‘Extending the Dream Machine’: Understanding Dedicated Participation in Mountain Biking

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Abstract

Mountain biking is one of the most popular adventure sports worldwide, bringing in millions of dollars to economies across the globe and representing a host of different recreational opportunities to the millions who take part. Despite this popularity, a comprehensive examination of the wide range of factors that influence why people enjoy this activity remains elusive.

Dedicated cross-country mountain bikers in Nelson, in New Zealand, and Shrewsbury, in England, were studied to rectify this. Qualitative research, in the form of semi-structured interviews, was used to uncover bikers’ feelings, thoughts and desires. These study locations were chosen for their vibrant biking scenes and a range of easily-accessed purpose-built trails and traditional rights-of-way. Criterion and snowball sampling were the techniques used to select experienced and frequent riders to interview.

Bikers’ responses were analysed using a pragmatic general inductive approach, where the method is guided by the objectives, and robust results arise directly from the findings, not from preconceptions about the subject. The thesis is punctuated with rich and vivid participant quotes to illustrate the depth of their feelings on this emotive subject.

The research identified a range of factors that influence dedicated riders’ participation in mountain biking. These influences can be the push factors that motivate people to ride, and the factors that attract them to their chosen locations, whether physical attributes or less tangible characteristics. Other elements conspire to influence riders, whether they are constraints, such as legal access issues, or social factors, from the peer pressure to perform to the social recognition associated with ‘pushing the envelope’.

While many different factors inspire mountain bikers, several motivations are particularly important: the strenuous physical exercise, the escape from everyday routine that biking offers and the chance for social interaction and to share memorable moments. The thrill of fast, flowing trails enables bikers to sometimes experience those special
intrinsic rewards, even if a ‘flow’ experience appears not a motivation in itself but a welcome bonus of riding.

The diversity of settings that can be accessed appears among the most important attractions of mountain biking, but just one of many attributes riders seek in trails. Traditional rights-of-way create a sense of adventure for example, with the attractive scenery that the manipulated settings of the popular purpose-built mountain biking centres can rarely match.

These centres’ popularity lies in other characteristics: conflict-free riding, enjoyable singletrack trails and the type of condensed experience that fits into people’s time-constrained modern lives. These traditional and purpose-built trails are perceived as representing different experiences to mountain bikers, however, offering diverse settings and satisfying different motivations.

Riders get to learn about these desirable locations in a number of different ways, whether through the Internet, from guidebooks and magazines, but most importantly through word-of-mouth from their friends.

The broad range of participatory influences, explored through the use of qualitative research, is illustrated in a new conceptual framework, contributing to existing academic knowledge through a focus on mountain biking as a phenomenon of adventure recreation.
Preface

I wish to express particular gratitude to my supervisors, Dr Anna Thompson at the University of Otago, New Zealand and Dr Jan Mosedale, formerly of the University of Otago, but now at the University of Sunderland, England. Their (constructive) criticism and encouragement throughout my three years helped me enormously. Anna – and her husband Andy and daughter Jess – also get special thanks for letting me stay with them several times while in Dunedin.

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<td>Byway Open to All Traffic</td>
</tr>
<tr>
<td>DoC</td>
<td>Department of Conservation (New Zealand)</td>
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<td>GPS</td>
<td>Global Positioning System</td>
</tr>
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<td>IMBA</td>
<td>International Mountain Bicycle Association</td>
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<td>Mountain Bike Rider (UK magazine title)</td>
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Chapter One: Introduction

The enormous growth of mountain biking as a recreational activity over the last 25 years has seen a shift in the recreationist’s role away from the use of scenic areas for quiet enjoyment, fostering a “sense of being in harmony with the natural environment” (Miller et al., 2001: 27), to one of personal performance (Cloke and Perkins, 1998), where the landscape is consumed in a more physical and concentrated manner. This has been paralleled, to a considerable degree, by a fundamental, albeit more recent, change in the tourism sector, which has seen the advent and growth of alternative, special interest forms of tourism (Sung, 2004). The quest for adventure is just one motivation for these new breed of tourists, one that reflects a need among a growing element of the population to actually physically experience their vacation, and not be just a passive observer (Sung et al., 1997).

Walking or hiking may remain the dominant mode of enjoyment of outdoor spaces, but the needs of mountain bikers, and the popular force of mountain biking culture, are being increasingly recognised (Brown et al., 2008). In 2009, people are being asked to comment on proposals that will allow land managers in countries as diverse as New Zealand and the USA to allow greater use of mountain bikes in individual national parks (F. Shaw, pers. Comm.; IMBA, 2009). Other changes have been more dramatic and emancipating for bikers. Since 2003, for instance, everyone, including mountain bikers, has been given the right of access to most of the Scottish countryside for recreation (Scottish Natural Heritage, no date).

The mountain biking statistics available support Koepke’s (2005: 1) assertion that “mountain biking is one of the world’s most popular adventure sports”. Since the advent of the sport in the 1970s, its popularity has increased dramatically, to the point where it is forecast that in the USA alone there are approximately 50 million mountain bikers over the age of 16 (IMBA and Shimano, 2008). It is debatable whether this increase in popularity has seen a shift in attitudes among other users since earlier days of reluctant acceptance, when walkers perceived their landscapes to be scarred by the sinister traces of this new activity (Ruff and Mellors, 1993). The breadth and depth of academic articles written over
the past 20 years (for example, Cessford, 1995a; Chavez, 1996a; Fix and Loomis, 1998; Goeft and Alder, 2000; Thurston and Reader, 2001; Skår et al., 2008), however, is testament to the importance of mountain biking to the millions of people who participate in and enjoy it.

This introductory chapter sets the context for the thesis, the primary objective of which is to understand the key factors that influence people’s participation in mountain biking. It does this by, first, examining the importance of adventure as a recreational and touristic pursuit, and mountain biking as an element of adventure recreation. In this way the key elements of this research are defined. Second, the aim of this thesis and the research objectives are set out. Finally, the way in which the thesis is structured is explained.

1.1 The Research Context

Although statistics regarding the size of the adventure recreation market are hard to come by, the active outdoor recreation economy in the USA, for example, contributes $730 billion annually to the economy (Outdoor Industry Foundation, 2006). Similarly, in terms of participation in adventure tourism, of which adventure recreation is its integral part (Weber, 2001), Sung (2004) reports that 45% of Canadians undertook outdoor adventure activities on their vacations in 2001, while in the UK it is estimated that the activity holiday market comprised nearly fifteen million trips in 2000; overseas visitors represented nearly 10% of this figure (Mintel, 2005; cited in VisitScotland, 2007). Although adventure recreation and tourism may still be niche markets, research in the UK has found that over a third of holidaymakers have tried some form of adventure tourism, and half of the total would be interested in it in the future (VisitScotland, 2007). Moreover, the use of adventure as a central element in New Zealand’s tourism marketing (Cloke and Perkins, 2002), for example, is an indication of the importance of this niche within the tourism industry.

The roots of adventure tourism can arguably be traced back to the early days of tourism, when English mountaineers visited the French Alps in the 18th century to climb mountains (Bourdeau et al., 2002). In the following century, the grand tour, invented by the English upper classes, started to incorporate mountain excursions into the Alps, embracing romantic views of picturesque landscapes and wilder aspects of nature (Towner, 1985).
Therefore “in some respects it was tourists who thus passed on mountaineering to sports enthusiasts” (Bourdeau et al., 2002: 23). The recent growth in adventure tourism is considered to be part of the general growth in alternative forms of tourism (Berno and Moore, 1996), associated with a reaction against mass tourism, even though its rise in popularity can result in it usurping mass tourism and becoming the norm, which has arguably happened in Queenstown. Adventure tourism can be defined in terms of greater independence and seeking more active participatory experiences on vacation (Cloke and Perkins, 1998).

This more recent travel trend has been termed ‘special interest tourism’, catering for a wider range of specific individual interests with customized recreational experiences (Sung, 2004). Taking part in physically challenging outdoor activities is what differentiates adventure tourism from other forms of special interest or alternative tourism (Bentley et al., 2007), cultural tourism or ecotourism for example. It has been previously estimated that together these aforementioned new tourist activities would constitute 30-40% of international tourism by the year 2000 (Krippendorf, 1987; cited in Cater, 2006).

Although often used as a generic descriptor, along with adventure sports, adventure tourism can be defined as an extension of adventure recreation. It is the participation of such activities away from the participant’s home that differentiates them (Weber, 2001), although it is recognised that the distinction between tourism and recreation may be rather fuzzy and just a matter of degree (Hall, 2005). Adventure tourism is also often defined in terms of a commercialised experience, managed and controlled by a professional operator (Hall, 1992). Classification sees the placement of adventure types on a commodification continuum (Varley, 2006). At the deep end lie original adventures, defined as generally unsaleable activities with an internal locus of control and the possibility of misadventure. At the shallow end lie relatively unadventurous, saleable tourist products with responsibility in the hands of operators, such as balloon rides and bungy jumps, while guided expeditions and courses lie in-between these extremes (ibid.).

A traditional differentiation between adventure recreation and recreation is believed to be the uncertainty of the outcome of the activity and either perceived or real danger (Ewert and Hollenhorst, 1989), the combination of which is generally referred to as an element of risk. Often taking advantage of natural settings, an adventure activity “provides the tourist
with relatively high levels of sensory stimulation, usually achieved by including physically challenging experiential components” (Muller and Cleaver, 2000: 156). Such an adrenalin rush can be associated with mental, as well as a physical, challenge (Page et al., 2006). At the other extreme, people can be motivated by less physical experiential motivations, seeking escapism or discovery, for example (Swarbrooke et al., 2003).

While adventure recreation has been taking place, for example in New Zealand, for over a century, only recently has the mix of adventure and environment been used to promote such activities (Cloke and Perkins, 2002). New Zealand’s reputation as an adventure tourism destination (Carr, 1997) and Queenstown’s self-proclamation as the ‘adventure capital of the world’ (Cloke and Perkins, 2002) have meant that the country has been the subject of much of the research undertaken in this field. The development of similar adventurous attractions in countries as far apart as Australia and Canada, however, means that it is a worldwide phenomenon (ibid.). Other countries have recognised the potential for increasing their own tourism products: since 2002, for example, VisitScotland has been more focussed in promoting Scotland as an adventure tourism destination (Page et al., 2006).

Recognizing the wide range of activities available, adventure recreation or tourism activities have been placed on a continuum from hard to soft adventure, where a range of factors are used to differentiate the experience. Soft adventurers are defined as people who want to try something new with an element of risk, but still with some of the comforts of home (Cloke and Perkins, 1998), “insulated from less desirable elements of the real world” (Beedie, 2003: 206). At the other end of the spectrum are hard adventure activities, which pose increasing dangers, may also be more mentally challenging and may require travel to more remote locations (Beedie, 2003). Activities such as climbing and backcountry skiing have a high level of risk, physical demands and a requirement for competence (Christiansen, 1990). In between these extremes lies a wide range of activities that require some skill and competence and provide a degree of risk that elevate them above activities for the mass tourist (Cloke and Perkins, 1998).

As one of these activities that can lie at the deep end, mountain biking is an increasingly popular activity in a number of countries, especially in North America, Europe, Australasia and South Africa (Gajda, 2008). The International Mountain Bicycling Association
IMBA estimates that 23% of the adult population in the UK own a mountain bike and that over 78 million mountain bike rides are undertaken in the UK alone each year (IMBA-UK, 2005). In New Zealand it is estimated that over 6% of the population took part in mountain biking in 2007-8 (Tourism Resource Consultants, 2009).

Its prevalence determines growing demand for enclavistic spaces, and purpose-built infrastructure is seeing significant amounts of investment, as governments realise that facilitating recreational activities can serve as an important tool for revitalising rural economies (Costa and Chalip, 2005). In Scotland, for example, £3.6 million was spent between 2001 and 2008 on the development on the 7Stanes mountain biking centres (EKOS and Tourism Resources Company, 2007). The result is nearly 400,000 visitors per year, making them the sixteenth most popular tourist attraction in Scotland (ibid.). New Zealand’s first such facility, at Rotorua, attracted 85,000 mountain bikers in 2007, spending around NZ$7.4 million between them (Tourism Resource Consultants, 2009). As well as generating significant incomes for local businesses, the development of such facilities can help to divert bikers from other areas and therefore obviate potential issues, such as damaging fragile ecosystems or creating conflict with other users (Mosedale, 2003).

It is the active participation in these activities that makes mountain biking, and other adventure recreation pursuits, such a significant component in promoting and facilitating healthier lifestyles, an important contemporary issue in many countries. It is predicted, for example, that by 2010 over 30% of women and 25% of men in the UK will be obese, costing the economy around £3.6 billion annually (VisitScotland, 2007); these figures are mirrored in many other Western countries (WHO, 2009). Cross-country mountain biking is a demanding endurance sport (Impellizerri and Marcora, 2007), that burns nearly twice the calories per hour of walking (Pretty et al., 2007). Both cycling and walking are recommended by the World Health Organisation as healthy activities (IMBA and Shimano, 2008). Numerous studies have confirmed that riding for exercise is one of the most important motivations for mountain biking (for example, Cessford, 1995b; Gajda, 2008; Skår et al., 2008).

The economic benefits of the sport are far more direct than projections regarding health cost savings. In the USA, mountain biking contributes $26 billion annually into the
economy in direct expenditure, a figure that does not include the significant multiplier or ripple effects (IMBA and Shimano, 2008). On a regional scale, it is estimated that the recreational value to the Scottish economy of the 7Stanes mountain bike centres is £9.6 million per year (Moran et al., 2006).

Other less tangible reasons for participation are also apparent. The decision to partake in adventurous activities cannot always be rationalised like the purchase of white goods: feelings and fun are not goals bounded by logic but hedonistic experiences, imbued with symbolic meaning (Holbrook and Hirschman, 1982). Mountain biking can be seen as play (Brown et al., 2008), and play is the “antidote to all [original emphasis] the mundane duties of adulthood, from partnering and provisioning right down to the tedious maintenance of Self” (Roberts, 1995: 35). As Cater (2006: 323) suggests: adventure tourism “activities are fundamentally about pleasure and fun... [and] to ignore the importance of hedonism is to miss the principal aim of these pursuits”. The aim of this thesis is to identify the whole range of reasons why people enjoy mountain biking, whether hedonic or more rational, and to allow the richness of the interviewees’ feelings to elucidate their reasons for participation.

These pleasures, however, do not come without cost. The potential for environmental degradation and conflict with other trail users, in particular, have been the subject of a great deal of research (for example, Thurston and Reader, 2001; Cessford, 2003; White et al., 2006; Brown et al., 2008). The more physiological costs associated with undertaking high risk activities have also been explored as part of wider research (for example, Bentley et al., 2001, 2007).

1.2 Defining Mountain Biking

Mountain biking’s status as an adventurous, high-risk recreation activity has been acknowledged (Hall, 1992; Weber, 2001; Beedie, 2003), albeit as a lower risk activity than other adventurous pursuits such as skydiving (Creyer et al., 2003). As mountain biking can pose a high level of risk to the user, be physically and mentally demanding, require technical competence and take bikers into remote and unfamiliar terrain, it is argued that for intermediate to advanced cross-country riders, as researched in this thesis, it can be classed as a hard adventure activity (Muller and Cleaver, 2000).
Creyer et al. (2003: 252) define mountain biking as “bicycling off-road on trails, in hilly or mountainous terrain, using a bicycle with a heavy frame and wide tyres”. Although “the sport is also largely defined by the nature of the riding surface itself” (Koepke, 2005: 3), it is questionable whether mountain biking need take place in hilly or mountainous areas, or entirely on off-road trails. As advances in technology have negated the need for a heavy frame, the Oxford English Dictionary Online (2003) definition of a mountain bike itself appears more contemporary: “a type of bicycle typically having a sturdy but lightweight frame, broad, deeply treaded tyres, multiple gears, and straight handlebars, originally designed for riding in mountainous terrain”. In light of the breadth of academic mountain biking literature, it is significant that a more robust scholastic definition is not believed to exist.

Mountain biking, however, encompasses diverse riding styles, terrain and mountain bikes (Davies and Newsome, 2009). The types of mountain biking include downhill, where, naturally, the emphasis is on riding downhill and bikes are much heavier and more robust, and freeride, which involves riding wooden structures, jumps and drops (Anon, 2007). Cross-country mountain biking, conversely, entails riding point-to-point over a variety of terrain, that includes both climbs and descents (Mosedale, 2003). Research has found that 89% of bikers partake in this form of mountain biking (Green, 2003). Anecdotal evidence suggests that the forms of mountain biking are continually diversifying, and the term ‘trail riding’ now comprises some of the more challenging riding previously classified as ‘cross-country’, while ‘all-mountain’ riding denotes more aggressive or extreme terrain or riding styles. There is a great deal of overlap between the categories, however, and many people’s riding arguably encompasses all three styles, depending on the nature of the setting. It is these three riding styles, categorised here under the more traditional, general term of cross-country mountain biking, that form the focus of this research.

1.3 The Research Objectives: Addressing an Academic Need

Thus far, two quantitative studies have been carried out that have tried to determine some of the most important motivations for people’s participation in mountain biking as a key component of their research (Cessford, 1995b; Skår et al., 2008). Others (for example Hollenhorst et al., 1995; Chavez, 1997a; Leberman and Mason, 2000; Green, 2003) have
used quantitative methods to identify core motivations of bikers as part of much wider research. Two studies have used qualitative research to explore focused issues (Horn *et al.*, 1994, on conflict ostensibly, albeit with some examination of other motivational factors, and using, in addition, quantitative data collection; Probert, 2004, on escapism). A holistic, in-depth examination of the participatory influences on mountain bikers has yet to be undertaken.

No research in the field of mountain biking has been identified that qualitatively explores the issue of motivation in any depth, nor has any research in this field explored the issue of information sources, except as minor parts of much broader surveys (Bowker and English, 2002; Reiter and Blahna, 2002; Green, 2003; EKOS and Tourism Resources Company, 2004 and 2007; Koepke, 2005; Gajda, 2008, for example). A few quantitative studies have examined riders' preferences for trail types, settings or features and trail facilities (for example Cessford, 1995b; Goeft and Alder, 2000; Symmonds *et al.*, 2000; Bowker and English, 2002), and have gone on to examine their management implications.

While previous studies have only examined one or two aspects that might determine participation, it is argued by the author that a true understanding of why people partake in mountain biking can only be achieved through an examination of all the pertinent influences: motivations, settings attributes, decision-making influences and other relevant factors. To date no academic studies have brought together all of these issues. Furthermore, no academic research has used a qualitative method to investigate in depth the meanings and associations of these factors to mountain bikers. It is argued that only qualitative research allows mountain bikers to properly communicate their feelings about issues such as motivations; these are complex issues that a quantitative method cannot fully explain. The development in this thesis of a conceptual framework that aims to holistically examine all of these influences also represents a unique contribution to theoretical knowledge.

The research aim is therefore to conduct an examination of the factors that influence people's participation in mountain biking as a recreational pursuit, in doing so making a meaningful contribution to academic debate in this field. A qualitative research method is employed to interview mountain bikers in the research locations in New Zealand and the United Kingdom. In order to fully understand the reasons for people’s participation, the
research fieldwork and analysis are tailored to meet the objectives of this thesis in four ways:

1. The factors that motivate people to participate in, and enjoy, mountain biking as a predominantly recreational activity are identified and discussed. Uysal and Jurowski (1994) describe these intrinsic motivators as push factors, logically examined as an antecedent of pull factors (Dann, 1977).

2. The environmental, or site, attributes of trails or riding destinations that influence where mountain bikers ride will be established. These pull factors are “the elements that represent a promise of satisfaction at destinations” (Pomfret, 2006: 115). Understanding these factors may aid planning and development of mountain biking facilities, as well as enriching academic theory.

3. The factors that influence mountain bikers’ decisions on where to ride will be identified, as the accumulation and use of information helps individuals make destination decisions (Vogt and Fesenmaier, 1998). Also examined and discussed are other influential social factors germane to a full understanding of the reasons for participation, how people’s riding is affected by peer pressure for instance.

4. Consequent upon a thorough understanding of the other objectives is the development of a conceptual framework to illustrate these factors as a Gestalt (Patton, 2002).

Previous theoretical research in this field has examined a range of subjects to try to understand the influences on participation in adventure recreation: for example, motivations for mountaineering (Ewert, 1985); the ways in which participants in such adventure recreation activities match situational risk with personal competence (Martin and Priest, 1986); how participants’ motivations to partake in such activities change with accumulated experience (Ewert, 1987); and exploring the differences in needs, motivations and expectations of participants with experience and those with no such experience (Fluker and Turner, 2000).
Although their research pertains to more general recreation, the influence of Schreyer et al. (1985) on academic theoretical discussion in both recreation and adventure recreation activities lies in their examination of how the combination of motivations, environmental settings and lifestyle factors determine recreational behaviour. Using mountaineering as an adventure recreation case study, Pomfret (2006) develops a framework to explain the factors that push people to participate and pull them to certain locations. Coupled with an examination of personality characteristics and lifestyle factors, the framework aims to determine participation in both recreational mountaineering and mountaineering tourism. It is argued in Chapter Seven that the framework has a number of shortcomings relating to participatory influences, especially those of a more exogenous nature; it remains nevertheless influential in the development of this thesis.

The findings obtained from interviewing mountain bikers will be used to inform the development of a framework to understand the interplay of variables that inspire a decision to participate. The aim of the framework is to extend current theoretical understanding of participatory influences from general recreation (for example, Schreyer et al., 1985) and other adventure recreation activities (for example, Pomfret, 2006) to the realm of mountain biking. In addressing the four research objectives this research aims to make an original contribution to the academic literature that describes and comprehends the mountain biking experience.

1.4 Thesis Structure

Structured over eight chapters, this thesis will attempt to address the issues relating to participatory influences of mountain bikers. Chapter Two is centred on a review of the pertinent literature, split into nine principal sections. Section 2.2 introduces the academic research that has been carried out in the field of mountain biking over the last twenty years or so, before progressing to explore the profile of a typical mountain biker in the second section.

Section 2.3 discusses the literature that has been developed in seeking to understand tourists’ and recreationists’ motivations, from foundational theories to more applied models. It is acknowledged that a broad range of theoretical work has been undertaken on this subject, and the review focuses on the literature that is considered most relevant to this
thesis. The principal adventure recreation influences on the development of this research’s framework of participatory influences are explored in Section 2.4, and their academic contribution to the literature in this field is discussed. Section 2.5 examines the potential factors that motivate mountain bikers’ participation. The research for this discussion is drawn from both the adventure recreation literature and the more specific studies undertaken on the subject of mountain biking.

The potential environmental attributes that mountain bikers may seek in their riding destinations are explored in Section 2.6, followed by a discussion of potential social conflict issues that may affect riders. Section 2.8 considers the consequent management actions taken to address such issues. A dissection of the legal access issues that pertain to mountain bikers in both New Zealand and the UK forms the focus of Section 2.9, while other factors that inform behaviour choices are examined in Section 2.10. This covers a range of information sources, from internal memory, contingent on past experience, to external sources, such as word-of-mouth recommendations, and the associated constructs of place attachment, reputation and image, for example.

Section 2.13 discusses the core theoretical research that has informed and influenced the development of this thesis. Through exploring the work that has been undertaken to date, this chapter demonstrates that there has been little research that examines in any great detail why mountain bikers are motivated to participate in their chosen activity, and what are the factors that influence their participation. Furthermore, the research that has been undertaken on these subjects is shown to be either limited to cursory quantitative examinations, part of much wider research or outdated, in the face of so many developments in the sport and its huge growth over the past decade.

Chapter Three presents the research methodology, taking cognisance of the pertinent research literature. The author’s philosophical perspective is presented and rationalised, as is the choice of a qualitative approach to the thesis and its strengths and weaknesses. Following this, the justification for the choice of methodology is explained, starting with a detailed examination of the method for collecting research findings. This includes pre-fieldwork issues pertaining to the design of the interview and its pilot testing and consequent re-evaluation. The choice of research locations and the decision to interview mountain bikers at two locations in different countries is rationalised, while the logistics of
arranging and undertaking interviews, and the associated issues of sampling techniques and criteria, are considered. After a discussion of the analytical method and issues relating to reporting of findings, the ethical issues associated with this thesis are examined. The chapter concludes with an examination of the research assumptions and limitations, in order to clarify the focus of this thesis.

Chapters Four to Six constitute the contribution of this thesis to existing knowledge, presenting and discussing the findings of this research. Pertaining to the first objective of the research, through an analysis of interviewees’ responses the factors that motivate people to participate in and enjoy mountain biking are examined in detail in Chapter Four. Also discussed in this chapter is how these findings are supported, or contradicted, by existing literature, most pertinently on mountain biking but also in the wider arena of adventure recreation. Although it was initially intended to compare the data from the study locations in New Zealand and the UK, the generally close correlation of responses dictated that the data from the two countries be discussed together. The rationale for this is explained in Chapter Three. Those subjects where responses did differ between New Zealand and the UK are discussed in Chapter Seven.

The second objective is explored in Chapter Five, where the important environmental or site attributes of mountain biking destinations, both locations and trails, are established, along with key sources of information. Again, the research findings are discussed in the context of existing research. Other influential factors that can affect mountain bikers’ decisions about when, where or how to ride, relating broadly to the third objective of this thesis, are presented and discussed in a similar manner to the two preceding chapters, forming Chapter Six.

The findings from the preceding three chapters are brought together in Chapter Seven. All of the influences on participation in mountain biking identified through the research are presented in a conceptual framework. The interplay of these factors is discussed and the factors making up the framework are summarised and their importance discussed. The discussion then moves on to an explanation of the implications of the framework, and its contribution to academic research. This is achieved in the context of both mountain biking and the wider adventure recreation field. This chapter also discusses the potential interaction of the push and pull factors in determining behaviour.
In conclusion, Chapter Eight provides an overview of the research findings in the context of the original objectives of the study. The limitations of the research methodology are outlined, the implications of the research for an understanding of mountain biking are discussed, and a self-assessment is undertaken to reflect on the degree to which the research objectives have been satisfied. Finally, recommendations are made for further academic study, and concluding remarks draw the thesis to a close.
Chapter Two: Review of the Literature

“Adventure seems to be where the action is” (Vester, 1987: 237). An antidote to mass tourism, it represents leaving behind the security and ordinariness of our everyday lives and searching for less predictable values, such as novelty or thrill (Cloke and Perkins, 2002). People choose a recreational activity such as mountain biking because what they are seeking is fun, adventure and a high level of excitement (Goeft and Alder, 2000), where the attraction of adventure is in the doing, not just the seeing (Kariel and Draper, 1992). From the rational motivations for participating in this adventure recreation pursuit to the hedonistic, affective components that differentiate it from mere recreation, it is apparent that “the mountain bike is [still] for many the dream machine” (Ruff and Mellors, 1993: 109). Ruff and Mellors, writing in the nascent days of popular mountain biking in the UK, used the term ‘dream machine’ to suggest giving some people the ability to access the countryside for the first time, or to return after their hiking days have terminated. In the context of this thesis, however, it is used in a more generic sense to signify the importance of the mountain bike to dedicated individuals and as a means of satisfying a wide variety of different motivations, from aesthetic appreciation to thrill.

In the context of this research, the purpose of this chapter is to review the academic literature that pertains generally to adventure recreation and specifically to the pursuit of mountain biking. This process is undertaken to identify what has been written about mountain biking and, more importantly for this thesis, the subject matters that have not been examined, in order to justify the choice of research subject of this thesis and ensure that the research makes a unique and valuable contribution to academic knowledge (Hart, 1998). Having defined the topic for research in Chapter One, and placed the research in context, the literature review relating to the topic can be undertaken in order to rationalise the subject, a circularity of process (Baker, 2000).

2.1 Chapter Structure

Concordant with the aim and objectives of this thesis, this literature review commences with an examination of the literature pertaining to mountain biking. After developing a
brief understanding of the general profile of mountain bikers, an examination of relevant theories of motivation is appropriate to this thesis, from early general motivation theories to those that pertain more directly to recreation and tourism. A discussion of early motivation theories, that suggest that cognitive or emotive motivations explain tourist behaviour, progresses to reflect arguments that both aspects of impulsion need to be considered. It is hypothesised that mountain bikers are motivated by both cognitive and emotive factors, both in their decisions to recreate and the settings that they choose in which to participate. The role of cognitions and emotions in influencing participation is an important element of push and pull theory, which has been used by Pomfret (2006) to describe participation in mountaineering. Pomfret’s research is identified as an important influence on the development of this thesis, which also utilises elements of push and pull theory to explain the influences on people’s participation in mountain biking.

This is followed by an exploration of the range of conceptual research that has been undertaken in the pursuits of both recreation and adventure recreation. As these influential frameworks or models have been developed to explain the behaviour of recreationists or those partaking in adventure recreation they have direct relevance to the research objectives. An examination of the critical research that has been undertaken on both mountain biking motivations and potential motivations in the wider adventure recreation field logically follows this theoretical discussion. These influential factors range from the search for optimal experiences to novelty and exploration as possible motivations for participation, and correspond to both the first and third research objectives (Section 1.3).

Commensurate with the second objective, the academic literature that explores environmental or site attributes is reviewed, both those that are specifically applicable to mountain biking and other factors that have not generally been applied to this particular activity. The discussion is subsequently focussed on other factors germane to an understanding of participation in mountain biking: social conflict issues, management approaches to deal with mountain biking and legal access rights in the two countries being studied, New Zealand and the UK. Elements of these three issues are considered to be appropriate to the first three research objectives introduced in Section 1.3, as potential factors that can motivate participation and attract mountain bikers to specific settings, as well as imposing possible constraints on the activity. Other aspects of mountain biking that have been studied, the biological and physiological characteristics of mountain bikers
for instance, are not reviewed, as these subjects fall outside of the scope of this thesis and are therefore incidental to the research.

Finally, the variety of other factors that inform choices of locations at which to recreate is examined. As marketing information can attract mountain bikers to these settings, a consideration of these sources pertains directly to the second research objective. The review covers a range of information sources, from internal memory, which is contingent upon past experience, to external sources accessed, such as word-of-mouth recommendations and printed media. The chapter is concluded by summarising the key areas of literature that have informed this research, and discussing the core concepts that are relevant to the development of this thesis. Following an explanation of how this literature review has identified the flaws or gaps in existing knowledge and consequently shaped the research aim and objectives, the conclusion discusses the progression of the following chapters, starting with a discussion of the methodology and method used in this research.

2.2 The Mountain Bike: Still the Dream Machine?

A wide range of academic studies has been undertaken on mountain biking, from 1991 to the present day. While earlier research predominantly originated from the USA, more recent work has examined issues in a variety of countries, most notably New Zealand, Australia and the UK. While research in a number of different areas has been undertaken, on the economic impacts of the activity (Fix and Loomis, 1998; Chakrobarty and Keith, 2000) for instance, it is those studies that are directly relevant to the participatory influences on mountains bikers that are reviewed in this chapter.

2.2.1 A Brief History of Mountain Biking

“Popular lore holds that mountain bikes were first constructed in 1974 by Gary Fisher in Marin County, California” (Hoger and Chavez, 1998: 41). He and his contemporaries were suggested to have tired of the noise and pollution of their home environment, and the dangers posed by road cycling (Ruff and Mellors, 1993). These pioneers took heavy 1950s’ Schwinn road bikes into the hills and raced them down hiking paths and fire roads, before modifying them to make them rideable uphill as well as down (Patrick, 1988). As
word spread about this new craze, Fisher started to produce the bikes, making more than 81,000 (Hoger and Chavez, 1998), although the first commercial mountain bike, the Stumpjumper, was launched by Specialized in 1982 (Jacoby, 1990). From these humble beginnings mountain biking is now one of the top-ranked activities in adventure tourism, the fastest growing tourism sector (IMBA-Shimano, 2008), and millions of people worldwide have become enthusiastic mountain bikers (Koepke, 2005).

The term ‘mountain biking’ now covers a whole range of different activities, ranging from cross-country riding, by far the most popular, to niches such as freeride and North Shore (Gajda, 2008), discussed in detail in Section 1.2. Section 3.3.8 defines some of these terms in the context of this research, as the sampling criteria used to locate interviewees.

2.2.2 Mountain Biking: A Recreational Activity

Research confirms that most mountain bike rides are undertaken as discrete, single-day activities (Goeft and Alder, 2000; Leberman and Mason, 2000; Bowker and English, 2002). This thesis is therefore predominantly concerned with an understanding of mountain biking as a form of adventure recreation, not as an activity undertaken as a tourist. Recognising that people do travel further afield to mountain bike, however, a number of secondary questions were asked of participants regarding their thoughts about both trips away from home to access trails and multi-day mountain bike routes (see Section 3.3.3).

