opportunities for greater access to activity as well as inhibiting it, in accordance with its abundance or absence respectively. Purchasing power is an influential organisational variable in the *networking strategies* and *rationalising* processes used to facilitate participation in physical activity for the young person. *Enforcement* is either direct or indirect in nature and creates a situation for the young person where they are made to participate in physical activity. This negates a positive perception of the activity by the young person. However, even though this initial experience may be negative continued participation may develop into a situation where positive outcomes can result, such as secondary/primary friendships for the young person.

Vacuum strategies are employed by the young person to fill gaps of free time that infiltrate their lifestyle activities on various occasions and for a variety of reasons. The kind of activity that they use to fill the 'gaps' is confined or expanded given the season. These activities may be physically active or sedentary in nature, the frequency of which is increased as a consequence of the roles adopted by gatekeepers e.g. guardian (safekeeping) role. In addition the nature of the activity which is used to 'fill the vacuum' must also satisfy and/or conform to the criteria which are associated with the gatekeepers roles and their agendas. Those activities which become most acceptable to parental gatekeepers are those which require minimal organisation and supervision, but generate maximum control of contextual variables such as television watching and playing computer games become most acceptable. However, the young person's reasons for adopting this activity is completely different. It allows the young person to frequently experience numerous variables which can be manipulated on a 'quick fix' basis with no last effects on them. Consequently the physical activity in which a young person participates has to compete with these 'quick fix' experiences and their associated attraction for the young person. While the more able performers are capable of gaining greater success and rewards from physical activity to rival such attraction and so maintaining participation in physical activity, the less able person does not (to the same extent) and so more readily turns away from the activity.

This chapter has presented six gatekeeping processes which create complex interrelationships between gatekeeping agents. The interrelationship between the processes and agents construct situations which facilitate or inhibit the young person's participation in physical activity. Figure 6.15 illustrates the general components which exist independently, as well as jointly, to construct the level of physical activity the young person is involved in at any given moment in time. Figure 6.16 constructs the fundamental interrelationship between inhibiting and enhancing factors established by the gatekeeping processes influencing the possibility of the young person's participation in physical activity.

POSSIBILITY OF PARTICIPATION IN PHYSICAL ACTIVITY

HIGH

ENHANCING

THE ACTUAL LEVEL OF PHYSICAL ACTIVITY

INHIBITING

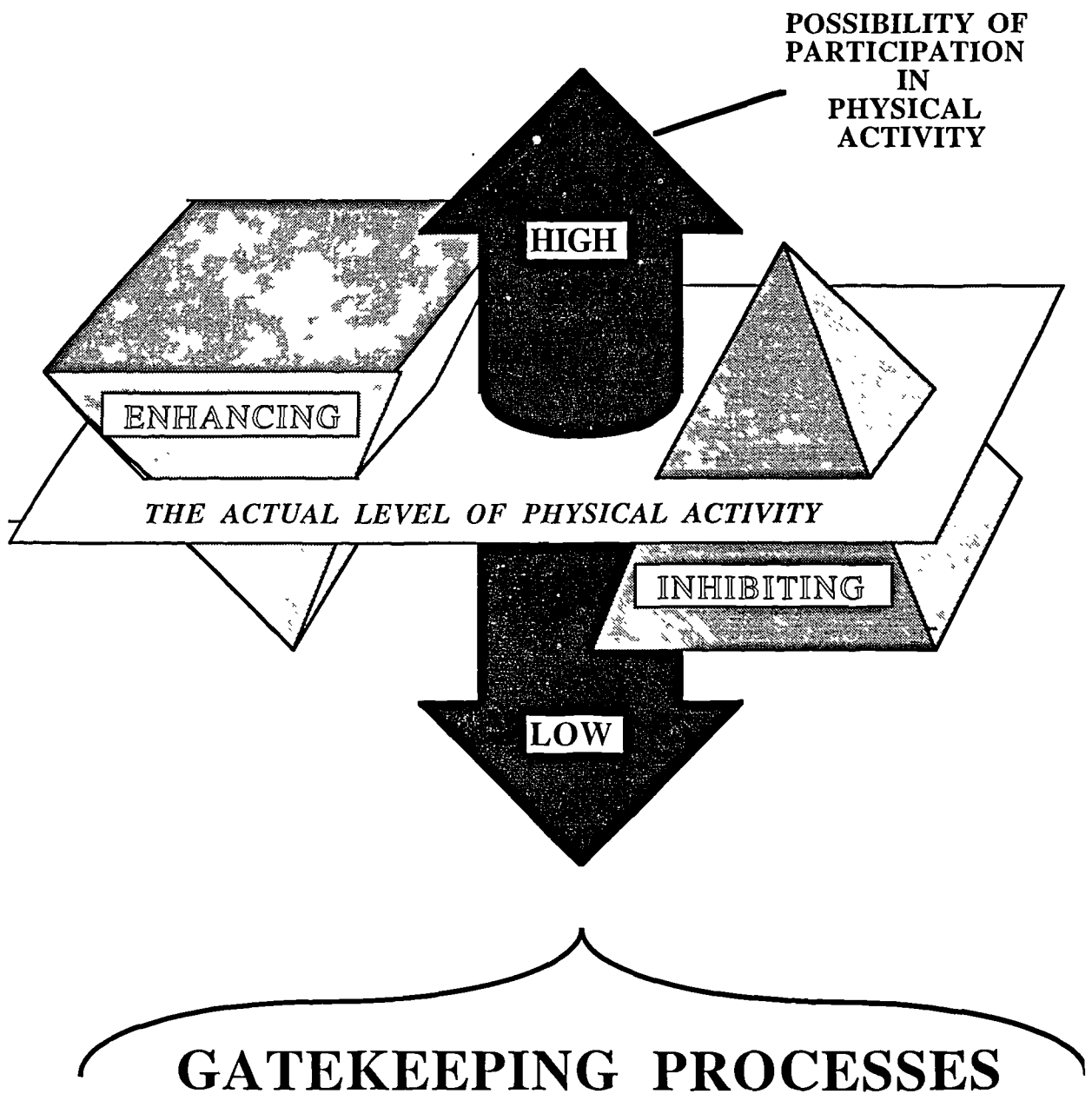LOW

GATEKEEPING PROCESSES

Figure 6.16 The Fundamental Relationship between Facilitators and Barriers to Physical Activity
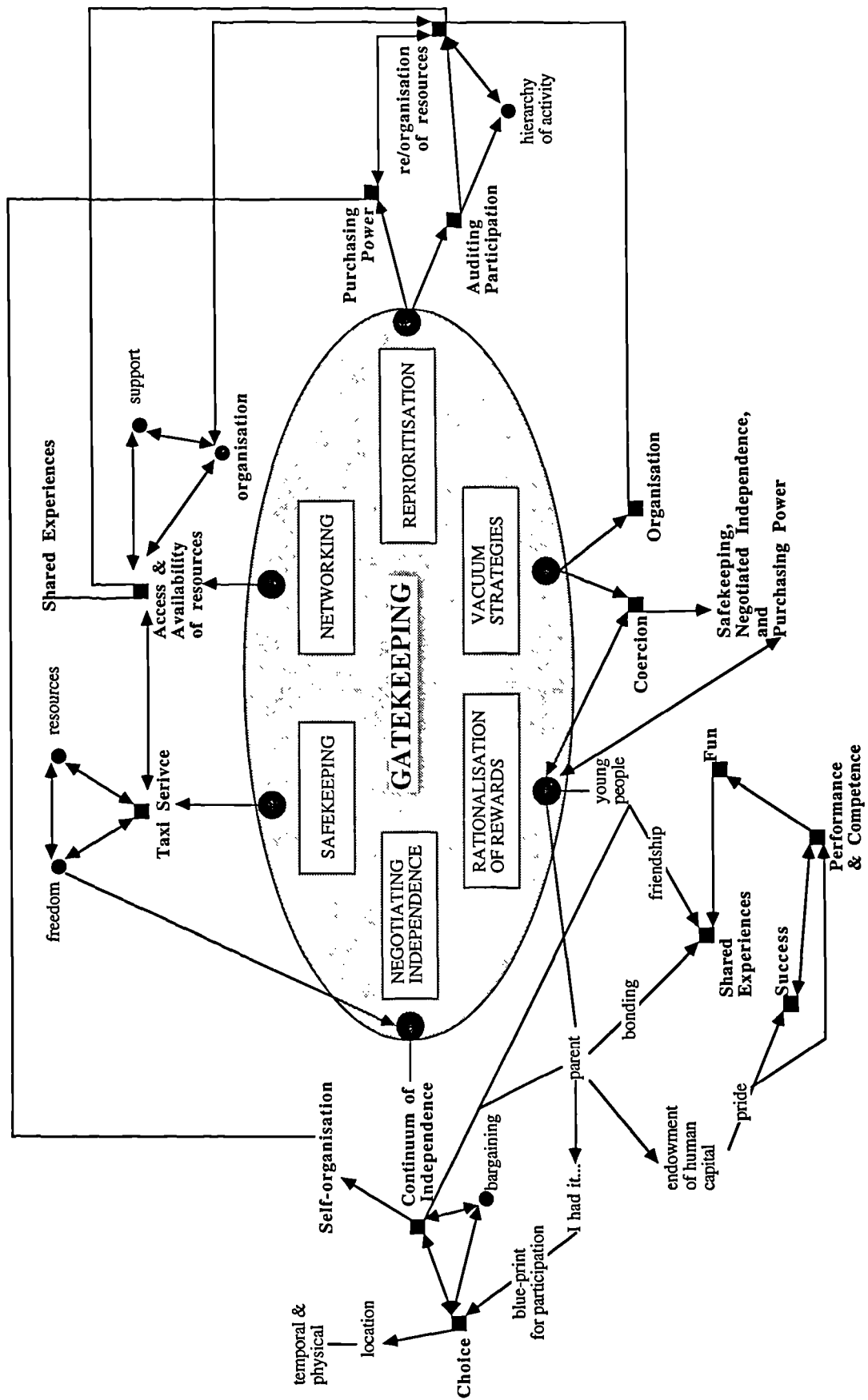
Figure 6.15   A Summary of the Gatekeeping Processes and Their Basic Relationships.

237

CHAPTER 7

SUMMARY AND RECOMMENDATIONS

7.1 Introduction

Faithfulness to grounded theory means that the results and implications of this study have been explored in the previous chapter. This chapter therefore attempts to identify key points that the author believes need to be highlighted and reinforced. By design this chapter will be short and in some ways reflects the 'never ending story' of grounded theory analysis. In addition to this, recommendations for developing future research will be made.

7.2 Reflecting on the Gatekeeping Processes

Continued monitoring of physical activity levels in various countries around the world is essential to provide much needed comparative baseline data. However, it has become increasingly evident that the processes which influence young people's participation in physical activity also need to be investigated, in order to understand why these patterns of participation manifest themselves as they do. There is a dearth of such information, however, it is something which this study, and now other research (Bar-Or & Malina, 1995; Sallis, 1995), is beginning to identify and address. Interventions designed to increase participation in physical activity must appreciate and focus on the processes which predispose young people to be involved in physical activity. Such processes are an essential component in the construction of relevant and effective interventions, not only to initiate involvement, but to encourage the maintenance of participation in physical activity.

The enhancement of the notion that physical activity involves a myriad of activities and not solely sports participation, is a crucial perception which must be addressed through education. Unfortunately, the research literature, along with the publicity and subsequent image distributed by the media, as well as most intervention strategies of the past aimed at young people, are guilty of reinforcing and indirectly endorsing a blinkered definition of physical activity by predominantly focusing on the sporting context (Greendorfer & Lewko, 1978; Gill et al., 1980; Patriksson, 1981; McGuire, 1982; Hasbrook, 1986; Coakley, 1991; Colley et al., 1992; Duda, 1992; Jambor & Rudisill, 1992; Clough et al., 1994; Jambor & Weekes, 1994,1995; Power & Woolger, 1994; Telema et al., 1994; Weiss & Hayashi, 1995). To young people, and

other gatekeepers, such an agenda implies that being physically active requires one to participate in sport. The synonymous use of sport and physical activity as terms is an inappropriate conception for use in promoting and maintaining participation in physical activity for the majority of young people, because it ignores physical activity outside of sport which immediately excludes many young people from the participation equation. However, it must be made perfectly clear that this does not mean that sport should be excluded, it just means that other activities should be included in a more comprehensive standard interpretation of physical activity. By establishing such a generally accepted conception of physical activity, all young people could be placed into a position which enhances their participation in physical activity (in some form or another) by utilising the gatekeeping processes. Essentially it is the need to clarify the interpretations of key gatekeeping factors and processes, which construct involvement in all physical activity for young people, that is the basis for this work. By achieving this, commonalities and complementary characteristics and interpretations can be enhanced and employed where appropriate so as to promote participation in physical activity. If one can understand the perceptions of individuals involved, one can understand the ground rules of each position and begin to highlight and complement the important aspects to each party and gain acceptance from them, ultimately increasing their participation, or at least maintaining it. The significance of the gatekeeping processes therefore becomes apparent.

Negotiation as a concept, over and above bargaining, is associated with many of the gatekeeping processes. It is the conscious, as well as the unconscious, interplay between all gatekeepers which undermines each of the gatekeeping processes influencing participation in physical activity. The choices which are made available to the young person are determined not least by the approach of the parents who determine the state of the negotiation. The young person is given the opportunity to make choices, however, these exist within defined boundaries constructed primarily by their parents. There are a mixture of current and past economic and social variables which influence these boundaries. It is not only the current economic and social situation of the parent(s) which influences these boundaries, but their whole life history and their perception of their current 'role(s)' in society as they perceive them. Unfortunately, the lifestyle biographies of parents and their children are not always compatible. Even so, it is the parental biography, with parental power to control key variables such as economic resources, which are fundamentally dominant regardless of apparent choice and negotiation. As Tinning and Fitzclarence (1992) point out there is a tremendous difference between being asked to produce ones biography and the possibilities of doing so.

Parents are quite prepared to allow young people all the choices they desire, so long as those choices exist within parameters which they find acceptable. They become acceptable when they can be identified and acknowledged (and so acted upon), as well as being compatible with their perceptions of their role as a parent. Fundamentally this involves the physical and emotional welfare of the young person in whatever they may be involved.

Consequently, physical activity becomes most acceptable within those environments in which the number of variables have been limited and/or identified, but which are all potentially acceptable to the parental gatekeeper. As soon as the gatekeeper or young person is in a situation where the outcomes of participation become either too extensive or unquantifiable within certain parameters, or they are unacceptable activities, participation in the activity is ether reduced or stopped. It is the likelihood of engaging in certain behaviour which constructs rules to regulate or inhibit such action and variables.

> The majority of children do not have total control over their lifestyles, and can have little or no impact upon their life-chances.
> (Sports Council for Wales, 1993: 37)

Therefore, when it comes to participation in physical activity it will be those environments which can offer consistent boundaries to the majority of variables in that context which become more attractive to the gatekeepers (i.e. clubs, organised activities, home entertainment). However, a notion and certain feelings of independence needs to be created and maintained for the young person in order for them to similarly accept the activity. Hence, within organised settings the degree of freedom given to the young person in order to make choices needs to be high and the structure to the activities within it weak to allow for flexibility. The autonomy afforded to each young person within parentally defined boundaries and activities involves a significant gender component to the degree of negotiation. Females have far more rigid conditions placed upon their behaviour than males of a similar age. The more stringent parental expectations with regards suitable sites of activity, companions in activity, as well as temporal constraints force females to consider their more limited opportunities to participate in physical activity more carefully than males. Another factor delimiting the independence of young people even further is their increasing withdrawal from situations in which they face physical threat from their environment, for example from road traffic and molestation. Ever decreasing periods of time and access are accommodated in every day life (because of *safekeeping* arrangements requiring the necessary accompaniment of parent or

adults/friends and the resource implications it has for the gatekeepers). This results in delimiting experiences in various contexts, contexts in which physical activity can be relaxed, facilitate independence, with few organisational, resource and performance implications placed upon them. Withdrawal from these situations means that the competition for time between physical activity and other activity becomes even more unequal, with the 'quick fix'[1] activities such as TV and computer games becoming increasingly compatible and identifiable with many factors of the every day life of the young person.[2]

> The last 10 years have not just seen more TV entertainment. Television (as a significant part of the information culture) now not only entertains and trivialises pubic discourse, it has become even more powerful as a key influence in how adolescents (and adults) define themselves in the world and project their future.
>
> (Tinning and Fitzclarence, 1992: 296)

The TV and videos are fast, slick, flash and full of action involving a short attention span, so they do not involve a great deal of commitment. Not only are these 'quick fix' activities in-line with the rest of the media diet young people are fed each day, but it is reinforced by their parental gatekeepers who through the use of such activities can create situations in which they can satisfy their safekeeping through their guardianship role with the minimal amount of hassle to themselves. These factors reinforce themselves in a viscous circle of acceptance potentially resulting in less and less physical activity for the young person. However, the more resources which a family have available to them the more likely they are to incorporate the 'quick fix' aspects, as well as the physical activity, because they can afford to locate their child in organised activity on a regular basis. So they get the best of both worlds. There is a strategy to facilitate this which is called networking. By sharing resources such as time and transport, access to and the provision of physical activity can be facilitated

---

[1] 'Quick fix' refers to an immediate response/gratification from the activity/experience. The activity is not demanding in the same sense that physical activity. It fosters a kind of surrogate participation which develops a 'wish I was there' kind of mentality, while at the same time satisfying it by putting the observer in the place of he participant being viewed. It is quick, fast, and colourful requiring a short attention span. It is something which physical activity fails to compete with on the same basis.

[2] Video games are appear to be taking over from television with regards to the amount of time young people spend on them. This is significant because television fills gaps in time with little or no commitment associated to such participation, however, video games require dedication and time to improve on them. Such commitment is made easier by the continual gratification of the activity. What is happening, therefore, is that the hierarchy of activity which young people are now constructing involve computer games at higher levels. This means that they are spending more time and resources on these activities which reduces that time and resources available for other activities which they may enjoy e.g. physical activity.

and maintained in a variety of settings over a period of time.[3] In addition, it maintains parentally established criteria which make the activity an acceptable, i.e. the well-being of their child can be maintained within certain identifiable boundaries. The 'taxi-service' is an important component of this networking strategy. It removes the potential variability associated with the transportation of their child to and from the activity venue, which is a main source of concern for them. However, the interpretation of such organisation is different for the young person compared to the parents. For the young person it is a convenient and reliable way of getting to and from a venue which can offer them relative independence from their home environment.

The belief that TV and computer games are ' the ' threat to participation in physical activity is one which might be ill deserved. It is not TV or video which creates the vacuum situation even though it has been designed to exploit and expand it. Such a statement is justified by the fact that young females watch less television than young males. They also participate in less organised sport than males. Therefore, it cannot be TV or video which is taking up more of their time, so what is it? What aspect of their hierarchy of activity can be done in contexts which are acceptable to the *safekeeping* role of gatekeepers. It might be that the context is acceptable, but the activity is not e.g. smoking at school. There are long term implications to such behaviour, which the 'quick fix' notions that children are impregnated with by the media and everyday life, are unable to readily, if at all, assimilate. The blue print for behaviour which they are creating is inappropriate for future participation even if the desire to participate is there. They are unable to participate at any level (recreational or serious) because of the potential physical discomfort. It just so happens that TV and video are those activities which are predominantly filling the vacuums of time which are continually being created, in so doing they are becoming activities which are elevated in the rationalised hierarchy of activity because of their compatibility with the young persons conception of life and the safekeeping process. If another activity is available which can offer an equivalent alternative, then it too is likely to be adopted for example, reading, smoking and socialising. Such a situation influences the young persons 'blue print for participation' which they can call upon in later life or at different stages of their life to incorporate physical activity into it. They use what they know and if they have not known about certain physical activity opportunities then they are less likely to employ them.

---

[3] Access to facilities is fundamental to participation in physical activity and there are a variety of processes and factors which influence it. Policy level work needs to incorporate and provide for a safe, low-cost indoor facilities which can be used for a variety of physical activities.

The issue is one of movement towards certain activities, rather than away from physical activity. It is continually being reinforced that it is not the dissatisfaction with physical activity which is the problem, it is the attraction of others which is greater and given the limited resources which are available to all young people they have to construct their own hierarchy of activity to maximise the rationalisation of rewards process. By creating this hierarchy they devote proportionally more resources to the higher ranked activity. If there are a lot a resources available to the young person even if the activity comes low down their hierarchy they will still spend a lot of time on that activity. Alternatively, if they do not have many resources available to them more vacuum strategies have to be adopted and there is a potential decrease in their level of physical activity.

Support for the young person, which exists in many guises, is essential if they are to initiate and maintain participation in physical activity. Such support comes from a variety of sources, the most important one of these being their parent(s). Parents are the fundamental gatekeeping agents who facilitate opportunities for the young person to participate in physical activity. The location of activity is important on a number of levels. Firstly it is important for the young person to be away from the family home/environment to increase the feeling of independence. However, movement away from the home requires transport of some kind. Resourcing participation then becomes an issue, not merely/only to participate in the activity, but to get to the activity on a consistent basis. There is also the safekeeping processes associated with the parental guardianship gatekeeping role. This equates to a situation where they provide things such as the 'taxi service'. Of course, that is assuming the parents have the ability to provide a car (with its financial obligations) and time. This can be complemented or replaced by the networking process. This process not only provides resources which are not necessarily readily available to a young person (but are to another), as well as distributing resources, and so enabling greater participation amongst those who do have the resources within the network. Everyone brings something to the network, for those who do not contribute to the taxi service, bring themselves which links into the rationalisation of rewards process and the shared experiences and friendships which are created.

Interventions to increase young peoples' physical activity must therefore involve increased support, especially from parents, of physical activity to children. As Sallis et al., (1992) also identified, the most effective type of support for young people involves their participation in organised physical activity contexts. This study not only confirms this, but goes towards identifying the processes which underpin its manifestation.

The more opportunities and experiences that are created for the young person, the more they are in a position to appreciate what physical activity is available (now and in the future), as well as what it can offer them in a variety of situations/contexts. This helps construct their 'blue print for participation' which is created through participation in physical activity. Through such a blue print (and that of their parents and other gatekeepers) the young person is in a position to be able to move in and out of various situations without being intimidated by the lack of familiarity with the process of involvement or by the content and consequences of such involvement. They can satisfy any variations they may desire (move in and out of activity) and remove any disillusionment with the activity where necessary. This is also a factor when it comes to auditing participation. That is at various points in time (e.g. when the resources such as money and time are reduced or increased, or the rewards from the activity (shared experiences, learning, acknowledgement of ability by others) are not being received.), it is deemed necessary by the young person, as well as their gatekeepers, to reprioritise the activities which they are all involved in to allow for the most desirable ones at the time to the maintained and/or others to be incorporated into their lifestyle.

The rewards which young people use to rationalise their participation in physical activity, can be sectioned into two processes; social processes and performance (and competence). It is the 'shared experience' which is the most important consideration for the young person in the social processes. If a commonality of experience can be generated between participants then there is a source of interaction which is highly desirable to them. If the activity can facilitate such common experiences there is likely to be a commitment to it. There is a preference for a positive experiences, however, negative ones do not negate the process. The facilitation of any *shared experience* through a physical activity is a positive consequence of participation for the young person, resulting in a commitment to the activity which generates them.

Whatever the physical activity the young person is involved in, *performance* and a degree of *competence* are fundamental considerations influencing participation in that physical activity. Performance (and competence) exists on two levels; *recreational.* and *serious* Recreational performance (and competence) allows for experimentation while ignoring competence levels and is 'non-threatening' to the young person because they do not perceive it as undermining them in any way physically or emotionally. Consequently, they do not feel as though they are being 'shown up' through participation. The distinction between positive or negative experimentation varies with the young person and their peer group. The notion of fun which infiltrates

this process is one which allows for broad choice and experimentation. Alternatively, the serious performance (and competence) process is more threatening and demanding than the recreationally orientated process. However, the perception of the increased physical and emotional criticism, which serious performance processes involves, are seen as necessary evils to achieve their goal of increased ability and representative honours.

Commitment from the young person is essential if they are to adopt physical activity. However, this is constructed through the nature of the activity, the young person's perception of it and their interpretation of what it is they want from the activity. These aspects are all influenced by the rewards process. Bearing this in mind there are serious implications for the way in which competition is presented and employed in physical activity. One must take into account the perceptions and desires of the young person participating in the activity so that it can suit their emotional interpretations. Competition is not inherently wrong it is the way in which it is manipulated in any given context.[4] In activities promoting physical activity the competition should remain, however, it should be in a form which challenges the young person in a learning environment, without highlighting their weaknesses to anyone other than themselves and those they wish to share that with. In so doing it will maintain participation in the physical activity. Given an alternative situation at a club, where representative honours are available, the kind of competition they will experience is not a significant consideration when facilitating and/or maintaining participation. This is because they see direct comparison as a necessary part of such participation, a perception shared between their peers and their parents. However, it might be that if similar considerations to those in the recreational context were made they may have beneficial effects on performance with the potential reduction in anxiety?

Underpinning these notions is the persistent interpretation that it is socialisation into sport rather than physical activity which is the issue. It is not. We need to promote the notion that it is physical activity which is important of which sport is a component. In so doing those aspects which make physical activity unacceptable to so many can be removed and become irrelevant, adopted only when applicable, rather than the other way around as exists at the moment.