Although many motivational theories pertain more directly to tourism, recreation and tourism are both subsets of leisure (Hall, 2005), with a degree of commonality between motivating factors, where some needs can be equally fulfilled in either context (Kelly, 1982). Recreation is defined as simply an activity undertaken in leisure time, while, although many definitions exist, the term tourism has generally suggested an overnight stay away from home, mainly or partly for the purpose of pleasure (Shaw and Williams, 2002). A more recent differentiation suggests that the need for an overnight stay is an outmoded definition and tourism activity can also incorporate single-day excursionists (Goeldner and Ritchie, 2006). Commonalities between recreation and tourism are recognized in the various motivational factors applicable to both leisure and tourism.
Common consumer behaviour is acknowledged, and it is often unnecessary to distinguish between causal factors that explain tourism and leisure activity (Moore et al., 1995). Indeed, it is believed that the distinction between tourism and recreation may be just a matter of degree (Hall, 2005). While the blurred boundary between adventure recreation and tourism is acknowledged, it is argued by the author that as cycling is generally perceived as being primarily a leisure activity it is as a recreational pursuit that mountain biking participation is predominantly examined in this research.

2.2.3 Meeting the Demand for Mountain Biking Activity

In many areas, tourism organisations, service providers and local communities have been keen to capitalise on the enormous growth of mountain biking, from both recreationists and tourists. Various studies have found mountain bikers to be affluent (Hollenhorst et al., 1995; Reiter and Blahna, 2002; Green, 2003, for example), and also much more likely to visit specific areas, for the quality of the mountain biking, than travellers in general (Tourism British Columbia, 2008). Some locations have been more reactively developed as biking hubs, catering for mountain bikers based around existing rights-of-way in scenic areas, such as Keswick in the English Lake District; the complex issue of legal access to such trails for mountain bikers, in both the UK and New Zealand, is examined in Section 2.9. Conversely, proactive steps have been taken to exploit the financial potential of the activity. The UK government for example, through the Forestry Commission, recognised the potential for mountain biking to help revitalise struggling rural areas through the provision of purpose-built facilities. This issue is examined in greater depth in Section 3.3.5, the discussion also tentatively exploring how these trail centres have been developed in New Zealand.

The economic impact of mountain bikers has received comparatively little attention compared to other aspects of biking (although see Chakraborty and Keith, 2000; Morey et al., 2002; Christie et al., 2006, for example), and has generally focussed on measurements of ‘consumer surplus’ to try to put an economic value on mountain biking. Fix and Loomis (1997), for example, use a ‘travel cost method’ to measure consumer surplus as a surrogate for economic benefits to riders using the mountain biking trails at Moab, USA. Using this approach, the authors estimate the economic impact of the world-famous Slickrock Trail at approximately US $8.5m annually.
A similar method, albeit using different count data models, is used to measure the economic surplus of the Glentress mountain biking centre in Scotland, one of the highly-acclaimed 7Stanes (Moran et al., 2006). Their calculations estimate an annual recreational value of £9.6m to the centre, although it is cautioned that to err on the side of conservatism this figure should be assigned to all seven of the sites. “This exceeds the approximate £3 million investment [emphasis added by the author] in the whole Stanes project” (Moran et al., 2006: 130), and illustrates the potential economic benefits of well-publicised, highly-developed and politically-supported mountain biking facilities (Koepke, 2005).

The success of the 7Stanes initiative also demonstrates the effectiveness of a multi-agency approach, whereby a government body, the Forestry Commission, has driven a project forward with a range of co-funding bodies and other regional or local government organisations with tourism or business development agendas (EKOS and Tourism Resources Company, 2004). The success of this approach can be contrasted with demonstrably ‘ad hoc’ and reactive planning for such recreation facilities in many other locations (Mason and Leberman, 2000). Using the Manawatu region of New Zealand as a case study, it is suggested that local governments can struggle to implement strategic planning goals for tourism and recreation, although Wellington and Christchurch are cited as notable exceptions in New Zealand (ibid.). The range of theoretical management and regulation issues is discussed in detail in Section 2.8. Management issues, however, remain largely beyond the scope of this thesis.

2.2.4 Profiling Mountain Bikers

A number of management-oriented studies, predominantly in the USA and Australia, have attempted to determine the socio-demographic characteristics of typical mountain bikers. One of the earliest surveys to try to ascertain extensive quantitative information interviewed bikers in a range of national forests across the United States (Hollenhorst et al., 1995). The authors set a marker for profiling the typical mountain biker, reporting that bikers ride on average 67 times a year, while the average ride is 15 miles (24 km) long and two and a half hours in duration. Interestingly, depending upon the survey site, females made up only between 6% and 20% of bikers (Hollenhorst et al., 1995). Although it might be reasonable to assume that this figure might increase over time, in Gajda’s (2008) survey in the UK only 3% of respondents were female.
From their Australian survey, Goeft and Alder (2000: 265) conclude that “the profile of mountain bikers in this study coincides with that of other studies, that is, young males seeking fun and adventure with a high level of excitement and risk”. Later articles by Chiu and Kriwoken (2003) in Tasmania, and Symmonds et al. (2000) in the USA, similarly quantify riders' socio-demographics, in their examination of management issues relating to mountain biking. The research of Bowker and English (2002) and Reiter and Blahna (2002) differ by being more site-specific, these American studies focussing on profiling riders at the Tsali Recreation Area and on the Slickrock Trail in Utah respectively.

The most up-to-date research, carried out through the UK arm of the IMBA, yields quantitative information on profiling, providing demographic and socio-economic data, as well as information regarding travel patterns, of UK mountain bikers (Gajda, 2008). The research is generally discussed in the context of only purpose-built trail centres, however. Although no data are available that quantify the levels of activity at such centres and on traditional rights-of-way, it is suggested that this restricts the usefulness of the findings on trail attributes and motivations. The study is also focused on mountain biking as an adventure ‘tourism’ activity, involving an overnight stay. Other research shows that three-quarters of trips to the Forestry Commission Scotland’s 7Stanes purpose-built centres are day visits (EKOS and Tourism Resources Company, 2004): it is argued that mountain biking is therefore more usefully studied as an adventure recreation, not tourism, activity.

2.3 Understanding Motivations

Regardless of the settings that they access, a consideration of tourists’, or recreationists’, motivations is considered key to understanding why people behave as they do. The when, who, where and how of such behaviour can be relatively readily described but the why poses greater questions (Crompton, 1979). Motivation may be only one of a number of variables that explain people’s behaviour, but as it is impels all behaviour it is considered the critical variable (Fodness, 1994). Psychological needs, wants and goals are described as creating internal tension, and individuals are stimulated to act to reduce this tension (Sarnoff, 1960), in the process satisfying needs and restoring equilibrium (Fodness, 1994).
While motives energise behaviour, it is suggested that motives only become motivations when interacting with situations or locations and the person’s inherent values (Gnoth, 1997). While motives can be defined in general terms, when a person wants to change his or her place, they can also be more location-specific, when he or she wants to visit a certain place (Wahab, 1975). As such, motivation is both the impelling force behind an initial decision to travel, in order to satisfy needs, and as an explanatory factor, at a later stage, in helping to determine decisions on where to travel, creating the actions to restore the psychological balance.

A diverse range of theories regarding touristic or recreational motivation has been developed. It is apparent, however, that their relevance to this thesis varies considerably, and the conceptual work examined in this review of the literature is focussed on the research that pertains directly to the issues that are examined in this study. Maslow’s (1943) theory is therefore reviewed, as elements of the hierarchy of needs model were later considered relevant to adventure recreation. Push and pull theory (Dann, 1977) has influenced how the fourth research objective, the development of a conceptual framework, is addressed and is therefore the most relevant theory to this research.

Push and pull theory combines elements of both the cognitive and behavioural schools of thought. It is argued that neither cognitive nor emotional factors can successfully explain tourist behaviour alone (Gnoth, 1997) and both constructs need to be considered in the examination of tourist behaviour. Although directly pertaining to leisure, the seeking and avoiding motivational theory of Iso-Ahola (1980) is suggested to be an influential work in the field of adventure recreation, as it recognises that elements of achievement and escape as both important inspirations for participation (Sung, 2004).

2.3.1 The Founding Theory of Motivation

The most well known motivation theory, and one of the most influential (Gilbert, 1990), is arguably Maslow’s (1943) hierarchy of needs model, which ranks individuals’ needs in a hierarchy of five groups. These range from physiological needs, the prerequisites of life, such as satisfying hunger and thirst, to higher level needs, those relating to esteem, both one’s own and how one is perceived by others. The highest level needs, termed self-actualization, are the ultimate goal in developing one’s potential, and represent peak
experiences and self-fulfilment, both important motivations in adventure recreation (Maslow, 1943).

Despite its undoubted influence, Maslow’s model has been subject to criticism. There are inherent weaknesses in a model that has never been justified by empirical observation, and that pigeon-holes motivations into convenient groups that ignore the unpredictability of human behaviour for example (Gilbert, 1990). In the context of adventure recreation, it is suggested that participants totally abandon the need for safety in the search for higher level needs (Walle, 1997), contrary to Maslow’s model. This has been refuted, however, the belief being that needs such as safety are always important in the long-term, while individuals attempt to satisfy higher needs only once lower needs have been satisfied to an acceptable degree (Weber, 2001).

In addition to being a founding theory of motivation, Maslow’s (1943) hierarchy of needs model was perhaps the first to recognize that people’s needs transcend basic human requirements. The growth need of self-actualization, characterised, for example, by complete attention and no awareness of time (Maslow, 1968) is of particular relevance to adventure recreation. These moments are characterised by a number of factors, including complete attention, fearlessness, no awareness of time and reverence for the experience (Pomfret, 2006). Tourists are often “in locations that provide differences and challenges to the required level – in short all the requisites for achieving personal self-actualization might be said to be present” (Ryan, 2002: 30). In contemporary adventure recreation research, however, Maslow’s work is arguably less influential than flow theory (Section 2.5.3).

### 2.3.2 Cognition Theory and the Behavioural Approach

Early motivational theory pertaining to tourist behaviour developed into two distinct approaches: the cognitive approach and behavioural theory. While these two perspectives approach motivations from different angles, they are not mutually exclusive, as, to a degree, each takes cognisance of elements of the other. There are fundamental differences between the two however. Cognitions pertain to knowledge or beliefs (Gnoth, 1997), and are said to be externally constructed and more tangible. Emotional or behavioural motives, conversely, are internally constructed drives and feelings (Yoon and Uysal, 2005).
Recreation is believed to be a valuable means of overcoming stress from everyday life and for the gratification of internal needs such as self-image, self-fulfilment, and, ultimately, self-actualization (Driver, 1972). It is argued, however, that emotional and cognitive elements are each important motivations underlying vacation decisions, and rather than be considered exclusively, both elements need to be considered for a complete understanding of tourist behaviour (Gnoth, 1997).

The importance of both internal behavioural drives and externally constructed cognitions is acknowledged in other theoretical research on tourist motivations. Push and pull theory, discussed below, suggests that push factors pertain to people’s desires, and are thus emotionally constructed (Yoon and Uysal, 2005). Pull factors, conversely, are often tangible, externally derived and cognitive elements (Chan and Baum, 2007). The range of cognitive and emotional factors identified in previous mountain biking research (Horn et al., 1994; Gajda, 2008) confirms that an appreciation of both elements is required to understand behaviour, as Gnoth (1997) suggests.

2.3.3 The Push and Pull of Destinations

In seeking to understand why tourists travel, push and pull theory makes the distinction between the factors that determine tourist behaviour. A simple set of definitions, push factors are those that predispose a person to travel, while pull factors attract the person to a specific destination (Dann, 1977). Push factors are defined as socio-psychological needs related to emotions and internal motives (Gnoth, 1997) which have generally been used to explain a consumer’s need or desire to travel (Baloglu and Uysal, 1996). The desire for escape, relaxation, adventure or excitement are all push motivations (Crompton, 1979), different motives reflecting individual emotions and needs. It is suggested that the need to overcome a feeling of isolation in one’s everyday life, termed anomie, and a need, from time to time, for a perceived increase in one’s status are other possible factors that push people to travel (Dann, 1977). Sunlust, a literal search for the sun, and Wanderlust, a desire to explore new cultures and places and leave behind the familiar, are more straightforward motivations for vacationers (Gray, 1970).

Pull factors, conversely, attract a person to a particular destination (Oh et al., 1995), and both respond to and reinforce push factors (Dann, 1981). These pull motivations can
be both tangible, inspired by the attractiveness of a destination, such as facilities, scenery and cultural attractions for example (Yoon and Uysal, 2005), and more perceptual, such as novelty and perceived image (Uysal and Jurowski, 1994). It is in the sequential consideration of causal push and pull factors that an understanding of a tourist’s motivation to travel to a destination is understood (Baloglu and Uysal, 1996). In contrast, Crompton (1979) proposes that general push factors can drive people to choose not only to travel, but also where to travel. Motivations relating to an escape from routine, self-discovery and engaging in relatively unrestricted behaviour, it is suggested, require only a destination that is sufficiently different from the home environment for needs and wants to be satisfied (Crompton, 1979).

A considerable number of empirical examinations of push and pull factors has been undertaken. Some have considered pull or push factors only (Dann, 1977; Fodness, 1994, for example), but most studies have considered the relationship between the two (for example, Crompton, 1979; Oh et al., 1995; Baloglu and Uysal, 1996). While qualitative approaches have been used, such as Crompton (1979), most studies have employed quantitative analysis of secondary data (Klenosky, 2002), which arguably limits the usefulness of the findings.

A number of other limitations of this approach are identified. It is argued by the author that some factors, such as scenery for example, could be described as simultaneously being both a push and pull motivation. More significantly, the ability of the approach to explain how and why push and pull factors are related is questioned, as empirical testing has tended to be focused on the degree of association between destination pull attributes and particular sets of push motivations (Klenosky, 2002). Moreover, there may be more factors than just motivation that determine a person’s decision to visit a destination (Baloglu and Uysal, 1996). The number of recent studies that have been undertaken based on its theoretical constructs (Yoon and Uysal, 2005; Pomfret, 2006; Chan and Baum, 2007), however, is argued to be testament to the sound fundaments of the theory.

In the development of a conceptual framework to explain participation in mountaineering Pomfret (2006: 114) explains how there are “important inter-related elements [that] influence participation in mountaineering and people’s actual experiences of it”. Central to the framework is the identification of push elements, challenge for
example, and factors such as natural qualities that pull people to locations in order to participate. Schreyer et al. (1985) describe how recreational environments are searched for because participation can lead to desirable outcomes. In other words, it is argued, the qualities that these environments possess, their pull factors, are intrinsically bound up in the motivations, or push factors, that these settings can satisfy.

In Section 2.4 below and Chapter Seven it is explained how these two conceptual works have influenced the development of this thesis. The argument that two different set of factors motivate mountain bikers to participate in the activity and consider a range of different attributes of settings at which to realise these motivations is central to the development of this framework. The delineation of push and pull factors therefore constitutes a very influential theory in this research.

2.3.4 Seeking and Avoiding Motivations

“It may have been Iso-Ahola (1980) who initially conceptualized the fundamental motivations as to why people engage in outdoor recreation” (Sung et al., 1997: 50): seeking and avoiding. Seeking drives a person to find intrinsic rewards through travelling to new places, for example; leisure activities can also yield intrinsic rewards, such as feelings of mastery (Iso-Ahola, 1982). Escaping, conversely, involves leaving behind the routine of everyday life (Norman and Carlson, 1999). As both motivations also have an interpersonal component, there are four dimensions to the theory, the interaction of which yields psychological benefits to the participant; all of these dimensions can act as push factors in recreation activities (Snepenger et al., 2006).

Although seeking and avoiding theory has seen a number of recent applications, the difficulties of utilising the concept to empirically test motivations and environmental attributes are acknowledged, in particular trying test push and pull factors in the same model (Snepenger et al., 2006). Others believe that preferences for leisure activities can also be determined by factors such as personality traits (Shaw and Williams, 2002). Academic research has identified both avoiding and seeking elements (Cessford, 1995b; Skår et al., 2008) as important motivations for mountain bikers, however, and the influence of this conceptual work in proposing these antagonistic motivations is consequently recognised.
2.3.5 Motivations for Leisure

Ostensibly an influential theory in this field, Beard and Ragheb’s (1983) leisure motivation scale seeks to classify motives for leisure into four categories. Intellectual motives involve mental action such as exploring or discovering, while social motives entail building friendships or the need for the esteem of others. Competence-mastery relates to the development of expertise in activities, and stimulus-avoidance suggests a need to “get away from overstimulating life situations” (Beard and Ragheb, 1983: 225), although physical activities can act as sufficient distraction to clear the mind (Ryan, 2002). While it is acknowledged that these motives may pertain to cycling as a leisure activity for example, mountain biking as an adventure recreation activity is believed to encompass a wider range of motivations (see Horn et al., 1994; Cessford, 1995b; Chiu and Kriwoken, 2003, for example). It is also argued that the usefulness of the model is limited by its consideration of only the push factors, with no attempt to understand their relationship with specific locations.

2.4 An Examination of Influential Frameworks and Concepts

2.4.1 The Adventure Experience: Mortlock (1984)

Perhaps the earliest adventure recreation concept was developed by Mortlock (1984), who conceptualised the adventure experience in terms of four stages of an outdoor journey. While the first two stages, play and adventure, present no great challenges to a participant, and skills can be acquired or honed in preparation for further adventure, the third stage, frontier adventure, sees a person no longer in complete control of his or her own situation, resulting in uncertainty of outcome. With application, however, the person can prevail and learn from the experience. The final stage, misadventure, occurs if their skill is unable to match the challenge. While death is the ultimate extreme, more likely are mishaps or minor injury, which may result from trying something just beyond capability, which may yield, in the end, valuable learning experiences.

Varley (2006) considers Mortlock’s (1984) metaphorical journey, and suggests that the search for what is termed an original adventure, in contrast to commodified activities, involves an individual, subjective journey. This takes place in natural surroundings, and
involves new experiences and learning skills that permits one to get closer to the edge. Here lie the exhilaration and lack of conscious application to the activity that characterise moments of ‘flow’ (Varley, 2006). In some respects, the model is rather outmoded now, as the consumption of commodified activities has displaced some of these original qualities (ibid.).

2.4.2 A Recreational Behaviour Model: Schreyer et al. (1985)

Although pertaining to more general recreational activities, Schreyer et al. (1985) extend theoretical understanding by conceptualizing the link between motivation and environment settings in determining behaviour. Rather than motivation or behaviour in isolation, it is the combination of motivation, behaviour and environment that lead to a satisfactory experience (Schreyer et al., 1985). The interaction of motivation and the recreational environment may also be influenced by the provision of information available to an individual (ibid.), the information available being directly related to an individual’s past experience of settings.

Schreyer et al. (1985) argue that lifestyle factors also influence recreational behaviour. These factors relate to an individual’s level of development, itself correlated to one’s previous experience, and the social context within which activities are undertaken, with resultant cognitive recognition of status value. The conceptual relationship between motivations, settings, information and lifestyle factors is acknowledged as an influential factor on the development of this research. This framework for mountain biking, however, departs from their model in a fundamental way, as the actual mental processes entailed in decision-making (see Sirakaya and Woodside, 2005 for example) that determines recreational behaviour lies beyond the remit of this research; the focus is on an examination of the ‘factors’ that influence mountain biking participation. The influence of this conceptual research is discussed in more detail in Section 7.2.1.

2.4.3 Mountaineering Motivations: Ewert (1985)

More specific to adventure recreation, Ewert’s (1985) research explores why mountaineers climb. In doing so, the study examines motivations that are relevant to this thesis, although the range of motivations is arguably too narrow to encapsulate all the
reasons why people choose such activities. The six motivations identified are: challenge/risk, catharsis (described as escape or solitude), recognition, creativity (for example, route finding), locus of control and the physical setting (in terms of scenery or nature). The relevance to this research is therefore that Ewert recognises that influences on participation are a combination of personal and setting attributes. More generally, the influence also lies in its shaping of subsequent adventure recreation literature (Weber, 2001 for example).

2.4.4 The Adventure Experience Paradigm: Martin and Priest (1986)

The adventure experience paradigm of Martin and Priest (1986) explores the mental tension inherent in adventure recreation activities, through the interplay of risk – described as a potential loss – and competence, where skill, experience and confidence are used to offset the risk. Concepts such as the flow experience (Csikszentmihalyi, 1975), discussed in Section 2.5.3, are central to the model. While matching competence to situational risk is undoubtedly an important ingredient of the mountain biking experience to some people, it is argued by the author to be just one of the potentially important motivational factors.

2.4.5 The Adventure Model: Ewert (1987)

The influence of Ewert’s (1987) adventure model has been widely acknowledged (for example, Weber, 2001; Todd et al., 2002; Pomfret, 2006; Beedie and Hudson, 2003). This model was developed to be able to make predictions regarding the shift in motivations with changing experience levels. It therefore appears, ostensibly, to have limited applicability to this research, as a key assumption is that the mountain bikers interviewed are already experienced bikers. How their motivations have changed is not central to this thesis, although the role of previous experience as an influential factor is acknowledged and discussed. The relevance and influence of the adventure model lies in its conceptual merging of personal attributes with setting or activity variables, deemed to be the key factors in determining a person’s level of engagement in an activity (Ewert and Hollenhorst, 1989).
2.4.6 Needs, Motivations and Expectations: Fluker and Turner (2000)

While it is acknowledged, the framework of Fluker and Turner (2000) is not conceptually referenced for a similar reason. Their study examines the differences in needs, motivations and expectations of participants with rafting experience and those with no such experience. Furthermore, these experiences are explored within the context of a ‘commercial’ whitewater rafting trip; in this respect their research also departs from the approach of this thesis. The authors report that inexperienced rafters are most interested in the more dynamic experiential aspects of rafting, while those with previous experience are more relaxed in attitude and more concerned with extrinsic factors, such as the sociable nature of the activity (Fluker and Turner, 2000).


More directly influential, Pomfret’s (2006: 113) examination of mountaineering aims to develop “a conceptual framework to evaluate mountaineer adventure tourists, key influences on their participation in mountaineering, and their actual experience during involvement”. Her framework examines the important push and pull factors, coupled with personality characteristics and lifestyle factors, that determine recreational mountaineering participation. It also considers people’s emotional states attained during participation and supplementary push and pull factors that influence people’s participation in mountaineering as an adventure tourism product.

Pomfret’s (2006) framework was applied to mountaineering, an adventure recreation activity that parallels mountain biking in a number of ways. Some risk-associated elements may be more significant for mountaineering, for example exposure to adverse weather or the consequences of failure, while, unlike mountain biking, mountaineering, by definition, must take place in physically-testing settings. Nonetheless, both mountaineering and mountain biking, at the level of experience and commitment of the bikers interviewed, are argued to be hard adventure activities, with a high level of risk, physical demands and a requirement for competence (Christiansen, 1990). Both mountaineering, as an adventure ‘recreation’ activity, and mountain biking are intrinsically-controlled, where the actions, and repercussions of those actions, are controlled by the participant (Ewert, 1987). These activities may also be mentally
challenging and require travel to more remote locations. Through these characteristics they are argued to constitute serious leisure (Beedie, 2003).

The framework of Pomfret (2006), however, considers both mountaineering as a recreational pursuit and as a commercialised adventure tourism activity. Examining mountain biking as such a commodified adventure activity, defined by Varley (2006) as a saleable touristic product, is generally beyond the remit of this study, although the possible employment of a guide is briefly discussed as a situational attribute. The idea that mountain biking at trail centres may represent a commodified activity, through the the direct provision of purpose-built trail for which a charge, directly or indirectly, may be levied, is discussed in Section 5.9, while the influence of Pomfret’s framework is discussed in more detail in Section 7.2.2.

Consideration of all of the models discussed confirms that Pomfret’s (2006) framework, and that of Schreyer et al. (1985), remains an influential source for the conceptual construction within this research. Their particular relevance to this conceptualisation of mountain biking participation lies in their attempts to draw together all the elements that are believed to determine participation, and that are examined in this thesis: motivations, specific environmental or site attributes and other socially-oriented influences. The research and findings of Pan and Ryan (2007), regarding the contextualisation of motivations within a person’s experience of settings and their attributes, serve to reinforce the importance of recognising the interaction of all of these influential participatory factors.

2.5 Potential Motivations for Mountain Biking

In differentiating general recreational pursuits from those activities such as mountain biking that are labelled as adventurous, the latter are generally perceived as involving elements of risk, danger and adrenalin (Kane and Zink, 2004), where the outcome can be influenced by either the participant, in the case of autonomous activities, or through independent control of the experience (Hall, 1992). The roots and definitions of adventure recreation and tourism were introduced and discussed in Chapter One, enabling mountain biking, at the level of experience and dedication explored in this thesis, to be placed towards the hard end of the adventure recreation spectrum.
Although it may be the element of risk that is often cited as the defining feature of adventure recreation (Ewert, 1989), it is acknowledged that adventure means different things to different people (Gajda, 2008). There are a number of principal elements, however, that are argued to both define adventure recreation and influence people’s participation in these activities (Swarbrooke et al., 2003). The aim of this section is to discuss the factors that potentially motivate people to mountain bike. These are examined below, having first discussed previous academic research in this area.

2.5.1 Academic Research on Motivations for Mountain Biking

It is suggested that mountain biking owes some of its success to the wealthy baby boomer generation, conveying to them ideas of peer acceptance and masculine identity, while offering riders the chance to relive the halcyon days of childhood (Patrick, 1988). Although an area where little in-depth work has been carried out, a few quantitative studies have been undertaken that have tried to determine some of the key motivations for riding. When bikers have been asked why they enjoy the pursuit, the most popular response is that it is for fun, enjoyment or the fact that they love mountain biking, while riding for the physical exercise and being in nature or the environment are also popular motivations (Hollenhorst et al., 1995). A study in Tasmania, exploring mountain biking management implications, similarly reports that most mountain bikers visit Wellington Park near Hobart for appreciation of scenery or nature, while other important motivations are exercise, social reasons and the excitement or risk (Chiu and Kriwoken, 2003). Both of these studies, however, use a quantitative method to confirm only a narrow range of motivations.

The most recent findings originate from Norway, where factor analysis is used to assess 27 motivational items from the Recreation Experience Preference scales (Skår et al., 2008). It is concluded that physical exercise, contemplation and nature experience are the most important motivations for bikers. In trying to correlate these seemingly antagonistic motivations, it is proposed that a mountain bike ride “may be just what is required to change focus, relax an overloaded mind, and release the frustrations of daily life” (Skår et al., 2008: 42). Significant by its omission in Skår et al.’s study, however, is reference to peak or optimal experiences, or the components thereof, argued to be an important intrinsic reward for adventure recreationists (Csikszentmihalyi and Csikszentmihalyi, 1990).
Much narrower in focus is Dodson’s (1996) research which examines only two aspects of mountain biker behaviour, albeit novel and interesting ones: whether there is a positive correlation between a peak experience while riding and the incorporation of the bike into the rider’s extended self. Bikers were asked whether they feel any of the constructs associated with peak experiences, such as absorption, spontaneity, or intensity. Sixty-five percent mentioned that their most memorable memory of mountain biking contains many elements of a peak experience (Dodson, 1996). The findings regarding incorporation of the mountain bike into the self, however, are generally inconclusive.

Similarly focussed is an examination of the factors that influence participation in a risky recreational activity such as mountain biking and how this is affected by experience (Creyer et al., 2003). Mountain biking is used as it is deemed to be a physically and financially accessible activity that is easily understood, that nonetheless offers suitable levels of risk. The findings suggest that in bikers the propensity to take risks is not an innate characteristic, but results from a process of acquisition. In this respect, the findings are commensurate with earlier studies into other high-risk activities such as sky-diving (Celsi et al., 1993). The authors state that “risk propensity was... significantly influenced by experience, perceived risk, and affective outcome expectancies”; as bikers become experienced they indulge in increasingly risky behaviour (Creyer et al., 2003: 251).

As they become more experienced, mountain bikers have been found to derive greater enjoyment from physical and technical challenges, and speed, excitement and risk (Cessford, 1995b). Differentiating a wide range of New Zealand mountain bikers’ motivations by experience, this seminal, if now dated, work concludes that beginners tend to be motivated more by exercise and fitness in particular. Some motivations identified in this thesis are notably absent from the research however, for example, riding for recognition or to seek adventure. It is also argued that speed, excitement and risk, examined together by Cessford, are not components of the same motivation and the usefulness of the findings are arguably constrained by grouping these motivations together. Further research in New Zealand on another narrow range of riders' motivations and demographics as part of a wider study on management issues has yielded findings that are quite closely correlated with those of the other studies discussed (Leberman and Mason, 2000). These studies, however, have generally tended to ignore the importance of intrinsic rewards to mountain bikers, exemplified by the flow experience.
2.5.2 Optimal Experiences: The Core of Adventure Recreation?

While physiological benefits are also believed to be a motivating force for adventure recreation, it is suggested that “the primary motive for participation in adventure activities is the intrinsic psychological benefits to be gained by individuals from recreational challenges” (Hall, 1992: 145). Flow experiences, along with alternative constructs such as peak experiences discussed in Section 2.5.2, embody these optimal psychological experiences (Walker et al., 1998). Defined as special or out-of-the-ordinary experiences (Mannell, 1996), they form a key participatory motivation (Walker et al., 1998).

2.5.3 The Theory of Flow

Rooted in the work of Maslow (1943), the theory of flow (Csikszentmihalyi, 1975) is perhaps the most influential and oft-quoted construct in defining the adventure experience (Cater, 2006; Varley, 2006; Lipscombe, 2007; McGillivray and Frew, 2007, for example). Flow describes “the holistic sensation that people feel when they act with total involvement” (Csikszentmihalyi, 1975: 36), and has been applied to activities as diverse as dancing, chess and climbing. Many activities in which flow may be experienced have few extrinsic rewards (Csikszentmihalyi and Csikszentmihalyi, 1990). People’s requirements extend beyond the satisfaction of basic needs however, and intrinsically rewarding flow experiences are not just a means to an end, but an end themselves (Voelkl et al., 2003). The model has been applied to adventure recreation, reasoning that “adventure participants are searching for a peculiar state of experience, an experience that is rarely accessible in everyday life” (Csikszentmihalyi and Csikszentmihalyi, 1990: 154).

There are a number of prerequisite conditions that must be present for flow to be experienced: participation in the activity must be voluntary, facilitate the necessary level of arousal and entail psychological commitment from the participant (Ryan, 2002). These elements only rarely converge and flow for most people is therefore a mysterious and evasive phenomenon (Voelkl et al., 2003). Since its development, a various number of elements associated with flow experiences have been identified, although seven indicators are generally considered to be key (Csikszentmihalyi and Csikszentmihalyi, 1990). Ranging from perceptions of the balance between challenge and skill, to a loss of self-
consciousness, when the person is at one with the activity, these elements are discussed in detail in Section 4.7.5.

A specific advantage of the flow model over Maslow’s work is the deliberate development of methods for the measurement of flow (Ryan, 2002), and the concept has been empirically tested in a number of different adventure recreation activities, for example, whitewater rafting (Ryan, 1997) and whitewater kayaking (Jones et al., 2003). Key elements of the model have also been applied to mountain biking (Dodson, 1996), as discussed above. Whitewater kayaking experiences have also been empirically tested using a modified version of the model, termed the four channel model (Jones et al., 2000). While the flow experience is undoubtedly an influential construct, authors such as Varley (2006) question its centrality in the adventure recreation experience.

2.5.4 Mastering the Challenge

Potentially rewarded by feelings of flow, mastering a challenge presented by an activity, whether physical or psychological in nature, is an important motivation in adventure recreation (Beard and Ragheb, 1983; Carpenter and Priest, 1989; Csikszentmihalyi and Csikszentmihalyi, 1990; Jones et al., 2003). As a motivation for participation, it is considered to become more important as people become more engaged in adventure recreation activities and favour such intrinsic motivations (Ewert and Hollenhorst, 1989). Mastery as a motivation suggests that people’s ability to conquer the challenges of situational risk create the opportunities for optimal experiences (Iso-Ahola, 1980). Many adventure recreation activities are intrinsically rewarding, as they can represent a new kind of challenge, one that calls upon a skill-set not apparent in everyday life (Csikszentmihalyi and Csikszentmihalyi, 1990). The balance of individual competence and perceived situational risk, correlating closely to skill and challenge, forms the core of the adventure experience paradigm (Martin and Priest, 1986), examined in Section 2.4.4.

Mastery is linked to the compulsion of some people to fulfil goals that they set themselves. Mountaineers often strive for goal-completion even when it appears to be an irrational choice and they put themselves in danger (Loewenstein, 1999). Although ostensibly irrational, this may be explained by an individual’s compulsion to master their immediate environment, where people may be willing to take greater risks to overcome the
challenge this presents (Todd et al., 2002). Participants may also be totally absorbed in their activity (Tellegen and Atkinson, 1974) and be unaware of the dangers. Overcoming these challenges, and the inherent risk, however, can help to both reinforce one’s self-esteem and facilitate and promote social recognition amongst peers (Loewenstein, 1999), discussed in Section 2.5.13.

2.5.5 The Seeking of Risk

The proposal that seeking risk, defined as the possibility of loss and uncertainty of outcome (Cater, 2006), is one of the principal motivations for participating in adventure recreation has been core to a wide range of the academic argument in this field (for example, Carpenter and Priest, 1989; Weber, 2001; Creyer et al., 2003; Pizam et al., 2004; Cater, 2006). One of fundamental differences between recreation and adventure recreation is argued to be the elements of danger that are faced by the participant (Ewert and Hollenhorst, 1989), where an individual’s abilities can play a crucial role in determining the outcome (Ewert, 1994).

There is an important distinction to be made, however, between those adventure recreation activities that present real risks to the participant and those that merely constitute a perceived risk. It is argued that a major difference between commodified activities such as jet boating and bungy jumping, and independent, autonomous adventurous activities, for example whitewater kayaking, is that the former “commercial adventure tourism activities may seem risky, but are merely ways of packaging safe experiences to look risky” (Bell and Lyall, 1998: 28). A strong correlation has been found between the level of perceived risk and a person’s unfamiliarity with an activity (Cheron and Ritchie, 1982). Some of these commercialised activities are argued to be once-in-a-lifetime experiences, and it is the novelty of such activities that is one of the most important motivations for participation (Cloke and Perkins, 2002).

The propensity to take risks in order to engage in novel, complex, varied and intense experiences is defined as a personality trait. People who have a strong need for these experiences are deemed to be high sensation-seekers (Zuckerman, 1994). In adventure recreation, there are those who seek risk and those who try to avoid it (Ewert, 1994). For the former, risk is part of the experience rather than just something to be managed (Creyer
et al., 2003), and represents a positive part of the adventure recreation experience (Swarbrooke et al., 2003). In a study of skydivers, it has been found that as participants become more experienced they need to take greater risks to achieve the same level of affective outcome (Celsi et al., 1993). There is evidence, therefore, to suggest that “risk propensity be viewed as a process of acquisition rather than an innate characteristic” (Creyer et al., 2003: 250).

Ewert (1994: 5) argues, however, that “the principal shortcoming of [the personality predisposition] approach is that it fails to provide a multidimensional explanation... for voluntary risk-taking behaviours”; an alternative proposal is that risks are sought to achieve certain goals. A desire to experience flow is one such goal, resulting from the matching of personal skills to the risk posed by a situation (Csikszentmihalyi and Csikszentmihalyi, 1990). More importantly, the importance of risk in adventure recreation, however, has been questioned (Ewert, 1994; Weber, 2001); this is discussed below.

2.5.6 Thrill as a Prime Motivation

Contrary to the traditional belief that risk is a prime motivator for adventure recreationists, when respondents in Cater’s (2006) study of adventure tourists in Queenstown were questioned how they rated risk, 94% stated either very low or non-existent. It is argued that rather than adventure being pursued because of the uncertainty of outcome (Hall, 1992), in many adventure recreation activities, particularly those offered commercially, the outcome is known, and “the prime motivation for the practice of adventure is thrill and excitement”, not risk (Cater, 2006: 321). Many commercialised adventure pursuits are therefore described as activities “in which excitement, thrill, fear and overcoming of fear can be purchased” (Cloke and Perkins, 2002: 538).

Thrill is defined in terms of encapsulating the middle ground between harmful and harmless recreational pastimes, characterised by a degree of anxiety or existence of real danger, voluntary exposure to danger and the confident hope that this will turn out alright (Balint, 1959; cited in Vester, 1987). It is argued that the existence of danger, however, means that thrill lies much more towards the harmful than the harmless. Ewert’s (1994) research on high-altitude mountaineering, as an autonomously controlled adventure
activity, appears to confirm the importance of thrill and excitement, compared to risk. Respondents of all experience levels felt that “risk has little to do with the reasons for being there”, while “exhilaration and excitement appear to be important components” (Ewert, 1994: 21). This prompted the suggestion that perhaps risk recreation is an erroneous name for such activities, and that adventure or challenge recreation would be more appropriate (Ewert, 1994).

2.5.7 Fun and Enjoyment

“Common sense tells us that when people have a choice, they undertake an activity because they anticipate it will be fun or enjoyable” (Henderson et al., 1999: 43). This particular experiential aspect of adventure recreation appears to be often overlooked, however, in relation to the concepts of thrill and, in particular, risk. Contrary to a number of general motivation theories, the experiential view of consumption assumes that people want these types of experiences for enjoyment, not rational reasons (Lofman, 1991).

Partaking in adventure recreation pursuits ascribes to this model of consumption, and fun has even been identified as the most important motivation (Todd et al., 2002). It is difficult for people to rationalise bungy jumping, for example: they jump because, among other reasons, it is fun, and appreciated for its intrinsic worth, not for any utilitarian value it may have (Holbrook and Hirschman, 1982). Such activities are akin to play, defined in terms of “pure pleasure, an activity undertaken solely for enjoyment… [and] an antidote to all the mundane duties of adulthood” (Roberts, 1995: 36). Taking part for such experiential or intrinsic reasons suggests, it is argued, that enjoyable or fun activities are conducive to the search for optimal experiences.

2.5.8 The Rapid Consumption of Activities

Adventure recreation activities, whether driven by fun or other defining characteristics, are argued to be particularly relevant to today’s society, due to the nature of many people’s contemporary lives. “Since the beginning of the 1980s, there has been a trend towards the development of those disciplines which are best able to meet the need for rapid ‘consumption’” (Bourdeau et al., 2002: 28). It is suggested that today’s quicker pace of life dictates that people use their time more precisely or undertake an activity more
quickly, termed *time deepening* (Godbey, 1985). In the context of mountain biking, while ‘rapid consumption’ may explain intense rides at purpose-built trail centres for example (discussed in Section 5.11), it is suggested that people are also motivated to participate in longer rides, perhaps as an antidote to the pace of their everyday lives.

### 2.5.9 Mental Catharsis

A motivation that is suggested to be very different in orientation to rapid consumption is participation to experience mental escapism or catharsis. As people often associate natural environments with happy memories and symbols of health, “encounters with nature, therefore, evoke good feelings… and [can] consequently restore the individual to a positive mental state” (Hull IV and Michael, 1995: 2). The natural environment can be a major draw for visitors (Higham *et al*., 1996), and even in a country as populous as the UK there are many opportunities for relaxation (Miller *et al*., 2001).

Most inhabitants of the western world live essentially urban lives (Beedie and Hudson, 2003). Recreationists are therefore drawn to scenic areas not only to appreciate the aesthetics of the countryside, as discussed above, but also to withdraw from the social world, seeking instead settings conducive to privacy and contemplation (Lee, 1977). Partaking in leisure activities can help to moderate stress levels, or the physiological or psychological effects of stress (Han and Patterson, 2007) that can result from modern lives.

More dynamic pursuits, whose goals are ostensibly antagonistic to perceptions of peace and contemplation, are also able to provide psychologically cleansing experiences. Mountain climbing, for example, can provide catharsis through the demands placed on climbers for total concentration and commitment (Ewert, 1985). Mountain bikers have also been found to value the therapeutic and escapism aspects of the activity as an influence on their participation (Probert, 2004).

### 2.5.10 Novelty

Sometimes participation can be driven by nothing more than experiencing new destinations (Basala and Klenosky, 2001). Novelty is a hedonic need that does not usurp the more functional or utilitarian needs in people’s decision-making, but captures the more
pleasurable aspects of consumption (Vogt and Fesenmaier, 1998). Novel experiences can both restore an individual’s internal equilibrium (Crompton, 1979), and help to develop self-identity and generate status amongst others (Lee and Crompton, 1992).

Novelty has been conceptualized through six dimensions: in offering a change from one’s everyday routine, it offers an escape from reality, even if it is only temporary, and helps to alleviate boredom (Lee and Crompton, 1992). Experiencing the unknown offers the potential to surprise, to thrill or excite and an element of adventure, where uncertainty and risk may be prevalent (ibid.). As such, whether something wholly new or just a variation on something already experienced, novelty can play an important role in adventure recreation activities (Swarbrooke et al., 2003), both commodified and autonomous.

2.5.11 Exploration

Closely related to the concept of novelty, exploration is an important motivation in many adventure recreation activities (Swarbrooke et al., 2003). Many such activities, especially those undertaken autonomously, can contain an element of adventurous travel and its associations with finding new places, having new experiences or acquiring new skills or knowledge (Sung et al., 1997). A physical journey, undertaken as part of a mountain bike ride over personally uncharted terrain for example, can imitate, for the participant, the great adventures of heralded explorers (Swarbrooke et al., 2003). Indeed, now that most of the western world has already been discovered, it is suggested that the real discoveries to be made are those personal journeys that people make (Addison, 1999; cited in Swarbrooke et al., 2003), both physical and metaphysical.

2.5.12 Peer Pressure

A concept that has received little attention in the fields of either mountain biking or adventure recreation, a demand from peers to conform (Brown et al., 1986) may result in a person doing something that they may not personally want to do (Ungar, 2000), participating in the exploration of places or experiences beyond their comfort zone for example. The importance of peer pressure on school children’s adventure activities has been acknowledged, resulting in a need to build their social status among their peers, when
faced with a challenge (Wallia, 2008). In a range of situations, peer pressure may result in people taking greater risks and making riskier decisions than when they are alone (Gardner and Steinberg, 2005), which has obvious implications for participation in adventure recreation activities. Decisions that are made within a group may also be riskier than those made individually (Hensley, 1977).

Research in other fields has found that adolescents are generally more susceptible to peer pressure than adults (Gardner and Steinberg, 2005), and males more susceptible than females (Brown et al., 1986). While it is argued that these findings are reflected in adventurous activities, it is believed that peer pressure has yet to be empirically researched in the context of autonomous adventurous activities. In New Zealand adventure recreation, males have much higher compensation claims per head than females, while riskier activities such as snowboarding have a much lower mean age of injured participant than the norm (Bentley et al., 2008). While no causal link is suggested by the author, these findings may support the suggestion that it is young males who tend to be most influenced by peer pressure (Brown et al., 1986; Gardner and Steinberg, 2005).

2.5.13 Social Recognition

Conforming to a peer group can have more positive implications, however. Being seen to belong to such groups helps to develop people’s reputation (McGillivray and Frew, 2007), for example, and to create esteem in the eyes of others (Beard and Ragheb, 1983). People often have pre-conceived ideas about others who participate in certain activities and some people may actually choose to participate in an activity in order to try to influence how other people see them, or at least how they believe others will see them (Schrader and Wann, 1999). Unlike the elite racers, for example, corporate adventure racers seek symbolic profit from their participation, “based on social perceptions of [adventure racing] as a ‘tough’, ‘risky’, and ‘fringe’ sport practice, that constructs identity and difference” (Kay and Labarge, 2002: 32).

Making the choice to belong to a social group can also help to avoid alienation (Ungar, 2000) and foster a sense of belonging (Hultsman, 1993). Knowing that they belong to a desired social group, and the value they place on belonging to that group, also helps people to define their own social identity (Tajfel, 1982). Their status-building achievements in
adventure recreation help to reinforce their perception of their social identity in the eyes of others, their peers in particular, as they “signal to themselves that they have desirable attributes by taking actions that they believe are consistent with those attributes” (Loewenstein, 1999: 323). Understanding, and utilising, sub-cultural ‘jargon’ also helps to develop one’s identity within a group of peers and to facilitate acceptance (Pomfret, 2006); mountain biking, as an ‘extreme’ sport that appeals to youths, as well as older riders, has developed its own sub-cultural language (Wagner, 2008), that lets individuals signal their belonging.

Social recognition or prestige has been defined in terms of symbolic capital (Bourdieu, 1990), symbolic because it is can only be bestowed upon a person by those within their peer group (McGillivray and Frew, 2007). Participating in activities perceived as dangerous or adventurous, such as whitewater kayaking, “provide[s] participants with experience stories, a form of ‘symbolic capital’, of experience similar to the kayaking elite” (Kane and Zink, 2004: 332). Narrating their experiences on the river to other members of their peer group helps them accumulate symbolic capital and increase their social status in the group (Kane and Zink, 2004). These adventurous social worlds are defined by common interests and a strong personal identification with a sport or pastime (Green and Jones, 2005), characteristics which suggest that the activity represents serious leisure to the participants, becoming sufficiently involved in an activity to generate substantial personal and social rewards (Stebbins, 2001).

2.5.14 Autonomy in Decision-Making

While symbolic capital may be accrued through taking part in adventurous guided trips, anecdotal evidence suggests that commodified mountain biking experiences represent a very small minority of trips, and that for the most part the locus of control is with the mountain bikers themselves. The need or desire for autonomy in decision-making is a personality characteristic (Wann and Schrader, 1999) and a key feature of unguided adventurous activities. Many adventure recreationalists want to make their own decisions before and during the activity and take control of their own actions (Pomfret, 2006).

In a rather paradoxical parallel with mass tourism, considering the reactionary roots of alternative tourism, many people are happy to pay third parties to make all the
arrangements for adventure recreation (Beedie, 2003). A crucial distinction from predominantly autonomous adventure recreation activities such as mountain biking, however, is that these activities, as discussed earlier, are argued to be relatively risk-free but still offer the perception of risk (Ritzer and Liska, 1997). In activities undertaken independently, such as mountaineering and whitewater kayaking, the risk can be totally borne by the participant.

As Bentley et al. (2007: 792) found, “recreationalists engaged in unguided, independent [emphasis added by the author] adventure activities… were most frequently injured or killed as a result of their activity”. Anecdotal evidence suggests that mountain biking is for most people an unguided activity. The high incidence of mountain biking injuries in New Zealand attests to the very real dangers that participation in the sport poses (ibid.), and adds weight to Bentley et al.’s suggestion that such autonomously-controlled activities pose high levels of personal risk.

2.6 Potential Environmental Attributes that Attract Mountain Bikers

Previous academic research has determined a variety of different site attributes that influence mountain bikers’ autonomous spatial decisions prior to participation. This section therefore starts with an examination of these quantitative studies, and discussion of their key findings. The qualitative nature of this thesis, however, suggests that other factors may be proposed by research participants as desirable environmental attributes. A range of other characteristics is therefore discussed as potentially important pull factors to mountain bikers.

2.6.1 Academic Research on Trail Preferences

Riders’ preferences for trail types, settings or features and trail facilities have been explored as the core of research by a limited number of studies (Cessford, 1995b; Goeft and Alder, 2000 and 2001; Symmonds et al., 2000; Bowker and English, 2002). These studies have subsequently examined their implications for the management of trails and facilities for mountain bikers. Wide-ranging research on the implications for trail management, in the USA, UK, Australia and New Zealand, concludes that roots, rocks, and gullies generally add to the perceived quality of biking, while mud detracts from the
experience (Symmonds et al., 2000). In terms of how attitudes towards trail conditions and features vary according to a number of variables, age, skill and commitment for instance, it is concluded that there is no one biker profile that can be used in recreation management, and the preferences of a range of different sub-groups need to be taken into account (ibid.).

Within the context of the varying levels of experience, an examination of preferences of New Zealand riders concludes that a mixture of climbs and descents are preferred riding conditions for riders of all experience levels, while trails set in a variety of terrain are more important factors for more experienced riders (Cessford, 1995b). Expert riders favour technical or challenging trails: tight, narrow and winding singletrack, which poses its own riding challenges, is their favoured condition (ibid.). It is the examination of the interplay of trail preferences and environmental considerations that forms the focus of research on sustainable mountain biking in Western Australia (Goeft and Alder, 2000 and 2001). The earlier work examines perceptions and preferences of riders in Western Australia, while the latter paper researches appropriate trail design that minimises environmental impacts while still providing great experiences for riders (Goeft and Alder, 2001). Downhills, curves, short uphill sections and jumps are reported as being among the most desirable trail features, while route markers, parking and the supply of drinking water are preferred trail facilities. Preferred settings for mountain biking are also identified: singletrack and native bush are the most preferred, sealed roads and built-up areas the least preferred (Goeft and Alder, 2000).

Hollenhorst et al.’s (1995) study also purports to report on rider preferences for trail types, although it is argued that merely reporting the types of trail that they do ride on is not the same as their ‘preference’ for trail type. More pertinently, riders at the Tsali Recreation Area in the USA are questioned about the importance of trail characteristics, trailhead facilities and area amenities. It is significant that while trail attributes and on-site facilities are considered quite important, such facilities are ancillary to the experience and the primary reason people come to Tsali is just to mountain bike (Bowker and English, 2002).

The examination of many of these attributes, however, is argued to be in many respects out-dated, understandably so given developments in mountain biking provision over the
last decade. In Goeft and Alder’s (2000) and Bowker and English’s (2002) research, for example, the trailhead facilities examined were both very basic in nature and restricted in breadth. Anecdotal evidence suggests that many purpose-built mountain biking centres, in the UK for instance, provide a much wider range of more sophisticated facilities. Furthermore, studies such as Cessford’s (1995b) research were undertaken before the widespread development of purpose-built centres in New Zealand and other countries. Contemporary site attributes, as well as the motivations for visiting them, are suggested to be both different and more varied to those examined in 1995.

2.6.2 The Impact of Weather and the Seasons

As an outdoor activity it is reasonable to assume that mountain bikers’, or other recreationists’, decisions regarding where to participate are affected to some degree by the local weather conditions (Brandenburg and Arnberger, 2001). This is believed to be particularly relevant in countries with a maritime climate and unpredictable weather patterns, such as the UK and New Zealand. Those factors that typically affect recreation participation rates are the temperature, wind-chill, wind and rain (Crowe, 1975), the effects of which are considered to be both psychological and physiological (Martín, 2004). The weather factor is an important safety consideration when participating in sports in upland or mountain areas, which can be particularly prone to rapid changes in conditions (Smith, 1993). The length of the day is a typical seasonal factor affecting general outdoor activity (Crowe, 1975), and the number of daylight hours is therefore postulated to be a factor for consideration when mountain bikers, or other adventure sports participants, choose a location and duration of activity.

It is apparent that “resorts need to include activities that can be performed... sheltered from inclement weather, to guarantee customer loyalty even during bad weather” (Martín, 2004: 577). It is argued that in terms of mountain biking, the development of new purpose-built facilities, very often in forested areas and with well-drained, all-weather surfaces, provide this necessary shelter from inclement weather. While the aesthetic value of such centres may be questioned, these are believed to have been important factors in reducing the seasonality and weather-dependence of mountain biking, and consequently increasing the accessibility and popularity of the sport.
2.6.3 Aesthetic Values in Adventure Recreation

It has been suggested that “while scenic beauty is an important resource in its own right, it… almost certainly contributes to the value of the recreation experiences” (Brown et al., 1990: 281). In this regard it is argued that mountain biking and other adventure recreation activities are no different, and the enjoyment of nature and scenery has been identified as one of the top three features of mountain biking (Cessford, 1995b). Some authors believe, however, that activities that have a strong performance element, such as mountaineering, are less dependent on scenic aesthetics (Brown et al., 1990). Hall (1992) concurs, believing that the landscape only provides the stage for adventurous activities, although the activity’s dependence on this resource is recognised.

Other authors adopt an antagonistic position, however, and argue that scenic beauty is an intrinsic part of the adventure recreation experience. The “essential interconnection between paradisal nature and adventurous activity” (Cloke and Perkins, 1998: 201), along with images of mountain biking to promote the ‘100% Pure’ advertising slogan, has helped brand New Zealand for example (Cloke and Perkins, 2002). Authors such as Goeft and Alder (2000) verify the importance of natural settings to mountain bikers, reinforcing this argument. In landscapes commodified by adventure recreation, active performance has to a degree usurped passive appreciation. The spectacular scenery of the Himalayas, for example, permits the adventure tourist to accumulate great capital (Beedie and Hudson, 2003). It is not only mountain environments that are attractive to adventure recreationalists, as “bikers demand forest terrain for challenging and aesthetically pleasing experiences” (Moran et al., 2006: 125), although the findings of this research question that assertion.

2.6.4 Mountain Biking's Potential Impacts on the Environment

While the managers of these environments, and other users, may use potential trail impact as the reason for disliking mountain bikers (Hoger and Chavez, 1998), it is generally acknowledged that some change will occur with all uses, not just biking (Thurston and Reader, 2001). In terms of the potential damage of different uses, “it is commonly considered that cars tend to cause more damage than horse riding, which causes more damage than mountain bikes, which in turn cause more damage that [sic] walking”
A considerable number of academic studies have been carried out to examine this hypothesis, with inconclusive results. Some studies, for example, find no significant difference between the effects of hiking and mountain biking (Wilson and Seney, 1994; Chiu and Kriwoken, 2003, for example). Compared to a trail’s erosion caused by its actual existence and natural forces, erosion from activities like mountain biking or hiking is argued to be insignificant (Grost, 1989).

It is undisputable that, like any other outdoor activity, mountain biking does impact the environment (Sprung, 2004). There is no conclusive proof, however, that mountain biking is more damaging to trails than hiking. Impacts to mountain biking tracks are considered to be comparable to hiking or multiple-use trails (White et al., 2006), while equestrians are considered to cause more damage than bikers (Wilson and Seney, 1994). It may be that the scapegoating of mountain bikers by other trails users may account for much of the perceived difference in trail impact (Hoger and Chavez, 1998). While environmental impacts may not ostensibly appear to influence participation in mountain biking, there are implications in terms of constraints. People’s awareness of the impact of riding on wet tracks, for example, can determine seasonal riding patterns and the consequent accessibility of trails. An appreciation of this issue is therefore argued to have a potentially significant influence on settings for mountain biking.

2.7 Social Conflict

A socially-oriented impact that has been the focus of a range of research has been the conflict between mountain bikers and other users of the great outdoors. Naturally, given the great numbers of recreationists who hike, it is biker’s conflict with this user group, whether real or merely perceived, that occupies most of the literature. The debate over potential social conflict is contingent upon the issue of mountain bikers’ access to trails, which in many cases have traditionally been the preserve of hikers in particular (Brown, 2008). This spread of mountain bikers onto tracks that were previously the preserve of walkers is a worldwide phenomenon (Cessford, 2003).

Consequently, the social situation has changed on many popular trail systems (Ramthun, 1995). The use of mountain bikes on such traditional trails has long been contested, and in some countries, such as the USA for example, bicycles have been
traditionally classed or treated as motorised vehicles in many recreational areas (IMBA, 2009). This has led to questions over their use in wild areas, as the bike’s mechanical advantage is perceived as conferring the means to travel further into areas once the preserve of hikers (Butler, 2003).

To enable conflict-free mountain biking, many countries have developed purpose-built centres. The 7Stanes trail centres, for example, in the border region of Scotland, have been largely responsible for Scotland being tagged as the mountain biking global superstar for two years in a row by the International Mountain Bicycling Association (IMBA, 2006). At centres such as these, where trails are generally constructed for mountain biking only, to the exclusion of other users, conflict issues are avoided at source.

2.7.1 Conflict: An Actual or Perceived Problem?

It is apparent that wherever there are different users competing for the same space the potential for conflict between different people or different user groups is ever-present (Moore and Barthlow, 1997). Research confirms considerable numbers of hikers mentioning negative encounters with mountain bikers (Heer et al., 2003). It is believed that these encounters may be actual or may just be perceptual (Carothers et al., 2001). Actual conflict can occur when the presence of one user group interferes with the goals of another (ibid.). On the other hand conflict may be perceptual, resulting, to a large extent, from people's lifestyles, attitudes and values (Watson et al., 1991). Perceived differences between user groups, in terms of their dress or equipment for example, can lead to unjustified mental constructs about other group members. Such conflict, independent of actual contact between groups, is termed social values conflict (Carothers et al., 2001).

An asymmetric relationship is believed to exist between mountain bikers and other user groups, resulting from these social value conflicts, and hikers have been found to be more likely than mountain bikers to perceive differences between the two users (Watson et al., 1991). Despite this, resonance still exists between walkers’ and bikers’ motivations for being in the outdoors (Brown et al., 2008). Negative perceptions, however, can result in the portrayal of others as stereotypes: for examples hikers’ perceptions of mountain bikers as young hoons (Horn et al., 1994) or not caring about the environment (Symmonds et al., 2000). Pigeonholing other users as members of either an in-group or out-group in this way
can lead to perceived conflict, even if no actual conflict occurs (Ramthun, 1995). Furthermore, in-group discussion of perceived problems can often lead to distortion of encounters and conflict, as problems are exaggerated beyond what was actually encountered (The Countryside Agency, 2001).

Alternatively, conflict can result from the perception of new user groups imposing themselves on traditional trail users (Horn et al., 1994). This can be exacerbated by perceived differences in technology used on the trail, for example. While some anecdotal evidence supports this (ibid.), more recent research found that 72% of walkers agreed that as they get used to bikes conflicts will reduce, giving some support to the proposition that walkers’ perceptions may change as they become more used to encounters with mountain bikers (Cessford, 2003).

2.7.2 User-Group Conflict: Empirical Research

A few studies report conflict, both real and perceived, between hikers, in particular, and mountain bikers. A study on New Zealand’s Queen Charlotte Track reported that 29% and 27% of walkers felt that mountain bikers go past them too quickly and go round corners too quickly respectively. However it was found that those who had not actually encountered mountain bikers were those with more negative perceptions, highlighting the difference between perceptions and actual conflict (Cessford, 2003). While safety concerns have been reported by walkers, actual reports of accidents are few. An unpublished survey of walkers, for example, notes only 15 encounters cited by walkers as potentially hazardous, out of nearly 1500 interviewed, and only one actual accident reported, between two bikers (Petit and Pontes, 1987; cited in Grost, 1989). In several years of accident statistics in the German Alps, almost none of the thousands of incidents reported involve bikers and walkers (Woehrstein 1998; cited in Cessford, 2003). Although mountain bikers may be criticised for illegally using walking tracks, and therefore creating greater potential conflict issues, there is little evidence to support this (Connelly et al., 2004).

Where conflict has occurred, walkers are nearly six times more likely to attribute it to bikers than vice versa, reinforcing ideas about the asymmetric nature of perceived conflict between hikers and mountain bikers (Ramthun, 1995). In terms of attitudinal differences,
for example, 41% of walkers perceive that as a group they are more interested in the environment (Cessford, 2003). Other research, however, finds that hikers and mountain bikers are generally correlative in their attitudes towards the environmental (Watson et al., 1991).

Social conflict is clearly a significant potential issue. While there may be positive social aspects to meeting other people on the trail, which could act as a motivational factor, the evidence suggests that conflict, even if perceptual, is a constant latent issue, particularly between different trail user groups. It is suggested that trying to avoid conflict may have direct implications for the settings that mountain bikers choose for participation. As a result, bikers’ attitudes towards meeting both other riders and trail users from outside this ‘in-group’ will be examined to assess these spatial and motivational implications.

2.8 Managing Mountain Biking: Issues and Actions

The issues faced by trail and land managers generally fall into three categories (Chavez, 1993): trail design and management (Section 2.6.1); safety issues, typified by potential conflict with other users (Section 2.7); and issues relating to access (Section 2.9). A problem for managers is taking into account the goals of different user groups for recreational experiences. Goal interference can occur when bikers who want an exciting ride use the same trails as hikers seeking a relaxing walk, and this can be one of the hardest issues to overcome (Chiu and Kriwoken, 2003). Management styles to address these problems are identified as falling into three strategies: direct, indirect and bridge building (Chavez, 1996a).

2.8.1 Direct Management Decisions

Those management approaches that involve some form of regulation or aim to control use are termed hard or direct approaches (Mason, 2005). They include techniques such as trail improvements, separate trails or dispersing riders over a greater number of trails if they become too crowded (Chavez, 1997b). Some areas in the USA have even imposed fines for riding on hiking trails (Hoger and Chavez, 1998). Such direct approaches, however, can be counter-productive, if people consider that there are too many issues associated with riding a trail (ibid.).
It is suggested that to avoid possible conflicts, specific trails should be built for mountain biking, where possible (Goeft and Alder, 2001). At most purpose-built trail centres, in the UK and New Zealand at least, this is now the case. Where this is not possible, multiple-use trails should be carefully designed and marked to take account of all user-group needs. These are an efficient and popular way to cater for mountain bikers, and in some places they may be the only option (Moore and Barthlow, 1997). Zoning riders away from other user groups, particularly more advanced bikers who may ride at high speed, is a further available tool (Davies and Newsome, 2009).

The use of fees as a management tool has been examined in previous research. A survey of user perceptions on the Slickrock Trail in the USA concludes that, as the vast majority of respondents feel that the trails were not too crowded, such use restrictions are not necessary (Reiter and Blahna, 2002). While interviewees are willing to pay modest fees to fund proper trail management, resource protection is considered to be more important than the provision of services (ibid.). An example of a direct management approach to try to minimise potential conflicts between hikers and mountain bikers is employed by the Snoqualmie Ranger District in Washington State, which opens a trail for mountain bike access on odd-numbered calendar days only (Jellum, 2007). While more conflict is still observed on odd calendar days than even, it is found that both sets of users prefer the policy to either banning mountain bikes or allowing full-time access; continued access on the trial basis is recommended (ibid.).

2.8.2 Indirect Approaches

Possibly because direct methods are more contentious, or more expensive in the case of trail improvement, most land managers use indirect management methods (Chavez, 1996a). These methods also tend to be favoured by recreational users over heavy-handed, direct methods (Chiu and Kriwoken, 2003). In terms of mitigating the potential for conflict, for instance, bikers feel that having a responsible attitude to riding is effective (Leberman and Mason, 2000). Bikers who ride in control, for example, are less likely to skid and cause trail damage (Goeft and Alder, 2000). An indirect technique, such as educating all trail users, can also help to avoid conflict issues with walkers (Watson et al., 1991). Other soft approaches, such as posters, signs and brochures (Chavez, 1997b), can also be used to educate people, and change their attitudes and behaviour, while codes of
conduct represent an effective means of self-regulation. The International Mountain Bicycling Association has developed an internationally recognised code of conduct for mountain bikers, the *Rules of the Trail*, which addresses issues such as riding in control, being considerate towards other users, looking after the environment and personal safety (International Mountain Bicycling Association, no date).

### 2.8.3 Building Bridges for Mountain Bikers

Acknowledged as a more progressive management tool is the idea of bridge building, which reflects possible budget restrictions and a more innovative and collaborative approach (Chavez, 1996a). Some areas in the USA, for example, have been successful in organizing meetings between land or trail managers and user groups, such as local mountain bike clubs, in order to try to address conflict issues through a mutual process of analysis, confrontation and resolution (Schneider, 1997). Two well-known advocacy groups in the USA with disparate agendas, the Sierra Club and the IMBA, have set aside mutual differences to develop joint conservation projects and revise the Sierra Club’s policy towards bikers (Sprung, 1997).

It is acknowledged that sometimes bridge-building or indirect management does not work however, and managers are left with no alternative but to take direct action (Watson *et al.*, 1991). While the management style at the Rattlesnake National Recreation Area in the USA has been centred on education and collaborative programs, it has been recognised that more direct techniques were necessary for the minority of trail users who have not responded to indirect methods (ibid.). As can often be the case, the bad image of bikers can develop from the irresponsible behaviour of just a few bikers (Horn *et al.*, 1994), but direct management repercussions affect everybody.

Although this thesis is not directly concerned with the management implications of its findings, management actions do impact people’s participation in mountain biking in a number of ways. The development of purpose-built trail centres for bikers is an explicit way of segregating mountain bikers and walkers, for example. This provides undiluted experiences for mountain bikers, but in terms of social issues it also obviates at source potential conflict and safety problems. The management of traditional trails also has implications for bikers. In Chapter Five it is argued that the evolving nature of many such
trails can create riding challenges that differ substantially from purpose-built trails. A lack of intervention can therefore affect mountain biking in more subtle ways than more direct management approaches. Whether or not mountain bikers are able to access these traditional trails is another important issue.

2.9 Access to the Countryside: A Mountain Biking Perspective

Access rights to the countryside are an essential dimension of accessibility for recreational use (Wilson et al., 2002). How these rights have developed in individual countries has been affected by a multitude of factors, for example land ownership, the environment, legislation and attitudes (McIntyre et al., 2001). As access rights vary so greatly between countries, only those that pertain to the study locations in New Zealand and the UK are examined. Northern Ireland is excluded from this review as, being incontiguous to the rest of the UK, it is argued to be outside the sphere of consideration for mountain biking as a recreation, rather than tourist, activity for the UK study locations on the English-Welsh border.

2.9.1 Access Rights in the United Kingdom

Access rights in individual countries need to be understood in the context of public values relating to access (Curry, 2004). Prior to the popularisation of walking in the UK in the mid 19th century, public enjoyment of the land was largely confined to the landed gentry, for pastimes such as hunting, and, more latterly, quiet appreciation of the landscape. Post-industrial revolution, people began to see countryside recreation as an escape from the squalor of life in the towns and cities (Curry, 2002), although access to the outdoors remained largely on a de facto basis until the 1949 National Parks and Access to the Countryside Act. This provided the public rights-of-way system on linear routes that is still in operation today, although, in contrast, legislation providing similar access to areas of land was not adopted (Parker and Ravenscroft, 2001).

In England and Wales, access to the countryside for cyclists is via the public rights-of-way system, where all such routes are treated as highways in law. There is a network of 190,000km in England and 33,000 km in Wales, which includes access to national parks. In England the rights-of-ways are broken down into four categories: footpaths, bridleways,
restricted byways and byways open to all traffic (BOATs). Mountain bikers can access all these rights-of-way bar footpaths. The bridleways, restricted byways and BOATs make up a network of 46,000 km of trails to which mountain bikers have a legal right of use (Natural England, 2006). The system is highly regarded “as an effective means of securing collective access rights because of its linearity and the fact that linear routes are much easier to define and understand” (Curry, 2002: 430). In Wales the classification is slightly different, made up of: footpaths and bridleways, as in England; restricted byways, which also allow access by horse drawn carriages and other non-motorised vehicles; and byways, usable by all traffic, including vehicles. In Wales, mountain bikers have access to 7,000 km of these rights of way (Countryside Council for Wales, 2007).