---

[4] For example, the way in which parents and teachers make situations too competitive, believing competition is motivation for everyone, leaving no other choices open to the young person. It can become a 'put down', where the young person receives constant comparisons with others and very little praise, thus lowering their self-esteem and self-worth.

The notion of 'fun' which infiltrates both of the fundamental reward processes is an important one, however, it is an extremely difficult one to define. This difficulty is probably a problem associated with the language which is used to investigate this aspect. Language constrains our interpretation of this area in England. It is difficult for young people, as well as people in general, to define what it is they mean by 'fun'. There is an important cultural aspect to this with the potential to explain the notion of fun being determined by the language. In addition the method of investigation is significant in the interpretation of the notion of fun. For example in the USA, even though the Athletic Footwear Association (1990) had a sample population of more than 10,000 students (10-18 yrs), they employed a questionnaire using a five point response scale which simply asked questions such as; What are the most important reason for you liking a non-school sport? to have fun? Not only does this negate any depth of or individual interpretation of fun, it concentrates once again on enhancing the notion that physical activity equates to participation in sport rather than the wide expanse of activities which it should. Therefore cultural variations must be catered for once they have been identified. Fun and enjoyment are consistently acknowledged as an important component with regards young peoples participation in physical activity in a variety of countries (Athletic Footwear Association, 1990; Schmidt and Stein, 1991; Petlichkoff, 1992; Scanlan and Simons, 1992; Tinning and Fitzclarence, 1992; Goudas & Biddle, 1993; Weiss, 1993; McKenzie et al., 1993; Bungrum, 1995; Vuori, 1995). However, the definition of such notions is far from clear and requires further scrutiny to identify indepth definition and meaning relative to the cultural context. There is a need to examine the notion with more thorough and rigorous qualitative data. The notion of fun and enjoyment must be incorporated into the planning of all physical activity if we are to maximise the participation levels of young people.

This links closely with the other rewards for young people in the social processes, notably their concept of success in physical activity. Success is principally self-serving for the young person, and is used to maintain and develop their self-concept through achieving the increased attention and acceptance of others (e.g. peers). The influence of competition once more needs mentioning as the way in which it is used will influence the outcome of the physical activity experiences of the young person. Success for the young person is also achieved in the number of *shared experiences* they can consistently achieve with their friends. *Fun* and *success* can be the incentive for the promotion of physical activity, however, it is the positive perceptions associated with it, that will contribute to the decision of whether or not the young

person participates in more physical activity.[5] The developmental stage of the young person is yet another variable which complicates the many interrelationships which influences their participation in physical activity. Success for the young person comes from participation with friends in an environment of shared and generally non-threatening experiences where they can learn or develop skills and their knowledge. If the young person is reaching their growth spurt and physically developing, it is likely that their co-ordination and perception of self are constantly being challenged. These challenges should be such that they maintain a positive orientation to success in the *social processes*. Therefore, the organisation of the physical activity becomes paramount. If the young person is consistently 'shown up' in the activity (given a moderate competence level) they will be increasingly less likely to participate in physical activity because of the negative consequences to their self-image.[6] Given a situations in which the young people have time to experiment and practice in a non-threatening manner, they can overcome any of the performance and emotionally inhibiting consequences of their physical development. They can maintain a positive outlook on physical activity and in so doing are more likely to participate in it.

For the parent rewards from the young person's participation are both self-serving and philanthropic, associated with issues of safety, bonding and the 'enrichment of human potential'. The emotional and physical safety of their child is the most important thing to the parent. This is something which undermines most, if not all, of their decisions associated with the young person's participation in physical activity. Rewards for the parent interrelate with those of the young person, for example with regards *shared experiences* and *success*. Shared experiences between the young person and the parent to develop the bonding between parent and child are important to the parent.[7]

Success of a young person in a physical activity (equated with both performance and competence, as well as social processes) facilitates a sense of pride in the parents, which reflects on their potential efforts to provide wide ranging and varied experiences for that child (endowment of human capital). The greater their child's success the more it is seen as a complement to their role as parents. This can be a

---

[5] In addition there are issues such access to facilities, financial resources and parental support which contribute to this decision, and which also have to be considered.

[6] It might be that in such a situation the negative implications they associate with participation in physical activity mean they dismiss it, however, there is the speculative question about the likelihood of the resumption of such activity. If the young person has been put in a situation where they are attempting to 'catch-up' with the skills and knowledge of those who coped better with physical development, is there a point where they cannot catch up and it becomes a inhibiting factor?

[7] If they have a 'blue print' for physical activity they are happy with the context and confident. They are more likely to use such a context to investigate with their child because they understand it and its potential.

positive factor with regards participation in physical activity, in that the more activities the young person experiences the greater their 'blue print for activity' is likely to be. [8] When establishing the young person's 'blue print for activity', the parental 'blue print of activity' is important. Not only does the previous experience of physical activity of the parent enable them to give their child the benefit of their knowledge and aid in the learning aspects, which are important to maintaining participation in physical activity[9], but they indirectly lead to giving the young person more choice. Increase in choice comes about through the parent's appreciation of opportunities and potential avenues of access. The parental understanding of how the network of such opportunities works can be extremely beneficial to the young person's participation in physical activity. The parent is able to negate wasted time and resources, which have the potential to lead the disillusionment of the young person with regards participation in physical activity. Choice contributes to the notion of independence which can be another positive factor enhancing young peoples' participation in physical activity.

The orientation of the gatekeeping processes determines whether they are constraints or barriers to participation. Given the positive or negative orientation of an accumulation of these factors one can establish the likelihood of participation in physical activity. In essence each of the gatekeeping processes may appear straight forward, however, none of them exist as completely independent variables. There are numerous interrelated factors which have a significant influence and have to be taken into account when applying them to interventions. In addition, none of these factors remain constant, which makes it exceedingly difficult to maintain a focus.

> Important questions about the effectiveness of interventions that promote lifetime physical activity will take decades to answer. In the meantime, however, short-term studies will continue to provide valuable information on the determinants of physical activity and the extent to which interventions for children and adolescents lead to the generalisation and maintenance of physical activity.
>
> (Sallis, 1995: 133)

---

[8] Given the many other factors which have been mentioned here and which have to be taken into account when determining participation.

[9] If they are positively orientated it can enhance participation. Alternatively, if they are negatively orientated it can inhibit participation.

7.3 Developing Grounded Theory

In terms of the location of grounded theory development, it has been suggested that it is at the beginning of a path similar to that followed by survey research:

> What researchers did with survey methodology, once aware of it, was to reject it for one reason or another, or over the years to use it in its original formulation, elaborate it, or adopt it in various ways, including combining it with other methodologies. The fate of grounded theory should not be appreciably different.
> (Strauss and Corbin, 1994: 283)

Taking this into account it is apparent that there will continue to be variations in the interpretation of the general grounded theory methodology which is being employed in an escalating number of settings and countries. These variations are also likely to involve the adoption of other methodologies, for example hermeneutical and phenomenological methods (Strauss & Corbin, 1994). This is itself likely to lead to the amalgamation of methods with different perspectives being treated as synonymous. Most likely on the agenda is the increased use of computer programmes to perform more and more sophisticated management and interpretation tasks. Therefore, those who have developed programmes such as N.U.D.I.S.T.,[10] are in an extremely influential position with regards the direction and nature of the development of grounded theory. They will help to refine the interpretation of its components and the evolving terminology. This terminology has already evolved from its starting point (Strauss, 1994 personal communication)[11], which itself can create some ambiguity and confusion. It is likely that a situation where particular variations of grounded theory evolve and become predominant in specific research communities. For example, in psychology and business management to use of grounded theory is becoming increasingly more wide spread, each of these address their area with a different research history and agenda. The dominant agenda in each research domain influences the way in which one might interpret or accept a different methodology to that usually employed. Such interpretations evolve over time to suit the context and give rise to variations in grounded theory relative to the particular research communities. The more extensive the use of a method the greater the likelihood that its potential will be realised as it evolves through such use. The Helix Model is a prime example of its evolution, where an interpretation has been made

---

[10] Similar computer applications include Ethnograph, and Hypercard.

[11] Strauss and Corbin (1990) have evolved their account from Glaser and Strauss's (1967) The Discovery of Grounded Theory text.

about the relationship of its components. However, there is a potential of abuse in its application which cannot be ignored. But, who is to say what is abuse?

In order to address the issue of potential abuse, it is necessary to identify those fundamental aspects which make-up grounded theory methodology. In doing so it prevents them from being clouded over or distorted by evolving methodologies. Strauss and Corbin (1994) have identified the following components:

> The features of this (grounded theory) methodology that
> we consider so central that their abandonment would
> signify a great departure are the grounding of theory
> upon data through data-theory interplay, the making of
> constant comparisons, the asking of theoretically
> orientated questions, theoretical coding, and the
> development of theory.
>
> (Strauss and Corbin, 1994: 283)

This study is instrumental in the evolutionary process of grounded theory methodology, as are all interpretations of it. However, the above quote is as applicable at this moment in time as it certainly will be in the future. The Helix Model encapsulates these fundamental components to grounded theory methodology in a framework which has a flexibility to cope with the relative understanding and experience of the researcher.

7.4 Recommendations for Future Research

The dearth of information on young people relative to their physical activity patterns and reasons for participation demands more research. Work also needs to be done on the stages and processes people go through in their decisions to consider, prepare, initiate, maintain and drop-out from physical activity participation, in order to formulate the most effective interventions for young people at these different stages. Given the limited information available, there are many questions regarding young peoples' participation in physical activity that remain only partially answered. Some of which have been highlighted by Dishman (1988: 187):

- When and how do preferences for activity types and intensities develop, and how do they correspond with activity patterns in children and youth and later in adults?

- What determinants of physical activity in young people can guide interventions to increase the likelihood of physical activity now and in the future?

- Are certain types of individuals or situations predisposed to activity or inactivity?

• How do abstract incentives, such as health knowledge and beliefs, or tangible exercise outcomes, such as exertional sensations and perceived competence or social reinforcement, interact to influence both the intention to adopt physical activity and reinforcement for sustained participation?

The gatekeeping processes identified in this project have started to answer these, however, such a foundation needs to be developed. These finding will be developed by focusing on other populations of young people from different locations, incorporating the need to investigate potential cultural and ethnic components to the gatekeeping processes. Parental and gender aspects, as well as the school context, are also areas which deserve further investigation.

Temporal aspects to the gatekeeping processes, using younger and older populations should to be investigated to see in what ways, if any, the evolving gatekeeping processes might change. The Helix Model will be employed in these developments, however, it has application to investigate any number of aspects within physical education, as well as education generally.

Over the course of this project the author has been on a roller coaster of emotional highs and lows. The whole process while enjoyable and certainly interesting, was at the same time frustrating and disappointing. A notable disappointment included the limited use of the N.U.D.I.S.T. software. This would have enhanced the physical manipulation of the data, making the task of analysis considerably more convenient and less overwhelming. However, such lows were counteracted by highs, and the creation of the Helix Model was a notable one. This model certainly reduced many of the disappointments, especially with the kind of endorsement it received from Strauss, as well as other prominent academics in England (Alan Bryman, John Evans, Martin Hammersley, David Kirk, Barry Turner).

The complexity of the social world is such that one cannot entirely address it in a single piece of research. Each author is constantly faced with a compromise between adequacy and satisfaction in their work, and this project was no exception. Unfortunately, compromise imposes a degree of failure, something which the author acknowledges. However, it is an inherent aspect associated with many forms of social research. This project is but a small contribution to our constantly evolving understanding and investigation of the social world and should be used by others to build on that understanding.

REFERENCES

REFERENCES

Aaron, D. J., Aaron, D. J., Kriska, A. M., Dearwater, S. R., Anderson, R. L., Olsen, T. L., Cauley, J. A., & LaPorte, R. E. (1993). The Epidemiology of Leisure Physical Activity in an Adolescent Population. Medicine and Science in Sports and Exercise, 25(7), 847-853.

Adams, J. (1993). Risk Compensation and the Problem of Measuring Children's Independent Mobility and Safety on the Roads. In M. Hillman (Eds.), Children, Transport and the Quality of Life (pp. 62-76). London: Policy Studies Institute.

Adeyanju, M., & Creswell, W. H. J. (1987). The Relationship Among Attitudes, Behaviours and Biomedical Measures of Adolescents 'at risk' from Cardiovascular Disease. Journal of School Health, 57(8), 326-331.

Ainsworth, B. E., Richardson, M., Jacobs, D. R., & Leon, A. S. (1993). Gender Differences in Physical Activity. Women in Sport and Physical Activity Journal, 2(1), 1-16.

Ajzen, I. (1985). From intentions to Actions: A Theory of Planned Behavior. In J. Kuhl & J. Beckman (Eds.), Action Control: From Cognition to Behavior (pp. 11-39). Berlin: Springer-Verlag.

Ajzen, I., & Driver, B. L. (1992). Application of the Theory of Planned Behaviour to Leisure Choice. Journal of Leisure Research, 24(3), 207-224.

Al-Jaser, T. A., & James, C. (1994a). Physical Activity Patterns and Health Related Fitness Levels of British and Kuwaiti Boys. Research Quarterly for Exercise and Sport Supplement, March, A 32.

Allen, L. R., & Donnelly, M. A. (1985). An Analysis of the Social Unit of Participation and the Perceived Psychological Outcomes Associated with Most Enjoyable Recreation Activities. Leisure Sciences, 7(4), 421-441.

American College of Sports Medicine (1990). Position statement on the recommended quality and quantity of exercise for developing and maintaining fitness in health adults. Medicine Science in Sports and Exercise, 22, 265-274.

American College of Sports Medicine (1991). Guidelines for Exercise Testing and Prescription (4th ed.). Philadelphia, USA: Lea & Febiger.

Ames, C. (1992). The Relationship of Achievement Goals to Student Motivation in Classroom Settings. In G. C. Roberts (Eds.), Motivation in Sport and Exercise (pp. 161-176). Champaign, Illinois: Human Kinetics.

Andersen, K., Masironi, R., Seliger, V., & Rutenfranz, J. (1978). Habitual Physical Activity and Health. World Health Organisation Publications.

Anderson, R. C., Wilson, P. T., & Fielding, L. G. (1988). Growth in Reading and How Children Spend Their Time Outside School. Reading Research Quarterly, 23(3), 285-303.

Anderssen, N. (1993). Perception of physical education among young adolescents: do physical education classes provide equal opportunities for all students? Health Education Research, 8(2), 167-179.

Anderssen, N., & Wold, B. (1992). Parental and Peer Influences on Leisure-Time Physical Activity in Young Adolescents. Research Quarterly for Exercise and Sport, 63(4), 341-348.

Andrew, G. M., Oldridge, N. B., Parker, J. O., Cunningham, D. A., Rechnitzer, P. A., Jones, N. L., Buck, C., Kavanagh, T., Shephard, R. J., Sutton, J. R., & McDonald, W. (1981). Reasons for Dropout from Exercise Programs in Post-Coronary Patients. Medicine and Science in Sports and Exercise, 13(3), 164-168.

Andrew, G. M., & Parker, J. O. (1979). Factors Related to Dropout of Post Myocardial Infarction Patients from Exercise Programs. Medicine and Science in Sports and Exercise, 11, 376-378.

Apter, T. E. (1990). Altered Loves: Mothers and Daughters During Adolescence. Hempstead: Harvester Wheatsheaf.

Armstrong, N. (1989). Children are Fit But Not Active! Education and Health, 7(2), 28-32.

Armstrong, N. (1992). Are British Children and Youth Fit? Research Quarterly for Exercise and Sport, 63(4), 449-452.

Armstrong, N. (1993). Independent Mobility and Children's Physical Development. In M. Hillman (Eds.), <u>Children, Transport and the Quality of Life</u> (pp. 35-43). London: Policy Studies Institute.

Armstrong, N., Balding, J., Gentle, P., & Kirby, B. (1990). Patterns of physical activity among 11 to 16 year old British Children. <u>British Medical Journal, 301</u>, 203-205.

Armstrong, N., Balding, J., Gentle, P., & Kirby, B. (1990b). Estimation of Coronary Risk Factors in British School Children. <u>British Journal of Sports Medicine, 24</u>(1), 61-66.

Armstrong, N., Williams, J., Balding, J., Gentle, P., & Kirby, B. (1991). Cardiopulmonary Fitness, Physical Activity Patterns and Selected Coronary Risk Factor Variables in 11-to 16 Year Olds. <u>Pediatric Exercise Science, 3</u>, 219-228.

Armstrong, N., & Biddle, S. (1992). Health Related Physical Activity in the National Curriculum. In N. Armstrong (Eds.), <u>New Directions in Physical Education Volume 2: Towards a National Curriculum.</u> London: Human Kinetics.

Armstrong, N., & Bray, S. (1990). Primary School Children's Physical Activity Patterns During Autumn and Summer. <u>Bulletin of Physical Education, 26</u>(3), 23-26. Ashford, S. (1987). Family Matters. In Jowell et al., (Eds.), <u>British Social Attitudes: The 1987 Report (S.C.P.R.).</u> Gower.

Athens, L. H. (1984b). Scientific Criteria for Evaluating Qualitative Studies. In N. K. Denzin (Eds.), <u>Studies in Symbolic Interactionism</u>. USA: JAI Publishing Inc..

Athletic Footwear Association (1990). <u>American Youth and Sports Participation</u>. Youth Sports Institute, Michigan State University.

Atomi, Y., Iwaoka, K., Hatta, H., Miyashita, M., & Yamamoto, Y. (1986). Daily physical activity levels in preadolescent boys related to Vo2 max and lactate threshold. <u>European Journal of Applied Physiology, 55</u>, 156-161.

Balding, J. (1987). <u>Young People in 1986: The Health Related Behaviour Questionnaire results for 18,200 pupils between the ages of 11 and 16</u>. University of Exeter: HEA.

The Australian Council for Health, P. E. and Physical Recreation (1987). Australian Health and Fitness Survey (1985). Edwardstown, Australia: KB Printing Services Pty. Ltd..

Bale, P. (1992). The Functional Performance of Children in Relation to Growth Maturation and Exercise. Sports Medicine, 13(3), 151-159.

Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behvioral Change. Psychological Review, 84, 191-215.

Bandura, A. (1986). Social Foundations of Thought and Action. A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice Hall.

Baranowski, T., Tsong, Y., Hooks, P., Cieslik, C., & Nader, P. R. (1987). Aerobic Physical Activity Among Third to Sixth Grade Children. Journal of Developmental and Behavioural Pediatrics, 8(4), 203-206.

Baranowski, T., et al., (1992). Assessment, Prevalence, and Cardiovascular Benefits of Physical Activity and Fitness in Youth. Medicine and Science in Sports and Exercise Supplement, 24(6), S237-S247.

Barber, G., & Heise, C. T. (1991). Subjective Estimates of Exercise Ability: Comparison to Objective Measurements. Pediatric Exercise Science, 3(4), 327-332.

Barnes, B. (1986). Thomas Kuhn. In Q. Skinner (Eds.), The Return of Grand Theory in Human Sciences (pp. 85-100). Cambridge: Cambridge University Press.

Barone, T. E. (1992). On the Demise of Subjectivity in Educational Inquiry. Curriculum Inquiry, 22, 25-38.

Bar-Or, O. & Malina, R. M. (1995). Activity, Fitness, and Health of Children and Adolescents. In L. W. Y. Cheung & J. B. Richmond (Eds.), Child Health, Nutrition, and Physical Activity. (pp. 79-124). Champaign, Illinois: Human Kinetics.

Baumrind, D. (1971). Current Patterns of Parental Authority. Developmental Psychology Monograph, 4, 1-102.

Becker, M. H., Haefner, D. P., Kasl, S. V., Kirscht, J. P., Maiman, L. A., & Rosenstock, I. M. (1977). Selected Psychosocial Models and Correlates of Individual Health-Related Behaviours. Medical Care, 15(Supplement), 27-46.

Bendit, R., Gaiser, W., & Nissen, U. (1993). Growing up in the Federal Republic of Germany: Chance and Risk in a Modern Sozialstaat. Journal of Education Policy, 8(1), 43-59.

Berger, B. G., & McInman, A. (1993). Exercise and the Quality of Life. In R. N. Singer (Eds.), Handbook of Research in Sport Psychology (pp. 729-760). London: Maxwell MacMillan.

Berlant, A. R. (1994). I'm OK, I'm Not OK? Self Perceptions of Competence in the Physical Domain. Research Quarterly for Exercise and Sport Supplement(March), A84.

Berry, M. J., Weyrich, A. S., Robergs, R. A., Krause, K. M., & Ingalls, C. P. (1989). Ratings of Perceived Exertion in Individuals with Varying Fitness Levels During Walking and Running. European Journal of Applied Physiology, 58, 494-499.

Biddle, S. (1992). Sport and Exercise Motivation: A Brief Review of Antecedent Factors and Psychological Outcomes of Participation. Physical Education Review, 15(2), 98-110.

Biddle, S. (1994). Exercise Motivation: Theory and Practice. In F. I. Bell & G. H. Van Gyn (Ed.), 10th Commonwealth & International Scientific Congress, (pp. 12-38). University of Victoria, Victoria, British Columbia, Canada.

Biddle, S. J. H., & Mutrie, N. (1991). Psychology of Physical Activity and Exercise: A Health-related Perspective. London: Springer.

Blair, P. (1992). Are American Children and Youth Fit? The Need for Better Data. Research Quarterly for Exercise and Sport, 63(2), 120-123.

Blair, S., Ellsworth, N., Haskell, W., Stern, M., Farquhar, J., & Wood, P. (1981). Comparison of Nutrient Intake In Middle-Aged Men and Women Runners and Controls. Medicine and Science in Sports and Exercise, 13, 310-315.

lair, S. N., Jacobs, D. R., & Powell, K. E. (1985). Relationships Between Exercise Physical Activity and Other Health Behaviors. Public Health Reports, 100, 172-180.

Blumer, H. (1969). Symbolic Interactionism. Englewood Cliffs, NJ: Prentice-Hall.

Blumer, H. (1981). George Herbert Mead. In B. Rhea (Eds.), The Future of the Sociological Classics (pp. 136-169). Boston, MA: George Allen & Unwin.

Blumer, H. (Ed.). (1990). Industrialization as an Agent of Social Change. A Critical Analysis. New York: Aldine de Gruyter.

Borg, W. R., & Gall, M.D. (1983). Educational Research (4th Ed.). New York: Longman Inc..

Bouchard, C., & Després, J.-P. (1995). Physical Activity and Health: Atherosclerotic, Metabolic and Hypertensive Diseases. In Physical Activity, Health and Well-Being: An International Scientific Consensus Conference. Quebec City: Mars/World Forum.

Bouchard, C., Shephard, R. J., & Stephens, T. (Eds.). (1994). Physical Activity, Fitness and Health - International Proceedings and Consensus Statement. Champaign, Illinois: Human Kinetics.

Bouchard, C., Shepherd, R. J., & Stephens, T. (Eds.). (1993). Physical Activity, Fitness and Health - Consensus Statement. Champaign, Illinois: Human Kinetics Publishers.

Bradstock, M. K., et al., (1984). Behavioral Risk Factor Surveillance, 1981-1983 (MMWR No. 33 (1SS).). Centres for Disease Control Surveillance Summaries.

Brannen, J., Dodd, K., Oakley, A., & Storey, P. (1994). Young People, Health and Family Life. Buckingham: Open University Press.

Brawley, L. R. (1993). The Practicality of Using Social Psychological Theories for Exercise and Health Research and Intervention. Journal of Applied Sport Psychology, 5, 99-115.

Brenner, M., Brown, J., & Canter, D. (1985). The Research Interview, Uses and Approaches. London: Academic Press Inc..

Brettschneider, W.-D. (1992). Adolescents, Leisure, Sport and Lifestyle. In T. Williams, L. Almond, & A. Sparkes (Eds.), AIESEP World Convention - Sport and

Physical Activity: Moving Towards Excellence. (pp. 536-550). Loughborough
University, United Kingdom: E & FN Spon.

Brill, P. A., Kohl, H. W., Rogers, T., Collingwood, T. R., Sterling, C. L., & Blair,
S. N. (1991). Recruitment, Retention and Success in Worksite Health Promotion:
Association with Demographic Characteristics. American Journal of Health Promotion,
5, 215-221.

Brink, P. J. (1991). Issues of Reliability and Validity. In J. M. Morse (Eds.),
Qualitative Nursing Research: A Contemporary Dialogue. Thousand Oakes, CA: Sage
Publications.

British Medical Association (BMA) (1934). Report of the Physical Education
Committee. London: HMSO.

Brown, G. W. (1973). Some Thoughts on Grounded Theory. Sociology, 7, 1-16.

Browne, J. (1992). Reasons for the Selection or Non-selection of Physical Education
Studies by Year 12 Girls. Journal of Teaching in Physical Education, 11, 402-410.

Brownell, K. D., Bachorik, P. S., & Ayerle, R. S. (1982). Changes in Plasma Liquid
and Lipoprotein Levels in Men and Women after a Program of Moderate Exercise.
Circulation, 65, 477-484.