In Scotland an entirely different system is in operation: in essence an area-based right to roam. The Land Reform (Scotland) Act of 2003 gave everyone, including cyclists, new rights of access to the countryside. Under the provisions of the Act, mountain bikers and other non-motorised users have a right of access to most areas of land for recreation. The principal exceptions are people’s private gardens, farmyards and land in which crops are growing (Scottish Natural Heritage, no date). For walkers a similar system of right to roam has been operating in England and Wales since 2004 but only in certain areas (Natural England, 2006), and mountain bikers’ access to land is still governed by the existing rights of way system (Bathe, 2007).

2.9.2 Access Rights in New Zealand

Outdoor recreation in New Zealand grew as a social pastime, linked to the development of mountaineering clubs for example, contrary to the English appreciation of quiet solitude (Curry, 2004). From these early times around 45% of the land was designated as public or Crown Lands, for the purpose of both recreation and conservation, while access to the sea, lakes and rivers over a key dimension was enabled through the designation of the Queen’s Chain (Hall and Kearsley, 2001). Accounting for over 30% of the country’s land area, in New Zealand’s national parks, conservation areas and over 3500 reserves there is a free right of access as long as it does not conflict with the conservation purpose of the land (McIntyre et al., 2001), although this does not apply to mountain biking.
Although mountain biking is promoted as a great opportunity to encourage more people into the backcountry (Wynn Williams, 2007), New Zealand has been moving in the opposite direction to the UK, for in New Zealand, “having enjoyed a long tradition of free rights of access to public areas on the Crown Lands, it was linear access that became a perceived deficiency” (Curry, 2004: 215). Therefore, in contrast to the UK, where there has been a longstanding, and even now only partially remedied, deficiency of access to areas, but a well-established set of linear rights of way that are legally rideable, in New Zealand there is widespread legal access to areas, but more limited availability of the linear routes, of the type that mountain biking demands.

For cyclists in New Zealand, a general prohibition from national parks stems from cycles being classed as a vehicle under the 1983 General Policy for National Parks. The situation is changing however, as since 2004 each National Park Management Plan has been able to specify tracks where biking would be permissible (Wynn Williams, 2007); recent developments are discussed in Section 6.5.1.2. The use of mountain bikes on conservation lands other than national parks, meanwhile, is controlled by provisions in Conservation Management Strategies (Booth and Bellingham, 2004).

In New Zealand half of the land area is privately owned, although strictly speaking all land is owned by the Crown and land owners hold the rights to the land (Booth, 2006). For recreation purposes, there is no common law right of access across private land and landowners have trespass rights over it (Booth and Bellingham, 2004). There is, however, a long tradition of de facto access to land, as long as permission is sought (Booth, 2006); the same rights apply to public land in private occupation. In many cases a permit may be required to access land, for example in a number of privately-managed forests (ibid.).

Mountain biking is permitted, in theory, through public access on private land. Although ostensibly for walkers, cyclists can be permitted on established walkways, with the approval of the landowner and the controlling authority, usually the Department of Conservation (Booth, 2006). Considered as a whole, however, the wide range of access legislation within New Zealand (McIntyre et al., 2001), coupled with a lack of publicly available information on public access and the fact that they are not recorded on maps, means that the situation regarding rights of access to much of the land resource is far from clear (Booth and Bellingham, 2004).
2.10 Information: Influencing Behaviour and Locational Choices

Information is argued to be an important link between people’s motivations and determining their perceptions regarding potential locations at which to recreate (Schreyer et al., 1985), and one which ultimately influences their participation in adventure recreation activities. The information available about destinations attracts people to these destinations (Pomfret, 2006), and the application of either information stored internally or accessed from external sources can therefore play a key role in mountain bikers’ decisions regarding locations. Interviewees in this research were therefore asked a series of questions about the sources that they access for information about biking destinations and the role that they play in attracting them to trails or riding destinations.

The search for information, the “who, when, where, how and why” (Seabra et al., 2007: 1541), is a motivated problem-solving task, started when a need is recognised and the individual’s knowledge is insufficient to address that need (Kerstetter and Cho, 2004). This search is used to reduce the perceived risk associated with a purchase (Mitra et al., 1999), and is continued until the outcome of the search exceeds the cost of undertaking it (Money and Crotts, 2003). While these functional descriptions of information search assume that a decision will be made at the end of the process, it is acknowledged that people sometimes also search for information which is then stored for future, rather than immediate, use. This information is stored as an extension of memory, so that the appropriate external sources can be accessed when required (Vogt and Fesenmaier, 1998).

Functional needs are recognised as only one of a number of different individual needs that people aim to satisfy (Vogt and Fesenmaier, 1998). Needs relating to hedonism, aesthetics, novelty and sign are also recognised. It is argued that hedonic and aesthetic motivations are central to decisions to partake in adventure recreation (Bell and Lyall, 1998), while the search for novelty is also recognised as a key element of commercialised adventure activities (Cloke and Perkins, 1998). The social aspects of knowledge transfer, or sign needs, relate directly to information that is sourced passively (Vogt and Fesenmaier, 1998), most notably through word-of-mouth, which is believed to be one of the most important sources in this field. Irrespective of people’s needs, personal memory is the first place sought for information.
2.11 Internal Information Sources

An internal information search entails the retrieval of information stored in one’s memory (Money and Crotts, 2003). Memory, along with photographs and souvenirs, is what is left at the end of a vacation, and as such is seen as one of the most important sources of information when people consider their future intentions (Braun-LaTour et al., 2006). Although memory may be informed through previous information searches (Money and Crotts, 2003), it is generally acknowledged that one’s past experience is the key component (Baker and Crompton, 2000).

2.11.1 Past Experience Engendering Place Attachment

Personal experience is described as an internal memory store (Braun-LaTour et al., 2006). It therefore follows that one’s recollection of satisfaction with a product or service is an important concept in recreation, as the retrieval of such information can have an important bearing on making recommendations to other people, as well as potentially revisiting a place and developing consequent loyalty to that place (Weaver et al., 2007). Loyalty can simply refer to the consumption of a brand, service or destination over and over again (Oppermann, 2000), but in recreation “the concept of loyalty is most often used to refer to recreationists’ attachments to specific recreation areas” (Kyle et al., 2004: 100). Attachment in this context is seen as an affective bond between a person and place and is defined as having two components: place dependence and place identity. The former suggests that natural resources provide the amenities necessary for recreational activities (Kyle et al., 2003), for example the location of mountain biking trails in forests or mountainous areas.

Place identity, on the other hand, refers to the extent to which a place is a central aspect of a person’s life, defining their identity in relation to a place through beliefs, values and preferences (Williams et al., 1992). Place can therefore be seen as a metaphor, where the interaction of the self, place and other people creates subsequent meanings associated with a place. It represents a longer-term commitment that goes much deeper than mere satisfaction (Brooks et al., 2006). As fieldwork was undertaken in two distinct study locations (Section 3.3.6) it was hypothesised that participants may have developed a degree of loyalty to trails in their locality, or to trails elsewhere, if they consider those
places as metaphors for their experiences, as Brooks et al. (2006) suggest. Interviewees in this research were therefore asked if they felt an attachment to places and to rationalise their affective bond to those locations.

### 2.11.2 Destination Image and Reputation

The image of a destination in the mind of potential consumers is an important influence on people’s perceptions of a place, their motivation to visit and their consequent purchasing behaviour (Gallarza et al., 2002). Those with more favourably perceived images are considered more likely to be chosen (Echtner and Ritchie, 1993). Destination image development entails both people’s impression about a place, an affective evaluation, and its attributes, a cognitive component (ibid.). It is influenced by personal characteristics, such as their motivation to visit and socio-demographics, and, in the absence of personal experience of a place, the information acquired about it (Baloglu and McCleary, 1999). Destination images are therefore said to be socially-constructed, as they are ascribed particular meanings by individuals (Larson and George, 2004).

The acquisition of information begins with the collection of organic images: mental images accumulated from independent sources, such as through friends or magazines (Gunn, 1972). Accessing commercial information sources, for example brochures, can modify or reinforce these images, to create an induced image (ibid.). Commercial marketing, whether in brochures, on posters or on websites, uses extensive imagery, discussed below, to develop and reinforce destination image in the mind of consumers (Coshall, 2000). In the case of mountain biking, it is believed that “even a single trail can create a destination image that has the power to lure visitors for many years” (Koepke, 2005: 21). His example, the Slickrock trail in Utah, possibly the best known mountain bike trail in the world, is equated by Reiter and Blahna (2002) to a national park, in that it has become a single focus attraction.

A destination’s reputation is one of the elements that help to create its image (Hankinson, 2005). It is suggested that the development of this reputation “relies on the initial discovery of a place by core enthusiasts... and their subsequent word of mouth advertising” (Koepke, 2005: 22). Green (2003) found that the reputation of a destination is jointly considered the single most important factor in influencing American mountain
bikers’ choice of locations at which to ride. More specifically, the Scottish mountain bike centres branded together as the 7Stanes have:

Earned a worldwide reputation for high quality, man-made, all-weather trails… According to the International Mountain Bike [sic] Association’s annual report card, Scotland is “one of the hottest places to ride in the world” (Barton, 2006).

The 7Stanes’ reputation (EKOS and Tourism Resources Company, 2004) has been developed through the aforementioned positive press coverage, personal experience and word-of-mouth endorsement. The opinions of others, through word-of-mouth testimonials for example, are important in reinforcing reputation and image, while actually visiting a destination naturally influences people’s evaluation of its image and consequently affects their intention to revisit and their willingness to recommend it to others (Bigné et al., 2001). If it does not live up to expectations, however, they are less likely to return or recommend it (Papadimitriou and Gibson, 2008).

2.12 External Sources of Information

If an internal search does not enable a decision to be made, or novelty is sought, and a consumer has no knowledge about a location, external sources of information will need to be examined (Fodness and Murray, 1998). Traditionally, four sources of external information have been recognised: informal word-of-mouth recommendations (Assael, 1987); the mass media, broadcast through television, radio and the press (Seabra et al., 2007); non-media sources that require a deliberate effort on the part of the consumer to access (ibid.); and, finally, experiential sources accessed by product trial, argued to be less relevant to tourism or recreation (Fodness and Murray, 1998). To this traditional list the Internet has more recently been added (Money and Crotts, 2003).

2.12.1 Word-of-Mouth Recommendations

Word-of-mouth recommendations, defined as informal transfers of information between consumers (Söderlund and Rosengren, 2007), are in many cases likely to be the most influential factor in consumer choice (Mowen et al., 2007). Personal information received from family and friends, is generally perceived to be more honest, credible (Braun-LaTour
et al., 2006) and independent (Litvin et al., 2008) than many other sources, such as advertising. It is cautioned, however, that even verbal testimonials may be prey to external influence, through destinations’ retail promotions for example (Simpson and Sigauw, 2008).

These recommendations, whether positive or negative, have their origins in the past experience of other consumers, and are therefore related to antecedents such as satisfaction, quality and loyalty (Söderlund and Rosengren, 2007). Word-of-mouth recommendations are a proven means of communicating information in adventure recreation. When mountain bikers in Green’s (2003) survey in the USA were asked the factors that influenced their choice of a riding destination for a multi-day trip, word-of-mouth recommendations were one of the most important factors cited. It was also found that three-quarters of people visiting the renowned Slickrock mountain biking trail in the USA heard about the trail from other people (Reiter and Blahna, 2002).

2.12.2 Media Sources

Reports shown in or on forms of mass-media are seen as an important source for consumers as, like word-of-mouth recommendations, they too are perceived to be neutral and independent (Mitra et al., 1999). These sources provide a great breadth of information, but as they are intended for a wide audience they do not provide information tailored to individuals’ requirements and information may need to be supplemented (Seabra et al., 2007). The media is an important source of information for the adventure recreation field. While television, newspaper and radio rarely feature reports on this subject, many participants read specialist magazines (Confer et al., 2000). Magazine articles and news items are generally seen as a means by which information about new products and locations is passed to the consumer (Creyer et al., 2003), and a common way to find out about trails (EKOS and Tourism Resources Company, 2004). Magazines can also be used as political platforms to discuss relevant topics within a reference group, access issues in the case of mountain biking for example (Marx and Chavez, 2002).
2.12.3 Sourcing Non-Media Information

Unlike media sources, accessing non-media information, for example institutional or commercial brochures (Seabra et al., 2007), requires a deliberate, active effort by the consumer. In the fields of tourism and recreation, brochures and other printed material have traditionally been widely used to target consumers, and persuade consumers to use their services (Chiou et al., 2008). Information from institutional brochures, such as those developed by tourism offices, is perceived by consumers to be informative and reliable; commercial brochures, on the other hand, are generally developed by private businesses and provide more detailed information about specific services such as hotels and restaurants (Seabra et al., 2007). While such media have been important sources in the past, it is suggested that electronic sources are assuming part of the role (ibid.).

2.12.4 Electronic Sources: Supplementing or Usurping Traditional Means?

The Internet is considered to be revolutionizing the way in which adventure recreation activities are promoted (Swarbrooke et al., 2003), and seen as an increasingly important medium of communication for accessing information-based tourism and recreation products and services (Doolin et al., 2002). In a recent study, nearly half of respondents visiting New Zealand agreed that they had used the Internet to look for destination information and 58% felt that it aided holiday planning (Ryan and Rao, 2008). Even more compellingly, 86.5% of tourists to Spain have been found to use the Internet to enquire about, reserve or purchase a flight into the country (Frías et al., 2008). The Internet conveys numerous advantages over traditional media, providing a low-cost means of advertising and, crucially, combining information provision, promotion and purchasing (Chiou et al., 2008) that permits instant purchases (Wu et al., 2008). Consumers are able to access it globally, while service providers are able to easily update information and have direct contact with consumers (Frías et al., 2008).

Tourism, and recreation, products are unusual in generally being unable to be sampled before purchase (Doolin et al., 2002). It is argued, however, that the Internet is altering the buying experience as it does enable products to be sampled, to a degree, before purchase (Chiou et al., 2008). Videos of heli-biking posted on the websites of guiding companies,
for example, allow the experience to be vicariously sampled, before a decision is made regarding actual participation.

2.12.5 Imagery

Many adventure recreation websites make extensive use of photographs, and mountain bikers’ perceptions of destination image can be heavily influenced by the use of such imagery. Pictures can be very persuasive and photographs of scenery and landmarks have long dominated promotion (Yüksel and Akgül, 2007). Page et al. (2006: 57) believe that: “in tourism, which is uniquely visual, pictures are paramount to successfully creating and communicating an image of a destination”.

Imagery portraying adventure sports in Scotland, in the promotional literature of VisitScotland for example, focuses on action and scenery, and mountain biking is one of the dominant themes (Page et al., 2006). Films, magazines and guidebooks can also fuel tourists’ impressions of a place (Mercille, 2005): for example, anecdotal evidence suggests that many visitors to New Zealand consider their impressions of the scenery to be very like The Lord of the Rings (Larson and George, 2004).

The use of imagery is important to the formation of destination image, and has helped two highly-regarded mountain biking destinations in this respect. “Moab and British Columbia capitalized heavily on the power of photography and media in developing icon [sic] destination images in the minds of a global audience” (Koepke, 2005: 21). Cloke and Perkins (2002: 535) suggest that brochures, produced by such destinations, “aim to draw in tourists to particular attractions, by using images and words which in some way idealise the site and activity concerned”. It is therefore relevant to explore if imagery does act as a pull factor for participants, both attracting mountain bikers to destinations and reinforcing the images that they have of these destinations.

2.13 The Core Research Informing This Thesis

The purpose of this chapter has been to examine the most important research that has been undertaken in the key areas that influence the realisation and justification of the research aim and objectives introduced in Chapter One. That research aim, to develop an
understanding of the range of factors that influence people’s participation in mountain biking, has dictated that the literature review has concentrated on a range of relevant research. These key influences are illustrated below in Table One.

### Table One

**Key Influences on the Development of this Thesis**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Subject/Influence</th>
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<tbody>
<tr>
<td>Bowker and English (2002)</td>
<td>Mountain bikers’ trail preferences</td>
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<td>Brown et al. (2008)</td>
<td>Mountain bikers' potential conflict issue</td>
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<td>Cater (2006)</td>
<td>Risk and commercialised adventure experience</td>
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<td>Cessford (1995b, 2003)</td>
<td>Mountain bikers' motivations, trail preference and user group conflict</td>
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<td>Csikszentmihalyi and</td>
<td>The flow experience in adventure recreation</td>
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<td>Csikszentmihalyi (1990)</td>
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<td>Ewert (1994)</td>
<td>Risk and mountaineering</td>
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<td>Goeft and Alder (2000)</td>
<td>Mountain biking trail preferences</td>
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<td>Iso-Ahola (1980)</td>
<td>Seeking and avoidance leisure motivation theory</td>
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<td>Pan and Ryan (2007)</td>
<td>Empirical testing of push and pull theory</td>
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<tr>
<td>Pomfret (2006)</td>
<td>A framework to explain participation in mountaineering recreation and tourism</td>
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<td>Schreyer et al. (1985)</td>
<td>Conceptualisation of recreation behaviour</td>
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<td>Skår et al. (2008)</td>
<td>Mountain bikers' motivations</td>
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<td>Swarbrooke et al. (2003)</td>
<td>General adventure recreation</td>
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<tr>
<td>Symmonds et al. (2000)</td>
<td>Mountain bikers' trail preferences</td>
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<tr>
<td>Varley (2006)</td>
<td>The flow experience</td>
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This literature review has attempted to synthesise a wide range of issues that are potentially pertinent to the development of this thesis. In an examination of the wide range of factors that can influence people’s participation in mountain biking, academic research on subjects as diverse as peer pressure and access rights has been examined. An examination of motivations for riding, pertinent to the first research objective (Section 1.3), dictates a necessary basic comprehension of motivation theory, with particular emphasis on the recreational, leisure and tourism sectors. A number of adventure recreation models and frameworks have been described as being of particular influence on the development of this thesis, while a broad spectrum of motivational factors can influence participation in adventure recreation. This chapter has also pulled together theoretical literature and empirical research on place-specific characteristics that relate to the second research objective: the range of factors that can influence where mountain
bikers choose to recreate, from the attributes of trails to the intervention of trail managers. The third objective, to comprehend other factors that can direct engagement, has determined a logical interrogation of different information sources, supplemented by more abstract factors, such as past experience and place attachment.

The review commenced by ascertaining the studies that have examined a variety of mountain biking issues. While issues such as the economic impact of the pursuit are more tangential to the remit of this research, they nonetheless help to set the context, especially as this directly influences the provision of purpose-built trails and facilities for mountain biking. More directly pertinent is the previous academic research undertaken on mountain bikers that explores issues such as motivations and trail preferences. The pursuit’s environmental impacts and social conflict with other trail users are potentially negative issues; a range of management styles and options have been discussed to mitigate such problems.

This was followed by a discussion of influential research regarding motivations for those who take part in leisure or touristic activities, germane to developing an understanding of the theoretical constructs underpinnings this research. A number of models have been developed in the fields of recreation and adventure recreation; as this thesis aims to develop a conceptual framework of mountain bikers’ participatory influences, a discussion of the most influential work is commensurate with the fourth research objective. More focused in terms of this research was the subsequent examination of bikers’ motivations that act to push them to participate in their chosen activity, and desired site attributes and sources of information, which can pull them to individual settings. Other issues that may impact mountain bikers’ participation include conflict with other trail users, the environmental impact of riding and legal access issues.

Core to the development of this thesis’ aim and objectives is the identification of the research that has yet to be undertaken on the subject of mountain biking. It has been established in this chapter that a holistic, in-depth examination of participatory influences on mountain biking has yet to be undertaken. Two quantitative studies have been carried out that try to determine some of the key motivations for riding (Cessford, 1995b; Skår et al., 2008). Others (Hollenhorst et al., 1995; Chavez, 1997a; Leberman and Mason, 2000; Green, 2003) use quantitative methods to identify core motivations of bikers as part of
much wider research. Three studies use qualitative research to explore narrow issues, such as escapism (Probert, 2004) and conflict (Horn et al., 1994; Brown et al., 2008), albeit with some examination of other motivational factors, and using quantitative data collection in addition, in the case of the latter study. No research in the field of mountain biking has been identified, however, that qualitatively explores the issue of motivation in any depth.

In terms of determining the factors or attributes that attract mountain bikers to specific settings, no research in this field explores the issue of information sources, except as minor parts of much broader surveys (Bowker and English, 2002; Reiter and Blahna, 2002; Green, 2003; EKOS and Tourism Resources Company, 2004 and 2007; Koepke, 2005; Gajda, 2008). A few quantitative studies do examine riders' preferences for trail types, settings or features and trail facilities (Cessford, 1995b; Goeft and Alder, 2000; Symmonds et al., 2000; Bowker and English, 2002), and go on to examine their management implications. More holistically, no previous research brings together all of these issues to identify the interplay of mountain bikers’ motivations, site attributes, decision-making influences and other influential variables. Finally, it is identified that little in-depth research using a qualitative method has been carried out on mountain bikers. The strengths of this methodological approach are discussed in Chapter Three.

A number of theories of touristic, recreational and leisure motivations are also core concepts that are relevant to this research subject. Maslow’s (1968) work on peak experiences has informed the development of the flow experience, and Chapter Four discusses the relevance of these optimal experiences to mountain bikers. More obviously pertaining to motivations to mountain bike, Iso-Ahola’s (1980) study of seeking and avoiding motivations and academic discussions regarding emotional and cognitive touristic motivations (Driver, 1972; Fishbein and Ajzen, 1974; Gnoth, 1997, for example) suggest the importance of a wide range of externally and internally constructed dispositions to participate in adventurous activities.

**Push and pull** theory (Dann, 1977) also differentiates between intrinsic and extrinsic reasons for visiting destinations. The concept proposes that to understand tourist, and recreationist, behaviour, consideration needs to be given to both the intrinsically derived emotional desires and needs that motivate people to travel, and the external situational factors that are cognitively understood and pull people to specific locations to satisfy those
motivations. The theory provides a simple framework to understand the interaction of these factors, and is used in this thesis to develop an understanding of mountain bikers’ participation.

Elements of push and pull theory have been adopted by Pomfret (2006) to understand participatory influences on mountaineering, reinforcing the relevance of the approach in understanding adventure recreational as well as touristic behaviour. Pomfret’s framework is one of a number of conceptual models that have been developed in adventure recreation. In its attempt to comprehend the wide range of factors that determine participation in mountaineering, it is acknowledged as probably the most important influences on this thesis. The work of Schreyer et al. (1985), despite being focussed on recreation, is another model of which cognisance has been taken. The authors’ conceptualisation of the relationship between motivations, settings, information and lifestyle factors in understanding recreationists’ behaviour has helped to shape the development of this thesis.

These perceived gaps in the existing academic literature on mountain biking have determined the overall research aim and the development of four objectives: these are presented and discussed in detail in Chapter Two. The core concepts that inform and influence the thesis are also discussed in the next chapter, as consideration of this research sets the theoretical context for the rest of the thesis. Before the research findings are presented in Chapters Four to Six, a detailed description of the method of qualitative research used to elicit mountain bikers’ thoughts and feelings about their participatory influences, along with methodological considerations, forms the core of Chapter Three.
Chapter Three: Research Methodology and Method

The purpose of Chapter Three is to set out in detail the methodology, research design and method for this thesis. It discusses the research design, or strategy, behind the choice of method, and the method utilised to gather findings in the field and to analyse, interpret, present and report those findings. It also places the research design within the context of the author’s methodology, taking into account issues of both epistemology and ontology, and considers how these key elements are linked.

3.1 Methodology

The philosophical perspective that the researcher adopts provides the context for the research process and grounds the logic and criteria of the methodology chosen to collect, analyse and report the findings (Crotty, 1998). When different philosophical approaches are examined, what one is trying to understand is the way in which one looks at the world and how it works: a world view or Weltanschauung (Tolich and Davidson, 1999). The researcher’s methodology is informed through two means: his/her ontology, an understanding of the structure of reality and what is; and his/her understanding of what it is to know and how he/she knows what he/she knows, the epistemology (Crotty, 1998).

It is acknowledged that philosophers have long been engaged in debates regarding the nature of reality and knowledge, and that people often get caught up in and have to defend their epistemological and ontological beliefs when conducting research (Patton, 2002). It is suggested that this debate can be simplified into one on the relative merits of two competing paradigms: first, quantitative and experimental methods to deductively test hypotheses and generalizations; and second, “qualitative and naturalistic approaches to inductively and holistically understand human experience and constructed meanings in context-specific settings” (Patton, 2002: 69).

The adoption of a pragmatic approach to both questions of ontology and epistemology and to methodological considerations is espoused by a number of authors (for example, Miles and Huberman, 1994; Patton, 2002; Thomas, 2006). Indeed it is believed that the
researcher does not need to swear allegiance to a single epistemology, and that “there is a very practical side to qualitative methods that simply involves asking open-ended questions of people” (Patton, 2002: 136). Such an approach to research is supported by a pragmatic methodology of critical realism (Miles and Huberman, 1994; Thomas, 2006). The philosophical perspective of critical realism refers to beliefs that an objective, mind-independent reality exists; it acknowledges, however, that human perception and cognition play an important role in influencing our views about reality (Thomas, 2007). Such an approach accords with Miles and Huberman’s (1994) description of transcendental realism, which maintains that social phenomena exist in the objective world as well as in the mind.

This perspective represents a paradigmatic blurring between the methodologies of realism, a quantitative-deductive paradigm that sees the world as having an explicitly objective reality (Tolich and Davison, 1999), and social constructionism, the view that all meaning in reality is constructed by human beings (Crotty, 1998), and which is equated to the qualitative school of thought (Tolich and Davison, 1999). A philosophical perspective of critical realism recognises that ontological realism and epistemological constructionism can be compatible (Crotty, 1998). Although Yeung (1997) believes that inductive methods may be antithetical to realism, many qualitative enquirers nonetheless have a commonsense realist ontology (Schwandt, 1997). A number of authors argue that a critical realism philosophy and an ostensibly inductive qualitative method, that essentially combines elements of induction and deduction anyway (see Section 3.3.2), can be both congruous and appropriate (Miles and Huberman, 1994; Patton, 2002; Thomas, 2006).

This perspective describes the author’s own philosophical beliefs: that objects actually exist, independently of how I feel about them, but these objects are only given meaning in my social world by the values that I ascribe to them. Although this perspective may appear incongruent with traditional schools of thought, it recognises the changing nature of social research methodologies (Miles and Huberman, 1994). It is therefore within a pragmatic methodology of critical realism that the research design for this thesis is grounded.
3.2 Research Design

Research design is defined in terms of a plan of action lying behind the choice and use of particular research methods, and which links the method to both the outcome and the researcher’s methodology (Crotty, 1998). In essence it defines how the research is undertaken (Strauss and Corbin, 1998). The choice of research design adopted for this study is defined, explained and rationalised in this section. The research objectives (described on page 9) act as a starting point for developing the choice of method and research design that, along with the methodology adopted, will address these objectives (Crotty, 1998). There are many established approaches to research design and a range of methods that will allow the research design to address the fundamental issues associated with the study. Taking a pragmatic approach in this research yields a degree of flexibility in the choice of method, allowing the researcher to choose an appropriate method, rather than one that merely conforms to existing research doctrine (Patton, 2002). In the field of social research, the oldest debate is the one between qualitative and quantitative paradigms (Tolich and Davison, 1999).

3.2.1 Rationale for the Use of a Qualitative Approach

The qualitative research design employed in this thesis, in contrast to a quantitative approach, was naturalistic and placed the researcher in the world being studied (Denzin and Lincoln, 2000). The researcher was better placed to explore mountain bikers’ interpretations of factors which connect events and activities and to get closer to the research participants (Bryman, 1999). It is argued that it is only through such an emic, or insider’s, perspective that meaningful cultural distinctions were able to be made (Patton, 2002). Researching risk-taking among skydivers, for example, Celsi et al. (1993) immersed themselves directly into the skydiving sub-culture, and through secondary sources such as magazines and journals, before they started data collection.

Being on-site and close to participants, things were able to be discovered that people may have been unwilling to talk about or may have missed. It also permitted an understanding of the context for the research (Patton, 2002). In trying to understand meanings, reflection and emotions the context was all-important (Tolich and Davidson,
1999). The researcher was empathetic towards the research subjects, and personal experience was used in interpreting findings (Patton, 2002).

Revisiting the research objectives (page 9), it is clear that this thesis aims to develop both a deeper comprehension about the socio-psychological motivations that influence mountain bikers’ participation, and an understanding of the relative importance of destinations attributes and a range of decision-making influences, such as internal and external information sources. It is only through an understanding of motivations, site attributes and other relevant influences that recreationists’ behaviour can be properly explained (Scherer et al., 1985).

It is acknowledged by the author that the employment of a quantitative approach could have unearthed these destination characteristics and external variables, and determined the most important motivations, relative to each other. A weakness of the quantitative approach, however, would have been a lack of comprehension of ‘why’ these factors are important to research participants. While quantitative data are argued to be more generalisable to the wider population (Tolich and Davison, 1999), the goal of this research was depth of findings, rather than the generalisation of results.

It is also argued that motivations are deep-seated psychological issues that cannot be adequately explored through an approach that reduces data to numbers (Tolich and Davidson, 1999). People’s understanding of everyday situations and meanings they place on events and processes are central tenets of the qualitative school of thought (Miles and Huberman, 1994). These social phenomena differ from natural phenomena and are dependent on people’s beliefs and the intentions of the actors; behaviour, therefore, can only be understood in terms of the meanings ascribed to that behaviour by the individual (Tolich and Davidson, 1999). In qualitative research these meanings are often in the form of words and descriptions: they tell a story (Patton, 2002). Words can yield thick descriptions that can paint a holistic picture of all the elements needed to understand the research, including its context (Punch, 2005).

In the context of this thesis, therefore, it is argued that only qualitative research could have explored in detail the deeper understandings, and related meanings, associated with personal motivations, and, in doing so, could have developed a comprehension of why
they are important. It is argued that only through allowing mountain bikers to openly and freely discuss their thoughts, and through a methodology that encourages the textual manifestation of these thoughts, could the richness and detail of meanings (Bryman, 1999), and a contextual holism, have been allowed to shine through.

In practical terms, qualitative research’s naturalistic and open-ended nature meant that while the research may have been initially focussed, its flexibility allowed the collection and analysis of findings to emerge by design, and for modification of the methodology and method as research progressed; it was therefore consistent with the pragmatic approach to the research adopted (Patton, 2002). Getting close to participants and immersing oneself in the findings has allowed the identification of patterns and themes, and while sometimes new concepts have been the result, other studies have related findings to pre-existing concepts (Bryman, 1994). These considerations are discussed in more detail below, when the choice of approach is rationalised.

3.2.2 Issues of Objectivity and Reflexivity

The quantitative school of thought argues that as the researcher stays distant and detached from the subject being studied (Bryman, 1999) the resultant objectivity yields more worthy data (Tolich and Davison, 1999). It is argued, however, that it is not possible to maintain true objectivity, and that the goal of objectivity is less relevant given the social nature of much research (Patton, 2002). Proponents of qualitative research argue that subjectivity allows the researcher to better understand the social world (Patton, 2002); losing an element of one’s perspective as the researcher is sometimes considered to be the cost of getting closer to the subjects (Bryman, 1999). It is suggested, however, that there is a position to be found between being too involved with the research subject, that can unduly influence the researcher’s judgement, and being too distant, which can adversely affect true comprehension of the issues (Patton, 2002).

The acknowledgement that social researchers remain a part of the world that they are studying underpins the issue of reflexivity (Punch, 2005). The term refers to how the meanings of actions and thought are paramount in qualitative research and how “researchers must self-consciously reflect upon what they did, why they did it, and how they did it”; their perspective and values are an important part of the research process.
(Tolich and Davidson, 1999: 39). Through stating both the value of the research, in terms of, for example, the strengths of the method and its contribution to academic knowledge, and the limitations of both the method and of the research as a whole, the researcher’s reflexivity becomes apparent (Tolich and Davidson, 1999). Reflexivity also concerns how the researcher is perceived by others, and therefore demands that the researcher has the confidence to communicate to readers how the research was carried out; this can be achieved by engaging them with clear and vivid descriptions of findings, illustrated with suitable quotations (Patton, 2002).

3.2.3 Choice of Research Design

The use of a pragmatic general inductive research approach for the analysis of the qualitative findings collected in this research is concordant with the adoption of a critical realist methodology (Patton, 2002). Inductive analysis describes a systematic approach that begins with a strong interest in a subject (Tolich and Davidson, 1999). The methodology is guided and focussed by the research objectives, where the findings arise directly from the raw data, not from preconceived expectations (Thomas, 2006). It uses repeated close readings of the findings to develop concepts or a framework through their interpretation: the inductive component (Thomas, 2007). A similar, albeit less explicit, cyclical and iterative process has been described by Miles and Huberman (1994), where qualitative findings are analysed, reduced to key categories and displayed, in a model for example. The process concludes with the drawing and validation of conclusions.

It is notable that many studies labelled as using such an approach, in the medical field for example, are recognised as using both an inductive analysis and a process of deduction (Thomas, 2006). Deductive research implies the formal testing of existing theories, using testable hypotheses with precisely defined variables: the opposite approach to induction (Tolich and Davidson, 1999). Indeed, it can be argued that as the researcher can use his or her own experience, for example, to determine the questions to be asked of interviewees this represents an element of deduction (Patton, 2002); this apparent paradox is discussed in Sections 3.3.2 and 3.3.15. Thomas (2006), however, asserts that as no theory or model is being ‘tested’, and the results are derived from the findings, the method remains inductive in nature.
Inductive approaches are commonly used in a number of qualitative methods aside from a general inductive approach, grounded theory for example (Thomas, 2006). Unlike grounded theory, the general inductive approach, however, does not split the coding process into open coding, the identification of concepts during analysis, and axial coding, which involves relating categories to sub-categories (Patton, 2002). More importantly, an inductive approach generally only presents and describes categories, rather than developing theory, although the interpretation of the findings during analysis can sometimes move beyond this stage (Strauss and Corbin, 1998).

Inductive research begins by interviewing people in the research setting, although the observation of participants may also be used (Tolich and Davidson, 1999). This thesis used in-depth interviews to gather findings; this process is detailed later in Section 3.3.1. Post data collection, Thomas (2006) describes the analytic procedure as having three overall purposes. The first step is to condense textual findings into summaries to convey key themes or categories. The establishment of clear and justifiable links between these summaries and the research objectives follows. The final, consequent, stage is to create a model or framework to illustrate the structure of these themes and key sub-themes that emerge from the analysis and which can be applied to the research setting (Thomas, 2006).

Inductive analysis, whether explicitly labelled as such or not, has been used by a number of authors (Elliott and Gillie, 1998; Jain and Ogden, 1999; Stolee et al., 1999). Such an approach has been used in a study of health behaviour, where free-ranging semi-structured interview transcripts, in combination with observation and participation in local activities, were thematically analysed to understand the meanings associated with the underlying socio-cultural processes (Backett and Davison, 1995). An implicitly inductive approach was employed to examine how doctors experience patients’ complaints in Jain and Ogden’s (1999) study. Their analytic methodology followed that of Miles and Huberman (1993) in rereading the interview transcripts several times to identify themes and categories; in this way a coding frame was developed and transcripts coded. Emergent new codes dictated a change to the coding frame and rereading of the interview transcripts according to the new frame (Jain and Ogden, 1999). Using this approach, categories were developed which were conceptualised into key themes.
Elliott and Gillie (1998) used a similar inductive analysis technique, whereby thorough rereading and coding of the data allowed major themes to emerge. The coding of text segments to these different themes allowed relationships between themes to be discovered. The presentation of these themes was reinforced by using quotes from research participants. This thesis used a similar approach to that employed by Jain and Ogden (1999) and Elliott and Gillie (1998), as rereading and coding of data were employed to develop key themes and sub-themes.

A number of adventure recreation or alternative tourism studies have used similar qualitative research approaches and methods, that utilise elements of induction without specifically labelling it as such. Kane and Tucker (2004), for example, used both interviews with, and lived-in experiences of, whitewater kayakers in New Zealand. Repeated readings of individual interviews enabled the identification of themes of understanding to emerge regarding participants’ experiences. Constant comparison of data to find emerging patterns and themes was employed by Celsi et al. (1993) in their research on skydiving in the USA, the data collected through prior ethnography and in-depth interviews.

Having also used in-depth interviews to ascertain the adventure experiences of tourists in Queenstown, Cater (2006: 319) analysed the data using the “identification of salient themes running through the commentaries”, while preconceptions about the research subject were ignored: “so that it is the respondents’ experiences that are noted... a methodology that allows the researched community to vocalise their discourses of risk”. While grounded theory was employed by Hardy (2005) to examine the role of stakeholders in sustainable tourism, commensurate with Cater (2006) no hypothesis was developed before the research. This permitted the relevant issues to emerge through the research methods employed, which included in-depth interviews.

The key influences on this research, however (discussed in Section 2.4), were the models of Schreyer et al. (1985) and Pomfret (2006), and their research was conceptual in nature and not empirically tested. The frameworks of Martin and Priest (1986) and Mortlock (1986) were also conceptual, although the latter was tested by McIntyre (1990) for example. That study used a mixed-methods approach to research adventure experiences in horse riding and black water rafting in New Zealand (McIntyre, 1990).
Some of the other frameworks discussed in Section 2.4 have been tested: Ewert (1985), Ewert (1987) and Fluker and Turner (2000) all employed quantitative surveys however. In the specific adventure recreation activity of mountain biking, the most influential research has invariably used quantitative surveys: for example, Cessford (1995b), Goefl and Alder (2000), Bowker and English (2002) and Skår et al. (2008).

### 3.3 Research Method

Whereas the research design describes where the researcher aims to take the study, through an overarching strategy for the study, the method describes how these aims are translated into actions (Strauss and Corbin, 1998). The method refers to the techniques or procedures used to gather and analyse findings, and needs to be grounded in the research proposal and objectives (Crotty, 1998). These techniques need to be spelled out precisely in order to rationalise the choice of research method (*ibid.*). This section sets out in detail the procedures that were employed in the research, with particular emphasis on the how, where, when and from whom findings were amassed, and how they were analysed and reported.

#### 3.3.1 Collection of Research Findings

The technique to ascertain findings was the use of semi-structured and open-ended interviews, chosen because they are acknowledged as an excellent means of collecting findings relating to people’s meanings and the ways in which they construct their perceptions of reality (Punch, 2005). This technique also allows the researcher to collect supplementary information about the participant and the environment being studied that may help to interpret meanings and results (Miller and Salkind, 2002). A focus group was considered as an alternative means of gathering findings, but was rejected for this research as it is acknowledged as “provid[ing] less depth and detail about the opinions and experiences of any given participant” (Morgan, 1997). As depth of personal feelings and meanings is so crucial to understanding motivations, an individual interview was considered a more relevant method.

A semi-structured interview technique is distinguished from one that is standardised by the notion of ‘equivalence of meaning’ (Barnball and While, 1993). While both
approaches ask the same general questions of each participant, a process facilitating both
the interview and the analysis (Patton, 2002), a standardised questionnaire uses identical
wording and sequencing of questions for each participant (Barnball and While, 1993). A
semi-structured approach, conversely, “acknowledges that not every word has the same
meaning to every respondent and not every respondent uses the same vocabulary”
(Barnball and While, 1993: 330). This approach also leaves room for the participants to
digress, which can generate important findings that the researcher did not think of prior to
the interview and would have been otherwise unexplored. In an activity such as mountain
biking that has developed its own jargon (Wagner, 2008; see Section 2.5.13) this approach
also lends a degree of flexibility in eliciting meaningful responses.

The use of open-ended questions allows interviewees to explain, in their own words,
their thoughts and actions. The emergence of feelings and meanings is a key aspect of
qualitative research: the use of open-ended questions means that interviewees are not
constrained or directed in response, and fuller responses are encouraged to emerge as
participants take advantage of the free reign offered by the questioning. Open-ended
questions can elicit rich and thick descriptions from the interviewees about their actions,
the context in which they take place and the intentions and meanings that precipitate such
action (Dey, 1993).

A distinction is made between those questions that are ostensibly open-ended, but
which in reality still have a limited set of responses available, even if those limits are quite
broad, and questions that are truly open-ended, allowing unlimited breadth of response
(Patton, 2002). This research uses a mixture of the two types. If deeper responses are
required, or the interviewer wishes the participant to elaborate on a response, a probe can
be used; probes can also indicate to the interviewee the level of response that is wanted
(Patton, 2002).

It is acknowledged that interviews can be time-consuming and difficult to organise,
with associated implications for the researcher’s workload and schedule. Numerous
studies report that a typical mountain biker is likely to be under 40 (Hollenhorst et al.,
1995; Symmonds et al., 2000; Green, 2003) and working full-time (Bowker and Cessford,
1995b; English, 2002; Gajda, 2008). In this fieldwork process, this necessitated mostly
evening or weekend interviews, or occasionally an interview at the participant’s
workplace; this demanded flexibility on the part of the researcher, and had minor implications for the timescale of the fieldwork.

3.3.2 Addressing Subjectivity and Potential Researcher Bias in this Research

While familiarity with the research subject can be viewed positively, through the provision of valuable contextual findings (Stolee et al., 1999), those who undertake qualitative research in particular must be aware of, and address, the potential issue of researcher bias. This term refers to a tendency to interpret or report findings in a manner that favours the researcher’s perspective. It can result from the wording of interview questions for example (Hammersley and Gomm, 1997), or questions asked in such a way to confirm the researcher’s views, rather than elicit interviewees’ opinions (Miller and Salkind, 2002). As the researcher is a keen mountain biker himself, potential bias is a valid issue that has had to be addressed.

Although the researcher has many years’ experience as a mountain biker and naturally has his own views and beliefs about the sport, any preconceptions about the factors affecting people’s participation in mountain biking, such as motivations or use of information sources, were dispelled as far as possible. An ongoing process of critical reflection was employed to ensure that researcher preconceptions and thoughts regarding the findings were ignored and that the findings arose solely from the interviewees’ responses (Stolee et al., 1999). This was achieved through multiple readings of the findings that enabled the researcher to become so immersed during analysis and writing that the findings became primary, and researcher preconceptions peripheral.

It is also acknowledged that as the researcher selects the topic and determines the basic questioning format there will naturally be an element of researcher subjectivity introduced. This issue, however, can be embraced by the researcher and dealt with accordingly, through the use of open-ended questioning for example. As discussed in Section 3.2.2, subjectivity is argued to permit a greater comprehension of the social world being researched (Tolich and Davison, 1999), and steps can also be taken to address the issue of subjectivity. The use of semi-structured questions in this research, for example, entailed less interviewer determination and avoided the pigeonholing of interviewees’ responses of closed questions (Patton, 2002). In terms of analysis, an element of structure invariably
directed attention to certain aspects of the findings, thus limiting the breadth of interpretations; however, as the research approach otherwise presupposed no interviewer preconceptions about the findings, it remained essentially inductive in nature (Thomas, 2006).

### 3.3.3 Interview Protocol

Concordant with a semi-structured and open-ended approach to interviews, a set of questions, forming Appendix A, was devised to guide the interviews, while permitting participants freedom to answer the question. The questions were broken down into three core sections, each relating to one of the first three research objectives introduced in Section 1.3. The choice of sub-sections was guided by subjects explored in previous mountain biking research (Horn *et al*., 1994; Sumathi and Berard, 1997, for example), discussions with supervisors and other relevant academic staff members, and the researcher’s own experience. Similar sources (for example, Cessford, 1995b; Bowker and English, 2002) were used to guide the development of the questions themselves.

The first section consisted of questions that aimed to determine mountain bikers’ motivations for participation. These questions were both general, relating to why people started mountain biking for example, and more specific, about the importance of constructs such as thrill or risk, or issues of mental catharsis. The first question was devised to ‘break the ice’ with the participants and encourage them to talk freely. In the second section the questions aimed to establish the most important site attributes of trails and locations. This covered a range of issues, from questions about the tangible qualities of trails or destinations that attract them to factors that affect people’s riding patterns, such as seasonal variations. In order to uncover potential trail characteristics that might attract interviewees to destinations further from home, three questions were asked about mountain biking as a touristic activity. The last section comprised questions pertaining generally to the information sources that people utilise when making decisions regarding where to ride.

Suitable probing questions were created to elicit answers where an interviewee was not able to understand the nature of the question, where the response was not understood by the interviewer, or where the response was open to ambiguous interpretation. In general, the themes that required probing for responses were twofold. First, there were some
questions that were broad in scope, for example pertaining to why people enjoy mountain biking, where probes could help participants to understand the various facets of the question. Conversely, some questions were more focussed, where assistance may have been needed to understand the depth of the response that was sought, for example asking participants how their mental day-to-day well-being is affected by mountain biking.

Although all the interviewees were asked about all the interview subjects, the majority of interviewees did not need to be asked all the questions, as there were numerous different instances of single responses answering two or more questions. A response to the question regarding the trails to which participants have an attachment, for example, would often also answer the consequent question, pertaining to why they have an attachment to them. It was therefore generally unnecessary to ask all participants all the questions.

The open-ended nature of the questions meant that there were no right answers, and that all opinions, even negative responses or questions where an answer was not known, were considered to be valuable findings. An additional open-ended question was added at the end, to enquire if there were any other points that the interviewee would like to make that had not already been discussed. After the questions had been devised they were discussed with supervisors, to elicit feedback and suggestions for improvements; as a result, further questions were added and a number of revisions were made. Pilot interviews were subsequently held to test the robustness and flow of the questions.

3.3.4 Pilot Testing and Interview Protocol Re-Evaluation

Approval was granted by the Department of Tourism Ethics Committee on September 10th 2007 to undertake a number of local pilot interviews, in order to verify the efficacy of the interview process, and to review the interview questions and revise as necessary. Accordingly, three pilot interviews were carried out, in Dunedin and Queenstown in September 2007. The interviewees were mountain bikers, previously unknown to the researcher, who were located through personal contacts. As a result of the pilot interviews, a number of minor revisions were made to the questions in order to enhance the flow of the interview and to elicit richer responses: first, the use of ice-breaking questions at the start of each of the three core sections, to encourage interviewees to talk about the subject;
second, refining the wording of some questions to obviate ambiguity, and; third, the creation of suitable probing questions to elicit more meaningful thoughts and feelings.

3.3.5 Two Research Locations: A Rationale

For the actual acquisition of findings, the fieldwork was undertaken in locations in both New Zealand and the United Kingdom, detailed in Section 3.3.6. Using twin studies is argued to facilitate a greater understanding of, and explanation for, findings (Miles and Huberman, 1997), and yield more authoritative findings (Yin, 2003). The rationale for this approach was therefore that it would yield both a greater breadth and a greater richness of information about mountain bikers’ motivations and the way they ascribe meanings to places and their actions.

Mountain biking in New Zealand and the UK is argued to differ in terms of both the purpose-built facilities that are available and, in particular, the systems of legal access rights in each. The access rights in each country are discussed in detail in Section 2.9, the different systems within each country engendering different riding opportunities for mountain bikers. While New Zealanders have had free access rights to public areas on Crown Lands, it is suggested that there is a deficiency of the linear access rights (Curry, 2004) that are naturally more pertinent to mountain bikers, while mountain biking is not generally permitted in national parks for example (Section 2.9.2). England and Wales, conversely, have perceived deficiencies in terms of access to land but a highly regarded set of linear rights-of-way (Curry, 2002). Scotland’s system of rights of access to most areas of land (Scottish Natural Heritage, no date) would, on paper, appear to address the weaknesses of each system.

Purpose-built mountain biking facilities in the UK have also been generally developed in a different manner. The 7Stanes group of trail centres in Scotland, for example, has been developed by public and private sector partners, with match-funding through the European Regional Development Fund Objective 2 Programme and Transitional Programme, which saw £3.6 million (NZ$9 million) spent on the centres between 2001 and 2008 (EKOS and Tourism Resources Company, 2007). The European Union’s Objective 2 Programme was designed to give economic aid to areas facing structural difficulties (Government Offices for the English Regions, no date), and this funding source
has also been used to aid the development of similar facilities elsewhere, at Dalby Forest in England for example (Davis, no date).

While early development of trail centres such as the 7Stanes tended to concentrate on trails for more experienced riders, many more recent trails at established centres have been targeted more towards beginners or families (EKOS and Tourism Resources Company, 2007). While more trails are being built for novices, however, centres such as Coed y Brenin in Wales, as well as Rotorua in New Zealand, still arguably cater for a predominantly experienced user base. Many of the newest purpose-built trails, moreover, Gisburn Forest in England or the Nichols Creek trail in Dunedin, New Zealand for example, have been built for advanced riders. Although recent research (see Gajda, 2008) has drawn inconclusive demographic results regarding levels of experience, anecdotal evidence supports previous academic studies that conclude most bikers rate themselves as immediate or advanced standard (Symmonds et al., 2000; Bowker and English, 2002). Examining the range of factors that motivates these dedicated and experienced riders to participate in mountain biking therefore remains a pertinent and worthwhile research objective.

The creation of equivalent facilities in New Zealand has generally taken a different approach. By way of example, one of New Zealand’s most well known trail centres, Makara Peak in Wellington, has been largely developed by the Makara Peak Mountain Bike Park Supporters, a group of volunteers which provided most of the labour and much of the funding for the development of the park (Makara Peak Mountain Bike Park Supporters, no date). The highly regarded mountain bike park at Woodhill, near Auckland, conversely, is run as a commercial entity, charging for use (Bike Parks, no date). It is accepted by the author that this does not paint the full picture of trail centre funding and development in New Zealand and the UK; grassroots development also takes place in the UK, at smaller trail centres for examples. It is, however, argued to be generally representative of the different approaches to development taken.

The differing access rights and contrasting range of purpose-built facilities in New Zealand and the UK are argued to have important influences on both people's motivations and the site attribute they consider to be desirable, and therefore justify the use of study sites in different countries. The motivation to visit a purpose-built trail centre in the UK,
for example, may be influenced by the social opportunities offered by the provision of trailhead facilities, such as a café, that characterise them; for a number of reasons, such centres in New Zealand tend to be more focussed on the riding. Mountain bikers’ attitudes towards the provision of such facilities as site attributes may also differ.

Accordingly, the second benefit therefore relates to the ability to compare the findings from each study location. When defining the research subject of this thesis, it was considered that the method would include the comparison of participatory influences on mountain bikers in New Zealand and the UK. It was rationalised that conducting such a comparison would help to create an understanding of different attitudes and feelings towards the activity. Dynamic in nature, motivations can vary not only between people but also between locations, cultural differences also playing a part in affecting people’s behaviour (Kozak, 2000).

While the decision to undertake a comparison had no impact on the philosophical perspective or methodology adopted for this research, it naturally influenced the method, in terms of necessitating two separate, consecutive phases of fieldwork. The findings from phases one and two of the fieldwork were synthesised during the process of analysis; at this stage a tentative comparison was undertaken of the findings from the two study locations (see Section 3.3.12). In practice however, while analysing the findings, it became apparent that there were essentially few differences between findings from the two study locations. At that stage it became clear that a comparison was generally irrelevant to the research; this issue is discussed in more detail in Section 7.3. The analyses in Chapters Four to Six do, however, discuss the differences between them, where the differences are considered fundamental (see Section 5.9 on trailhead facilities and Section 6.5.1 on access issues).

3.3.6 Fieldwork Locations

The criteria for choosing the study locations in each country were the presence of large populations and vibrant mountain biking scenes, where active mountain biking clubs and numerous cycle shops act as foci and forums for locating interviewees. The factors used to justify the choice of these locations, which also represent commonalities between them,
Figure One

New Zealand Study Locations and Key Local Mountain Biking Destinations
relate, in part, to the sampling criteria for interviewees. These are discussed in Section 3.3.8.

The New Zealand interviewees were located principally in the town of Nelson, in the north of the South Island, with a few participants in the nearby townships of Mapua, Stoke and Richmond (Figure One on page 82). Christchurch and Queenstown were considered as alternative study locations. Queenstown was rejected however as it was not considered to offer a wide enough range of purpose-built tracks for cross-country riders, much of the infrastructure near the town being arguably of a tougher standard and more suited to downhill biking. Christchurch, conversely, does offer a range of purpose-built and traditional tracks within relatively easy distance and was therefore a viable alternative. The decision was made to choose Nelson for a number of reasons: its size is more closely aligned with that of the UK fieldwork location, while there is arguably a wider range of cross-country trails more directly accessible from the city centre. This choice was strengthened by the fact that the researcher already had a number of contacts in the area, via departmental colleagues, which would aid the process of locating interviewees.

In the United Kingdom the neighbouring English towns of Oswestry and Shrewsbury, along with Welshpool, a few miles over the Welsh border, were the focus of research (Figure Two on page 84). Several locations in the UK were considered to meet the criteria: Edinburgh, Bristol and Cardiff for example. Again, however, the presence of mountain biking contacts, made through the researcher’s previous time in the UK, and which facilitate the fieldwork process, determined the decision towards the chosen location. The large size of the three aforementioned alternatives also suggested that trails would be less readily accessible from participants’ homes, which could compromise the nature of some of the questions. The location of participants, identified using their pseudonyms, is shown in Table Two on page 84.

In terms of examining participatory influences, the chosen study locations have a range of mountain biking trails and facilities available within easy reach, defined for the purposes of this research as less than two hours’ drive. The range of trails and facilities available at each location are both purpose-built, often all-weather, mountain bike-only routes and traditional public rights-of-way across public and private land that are shared with other users, principally walkers. An important factor in the choice of locations was
Figure Two

UK Study Locations and Key Local Mountain Biking Destinations
the availability of purpose-built mountain biking trails of sufficient length, quantity and quality. As well as complementing each other, the availability of both trail types permits a degree of ‘substitutability’ when choosing between purpose-built and traditional trails to ride. As the justification for this factor, it is argued that a mountain biker needs to be able to make a choice between the two types of trail, as they are hypothesised to offer different types of riding experience, and the motivations for riding them may be very different.

In the Nelson area, there are numerous trails available for cross-country riding within easy reach of the city centre, of which the Dun Mountain mixed-use trail is probably the best known route. The Grampians trails, Hira Forest and tracks emanating from Tantragee Saddle are other well used riding locations, with a mixture of forest roads, mixed-use trails and purpose-built mountain biking tracks. Further afield, the more popular trails are mostly traditional mixed-use trails, such as the Rameka Track, the trail to the Hackett Hut and the Wakamarina Track. Figure One on page 82 shows the location of the study site and some of the trails available in the area.

In the UK, the majority of the riding around the towns selected for the research is on traditional rights-of-way. The most popular areas for riding are probably the multifarious bridleways available on the Long Mynd, in the Berwyn Hills and on the Kerry Ridgeway. Within a two-hour drive, the possibilities for riding further rights-of-way are numerous: the Elan Valley and Snowdonia National Park are popular choices. In terms of purpose-built mountain biking trails, while limited trails are available at Haughmond Hill at Shrewsbury, there are a number of highly-regarded and well known trail centres within a two-hour drive. Coed-y-Brenin, the original centre in the UK, is the most well-known, but others of similar standard are situated at Llandegla, Nant y Arian and Betws y Coed. The UK study site and the principal trails nearby are illustrated in Figure Two on page 84.

3.3.7 Experiencing the Setting

For this thesis, interviews were not undertaken on site but at other more practical locations, due to the logistical difficulties associated with, in particular, the length of in-depth interviews and audio-recording quality issues. However, concordant with the naturalistic nature of qualitative research (Patton, 2002), the settings were experienced appropriately, entailing riding the trail options that are typically open to participants in
both research locations. Although the researcher’s thoughts about the settings were not formally recorded, the informal experiences did allow for a better understanding of interviewee’s responses pertaining to the attributes of these settings, and also aided a contextualised understanding of meaning beyond words (Slaughter et al., 2007). Taking this approach also facilitated establishing a rapport with local bikers and possible identification of suitable interviewees.

### 3.3.8 Sampling Procedure and Criteria

A form of sampling technique is required to create an actual group for research, taken from the target group (Punch, 2005). In this research the target group was all mountain bikers in the study locations in New Zealand and the UK fitting the research criteria detailed below. Table Two illustrates the sampling technique used to allocate each interviewee. The nationality of participants is also shown; as all interviewees were Anglo-Saxon in origin and native English speakers, and the researcher has extensive experience of working with different nationalities, cultural misunderstandings were not an issue.

A purposive sampling strategy was used to select representative individual interviewees. An approach typically used in qualitative studies, it entails the purposeful selection of relatively small, but information-rich samples. The aim is not to be able to make generalisations, but to yield an in-depth knowledge of the subject being researched (Patton, 2002). Within this purposive sampling strategy, two different sampling techniques were used.

First, criterion sampling was employed to select information-rich cases for research that met the pre-determined criteria (Patton, 2002). The criteria for purposive sampling in this research were fivefold. First, mountain bikers were interviewed whose riding is for recreational reasons, rather than competitive racing. It is argued by the author that racers form a totally separate sub-culture, and as races are place-specific, locational decision-making is necessarily imposed upon the participant. Participatory influences, in terms of site attributes, are therefore not consistent with recreational riding.
The second criterion was to interview bikers who predominantly ride cross-country trails, as opposed to downhill trails or freeride facilities. Cross-country, including trail riding at purpose-built centres, is by far the most popular form of mountain biking (Green, 2003), and motivations for downhill riding, where ascending is usually vehicle- or lift-assisted, would arguably preclude riding for fitness for example. Consideration of this niche, including perhaps a comparison with cross-country riding, would form another discrete study. Third, it was important to talk to participants who ride on both purpose-built and traditional mountain biking trails. As discussed in Section 3.3.6, it was considered that as the characteristics of these trails can be very different the motivations for riding at each could also differ.
Frequency of riding, defined for the purpose of this research as those who mountain bike at least once a week on average, and ride all year round, was the fourth criterion. It is argued that frequent riders are more likely to ride on a variety of trails and they therefore make more informative interviewees. As some of the questions pertain to issues of seasonality, interviewing year-round riders was necessary. This degree of involvement suggests a heightened level of interest or motivation to participate in their chosen leisure pursuit (Havitz and Dimanche, 1997). Finally, mountain bikers who would classify themselves as of at least an intermediate standard of ability, with an advanced level of technical mastery (Bryan, 2000), were interviewed, as they would have trail options of varying difficulty open to them. Riding experience arguably also opens up a wider range of more intrinsic motivations for bikers and other adventure recreationists (Ewert and Hollenhorst, 1989; Cessford, 1995b). The experience level of the participants, along with their age group, is illustrated in Table Two on page 87.

These interviewees’ dedication and commitment to mountain biking suggests it represents to them serious leisure, defined as "the systematic pursuit of an amateur, hobbyist, or volunteer activity sufficiently substantial and interesting for the participant to find a career there in the acquisition and expression of a combination of its special skills, knowledge, and experience" (Stebbins, 1992: 3). Perseverance and the expenditure of significant effort yield benefits to participants, helping them to identify with the activity and associate themselves with a unique ethos that comes with the activity (Bull, 2006). It is argued that participation in mountain biking can be compared to the pursuit of a career, usually of no remuneration, where progress can be achieved through skills acquisition or experience, for example, or where the career can decline through lack of participation or unanticipated events (Stebbins, 2001).

Snowball sampling was the second technique used, where interviewees knew other potential candidates who would be worth considering for interview, where they met the sampling criteria (Tolich and Davidson, 1999). Snowballing is a common sampling technique, which has been used for locating interviewees in a number of tourism studies (Schuster et al., 2001; Kiewa, 2002; Hardy, 2005, for example). Previous research on adventure recreation participants has used similar means of selecting interviewees, reinforcing the choice of sampling techniques in this research. Schouten and McAlexander’s (1995) study of motor bikers, for example, used a purposive sampling
technique that targeted bikers of varied age, class and lifestyle preference, some of whom belonged to biking groups and some of whom had no such affiliations.

In contrast, purposive and snowballing sampling was used to interview climbers in the USA, in research on the management of climbing resources (Schuster et al., 2001). Participants were chosen from a number of sources: the climbing community, advocacy groups, land managers, environmental groups and climbing goods retailers (ibid.). A more informal sampling technique was used in a sub-culture study on risk-taking in Australian surfing, the researcher establishing himself as a surfer and casually interviewing fellow surfers, to whom his research intentions were made clear (Stranger, 1999). Snowballing resulted in a number of interviewees for a study of climbers in Australia (Kiewa, 2002), but, more pertinently, criteria for interviewees were explicit: traditional, not sport, climbers, and climbers who were currently active. Those with a range of experience were interviewed, but interviewees needed to have had at least three years’ experience. Climbers of different ages were selected for interview. Although a study limitation in practice, data collection was also characterized by an aspiration to interview similar numbers of men and women to ensure a representative research group (ibid.).

### 3.3.9 Sampling Logistics

There are no established rules laid down for determining sample size; accordingly, interviews were undertaken until it was considered the findings were saturated and it was deemed that further interviews would yield no new findings (Miller and Salkind, 2002). While the aforementioned sampling criteria are well defined they remain loose enough to capture a wide range of interviewees. Furthermore the breadth of interviewee ages, and locating both male and female interviewees, would help to ensure a variety of responses. The result was a total of sixteen interviews undertaken in New Zealand and fifteen in the UK; one interview in New Zealand was subsequently rejected as it was considered during the transcription process to yield insufficient findings.

The interviewees were accessed through a number of means, discussed in Section 3.3.10. Three sampling rules of thumb were adhered to, in terms of chosen interviewees: first, interviewees were unfamiliar to the researcher; second, none had prior academic experience in the field of mountain biking; and finally, none had expertise in this particular
field (McCracken, 1988; cited in Riley, 1995). The former rule of thumb was adopted in order to avoid elements of familiarity in response that might compromise the authenticity of findings. The latter two were important, to ensure that responses pertained to personal feelings and meanings, rather than accepted professional or academic definitions.

In order to include a degree of sample variety, interviewees were chosen, where practical, for a degree of contrast in socio-ethnographic characteristics, in particular age and gender. A number of previous studies in this field (for example, Symmonds et al., 2000; Goeft and Alder, 2001; Bowker and English, 2002) have confirmed that the average mountain biker is a young (early thirties), white, college-educated and employed male; such socio-ethnographic characteristics are akin to that of a number of sporting sub-cultures, such as surfing (Wheaton, 2000). Anecdotal evidence, however, suggests that mountain biking is a sport that has seen an increase in the number of female participants in the past five to ten years. It was therefore considered relevant to interview a significant percentage of female bikers, without expressly setting targets for such.

3.3.10 Locating Interviewees

Contact was made with interviewees through a number of different means. As it is recognised that a good informant can save much time (Fontana and Frey, 2000), informal contacts supplied by sources away from the research locations, and other informal contacts made on previous trips to these locations, were the first to be approached. The local mountain bike club and cycle shops in or near the research locations were considered to be good sources of potential interviewees, and these were the next avenue to be explored. The cycle shops were personally visited and the issue of possible interviews was discussed with store owners or managers. Having ascertained details of committee members from the mountain bike club website, they were telephoned about their potential involvement in the research. They were also asked if they knew other club members who might be willing to be interviewed.

Finally, an informal snowballing effect yielded further interviewees. Many research participants had mountain biking friends or were aware of other potential interviewees in their peer group, and these leads were followed up and enacted upon where suitable. In total, in New Zealand and the UK, two interviewees were contacted through the local
mountain bike clubs, four through existing contacts and five through local bike shops. Nineteen interviewees were contacted through snowballing, eight of those through the initial contact with club committee members. This is illustrated in Table Two on page 87. Once potential participants had been identified, they were assessed for their suitability for interviewing by the researcher. This entailed cross-reference back to the sampling criteria, detailed in Section 3.3.8, to ensure that the interviewees were of sufficient experience and commitment, for example, to yield worthwhile and appropriate findings.

### 3.3.11 Interview Logistics

A flexible, open and practical approach was taken regarding the location of interviews, the primary consideration being to take into account the psychological comfort of participants. While it was necessary to use locations that enabled interviews to remain relatively undisturbed to permit audio recording, participants were proactively asked where they would like the interviews to be undertaken, and their preference adhered to. Overall, 22 interviews were carried out at the participant’s home and eight at their place of work. Participants were also asked to nominate a suitable time to be interviewed: twenty interviews were carried out in the evenings and nine during working hours, while only one took place at the weekend.

When undertaking research, it is important that the researcher is able to establish both a rapport and trust with participants, in order to yield valuable findings and be able to see things from their perspective, an issue of empathy (Fontana and Frey, 2000). In this study, general discussions about mountain biking, and the local biking scene in particular, allowed rapport to be established with participants at an early stage. Once established, every effort was made to keep the relationship alive and meaningful throughout the interview.

Commensurate with the nature of the study, the researcher dressed informally to make the participants feel comfortable. An information sheet was carried and presented to the participants prior to the interview, to ensure that they were comfortable with the purpose of the interview. All interviewees were given the opportunity to read this, and were asked to read and sign a consent form; both of these forms are appended to the thesis (Appendices B and C). Interviews lasted between 30 and 73 minutes, with an average of nearly 50
minutes. Not all the interviewees were asked all the questions, as discussed in Section 3.3.3. All interviews were recorded using a digital audio recorder, which were later manually transcribed in their entirety by the researcher, a process which formed an integral part of the analysis.

3.3.12 Analysing and Interpreting Findings

As described in Section 3.2.3, a general induction method for analysis was used, as it is a comprehensible and systematic qualitative analytic procedure (Thomas, 2006). The procedure is outlined in Table Three below. Using this method, reliable and robust findings are guided by the research objectives and derived through multiple readings and interpretation of the findings (Thomas, 2007). This section describes the stages of the process in detail.

For logistical reasons, as the fieldwork was undertaken in New Zealand in April-May 2008 and in the UK in September-October 2008, the primary stages of the analysis were carried out separately, immediately after the interviews. This approach had the advantage of rendering the large numbers of findings more manageable, and enabling any interviewing or analytical issues to be sorted out halfway through. Responses from both New Zealand and UK fieldwork were considered together, however, when the analysis of findings was started.