Bruce, E. H., Fredrick, R. A., Bruce, R. A., & Fisher, L. D. (1976). Comparison of
Active Participants and Dropouts in Cardiopulmonary Rehabilitation Programs.
American Journal of Cardiology, 37, 53-60.

Bruce, R. A., DeRoven, T. A., & Hossack, K. F. (1980). Pilot Study Examining the
Motivations Effects of Maximal Exercise Testing to Modify Risk Factors and Health
Habits. Cardiology, 11, 1119.

Brustad, R. D. (1993). Who Will Go Out and Play? Parental and Psychological
Influences on Children's Attraction to Physical Activity. Pediatric Exercise Science,
5(3), 210-223.

Brustad, R. J. (1988). Affective Outcomes in Competitive Youth Sport: The Influence
of Intrapersonal and Socialization Factors. Journal of Sport and Exercise Psychology,
10, 307-321.

Brustad, R. J. (1992). Integrating Socialisation Influences into the Study of Children's Motivation in Sport. Journal of Sport and Exercise Psychology, 14, 59-77.

Brustad, R. J. (1993). Youth in Sport: Psychological Considerations. In R. N. Singer (Eds.), Handbook of Research in Sport Psychology (pp. 695-717). London: Maxwell MacMillan.

Brustad, R. J., Wiggins, M. S., & Wyatt, F. (1995). Attraction to Physical Activity in Urban Children: Parental Socialization Influences. Research Quarterly for Exercise and Sport Supplement, 66(1), A-73.

Bryman, A. (1984). The Debate About Quantitative and Qualitative Research: A Question of Method or Epistemology? British Journal of Sociology, 35, 75-92. 27, 651-77.

Bryman, A. (1988). Quantity and Quality in Social Research. London: Unwin Hyman.

Bryman, A., & Burgess, R. G. (Eds.), (1994). Analysing Qualitative Data. London: Routledge.

Buhrmester, D., & Furman, W. (1987). The Development Of Companionship and Intimacy. Child Development, 58, 1101-1113.

Bulmer, M. (1979). Concepts in the Analysis of Qualitative Data. Sociological Review, 27, 651-77.

Bungrum, T. (1995). Determinants of Physical Activity in a Sample of African-American and White Adolescent Females Living in Rural South Carolina. Research Quarterly for Exercise and Sport Supplement, 66(1), A-78.

Burgess, H. (1985). Case Study and Curriculum Research: Some Issues for Teacher Researchers. In R. G. Burgess (Eds.), Issues in Educational Research: Qualitative Methods (pp. 177-196). London: The Falmer Press.

Burgess, R. G. (Ed.). (1982). Field Research: A Sourcebook and Field Manual. London: Allen and Unwin.

Burgess, R. G. (Ed.). (1985b). Issues in Educational Research: Qualitative Methods. Great Britain: Falmer Press.

Burgess, R. G. (1988). Conversations with a Purpose: The Ethnographic Interview in Educational Research. In R. G. Burgess (Eds.), Studies in Qualitative Methodology. Vol 1. Conducting Qualitative Research. JAI Publishing Inc..

Busser, J. A., Hyams, A. L., & Carruthers, C. P. (1995). Differences in Adolescent Activity Participation by Gender, Grade and Race. Research Quarterly for Exercise and Sport Supplement, 66(1), A-44.

Butcher, J. (1983). Socialization of Adolescent Girls into Physical Activity. Adolescence, 18(72).

Cale, L. (1993) Monitoring Physical Activity in Children. Ph.D., Loughborough University.

Cale, L., & Almond, L. (1992). Physical Activity Levels of Young Children: A Review of the Evidence. Health Education Journal, 51(2), 94-99.

Cale, L., & Harris, J. (1993). Exercise Recommendations for Children and Young People. Physical Education Review, 16(2), 89-98.

Canada Fitness Survey (1983). Canada Fitness Survey: Fitness and Lifestyle in Canada.

Carr, D. S., & Williams, D. R. (1993). Understanding the Role of Ethnicity in Outdoor Recreation Experiences. Journal of Leisure Research, 25(1), 22-38.

Carroll, B. (1993). Factors Influencing Ethnic Minority groups' Participation in Sport. Physical Education Review, 16(1), 55-66.

Carroll, B., & Hollinshead, G. (1992). Equal Opportunities: Race and Gender in Physical Education. In J. Evans (Eds.), Equality, Education and Physical Education London: Falmer Press.

Caspersen, C., & DiPietro, L. (1991). National Estimates of Physical Activity Among Older Adults (Abstract). Medicine and Science in Sports and Exercise, 23 (Supplement), S106.

Caspersen, C. J., Merritt, R. K., & Stephens, T. (1994). International Physical Activity Patterns: A Methodological Perspective. In R. K. Dishman (Eds.), Advances in Exercise Adherence (pp. 73-110). Champaign, Illinois: Human Kinetics.

Chapin, K. G., Ewing, M. E., Seefeldt, V. & Vogel, P., (1994). Parental Perceptions of Why Kids Play Hockey. Research Quarterly for Exercise and Sport Supplement(March), A85.

Charmaz, K. (1983). The Grounded Theory Method: An Explication and Interpretation. In R. M. Emerson (Eds.), Contemporary Field Research: A Collection of Readings. (pp. 1161-1172). Boston, MA: Little Brown.

Charmaz, K. (1990). 'Discovering' Chronic Illness :Using Grounded Theory. Social Science and Medicine, 30(11), 1161-1172.

Chen, M. K. (1986). The Epidemiology of Self-Perceived Fatigue Among Adults. Preventive Medicine, 15, 74-81.

Chen., B. S., Fu., Z. P., & Qi., Z. Z. (1990). People's Republic of China: Perspectives in School Health. Journal of School Health, 60(7), 349-350.

Chenitz, C. W. (1986). The Informal Interview. In C. W. Chenitz & J. M. Swanson (Eds.), From Practice to Grounded Theory: Qualitative Research in Nursing (pp. 79-90). Menlo Park, CA: Addison-Wesley Publishing Company.

Chenitz, C. W., & Swanson, J. M. (Eds.). (1986). From Practice to Grounded Theory: Qualitative Research in Nursing. Menlo Park, California: Addison-Wesley Publishing Company.

Chisholm, L. (1993). Youth Transitions in Britain on the Threshold of a 'New Europe'. Journal of Education Policy, 8(1), 29-41.

Chubb, M., & Chubb, H. R. (1981). One Third of Our Time? An Introduction to Recreation Behavior and Services. New York: John Wiley & Sons.

Cicourel, A. (1964). Method and Measurement in Sociology. New York: Free Press.

Clough, J., McCormack, C., & Traill, R. (1993). A Mapping of Participation Rates in Junior Sport. The ACHPER National Journal(Winter), 4-7.

Coakley, J. (1991). A Sociological Alternative to Stress-based Models of Burnout Among Adolescent Athletes. Seminar at Loughborough University of Technology, 11.2.92..

Coakley, J. (1993a). Sport and Socialisation. Exercise and Sports Science Reviews, 21.

Coakley, J. (1993b). Socialization and Sport. In R. N. Singer (Eds.), Handbook of Research in Sport Psychology (pp. 571-586). London: Maxwell MacMillan.

Coakley, J., & White, A. (1992). Making Decisions: Gender and Sport Participation Among British Adolescents. Sociology of Sport Journal, 9, 20-35.

Cohen, L., & Manion, L. (1989). Research Methods in Education (3rd ed.). London: Routledge.

Colley, A. (1984). Sex Role and Exploration of Leisure Behavior. Leisure Studies, 3, 335-341.

Colley, A., Eglinton, E., & Elliott, E. (1992). Sport Participation in Middle Childhood: Association with Styles of Play and Parental Participation. International Journal of Sport Psychology, 23, 193-206.

Colley, A., Nash, J., O'Donnell, L., & Restorick, L. (1987). Attitudes to the Female Sex Role and Sex-Typing of Physical Activities. International Journal of Sport Psychology, 18, 19-29.

Conrad, P. (1987). Who Comes to Work-Site Wellness Programs? Journal of Occupational Medicine, 29, 317-320.

Conroy, R. M., Cahill, S., Mulcahy, R., Johnson, H., Graham, I. M., & Hickey, N. (1986). The Relation of Social Class to Risk Factors, Rehabilitation, Compliance, and Mortality in Survivors of Acute Coronary Heart Disease. Canadian Journal Soc. Med., 14, 51-56.

Corbin, C. B., & Laurie, D. R. (1981). Parental Attitudes Concerning Modifications in Baseball for Young Children. In G. C. Roberts & D. M. Landers (Eds.), Psychology of Motor Behaviour and Sport - 1980 North American Society for the Psychology of Sport and Physical Activity (pp. 108). Human Kinetics.

Corbin, J. (1986). Coding, Writing Memos, and Diagramming. In C. W. Chenitz & J. M. Swanson (Eds.), From Practice to Grounded Theory: Qualitative Research In Nursing (pp. 102-120). Menlo Park, CA: Addison-Wesley Publishing Company.

Council for Scientific Affairs (1989). Treatment of Obesity in Adults. J.A.M.A., 260, 2547-2551.

Cratty, B. J. (1986). Perceptual Motor Development In Infants and Children (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Crouter, A. C., McHale, S. M., & Bartko, W. T. (1993). Gender as an Organising Feature in Parent-Child Relationships. Journal of Social Issues, 49(3), 161-174.

Csikszentmihalyi, M. (1975). Beyond Boredom and Anxiety: The Experience of Play in Work and Games. San Francisco, CA: Jossey-Bass Inc..

Cunningham-Burley, S. (1985). Constructing Grandparenthood: Anticipating Appropriate Action. Sociology, 19(3), 421-436.

Daltroy, L. H., & Godin, G. (1989). The Influence of Spousal Approval and Patient Perception of Spousal Approval on Cardiac Patient Participation in Exercise Programs. Journal of Cardiopulmonary Rehabilitation, 9, 363-367.

Danielson, R. R., & Wanzel, R. S. (1977). Exercise Objectives of Fitness Program Drop-outs. In D. M. Landers & R. W. Christina (Eds.), Psychology of Motor Behavior and Sports (pp. 310-320). Champaign, Illinois: Human Kinetics Publishers.

Denscombe, M., & Aubrook, L. (1990). Liquidity Preference: Levels of Income and the Consumption of Alcohol Among 15 to 16 Year Old School Children. Research Papers in Education, 7(1), 151-171.

Denzin, N. K. (1970). Sociological Methods: A Source Book. Chicago: Aldine.

Denzin, N. K. (1992). Symbolic Interactionism and Cultural Studies: The Politics of Interpretation. USA: Blackwell Publishing.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). Handbook of Qualitative Research. Thousand Oaks, CA: Sage.

Department of Health (1992). On the State of the Public Health. London: H.M.S.O.

Department of Health (1992a). Health of the Nation. London: HMSO.

Desmond, S. M., Price, J. H., & Block, J. (1990). Urban Black and White Adolescents' Physical Fitness Status and Perceptions of Exercise. Journal of School Health, 60(5), 220-226.

Dey, I. (1993). Qualitative Data Analysis: A User-Friendly guide for social scientists. London: Routledge.

Dickenson, B. (1986). The Physical Activity Patterns of Young People-The Implications for Physical Education. The Bulletin of Physical Education, 22(1), 36-39.

Dickenson, B. (1987) A Survey of the Activity Patterns of Young People and their Attitudes and Perceptions of Physical Activity and Physical Education in a Local Education Authority. M. Phil., Loughborough University.

Dietz, W. H., & Gortmaker, S. L. (1985). Do We Fatten Our Children at the Television Set? Obesity and Television in Children and Adolescents. Pediatrics, 75, 807-812.

Dishman, R. K. (1981). Biologic Influences on Exercise Adherence. Research Quarterly for Exercise and Sport, 52(2), 143-159.

Dishman, R. K. (1982). Compliance/Adherence in Health-Related Exercise. Health Psychology, 1, 237-267.

Dishman, R. K. (Ed.). (1988a). Exercise Adherence: Its Impact on Public Health. Champaign, Illinois: Human Kinetics.

Dishman, R. K. (1988b). Supervised and Free-living Physical Activity: No Differences in Former Athletes and Non-Athletes. American Journal of Preventive Medicine, 4, 153-160.

Dishman, R. K. (1990). Determinants of Participation in Physical Activity. In C. Bouchard, R. J. Shephard, T. Stephens, J. R. Sutton, & B. D. McPherson (Eds.), Exercise, Fitness and Health: A Consensus of Current Knowledge (pp. 75-101). Champaign, Illinois: Human Kinetics.

Dishman, R. K. (1994a). Introduction: Consensus, Problems, and Prospects. In R. K. Dishman (Eds.), Advances in Exercise Adherence (pp. 1-27). Champaign, Illinois: Human Kinetics.

Dishman, R. K. (Ed.). (1994c). Advances in Exercise Adherence. Champaign, Illinois: Human Kinetics.

Dishman, R. K., & Dunn, A. L. (1988). Exercise Adherence in Children and Youth: Implications for adulthood. In R. K. Dishman (Eds.), Exercise Adherence: Its Impact on Public Health. (pp. 145-189). Champaign, Illinois: Human Kinetics.

Dishman, R. K., & Gettman, L. R. (1980). Psychobiologic Influences on Exercise Adherence. Journal of Sports Psychology, 2, 295-310.

Dishman, R. K., & Sallis, J. F. (1994b). Determinants and Interventions for Physical Activity and Exercise. In C. Bouchard, R. J. Shephard, & T. Stephens (Eds.), Physical Activity, Fitness, and Health. International Proceedings and Consensus Statement. (pp. 214-238). Champaign, Illinois: Human Kinetics.

Dishman, R. K., Sallis, J. F., & Orenstein, D. (1985). The Determinants of Physical Activity and Exercise. Public Health Report, 100, 158-171.

Dishman, R. K., & Steinhardt, M. (1988). Reliability and Concurrent Validity for a 7-Day Re-call of Physical Activity in College Students. Medicine and Science in Sports and Exercise, 20(1), 14-25.

Dracup, K. (1985). A Controlled Trial of Couples Group Counselling in Cardiac Rehabilitation. Journal of Cardiopulmonary Rehabilitation, 5, 436-442.

Duda, J. L. (1992). Motivation in Sport Settings: A Goal Perspective Approach. In G. C. Roberts (Eds.), Motivation in Sport and Exercise Champaign, Illinois: Human Kinetics.

Duda, J. L., Fox, K. R., Biddle, S., & Armstrong, N. (1992). Children's Achievement Goals and Beliefs about success in Sport. British Journal of Educational Psychology, 62, 313-323.

Duffy, P. J. (1988). Analysis of the Inhibitors to Participation in Sport in Two Capitalist Countries. In E. F. Broom, R. Pendleton, & B. Pooley (Eds.), Comparative Physical Education and Sport. Vol 5. Champaign, IL: Human Kinetics Publishers.

Dweck, C. S. (1986). Motivational Processes Affecting Learning. American Psychologist, 41, 1040-1048.

Dzewaltowski, D. A., Noble, J. M., & Shaw, J. M. (1990). Physical Activity Participation: Social Cognitive Theory versus The Theories of Reasoned Action and Planned Behavior. Journal of Sport and Exercise Psychology, 12, 388-405.

Eaton, W. O., & Enns, L. R. (1986). Sex Differences in Human Motor Activity Level. Psychological Bulletin, 100, 19-28.

Ebessen, L. S., Guyatt, G. H., McMartney, M., & Oldridge, N. B. (1990). Measuring Quality of Life in Cardiac Spouses. Journal of Clinical Epidemiology, 43, 481-487.

Ellis, J. D., Carron, A. V., & Bailey, D. A. (1975). Physical Performance in Boys from 10 through 16 years. Human Biology, 47, 263-281.

Ellis, M. (1973). Why People Play. Inglewood Cliffs, NJ: Prentice Hall.

Ellis, G. D., & Rademacher, G. (1987). Development of a Typology of Common Adolescent Free Time Activities: A Validation and Extension of Kleiber, Larson, and Csikszentmihalyi. Journal of Leisure Research, 19(4), 284-292.

Ellison, P., & Wise, A. (1993). Active Lifestyles: Fighting the Teenage Switch-off. Education and Health, 11(4), 56-62.

Emerson, R. M. (1983). Introduction, Part II: Theory and Evidence in Field Research. In R. M. Emerson (Eds.), Contemporary Field Research: A Collection of Readings. (pp. 93-108). Boston, MA: Little Brown.

Endicott, C. (1993). Study Shows Canadian Girls Are Much Less Active Than Boys. CAHPER Journal, 59(1), 35-37.

Engstrom, L. M. (1986). The Process of Socialisation into Keep-fit Activities. Scandinavian Journal of Sports Science, 8, 105-122.

Epstein, L. H., Koeske, R., & Wing, R. R. (1984a). Adherence to Exercise in Obese Children. Journal of Cardiac Rehabilitation, 4, 185-195.

Epstein, L. H., McGowan, C., & Woodall, K. (1984b). A Behavioural Observation System for Free Play Activity in Young Overweight Female Children. Research Quarterly for Exercise and Sport, 55(2), 180-183.

Epstein, L. H., Valoski, A., Wing, R. R., Perkins, K. A., Fernstrom, M., Marks, B., & McCurley, J. (1989). Perception of Eating and Exercise in Children as a Function of Child and Parent Weight Status. Appetite, 12, 105-118.

Epstein, L. H., Wing, R. R., Thompson, J. K., & Griffin, R. (1980). Attendance and Fitness in Aerobics Exercise: The Effects of Contract and Lottery Procedures. Behavior Modification, 4, 465-479.

Epstein, L. H., Smith, J. A., Vara, L. S., & Rodefer, J. S. (1991). Behavioural Economic Analysis of Activity Choice in Obese Children. Health Psychology, 10(5), 311-316.

Erickson, F. (1986). Qualitative Methods in Research on Teaching. In M. Wittrock (Eds.), Handbook of Research on Teaching (pp. 119-169). New York: Macmillan.

Erikson, E. (1968). Identity, Youth and Crisis. New York: Norton.

Escobedo, L. G., Marcus, S. E., Holtzman, D., & Giovino, G. A. (1993). Sports Participation, Age at Smoking Initiation, and the Risk of Smoking Among US High School Students. J.A.M.A., 269, 1391-1395.

Eston, R. G., & Williams, J. G., (1986). Exercise Intensity and Perceived Exertion in Adolescent Boys. British Journal of Sports Medicine, 20(1), 27-30.

Ewart, C. K., Stewart, K. J., Gillilan, R. E., et al. (1986). Self-Efficacy Mediates Strength Gains During Circuit Weight Training in Men with Coronary Artery Disease. Medicine and Science in Sport and Exercise, 18, 531-540.

Ferguson, K. J., Yesalis, C. E., Pomrehn, P. R., & Kirkpatrick, M. B. (1989). Attitudes, Knowledge, and Beliefs as Predictors of Exercise Intent and Behavior in School Children. Journal of School Health, 59, 112-115.

Finch, J. (1989). Family Obligations and Social Change. Southampton, England: Polity Press.

Finders, M., & Lewis, C. (1994). Why Some Parents Don't Come to School. Educational Leadership, 51(8), 50-54.

Finnish Gallup (1995). Liikunagallup 1994. Osa I: Liikunnan harastaminen. Ranto, E., & Pehlonen, J. (Eds). Helsinki.

Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory Research. Reading, MA: Addison-Wesley.

Folksam, Hogskolan for lararutbiolding, Idrottshogskolan, Karolinska Institutet, Korpen & Riksidirottsforbundet. Livsstil - Prestation - Halsa. LIV 90. Rapport 1. Engstrom, L-M., Ekblom, B., Forsberg, A., Koch, M. & Seger, J. (1993). (in Swedish)

Folsom, A. R., Caspersen, C. J., Taylor, H. L., Jacobs, H. L., Leupker, D. R., Gomez-Marin, R. V., Gillum, O., & Blackburn, H. (1985). Leisure Time Physical Activity and Its Relationship to Coronary Risk Factors in a Population Based Sample: The Minnesota Heart Survey. American Journal of Epidemiology, 121(4), 570-579.

Folsom, A. R., Cook, T. C., Sprafka, J. M., Burke, S., Norsted, W., & Jacobs, D. R. (1991). Differences in Leisure-Time Physical Activity Levels Between Blacks and Whites in Population-based sample: The Minnesota Heart Survey. Journal of Behavioral Medicine, 6, 1-9.

Fontana, A. F., Kerns, R. D., Rosenboerg, R. L., Marcus, J. L., & Colonese, K. L. (1986). Exercise Training for Cardiac Patients: Adherence, Fitness, and Benefits. Journal of Cardiopulmonary Rehabilitation, 6, 4-15.

Ford, E. S., Merritt, R. K., Heath, G. W., Powell, K. E., Washburn, R. A., Kriska, A., & Haile, G. (1991). Physical Activity Behaviours in Lower and Higher Socio-economic Status Populations. American Journal of Epidemiology, 133(12), 1246-1256.

Fox, K. (1994). Understanding Young People and Their Decisions About Physical Activity. British Journal of Physical Education.25(1), 15-19.

Fox, K., & Biddle, S. (1988). The Child's Perspective in Physical Education Part 2: Children's Participation Motives. British Journal of Physical Education, 19(2), 79-82.

Fox, K. R. (1992). Physical Education and the Development of Self-Esteem in Children. In N. Armstrong (Eds.), New Directions in Physical Education Vol. 2. Towards a National Curriculum. Champaign, IL: Human Kinetics.

Freedson, P. S., & Evenson, S. (1991). Familial Aggregation in Physical Activity. Research Quarterly for Exercise and Sport, 62(4), 384-389.

Freedson, P. S., & Rowland, T. W. (1992). Youth Activity Versus Youth Fitness: Let's Redirect Our Efforts. Research Quarterly for Exercise and Sport, 63(2), 133-136.

Freysinger, V. J. (1994). Leisure With Children and Parental Satisfaction: Further Evidence of a Sex Difference in the Experience of Adult Roles and Leisure. Journal of Leisure Research, 26(3), 212-226.

Frontana, A., & Frey, J. H. (1994). Interviewing: The Art of Science. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research (pp. 361-376). Thousand Oaks, CA: Sage.

Fry, D. (1994). Social focus on Children. London: H.M.S.O..

Fry, D. A. P., McClements, J. D., & Sefton, J. M. (1981). A Report on Participation in the Saskatoon Hockey Association. Saskatoon, Canada: SASK Sport.

Fuchs, R., Powell, K. E., Semmer, N. K., Dwyer, J. H., Lippert, P., & Hoffmeister, H. (1988). Patterns of Physical Activity Among German Adolescents: The Berlin-Bremen Study. Preventive Medicine, 17, 746-763.

Furnham, A. (1988). Lay Theories: Everyday Understanding of Problems in the Social Sciences. Oxford: Pergamon Press.

Garcia-Palmieri, M., Costas, R., Cruz-Vidal, M., Sorlie, P., & Havlik, R. (1982). Increased Physical Activity: A Protective Factor Against Heart Attacks in Puerto Rico. American Journal of Cardiology, 50, 749-755.

Gaster, S. (1991). Urban Children's Access to Their Neighbourhood: Changes Over Three Generations. Environment and Behaviour, 23(1), 70-85.

General Household Survey (1977). London: H.M.S.O..

General Household Survey (1989). Alcohol, Drugs and School-leavers. London: Tavistock.

Gentle, P., Caves, R., Armstrong, N., Balding, J., & Kirby, B. (1994). High and Low Exercisers Among 14- and 15-year-old Children. Journal of Public Health Medicine, 16(2), 186-194.

Gershuny, J. (1993). Escorting Children: Impact on Parental Lifestyle. In M. Hillman (Eds.), Children, Transport and the Quality of Life (pp. 62-76). London: Policy Studies Institute.

Gettman, L. R., Pollock, M. L., & Ward, A. (1983). Adherence to Unsupervised Exercise. Phys. Sportsmed., 11, 56-66.

Gilbey, H., & Gilbey, M. (1995). The Physical Activity of Singapore Primary School Children as Estimated by Heart Rate Monitoring. Pediatric Exercise Science, 7, 26-35.

Gill, D. L., Goss, J. B., & Huddleston, S. (1980). Participation Motivation in Youth Sports. In G. C. Roberts & D.M. Landers (Eds.), Psychology of Motor Behaviour and Sport. North American Society for the Psychology of Sport & Physical Activity.

Gill, D. L., Gross, J. B., & Huddleston, S. (1981). Participation Motivation in Youth Sports. In G. C. Roberts & K. M. Newell (Eds.), Psychology of Motor Behavior and Sport - 1978 Champaign, Illinois: Human Kinetics.

Gilliam, T. B., Freedson, P. S., Greenen, D. L., & Shahrany, B. (1981). Physical Activity Patterns Determined by Heart Rate Monitoring in 6-7 Year Old Children. Medicine and Science in Sports and Exercise, 13(1), 65-67.

Gilligan, C. (1982). In a Different Voice: Psychological Theory and Women's Development. Cambridge, MA: Harvard University Press.

Glaser, B. (1992). Basics of Grounded Theory Analysis. Mill Valley, California: Sociology Press.

Glaser, B. G. (1978). Theoretical Sensitivity: Advances in the Methodology of Grounded Theory. Mill Valley, California: Sociology Press.

Glaser, B. G. (Ed.). (1993). Examples of Grounded Theory: A Reader. Mill Valley, California: Sociology Press.

Glaser, B. G. (Ed.). (1994). More Grounded Theory Methodology: A Reader. Mill Valley, California: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory. New York: Aldine Publishing Company.

Godin, G., & Shephard, R. J. (1983). Physical Fitness Promotion Programmes: Effectiveness in Modifying Exercise Behavior. Canadian Journal of Applied Sports Science, 8, 104-113.

Godin, G., & Shephard, R. J. (1986). Psychosocial Factors Influencing Intentions to Exercise of Young Students From Grades 7 to 9. Research Quarterly for Exercise and Sport, 57(1), 41-52.

Godin, G., Shephard, R. J., & Colantonio, A. (1986). Children's Perceptions of Parental Exercise :Influence of Sex and Age. Perceptual and Motor Skills(62), 511-516.

Gorden, R. L. (1975). Interviewing: Strategy, Techniques, and Tactics. Homeword, Illinois: The Dorsey Press.

Gortmaker, S. L., Dietz, W.H., Sobol, A.M., & Wehler, C.A. (1987). Increasing Obesity in the United States. American Journal of Diseases of Children, 141, 535-540.

Gottlieb, N. H., & Chen, M. S. (1985). Sociocultural Correlates of Childhood Sporting Activities: Their Implications for Heart Health. Social Science and Medicine, 21(5), 533-539.

Goudas, M., & Biddle, S. (1993). Pupil Perceptions of Enjoyment in Physical Education. Physical Education Review, 16(12), 145-150.

Gould, D., Feltz, D., Horn, T., & Weiss, M. (1982). Reasons for Discontinuing Involvement in Competitive Youth Swimming. Journal of Sport Behavior, 5, 155-165.

Gould, D., & Horn, T. (1984). Participation Motivation in Young Athletes. In J. V. Silva & R. S. Weinberg (Eds.), Psychological Foundations of Sport (pp. 359-370). Champaign, Illinois: Human Kinetics.

Great Britain Parliamentary Papers (1903). Report of the Royal Commission on Physical Training in Scotland. London: HMSO.

Great Britain Parliamentary Papers (1904). Report of the Interdepartmental Committee on Physical Deterioration. London: HMSO.

Greendorfer, S. L., & Ewing, M. E. (1981). Race and Gender Differences in Children's Socialization into Sport. Research Quarterly for Exercise and Sport, 52, 301-310.

Greendorfer, S. L., & Lewko, J. H. (1978). Role of Family Members in Sport Socialisation of Children. Research Quarterly for Exercise and Sport, 49(2), 146-152.

Greendorfer, S. L., & Ewing, M. E. (1981). Race and Gender Differences in Children's Socialization into Sport. Research Quarterly for Exercise and Sport, 52(3), 301-310.

Greene, J. C. (1994). Qualitative Program Evaluation. In R. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research (pp. 530-544). Thousand Oaks, CA: Sage.

Greenhalgh, L., & Worpole, K. (1994). Parks in the City: Common Space. The Leisure Manager(April/May), 26-27.

Greenockle, K. M., Lee, A. A., & Lomax, R. (1990). The Relationship Between Selected Student Characteristics and Activity Patterns in a Required High School Physical Education Class. Research Quarterly for Exercise and Sport, 61(1), 59-69.

Guba, E., & Lincoln, Y. (1989). Fourth Generation Evaluation. Beverly Hills, CA: Sage.

Guba, E. G. (Ed.). (1990). The Paradigm Dialog. Newbury Park, CA: Sage.

Guba, E. G., & Lincoln, Y. S. (1981). Effective Evaluation. San Francisco: Jossey-Bass.

Guba, E. G., & Lincoln, Y. S. (1994). Competing Paradigms in Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research (pp. 105-117). Thousand Oaks, CA: Sage Publications Inc..

Hammersley, M. (1984a). The Paradigmatic Mentality: A Diagnosis. In L. Barton & S. Walker (Eds.), Social Crisis and Educational Research (pp. 230-255). London: Croom Helm.

Hammersley, M. (1984b). Some Reflections upon the Macro-Micro Problem in the Sociology of Education. Sociological Review, 32, 316-324.

Hammersley, M. (1989). The Dilemma of Qualitative Method: Herbert Blumer and the Chicago Tradition. London: Routledge.

Hammersley, M. (1992). What's Wrong With Ethnography? London: Routledge.

Hammersley, M. (1993a). On Methodological Purism: A Response to Barry Troyna. British Educational Research Journal, 19(4), 339-341.

Hammersley, M. (Ed.). (1993b). Social Research: Philosophy, Politics and Practice. London: Sage Publications.

Hammersley, M., & Atkinson, P. (1983). Ethnography Principles in Practice. USA: Tavistock.

Hasbrook, C. A. (1986). The Sport Participation - Social Class Relationship: Some Recent Youth Participation Data. Sociology of Sport Journal, 3, 154-159.

Haskell, W. L. (1994). The Efficacy and Safety of Exercise Programmes in Cardiac Rehabilitation. Medicine and Science in Sports and Exercise, 26(7), 815-823.

Hayashi, C. T., & Smith, A. J. (1994). Parents, Peers and Coaches: The Social Support Team in Childrens Physical Activity. Research Quarterly for Exercise and Sport Supplement.(March), A84.

Health Education Authority, (1989). Tomorrow's Young Adults. London: HEA.

Heath, G. W., Macera, C. A., Eaker, E. D., & Wheeler, F. C. (1991). Physical Activity Patterns in a Bi-Racial Semi-Rural Population (Abstract). Medicine in Science, Sports and Exercise, 123 (Supplement), S105.

Hebbelinck, M., & Shephard, R.J. (Eds.) (1986). Fitness of a Nation. Medicine and Sport Science. Barger: Karger.

Heinzelmann, F., & Bagley, R. W. (1970). Response to Physical Activity Programs and their Effects on Health Behavior. Public Health Reports, 85, 905-911.

Hellstedt, J. C. (1995). Invisible Players: A Family Systems Model. In S. M. Murphy (Eds.), Sport Psychology Interventions (pp. 117-146). Champaign, Illinois: Human Kinetics.

Henderson, K. A., & Bialeschki, M. D. (1991). A Sense of Entitlement to Leisure as a Constraint and Empowerment for Women. Leisure Sciences, 13, 51-65.

Hendry, L. (1976). Personal, Social and Educational Characteristics of School Sports Participation: Some Social and Curricular Implications. Momentum, 1(2), 34-47.

274

Hendry, L. B. (1978). School Sport and Leisure - three dimensions of adolescence. London: Lepus Books.

Hendry, L. B., Shucksmith, J., Love, J., & Glendinning, A. (1993). Young People's Leisure and Lifestyles. London: Routledge.

Henwood, K., & Pidgeon, N. (1995). Grounded Theory and Psychological Research. The Psychologist(March), 115-118.

Henwood, K. L., & Pidgeon, N. F. (1993). Qualitative Research and Psychological Theorizing. In M. Hammersley (Eds.), Social Research: Philosophy, Politics and Practice (pp. 14-32). London: Sage.

Higginson, D. C. (1985). The Influence of Socializing Agents in the Female Sport-Participation Process. Adolescence, 20(77), 73-82.

Hillbert, G. A. (1985). Spouse Support and Myocardial Infarction Patient Compliance. Nursing Research, 34, 217-220.

Hillman, M. (Ed.). (1993a). Children, Transport and the Quality of Life. London: Policy Studies Institute.

Hillman, M. (1993b). One False Move...A Study of Children's Independent Mobility: an overview of findings and the issues they raise. In M. Hillman (Eds.), Children, Transport and the Quality of Life (pp. 7-18). London: Policy Studies Institute.

Hitchcock, G., & Hughes, D. (1989). Research and the Teacher - A Qualitative Introduction to School-based Research. London: Routledge.

Hoferek, M. J. (1982). Sex Roles and Physical Activities: Evolving Trends. Quest, 34(1), 72-81.

Hofstetter, R. C., Hovell, M. F., Macera, C., Sallis, J. F., Spry, V., Barrington, E., Callender, L., Hackley, M., & Rauh, M. (1991). Illness, Injury, and Correlates of Aerobic Exercise and Walking: A Community Study. Research Quarterly for Exercise and Sport, 62(1), 1-9.

Holme, I., Helgeland, A., Hjermann, I., Leren, P., & Lund-Larsen, P. (1981). Physical Activity at Work and at Leisure in Relation to Coronary Risk Factors and

Social Class: A 4-year Mortality Follow-up. The Oslo Study. Acta Medica Scandinavia, 209, 277-283.

Horn, T. S., & Claytor, R. P. (1993). Developmental Aspect of Exercise Psychology. In R. N. Singer (Eds.), Handbook of Research in Sport Psychology (pp. 299-338). London: Maxwell MacMillan.

Horn, T. S. &. Weiss., M.R. (1991). A Developmental Analysis of Children's Self-Ability Judgements in the Physical Domain. Pediatric Exercise Science, 3(4), 318-326.

Horna, J. L. (1989). The Leisure Component of the Parental Role. Journal of Leisure Research, 21(2), 228-241.

House, E. R. (1991). Realism in Research. Educational Researcher, 20(6), 2-9.

Hovell, M. F., Bursick, J. H., & Sharkey, R. (1978). An Evaluation of Elementary Students' Voluntary Physical Activity During Recess. Research Quarterly for Exercise and Sport, 49, 460-474.

Hutchinson, R., & Fidel, K. (1984). Mexican-American Recreation Activities: A Reply to McMillen. Journal of Leisure Research, 16, 334-349.

Hutchinson, S. A. (1988). Education and Grounded Theory. In R. R. Sherman., &. R.B. Webb., (Eds.), Qualitative Research in Education: Focus and Methods. Falmer Press.

Ignico, A. A. (1990). The Influence of Gender-Role Perception on Activity Preferences of Children. Play and Culture, 3, 302-310.

Ingjer, F., & Dahl, H. A. (1979). Dropouts From An Endurance Training Program. Scandinavian Journal of Sports Science, 1, 20-22.

Iso-Ahola, S. E. &. Weissinger, E., (1990). Perceptions of Boredom in Leisure: Conceptualisation, Reliability and Validity of the Leisure Boredom Scale. Journal of Leisure Research, 22(1), 1-17.

Jambor, E. A., & Rudisill, M. E. (1992). The Relationship Between Children's Locus of Control and Sport Choices. Journal of Human Movement Studies, 22, 35-48.

Jambor, E. A., & Weekes, E. M. (1994). The Parental Influences on Pre-Adolescent Children Adult-Organised Sport Participation. Research Quarterly for Exercise and Sport Supplement(March), A87.

Jambor, E. A., & Weekes, E. M. (1995). Benefits Parents Seek from Children's Sport Participation. Research Quarterly for Exercise and Sport Supplement, 66(1), A-79.

Janz, K. F., Phillips, A.D., & Mahoney, C. (1992). Self-Selected Physical Activity Profiles in Children and Adolescents. Physical Educator, 49(2).

Jones, S. (1985). The Analysis of Depth Interviews. In R. Walker (Eds.), Applied Qualitative Research. Gower Publishing Company.

Kannas, L., Tynjala, J., Edward Aaro, L., & Wold, B. (1986). Leisure Time Physical Activity and Health Related Behaviour in Four European Countries. In 3rd ICHPER Europe Congress - Health and PE in the 1990's. Cuneo, Italy.

Kaplan, A. (1964). The Conduct of Inquiry. San Francisco, CA: Chandler.

Kaplan, R. M., Sallis, J. F., & Patterson, T. L. (1993). Health and Human Behaviour. Singapore: McGraw-Hill Book Company.

Katz, J. (1983). A Theory of Qualitative Methodology: The Social System of Analytic Fieldwork. In R. A. Emerson (Eds.), Contemporary Field Research: A Collection of Readings. (pp. 127-148). Boston, MA: Little Brown.

Kelder, S. H., Pery, C. L., Klepp, K.-I., & Lytle, L. L. (1994). Longitudinal Tracking of Adolescent Smoking, Physical Activity, and Food Choice Behaviors. American Journal of Public Health, 84(7), 1121-1127.

Kenyon, G. S. (1968). A Conceptual Model for Characterizing Physical Activity. Research Quarterly, 39(1).

Kibler, B. W. (1993). Injuries in Adolescent and Preadolescent Soccer Players. Medicine and Science in Sports and Exercise, 25(12), 1330-1332.

King, A. C., Blair, S. N. , Bild, D. E., Dishman, R. K., Dubbert, P. M., Marcus, B. H., Oldridge, N. B., Paffenbarger, R. S., Powell, K. E., & Yeager, K. M. (1992).

Determinants of Physical Activity and Interventions in Adults. Medicine and Science in Sports and Exercise Supplement, 24(6), S221-S236.

King, A. C., Carl, F., Birkel, L., & Haskell, W. L. (1988). Increasing Exercise Among Blue-Collar Employees: the Tailoring of Worksite Programs to Meet Specific Needs. Preventive Medicine, 17, 357-365.

King, A. C., Taylor, C. B., Haskell, W. L., & DeBusk, R. F. (1990). Strategies for Increasing Early Adherence to and Long-Term Maintenance of Home-Based Exercise Training in Health Middle-aged Men and Women. American Journal of Cardiology, 61, 628-632.

King, A. C., & Tribble, D. L. (1991). The Role of Exercise in Weight Regulation in Nonathletes. Sports Medicine, 11(5), 331-349.

Klesges, R. C., Coates, T. J., Moldenhauer-Klesges, L. M., Holzer, B., Gustavson, J., & Barnes, J. (1984). The FATS: An Observational System for Assessing Physical Activity in Children and Associated Parent Behaviour. Behavioral Assessment, 6, 333-345.

Klesges, R. C., Eck, L. H., Hanson, C. L., Haddock, C. K., & Klesges, L. M. (1990). Effects of Obesity, Social Interactions, and Physical Environment on Physical Activity in Pre-schoolers. Health Psychology, 9, 435-449.

Kleseges, L. M., & Kleseges, R. C. (1987). The Assessment of Children's Physical Activity: A Comparison of Methods. Medicine and Science in Sports and Exercise, 19(5), 511-517.

Knapp, D. N. (1988). Behavioral Management Techniques and Exercise Promotion. In R. K. Dishman (Eds.), Exercise Adherence: Its Impact On Public Health (pp. 203-236). Champaign, Illinois: Human Kinetics.

Kohl, H., Moorefield, D. L., & Blair, S. (1987). Is Cardiorespiratory Fitness Associated with General Chronic Fatigue in Apparently Healthy Men and Women? Medicine and Science in Sports and Exercise, 19 (Supplement abstract), S6.

Kohl, H. W., et al. (1988). A Mail Survey of Physical Activity Habits as Related to Measured Physical Fitness. American Journal of Epidemiology, 127(6), 1228-1239.

Kucera, M. (1985). Spontaneous Physical Activity in Pre-school Children. In R. A. Binkhorst, H. C. G. Kemper, & W. H. M. Saris (Eds.), Children and Exercise XI (pp. 175-182). Champaign, Illinois: Human Kinetics.

Kuh, D. J. L., & Cooper, C. (1992). Physical Activity at 36 Years: Patterns and Childhood Predictors in a Longitudinal Study. Journal of Epidemiology and Community Health, 46, 114-119.

Kuhn, T. S. (1962). The Structure of Scientific Revolution. Chicago, IL: University of Chicago Press.

Kunesh, M. A., Hasbrook, C. A., & Lewthwaite, R. (1992). Physical Activity Socialisation: Peer Interactions and Affective Responses Among a Sample of Sixth Grade Girls. Sociology of Sport Journal, 9, 385-396.

Lamarine, R. J. (1987). Self-Esteem, Health Locus of Control and Health Attitudes Among Native American Children. Journal of School Health, 57(9), 371-374.

Larossa, R., Bennet, L. A., & Gelles, R. J. (1981). Ethical Dilemmas in Qualitative Family Research. Journal of Marriage and the Family, 43, 303-313.

Layder, D. (1993). New Strategies in Social Research: An Introduction and Guide. Cambridge: Polity Press.

Layder, D. (1994). Understanding Social Theory. London: Sage Publications.

LeCompte, M. D., Millroy, W. L., & Preissle, J. (Ed.). (1992). The Handbook of Qualitative Research in Education. San Diego, CA: Academic Press.

Lewko, J. H., & Ewing, M. E. (1981). Parental Influence and Importance of Ability in Children's Physical Activity Involvement. In G. C. Roberts & D. M. Landers (Eds.), Psychology of Motor Behaviour and Sport. North American Society for the Psychology of Sport and Physical Activity.

Lewko, J. H., & Greendorfer, L. (1982). Family influence and sex differences in children's socialisation into sport: a review. In R. A. Magill, M. J. Ash, & F. L. Smoll (Eds.), Children in Sport (pp. 279-293). Champaign, Illinois: Human Kinetics.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic Inquiry. London: Sage.

Lirgg, C. D. (1991). Gender Differences in Self-Confidence in Physical Activity: A Meta-Analysis of Recent Studies. Journal of Sport and Exercise Psychology, 13, 294-310.

Locke, L. (1989). Qualitative Research as a Form of Scientific Inquiry in Sport and Physical Education. Research Quarterly for Exercise and Sport, 60(1), 1-20.

Macera, C. A., Jackson, K. L., Hagenmaier, G. W., & Kronenfeld, J. J. (1989). Age, Physical Activity, Physical Fitness, Body Composition, and Incidence of Orthopaedic Problems. Research Quarterly for Exercise and Sport, 60(3), 225-233.

Maddux, J. E. (1993). Social Cognitive Models of Health and Exercise Behaviour: An Introduction and Review of Conceptual Issues. Journal of Applied Sport Psychology, 5, 116-140.

Malina, R. M. (1988). Growth and Maturation of Young Athletes: Biological and Social Considerations. In F. L. Smoll, R. A. Magill, & M. J. Ash (Eds.), Children in Sport (pp. 83-101). Champaign, Illinois: Human Kinetics.

Marella, M., Colli, R., & Faina, M. (1986). Evaluation de L'Aptitude Physique: Eurofit, Batterie Experimentagle. Rome: Scuola Dello Sport.

Marshall, C., & Rossman, G. B. (1989). Designing Qualitative Research. Newbury Park, CA: Sage.

Marti, B., Abelin, T., Minder, C., & Cader, J. (1988). Smoking, Alcohol Consumption, and Endurance capacity: An Analysis of 6500 19 year-old Conscripts and 4100 Joggers. Preventive Medicine, 17, 79-92.

Marti, B., Salonen, J., Tuomilehto, J., & Puska, P. (1989). 10-year Trends in Physical Activity in the Eastern Finnish Adult Population: Relationship to Socio-economic and Lifestyle Characteristics. Acta Medica Scandinavia, 224, 195-203.

Martin, J. E., & Dubbert, P. M. (1982). Exercise Applications and Promotion in Behavioral Medicine: Current Status and Future Directions. Journal of Consult. Clin. Psychology, 50, 1004-1017.

Martin, J. E., & Dubbert, P. M. (1985). Adherence to Exercise. Exercise and Sports Science Reviews, 13, 137-167.

Martin, P. Y., & Turner, B. A. (1986). Grounded Theory and Organisational Research. The Journal of Applied Behavioural Science, 22(2), 141-157.

Martinek, T. J. (1994). Why Kids Give Up: An Examination of How Teacher and Parental Expectations Influence Self-Perceptions of Children. Research Quarterly for Exercise and Sport Supplement(March), A71.

Massie, J. F., & Shephard, R. J. (1971). Physiological and Psychological Effects of Training - A Comparison of Individual and Gymnasium Programs with a Characterization of the Exercise "Dropout". Medicine and Science in Sports, 3, 110-117.

May, K. A. (1986). Writing and Evaluating the Grounded Theory Research Report. In C. W. Chentiz & J. M. Swanson (Eds.), From Practice to Grounded Theory: Qualitative Research in Nursing (pp. 146-154). Menlo Park, CA: Addison-Wesley Publishing Company.

May, K. A. (1991). Interview Techniques in Qualitative Research: Concerns and Challenges. In J. M. Morse (Eds.), Qualitative Nursing Research: A Contemporary Dialogue. Revised Edition. Thousand Oakes, CA: Sage Publications.

Maykut, P., & Morehouse, R. (1994). Beginning Qualitative Research: A Philosophic and Practical Guide. London: Falmer Press.

McAuley, E. (1994). Physical Activity and Psychosocial Outcomes. In C. Bouchard, R. J. Shephard, & T. Stephens (Eds.), Physical Activity, Fitness, and Health. International Proceedings and Consensus Statement. (pp. 551-568). Champaign, Illinois: Human Kinetics.

McAuley, E., & Jacobson, L. (1991). Self-efficacy and Exercise Participation in Adult Females. American Journal of Health Promotion, 5(185-191).

McCracken, G. (1988). The Long Interview. Newbury Park, CA: Sage.

McCullagh, P., Matzkanin, K. T., Sha, S. D., & Maldonado, M. (1993). Motivation for Participation in Physical Activity: A Comparison of Parent-Child Perceived Competencies and Participation Motives. Pediatric Exercise Science, 5, 224-233.

McElroy, M. A., & Kirkendall, D. R. (1981). Relationship Between Parent/Child Differences in Sport Ability Judgements and Self-esteem. In G. C. Roberts & D. M. Landers (Eds.), Psychology of Motor Behaviour and Sport - 1980 North American Society for the Psychology of Sport and Physical Activity (pp. 114). Human Kinetics.

McGuire, R. T., & Cook, D. L. (1982). The Influence of Others and the Decision to Participate in Youth Sports. Journal of Sport Behaviour, 6(1), 9-16.

McKechnie, G. E. (1974). The Psychological Structure of Leisure: Past Behavior. Journal of Leisure Research, 6, 27-45.

McKenzie, T. L., Sallis, J. F., & Nader, P. R. (1991). BEACHES: An Observational System for Assessing Children's Eating and Physical Activity and Associated Events. Journal of Applied Behavioral Analysis, 24, 141-151.

McKuster, J. (1985). Involvement of 15-19 year olds in sport and physical activity. In Miyashita, M., Atomi, Y., & Iwaoka, K. (1983). Relationship Between Daily Physical Activity Levels and VO2 max or LT in 9-10 year old Boys. Rep. Sre. Cent. Phys. Ed.,11, 31-39.

McMillen, J. B. (1983). The Social Organisation of Leisure Among Mexican-Americans. Journal of Leisure Research, 15, 164-173.

McMurray, R. G. (1993). Parental Influences on Childhood Fitness and Activity Patterns. Research Quarterly for Exercise and Sport, 64(3), 249-255.

Mead, G. H. (1934). Mind, Self and Society. Chicago: University of Chicago Press.

Miller Lite Report (1983). American Attitudes Towards Sports. New York, Research and Forecasts Inc..

Mishler, E. G. (1986). Research Interviewing: Context and Narrative. Cambridge, MA: Harvard University Press.

Mishler, E. G. (1990). Validation in Inquiry Guided Research: The Role of Exemplars in Narrative Studies. Harvard Educational Review, 60(4), 415-442.

Montoye, H., Block, W., Metzner, H., & Keller, J. (1976). Habitual Physical Activity and Serum Lipids: Males, age 16-64 in a Total Community. Journal of Chronic Diseases, 29, 697-709.

Moore, L. L., Lombardi, D. A., White, M. J., Campbell, J. L., Ollveria, A., & Ellson, C. R. (1991). Influence of Parents' Physical Activity Levels on Activity levels of Young Children. Journal of Pediatrics, 118(2), 215-219.

Moran, P. (1992). Television is Beautiful. Education 3-13, 20(3), 45-46.

Morse, J. M. (1991). Evaluating Qualitative Research. Qualitative Health Research, 1(3), 283-286.

Morse, J. M. (Ed.). (1994). Critical Issues in Qualitative Research Methods. Thousand Oaks, CA: Sage Publications.

National Survey of Personal Health Practices and Consequences (1979). Highlights from wave 1 of the National Survey of Personal Health Practices and Consequences (DHSS publication No. (PHS) 81-1162). National Centre for Health Statistics, Hyattsville, MD, USA.

Neale, D. C., Sonstroem, R. J., & Metz, I. F. (1970). Physical Fitness, Self-Esteem, and Attitudes Towards Physical Activity. Research Quarterly for Exercise and Sport, 40, 743-749.

Nicholls, J. (1984). Achievement Motivation: Concepts of Ability, Subjective Experience, Task Choice, and Performance. Psychological Review, 91, 328-346.

Nicholls, J., & Miller, A. (1984). Development and its Discontents: The Differentiation of the Concept of Ability. In J. Nicholls (Eds.), Advances in Motivation and Achievement: The Development of Achievement Motivation (pp. 185-218). Greenwich, CT: JAI Press.

Nieman, D., Onasch, L., & Lee, J. (1990). The Effects of Moderate Exercise Training on Nutrient Intake in Mildly Obese Women. Journal of the American Dietician Association, 90, 1557-1562.

Noller, P., & Callan, V. (1991). The Adolescent in the Family. In L. Hendry, J. Shucksmith, J. G. Love, & A. Glendinning (Eds.). Young People's Leisure and Lifestyles. London: Routledge.

Norgan, N. G. (1992). Physical Activity and Health. Great Britain: Cambridge University Press.