Undertaking the interviews and the process of listening to the recorded interview and transcribing each set of responses enabled the researcher, at a very early stage of analysis, to gain an impression of the overall feelings and meanings of each participant, in relation to their motivations and important site attributes for example. These close and multiple readings of the text are a key component of the analytic method of general induction, as they enable the researcher to familiarise him or herself with the content and be able to uncover key sub-themes within the text. This close understanding was achieved by immersion in the findings in five further stages, relating to the transfer of findings to spreadsheets and the highlighting of key text. Highlighting was used to both allocate text to sub-themes and for possible participant quotations to illustrate meanings of sub-themes in Chapters Four to Six. Once the digital recordings of all the interviews had been
transcribed, the following procedures were undertaken to analyse the findings (derived from Thomas, 2006). These are displayed in Table Three below.

**Table Three**

**Analytical Steps in the General Induction Method**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
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<tbody>
<tr>
<td>1</td>
<td>Preparation of raw findings, grouped by question</td>
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<tr>
<td>2</td>
<td>Identification of key themes</td>
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<tr>
<td>3</td>
<td>Identification of provisional sub-themes</td>
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<td>4</td>
<td>Coding of transcripts for cross-reference</td>
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<tr>
<td>5</td>
<td>Key text segments highlighted, using common responses or terms</td>
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<tr>
<td>6</td>
<td>Highlighted text segments transferred to spreadsheets, ordered by sub-theme</td>
</tr>
<tr>
<td>7</td>
<td>Key sub-themes given a description</td>
</tr>
<tr>
<td>8</td>
<td>Meaningful interviewee responses highlighted as quotations</td>
</tr>
<tr>
<td>9</td>
<td>Development of a framework to illustrate the key themes and sub-themes</td>
</tr>
</tbody>
</table>

The first step was to prepare the raw findings using standardised formatting. This entailed transferring, from each transcript, the responses to each question to a new document created to display only those responses pertaining to that particular question. A later step in the analytic process would, however, allow for responses to be coded to more than one category. In this way, new documents were created, with the questions grouped with similar questions to facilitate analysis. These new documents therefore displayed the 30 responses to each question.

Step Two involved the identification of three key themes, derived directly from the first three research objectives and the three core sets of questions. These themes are: motivations for mountain biking, the important attributes of riding locations, and the information sources that influence their decisions about where to ride. These themes would be reviewed at frequent intervals to ensure their continued relevance. A descriptive label was applied to each new theme, the description taken from the relevant objective and modified as necessary.
### Table Four

**Response Coding Framework**

<table>
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<tr>
<th>Theme One: Mountain Bikers’ Motivations</th>
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<tr>
<th>Theme Two: Site Attributes</th>
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<table>
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<th>Theme Three: Influential Decision-Making Variables</th>
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Each set of 30 responses to the questions was read and a provisional set of key sub-themes was developed: this formed Step Three. These sub-themes pertained directly to the most frequent points that emerged under the three key themes. The identification of these sub-themes was enabled by the researcher’s total immersion in the findings by this stage of the analytic process. These sub-themes were continuously reappraised to ensure appropriateness.

In Step Four, in order to facilitate the continual revision of sub-themes, each of the original transcripts was reread and responses therein coded according to a coding framework derived from the key sub-themes identified in Step Three (illustrated in Table Four on page 94). This permitted cross-checking of coded text by comparing coded responses from individual transcripts to responses grouped under the key themes. Continual refinement of the sub-themes, throughout both the processes of analysis and writing meant that some of the coded responses were reassigned; the theme ‘peer pressure’ was subsumed under the ‘social nature of mountain biking’, for example, as continued immersion in the findings confirmed that it was not itself a motivation for mountain biking.

Step Five entailed the highlighting of text to distinguish the interviewee responses that pertained to the key sub-themes. These text segments were identified through two principal means: first, common responses to a key question, for instance asking how peer pressure affects how interviewees ride; and second, through identifying common key terms used by the interviewee, such as their identification of singletrack or flowing as trail characteristics. The highlighted text segments were transferred into a spreadsheet, forming Step Six. Three such spreadsheets were created, one for each key theme, to ensure the spreadsheets remained manageable. Each spreadsheet was populated with key sub-themes. The highlighted text was placed according to its relevance to the provisional key sub-themes, in order to illustrate the meaning of sub-themes and to identify associations. In Step Seven, an initial description of the meaning and key characteristics of each sub-theme was then created.

Relevant text segments were not confined to a single sub-theme; they were coded to any sub-theme to which they pertained. Overlapping coding is an important part of the analytic process in qualitative research (Thomas, 2006), as some responses relate to more
than one sub-theme. A response about the use of a mountain bike club website, for example, could relate to both the club and the Internet as an information source.

Through these multiple readings of the text, the sub-themes were continually revised and refined. In this manner contradictions were addressed and new insights into the findings were able to be identified. Overlaps between categories suggested commonalities in meanings, or causal relationships, leading to the identification of links to other sub-themes; these links would be detailed in the reporting and discussion of results. A considerable amount of text, estimated at 20-30%, was left uncoded where it was felt to be irrelevant, in order to reduce unnecessary overlap and redundancy. It is suggested that using the general induction method up to 50% of text may be left uncoded (Thomas, 2006). Uncoded text was not assigned to sub-themes. Finally, Step Eight involved the highlighting, as appropriate, of illuminating or meaningful quotations. These were later utilised in the reporting stage, in order to illustrate the essence of a sub-theme, and provide real-world examples of motivations for example.

The output of this analytical process was three categories of findings that captured the key aspects of the themes in the raw findings. These were assessed to be the most important themes in relation to the research objectives. Continual analysis of the findings, stretching into the writing process, saw eventual refinement of the findings into three key themes, which are used as the headings for Chapters Four to Six, and a considerable number of sub-themes, which form many sub-sections. While Chapters Four and Five correlate closely to the first two research objectives (see Chapter One), during the analytical process it became apparent that information-oriented influences on bikers’ destination decision-making – the third objective – should also be considered as ‘pull’ factors and therefore logically discussed in Chapter Five. Concurrently, some factors previously considered to be potential motivations for riding, peer pressure for example, were restructured during analysis as socially-oriented influences on participation; a discussion of these factors forms Chapter Six. The rationale for these decisions is discussed in Section 8.3.

In terms of research design, the outcome of a general inductive approach to analysis of the findings is typically a model or framework that illustrates the key themes and sub-themes, and thereby summarizes the findings (Thomas, 2006). The employment of this
methodology in this research has resulted in the development of a conceptual framework that illustrates the key themes of the research. The framework and a summary of the key outcomes are presented in Chapter Seven.

### 3.3.13 Issues of Ethics and Anonymity

All social research involves issues of ethics as all research “involves collecting data from people, and about people” (Punch, 2005: 276). It is recognised that within a qualitative approach ethical issues are more likely to arise, as such research deals with people’s feelings and the interpretation of meanings. The interview process, and subsequent analysis, was undertaken according to the principal guidelines that academic codes of ethics generally follow (Christians, 2000). These four principles are commensurate with the University of Otago’s *Principles and Policies Governing Ethical Approval* (University of Otago, no date).

First, the interviewees were deemed to have the right to be informed about the nature and consequences of the research in which they were partaking. Participation was therefore voluntary and based upon informed consent (Christians, 2000). The researcher was open and frank with the participant, and explained the purpose, duration, methods and possible risks associated with the research. In this way, the research was designed to be free of deliberate misrepresentation or deception, the second principle (*ibid.*).

The third guideline pertained to privacy and confidentiality. The researcher took the necessary steps during fieldwork, and all subsequent analysis and reporting, to protect people’s identities and to ensure that their privacy has been maintained and no embarrassment caused (Christians, 2000). Participants were therefore assured upfront of total anonymity, and pseudonyms were used in the reporting of the findings to ensure this as far as possible. Fourthly, the researcher accepted the responsibility of ensuring that the study must be research of merit (University of Otago, no date) and that all the findings were accurate and free from omission or fabrication (Christians, 2000).

In addition to these four key ethical concerns, a number of secondary ethical concerns were identified and addressed during the research (from Miles and Huberman, 1994). First, the worthiness of the research was evaluated and confirmed: the process of
reviewing the existing literature in this field identified aspects of mountain bikers’ behaviour that had yet to be researched in depth. It was apparent, therefore, that, as discussed in Section 1.3, the research could make an original contribution to academic knowledge.

Second, as the study unfolded, the researcher considered issues pertaining to the nature of the relationship between researcher and participant and how trust was ensured. This entailed a responsibility on the part of the researcher to ensure that interviewees’ responses were faithfully and accurately reported. Concordant with the consent form signed by the participant, the researcher safeguarded the maintenance of interviewee anonymity and respected his or her right to withdraw from the study if he or she felt uncomfortable or unhappy.

The third pertinent concern related to ownership of the research, in particular who owns the findings, field notes, analyses and conclusions; these ownership issues are concordant with the University of Otago’s Policy for Intellectual Property Rights of Graduate Research Students (University of Otago, no date). The findings on which the results of the thesis depend are stored securely within the department for five years, after which time they will be destroyed. Finally, self-reflection during the writing of the thesis facilitated consideration of integrity and quality issues, ensuring that the research was undertaken carefully and correctly, and reported with clarity (Miles and Huberman, 1994).

The ethical issues that are germane to this research were primarily the responsibility of the researcher. Concordant with university policy, however, they were addressed through a Category A application to the University of Otago’s Human Ethics Committee, which was approved on 13 December 2007. Through this process it was ensured that all ethical issues were covered to enable research to be undertaken in New Zealand and the UK.

3.3.14 Research Decisions and Assumptions

A number of research decisions and assumptions need to be stated at an early stage, in order to clarify the scope of this research and avoid confusion. First, as discussed in Section 3.3.8, the fieldwork entailed interviewing recreational mountain bikers who fitted a number of key criteria, such as experience and dedication. Mountain bikers who were
primarily racers, therefore, were excluded, as their motivations would arguably have differed from recreational riders. Furthermore, as the location of races is determined exogenously, what attracts racers to locations is the racing, not the attributes of the settings. As the motivations for, and site attributes pertinent to, other forms of the sport, for instance freeriding or downhilling are also arguably different, these forms of mountain biking were also excluded.

Another decision relates to the differences between mountain biking as a recreational activity and as a tourist activity. A number of studies suggest that most mountain biking trips are undertaken near to home or as a single day’s activity (for example, Goeft and Alder, 2000; Leberman and Mason, 2000; Bowker and English, 2002). Mountain biking is therefore predominantly a recreational activity, differentiated from a tourist activity by the widely accepted definition of an overnight stay away from home (Shaw and Williams, 2002). This research therefore pertains to mountain biking as an adventure recreation activity. While several questions were asked of interviewees regarding trips that could be classed as mountain bike tourism, for example determining the motivations for multi-day mountain bike rides, these are explicitly stated. Finally, a decision was made regarding the factors identified by interviewees that influence their decision-making and choice of location. While one of the principal objectives of the thesis is to identify and discuss such factors, discussed in Chapter Five, an examination of the actual psychological processes relating to decision-making, and the hierarchical relationship between these factors, lies outside the research scope.

3.3.15 Research Limitations

Two potential method-related limitations in the design and execution of the questions became clear. First, the general analytic method adopted suggests debate over the nature of the interview questions: principally, how can an inductive approach be taken, where there are no preconceptions about the findings (Thomas, 2006), when the development of questions by the researcher would appear to require a number of preconceived ideas to actually script the questions? The answer to this issue lies in the employment of open-ended questions rather than structured, closed-ended questions: while the latter “requires a deductive approach because items must be predetermined based on some theory or preordinate criteria” (Patton, 2002: 56), the use of open-ended interview questions allows
the interviewees to describe the meanings of actions or thoughts, for example, without being pushed into preconceived categories. Although many studies in reality use a combination of both approaches, in this thesis no preconceived assumptions were made by the researcher and the themes and sub-themes identified only emerged through the immersion in the findings (Thomas, 2006).

Second, the ambiguity of a few interviewee responses, which became apparent during the analytic process, necessitated a minor level of interpretation by the researcher, in order for them to be coded to the appropriate theme or sub-theme. This introduced the potential for a degree of researcher bias. This was minimised through only coding findings where the researcher was confident of their meaning or coding the findings to more than one theme or sub-theme.

Two minor limitations to the interview questions, not identified in the pilot interviews, became apparent during the fieldwork process. First, the ordering of several questions was felt to hamper the flow of the interview; these questions were reordered without the questions themselves being changed at all. Second, it became obvious that a few questions were superfluous to the research, such as asking respondents to describe their last mountain bike ride. While these questions were felt to aid the interview process by breaking the ice and encouraging participants to speak freely, and all interviewees were therefore asked these questions, they yielded few in the way of pertinent findings.

After the findings had been analysed, a decision was made to explore how the push and pull factors identified by participants interact with each other, in order to discuss how participants felt that recreation in their chosen settings could help to satisfy both their general motivations for riding and their motivations for choosing those recreational landscapes. The nature of interviewee responses, whereby site attributes were often discussed in the context of their motivations for mountain biking for instance, meant that this subject could be examined with some authority. While the open-ended nature of responses would suggest that such responses could occur, it is acknowledged that the prior development and use of questions pertaining to this interaction could have strengthened the discussion.
A further methodological limitation that may be raised by quantitative researchers regards concerns about the inability to generalise qualitative data to a wider population (Tolich and Davison, 1999). It is argued, however, that qualitative findings are not designed to be generalisable (*ibid.*). The aim of this research was to develop a deeper understanding of the research subject (Patton, 2002).

### 3.4 Presentation of Research Findings

This purpose of this chapter has been to set out in detail how the research was undertaken, from philosophical considerations to the practical issues associated with gathering, analysing and reporting research findings. Having explained and justified the methodology, research design and method, the remainder of the thesis is structured to, first, present and analyse the research findings in the context of the existing academic literature. Reporting is divided into three sections, forming Chapters Four to Six. The first two of these chapters relate to the first two research objectives: mountain bikers’ motivations and the important attributes of riding destinations. As outlined in Section 3.3.12, the third objective – influences on bikers’ destination decision-making – has been subsumed under Chapter Five, while Chapter Six explores other influences on participation.

Chapter Seven synthesises the key sub-themes from Chapters Four to Six. In a discussion to weld together and examine the inter-relationship of all the salient factors, it presents a conceptual framework for the field of mountain biking, examining the range of factors that influence riders’ participation in this particular adventure recreation activity. Chapter Seven also addresses the fourth research objective, developing a framework to present the research findings. This chapter amalgamates the findings into a broad theoretical discussion, and explains and rationalises the study’s contribution to academic knowledge. Chapter Eight concludes the thesis by discussing methodological limitations and recommendations for further study and reviews the implications of the research findings in the context of the research.
Chapter Four: Research Findings - Mountain Bikers’ Motivations

Understanding people’s motivations for leisure “helps determine why people engage in leisure behaviour in the manner they do” (Manfredo et al., 1996: 188). Extending Dann’s (1977) influential work on push and pull factors into the adventure recreation field, a mountain biker’s decision to ride at a certain location is consequent to his or her need or desire to partake in mountain biking as an activity. An understanding of people’s motivations to participate therefore forms the logical platform from which to better comprehend other factors that influence people’s participation in mountain biking.

Motivation to participate in an activity is not one-dimensional, and tourists, or recreationists, will generally take part in order to concurrently satisfy a number of different motivations (Baloglu and Uysal, 1996). The realisation of seemingly divergent motivations for participation can also be simultaneously fulfilled (Iso-Ahola, 1980): for example, both exploring the countryside and the seeking of thrills are found to be important motivations for mountain biking, even on the same ride, despite high speed excitement and enjoying the beauty of the landscape appearing ostensibly antagonistic.

It is suggested that although a motivation can be generalised, “its content needs to be specifically contextualised within individual experiences of a site’s physical attributes” (Pan and Ryan, 2007: 303). Mountain bikers’ behaviour, therefore, requires that individuals’ motivations are understood in the context of the settings in which they recreate. The pull factors that will satisfy those motivations are also likely to be multidimensional in nature (Baloglu and Uysal, 1996), while different attributes or settings can satisfy different motivations in individuals (Pan and Ryan, 2007). A trail that may pose a challenge to one mountain biker, therefore, may represent a thrill to another, more experienced rider. By extension, pull factors other than the physical attributes that attract them to specific areas or trails, such as the image of a destination or information about a location, also need to be examined to comprehend the relationship between motivation and settings (Schreyer et al., 1985). The interaction of these influences is discussed in more depth in Section 7.5.
4.1 Structure of Following Chapters

Introduced in Section 1.3, developing an understanding of the range of factors that influence people’s participation in mountain biking is the core aim of this thesis. Qualitative research of mountain bikers was used to elicit their thoughts and feelings about these influences on their participation. The purpose of these next four chapters is to examine in turn the issues set out as the research objectives. Concordant with the first objective, this chapter examines people’s motivations for mountain biking, as these push factors should be examined, according to Dann (1977), before the attributes that attract bikers to individual destinations. The aim of Chapter Five is an investigation of the different pull factors that influence people’s decisions about where to bike: tangible site attributes, more impalpable characteristics of destinations and other factors, such as sources of information, that attract riders to individual locations. These issues address the second research objective. Chapter Six correlates to the third objective and frames a discussion of other factors that may also influence, or possibly constrain, participation, without, it is argued, being motivations in themselves to ride. How participants felt that their motivations had changed, as a means of better understanding their current predisposition to mountain bike, is also examined in this section.

Finally, Chapter Seven aims to synthesise the findings into a single discussion, introducing a new conceptual framework to illustrate the range of factors that influence participation in the activity, as set out in the fourth objective. The issue of a general homogeneity of influences between mountain bikers in New Zealand and the UK is also discussed. The principal sections of Chapter Seven are centred on a discussion of the range of findings presented in Chapters Four to Six, contextualised within the framework. It concludes with an analysis of the thesis’ proposed contributions to academic knowledge in the fields of mountain biking and wider adventure recreation. In bringing together the findings and discussing their importance and relevance in a holistic manner, Chapter Seven aims to examine the relative importance of participatory factors. This factorial relativity is based on the emphasis placed by interviewees, or by the number of interviewees favouring a trail attribute or being influenced by a certain motivation for example.

To elicit this information, a total of 30 mountain bikers were interviewed in New Zealand and the UK in 2008 (see Section 3.3). Bikers were interviewed who met a
number of pre-defined criteria: principally participants were experienced cross-country mountain bikers who ride frequently on a range of traditional and purpose-built trails throughout the year. An extensive set of open-ended questions was developed, the structure of which was guided by the research objectives. Questions relevant to this chapter were both very general, inquiring what it is participants enjoy about mountain biking for example, and more focussed, related to issues such as the importance of risk, how mountain biking affects their mental well-being and people’s thoughts about the sociable aspects of the activity.

The principal aim of the analytical method was to identify key themes and sub-themes running through the interviewee responses. This was achieved using a method of general induction (Section 3.3.12). Preconceptions regarding the subject matter were effectively discarded, allowing the findings to arise directly from the interviewee responses: this forms the inductive component. The analysis in this thesis concludes with the development of the framework, illustrated in Section 7.2. A strength of this methodological approach is the use of participant quotations that richly demonstrate the meanings of these identified sub-themes.

The presentation of the findings in Chapters Four to Six therefore takes the form of collective discussions that are structured around the key sub-themes identified during analysis. The layout of the chapters entails the consideration of factors grouped into cogent combinations. For example, seeking thrills and risks are discussed sequentially in this chapter, flowing and singletrack as trail attributes are examined together in Chapter Five, and information sources are broken down into those stored internally and those accessed externally. In this manner, effort has been made to create a discursive flow in each chapter.

Interviewee quotations are extensively used to allow the interviewees’ feelings and thoughts to meaningfully illustrate the sub-themes. Pseudonyms are used throughout to protect the anonymity of the participants. As there were very few areas were a disparity of responses between interviewees in New Zealand and the UK was found, the findings are discussed collectively. Section 7.3 discusses the anomalous points in general terms, while the divergent issues are discussed in depth in Sections 5.9 (trailhead facilities), 5.21.3
(printed media information sources) and 6.5.1 (access issues). Mountain bikers of different age groups, and both male and females, were interviewed.

Although it is beyond the objectives of this thesis to explicitly explore motivational differences between males and females, or between bikers of disparate age groups, it is apparent that age and gender can have significant influence on people’s motivations for riding, as well as trail choices and riding patterns. Many interviewees have families, while the oldest rider was over twice the age of the youngest. Age and gender can affect motivations, from the need to escape a home- or family-oriented life to differences in attitudes towards taking risks. These factors are discussed as appropriate in these three chapters. As all experiences are new in the beginning, this motivational discourse logically commences by examining the role of novelty in mountain biking.

4.2 Novelty

The joy of doing something new or discovering somewhere different, and the potential excitement that this can entail and convey, was extolled by many of the interviewees, confirming its importance as a motivation for riding. At its most basic level, the desire to experience something new can pertain to the circumstances surrounding people’s entry into mountain biking, as Todd suggests: “my mate asked if I wanted to try mountain biking, so I thought that I would give it a crack”. Some interviewees tried mountain biking in its, and their, formative years, when the bikes represented a radical departures from road bikes:

When I was growing up I was lucky enough to be close to one of the shops that first starting stocking mountain bikes, and me and my contemporaries, aged about 13, were forever in the shop looking at these incredible bikes with their big fat tyres and heavy brakes... As soon as we could get hold of mountain bikes we were out (Robert).

Others, Ewan for example, were either hikers who wanted to venture further into the countryside to see new places or were road cyclists who wanted to try it as a new variation of their pursuit:

I used to be a roadie. Seven years ago we moved to this area and the second day we were here I met up with a guy who took me out mountain biking. Two days later I owned a mountain bike.
The enthusiasm for novelty can therefore pertain to experiencing a new pursuit, as well as riding new trails or seeing previously unvisited places, where the experiential element may be less about the riding and more focussed on other, less dynamic aspects, such as exploration or the appreciation of scenery. When Sean, for example, was asked why he likes going to new locations, he replied: “new! Something different, anticipation, the promise of something different that you haven’t done before. From time to time you just fancy something different”. Dick reasoned that it’s because “all trails get a bit, not so much boring but stagnant after so many times, so something new is good”. Introduced in Section 2.5.10, the search for novelty can be linked to a sensation-seeking trait within individuals, as a new experience can be an antidote to boredom (Zuckerman, 1979). Other studies on mountain biking have confirmed its importance (Kennett and Hughes, 1994; Cessford, 1995b), 60% of riders citing the exploration of new areas as a motivation for mountain biking (Kennett and Hughes, 1994).

The search for novelty can satisfy a number of other potential riding motivations too, for example a quest for adventure or meeting a challenge. In terms of challenge, on a new trail: “it’s the unknown, and you’re a bit nervous, what you may find round the next corner. On a more positive side it’s exciting to not see what’s coming next” (Dorothy). As Gail suggested: “it’s good to challenge yourself on new trails. Whether they are technically harder or not it’s good for your confidence”. Betty believes that the search for novelty forms the “adventurous part of mountain biking, not knowing what the view is going to be like at the top or what’s round the corner, and seeing different corners of the country”. It is suggested that novelty and adventure are directly linked, a new environment arousing exploratory behaviour in individuals (Lee and Crompton, 1992).

A couple of interviewees think that there is an indefinable quality about new trails, an element of excitement in the unfamiliar that stimulates a person’s expectations, what Beatrice described as ‘an X factor’. Ewan theorized on the attraction of riding something for the first time: “I guess we all have a sense of nirvana about the perfect trail. A sense of excitement and satisfaction too. It’s something to talk about with your friends”. Finding a new trail also gives “something to add to the repertoire, so more choice for when you feel like going out somewhere” (Troy). Exploring new places helps to create a store of potentially useful knowledge (Vogt and Fesenmaier, 1998), based on previous experience, which people retain in their memory (Section 5.18). Bob suggested that you then
“compare it to all the stuff you know”, and the new trail is added to memory as either positive or negative information depending on one’s experience and satisfaction.

The novel experience of mountain biking at night was cited by many interviewees as one of its key attractions. At night one’s world is limited to seeing a few metres ahead of oneself, with limited peripheral vision. This instils a complete change in perception as your concentration is focussed on “the pool of light on the road ahead” (Bob). The trail can consequently become more surprising and thrilling, as John explained:

It just looks different. When you are looking at everything through a headlamp it looks totally different... So you can’t see how much further you have to go. And coming down is really exciting.

For Richard, night riding is also imbued with a different type of novelty, not related to a different or new type of personal experience, but to the enjoyment derived from doing something different to everybody else, escaping when others are perceived as being tethered to the monotony of routine:

It’s different, it’s challenging and it’s fun. It’s something new. It’s a nice feeling to be at work on a grim day in December and have a ride on the moors that night to look forward to, when everyone else will be sat at home watching TV.

A search for novelty is also seen by some interviewees as being a key factor for mountain biking as a touristic pursuit, both on a weekend away mountain biking and multi-day rides. Some of the interviewees in the UK have ridden the same multi-day ride in the European Alps, for example. They all loved the ride because it offered them something that their usual riding did not. Rick, for example:

Enjoyed doing the Tour du Mont Blanc for the challenge... It was totally different, different languages, the challenge of something that’s not easy to do, the scenery, everything. Something totally, totally new.

Perhaps more importantly it offered them something that everyday lives did not: uncertainty, excitement, adventure, escape, a break from routine, an alleviation of boredom (Lee and Crompton, 1992). All the dimensions of novelty were therefore present in a consummate example of why people find mountain biking so enjoyable.
4.3 An Enjoyable Pursuit

In Section 2.5.7 it is suggested that fun and enjoyment are underrated as motivations for recreational pursuits. Fun, “the positively stimulating sensation of having a good time” (Henderson et al., 1999: 44), is undoubtedly a motivation for participation in mountain biking, however. Fun was mentioned by a number of participants; its importance as a motivation for mountain biking is also supported by previous research (Horn et al., 1994; Hollenhorst et al., 1995). While not easy to define, everybody has an idea about what fun encapsulates, and its value to them (Henderson et al., 1999). Marty for example, stated that: “if someone had told me previously that I could have so much fun on a push bike I would have laughed. I love it”.

Sean was very considered in his appraisal of enjoyment. In differentiating the thrill to be gained from simply partaking, more akin to enjoyment, from other, more adrenaline manifestations of thrill, discussed below, he observed:

It depends how you define thrill. Thrill in terms of excitement, something dangerous, that for me is one kind of thrill. There is, it seems to me, a more subtle version of thrill, whereby your involvement in something at a deep level is thrilling in a particular way, which is not quite the same as something more immediate, like charging down a hill. That to me is slightly more important.

Sean’s distinction raises an important consideration: in the context of mountain biking, it is argued that enjoyment and fun represent a quite different experience to thrill. While the latter is often associated with excitement or emotion, fun and enjoyment can arguably be seen in more sedate, but no less affective, terms, such as playfulness or pleasure. Flo also defined her enjoyment in more holistic terms. When asked if thrill was important to her while riding, she replied: “a little bit. But not as important as an overall sense of enjoyment”. She elucidated her feelings of enjoyment:

I’m a mountain biker for the whole sort of enjoyment of it, keeping fit, mentally doing yourself good, enjoying the scenery, going out with a group of people, because that motivates me as well… Hopefully I’ll come back feeling good and elated and happy that I’ve done something that I’ve enjoyed.
Mountain biking was likened by some interviewees to being a child again: “you feel like a kid, having fun, it’s like playtime” (Beatrice). Similarly, George, by far the oldest interviewee at 68, concurred, describing his feelings about participating in mountain biking:

At an emotional level it makes me feel boyish again, young and excited. I don’t even know how it does that, but I feel like a kid. Maybe it harks back to when we rode bikes as kids. I feel childlike – it’s play. As you get older it gets more difficult just to play, and biking is play.

Play was defined in Section 2.5.7 in terms of an activity people partake in solely for enjoyment (Roberts, 1995). It is suggested that mountain biking not only ascribes to people’s perceptions of play, but also “offers riders an opportunity to relive or to remember the irresponsible days of childhood while riding” (Patrick, 1988: 17). As people get older their lives can become time-constrained and they may find it harder to play (Roberts, 1995). For George, mountain biking offers a means of indulging in play, as well as having important nostalgic connotations and a reminder of the freedom and abandon with which he was able to run around as a child.

4.4 Exercise: A Good Physical Workout

A key driver identified for many participants is the fact that mountain biking, for all its other worthwhile attributes or characteristics, is seen as an excellent form of exercise. Mountain biking is the most vigorous activity assessed in Pretty et al.’s (2007) study of green exercise, burning around twice the calories per hour as walking. Rick considered what mountain biking as a form of exercise means to him: “you come back and think that you could have been sitting in a pub watching football, but you haven’t, you’ve been out and done some good”. Bob took this up:

[I enjoy] the fitness aspect and getting outside. Knowing that it is doing me good and getting outside, they’re the things that I enjoy. I do a bit of walking, sailing and snowboarding, when I can get to go. It’s the exercise, the high heart-rate exercise [of biking]. The sailing I do doesn’t do that.

The exercise involved is one of the principal reasons that people choose to ride cross-country rather than just downhill, as it is proven to be “a highly demanding endurance
sport during which the aerobic energy system is heavily taxed” (Impellizzeri and Marcora, 2007: 69). Ewan likes: “cross-country, not downhill, [because] I enjoy – sounds masochistic – getting to the top of a hill and smashing myself”. Ian even went as far as saying that the physical pain of climbing on a bike, and the benefits that that brings, is one of his key motivations:

I enjoy the pain of cycling uphill, the grind. And I enjoy the change in your body, over a period of time, as you become fitter and fitter… Downhill doesn’t include the cardiovascular workout and physically I feel really good after a long cross-country ride. I think I get just as much of an endorphin release from the workout as I might do from a downhill.

A slightly different rationale is adopted by Todd, whose motivation for mountain biking is fired not by the need to push himself physically, but because biking offers him the benefits of an activity such as tramping with fewer physical complications: “because I have arthritis I have difficulty walking and running, so it is a good way of getting round the countryside. Even though I do fall off biking is low impact on your knees”. Perhaps not surprisingly, no other interviewee described mountain biking as a low-impact activity however, and the challenging nature of the activity is explored below.

The importance of physical exercise as a motivation correlates with previous research on mountain biking, examined in Section 2.5.1. In an early study, 86% of UK interviewees stated that they mountain bike for competition training or fitness (Ruff and Mellors, 1993), while, more recently, Skår et al. (2008: 40) found that “the four most important single motives for mountain biking in the total sample all relate to physical exercise and personal health”. Ian was one interviewee who started biking for health reasons: “I wanted something that I could do instantly that didn’t involve finding someone else to go out with. It was a way to get fit and wake myself up that wasn’t in a gym”. Mountain biking for exercise has been found to be a stronger motivation for beginners than for more experienced riders, 59% of beginners riding for exercise, compared with only 23% of expert riders (Cessford, 1995b). The findings from this research, however, suggest that even for experienced riders it remains a strong reason for participation.

Several interviewees believe that mental and physical well-being are inter-related, and that a mountain bike ride is a means through which a psychological release and a physical
workout can be simultaneously achieved; mental catharsis as a motivation is discussed below. As Ian explained:

It’s the only thing I can do that’s a release of stress and physical energy that I know at the end of it, no matter what, whatever the weather or how I’m feeling before I go out, I know I will be in a better physical and mental state at the end of it. That’s what keeps me going out.

The link between mental and physical well-being is an important one, especially over the longer term. Charlie, for example, believes that both physical and mental benefits can endure long after the end of the ride:

You get a buzz out of doing any exercise. The release of serotonin. After you’ve done it you feel fantastic… Much more positive. It makes you much fitter, more alert. We get out on a Thursday and having worked four days you feel a bit lethargic. You feel ten times better afterwards, and better able to face Friday.

The enduring mental benefits of exercise are believed to be intrinsically linked to people’s motivations to maintain an activity. While the physical benefits of exercise often motivate people’s initial involvement in a sport, a more important motivation for their continued participation is the sense of wellbeing it fosters (Tsai, 2005).

4.5 Mental and Physical Escapism

In Section 2.5.9 it is suggested that one of the most important motivations for undertaking leisure activities is believed to be escapism: leaving behind the monotony and routine of everyday life, whether personal issues or inter-personal troubles (Iso-Ahola, 1982). Out on the trail, a “mountain biker gets the opportunity to achieve a temporary state of freedom... A ride on a mountain bike is a total release from normal requirements” (Patrick, 1988: 20). One of the interviewees, Patrick, explained how he loves to escape by himself, reasoning that: “the feeling of being out in the hills by yourself is sometimes very nice in itself. Just being by yourself, out in the environment, just you challenging the environment”. Challenge, in the many forms in which it can manifest itself, is discussed in Section 4.7 below.
In some respects this may appear to be a motivation antagonistic to the perception of mountain biking as a thrilling and adventurous activity. It is acknowledged, however, that many who participate in active mountain sports cite relaxation as a principal motivation (Papadimitriou and Gibson, 2008). The importance of escape is reported in other mountain biking research, getting out into nature and escaping everyday stresses found to be the second most important motivation for mountain bikers after physical exercise (Skår et al., 2008).