Northern Ireland Fitness Survey (1990). The Northern Ireland Fitness Survey - 1989. The Fitness, Physical Activity, Attitudes and Lifestyles of Northern Ireland Post-Primary Schoolchildren. Division of Physical and Health Education, Queens University Belfast.

Nutbeam, D., Farley, P., & Smith, C. (1990). England and Wales. Perspectives in School Health. Journal of School Health, 60(7), 318-323.

O'Connell, J. K., Price, J. H., & Roberts, S. M. (1985). Utilizing the Health Belief Model to Predict Dieting and Exercising Behavior of Obese and Nonobese Adolescents. Health Education Quarterly, 12, 343-351.

Oja, P. (1995). Descriptive Epidemiology of Health-related Physical Activity and Fitness. In Physical Activity, Health and Well-being. An International Consensus Conference. Quebec City, Canada.

Oldridge, N. B. (1982). Compliance and Exercise in Primary and Secondary Prevention of Coronary Heart Disease: A Review. Preventive Medicine, 11, 56-70.

Oldridge, N. B. (1988). Compliance With Exercise in Cardiac Rehabilitation. In N. K. Dishman (Eds.), Exercise Adherence: Its Impact on Public Health (pp. 283-304). Champaign, Illinois: Human Kinetics.

Oldridge, N. B. (1991). Compliance with Cardiac Rehabilitation Services. Journal of Cardiopulmonary Rehabilitation, 11, 115-127.

Oldridge, N. B., Donner, A. P., Buck, C. W., et al. (1983). Predictors of Dropout Cardiac Exercise Rehabilitation. American Journal of Cardiology(51), 70-74.

Oldridge, N. B., & Jones, N. L. (1983). Improving Patient Compliance in Cardiac Rehabilitation. Effects of Written Agreement and Self-monitoring. Journal of Cardiopulmonary Rehabilitation, 3, 257-262.

Oldridge, N. B., Rogowski, B. B., & Gottlieb, M. (1992). Factors Associated with Utilization of Outpatient Cardiac Rehabilitation Services. Journal of Cardiopulmonary Rehabilitation. In A. C. King, S. N. Blair, D. E. Bild, R. K. Dishman, et al. (1992). Determinants of Physical Activity and Interventions in Adults. Medicine and Science in Sports and Exercise Supplement, 24(6), S221-S236.

Oldridge, N. B., & Streiner, D. L. (1990). The Health Belief Model: Predicting Compliance and Dropout in Cardiac Rehabilitation. Medicine and Science in Sports and Exercise, 22(5), 678-683.

Oldridge, N. B., Wicks, J. R., Hanley, C., Sutton, J. R., & Jones, N. L. (1978). Non-compliance in an Exercise Rehabilitation Program or Men Who Have Suffered a Myocardial Infarction. Canadian Med. Assoc. Journal, 118, 361-364.

Page, R. M., Frey, J., Talbert, R., & Falk, C. (1992). Children's Feelings of Loneliness and Social Dissatisfaction Relationship to Measures of Physical Fitness and Activity. Journal of Teaching in Physical Education, 11, 211-219.

Pate, P. R., Pratt, M., Blair, S. N., Haskell, W. L., Macera, C. A., Bouchard, C., Buchner, D., Ettinger, W., Heath, G. W., King, A. C., Kriska, A., Leon, A. S., Marcus, B. H., Morris, J., Paffenbarger, R. S., Patrick, K., Pollock, M. L., Rippe, J. M., Sallis, J. M., & Willmore, J. H. (1995). Physical Activity and Public Health: A Recommendation from the Centres for Disease Control and Prevention and the American College of Sports Medicine. Journal of American Medical Association, 273, 402-407.

Pate, R., Sargent, R., Baldwin, C., & Burgess, M. (1990). Dietary Intake of Women Runners. International Journal of Sports Medicine, 11, 461-466.

Pate, R. R., Dowda, M., & Ross, J. G. (1990). Associations Between Physical Activity and Physical Fitness in American Children. American Journal of Diseases of Children, 144(10), 1123-1129.

Patriksson, G. (1981). Socialisation to Sports Involvement Influences of Family Members and Peers. Scandinavian Journal of Sports Science, 3(1), 27-32.

Patterson, P., & Faucette, N. (1990). Attitudes Towards Physical Activity of Fourth and Fifth Grade Boys and Girls. Research Quarterly for Exercise and Sport, 61(4), 415-418.

Patton, M. (1978). Qualitative Evaluation Methods. Beverly Hills, CA: Sage.

Patton, M. J. (1991). Qualitative Research on College Students: Philosophical and Methodological Comparisons with the Qualitative Approach. Journal of College Student Development, 32, 389-96.

Patton, M. Q. (1990). Qualitative Evaluation and Research Methods. Newbury Park, CA: Sage.

Perusse, L., Leblanc, C., & Bouchard, C. (1988). Familial Resemblance in Lifestyle Components: Results From the Canada Fitness Survey. Canadian Journal of Public Health, 79(May/June), 201-205.

Pérusse, L., Tremblay, A., Leblanc, C., & Bouchard, C. (1989). Genetic and Environmental Influences on Level of Habitual Physical Activity and Exercise Participation. American Journal of Epidemiology, 129(5), 1012-1022.

Petlichkoff, L. M. (1992). Youth Sport Participation and Withdrawal: Is It Simply a Matter of FUN? Pediatric Exercise Science, 4, 105-110.

Phtiaka, H. (1994). What's in it For Us? Qualitative Studies in Education, 7(2), 155-164.

Pi-Sunyer, F., & Woo, R. (1985). Effect of Exercise on Food Intake in Human Subjects. American Journal of Clinical Nutrition, 42, 983-990.

Pidgeon, N. F., Turner, B. A., & Blockley, D. I. (1991). The Use of Grounded Theory for Conceptual Analysis in Knowledge Elicitation. International Journal of Man-Machine Studies, 35, 151-173.

Pittman, M. A., & Maxwell, J. A. (1992). Qualitative Approaches to Evaluation: Models and Methods. In M. D. LeCompte., W. L. Millroy, & J. Preissle (Eds.), The Handbook of Qualitative Research in Education (pp. 729-770). San Diego, CA: Academic Press.

Pless, I. B., Verreault, R., Arsenault, L., Frappier, J. Y., & Stulginkas, J. (1987). The Epidemiology of Road Accidents in Childhood. American Journal of Public Health, 77(3), 358-360.

Plummer, K. (1983). Documents of Life: An Introduction to the Problems and Literature of a Humanistic Method. London: George Allen & Unwin.

Poest, C. A., Williams, J. R., Witt, D. D., & Atwood, M. E. (1989). Physical Activity Patterns of Preschool Children. Early Childhood Research Quarterly, 4, 367-376.

Polit, D., & Hungler, B. (1987). Nursing Research: Strategies for a Natural Sociology (3rd ed.). Philadelphia: J.B. Lippincott.

Pollock, M. L. (1988). Prescribing Exercise For Fitness and Adherence. In R. K. Dishman (Eds.), Exercise Adherence: Its Impact On Public Health (pp. 259-277). Champaign, Illinois: Human Kinetics Publishers.

Pollock, M. L., Carroll, J. F., Graves, J. E., Leggett, S. H., Braith, R. W., Limacher, M., & Hagberg, J. M. (1991). Injuries and Adherence to Walk/Jog and Resistance Training Programs in the Elderly. Medicine and Science in Sports and Exercise, 23(10), 1194-1200.

Pollock, M. L., Gettman, L. R., Milesis, C. A., Bah, M. D., Durstine, L., & Johnson, R. B. (1977). Effects of Frequency and Duration of Training on Attrition and Incidence of Injury. Medicine and Science in Sports, 9, 31-36.

Powell, K. E., & Dysinger, W. (1987). Childhood Participation in Organised School Sports and Physical Education as Precursors of Adult Physical Activity. American Journal of Preventative Medicine, 3(5), 276-281.

Power, T. G., & Woolger, C. (1994). Parenting Practices and Age-Group Swimming: A Correlational Study. Research Quarterly for Exercise and Sport, 65(1), 59-66.

President's Council on Fitness and Sports (1974). National Adult Fitness Survey. Physical Fitness Research Digest, 4, 1-27.

Prochaska, J. O., & DiClemente, C. C. (1984). The Transtheoretical Approach: Crossing Traditional Boundaries of Therapy. Homewood, Illinois: Dow Jones-Irwin.

Rapoport, P., & Rapoport, N. (1975). Leisure and the Family Life Cycle. London: RKP.

Raynor, J. (1978) Justice and Culture in the City, in the Urban Setting. Milton Keynes: Open University Press.

Reynolds, K. D., Killen, J. D., Bryson, S. W., Maron, D. J., Taylor, C. B., Maccoby, N., & Farquhar, J. W. (1990). Psychosocial Predictors of Physical Activity in Adolescents. Preventative Medicine, 19, 541-551.

Richards, T., Richards, L., McGalliard, J., & Sharrock, B. (1992a). NUDIST 2.3 User Manual. Eltham, Victoria: Replee Proprietary Limited and La Trobe University.

Richards, T., Richards, L., McGalliard, J., & Sharrock, B. (1992b). NUDIST 2.3 Reference Manual. Eltham, Victoria: Replee Proprietary Limited and La Trobe University.

Richards, L., & Richards, T. (1987). Qualitative Data Analysis: Can Computers do it? Australian and New Zealand Journal of Sociology, 23, 23-35.

Richards, T. J., & Richards, L. (1994). Using Computers in Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.). Handbook of Qualitative Research (pp. 445-462). Thousand Oaks, CA: Sage.

Richardson, M., Nagy, S., Ashley, C., & Adcock, A. G. (1995). Physical Activity Levels in Adolescents: Interaction Between Age, Gender, and Ethnicity. Research Quarterly for Exercise and Sport Supplement, 66(1), A-43.

Richardson, M., Nagy, S., Ashley, C. D., & Adcock, A. G. (1994). Physical Activity Habits in 5,733 Eighth and Tenth Grade Alabama Students. Research Quarterly for Exercise and Sport Supplement(March), A51.

Riddoch, C., Mahoney, C., Murphy, N., Boreham, C., & Cran, G. (1991). The Physical Activity Patterns of Northern Irish School Children Ages 11-16 Years. Pediatric Exercise Science, 3(4), 300-309.

288

Roberts, G. C. (1992). Motivation in Sport and Exercise. Champaign, Illinois: Human Kinetics Publishers.

Roberts, K. (1993). Young People and Football in Liverpool. In Leisure in Different Worlds. Third International Conference of the Leisure Studies Association, Loughborough University.

Roberts, K., & Brodie, D. A. (1989). The Rise of Sports Participation in the United Kingdom. Society and Leisure, 12(2), 307-324.

Roman, L. G., & Apple, M. W. (1990). Is Naturalism a Move Away from Positivism? Materialist and Feminist Approaches to Subjectivity in Ethnographic Research. In E. W. Eisner & A. Peshkin (Eds.), Qualitative Inquiry in Education: The Continuing Debate (pp. 38-73). New York: Teachers College Press.

Ross, J. G., Dotson, C. O., Gilbert, G. C., & Katz, S. J. (1985). After Physical Education...Physical Activity Outside of School Physical Education Programs. J.O.P.E.R.D., 56(1), 35-39.

Ross, J. G., & Pate, R. R. (1987). The National and Youth Fitness Study II: A Summary of Findings. J.O.P.E.R.D., 58(9), 51-56.

Ross, J. G., Pate, R. R., Caspersen, C. J., Damberg, C. L., & Svilar, M. (1987). Home and Community in Children's Exercise Habits. (The National Children & Youth Fitness Study II). J.O.P.E.R.D., 58(9), 85-92.

Rotevatn, S., Akslen, L., & Bjelke, E. (1989). Lifestyle and Mortality Among Norwegian Men. Preventive Medicine, 18, 433-443.

Rowland, T. W. (1990). Exercise and Children's Health. Champaign, Illinois: Human Kinetics Publishers.

Sallis, J. F. (1994). Determinants of Physical Activity Behaviour in Children. In R. R. Pate & R. C. Hohn (Eds.), Health and Fitness Through Physical Education (pp. 31-43). Champaign, Illinois: Human Kinetics.

Sallis, J. F. (1994b). Influences on Physical Activity of Children, Adolescents, and Adults or Determinants of Active Living. Physical Activity And Fitness Research Digest, 1(7), 1-8.

Sallis, J. F. (1995). A Behavioral Perspective on Children's Physical Activity. In L. W. Y. Cheung & J. B. Richmond (Eds.), Child Health, Nutrition, and Physical Activity. (pp. 125-138). Champaign, Illinois: Human Kinetics.

Sallis, J. F., Alcaraz, J. E., McKenzie, L., Hovell, M. F., Koloday, B., & Nader, P. R. (1992c). Parental Behaviour in Relation to Physical Activity and Fitness in 9-Year-Old Children. American Journal of Diseases of Children, 146(4), 1383-1388.

Sallis, J. F., Buono, M. J., Roby, J. J., Micale, F. G., & Nelson, J. A. (1993). Seven-Day Recall and Other Physical Activity Self-Reports in Children and Adolescents. Medicine and Science in Sports and Exercise, 25(1), 99-108.

Sallis, J. F., Condon, A. S., Goggin, K. J., Kolody, B., & Alcaraz, J.E. (1993b). The Development of Self-Administered Physical Activity Surveys for 4th Grade Students. Research Quarterly for Exercise and Sport, 64(1), 25-31.

Sallis, J. F., Haskell, W. L., Fortmann, S. P., et al. (1986). Predictors of Adoption and Maintenance of Physical Activity in a Community Sample. Preventive Medicine, 15, 331-341.

Sallis, J. F., Haskell, W. L., Wood, P. D., Fortmann, S. P., Rogers, T., Blair, S. N., & Paffenbarger, R. S. (1985). Physical Activity Assessment Methodology in the Five City Project. American Journal of Epidemiology, 121(1), 91-106.

Sallis, J. F., & Hovell, M. F. (1990). Determinants of Exercise Behaviour. Exercise and Sports Science Reviews, 18.

Sallis, J. F., Hovell, M. F., & Hofstetter, C. R. (1992b). Predictors of Adoption and Maintenance of Vigorous Physical Activity in Men and Women. Preventive Medicine, 21, 237-251.

Sallis, J. F., Hovell, M. F., Hofstetter, C. R., Elder, J. P., & et al., (1990). Distance From Homes and Exercise Facilities related to Frequency of Exercise Among San Diego Residents. Public Health Reports, 105, 179-185.

Sallis, J., Hovell, M., Hofstetter, C., Faucher, P., Elder, J., Blanchard, J., Caspersen, C., Powell, J., & Christenson, G. (1989). A Multivariate Study of

Determinants of Vigorous Exercise in a Community Sample. <u>Preventive Medicine, 18</u>, 20-34.

Sallis, J. F., & McKenzie, T. L. (1991). Physical Education's Role in Public Health. <u>Research Quarterly for Exercise and Sport, 62</u>, 124-137.

Sallis, J. F., McKenzie, T. L., & Alcaraz, J. E. (1993c). Habitual Physical Activity and Health-Related Physical Fitness in Fourth Grade Children. <u>American Journal of Diseases of Children, 147</u>(August), 890-896.

Sallis, J. F., & Nader, P. R. (1988). Family Determinants of Health Behaviours. In D. S. Gochman (Eds.), <u>Health Behaviour</u> (pp. 107-123). New York: Plenum Press.

Sallis, J. F., Patterson, T. L., Buono, M. J., Atkins, C. J., & Nader, P. R. (1988). Aggregation of Physical Activity Habits in Mexican-American and Anglo Families. <u>Journal of Behavioural Medicine, 11</u>(1), 31-41.

Sallis, J. F., Patterson, T. L., McKenzie, T. L., & Nader, P. R. (1988b). Family Variables and Physical Activity in Preschool Children. <u>Developmental and Behavioural Pediatrics, 9</u>(2), 57-61.

Sallis, J. F., Simons-Morton, B. G., Stone, E. J., Corbin, C. B., Epstein, L. H., Faucette, N., Iannotti, R. J., Killen, J. D., Kleseges, R. C., Petray, C. K., Rowland, T. W., & Taylor, W. C. (1992). Determinants of Physical Activity and Interventions in Youth. <u>Medicine and Science in Sports and Exercise Supplement, 24</u>(6), S248-S257.

Salomon, G. (1991). Transcending the Qualitative - Quantitative Debate: The Analytic and Systematic Approaches to Educational Research. <u>Educational Researcher, 20</u>(6), 10-18.

Salonen, J., Slater, J., Tuomilehto, J., & Raauramaa, R. (1988). Leisure Time and Occupational Physical Activity: Risk of Death from Ischemic Heart Disease. <u>American Journal of Epidemiology, 127</u>, 87-94.

Sanger, J. (1994). Seven Types of Creativity: Looking for Insights in Data Analysis. <u>British Educational Research Journal, 20</u>(2), 175-185.

Sanne, H., Elmfeldt, D., Grimby, G., Rydin, & Wilhelmsen, L. (1973). Exercise Tolerance and Physical Training of Non-Selected Patients After Myocardial Infarction. Acta Medica Scandinavia (Supplement), 551, 11-24.

Saris, W. H. M. (1985). The Assessment and Evaluation of Daily Physical Activity in Children: A Review. Acta Paediatrica Scandinavia, 318(supplement), 37-48.

Saris, W. H. M., Binkhorst, R. A., Cramwinckel, A. B., Waesberghe, F., & Veen-Hexemans, A. M. (1980). The Relationship Between Working Performance, Daily Physical Activity, Fatness, Blood lipids and Nutrition in School Children. In K. Berg & B. O. Ericksson (Eds.), Children and Exercise XI (pp. 166-174). Baltimore: University Park Press.

Scanlan, T. K., & Simons, J. P. (1992). The Construct of Sport Enjoyment. In G. C. Roberts (Eds.), Motivation in Sport and Exercise (pp. 199-215). Champaign, Illinois: Human Kinetics.

Schatzman, L., & Strauss, A. L. (1973). Field Research: Strategies for a Natural Sociology. Englewood Cliffs: Prentice Hall Inc..

Schmidt, G. W., & Stein, G. L. (1991). Sport Commitment: A Model Integrating Enjoyment, Dropout and Burnout. Journal of Sport and Exercise Psychology, 8, 254-265.

Schoeborn, C. A. (1986). Health Habits of U.S. Adults: The "Alameda 7" Revisited. Public Health Reports, 101, 571-580.

Schutz, R. W., & Smoll, F. L. (1986). The (In)Stability of Attitudes Toward Physical Activity during childhood and Adolescence. In B. McPherson (Eds.), The 1984 Olympic Scientific Congress Proceedings Volume 5 - Sport and Aging. Champaign, Illinois: Human Kinetics.

Shaw, S. M. (1992). Dereifying Family Leisure: An Examination of Women's and Men's Everyday Experiences and Perceptions of Family Time. Leisure Sciences, 14(4), 271-286.

Shaw, S. M., Bonene, A., & McCabe, J. F. (1991). Do More Constraints Mean Less Leisure? Examining the Relationship Between Constraints and Participation. Journal of Leisure Research, 23(4), 286-300.

Shephard, R. J. (1987). Physical Activity and Aging (Second Ed.). London: Croom Helm.

Shephard, R. J. (1988). Exercise Adherence in Corporate Settings: Personal Traits and Program Barriers. In R. K. Dishman (Eds.), Exercise Adherence: Its Impact on Public Health. (pp. 305-320). Champaign, Illinois: Human Kinetics.

Shephard, R. J. (1995). Physical Activity, Health and Well-Being at Different Life Stages. In Physical Activity, Health and Well-Being: An International Scientific Consensus Conference. Quebec City, Canada: Mars/World Forum.

Shephard, R. J., Jequier, J. C., Lavallee, H., LaBarre, R., & Rajic, M. (1980). Habitual Physical Activity: Effects of Sex, Milieu, Season, and Required Activity. Journal of Sports Medicine and Physical Fitness, 20, 55-66.

Simons-Morton, B. G., O'hara, N. M., Parcel, G., Huang, I. W., Baranowski, T., & Wilson, B. (1990). Children's Frequency of Participation in Moderate to Vigorous Physical Activity. Research Quarterly for Exercise and Sport, 61(4), 307-314.

Slaughter, M. H., Christ, C. B., Stillman, R. J., & Boileau, R. A. (1994). Effects of Gender, Physical Activity Level, Age Group and Test Year on Select Parameters of Physique in Children: A 4-Year Longitudinal Study. Research Quarterly for Exercise and Sport Supplement(March), A29.

Sleap, M., & Walker, L. (1992). Usage of Community Sports Centres by Adolescents: A Case Study of a Secondary School. Physical Education Review, 15(1), 61-71.

Sleap, M., & Warburton, P. (1992). Physical Activity Levels of 5-11 Year Old Children in England as Determined by Continuous Observation. Research Quarterly for Exercise and Sport, 63(3), 238-245.

Smith, J. K. (1989). The Nature of Social and Educational Inquiry: Empiricism versus Interpretation. Norwood, NJ: Albex.

Smith, M., Mendez, J., Druckenmiller, M., & Kris-Etherton, P. (1982). Exercise Intensity, Dietary Intake, and High-Density Lipoprotein Cholesterol in Young Female Competitive Swimmers. American Journal of Clinical Nutrition, 36, 251-255.

Smoll, F. L., & Schutz, R. W. (1980). Children's Attitudes Toward Physical Activity: A Longitudinal Analysis. Journal of Sport Psychology, 2, 137-147.

Smoll, F. L., Schutz, R. W., & Keeney, J. K. (1976). Relationships Among Children's Attitudes, Involvement, and Proficiency in Physical Activities. The Research Quarterly, 47(4), 797-803.

Smoll, F. L., Schutz, R. W., Wood, T. M., & Cunningham, J. K. (1979). Parent-Child Relationships Regarding Physical Activity Attitudes and Behaviours. In North American Society for the Psychology of Sport and Physical Activity (1978), (pp. 131-143). Human Kinetics.

Sonstroem, R. J., et al. (1992). Perceived Physical Competence in Adults: An Examination of the Physical Self-Perception Profile. Journal of Sport and Exercise Psychology, 14, 207-221.

Sonstroem, R. J. (1988). Psychological Models. In R. K. Dishman (Eds.), Exercise Adherence: Its Impact On Public Health (pp. 125-154). Champaign, Illinois: Human Kinetics.

Sparkes, A. (1990a). The Changing Nature of Teachers' Work: Reflecting on Governor Power in Different Historical Periods. Physical Education Review, 13(1), 39-47.

Sparkes, A. (1990b). The Emerging Relationship Between Physical Education Teachers and School Governors: A Sociological Analysis. Physical Education Review, 13(2), 128-137.

Sparkes, A. (1993). Challenging Technical Rationality in Physical Education Teacher Education :The Potential of a Life History Approach. Physical Education Review, 16(2), 107-121.

Sparkes, A. C. (1987) The Genesis of An Innovation: A Case of Emergent Concerns and Micropolitical Solutions. P.hD., Loughborough University.

Sparkes, A. C. (Ed.). (1992). Research in Physical Education and Sport - Exploring Alternative Visions. London: Falmer Press.

Sparkes, A. C. (1992b). Validity and the Research Process: An Exploration of Meanings. Physical Education Review, 15(1), 29-45.

Sports Council (1982). Sport in the Community...The Next Ten Years. London: H.M.S.O..

Sports Council for Wales (1986). Changing Times - Changing Needs- Ten Year Strategy for Sport in Wales. 1986-1996.

Sports Council for Wales (1987). Exercise for Health - Health-Related Fitness in Wales, Heartbeat Report. No. 23.

Sports Council (1992). Training of Young Athletes Study - TOYA and Lifestyle. Ipswich: Sports Council.

Sports Council (1993). Training of Young Athletes Study - TOYA and Education. Ipswich: Sports Council.

Sports Council & Health Education Authority (1992). Allied Dunbar National Fitness Survey - Main Findings. Sports Council.

Sports Council for Wales (1993). Children's Sports Participation 1991/92. The Policy Planning Section, Sports Council for Wales.

Sports Council (1994). Young People and Sport: National Survey Selected Findings. Sports Council/OPCS.

Stanley, L., & Wise, S. (1983). Breaking Out: Feminist Consciousness and Feminist Research. London: Routledge & Kegan Paul.

Stefanick, M. L. (1993). Exercise and Weight Control. Exercise and Sports Science Reviews, 21.

Stegman, M. R., Miller, P. J., Hageman, R. K., & et al., (1987). Myocardial Infarction Survival: How Important are Patient's Attitudes and Adherence Behaviors? American Journal of Preventive Medicine, 3, 147-151.

Stein, J., & Urdang, L. (1981). The Random House Dictionary of the English Language. New York: Random House.

Stenhouse, L. (1984). Library Use and User Education in Academic Sixth Forms: An Autobiographical Account. In R. G. Burgess (Eds.), The Research Process in Educational Settings: Ten Case Studies (pp. 211-234). London: Falmer Press.

Stephens, T., & Caspersen, C. J. (1994). The Demography of Physical Activity. In C. Bouchard, R. J. Shephard, & T. Stephens (Eds.), Physical Activity, Fitness, and Health. International Proceedings and Consensus Statement. (pp. 204-213). Champaign, Illinois: Human Kinetics.

Stephens, T., & Craig, C. L. (1990). The Well-Being of Canadians: Highlights of the 1988 Campbell's Survey. Canadian Fitness and Lifestyle Research Institute, Ottawa.

Stephens, T., Jacobs, D. R., & White, C. G. (1985). A Descriptive Epidemiology of Leisure Time Physical Activity. Public Health Report, 100(2), 147-158.

Stern, P. N. (1980). Grounded Theory Methodology: Its Uses and Processes. Image: Journal of Nursing Scholarship, 12(1), 20-24.

Stern, P. N. (1985). Using Grounded Theory Method in Nursing Research. In M. M. Leininger (Eds.), Qualitative Research Methods in Nursing. Orlando, USA: Grunne & Stratton Ltd.

Stern, P. N. (1991). Are Counting and Coding A Cappella Appropriate in Qualitative Research? In J. M. Morse (Eds.), Qualitative Nursing Research: A Contemporary Dialogue. Thousand Oaks, CA: Sage Publications.

Stern, P. N. (1994). Eroding Grounded Theory. In J. M. Morse (Eds.), Critical Issues in Qualitative Research Methods (pp. 212-223). Thousand Oaks, CA: Sage Publications.

Stewart, K. J., & Goldberg, A. P. (1992). Exercise, Lipids and Obesity in Adolescents with Parental History of Coronary Disease. American Journal of Health Promotion, 6(6), 430-436.

Stonecipher, L. J. (1995). Perceived Barriers and Physical Activity: Differences in Groups Defined by Gender and Activity Level. Research Quarterly for Exercise and Sport Supplement, 66(1), A-44.

✓ Strauss, A. (1978). Negotiations: Varieties, Contexts, Processes, and Social Order. San Francisco: Jossey-Bass Publications.

✓ Strauss, A., & Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park: Sage.

Strauss, A., & Corbin, J. (1994). Grounded Theory Methodology. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research (pp. 273-285). USA: Sage Publications Inc..

✓ Strauss, A. L. (1987). Qualitative Analysis for Social Scientists. New York: Cambridge University Press.

Stucky-Ropp, R. C., & DiLorenzo, T. M. (1993). Determinants of Exercise in Children. Preventive Medicine, 22, 880-889.

Sunnegardh, J., & Bratteby, L. E. (1987). Maximal oxygen uptake, anthropometry and physical activity in randomly selected sample of 8 and 13 year old children in Sweden. European Journal of Applied Physiology, 56, 266-272.

Sunnegardh, J., Bratteby, L. E., & Sjölin, S. (1985). Physical Activity and Sport Involvement in 8 and 13 Year Old Children in Sweden. Acta Paediatrica Scandinavia, 74, 904-912.

Tannehill, D., Romar, J.-E., O'Sullivan, M., England, K., & Rosenberg, D. (1994). Attitudes Towards Physical Education: Their Impact on How Physical Education Teachers Make Sense of Their Work. Journal of Teaching of Physical Education, 13(4), 406-420.

Tannehill, D., & Zakrajsek, D. (1993). Student Attitudes Towards Physical Education: A Multicultural Study. Journal of Teaching of Physical Education, 13, 78-84.

Tappe, M. K. (1992). The Model of Personal Investment: A Theoretical Approach for Explaining and Predicting Adolescent Health Behavior. Health Education Authority, 7(2), 277-300.

Tappe, M. K., Duda, J. L., & Ehrnwald, P. M. (1989). Perceived Barriers to Exercise Among Adolescents. Journal of School Health, 59(4), 153-155.

Taylor, W. C., Baranowski, T., & Sallis, J. F. (1994). Family Determinants of Childhood Physical Activity: A Social-Cognitive Model. In R. K. Dishman (Eds.), Advances in Exercise Adherence (pp. 319-342). Champaign, Illinois: Human Kinetics.

Telama, R., Laakso, L., & Young, X. (1994). Physical Activity and Participation in Sports of Young People in Finland. Scandinavian Journal of Medicine and Science in Sports, 4, 65-74.

Telama, R., & Silvennoinen, M. (1979). Structure and Development of 11- to 19-year-olds' motivation for physical activity. Scandinavian Journal of Sports Sciences, 1, 23-31.

Telama, R., Viikari, J., Valimaki, I., Siern-Tiusanen, H., Akerblom, H. K., Uhari, M., Dahl, M., Pesonen, E., Lajde, P. L., Pietikaninen, M., & Suoninen, P. (1985). Atherosclerosis Precursors in Finnish Children and adolescents X Leisure-Time Physical Activity. Acta Paediatrica Scandinavia, 318(supplement), 169-180.

Tell, G. S., & Vellar, O. D. (1988). Physical Fitness, Physical Activity and Cardiovascular Disease Risk Factors in Adolescents: The Oslo Youth Study. Preventive Medicine, 17, 12-24.

Tesch, R. (1990). Qualitative Research: Analysis Types and Software Tools. London: The Falmer Press.

The Perrier Study (1979). The Perrier Study: Fitness in America. New York: Perrier-Great Waters of France Inc..

Thirlaway, K., & Benton, D. (1993). Physical Activity in Primary and Secondary School Children in West Glamorgan. Health Education Journal, 52(1), 37-41.

Thomas, J. (1985). Why Doesn't Mum Go Out to Play? Scottish Journal of Physical Education, 13(1), 14-18.

Thomas, J. (1993). Doing Critical Ethnography. Sage Publications.

Thorlindsson, T., et al., (1990). Sport Participation and Perceived Health Status: A Study of Adolescents. Sociology of Science and Medicine, 31(5), 551-556.

Tinning, R., & Fitzclarence, L. (1992). Postmodern Youth Culture and the Crisis in Australian Secondary School Physical Education. Quest, 44, 287-303.

Tinsley, B. J. (1992). Multiple Influences on the Acquisition and Socialization of Children's Health Attitudes and Behaviour: An Integrative Review. Child Development, 63(5), 1043-1069.

Toole, T., & Kretzsehmar, J. C. (1993). Gender Differences in Motor Performance in Early Childhood and Later Adulthood. Women in Sport and Physical Activity Journal, 2(1), 41-71.

Trend, M. G. (1978). On the Reconciliation of Qualitative and Quantitative Analysis: A Case Study. Human Organisation, 37, 345-354.

Turner, B. A. (1981). Some Practical Aspects of Qualitative Data Analysis: One Way of Organising the Cognitive Processes Associated With the Generation of Grounded Theory. Quality and Quantity, 15, 225-247.

Turner, B. A. (1983). The Use of Grounded Theory for the Qualitative Analysis of Organisational Behaviour. Journal of Management Studies, 20(3), 333-348.

Unkel, M. B. (1981). Physical Recreation Participation of Females and Males During the Adult Life Cycle. Leisure Sciences, 4(1), 1-27.

Van Manen, M. (1990). Researching Lived Experience: Human Science for an Action Sensitive Pedagogy. London, Ontario: The Althouse Press.

Vara, L., & Agras, W. S. (1989). Caloric Intake and Activity Levels are Related in Young Children. International Journal of Obesity, 13, 613-617.

Verschuur, R., & Kemper, H. C. G. (1985). Habitual Physical Activity In Dutch Teenagers Measured by Heart Rate. In R. A. Binkhorst, H. C. G. Kemper, & W. H. M. Saris (Eds.), Children and Exercise XI (pp. 194-202). Champaign, Illinois: Human Kinetics.

Walkerdine, V., & Lucey, H. (1989). Democracy in the Kitchen: Regulating Mothers and Socialising Daughters. London: Virago.

Wankel, L. M. (1985). Personal and Situational Factors Affecting Exercise Involvement: The Importance of Enjoyment. Research Quarterly for Exercise and Sport, 56(3), 275-282.

Wankel, L. M., & Sefton, J. M. (1994). Physical Activity and Other Lifestyle Behaviors. In C. Bouchard, R. J. Shephard, & T. Stephens (Eds.), Physical Activity, Fitness, and Health. International Proceedings and Consensus Statement. (pp. 530-550). Champaign, Illinois: Human Kinetics.

Warburton, P., Sleap, M., & Williams, B. (1991). Participation in Organised Physical Activities by Children Aged 4-11 Years. British Journal of Physical Education Research Supplement (10, Winter).

Ward, A., & Morgan, W. P. (1984). Adherence Patterns of Healthy Men and Women Enrolled in an Adult Exercise Program. Journal of Cardiac Rehabilitation, 4, 143-152.

Watkin, B. (1988). Cross-National Comparisons of Motivation for Participation in Physical Activity of Australian and American Adolescents. In E. F. Broom, R. Clumper, B. Pendleton, & C. A. Pooley (Eds.), Comparative Physical Education and Sport. Champaign, Illinois: Human Kinetics.

Waxman, M., & Stunkard, A. J. (1980). Calorific Intake and Expenditure of Obese Boys. The Journal of Pediatrics, 96, 187-193.

Weinstein-Garcia, A., & King, A. C. (1991). Predicting Long-Term Adherence to Aerobic Exercise: A Comparison of Two Models. Journal of Sport and Exercise Psychology, 13, 394-410.

Weiss, M. R. (1993). Children's Participation in Physical Activity: Are We Having Fun Yet? Pediatric Exercise Science, 5(3), 205-209.

Weiss, M. R. (1994). Symposium: Children's Participation in Physical Activity: Psychosocial Perspectives. Research Quarterly for Exercise and Sport Supplement(March), A84.

Weiss, M. R., & Duncan, S. C. (1992). The Relationship Between Competence and Peer Acceptance in the Context of Children's Sports Participation. Journal of Sport and Exercise Psychology, 14, 177-191.

Weiss, M. R., & Glen, S. D. (1992). Psychological Development and Females' Sport Participation: An Interactional Perspective. Quest, 44, 138-157.

Weiss, M. R., & Hayashi, C. T. (1995). All in the Family: Parent-Child Influences in Competitive Youth Gymnastics. Pediatric Exercise Science, 7, 36-48.

Weiss, M. R., & Petlichkoff, L. M. (1989). Children's Motivation of Participation in Withdrawal From Sport: Identifying the Missing Links. Pediatric Exercise Science, 1, 195-211.

White, A., & Coakley, J. (1986). Making Decisions The Response of Young People in the Medway town to the 'Ever Thought of Sport?' Campaign. Sports Council.

White, C. C., Powell, K. E., Hogelin, G. C., & Gentry, E. M. (1987). The Behavioral Risk Factor Surveys: IV. The Descriptive Epidemiology of Exercise. American Journal of Preventive Medicine, 3, 304-310.

White, S. A., & Duda, J. L. (1994). The Relationship of Gender, Level of Sport Involvement, and Participation Motivation to Task and Ego Orientation. International Journal of Sport Psychology, 25, 4-18.

Whyte, W. F. (1982). Interviewing in Field Research. In R. G. Burgess (Eds.), Field Research: A Sourcebook and Field Manual. London: Falmer Press.

Wilhelmsen, L., Sanne, H., Elfeldt, D., Grimby, G., Tibblin, G., & Wedel, H. (1975). A Controlled Trial of Physical Training After Myocardial Infarction. Preventive Medicine, 4, 491-508.

Willerman, L., & Plomin, R. (1973). Activity Levels in Children and their Parents. Child Development, 44, 854-858.

Williams, A. (1988). Physical Activity Patterns Among Adolescents - Some Curriculum Implications. Physical Education Review, 11(1), 28-39.

Williams, C. (1993). Curriculum Relevance for Street Children. The Curriculum Journal, 3(3), 277-290.

Wilson, N. C., Hopkins, W. G., & Russell, D. G. (1993). Physical Activity of New Zealand Teenagers. Journal of Physical Education New Zealand, 26(2), 16-21.

Witt, P. A., & Goodale, T. L. (1981). The Relationship Between Barriers to Leisure Enjoyment and Family Stages. Leisure Sciences, 4, 29-49.

Wold, B., & Aarø, L. (1985). Physical Activity and Lifestyle Socialization in Youth. Selected Results from Health Behaviour in Schoolchildren. The World Health Organisation.

Wold, B., & Anderssen, N. (1992). Health Promotion Aspects of Family and Peer Influences on Sport Participation. International Journal of Sport Psychology, 23, 343-359.

Wood, K., & Abernethy, B. (1989). Parental Influences on the Competitive Sport Experience of Children. Physical Education Review, 12(1), 56-69.

Woods, P. (1992). Symbolic Interactionism: Theory and Method. In M. D. LeCompte, W. L. Millroy, & J. Preissle (Eds.), The Handbook of Qualitative Research in Education (pp. 337-404). San Diego, California: Academic Press Inc..

Wooley, S. F. (1995). Behavior Mapping: A Tool for Identifying Priorities For Health Education Curricula and Instruction. Journal of Health Education, 26(4), 200-206.

World Health Organisation/FIMS (1995). Physical Activity, Health and Well-Being: An International Scientific Consensus. Quebec City: Mars/World Forum.

Worsley, A., Coonan, W., Leitch, D., & Crawford, D. (1984). Slim and Obese Children's Perceptions of Physical Activities. International Journal of Obesity, 8, 201-211.

Wright, M., & Watkin, B. (1988). Physical Activity Participation Patterns of Australian Adolescents. In ICHPER/CAHPER World Conference, Towards the 21st Century, June 9-13, 1987, (pp. 63-67).

Young, J. R., & Ismail, A. H. (1981). Comparison of Selected Physiological and Personality Variables in Regular and Nonregular Adult Male Exercisers. Research Quarterly for Exercise and Sport, 48(3), 617-622.

Zakarian, J. M., Melbourne, M. P. H., Hovell, F., Hofstetter, R. C., Sallis, J. F., & Keating, K. J. (1994). Correlates of Vigorous Exercise in a Predominantly Low SES and Minority High School Population. <u>Preventive Medicine, 23</u>, 314-321.

APPENDIX A

- Introductory and follow-up letter to headteacher

APPENDIX A

Dear Headteacher,

I would like to thank you and those individuals involved from your school for their recent involvement and extremely valuable co-operation in research with us at Loughborough University, Department of P.E., regarding children's current levels of physical activity.

The results of this co-operative research have enabled valuable data to be gained. Feedback on this data will be presented to you when it has been fully analysed. In an attempt to extend this foundation study we need to interview various children in greater detail.

I am writing to ask you if we may contact certain children involved in the previous study, to ask them if they would be involved in further research interviews. These interviews would not take place at school, but at a time and location that is convenient for both parties. The children selected for interview from your school would be:

NAMES   *YEAR*

We sincerely hope that your school will continue to be involved in this valuable research project. If you have any questions regarding the research at all, please do not hesitate to contact me (Tel. 0509-263171 ext. 4251). Please could you fill in the form over the page and return it to me as soon as possible, in the stamped addressed envelope provided. If you agree to further interviews, I will be in touch with you in the near future. I look forward to hearing from you.

Yours sincerely,

Michael Waring

PTO.

Please return this form in the SAE provided to;

Michael Waring, Department of Physical Education and Sports Science, Loughborough University,
Loughborough,
Leicestershire.
LE11 3TU

I_____, as headteacher

of_____ (name of School)

do not object to you contacting the named children for further interview

do object to you contacting the named children for further interviews

(please delete as appropriate)

Signed_____

Dear *CONTACT PERSON'S NAME* ,

Thank you for your speedy reply to my initial letter and your continued co-operation with regards this research work. As an extension to this research, I propose to have more detailed discussions with the named children and their parents. I have enclosed a letter and a reply form for each child to take home to ask for parental permission and involvement in this extension research (see letter attached). A stamped addressed envelope is included for each of the parents/guardians to reply to me.

I expect each interview to last approximately 15 minutes. The location and time of these interviews will be the choice of the school, child and parent/guardian.

I thank you once more for your continued co-operation in this valuable research project. Please do not hesitate to contact me (Tel; 0509 - 263171 ext. 4251) if you have any further questions regarding the research.

Yours sincerely,

Michael Waring

Enc.

APPENDIX B

- Introductory letter to parents

APPENDIX B

Dear Sir/Madam,

Your son/daughter has been involved in extremely valuable research with us at Loughborough University concerning their level of physical activity during the week and at the weekend. I have contacted *HEAD TEACHER'S NAME HERE* and they have given me permission to contact you. I am writing to you to ask if you would like to be involved in further research with the University. I would like to interview *NAME OF YOUNG PERSON HERE* in greater detail about their physical activity. It will involve me asking them more questions about the physical activities they have been involved in, both in and outside of school time. In addition to this I would also like to interview you (parents/guardian) about your child's physical activity.

I would want to interview you all on separate occasions and I would expect the interviews to last approximately 15-30 minutes. After the initial interview there may be a further follow up interview with yourself and your child, again on separate occasions.

The time and place of these interviews would be entirely up to you. Please could you fill in the form over the page and return it to me as soon as possible in the stamped addressed envelope provided. If you agree to further interviews, I will be in touch with you, through liaison with the school, in the near future. I sincerely hope that you will agree to be involved in this valuable research project. If you have any questions to ask, please do not hesitate to contact me on (0509) 263171 extension 4251 during working hours or - 235897 after 6pm.

Yours sincerely,

Michael Waring

Please delete as appropriate and return this form in the SAE provided to;

Michael Waring
Department of Physical Education and Sports Science,
Loughborough,
Leicestershire.
LE11 3TU

I/We_____, as parent(s)/guardian(s)

of _____ (name of son/daughter),

(PLEASE DELETE AS APPROPRIATE)

- **do not** object to further interviews with my/our child and myself/ourselves.

- **do** object to further interviews with my/our child and myself/ourselves

SIGNED _____

APPENDIX C

- Follow-up letter to non-respondent parents

APPENDIX C

Dear Sir/Madam,

I am re-contacting you about some research your son/daughter has been involved in with us at Loughborough University. This research concerns the level of physical activity of young people. Having already contacted *(name of head teacher)* they have given me permission to ask you if you would help us with further research we are doing at the University. I am sending you this second letter because I would still like to ask your son/daughter some more questions about their physical activity. I will be asking them more questions about those activities they have been involved with, both in and outside of school time. In addition to this I would also like to ask you some questions about your child's physical activity. This should take approximately 15 minutes on each occasion.

The time and place of these interviews would be entirely up to you. Please could you fill in the form over the page and return it to me as soon as possible in the stamped addressed envelope provided. I sincerely hope that you will agree to be involved in this valuable research project. If you have any questions to ask, please do not hesitate to contact me on (0509) 263171 extension 4251 during working hours or - 235897 after 6pm.

Yours sincerely,

Michael Waring

Enc.

Please delete as appropriate and return this form in the SAE provided to;

Michael Waring
Department of Physical Education and Sports Science,
Loughborough,
Leicestershire.
LE11 3TU

I/We_____, as parent(s)/guardian(s)

of _____ (name of son/daughter),

(PLEASE DELETE AS APPROPRIATE)

- **do not** object to further interviews with my/our child and myself/ourselves.

- **do** object to further interviews with my/our child and myself/ourselves

SIGNED _____

APPENDIX D

- Second letter to parents

APPENDIX D

Dear Sir/Madam,

I have just interviewed your son/daughter about the physical activities they are involved in and would now like to interview you about their activities. I have enclosed a form for you to fill in and return. The form asks for a location and a time that would be convenient for you to be interviewed. The interview should take approximately 20-30 minutes. If you have any questions to ask please do not hesitate to contact me on (0509) 235897 after 6pm..

When you have completed the form over the page can you return it to me as soon as possible in the stamped addressed envelope provided.

Once again I would like to thank you for your continued assistance and good will, it is very much appreciated.

Yours Sincerely,

Enc.

Name of the young person here

Dear Sir/Madam,

Please could you answer the following questions so that a time and a place, that is convenient for you, can be arranged for the interview. The interview should take approximately 20-30 minutes.

WHERE would you like the interview to take place?

WHEN would you like the interview to take place?

DO you have a contact telephone number?

Please return this form in the stamped addressed envelope provided to;

Michael Waring,
Department of Physical Education and Sports Science,
Loughborough University,
Loughborough
LE11 3TU

THANK YOU

APPENDIX E

- Interview Foundation Questions

    - Young People: Round One

                                      Round Two

                                      Round Three

    - Parents: Round One

APPENDIX E

REFERENCE NUMBER

MALE FEMALE	AGE	BROTHERS	No.	Age(s)
HA	LA	SISTERS		
		NONE		

FATHER'S OCCUPATION

MOTHER'S OCCUPATION

WHERE DO YOU LIVE?	WITH BOTH PARENTS	WITH MOTHER	WITH FATHER	WITH GRANDPARENTS

WHAT WOULD YOU SAY IS YOUR FAVOURITE ACTIVITY(IES) AT THE MOTMENT?

HAS THIS FAVORITE ACTIVITY CHANGED AT ALL, IF SO WHY?

WHO FIRST INTRODUCED YOU TO THIS/THESE ACTIVITY(IES)?

HOW MUCH EQUIPMENT DO YOU NEED FOR THE(SE) ACTIVITIES? (WHO SUPPLIES IT?)

IF YOU HAVE CHANGED OR LEFT ANY ACTIVITY,WHAT WERE YOUR REASONS FOR DOING SO?

ARE YOU CURRENTLY A MEMBER OF A CLUB OR A SOCIETY -IF SO WHAT IS/ARE THEY AND WHAT WERE YOUR REASONS FOR JOINING?

WHAT ACTIVITIES DO YOU DO IN THESE CLUBS AND WHERE DO YOU DO THEM?   (A) IN SCHOOL   (B) OUTSIDE OF SCHOOL

HOW MUCH DO THESE CLUBS/ACTIVITIES COST YOU? (& WHO PAYS FOR IT?)

HOW DO YOU USUALLY GET TO THESE CLUBS/ACTIVITIES?

WHO INITIALLY INDUCED/INTRODUCED YOU TO JOIN THE CLUB(S)?

DO YOU TAKE PART IN COMPETITIONS IN YOUR CLUB(S) OR ANY OTHER ACTIVITY(IES)?

IF YOU HAVE CHANGED OR LEFT A CLUB OR SOCIETY, WHAT WERE YOUR REASONS FOR DOING SO?

THERE ARE LOTS OF THINGS THAT YOU CAN DO TO WIND DOWN, AND GET YOURSELF FEELING BETTER AGAIN, WHAT DO YOU DO:

NEVER   SOMETIMES   FREQUENTLY   VERY OFTEN

SPEND TIME TAKING CARE OF MY APPEARANCE

TIRE MYSELF OUT DOING SOME KIND OF SPORT

JUST PHONE SOMEBODY UP

PLAY ON A COMPUTER GAME

BUY SOMETHING NEW

SWITCH OFF BY PRACTISING SPORT

GO AND SPEAK WITH A FRIEND

LISTEN TO MUSIC

RELAX IN A BATH

REALLY EXHAUST MYSELF DOING SPORT OR SOME PHYSICAL ACTIVITY

HAVE SOMETHING SPECIAL TO EAT

WATCH THE TELEVISION OR VIDEO

WHEN DO YOU NORMALLY WIND DOWN DURING YOUR DAY?

IS THERE ANYTHING ELSE THAT HAS NOT BEEN MENTIONED?

DO YOUR PARENTS SMOKE?

DO YOU SMOKE?

DO ANY OTHER MEMBERS OF YOUR FAMILY SMOKE?

DO YOU HAVE A JOB? IF SO WHAT IS IT AND WHY DID YOU DECIDE TO GET YOUR JOB? HOW OFTEN DO YOU WORK AND FOR HOW LONG?

DOES YOUR MOTHER PARTICIPATE IN ANY SPORTS (TO WHAT LEVEL?) AND/OR HAVE ANY HOBBIES?

DOES YOUR FATHER PARTICIPATE IN ANY SPORTS (TO WHAT LEVEL?) AND/OR HAVE ANY HOBBIES?

DO ANY OTHER MEMBERS OF YOUR FAMILY PARTICIPATE IN SPORT? (& IF SO TO WHAT LEVEL?)

DO YOU DO ANY ACTIVITIES ALONE THAT YOU WOULD NOT CONSIDER DOING IF THERE WAS A GROUP OF YOU AND VICE VERSA?

WHEN DO YOU HAVE THE MOST SPARE TIME DURING YOUR DAY?

WHAT FACILITIES DO YOU KNOW EXIST FOR YOU TO PARTICIPATE IN PHYSICAL ACTIVITIES OUTSIDE OF SCHOOL IN YOUR LOCAL AREA THAT YOU CAN GE TO BY: A - WALKING   B - BY CAR

IF YOU GO TO ANY ACTIVITIES OUTSIDE OF SCHOOL HOURS HOW DO YOU USUALLY GET TO THEM IF THEY ARE: A- AT SCHOOL AND B- ELSEWHERE?

WHEN DO YOU ENJOY PHYSICAL ACTIVITY THE MOST/LEAST?

DO YOU GET ANY POCKET MONEY? IF SO HOW DO YOU USE MOST OF IT?

DO ANY OF THE FOLLOWING DESCRIBE YOUR RELATIONSHIP
WITH YOUR FRIENDS?

I am in a clique. We meet regularly and know each other well

I am friends with different people or groups. We rarely do things together.

I have a boy/girlfriend.

I am usually alone. I am not really part of a certain circle of friends or a clique.

If none of these, how would you describe your relationships?