There is a blurred line, however, between escaping for cathartic purposes, the relieving of emotional tension, or just bodily escaping from “the straight lines of the city”, as one of the interviewees, Pauline, termed it. Indeed, in Horn et al.’s (1994) study, while getting away from it all was one of the five most important motivations for riding, no differentiation was made between physical and mental escapism. More interviewee responses pertained to mental catharsis, rather than physical escapism however. A number of participants made a positive link between the two, believing that, aside from the ability of mountain biking to transport them mentally from their everyday lives, the physical effort that it requires helps to revitalise them psychologically. Patrick feels that it is the physical act of biking that clears away mental detritus from everyday routine:

One of the main things is that you switch off from the day’s activities, so it’s a refresh for the brain really. The harder you push yourself on the ride, whether physically or mentally… the more it takes away what’s been happening during the day... A healthy body creates a healthy mind and an energetic brain.

Research has found that even just physically being in the outdoors can have a profound effect on mountain bikers as it physically removes them from their everyday life (Probert, 2004). It is argued, from the nature of the responses, that it is the mental benefits associated with being in the outdoors that, exercise notwithstanding, form greater personal benefits to bikers.

4.5.1 Mental Catharsis

Mountain biking is perceived as “a great release valve”, as Ian termed it. Far from perhaps the usual perception of the activity, mountain bikers do sometimes ride in a more
contemplative manner, in relaxing surroundings (Brown et al., 2008), when the goal for a ride may be more psychological, or when people need to escape from overstimulating situations (Beard and Ragheb, 1983). Dick qualified the attraction of his favourite place:

The route into the Berwyns. I like that, just because when I want a bit of space and some time on my own it’s somewhere I can go and just sort of detach from the world… I enjoy the nothingness! Nobody around, nobody to annoy you, nobody to interrupt you. Just get out, fresh air and enjoy yourself on your own.

Beatrice sees mountain biking as the ideal antidote to her working life, as she explained: “my work is really about people and give, give. A mountain bike ride clears the head… because it gets you out of your mind and back into your body”. Rather than clearing the mind of what has happened that day, Bob talked about how a ride prepares him for what is to come work-wise:

I know that at the end of a ride it will set me up for the week, for a week of work. It really does. It puts in a frame of mind that will get me through a week in work. That is a big motivator for getting out on my bike, just to get through the next five days of work.

While most responses related to the release that it provides from the work environment, escapism has a different meaning for Ruth and Jo: “when I’m ironing on a Monday I think that I have Friday to look forward to because I’m going on a bike ride. It helps you get through the mundane tasks” (Jo). Ruth was more emphatic: “it’s really important, because I have quite a stressful life at home with the children, so it’s my release”. Participation can therefore represent liberation from the strictures of their home life, and family, when denied the change of environment that even paid employment can yield.

Whether a release from work or home life, the freedom starts as one becomes engrossed in the act of riding (Dodson, 1996), as George suggests:

Sometimes I may feel a bit in the doldrums. Sometimes it’s even hard to get started on the bike, with that slightly flat feeling. But as soon as the pedals are turning it takes you out of that space. It changes your headspace.

Mental escapism was suggested as a key attraction of riding alone, Beatrice encapsulating how riding alone differs to a social ride: “it’s better for my head if I ride by
myself. It’s good for my soul and heart if I ride with other people”. Ewan took a different approach, believing that by riding yourself:

You feel safe – that’s a funny word to use, but life brings a lot of stresses and all sorts of things from work, family, organisations, socially and so on… it’s you and that’s it. There’s physical safety and there’s also emotional safety too, that’s what I mean.

Riding with other people, though, brings its own chance of mental escapism. Todd, for example, sees it as a time to: “maybe talk about work. Also forgetting about troubles at home. If you have problems at home you talk to your mates, [it] makes you feel better”. As well as discussing troubles, he also saw it as an opportunity to “talk about something totally different – about bikes, the scenery, how lucky we are to ride in Nelson”. The cathartic elements associated with outdoors pursuits can be lost however if too many other people are encountered (Needham et al., 2004). Richard was not the only interviewee to feel that he’d “rather be on a trail where there’s no-one at all”. The issues of crowding and conflict, whether perceived or real, are discussed in Section 5.10.

Interviewees’ thought processes were differentiated between climbing and descending trails. Climbing represents a challenge in itself for some people, and concentration on the task in hand is the prevalent thought; for others it is a time for contemplation. Sandy feels that climbing trails is: “a release, getting your head to a different place [and] almost like a trance-like state where you ride and there’s a level of clarity that comes”. Ian cautioned, however, that “reflecting on life... has a range of emotions from frustration to elation”.

Focus and concentration, not surprisingly, are the key mental processes for downhill sections of trails. This can in itself represent an escape for some people. When the wheels are pointed downhill one’s mental state can be similarly divorced from the rest of the world, albeit naturally with a more immediate level of focus. Such concentration is a requisite condition to experiencing flow on the trail, examined in Section 4.7.5. Sean explained how the physical exertion of climbs and the risks associated with downhills can equally represent a release to a biker:

On the uphill it’s the challenge of the climb and you’re thinking about just keeping going. Downhill you’re concentrating on the trail. The overall
result is exactly the same, the other world over there doesn’t exist. It’s put aside by struggle and pain on the one hand and fear on the other, basically.

Sean’s feelings also highlight the range of feelings associated with escapism. While it can relate to an escape from everyday reality, and total concentration on the immediate sensory environment, Todd’s comment above suggests that escapism can also take the form of actively engaging with peers to transport oneself away from their home environment. In this respect, escapism is found through the social interaction encouraged and facilitated by participation.

4.6 A Sociable Activity

The sociability of mountain biking is perhaps not its most obvious attribute, yet a wide range of comments related to its importance as a motivation, corroborating the suggestion that, conceptually, the seeking of interpersonal rewards, such as social contact, is an important motivation for partaking in both leisure activities (Beard and Ragheb, 1983; Norman and Carlson, 1999) and adventurous pursuits (Ewert, 2008). Responses suggest that its sociable nature can take on a number of different forms, such as: as a time to catch up with friends; enjoying the camaraderie of riding – and falling – together; taking pleasure in meeting other users, particularly other mountain bikers, on the trail; and engendering a sense of belonging to a community of riders (Section 6.2.1). Riding with others can also help to motivate people to get out of the house and ride, and create the right conditions for self-improvement in terms of technique. Peer pressure, conversely, can have more negative implications, tempting bikers to perhaps ride beyond their capabilities, for example, or forcing them to ride trails they would not ordinarily choose (discussed in Section 6.3).

The importance of the activity’s social world can be illustrated by the fact that few participants mostly ride by themselves. Similarly, in international research, over three-quarters of interviewees are reported to ride with other people (Symmonds et al., 2000). Other research also confirms its importance as a motivation. Mountain bikers in Tasmania confirmed that socialising is the third most popular reason for riding after the appreciation of nature and exercise (Chiu and Kriwoken, 2003), while a third of all interviewees in New Zealand cite socialising or riding with friends as a motivation for biking (Cessford, 1995b).
Riding with other people is considered desirable for the opportunity it affords to share experiences, both on and off the trail. Nancy encapsulated the feeling simply as: “sharing that thrill. Getting to the bottom and going, ‘that rocked’”. This close interaction with other participants has been confirmed as a key driver for a range of adventurous pursuits, from rock climbing to kayaking (Ewert, 2008). Dorothy used skiing as a social analogy:

I don’t get that much out of mountain biking alone. I will go out if I need to go and do a ride but, like the skiing, when you’re all going downhill and get to the bottom and go, ‘wow, that was ace’, you’re just experiencing it together, out in the outdoors, having a good time.

Philip agrees: “[it’s] having other people to share things with. There is no point having a crash if there is no-one to see it! I much prefer to go out with others than on my own”. Patrick acknowledges the enjoyment in recounting trail mishaps and adventures in the pub afterwards:

I find the whole challenge, the countryside, the scenery, just really satisfying and it’s just nice to appreciate it with somebody else. If you’ve had a bit of an epic, going out there during the winter and it’s blowing a blizzard, to be able to come back to the pub afterwards and talk about it is far better than just going home and having a cup of tea by yourself.

These après-bike activities can be an important element in forming bonds through the pursuit. They are, however, not argued to be a motivation in their own right, but subsumed within the sociable nature of mountain biking, and portrayed as such in the framework in Chapter 7.

Patrick’s thoughts reinforce the importance of a sense of belonging to a community of bikers. As discussed in Section 6.2.2, these narratives may be relatively meaningless to the wider population, and their purpose only relevant within their peer group. Riding with peers can perhaps make crashes or amusing mishaps more likely, as Elizabeth noted: “if you’re riding with somebody better than you it pushes you”. Being tempted out of one’s comfort zone on the trail through peer pressure is discussed in Section 6.3.4.
4.6.1 Meeting Other Trail Users

Meeting other bikers on the trail is generally seen in a positive light, although there are exceptions. People met on the trail are cognitively categorized into groups (Carothers et al., 2001), and if the others encountered on the trail are mountain bikers, and therefore perceived to have similar interests, use similar equipment and be part of the in-group, the result is more likely to be a positive encounter (Cessford, 2003). On the other hand, if the other trail users are perceived to be part of an out-group, possibly with antagonistic motivations or attitudes, conflict can be the result (Section 2.7). As potential trail conflict was identified by participants as an important issue, the ‘lack’ of conflict is considered in Section 5.10, as a desirable site attribute.

Interviewees’ attitudes towards other riders vary from a quick hello to sharing stories and experiences. Sean described why he thinks that there is such camaraderie within the mountain biking in-group:

It’s one of the things I like about mountain biking. You have a little fraternity. And you will all be from different walks of life, and you might not acknowledge one another in the street ordinarily. Because you have this thing that you do, that breaks down sufficiently those barriers. It’s one of the great things about being out.

Elizabeth also considered that there are social recognition considerations associated with meeting somebody new on the trail:

You want to find out about them a bit. See if they are any good. Find out where they have been. Again, it comes down to a bit of the pecking order. Find out what they are about, compare them to what you are about.

Her response suggested that some riders may feel that there is a competitive edge to their mountain biking, and an instinctive desire to compare other riders’ ability to their own. These are issues discussed in Section 6.3.

There are exceptions to the positive attitudes towards meeting other riders. Marty responded that on meeting other riders he is: “not grumpy, but just stop, say hello and then ride on. That’s what the soul requires”. Ian also considers it: “good, up to a point. If I
want a wilderness experience I don’t mind meeting other riders, but it’s nice to have the place to yourself”. Ian’s feelings illustrate how motivations vary according to the type of experience that a rider is seeking on any particular occasion, considerations of which are discussed in Section 5.22.

Meeting hikers or trampers can be seen in a positive light, rendering encounters with them more akin to a positive social event than a constraint on riding enjoyment. Ambivalence towards other trail users would describe the general feeling of mountain bikers, few appearing to actively dislike meeting hikers on the trail. This finding is consistent with other research that has been undertaken on the relationship between bikers and hikers (for example, Watson et al., 1991; Ramthun, 1995), and is examined in Section 5.10.2. Charlie considered the potentially problematic issue of co-existence on the trail, and reasoned that: “I don’t think that there is so much of a problem these days as we’ve become more accepted, because mountain bikers have been about for some 20-odd years”. Other research (Brown et al., 2008, for example) suggests that tension still exists between bikers and more hegemonic trail users, and that general acceptance of mountain bikers’ belonging in the countryside remains elusive.

4.7 Mastering the Challenge

The importance of challenge as a motivation in adventure recreation activities (Hall, 1992) is discussed in detail in Section 2.5.4, and meeting, and beating, the challenges posed by mountain biking is an important motivating factor. Challenges manifest themselves in a number of different ways: tackling long or technical uphills, or the challenge of riding fast or slower, more technical descents. All of these trail types can pose both psychological and physiological tests for riders, while navigating one’s way in backcountry areas can also present psychological challenges to riders.

When faced with such a challenge, people can feel compelled to fulfil goals that they set themselves (Loewenstein, 1999). These goals can be complex or substantial, such as undertaking a long, difficult ride, but may also pertain to simple, short-term goals, getting up a short technical climb, for example. Ruth described her psychological battle to attain the goals that she sets herself when tackling difficult ascents:
It’s a struggle! It’s never easy. Never easy. I’m always battling with myself to get up a rise, that sometimes I can do but depending on the weather sometimes I can’t get up. I push myself, so I’m fighting that battle in my head too.

Exploring your own limits is considered by some participants to be an integral part of tackling descents. People can become totally absorbed in the activity (Tellegen and Atkinson, 1974), so much so that they can sometimes put themselves in great danger (Pomfret, 2006). While one’s own physical abilities are tested, it is argued that the real battle is psychological, trying to overcome one’s fear. Elizabeth, for example, believes that downhills are about: “wanting to push the boundaries... You’re trying to find out where your own limits are”.

Achieving one’s goals has worthwhile intrinsic dividends, such as satisfaction and building self-esteem (Loewenstein, 1999), or building expertise (Beard and Ragheb, 1983), as Jo recognises: “it’s that sense of achievement, setting yourself a challenge... knowing that you might not achieve what you set out to achieve and that achievement when you do... that sense of fulfilment”. Beating a challenge can create the requisite conditions for experiencing those special experiences typified by ‘flow’, examined below. Mastery can also reward extrinsically, in terms of increasing status in the eyes of others (Section 6.2).

Meeting a challenge is closely related to the flow construct (Hall, 1992), introduced in Section 2.5.3 and examined below in Section 4.7.5. Mastery requires technical competence and an ability to correctly gauge the challenge posed (Martin and Priest, 1986). To avoid boredom a certain level of challenge is required however; conversely, anxiety can result if the challenge is too great (Jones et al., 2003). Robert encapsulated the fine line between the two:

If you just ride down a big, wide, perfectly surfaced track you may as well be on a road. On the other hand... we’ve hit some tracks occasionally where you just have your heart in your mouth, and you’re not really sure you’re going to avoid falling off.

Experience helps a person to assess and meet these challenges (Martin and Priest, 1986). The interviewees in this research are all mountain bikers with many years’ experience and who ride regularly. As adventure recreationists become more experienced
it has been found that motivations such as challenge and achievement become more important (Ewert and Hollenhorst, 1989). This shift in emphasis is discussed in greater detail in Section 6.4.

4.7.1 Challenge: A Key Component of Cross-Country Mountain Biking

The range of challenges is one of the reasons that interviewees choose to ride cross-country rather than downhill mountain biking. Elizabeth, for example, thinks that cross-country has a greater variety of psychological obstacles to overcome: “it’s more varied, the challenges that you have – having to watch the trail the whole time, make decisions”. Ewan finds cross-country riding physiologically testing, but worthwhile as a result: “it’s physically challenging... I enjoy… the satisfaction of getting there, and then the reward is the thrill down the other side”.

This can also be a key attraction of mountain biking over and above other activities, hiking or tramping for example: “it is much more challenging, as you have to deal with the fear of learning a new skill and crashing and hurting yourself, which you don’t get with tramping” (Beatrice). Rebecca thinks likewise: “mountain biking gives me the technical challenge I don’t get from other sports”. Responses, such as those discussed in Section 4.9 about the thrill of mountain biking in comparison to walking, allude to the wide range of factors that can motivate people to mountain bike, which many other activities are arguably not able to offer.

4.7.2 Negative Implications of Challenge

When the challenge or risk is greater than one’s competence, misadventure or even disaster can result (Martin and Priest, 1986), as Simon recognizes: “it’s all about pushing the boundaries, and occasionally you overstep that boundary and crash… [but] then you build up to that boundary again”. Simon was not alone in this respect, and only one interviewee had avoided quite serious falls from the bike. Injuries ranged from a broken back to a fractured skull, but only one interviewee mentioned shoulder injuries, statistically the most common injury to mountain bikers (Bentley et al., 2007).
Paradoxically perhaps, participants see negative implications of both riding alone and with others, in terms of self-challenge. While peer pressure might encourage, or force, one to ride at, or even beyond, one’s limit (Section 6.3.4), biking alone on challenging terrain also has safety implications. Flo considers that: “since my accident I realise you’re wise to ride with other people... I don’t really enjoy riding by myself – I go to low risk areas, where there are others around”. Richard thinks along the same lines, advising: “you have back-up there if something goes wrong”.

Attitudes towards riding behaviour after an accident vary considerably, some interviewees admitting that an accident makes them more cautious for a while. Sandy, for example, stated that: “initially you get incredibly cautious... But then I try to analyse what did I contribute to this and what can I do better next time”. Patrick took a lot longer to recover his confidence:

I’ve had three what I would call semi-serious accidents... It really holds you back for up to six months. You can’t get on the bike for three months and then the following three months you are as nervous as a kitten, until you get over it eventually.

On the other hand, Ian feels that: “it didn’t make any difference. Well, maybe for a couple of hours afterwards I was a little bit hesitant”. Regardless of how people are affected, as Troy admits, if you tackle testing terrain “you are always putting... yourself at risk and those around you at risk of having to look after you”. Such consideration is justified, as in New Zealand mountain biking accidents have one of the highest levels of injury claims of all adventurous activities (Bentley et al., 2007).

The potential for things to go wrong brings another dimension to a ride: “it adds that extra element of, you could get lost and it could be a whole different day. That can be quite exciting” (Flo). Bob was effusive about undertaking the Tour du Mont Blanc two summers previously.

You feel like you are on an expedition. You feel like you are exposed. There is all sorts that could go wrong. It’s just great putting yourself in that position, as you just don’t get that feeling in life. And I’m almost excited by the fact that a wheel could collapse and how are we going to get this back on the road. Years ago I would be worried by that but now I think that
it is quite entertaining when you have big mechanicals! It’s just a great feeling.

Bob positively relished the challenges that might have resulted, elements that many others would perhaps try to avoid. While the element of the unknown can be exacerbated when riding on multi-day rides, as they can present a series of challenges to a rider that are demonstrably different, even on a local day ride problems need to be anticipated.

4.7.3 Testing Navigation Skills

Navigating one’s own way on trails represents not only freedom in deciding where to ride, but also challenges people’s skill in translating the route on a map to the route on the ground. Undertaking recreational activities in more natural and primitive environmental settings is positively correlated with challenge (Todd et al., 2002), and is argued to pose a psychological challenge, where navigation and battling the elements, for example, create their own risks, aside from the physical issues associated with riding (Cessford, 1995b).

Dick, however, feels: “that’s part of the challenge of it. Mountain biking is about getting out there and doing some stuff yourself. It’s part and parcel of it”. Richard too is: “quite happy to navigate my own way. Admittedly you have to stop and look at the way, but it’s part of the challenge of being out there. I enjoy trying to find the right way”. Jo is one of several riders who enjoy spreading out a map and planning a natural ride: “I like the route planning aspect, sitting down and deciding where you are going to go, working out how many miles... It’s another challenge, another aspect”. Although GPS devices to overcome obstacles in route planning are used by riders such as Troy, the challenges of self-navigation using map and compass are still embraced.

4.7.4 Climbs and Descents: Presenting Their Own Challenges

Climbs and descents were both appreciated for their difficulties. It is not surprising that cycling uphill is seen as a physical challenge; while some do look forward to or even enjoy the challenge, others feel it is just something to be overcome, in order to enjoy the downhill, as Elizabeth admitted: “I like to get the climbing out of the way and enjoy the next section”. Riders can relish the challenge however, even if it is conceded that “there is
a sort of perverse pleasure in riding uphill as well as down” (Richard). On longer, less technical climbs perhaps the challenge is more psychological than physical, as Flo suggested: “I think I’m better on slightly technical uphills, rather than when it’s a long road. That kills my motivation”.

Perhaps surprisingly, there was less consideration of the trials presented by downhills. While on less difficult descents you “can let go and enjoy it” (Richard), on technical descents the challenge is seen as both mental and physical: mentally having to overcome a natural fear of obstacles and steep terrain before you can physically conquer the challenge. Rick, for example, admitted that:

Downhill, that’s trying to gauge it so that you get the thrill without actually hurting yourself… It’s finding that level where you frighten yourself enough but you don’t fall off and cause yourself any harm.

Having defeated this anxiety, the challenge lies in: “trying to pick the right line [and] forcing myself to look ahead” (Sandy). Sean agrees: “technical stuff… makes me think very carefully about where my line is, what is coming up around the next corner”. The rewards, however, are significant:

It’s the sense of fulfilment. I find it heaps more fulfilling than just getting on my road bike… Mountain biking, it’s a real risk, so [there’s] a great sense of achievement in making moves and getting through something (Nancy).

Nancy’s feelings concerning the intrinsic rewards for mastering the challenge suggest that mountain bikers can have a peak experience, giving rise to feelings of mastery and accomplishment (Dodson, 1996).

4.7.5 Intrinsic Rewards for Conquering the Challenge: Feelings of Flow

In the general absence of extrinsic rewards for partaking in their chosen activity, it is argued that “adventure participants are searching for a peculiar state of experience, an experience that is rarely accessible in everyday life” (Csikszentmihalyi and Csikszentmihalyi, 1990: 154). Flow (Csikszentmihalyi, 1975) is the most well known of these special experiences (see Section 2.5.3). Confirming that mountain bikers are
motivated by the desire and search for optimal experiences is difficult however. By their very nature, extraordinary experiences are hard to define or classify. When asked in open-ended questioning why they enjoy mountain biking, for example, no participant mentioned any terms synonymous with optimal experiences. Indeed, research on adventure recreation is criticised for concentrating too much on flow experiences, which are “really just the negotiation of a situation’s adventurous potential, and... might never happen... Flow, then, is a bonus experience in some adventures, but it is not an essential element” (Varley, 2006: 178).

The findings of this research generally support this claim: while mountain biking can produce moments correlating to optimal experiences, none of the interviewee responses alluded to actively seeking them. While flow experiences are logically discussed here as a corollary of mastering challenges on the trail, this reinforces Varley’s (2006) assertion they are argued to be a by-product of motivational factors such as mastery. It is apparent, however, that many of the components of flow do have significance for a number of the interviewees. In Section 2.5.3 it is suggested that there are seven core elements of flow experiences (Csikszentmihalyi and Csikszentmihalyi, 1990). The responses below suggest that bikers do exhibit some of these characteristics when mountain biking and can experience feelings akin to flow, without actively seeking it. Flow is such a complex, and individual, feeling that it is understandable that riders are unlikely to account for all seven components of flow in their responses, nor might not be able to elucidate fully what it is they are actually experiencing. Other authors in this field also recognise the difficulty mountain bikers may have in articulating peak experiences (Dodson, 1996; Brown et al., 2008, for example).

The first component of flow is a ‘balance of challenge and skill’. Dorothy explained how she judges the skill required to meet the risk posed by a tricky trail: “it’s a balance, with that element of risk... However I address that risk quite sensibly. I don’t take my brain out and go down stupid things”. Pauline stated, likewise, that risk on the trail: “adds an element of excitement but I prefer managed risk, risk that I’m in control of”. Second, when a mountain biker is at one with the activity there can be an ‘unconscious sense of control over actions’. Tackling a downhill section of a trail, for example, it is considered possible to “totally los[e] yourself in the riding” (Simon).
‘Intense concentration’ is the third characteristic. Ian feels that: “[on the] downhill you are so focussed on the task in hand that you are just concentrating”. Sandy concurred: “downhill the focus is on trying to pick the right line, trying to stop myself looking at the front wheel, forcing myself to look ahead”. Fourth, a ‘merging of action and awareness’ can characterise Sean’s mental state: “when you are out on the trail, particularly if you are working hard, whether something technical or physically challenging, that is all that is in your mind – that and the world around you”.

Fifth, Pauline described a ‘transformation of time’ when mountain biking sometimes. She can “be very much in the moment”, when time for her is dictated by the activity at hand, not by the clock. In this state, Sean feels like “the other world over there doesn’t exist”. Craig believes that sometimes he appears to have no conscious control over his actions: “downhills, I’m totally focussed on what I am doing, or not [doing]”, going on to add, more pertinently, that: “sometimes I ride without consciously processing, that’s just a state of mind”. Such a ‘loss of self-consciousness’ is the sixth characteristic of flow. Finally, flow is characterised by ‘clearly defined goals and immediate feedback’: “on the downhill I’m very focussed, there’s nothing else to think about except what’s in front of you that millisecond” (Beatrice).

The issue of flow, or peak or optimal experiences, has been the subject of few mountain biking studies, and only Dodson (1996) has researched the issue in any depth. Without empirically testing it, Horn et al. (1994) suggest that many of the components of flow can be experienced when mountain-biking. Kaplin (1985; cited in Patrick, 1988: 20) encapsulates the essence of these experiences, in doing so reinforcing some of the interviewees’ responses:

What’s neat about mountain-bike riding is that you are able to fuse the moment and your intention together... There’s none of this thinking about what you’re doing and then doing it. It’s an existential dream because you’re right there in the moment.

When riders in Dodson’s (1996: 320) study were asked whether they felt any of the constructs associated with peak experiences, 65% “reported their most memorable bike memory as one which contained many of the characteristics of a peak experience”. Interviewee responses in this thesis support Dodson’s findings: while elements of peak or
flow experiences are reported by bikers, the suggestion that people bike to have such experiences is not well supported. While these feelings may be a welcome by-product of thrilling, challenging or risky riding, they are therefore argued not to be a motivating factor in themselves for mountain bikers.

4.8 Seeking Risk

Risk, defined in terms of an uncertainty of outcome or potential loss (Cater, 2006), received little mention in the context of factors that make mountain biking enjoyable. Only when questioned about how important a sense of risk is to their riding were more responses prompted. Nevertheless, it is apparent that risk does have some importance. Ewan theorised that: “what bikers really like, to various degrees, is the element of risk – having trees around you and obstacles”. Although risk has been discussed extensively in the context of general adventure recreation, as discussed in Section 2.5.5, risk as a motivation for mountain bikers has sometimes been assessed as part of wider motivations. Cessford (1995b), for example, groups risk with speed and excitement as a motivational factor. While these elements are reported as the principal motivation for experienced bikers, the findings do not help to isolate the relevance of risk to riders.

It is suggested that “as experience is acquired... [mountain bikers] engage in increasingly dangerous behaviours” (Creer et al., 2003: 251). Some of the interviewees’ feelings, as experienced riders, support this. John, for example, sometimes stretches his own abilities, feeling that downhills are: “a little bit scary as I go a little bit beyond, a little bit faster than I am comfortable with”. Todd tried to rationalise why risk is sought on the trail: “if you look at society you don’t do risky things, you go to work, do your job. This is risky, when you have your own bike and make your own decisions”. Sean echoed this: “I quite enjoy being scared. Being scared, from time to time, is very good for you”. If there was no risk present in adventure recreation it would lose much of its attraction (Ewert, 1989).

It is acknowledged that taking risks can make people uncomfortable or anxious (Levinson, 1990). Rebecca and Dick described this in terms of their riding: “I ride within my comfort zone and just push it a little bit sometimes when I’m feeling comfortable enough to do that” (Rebecca). Dick agrees that you: “have to move out of your comfort
zone to feel that you’ve achieved something on a ride... It’s what eggs you on a little bit”. John, however, is calculating in terms of risk: “I’m more cautious about who I go out with because a lot of people I know ride beyond their ability... I just don’t go out with them anymore”. While these contrasting emotions, from anxiety to achievement and pleasure, are key elements of adventurous activities that entail uncertainty and risk (Swarbrooke et al., 2003), pushing the boundaries is clearly not embraced by everybody.

Responses were predictably varied when participants were questioned about the importance of risk to them when riding, but many riders consider that some element of risk is a desirable feature of mountain biking. While only Flo thinks that it is not important at all, at the other end of the spectrum lie Beatrice, who confessed that she loves technical downhills, and Craig, a former racer. For Beatrice the risk factor is: “hugely important. If there wasn’t a risk it would be no fun. Massively important”. Likewise, Craig considers risk to be: “an integral part of it I think… I will always take a difficult option if it’s there. It’s just a part of my riding”. Richard pondered the importance of risk in outdoor activities generally, as an antidote to what Troy termed ‘the health and safety culture’ of people’s everyday lives:

I think it’s essential in anything you do. If you don’t challenge yourself with a sense of risk then I don’t think that it’s worth doing... I do wonder about people who won’t do these things as they think they are too risky – they are missing out.

Pauline’s response, however, encapsulated the feelings of many interviewees, suggesting that while a degree of risk enlivens a trail, other motivational factors are more important. She rates risk as: “medium on a scale of one to ten. I guess it adds an element of excitement... I don’t seek risk, but on the other hand a gravel road is not very exciting”. A number of other responses pertain to the correlation between risk and excitement, Dorothy admitting that: “I need that element of real risk, to get the adrenalin up”.

Responses also support the link between risk and challenge, whereby risk is met with competence when facing a challenge (Beedie and Hudson, 2003). Ruth feels that: “it doesn’t have to be [risky]. It’s better if it is though, because I think you feel that you’ve challenged yourself on something rather than just riding on the flat”. Gail thinks that this has implications for self-improvement: “to grow and get better at biking you have to take a
certain element of risk”. As a person becomes more competent the chances of avoiding injury and the potential for peak experiences are both increased (Martin and Priest, 1986).

A number of bikers were relatively ambivalent about the need for risk, and suggested that they would enjoy a ride regardless of the absence of risk. Ian, for example, admitted that: “I wouldn’t say that I enjoy a ride because it’s really risky over and above a ride that’s not”. His response supports the overall pattern of response: most interviewees feel that an element of risk is quite desirable, to make a ride more challenging and exciting, but it is not essential.

4.8.1 Real or Perceived Risk?

Only Nancy and Dorothy made a distinction between real and perceived risk, believing that mountain biking represents a real risk, as the locus of control is with the participant, rather than in somebody else’s hands, where the risk may be no more than perceived. Dorothy explained: “in some adventure sports there’s just a perceived risk – you’re abseiling down on a safety rope. I think that in mountain biking there’s obviously real risk”.

Their thoughts support previous research. Cater (2006) – see Section 2.5.5 – suggests that if people are reassured that the activity will have a safe outcome, as is the case in many commodified adventure activities, there is little real risk, characterised by an uncertain outcome, merely the perception of a risk. Nancy considered the positive implications of autonomous control: “in mountain biking, it’s a real risk, so [there’s] a great sense of achievement in making moves and getting through something”. Perceptions of risk can also vary according to personal circumstances. Interviewee responses suggest that factors such as age and family circumstances can also influence how riders perceive risk, as Bob suggests: “downhill, the older I’ve got the more cautious I’ve got... I think it’s to do with having kids”. The implications of mismanaging risk in terms of being off work, or gender differences regarding perceptions of risk, were not raised by interviewees however. A biker’s acknowledgement of these potential repercussions can result in a more considered approach to riding, where active steps are taken to manage risky situations.
4.8.2 Managing the Risk

Participants with families take a pragmatic line borne of age, experience and responsibilities. While Sandy stated that: “I’ve always done things with a sense of risk” he did admit that: “it’s important but I like to get home after a ride too”. A man in similar circumstances, Charlie tries to manage the risk, reasoning that: “I’ve had quite a few crashes… I don’t feel that I’m taking that big a risk but accidents happen”. It is a person’s competence, and a correct assessment of the balance between situational risk and competence, that enables them to manage the risk (Martin and Priest, 1986). Marty explained: “I don’t mind risks but will minimise them by analysing what I have to do”, tempering this by admitting: “I have the scars, so don’t analyse correctly every time”. In such circumstances, when situational risk exceeds personal competence, cuts and scrapes or a blow to one’s self-esteem can often result (Carpenter and Priest, 1989).

Bob’s feelings suggest that even in an autonomously controlled activity such as mountain biking there is still a tension between perceived and real risk: “I like the idea that it’s risky but then on the downhills in particular I’m trying to minimise it… It’s weird that, isn’t it? I like the idea of the risk but I also like to minimise it”. It is proposed that a perception of risk represents a person’s expectations for that particular activity: Bob perceives that his ride will be risky, and his desire to manage the risk represents his attempt to determine the actual outcome (Carpenter and Priest, 1989). Bob’s feelings about thrill though suggest that it is a considerably more important motivation for him, and in this respect he is not alone.

4.9 Seeking Thrills

Unlike risk, mountain bikers consider thrill to be a core motivating factor. In Section 2.5.6 the pursuit of thrills is argued to be the central motivation in commercial adventure activities where the experience is externally controlled by professional operators (Cater, 2006). Participant responses, however, confirm the importance of thrill, or synonyms such as excitement, buzz and adrenalin, in the generally autonomous, non-commercialised activity of mountain biking. In similarly adventurous activities, such as kayaking, the exhilaration resulting from participation is also a principal motivating factor (Ewert, 2008). Rick was asked why he enjoyed mountain biking, and unequivocally replied:
It’s the thrill! Whereas walking you get the views, with mountain biking you also get that thrill... It’s the excitement as much as anything... While you get tired at the end of the day, it’s more the excitement – did you see that corner, I almost stacked it. It’s the excitement.