OF THE ACTIVITIES AND SPORTS THAT HAVE BEEN MENTIONED DO YOU
PRACTISE/PLAY THEM WITH FRIENDS, AND IF SO, IS IT IN A WHOLE
GROUP OF YOU OR WITH JUST A BOYFRIEND OR GIRLFRIEND?

WHEN YOU PLAY SPORTS OR ANY OF THE OTHER ACTIVITIES WITH
FRIENDS, ARE THESE FRIENDS ONLY BOYS; ONLY GIRLS; BOYS
AND GIRLS; IT VARIES.

WHAT ARE THE ACTIVITIES THAT YOU USUALLY DO WHEN
THERE IS A GROUP OF YOU?
WHERE DO YOU USUALLY DO THESE ACTIVITIES AND WHEN?

WHAT ARE THE ACTIVITIES THAT YOU USUALLY DO WHEN
YOU ARE WITH A BOYFRIEND?
WHERE DO YOU USUALLY DO THESE ACTIVITIES AND WHEN?

WHAT ARE THE ACTIVITIES THAT YOU USUALLY DO WHEN
YOU ARE WITH A GIRLFRIEND?
WHERE DO YOU USUALLY DO THESE ACTIVITIES AND WHEN?

DO YOU DO ANY ACTIVITIES OR PRACTISE ANY SPORTS
WITH ANY MEMBERS OF YOUR FAMILY;
    WITH YOUR FATHER
    WITH YOUR MOTHER
    WITH YOUR MUM AND DAD
    WITH YOUR BROTHER
    WITH YOUR SISTER
    WITH THE WHOLE FAMILY?

WHEN YOU PRACTISE SPORT WITH YOUR FATHER AND OR
MOTHER WHAT DO YOU ACTUALLY DO? WHERE AND WHEN?

WHAT ACTIVITIES DO YOU DO WITH YOUR BROTHER AND
SISTER(S) WHAT KINDS OF THINGS DO YOU ACTUALLY DO
WHEN AND WHERE DO YOU DO IT?

WHAT ACTIVITIES DO YOU DO WITH THE WHOLE FAMILY, WHAT
KINDS OF THINGS DO YOU DO, WHERE AND WHEN DO YOU DO IT?

314

WHEN YOU PRACTISE PHYSICAL ACTIVITIES/ SPORTS OF ANY KIND
WHAT ARE THE MAIN REASONS FOR YOU DOING IT:WHEN;

1 - You are with a group of friends?

2 - You are at a club?

3 - You are with the family?

4 - You are with brother(s) and/or sister(s)?

5 - You are with School?

6 - You are on your own?

HOW DO YOU SEE YOURSELF;   1 - non-athlete,
                            2 - hobby athlete,
                            3 - competitive athlete,
                            4 - top competitive athelte

WOULD YOU CHANGE THE SHAPE OF YOUR BODY?

GIVE AN ESTIMATION OF YOUR OWN ABILITY IN TERMS OF SPORT
AND THE OTHER ACTIVITIES THAT YOU MAY HAVE MENTIONED;

**WITH THE FOLLOWING STATEMENTS TELL ME TO WHAT EXTENT
EACH APPLIES TO YOU ON A SCALE 1 - 4
(1 = DOES NOT APPLY TO ME/ 4 EXACTLY APPLIES TO ME)**

I TAKE CARE TO BE PHYSICALLY FIT

I WATCH MY WEIGHT (HOW)

I WASH MY HAIR REGULARLY

I THINK CLEAN CLOTHES ARE IMPORTANT

I PRACTISE SPORT REGULARLY

COMPARED WITH OTHERS/FRIENDS I AM HEALTHY

I ENJOY LOOKING AT MYSELF IN THE MIRROR

SOMETIMES I AM AFRAID OF NOT BEING HEALTHY

I REGULARLY USE DEODERANT

I REGULARLY EXERCISE MY BODY (HOW OFTEN?)

I THINK IT IS IMPORTANT TO HAVE A SHOWER OR A BATH REGULARLY

SECOND ROUND
(FOUNDATION QUESTIONS)

• HOW OLD ARE YOU NOW?

• WHAT IS YOUR FAVOURITE ACTIVITY AT THE MOMENT?

Is that a different activity from the last time we spoke?

If it is what made you take it up?

Do you still do the activities we discussed last time? If no/yes why?

Have you taken-up any new activities and dropped any of them since last we spoke?

Have you joined any new clubs? Why?

At those clubs that you attend what are the people who run them like?

• WHAT WOULD YOU SAY ARE THE MOST IMPORTANT THINGS THAT HAVE HAPPENED TO YOU SINCE THE LAST TIME WE SPOKE;

a) at school?

b) at home?

c) with your friends?

d) anywhere else?

• BOREDOM

Do you get bored?

When are you most likely to get bored?

How long does it take you before you get bored?

When you are bored describe how you feel?

What do you do to get rid of the boredom?

What do you find the most enjoyable thing you can do is?

Why is it enjoyable?

Can you describe enjoyable?

When are you most likely to have fun?

Describe fun

• ARE THE FRIENDS THAT YOU HAVE AT HOME THE SAME AS THOSE FRIENDS THAT YOU HAVE AT SCHOOL?

• WHICH OF YOUR FRIENDS WOULD YOU SAY ARE MOST IMPORTANT TO YOU? WHY?

• IF YOU ARE WITH A MIXED GROUP OF FRIENDS (MIXED SEX) WHO WOULD DECIDE ON THE ACTIVITY THAT YOU WILL BE DOING;

     A AT SCHOOL

     B AT HOME

     C ELSEWHERE

• WHY DO YOU PLAY IN MIXED SEX GROUPS;

     A AT SCHOOL

     B AT HOME

     C ELSEWHERE

• WHY WOULD YOU PLAY IN SINGLE SEX GROUPS?

• IF YOU ARE WITH YOUR BOY/GIRLFRIEND AND IN A GROUP WOULD THEY ALL BE THEIR FRIENDS OR YOURS?   WHO KNEW THEM FIRST?

• WHAT KINDS OF IMAGE WOULD YOU LIKE TO PRESENT OF YOURSELF IN FRONT OF;

     A YOUR MUM

     B YOUR DAD

     C YOUR FRIENDS? (IS IT DIFFERENT FOR DIFFERENT FRIENDS - IF SO IN WHAT WAYS?)

     D YOUR BROTHER

     E YOUR SISTER

     F YOUR TEACHER(S)

     G IN FRONT OF ANYONE ELSE?

• HOW DO YOU MANAGE TO ACHIEVE THE IMAGES YOU WANT?

• WHAT KIND OF IMAGE BOTH IN TERMS OF CLOTHES AND ACTIVITIES IS MOST CREDIBLE FOR YOU AND YOUR FRIENDS?

• DO YOU THINK GIRLS AND BOYS HAVE THE SAME IMAGE THEY PRESENT?

• WHAT DO YOU THINK THAT IMAGE IS FOR; BOYS

                                 GIRLS

317

• DO YOU PLAY ANY COMPUTER GAMES?

• WHEN DO YOU PLAY?

• WHERE DO YOU PLAY?

• HOW MUCH TIME DO YOU SPEND?

• FROM YOUR FAMILY WHO DO YOU THINK PLAYS VIDEO GAMES THE MOST IN THE HOME?

• DO YOU PLAY ALONE?

• WHICH MEMBER OF YOUR FAMILY DO YOU NORMALLY PLAY COMPUTER GAMES WITH?

• IF YOU WERE INVOLVED IN A PHYSICAL ACTIVITY OF ANY KIND, WHAT KINDS OF THINGS WOULD MAKE YOU STOP DOING THAT ACTIVITY?

• DO YOU READ MUCH?

• HOW REGULARLY DO YOU READ?

• WHAT DO YOU READ?

• WHO DO YOU THINK YOU HAVE MOST THINGS IN COMMON WITH?
    (WHAT THINGS ARE THEY)

• WHEN ARE YOU MOST RUSHED FOR TIME -
                    A AT SCHOOL
                    B AT HOME
                    C ELSEWHERE

• WHO DO YOU THINK HAS THE MOST INFLUENCE ON YOU? AND WHY?

• IF YOU ARE WITH A GROUP OF FRIENDS WHO DECIDES WHAT ACTIVITIES YOU WILL DO?
                    A AT SCHOOL
                    B AT HOME
                    C ELSEWHERE?

• CAN YOUR FRIENDS PRESSURE YOU INTO DOING THINGS THAT THEY WANT TO DO? • IN WHAT WAY AND WITH WHAT ACTIVITIES?

• ARE EITHER OF THESE IMPORTANT TO YOU;

A) TO LOOK GOOD IN FRONT OF YOUR FRIENDS OR OTHER PEOPLE
B) THE KIND OF FEELINGS YOU GET WHEN YOU PARTICIPATE IN PHYSICAL ACTIVITIES
- WHICH WOULD YOU SAY IS MOST IMPORTANT TO YOU AND WHY?

- DO YOU THINK PARENTS SHOULD GIVE YOU INDEPENDENCE TO DO THINGS ON YOUR OWN?
- WHAT THINGS SHOULD THEY LET YOU DO AND WHEN?
- WHAT THINGS DO YOU THINK YOU SHOULD BE ALLOWED TO DO NOW, THAT YOU ARE NOT ALLOWED TO DO? WHY?
- WHAT KIND OF ACTIVITIES SHOULD YOU BE ALLOWED TO ORGANISE DO YOURSELF AND WHERE?

- ARE YOU ALLOWED TO TRAVEL ALONE ON PUBLIC TRANSPORT?
- IF SO WHEN AND WHERE TO?
- HOW LONG HAVE YOUR PARENTS LET YOU DO THIS?

- WHEN DO YOU THINK YOU SHOULD BE ALLOWED TO TRAVEL ALONE/ WITH FRIENDS TO PLACES?

- WHAT TIMES DO YOU THINK ARE FAIR TO LET YOU COME BACK IN/STAY OUT TILL? AND WHY?

- ARE YOU FORCED TO DO ANYTHING THAT YOU DISLIKE?

- ARE YOU FORCED TO DO ANYTHING THAT YOU DON'T MIND/QUITE ENJOY?

- IF YOU GO SOMEWHERE WITH THE FAMILY OR A MEMBER OF THE FAMILY (PARENT OR BROTHER OR SISTER) WOULD YOU EVER TAKE A FRIEND WITH YOU?

- WHAT MAKES IT BETTER WHEN YOU TAKE A FRIEND WITH YOU?

- GIVEN A SITUATION WHEN YOU ARE DOING SOME KIND OF ACTIVITY WHEN WOULD IT BECOME SOMETHING YOU DID NOT WANT TO DO ANYMORE?

- DO YOU THINK THERE ARE ANY REWARDS FROM PHYSICAL ACTIVITY?

• OF THESE REWARDS YOU'VE MENTIONED DO YOU THINK YOU GET ANY OF THEM FROM THE THINGS YOU DO?

• WHICH PERSON WOULD YOU SAY YOU ARE MOST LIKE?
  WHY?

• WOULD YOU BE PREPARED TO TRY ANY ACTIVITY - OR ARE THERE ANY THINGS THAT YOU WOULDN'T TRY?

• WHERE WOULD YOU SAY YOU DO MOST ACTIVITIES?

• IS PHYSICAL ACTIVITY EVER BETTER DONE AWAY FROM HOME OR IN THE HOME? WHEN AND IN WHAT WAY?

• HOW DO YOU GET TO PLACES TO DO ACTIVITIES?

• WOULD YOU BE INVOLVED IN THE SAME ACTIVITIES IF YOU WERE NOT TAKEN TO PLACES BY PEOPLE? WHY?

• WHAT DO YOU THINK YOUR PARENTS ARE MOST CONCERNED ABOUT WHEN YOU GO OUT AND DO PHYSICAL ACTIVITIES/ACTIVITIES AWAY FROM HOME -
                    A AT SCHOOL
                    B WITH A FRIEND
                    C ANYWHERE ELSE

• ARE ANY OF THE ACTIVITIES YOUR PARENTS DO THE SAME AS THE ONES YOU DO?

• IF YES WHO DID THEM FIRST?
• IF NO, HAS THIS EVER BEEN THE CASE IN THE PAST, BUT SINCE CHANGED?

• DO YOU DO ANY ACTIVITIES TOGETHER WITH YOUR PARENTS?

• HOW DO YOU GET THE MONEY YOU NEED TO DO THINGS?

- CAN YOUR PARENTS PERSUADE YOU TO DO THINGS THEY WANT YOU TO DO?   • LIKE WHAT AND WHEN?

- WHAT ARE THE TWO THINGS THAT YOU WOULD BE PREPARED TO SPEND THE MOST TIME DOING? AND WHY?

- WHAT KIND OF THINGS STOP YOU DOING THE KIND OF THINGS YOU LIKE DOING?

- HAVE YOU HAD A JOB?
- WHY YOU YOU HAVE A JOB?
- HAS IT CHANGED AT ALL, FOR WHAT REASONS?

- DO YOU EVER HAVE COMMITMENTS THAT CLASH?
- DOES ANYONE IN THE FAMILY HAVE COMMITMENTS THAT CAUSE YOU TO MISS OR TO DO THINGS YOU WOULDN'T NORMALLY GO TO?

THIRD ROUND
(FOUNDATION QUESTIONS)

• WHO DO YOU KNOW FROM YOUR FAVOURITE ACTIVITY THAT YOU KNOW FROM SCHOOL/ ELSEWHERE?

• WHAT THINGS DO YOU DO WITH YOUR PETS?

• DO YOUR FRIENDS HAVE A DOG/PETS?

• WHAT KINDS OF THINGS DO THEY DO WITH THEIR PETS?

• DO YOU DO ANY ACTIVITIES THAT INVOLVES YOUR FRIENDS AND THEIR PETS/DOGS?
> WHAT?
> WHEN?
> WHERE?
> WHY?

• WHAT MAKES YOUR FRIENDS YOUR FRIENDS?

• WHICH PLACES WOULD YOU SAY YOU VISIT THE MOST?
  WHAT YOU DO THERE?

• WHAT DO YOU THINK BEING ORGANISED MEANS?

• TELL ME HOW ORGANISED YOU ARE.

• ARE YOUR FRIENDS ORGANISED?

• IF YOU ARE AT A LOOSE END WHO NORMALLY SUGGESTS AND ACTIVITY FOR YOU TO DO?

• IF YOU DO AN ACTIVITY OF ANY KIND, WHAT IS THE MOST IMPORTANT THING TO GET FROM IT?

• DOES ANYTHING FRIGHTEN YOU?
> WHEN, WHERE, WHY?
> DO YOUR THINK YOUR FRIENDS ARE THE SAME?

• DO YOUR FRIENDS COPY YOU AT ALL?

        WHY?

        WIIEN

        WHERE?

• CAN YOU ALWAYS MAKE THE CHOICES YOU WANT ABOUT THE
THINGS YOU WANT TO DO?

        WHEN?

        WHERE?

• IN WHAT WAYS DO THE THINGS YOU DO DEPEND ON OTHER PEOPLE?

        (YOUR PARENTS,

        YOU

        OTHER RELATIONS

        YOUR FRIENDS

        THE PARENTS OF YOUR FRIENDS

        OTHER PEOPLE)

• WOULD YOU SAY YOU PREFER THE PRESENCE OF PEOPLE OF YOUR
OWN AGE OR OLDER/YOUNGER ONES

        WHY?

        WHEN?

        WHERE?

• WHAT THINGS ARE YOU FORCED TO DO;

        AT HOME?

        AT SCHOOL

        ELSEWHERE?

• WHAT THINGS ARE YOUR FRIENDS FORCED TO DO

        AT HOME?

        AT SCHOOL

        ELSEWHERE?

• DO YOU HAVE ENOUGH TIME TO DO WHAT YOU WANT TO?

• WHAT DO YOU SPEND MOST TIME DOING?

- WHAT DO YOUR FRIENDS SPEND MOST TIME DOING?

- WHAT DO YOU PARENTS SPEND MOST TIME DOING?

- WHEN DO YOU FEEL MOST PRESSURED INTO DOING THINGS;
        AT HOME?
        AT SCHOOL?
        ELSEWHERE?

- WHY DO YOU LIKE BEING WITH THE FRIENDS THAT YOU HAVE GOT?

- WHAT ARE THE THINGS YOU DO WITH YOUR BROTHER?
- WHAT ARE THE THINGS YOU DO WITH YOUR SISTER?

- DO THEY JOIN IN WITH ANY OF YOUR ACTIVITIES?

- IF YOU WERE TO DROP AN ACTIVITY BECAUSE YOU DID NOT HAVE ENOUGH TIME WHAT WOULD IT BE AND WHY?

- WHAT DOES SKILFULNESS MEAN TO YOU?

- WHEN DO YOU THINK IT IS MOST IMPORTANT FOR YOU TO HAVE SKILFULNESS?

PARENTAL INTERVIEW (FOUNDATION QUESTIONS)

REFERENCE NUMBER

MALE FEMALE	AGE

WHAT WOULD YOU SAY IS YOUR CHILD'S FAVOURITE ACTIVITY(IES) AT THE MOTMENT?

WHAT WOULD YOU SAY IS/ARE YOUR OTHER CHILD/RENS FAVOURITE ACTIVITY(IES) AT THE MOTMENT?

HAS THIS FAVORITE ACTIVITY CHANGED AT ALL, IF SO FROM WHAT?

IF YOUR CHILD HAS CHANGED OR LEFT ANY ACTIVITY,WHAT DO YOU THINK WERE THEIR REASONS FOR DOING SO?

WHO FIRST INTRODUCED YOUR CHILD TO THIS/THESE ACTIVITY(IES)?

IS YOUR CHILD CURRENTLY A MEMBER OF ANY KIND OF CLUB OR SOCIETY - AND WHAT WERE YOUR REASONS FOR JOINING?

WHO INITIALLY INTRODUCED YOUR CHILD TO JOIN THE CLUB(S)?

WHAT KINDS OF ACTIVITIES DO THEY DO AT THESE CLUBS AND WHERE DO THEY DO THEM?   (A) IN SCHOOL   (B) OUTSIDE OF SCHOOL

HOW MUCH DO THESE CLUBS/ACTIVITIES COST? (& WHO PAYS FOR IT?)

HOW MUCH EQUIPMENT DO YOU NEED FOR THE(SE) ACTIVITIES? AND WHO USUALLY SUPPLIES IT?)

HOW DOES YOUR CHILD USUALLY GET TO THEIR CLUBS/ACTIVITIES?

DOES YOUR CHILD TAKE PART IN COMPETITIONS IN THEIR CLUB(S) OR
ANY OTHER ACTIVITY(IES)?

IF YOUR CHILD HAS CHANGED OR LEFT A CLUB OR SOCIETY,
WHAT DO YOU THINK WERE THEIR REASONS FOR DOING SO?

**THERE ARE DIFFERENT RELATIONSHIPS PEOPLE CAN HAVE WITH
FRIENDS, HOW WOULD YOU DESCRIBE YOUR SON/DAUGHTERS
RELATIONSHIPS WITH THEIR FRIENDS;**

OF THE ACTIVITIES AND SPORTS THAT HAVE BEEM MENTIONED DOES YOUR
CHILD PRACTISE/PLAY THEM WITH FRIENDS?

IS IT USUALLY IN A WHOLE GROUP OF FRIENDS OR IS IT WITH A PARTICULAR
BOY OR GIRLFRIEND?

IF YOUR CHILD DOES PLAY SPORTS OR ANY OF THE OTHER ACTIVITIES WITH
FRIENDS, ARE THESE FRIENDS ONLY BOYS; ONLY GIRLS; BOYS
AND GIRLS; OR DOES IT VARY?

WHAT ARE THE ACTIVITIES THAT YOUR CHILD USUALLY DOES WHEN
THERE IS A GROUP OF THEM?
WHERE DO YOU USUALLY DO THESE ACTIVITIES AND WHEN?

WHAT ARE THE ACTIVITIES THAT YOUR CHILD USUALLY DOES WHEN
THEY ARE WITH A BOYFRIEND?
WHERE DO THEY USUALLY DO THESE ACTIVITIES AND WHEN?

WHAT ARE THE ACTIVITIES THAT YOUR CHILD USUALLY DOES WHEN
THEY ARE WITH A GIRLFRIEND?
WHERE DO THEY USUALLY DO THESE ACTIVITIES AND WHEN?

DOES YOUR CHILD DO ANY ACTIVITIES OR PRACTISE ANY SPORTS
WITH ANY MEMBERS OF YOUR FAMILY;

    WITH ONE PARTICULAR PARENT
    WITH BOTH PARENTS
    WITH THEIR BROTHER
    WITH THEIR SISTER
    WITH THE WHOLE FAMILY?

WHEN YOUR CHILD PRACTISES SPORT WITH YOU (FATHER AND OR
MOTHER) WHAT DO YOU ACTUALLY DO? WHERE AND WHEN?

WHAT KINDS OF ACTIVITY DOES THE WHOLE FAMILY DO TOGETHER,
WHERE AND WHEN DO YOU DO IT?

WHAT DO YOU THINK ARE THE MOTIVATING FACTORS MAIN REASONS
FOR YOUR CHILD PARTICIPATING IN IN PHYSICAL ACTIVITIES/SPORTS?

- When they are with a group of friends?

- When they are at a club?

- When they are with the family?

- When they are with brother(s) and/or sister(s)?

- When they are with School?

- When they are on your own?

HOW WOULD YOU DESCRIBE YOUR CHILD?   non-athlete,
    hobby athlete,
    competitive athlete,
    top competitive athelte

DO YOU THINK YOUR CHILD HAPPY WITH THE SHAPE OF THEIR BODY?

HOW WOULDS YOU ESTIMATE YOUR CHILD'S ABILITY IN TERMS OF SPORT
AND THE OTHER ACTIVITIES THAT YOU HAVE MENTIONED;
Very good at a certain kind of sport/activity
Very good at various kinds of sports/activities
Fairly good at various kinds of sports/activities
Not good at sport/activities at all
I don't participate in sport at all

WITH THE FOLLOWING STATEMENTS TELL ME TO WHAT EXTENT DO YOU THINK EACH APPLIES TO YOUR CHILD ON A SCALE 1 - 4
(1 = DOES NOT APPLY TO THEM/ 4 EXACTLY APPLIES TO THEM)

THEY TAKE CARE TO BE PHYSICALLY FIT

THEY WATCH THEIR WEIGHT (HOW)

THEY WASH THEIR HAIR REGULARLY

THEY THINK CLEAN CLOTHES ARE IMPORTANT

THEY PRACTISE SPORT REGULARLY

THEY ENJOY LOOKING AT THEMSELVES IN THE MIRROR

DO YOU THINK THEY ARE AFRAID OF NOT BEING HEALTHY?

THEY REGULARLY USE DEODERANT

THEY REGULARLY EXERCISE THEIR BODY

THEY THINK IT IS IMPORTANT TO HAVE A SHOWER OR A BATH EVERY DAY

THERE ARE LOTS OF THINGS THAT PEOPLE CAN DO TO WIND DOWN, AND GET THEMSELVES FEELING BETTER AGAIN, WHAT DOES YOUR CHILD DO?

NEVER   SOMETIMES   FREQUENTLY   VERY OFTEN

SPEND TIME TAKING CARE OF THEIR APPEARANCE

TIRE THEMSELVES OUT DOING SOME KIND OF SPORT

JUST PHONE SOMEBODY

PLAY ON A COMPUTER GAME

BUY SOMETHING NEW

SWITCH OFF BY PRACTISING SPORT

SPEAK WITH A FRIEND

LISTEN TO MUSIC

RELAX IN A BATH

HAVE SOMETHING SPECIAL TO EAT

WATCH THE TELEVISION OR VIDEO

WHEN DOES YOUR CHILD NORMALLY WIND DOWN DURING THEIR DAY?

IS THERE ANYTHING ELSE THAT YOUR CHILD DOES TO WIND DOWN THAT HAS NOT BEEN MENTIONED?

DO YOU SMOKE?

DOES YOUR CHILD SMOKE?

DO ANY OTHER MEMBERS OF YOUR FAMILY SMOKE?

DOES YOUR CHILD HAVE A JOB? IF SO WHY DO YOU THINK THEY GOT THE JOB? HOW OFTEN DO THEY WORK AND FOR HOW LONG?

DO YOU (MOTHER) PARTICIPATE IN ANY SPORTS (TO WHAT LEVEL?) AND/OR HAVE ANY HOBBIES?

DO YOU (FATHER) PARTICIPATE IN ANY SPORTS (TO WHAT LEVEL?) AND/OR HAVE ANY HOBBIES?

DO ANY OTHER MEMBERS OF THE FAMILY PARTICIPATE IN SPORT? (& TO WHAT LEVEL?)

DOES YOUR CHILD DO ANY ACTIVITIES ALONE THAT THEY DO NOT DO WHEN THERE IS A GROUP OF FRIENDS OR VICE VERSA? WHY?

WHAT FACILITIES DO YOU KNOW EXIST FOR YOUR CHILD TO PARTICIPATE IN PHYSICAL ACTIVITIES OUTSIDE OF SCHOOL IN YOUR LOCAL AREA?

IF YOUR CHILD GOES TO ANY ACTIVITIES HOW DO THEY USUALLY GET TO THEM?

DOES IT VARY?

WHEN DO YOU THINK YOUR CHILD ENJOYS PHYSICAL ACTIVITY THE MOST/LEAST? AND WHY?

APPENDIX F

- Interview protocol: young people

APPENDIX F

PROTOCOL FOR YOUNG PERSON INTERVIEWS

• Prior to the interview all the equipment required for that interview should be checked, as well as spares (batteries, dictaphone, cassettes, pens and paper, interview guide) included with the primary interviewing equipment.

• Each young person will be greeted by christian name by the interviewer.

• The physical organisation of the interview situation will be that of a table with two chairs situated at the same side, or where a table is not available two chairs side by side standing alone in a quite undisturbed environment. The dictaphone and questionnaire will be made clearly visible. Whatever the organisation, in whatever setting, it should remain as consistent as possible, given that it is in what can be considered an appropriate situation in the first instance.

• The introduction of the interviewer in the first interview will start with a reminder to the interviewee that they are from Loughborough University. They will then be informed that this conversation is an extension of the work they helped with the previous year, which asked them about the time they spent on activities on the previous day.

• In subsequent interviews, the interviewer will introduce the interview as an extension of the last one with the desire to ask more questions about what they had discussed before and to see if there had been any changes to those activities they were involved in and the consequences and feelings which led to such changes and their current opinions.

• It will be emphasised to the interviewee that the information which they give me will not be used by anyone else, other than myself and so will be completely confidential, whatever they may say. The interviewee will be further encouraged, through the sympathetic and friendly manner of the interviewer, to be as honest and truthful in their responses as they can be.

• It will be emphasised that this is not a test and there can be no right or wrong answers to any of the questions. It will be emphasised that if there are any questions which they do not want to answer, they should just say so and the interviewer will move onto the

next question. Also, if at any time the interviewee wishes to stop the interview, all they have to do is say they would like it to be stopped.

- The interviewee will be encouraged to ask any questions they would like to, at any point during the interview.

- On this basis the interviewee will then be asked if they have any objections to the interview being taped. At this point it will be stressed that this is purely to enable me to concentrate on asking questions rather than writing down things so that I can remember them. As this is being said the interviewer will place the dictaphone next to the interviewee and shown to them, giving them the opportunity to inspect and familiarise themselves with it.

- Having gained the agreement of the interviewee, the dictaphone will be placed in the centre of the table, or between the interviewee and interviewer and its operation explained to them. The voices of the interviewer and the interviewee will then be recorded and played back in an attempt to familiarise the interviewee with the product and alleviate potential apprehension and tension that may exist.

- At this point it will be explained to the interviewee that the purpose of the interview is to find out what kinds of activities and hobbies you are involved with, both inside and outside of school. This does not only mean what you actually did yesterday, but all the things you may have done in the past, do now and/or intend to do in the future. This is a lot of things to remember so to help them in this retrieval of information, it will be explained that there are very loose sections to the interview. These sections could be broken down into general information about the young person; involvement in activities; friends and relationships; perceptions of self; and general questions.

- Before commencing with the interview and tape recording, the interviewee will be asked if they have any questions they want to ask and whether they are happy to continue.

- Many of the questions in this and subsequent sections of the interview are extremely open ended and will require further questioning and probing on behalf of the interviewer. The nature and direction of the interview will, therefore, be determined by the responses given by the young person to that initial question. Probing techniques described by Gordon (1975); 'silent' (pausing and waiting for responses) and 'neutral' (I see...ummm....uhhh response from the interviewer), as well as Schatzman and Strauss's (1973); chronology (...and then?; What was that?), detail (Tell me more

about that; That's very interesting), *clarification* (I don't quite understand?; But you said earlier...) and *explanation* (Why?; How come?) will be employed to do this.

• In conclusion to the interview the interviewee will once again be given the chance to ask any other questions they may have. They will also be thanked for their time and effort in taking part in the interview, and the potential for follow-up interviews noted. Interviewees will be informed of the desire to see them again to do follow-up interviews, and asked if contact by telephone remains acceptable to them.

• Immediately after completion of the interview it should be reflected upon in writing by the interviewee, noting the organisation of the environment in which the interview took place, as well as other things which the tape recorder could not record, such as the body posture of the interviewee, their facial expressions and any other observations. The feelings of the interviewer during and after the interview will also be included.

APPENDIX G

- Interview protocol: parents

APPENDIX G

PROTOCOL OUTLINE FOR PARENTAL INTERVIEWS

• Prior to the interview all the equipment required for that interview should be checked, as well as spares (batteries, dictaphone, cassettes, pens and paper, interview guide) included with the primary interviewing equipment.

• The physical organisation of the interview situation will be one which is determined by the parent(s), however, it should be one which is in as quite and as undisturbed environment as possible. The presence of the young person is not required, unless requested by the parent. The dictaphone and questionnaire will be made clearly visible.

• The introduction of the interviewer in the first interview will start with a reminder to the interviewee that they are from Loughborough University. They will then be informed that this conversation is an extension of the work their son/daughter has been helping me with and which started the previous year and which asked them about the time they spent on activities on the previous day.

• It will be stated that the questions which they will be asked are the same as those asked of their son/daughter.

• It will be emphasised to the interviewee that the information which they give me will not be used by anyone else, other than myself and so will be completely confidential, whatever they may say. The interviewee will be further encouraged to be as honest and truthful in their responses as they can be.

• It will be emphasised that this is not a test and there can be no right or wrong answers to any of the questions. It will be also be emphasised that if there are any questions which they do not want to answer, they should just tell the interviewer, who will move on to the next question. Also, if at any time the interviewee wishes to stop the interview, all they have to do is say so and the interview will be terminated.

• The interviewee will be told that they can ask any questions they would like to, at any point during the interview.

• On this basis the interviewee will then be asked if they have any objections to the interview being taped. At this point it will be stressed that this is purely to enable me to

concentrate on asking questions rather than writing down things so that I can remember them. As this is being said the interviewer will place the dictaphone next to the interviewee and shown to them, giving them the opportunity to inspect and familiarise themselves with it.

• Having gained the agreement of the interviewee, the dictaphone will be placed in the centre of the table, or between the interviewee and interviewer and its operation explained to them.

• At this point it will be explained to the interviewee that the purpose of the interview is to find out what kinds of activities and hobbies their son/daughter is presently involved in, both inside and outside of school, as well as their own and their child's feelings about numerous aspects. It is emphasised that this is not constrained to those activities their son/daughter actually did yesterday, but all the things they may have done in the past, do now and/or intend to do in the future. It will be explained that there are very loose sections to the interview. These sections can be broken down into general information about the young person; involvement in activities; friends and relationships; perceptions of self; and general questions.

• Before commencing with the interview and tape recording, the interviewee will be asked if they have any questions they want to ask and whether they are happy to continue.

• Many of the questions in this and subsequent sections of the interview are extremely open ended and will require further questioning and probing on behalf of the interviewer. Probing techniques described by Gordon (1975); 'silent' (pausing and waiting for responses) and 'neutral' (I see...ummm....uhhh response from the interviewer), as well as Schatzman and Strauss's (1973); chronology (...and then?; What was that?), detail (Tell me more about that; That's very interesting), clarification (I don't quite understand?; But you said earlier...) and explanation (Why?; How come?) will be employed to facilitate this. The nature and direction of the interview will, therefore, be determined by the responses given by the parent to the initial questions and their relationship with what their child said and any other relevant questions which the researcher can think of asking to follow them up.

• In conclusion to the interview the interviewee will once again be given the chance to ask any other questions they may have. They will also be thanked for their time and effort in taking part in the interview, and the potential for follow-up interviews noted.

Interviewees will be informed of the desire to see their children again to do follow-up interviews, and asked if contact by telephone remains acceptable.

• Immediately after completion of the interview it should be reflected upon in writing by the interviewee, noting the organisation of the environment in which the interview took place, as well as other things which the tape recorder could not record, such as the body posture of the interviewee, their facial expressions and any other observations. The feelings of the interviewer during and after the interview will also be included.

APPENDIX H

- Standard ethical protocol

APPENDIX H

STANDARD ETHICS PROTOCOL

(To be read by interviewer before the beginning of the interview. One copy of this form should be left with the respondent, and one copy should be signed by the respondent and kept by the interviewer.)

Hi, my name is _____. I am a researcher/research assistant on a project entitled:_____

This project is being sponsored by the Department of _____ at the University of_____.

I am (Professor X is) the principal investigator of this project and I (he/she) may be contacted at this phone number _____ should you have any questions. Thank you for your willingness to participate in this research project. Your participation is very much appreciated. Just before we start the interview, I would like to reassure you that as a participant in this project you have several very definite rights.

> First, your participation in this interview is entirely voluntary.
> Your are free to refuse to answer any question at any time.
> You are free to withdraw from the interview at any time.
> This interview will be kept strictly confidential and will be available only to members of the research team.
> Exerts of this interview may be part of the final research report, but under no circumstances will your name or identifying characteristics be included in this report.

I would be grateful if you would sign this form to show that I have read you its contents.

_____ (signed)
_____ (printed)
_____ (dated)

Please send me a report on the results of this project. (circle one)

               YES   NO

address for those requesting research report:

_____
_____
_____
_____

(Interviewer: keep signed copy; leave unsigned copy with respondent)

(McCracken, 1988: 69)

APPENDIX I

- Letters from Glaser to Strauss

APPENDIX I

On September 23, 1991 I (Barney Glaser) wrote Anselm Strauss, my co-originator of Grounded Theory, the following letter:

I am writing you in response to your phone call last Friday night (9/20) during which you said that you will do nothing to either recall or change the Basics of Qualitative Research book, nor will you listen to any further critique from me.

Your response is totally unacceptable to me. As co-originator of ground theory, my response to yours is;

In 1967 we developed together the conceptions of grounded theory set forth in our book, the Discovery of Grounded Theory. In 1988 you published Basic Qualitative Research, which misconceives our conceptions on grounded theory to an extreme degree, even destructive degree. Furthermore you implied throughout the book my complete endorsement of these misconceptions, which further is very destructive to me and my creativity and my cherished contribution to the field of research methodology.

Therefore, I demand that you withdraw the book pending a rewriting of it. And then you and I sit down and go through each page of the book to iron out what I consider to be the misconceptions and then rewrite the book by mutual consent. Or, you rewrite the book deleting all the tie-in references to me and to grounded theory, subject to my approval that you have done so.

The problem will not go away until solved. And I will persist until it is.

Sincerely,

Barney

In January of 1991, 9 months before the above letter, Glaser had written the following letter:

Dear Ans:

I have read most of your letter to me. My response is that your experimental history may explain, partially as I see it, but it does not excuse a 'wrong doing.' As co-originator of grounded theory, I request that you pull the book (Basics of Qualitative Research). It distorts and misconceives grounded theory, while engaging in a gross neglect of 90% of its important ideas. With you as its legitimator, the misconceptions cannot be withstood or explained away. Your and Julie's book clearly indicates that you have seen yourselves exempt from doing the necessary study,

scholarship and research to check out your work with what has gone on before, and thereby doing the necessary footnoting and analyzing and integrating of your ideas with what has gone on previously in Discovery of Grounded theory and Theoretical Sensitivity. You write as if there were no grounded theory methodology and methods in the past, thus nothing to carefully contribute to.

To repeat it another way: You wrote a whole different method, so why call is 'grounded theory'? It indicates that you truly have never grasped what we did, nor studied it to try to carefully extend it. Yet you borrow its name to trade on its success, which success if theoretically fundamental, while your work is fractured and scattered.

Pull the book. It leaves out quantitative researchers and will wreck the work of qualitative researchers too, piling up tons of fractured rules instead of cutting directly through to basic and underlying fundamental relevance.

Your Pal,

Barney.

(Glaser, 1992)

APPENDIX J

- Intensity classification of activity levels

APPENDIX J

INTENSITY OF ACTIVITIES	MET VALUE ASSIGNED	ACTIVITIES
VERY LIGHT	1.5	Playing card/board games and with toys; using a computer/playing computer games; drawing/painting; homework; listening to music; playing a musical instrument; reading for pleasure; taking with friends; watching television and watching videos.
LIGHT	2.5	Bowling; caring for pets; cricket; darts; horseriding; light household chores - washing-up, tidying-up etc.; doing a part-time job; pool/snooker; shopping; table tennis; walking/strolling; going to a youthclub/disco.
MODERATE	4.0	Badminton; cleaning/hoovering/moving furniture; cycling; football in the playground; gardening; golf; gymnastics; hockey; netball; doing a paper round; playing tag/chasing games in the playground; rounders; swimming; tennis; volleyball and walking briskly.
HARD	6.0	Basketball; disco dancing; jogging and rugby/touch rugby.
VERY HARD	10.0	Athletics, football and running.

NB. Any other activities were classified as light, very light, moderate, hard and very hard at the interviewer's discretion

Intensity Classification of Activity Levels

APPENDIX K

- Conditional Matrix

APPENDIX K

THE CONDITIONAL MATRIX

Strauss and Corbin (1990) state that this should be used by the researcher as a framework to distinguish and link levels of conditions and consequences relative to the phenomenon under investigation. Taking the form of concentric circles (see below) it illustrates the components and their relationships. This matrix supplies a framework that enhances/tightens-up analysis by identifying how the causal, contextual and intervening conditions and consequences can be further woven into the research, as well as allowing some generalisation.

THE CONDITIONAL MATRIX

Includes items which are particular features of a part of the sub-location within a larger location where the study is taking place.

This includes biographies, philosophies, knowledge, and experiences of persons and families, as well as those various groups (special interest, professional and scientific).

This represents the things people do together or with respect to one another in regards to a phenomenon (Becker, 1986), and the action, talk and thought processes that accompany the doing of those things. Even things done alone require interaction in the form of self reflection. Interaction is carried out through interactional processes.

This level represents the active, expressive performance form of self and/or other interaction carried out to manage, respond to, and so forth, a phenomenon. Action is carried out through action processes.

INTERNATIONAL

NATIONAL

COMMUNITY

ORGANISATIONAL & INSTITUTIONAL LEVEL

SUB-ORGANISATIONAL, SUB-INSTITUTIONAL LEVEL

GROUP INDIVIDUAL, COLLECTIVE

INTERACTION

ACTION PERTAINING TO A PHENOMENON

Includes items such as; International problems and issues, international politics, environment, history, government relations, culture, values, philosophies and economics.

Includes items such as; Problems/issues, national politics, government regulations, culture, history, values economics

Includes items such as those identified at the National level - 'Each community has its own demographic features that give it singularity.'

Includes rules, problems and histories that are particular to the structure of each of these.

(Adapted Strauss & Corbin, 1990)

341

APPENDIX L

- Young people personal details and characteristics

This table is a rotated (landscape) data matrix recording characteristics for students No. 1–29. Filled dots (●) indicate the applicable category in each column. The column groupings are:

- **PERSONAL**: Student No.; Gender (M, F); Activity level (high, low)
- **AGE**: Year at school (1st interview); Age on first interview; Age on second interview; Age on third interview
- **FAMILY**: sister(s) — older No.(Age), younger No.(Age); brother(s) — older No.(Age), younger No.(Age); lives with: single parent / both parents; Parental Occupation — father (white c., blue c.), mother (white c., blue c.)
- **SCHOOL**: Comp. (single, mixed), independ. (single, mixed)
- **LOCATION**: home (rural, urban), school (rural, urban)
- **ORGANISED ACTIVITY**: school (none, 1, >1), outside school (none, 1, >1)
- **POCKET MONEY**: none, YES; KINVAEKI NO

Student No.	Age (Year at school)	Age first interview	Age second interview	Age third interview	sister older No.(Age)	sister younger No.(Age)	brother older No.(Age)	brother younger No.(Age)	mother occ.
1	7	13				2(10/7)			
2	7	13	13	14					
3	7	13	13	14					
4	7	13			1(14)			1(9)	
5	7	12	13		2(16/21)		1(20)	1(10)	HW
6	7	13	13	14					
7	7	13	13	14		2(11/9)	2(15/17)		HW
8	7	13	14	14	1(17)			1(10)	
9	7	13	13						
10	7	13							
11	7	13	13	14	1(15)			1(10)	HW
12	7	13	13						HW
13	7	13	13	14	1(14)		1(18)	1(9)	HW
14	7	13	14	14			1(14)	1(10)	HW
15	7	13				2(13/11)		1(10)	
16	7	13	15	16			1(17)		
17	9	15	15	16	1(18)				HW
18	9	14	15	16	2(23/20)				
19	9	14	15	16			1(17)		
20	9	15	15	15					
21	9	15	15		1(18)		1(24)		
22	9	14	15	16	1(21)		2(21/18)		
23	9	15	15	16	2(17/16)		1(20)	1(13)	
24	9	15							
25	9	15							
26	9	15							
27	9	15							
28	9	15							
29	9	15							

CLUB MEMBERSHIP (Sister & Brother)

CLUB MEMBERSHIP (PARENTS)

JOB (child)

SMOKER

Student No.: 1–29

Brother: none, one, more than one
Sister: none, one, more than one

mother: none, one, more than one
father: none, one, more than one

child: really against, yes
no, one, more than one

mother, father, brother, sister

○ YOUNGER ✕ OLDER

APPENDIX M

- Hierarchies of Activity

APPENDIX M

KEY

	MALES		FEMALES	
	HIGH ACTIVITY	LOW ACTIVITY	HIGH ACTIVITY	LOW ACTIVITY
Yr8	162 085 081	149		082 086 088 122
Yr10	011 155 171 200 229	058	180	076

A COMPARISON OF THE YOUNG PERSON'S ACTUAL HIERARCHY OF ACTIVITY COMPARED WITH THEIR IDEAL HIERARCHY

---

(082)

Activities spend most to least time on.	Most favourite activities (1 to -)
Homework	5
Netball	2
Piano	3
Socialising	1
Dancing	4
Clarenet	6

(088)

Activities spend most to least time on.	Most favourite activities (1 to -)
Homework	5
Watching TV	7
Syncro. swimming	1
Play rehersals	6
Choir	3
Badminton	2
Shopping	4

(122)

Activities spend most to least time on.	Most favourite activities (1 to -)
Riding	1
Reading	2
Watching TV	4
Listening to music	5
Homework	3

(086)

Activities spend most to least time on.	Most favourite activities (1 to -)
Young Farmers	1
Farm work	4
School	2
Pets	3

(180)

Activities spend most to least time on.	Most favourite activities (1 to -)
Socialising	1
Netball	2
Watching TV	4
Computer games	5
Basketball	3
Hockey	6

(076)

Activities spend most to least time on.	Most favourite activities (1 to -)
Listening to music	1=
Watching TV	2=
Table tennis	3=
Badminton	1=
Snooker	6
Reading	3=
Basketball	2=
Football	4
Darts	5

(058)

Activities spend most to least time on.	Most favourite activities (1 to -)
Football	1
Walking	5
Drawing	3
Listening to music	4
Fishing	2
Shopping	6
Computer games	7
Cycling (summer)	8

(149)

Activities spend most to least time on.	Most favourite activities (1 to -)
Homework	6
Listening to music	1
Watching TV	3
Reading	4
Shopping	2
Computer games	5

(011)

Activities spend most to least time on.	Most favourite activities (1 to -)
Ferreting	2
Gamekeeping	3
Horse stabling	4
Kennel work	1

(171)

Activities spend most to least time on.	Most favourite activities (1 to -)
Watching TV	2
Video games	1=
Socialising/walking	4
Motorbike	1=
Listening to music	3
Youth club	6
Football	7
Pubs	1=
Basketball	5

(229)

Activities spend most to least time on.	Most favourite activities (1 to -)
Watching TV	4
Computing	3
Reading	5
Dungeons & Dragons	1
CCF	2
Duke of Edingburgh	6

(081)

Activities spend most to least time on.	Most favourite activities (1 to -)
Walking the dog	2
Paper rounds	4
Milkround	5
Farm work	3
Shooting	1

(085)

Activities spend most to least time on.	Most favourite activities (1 to -)
Swimming	2
Cycling	6
Tai kick boxing	3
Computer games	9
Messaround games	8
Step aerobics	4
Studying	5
Skiing	1
Pets	10
Pool	7

(162)

Activities spend most to least time on.	Most favourite activities (1 to -)
Football	5
Cycling	7
Homework	13
Skiing	1
Computer games	10
Listening to music	3
Swimming	6
Rugby	8
Watching TV	11
Golf	4
Cinema	2
Ten Pin Bowling	9
Job (summer)	12

(200)

Activities spend most to least time on.	Most favourite activities (1 to -)
Revising/homework	6
Football	1
Shopping	3
Cinema	4
Fishing	2
Messing around	5

(155)

Activities spend most to least time on.	Most favourite activities (1 to -)
Cooking	1
Television	11
Walking	12
Talking with friends	10
Computer	8=
Pool	8=
Videos	5=
Youth Club	4
Gambling	6
Woodwork	7
Gardening	3
Basketball	2
Cinema	9
Holidays	5=

APPENDIX N

- Selected Correspondence with Strauss

APPENDIX N

Dear Michael Waring,

Julie Corbin has passed along your letter and its quite inventive and useful diagrams. It's obvious to us that you have a very good grasp of our overall conception of the grounded theory approach. If you would want to get our reactions to your actual research, now or whenever, we would be glad to correspond about that.

Meanwhile a few words about your 'illustrations' and accompanying commentaries. They are much better than those we could have devised or dreamed up! (Let alone use our relatively mute computers to make them.) The first one *(the Helix Model)*is especially nice for beginners to the methodology. And we were especially intrigued by the third, which we want to think further about because we need eventually to rewrite the section on the matrix. As now written, some readers probably misread it as too structural, though it seem clear enough for careful readers like you. We hope also to write a paper on the matrix, extending its complexity still further.

You write that these are copies. May we keep them? An in the next edition of our book, we may ask you if we can perhaps use one or two and request the publisher pay you for that privilege.

For your own use the methodology, we suggest if you have not already discovered it that my Qualitative Analysis for Social Scientists (Cambridge Uni. Press 1987) may also be useful for the carrying out of your own research. It should be readily available in England.

Thanks Again sincerely,

Anselm Strauss (Julie Corbin)

Dear Michael Waring,

Sorry for the belated reply to last months letter. And thanks again for the
illustrations. When we redo the book, we may contact you again about one or two of
them. And I still have not got a copy of your work, so you may want to try again?
An please don't hesitate to correspond. Also, note that my email address has changed,
so use the one on this letterhead, and send your own when you rewrite.

Sincerely,

Anselm Strauss

21.11.94

Dear Mike Waring,

Yes, I recollect our e-mail correspondence and your diagrams.

My reply-comments will be typed rather than taped: it's less exhausting for me. Also
forgive me but I am 78 yrs old, and am potentially short of time so my answers will
be relatively short but hopefully to the point.

To begin with, Barney Glaser and I are still good friends, but no longer talk about
grounded theory, since apparently we disagree very much. I've continued research
since the Discovery book (1967) in many areas and (you can get a sense of this from
my recent Continual Permutations of Action), and have taught it since 1978. He's
become a businessman, and a very successful one, though he still reads sociology.
He's remained methodologically about where he was when Discovery was written, I'd
guess from the long discussions and debates we had when the Basics book came out.
So I finally urged him to write his own version of GT methodology, and let readers
decide what was or wasn't useful to them.

So this is the position you are in, and in a sense I can't help you. But I will address some of your questions for whatever use this may be to you.

I wrote the Cambridge Press book Qual. Analy. for Soc. Scientists, because up until then there had been no offering of procedures that we found essential or useful. The Basics book was written because Corbin believed the other book too difficult for beginners, and she was quite right. What I tell students is they should read both books; that the first gives a much better sense of how we work, and the second is a pedagogical tool, useful in the sense that a manual is useful but not to be taken as a book of exact recipes. Both are a kind of distillation of my own and students research experiences over the years using and developing the methodology.

All over the world now, people seem to be doing 'grounded theory.' That is, they have learned from one or other of the books, and perhaps from our substantive writing, and quite obviously they are using this knowledge in their own ways and on a great many different kinds of materials and in different fields. In this sense GT is certainly evolving. (You can see our views on this in an article in Denzin and Lincoln, Handbook of Qual. Research (Sage Pub) 1994.)

At heart, the methodology means, or it is not this methodology, at least: (1) theoretical coding, since theoretical interpretation is the aim; (2) constant comparative analysis, and (3) theoretical sampling.

The guideline procedures are very useful, but they are guidelines not absolutes. The paradigm has been very useful, and is implicitly if not explicit in all explanatory (including scientific) work. The 6 C's have never been useful to my work. For more complexity of analysis, the matrix discussion in Basics is there to guide those who really want complexity!

Our statement on generalizability is meant to emphasise both variation (many social science text and studies ignore this) and to warn against to readily generalizing without taking specific variation of conditions into account. People do this all the time. On the other hand when you present your material and someone in the audience demurs, you just ask for a description of 'why doesn't this apply to your situation?' and then you will begin to see how the conditions in his/her workplace or whatever are somewhat different than those in your study. Once you know the alternative interpretation, you can begin to adjust your own theoretical interpretation: like when we studied dying in hospitals we didn't at first take into account the Asian-type

347

hospitals where a hundred patients are bedded down in a ward, so that dying was much more public and visible. What then?

You don't necessarily have to keep these comments confidential, but I'd appreciate you're not conveying them to Dr. Glaser since I would want the competition between us in your head to remain right there!

Good luck with your work.

Sincerely yours,

Anselm Strauss