When asked how important a sense of thrill is to her in her mountain biking, Dorothy explained: “you’re doing it because you want to get that sense of thrill, because that gives you the buzz and the adrenalin. You come off the trail and think, ‘wow, just had a great day’”. Patrick was equally ebullient in his feelings: “a sense of thrill is hugely important… Hard work slogging up the hill, but coming down the hill… there is always a real thrill to it, because you are going hell-for-leather”. Such sensation of speed is very important in creating feelings of excitement (Horn et al., 1994).

Marty, like other participants, used to enjoy hiking until he discovered mountain biking. When asked why he enjoyed it he compared his current passion with hiking, or tramping: “mountain biking is just a bit more of an adrenalin rush than tramping”. Richard agreed, and added: “it gives you the buzz that other outdoor sports don’t give you”. Bob was almost withering in his assessment of walking: “walking is walking, nice isn’t it! But no adrenalin”.

Excitement and thrill are seen as key elements of riding at night. Patrick explained the attraction: “I love riding at night... No matter how well you know a ride, when you are only using a torch to see where you are going you have limited vision. So it’s just more exciting”. Thrill can also result from the unexpected, itself a corollary of the enclosed world in which the night rider exists. Flo recounted how: “you get other elements of surprise, with animals that come out at night! We had someone hit a badger last winter, which caused a bit of a pile-up”! Philip believes that the thrill comes not from speed, as it might during the daytime, but from the illusion of speed:

The trail you ride in the light is different in the dark. You seem to be going faster, but I don’t think that you are. You’re just concentrating more and seems like you are going faster... It gives an extra buzz to what you are doing. There’s a bit more danger, a bit more thrill.

The issue of thrill was qualified however. Troy suggested that it is not a motivation for every mountain bike ride: “I do like the thrill of a fast descent or a tricky bit – it’s great. But you can have a good ride that doesn’t have any thrills at all – it may have other things
to it”. Flo considered it to be an unimportant factor in her riding generally. Her feelings are atypical however, as previous academic studies confirm the importance of thrill as a motivation for many mountain bikers (Cessford, 1995b; Chiu and Kriwoken, 2003).

In order to ascertain whether thrill or risk is a more relevant motivational factor for experienced mountain bikers, interviewees were asked why they consider one of these two constructs to be more important to them. While thrill and risk are perceived differently by individual riders, responses suggest that many interviewees believe the two to be essentially linked. If, as defined in Section 2.5.6, thrill in adventure recreation is characterised by anxiety and the exposure to danger (Balint, 1959; cited in Vester, 1987), there is clearly a considerable correlation with the threats to health or life (Hall, 1992) and degree of uncertainty (Fluker and Turner, 2000) that characterise risk.

The responses suggest that thrill is a much more important motivation for mountain bikers, and is actively sought in a ride or trail. Risk, conversely, is generally not sought by interviewees, but a degree of risk can form a desirable experiential or situational element. This refutes the oft-quoted assertion that it is the deliberate seeking of risk that defines adventure recreation (Ewert, 1989), and supports Weber’s (2001: 362) belief that “risk is not pursued as an end in itself... [and] often plays a negligible role”. Ewert’s own (1994) research on an equally autonomous adventure activity, high-altitude mountaineering, validates the importance of thrill and excitement compared to risk.

The differences in opinions, however, are illustrated by Nancy’s response, which suggests that thrill and risk can be divorced: “it probably is the thrill more than the risk, because even something that you do well that has no... risk, if I ride it well I will get a thrill from it”. Other responses appear to repudiate this, George defining his thrill in terms of speed: “I just like going fast, coming downhill. Even coming down Codgers [track] you can really come down at maximum speed”. Travelling downhill at speed is thrilling, but there has to be an inherent risk associated with mountain biking in this manner. Consequently it is argued there must be a degree of risk inherent in seeking thrills, not only those embodied in speed but also the thrills that can be found in slower, more technical trails for example.
Charlie’s response is therefore more consistent with the relationship between thrill and risk on the continuum of the harmless to the harmful: “I get a thrill without taking too much [emphasis added by the author] of a risk”. His thoughts on thrill versus risk as the more important motivational factor reflect others’ feelings, very few participants thinking that taking risks is more important in their riding than seeking a thrill. While Patrick finds it difficult “to decide on the difference between the thrill and the risk, as surely there is quite a lot of overlap there” he went to acknowledge that thrill-seeking behaviour requires an element of risk: “if it’s a downhill... I want to get the thrill out of it and I realise there’s a risk involved”.

In another adventure recreation activity, skydiving, it is suggested that beginners “tend to singularly equate thrill with risk”, and as they become more experienced, the thrill becomes normalised and risk-taking becomes more important (Celsi et al., 1993: 15). While both exhibit characteristics of hard adventure recreation pursuits, mountain biking is a less risky pursuit than skydiving (Creyer et al., 2003), and attitudes towards risk and thrill differ. It is argued that interviewees’ thoughts encapsulate the thrill construct in autonomous adventure recreational activities: in order to get a thrill out of mountain biking a certain degree of danger has to be faced. As Beatrice suggested: “you can’t get a thrill without taking a risk... and pulling it off”. While thrill may not entail great uncertainty of outcome or the potential for loss to the same degree as risk, it clearly still presents elements of danger and anxiety to bikers.

4.10 An Accessible and Flexible Pursuit

The flexibility and accessibility of mountain biking was identified as quite an important motivation for participation. Accessibility can manifest itself in a number of different ways: as a sport that can often be accessed from home; as something that can be done at relatively short notice; as a year-round activity for many people; as a relatively all-weather sport; and as a pursuit that can offer a quick hit of exercise, excitement and access to the countryside. A number of issues that constrain people’s ability to go mountain biking were apparent through responses. Factors that potentially constrain motivation, such as time pressures, the weather and the financial cost associated with participation, are discussed in Section 6.5.
4.10.1 Instant Access

Ian loves the accessible nature of mountain biking: “I can do it instantly, without much organization, irrespective of weather, or whether I can find someone to go with. I can do it when it suits me”. George agrees: “someone could ring me and ask if I want to go for a couple of hours. There’s no preparation, fill the drink bottle and ten minutes later I’m riding”. This accessibility is seen as a particular benefit of cross-country mountain biking, over downhillig for example, as Philip suggested: “cross-country you can just get on your bike and ride, rather than having to go somewhere to ride it”; downhillig, conversely, may necessitate organising shuttles to the top of the hill.

Riders can cherish the ability to ride in the immediate area, often from their front door. Phillip considers this a key attraction of living where he does: “it’s the freedom of getting out, getting up into the hills. You can go 20 minutes from here and you can be in the middle of nowhere”. When quizzed about his favourite local trails, Patrick replied: “I have my favourite trail over the hills, out the back of us. That’s a favourite simply because it’s on my doorstep”. This attachment to the local area is discussed in Section 5.19. George, living near the centre of Nelson, thinks that: “that’s one of the best things that mountain biking has going for it, as an urban-based recreation [it’s] very easy to fit into your life. I think that’s why it’s popular”. As a relatively accessible pursuit, compared to many other activities of this ilk, kayaking for example, and an activity that can be enjoyed with little preparation, it is argued that mountain biking has few peers.

4.10.2 A Quick Hit of Exercise and Adrenalin

The rapid experiential consumption offered by adventure activities is discussed in Section 2.5.8. It is argued that many commercial adventure activities, bungy jumping for example, are able to offer people a ‘quick hit’ of adrenalin or thrills, which may attract participants with little time available for such experiences. Responses in this research suggest that mountain biking is an easy, ‘autonomously organised’ way to fulfill these motivations.

Mountain biking is considered to offer a quick blast of exercise or adrenalin. A ride does not need to be particularly long in duration to be fulfilling, as Marty explained: “a
short ride in the forest can still be quite satisfying in the short time [available]”. The ability of mountain biking to offer a concentrated experience to some extent accounts for its popularity (Horn et al., 1994), with 70% of mountain bikers in Switzerland found to spend less than two hours riding (Heer et al., 2003). As a parent, Nancy feels that: “when you have kids you have limited time, so biking gives me everything I want in one sport”. Mountain biking is therefore seen as being a particularly relevant experiential activity in time-poor lives, whether because of work commitments or family life.

4.11 A Great Way to Explore and Appreciate the Countryside

Experiential goals are a very important aspect of many leisure activities (Botterill and Crompton, 1996), but there is a wide range of ways in which such experiences may manifest themselves. Rural landscapes can be the settings for thrilling activities, but sometimes mountain bikers can enjoy the more sedate appreciation of nature or a reflexive role more associated with a traditional walk in the countryside (Edensor, 2000). Even though the natural environment as a stage for adventure recreation activities may be imbued with a new type of dynamic symbolism (Cloke and Perkins, 1998), the intrinsic nature of mountain biking appears to compromise the capacity for reflection offered by walking for example. Seaton (2009: 157), however, believes that cyclists “retain something of the walker’s close observation... hearing and smelling [their] ambient surroundings”. A less technically-oriented ride, therefore, can still offer the opportunity for more meditative practice and aesthetically-orientated experiential goals, or to satisfy more intellectual motivations (Beard and Ragheb, 1983), as Flo described:

I’m not a mountain biker for the thrills, adrenalin, the buzz that it can give some people... If it’s a really beautiful place I’m often one for going slowly and looking at views... I’m a mountain biker for the whole sort of enjoyment of it.

Sean, for example, believes that, rather than the thrills associated with riding at purpose-built trail centres, it is the ability to explore the countryside that has been a key attraction of cross-country mountain biking to him:

I like to explore the countryside and get out and go places… I like to cover some distance and see the world. It’s only recently I started doing trail
centres – before that it was always pick a bridleway and go. The old-fashioned version of cross country.

Exploration as a motivation in adventure recreation activities is discussed in Section 2.5.11. Interviewee responses confirm that being able to experience nature, and explore natural environments, on a mountain bike is an important motivation for bikers. Horn et al. (1994) corroborate its significance as a motivation, for both tramping (hiking) and mountain biking. If thrill and excitement are not the goals sought on a ride, a mountain bike enables the countryside to be explored at a pace conducive to an appreciation of nature. It also allows one to comfortably cover a long distance and get further into the natural environment. Mountain biking to Craig was a childhood activity that: “took us places around my home town, Hamilton, that we wouldn’t otherwise see… It still takes me to some interesting places that I don’t think I would otherwise see”.

Many interviewees also enjoy, or have enjoyed, hiking and road biking, and, for some, mountain biking offers many of the advantages of these pursuits with a number of distinct attractions of its own. Betty feels that mountain biking enables participants to combine many of the elements of hiking – exploring the backcountry and visiting new places – and road biking – the sense of speed and distance – into one activity:

I guess there’s more of a sense of exploration and seeing where a track’s going to go, over that ridge, that you don’t get from road cycling. And it’s more difficult to get from walking as you can’t get there fast enough to be interested in what’s around the corner.

Similarly, Dorothy believes that the ability to cover a much greater distance in a day than hiking is a great advantage: “how great it is to travel across that terrain on two wheels. Travelling to that place by bike on a good trail means that… you can actually explore an area and really cover some distance”. Consequently, one can get “out into the back blocks of New Zealand and [see] some very beautiful and unspoilt places” (Ewan). Studies in New Zealand have confirmed that being in a natural environment is an important reason for participation in mountain biking (Leberman and Mason, 2000; Cessford, 1995b).

Conversely, Elizabeth considered how riding a bike enables people to be much more appreciative of nature, and observe the world much more closely, than would be possible
in a car: “I do like the pace – like in Scotland, you get to see more of an area but at a pace when you can take more of it in, rather than driving somewhere”. This results from the fact that: “bikes travel at a human speed, while the all-round vision you get from the saddle, unlike that from the seat of a car, means that you see landmarks very differently” (Hughes, 2000: 7).

While it is proposed that performance-related activities are less dependent on natural aesthetics (Brown et al., 1990), interviewee responses correlate more closely with the argument that even though participants in adventure recreation activities may move at higher speeds, the landscape still forms an intrinsic part of the experience (Bell and Lyall, 1998). Aesthetic considerations are examined in Section 5.15, but it is apparent that some mountain bikers’ enjoyment of the experiential aspects of nature is quite closely aligned with hikers’ quiet appreciation of the countryside (Miller et al., 2001).

4.12 Reflections upon Push Factors

Considerable breadth in the range of motivations to mountain bike is confirmed by interviewees, while several patterns have emerged through analysis. First, when asked in open-ended questioning what it is they enjoy about mountain biking, it became clear that participants are not motivated by a single factor, and each biker has a range of intrinsic motivations for participation.

Second, most interviewees introduced a range of motivations without prioritising them. Only three responses were so unequivocal that the thrill factor, for one participant, and a desire to explore the countryside for two others were singled out as the principal motivations for riding. A third pattern relates to temporal variations in motivations. Most participants enjoy winter night riding for example, especially for reasons of thrill and novelty, although longer summer days enable people to ride further, and satisfy motivations such as exploration and escapism that may be precluded in the cold of winter.

A number of key motivational relationships were identified for experienced mountain bikers. The physical exercise that the activity entails is a universally motivating factor for riders, inextricably linked to the sense of mental well-being that it can foster, through an escape from routine life. Different approaches to catharsis were espoused: a time to
completely switch off, focussing only on the riding, a chance to reflect on life, or the opportunity to escape through social interaction.

Mountain biking is perceived as a sociable activity, all participants extolling the virtues of riding with other people. Many riders feel that there is a real sense of community among mountain bikers, a forum to share trail stories, meet new riders and develop kinship. More importantly, the highs associated with overcoming challenges or experiencing great trails were generally felt to be more meaningful when shared with other people. Other community-related elements of biking that can affect people’s participation are explored in Chapter Six.

While novelty can be an important motivation in its own right, whether it pertains to the anticipation of riding somewhere new or sampling a new experience, a number of responses suggested that this promise of something different is concomitant with other motivations, adventure and exploration for example. Novelty can also be imbued with a sense of fun. Argued to represent something less visceral than thrill, fun can represent the more holistic pleasure derived from participation, or have nostalgic overtones, representing the abandon of childhood play.

Mastering the challenges faced on the trail was considered a particularly important motivation. While challenge can incur both psychological and physical struggle, when the challenges are mastered the potential exists for people to experience the types of intrinsic rewards that characterise feelings of ‘flow’. Although all the elements of flow were described by participants, it was clear that, as Varley (2006) suggests, the flow experience is not a motivation for mountain biking, but can occur when the necessary conditions fall into place.

Imbued in the flow construct, an element of risk on the trail was widely considered to be desirable, without being a motivation to mountain bike. Many riders suggested that they try to manage the risk through the application of skill. This sometimes requires bikers to move out of their comfort zone, but it was acknowledged to facilitate feelings of achievement, an important intrinsic reward. The presence of real risk in mountain biking enabled a couple of participants to acknowledge its ‘hard’ nature and differentiate it from other ostensibly adventurous pursuits where the risk is argued to be more perceptual.
In contrast, the seeking of thrills was perceived as an important motivation for riding. Several riders considered that the thrill of mountain biking is one of the principal reasons for participation and a key advantage over the more sedate pleasures derived from hiking for example. Thrill was often equated with the sensation of speed, and as travelling at speed entails inherent risk, it was acknowledged that there is an inextricable link between thrill and risk.

Suggested by one participant to account for its widespread popularity, mountain biking was also felt to be a very accessible means of seeking thrills for instance, being quick and easy to organise compared to other adventurous activities. This could enable riders to have a great ride in a couple of hours and satisfy needs for thrills, escapism or exercise without major time commitments. Almost antagonistic in nature, the appreciation of natural landscapes is an important motivation for mountain bikers however, and on slower trail sections the pace of biking facilitates appreciation of a rider’s surroundings. Whether mountain bikers are motivated to ride by exploration and adventure or more dynamic thrills and challenge, the following chapter considers the environmental factors that influence how these motivations are realised.
In order to satisfy their motivations for participation in a recreational activity, people will “search for settings which will allow them to behave in the ways they desire” (Schreyer et al., 1985: 16). These motivations can only be understood in the context of “site-specific attributes that are the ‘pulls’ that enable the ‘push’ motives to be satisfied” (Pan and Ryan, 2007: 303). To comprehend mountain bikers’ participatory behaviour, therefore, an understanding of both their motivations and the environmental settings in which they recreate is required. Unlike the predominantly socio-psychological motivations for mountain biking, environmental or site attributes encompass many physical and biological components (Cessford, 1995b), along with a number of social factors.

It is this combination of physical, biological, social and managerial conditions that give value to a place for recreationists (Clarke and Stankey, 1979). As discussed in Section 2.6.1, mountain bikers as a recreational group have a diverse range of preferences, motivations and needs (Symmonds et al., 2000), ranging from “an adrenalin rush to a peaceful ride in the bush” (Goeft and Alder, 2000: 269). Both individual trails and destinations need to have a range of features, facilities and settings (Goeft and Alder, 2000) in order for their motivations to be satisfied.

The ability to access relevant information is also an important consideration when making decisions about locations at which to recreate (Schreyer et al., 1985). Pull factors are defined generally in terms of peoples’ arousal to visit destinations (Chan and Baum, 2007), and this encompasses both tangible site attributes and sources of information about locations, as both are factors that can influence a recreationist’s choice of location at which motivations can be realised.

While pull factors are sometimes defined in terms of their tangible qualities, they can also pertain to more perceptual qualities, such as destination image (Baloglu and Uysal, 1996), to a mountain biker a powerful lure to visit a place (Koepke, 2005). Other, more
material information sources besides destination image are recognised as factors that attract or pull adventure recreationists to certain locations (Pomfret, 2006). This is discussed in more detail in Section 5.17.

5.1 Chapter Structure

This chapter examines the wide range of environmental attributes and sources of information about destinations that were identified by interviewees as important factors when making decisions regarding where to mountain bike. Each attribute is examined in turn, analysing its importance to bikers in the context of previous research that has been undertaken. In order to elicit participants’ feelings about the range of factors that can pull them to individual settings for mountain biking, whether site attributes or sources of information, a range of questions were asked.

Pertaining more directly to tangible site characteristics were questions regarding the factors that attract participants to traditional rights-of-way, and, conversely, those that attract them to purpose-built mountain biking centres. Questions regarding meeting different user groups on the trail or feelings about trying new destinations aimed to explore individual issues in greater depth. Inquiry into feelings about place attachment or the different sources people use for information about trails or locations were designed to provoke thoughts about other pull factors that can attract them to specific areas and influence their decisions about destinations.

The style of presentation of findings in Chapters Four to Seven was discussed in Section 4.1. This chapter follows the same progression: the findings are discussed in an order that is considered by the author to create a flowing presentation style, and one that facilitates an understanding of the core environmental attributes and sources of information that enable mountain bikers to satisfy their motivations and encourage participation in the activity. The ways in which these pull factors can interact with the push motivations (discussed in Chapter Four) to influence mountain bikers’ behaviour are summarised in Chapter Seven.

A factor that inherently affects the range of settings at which mountain bikers can satisfy their motivations for participation is the issue of physical access. Legal access
rights are complex issues, particular to each country. While a detailed discussion of the facets of access rights in New Zealand and the UK (introduced in Section 2.9) is beyond the remit of the thesis, section 6.5.1 broadly discusses interviewees’ feelings about these issues as a potential constraint to mountain biking. The trail attributes that are discussed in this chapter are those that are pertinent to where people are allowed to ride.

5.2 Singletrack Trails

The attraction of riding on singletrack trails was a common response when the interviewees were asked to name some of the characteristics that make a certain trail their favourite, or alternatively factors that make for a great ride. As Dick enthused: “singletrack is just the best invention in the world”, reinforcing Gajda’s (2008: 37) description of singletrack as “the most sought after experience among mountain bik[ers]”. Often used in combination with a term such as flowing, singletrack is defined as:

A trail or pathway that is only wide enough to accommodate users travelling in single file... [and that] provides users with a closer connection to nature, segregation from motorized vehicles, and a more challenging or varied experience than double track or roads can provide (Koepke, 2005: 3).

Without naming specific places, Gail feels that her dream place to mountain bike would be “anywhere there’s lots of flowing and fun singletrack”. Although the descriptor pertains to both ascents and descents, as a desired characteristic it is most commonly linked to the latter, many participants citing as a preferred downhill trail type. The responses are consistent with the other research on mountain bikers’ trail preferences reviewed in Section 2.6. Nearly two-thirds of respondents to Bowker and English’s (2002) survey considered singletrack to be important or very important, while over 95% of Western Australian recreational riders interviewed, who also race, rated singletrack as a good or essential trail characteristic (Goeft and Alder, 2000).

Local Nelson rides (discussed in Section 3.3.6) were praised for their singletrack trails. Gail opined about Third House: “you can push it or you can just cruise... It’s really nice singletrack”. Of the local Shrewsbury trails, Dorothy’s favourite is “Minton Batch near Stretton, which is singletrack, fast and technical”. These favoured trails are traditional
rights-of-way, shared with other users. While singletrack as a trail type was generally mentioned in relation to downhills, a key attribute of the Cwmcarn mountain biking centre in south Wales for Troy is “that nearly all of the climb is singletrack and it is quite technically challenging”. Likewise, Richard extolled the virtues of a singletrack ascent on the purpose-built White’s Level trail, also in South Wales, that “has a fantastic 6km climb that doesn’t feel like you’ve been climbing”.

Although singletrack is seen as a desirable characteristic of purpose-built trails, surprisingly few mentioned this as a specific attribute. It is suggested that as the majority of descents at trail centres are purpose-built singletrack, respondents might perceive this attribute as a given. One of the principal advantages of purpose-built over traditional trails is that excellent singletrack is pretty much guaranteed (Waterman, 2008). Purpose-built centres at Coed y Brenin in Wales and Rotorua in New Zealand were praised by interviewees for the quality of their flowing singletrack trails.

5.3 Flowing Trails

When riders were questioned about the factors that constitute a great ride the attraction of riding flowing trails was repeatedly cited. A word that is more generally used to describe downhills, in the absence of an academic definition ‘flowing’ is defined in terms of tracks that enable riders to find a smooth rhythm. Interviewees believe the pertinent requisite is having trails that entail “not getting off heaps” (Nancy) and that are “not so technical that it interrupts your momentum” (Betty).

The Dun Mountain trail in Nelson was singled out again for particular praise, for “the way the track flows” (Simon) and how “when you turn around and come back down it’s a huge and fast reward – fast and flowy” (Ewan). Fast was a common adjective to accompany flowing as a trail characteristic, and it is difficult to reconcile speed with a trail that interrupts your momentum. Patrick, for example, prefers: “long, flowing downhills with just the odd technical section. On a day-to-day basis I just like to get a whiz from going fast”. However some bikers do like to have a variety of trails to ride: “it’s nice to have a bit of flowing singletrack, but I like to mix it up with a bit of technical in there as well” (Rebecca).
Flowing trails is a favoured characteristic of both purpose-built and natural trails. Ruth described the purpose-built trails at Coed y Brenin as “so flowy and quick”, while Jo felt that the trail she rode at Llandegla: “flowed… I felt it really flowed”. Other interviewees, however, like the flowing nature of traditional trails, on rights-of-way. The Long Mynd is a local ride that several UK respondents enjoy for this key attribute, as Troy explained: “I particularly like that it has several variants, a couple of ups and downs and a nice flowy ridge, with really nice views”. Although bikers in the Tsali Recreation Area in the USA considered trail surface to be the most important trail attribute (Bowker and English, 2002), the authors did not elucidate the nature of its importance. It is considered, however, that the surface of a trail is one of the key characteristics, along with gradient, that affects both how it flows and its ability to thrill riders.

5.4 Thrilling Trails

The importance of thrill in adventure recreation activities, both commercialised and autonomously-controlled, is discussed in Section 2.5.6. While terms such as fun and thrill can be used to describe interviewees’ hedonic motivations for riding, mountain bikers also look for these qualities in the trails that they ride. The terms were used by a number of participants to describe trails, both traditional rights-of-way and, especially, purpose-built. Unlike more quantifiable environmental settings discussed, such as trail marking and facilities, what constitutes a thrilling trail is rather more subjective. Nevertheless, when asked what attracts them to trail centres, terms synonymous with thrill, such as excitement, were commonly used.

When considering a choice to ride on either traditional or purpose-built trails, Dorothy rhetorically asked: “do I just want a little bit of fun…? The fun side, let’s just go the purpose-built trail for a laugh”. As an example, Charlie sees: “Llandegla [as] a great playground – jumps and berms, absolutely superb. It’s just a lot of fun”. It is recognised these purpose-built tracks have the advantage of being designed with exciting riding in mind: “because mountain bikers know what mountain bikers like” (Nancy). Obstacles can be engineered into trails and often the gradients are able to be controlled so that trails can be either steep and more technical or gentler and faster, for example. Ian extolled their virtues:
I think that the people who designed the trails have a good understanding of what feels good on a mountain bike, so bermed [banked] corners for example. They can control the angle, can control how fast you can go and they can put little jumps in to build your confidence slowly. They can do all these in a bike park that they can’t do on natural trails.

Previous studies have ascertained bikers’ preferences for the trail features that enhance riders’ enjoyment, without determining how these factors constitute a thrilling trail (Section 2.6). A variety of gentle and steep slopes, bumps or jumps, obstacles and, in particular, turns have been identified as adding to respondents’ experiences (Goeft and Alder, 2000; Symmonds et al., 2000). Rotorua was New Zealand’s first mountain biking centre (Tourism Resource Consultants, 2009); it is widely considered by participants as one of best, and cited as a good example of how to design purpose-built tracks. Beatrice felt that: “they were really cool, interesting, well-made tracks... and it was great to ride them from that point of view, with the berms and the drops and corners. It was heaps of fun”.

In contrast to purpose-built trails: “it just amazes... the thrills you can have just on natural bridleways” (Rick). Ruth explained: “they are better trails... Natural trails aren’t consistent... it changes the ride. You know what you are getting on a man-made trail, on a natural trail it can change. That’s great”. Richard considered a good example in the UK: “that [Hebden Bridge] ride in the South Pennines has a wonderful descent which is as good as any man-made ones you’ll do”. Mountain biking on traditional trails can therefore be seen as offering a different type of enjoyment to purpose-built tracks, due to the way they have evolved more naturally and their consequent unpredictability. This unpredictability, however, can also manifest itself in other ways, notably rendering trails more challenging to ride, both on descents and climbs.

5.5 Rideable Climbs

There is considered to be a subtle, but distinctive, difference between what constitutes a rideable trail and a flowing trail. A flowing trail, one capable of being ridden without interruption, must, by definition, be rideable, but it also has connotations of rhythm and speed. Conversely, a rideable trail is not necessarily one that flows smoothly, without losing momentum, but merely needs to be able to be ridden per se. It is also argued that
the term flowing relates more generally to undulating or downhill trails, while the
responses regarding rideable trails were all mentioned in the context of climbs.

In the context of trail attributes, the term rideable generally pertains to uphill trail
sections that do not necessitate getting off and resorting to ‘hike-a-bike’ – pushing the bike
over steeper or difficult terrain. As suggested in the context of flowing trails, this can be
seen in terms of both the gradient and the surface of the track. Kennett and Hughes (1994: 2)
bemoan that many singletracks in New Zealand are not rideable “because they are too
steep and/or have very rough surfaces”. It is argued that many such traditional trails in
both New Zealand and the UK, not purpose-built for mountain biking, are likely to have
changed little in nature over the last 15 years, most obviously due to the difficulties and
costs associated with improving trails, particularly those less-regularly used tracks.

Charlie was adamant in his assessment: “it has to be rideable to enjoy it [although] I
don’t mind getting off a bit”. He went on to give an example: “Snowdon is three-quarters
rideable but not the best ride in the world as it isn’t all rideable”. Rebecca, meanwhile,
was honest about her ability and fitness levels on uphills: “if I had more fitness for
technical I would prefer that. But I find that the minute there’s too many roots I’m pretty
knackered, so it’s nice to have a cruisy singletrack uphill”. Uphills with technical sections
are not particularly favoured by either experienced or expert riders in Cessford’s (1995b)
research. Not all of the comments regarding rideable trails were necessarily about climbs
however. Flo extolled one of the attractions of a purpose-built trail, being “built so that in
theory you can ride it all”, without differentiating between uphill and downhill sections.
Patrick considered a different definition of rideable, pertaining to trail maintenance,
considering that at trail centres “you tend to find the trails are quite well looked after as
well, so they don’t get rutted out”.

The range of academic research (Grost, 1989; Symmonds et al., 2000; Thurston and
Reader, 2001; Pickering and Hill, 2007; Davies and Newsome, 2009, for example) on the
potential effects of mountain biking on trail condition is examined in Section 2.6.4. While
a number of studies have found no significant difference between the effects of hiking and
mountain biking on trails (Wilson and Seney, 1994; Chiu and Kriwoken, 2003),
traditionally, in the USA, “many trail users and managers [have cited] environmental
impact as the reason for their disapproval of mountain biking” (Hoger and Chavez, 1998:
43). The development of purpose-built, mountain biking-only trails appears a pragmatic solution to obviate both this problem and concerns regarding potential social conflict on trails, for example. This latter issue is examined in Section 5.10 below.

Perhaps the epitome of rideable off-road ascents, Dick was not alone in favouring “very draggy fireroads [forest tracks], 20-minute climbs to burn your legs and your lungs”. Dorothy even expressed a desire for “climbing that’s going to go on”, explaining that: “other people may think that that is boring but I just like the rhythm. Give me an alpine pass, whether dirt road or a road”. Ruth was pragmatic about such uphills: “fireroads are really boring but are a means to an end I suppose”. It is notable that only Marty stated that he would be happy to ‘hike-a-bike’ some uphill sections if necessary. This is in stark contrast with the findings of Cessford (1995b), who found that 18% of experienced riders tolerate carrying the bike for up to 20% of the ride. It suggests that developments in purpose-built trails have, to some extent, reduced the need to carry bikes and perhaps increased people’s expectations of both ‘rideability’ and the experiential aspects of the downhills.

It is apparent, however, that what is an unrideable trail to one rider may constitute a challenge to another. Consequently, trail obstacles are discussed in Section 5.6 as a positive factor on a challenging trail. To Betty, however, the two are not exclusive: “I like a good challenge on the uphill, but I like it to be rideable, but not so steep or so long that you have to walk the bike up”. The ability to successfully tackle rideable trails, and the consequent enjoyment that can be derived from them, is therefore dependent on the technical capability of the rider and the intrinsic motivation to challenge themselves on such trails.

5.6 Challenging Trails

While responses suggest that thrilling trails are encapsulated in terms of fun or excitement, challenging trails are perhaps better defined by their difficult or technical nature that requires a higher level of mental application and physical skill. Challenge is also discussed in Section 2.5.4 as a motivation for some riders. Challenging trails can manifest themselves in a number of ways: the technical aspects of the trail itself, for example uphill challenges or technical downhills, or the challenge of self-navigation on
natural trails. Other studies (see Section 2.6) have confirmed the importance of this riding environment attribute. The technical level of the trails was the second most important attribute for respondents at the 7Stanes purpose-built centres in the UK (EKOS and Tourism Resources Company, 2004). In the USA, 52.5% of respondents in an academic survey considered the provision of difficult trails at Tsali Recreation Area to be important or very important, a considerably higher percentage than those who favoured easy trails (Bowker and English, 2002).

Given the nature of the sport and the experience levels of the interviewees, it is not surprising that terms associated with challenging were used to describe the types of downhills that people prefer to ride. Experienced respondents have been found to favour fast and technical downhills; the challenges or technical difficulties posed by trails are highly favoured too (Cessford, 1995b). While responses in this research suggest that bikers prefer fast and flowing downhill trails, technical aspects of trails that challenge people’s ability are also liked. Craig’s riding style lies towards the more extreme end of cross-country riding, choosing: “hard ones, technically challenging downhills. Rocky, rooky – we have a lot of that here”.

Without being specific about a type of terrain, George wants his descents to be: “interesting – that have me practising, a little bit difficult for me, so I can think that ‘wow, I only just made it round that’”. Sean justified his pleasure in challenging descents, considering both the mental and physical aspects that constitute a challenge for him:

I like technical but not silly... I prefer something I have to work for, I like to work for my lunch. I like to feel that I have put something into it, so technical stuff that makes me think very carefully about where my line is, what is coming up around the next corner.

While meeting the challenge with judgement and ability (Martin and Priest, 1986) is clearly a key factor, equally important are the types of experiences that riders seek, as speed, obstacles and steep gradients all present their own challenge.

Challenging uphills can also be relished: “the climbs... that you know you can do and they’re really tough. The ones you know you can do and they’re right on your limits, I love those” (Bob). Pauline explained how she approaches challenging climbs:
I really like uphills! I like it all really. If it’s too technical I don’t have the skills to really hop up over obstacles. But I quite like it on the limit of what I can do. If I can’t do it I can have another crack at it next time.

From a number of responses, it is clear that there is a fine line between a technical challenge and something that is just ‘unrideable’, as discussed above. This line naturally lies in different places for different people, and illustrates how the same setting can satisfy a range of personal motivations, an issue discussed in Chapter Seven.

5.7 Marked Trails

In contrast to the challenge of self-navigation on traditional trails, it was widely recognised that signs are a welcome trail attribute on purpose-built mountain biking trails, as long as they are kept simple and do not impinge excessively on the quasi-natural feel of such trails. It was suggested that signage away from purpose-built tracks is inappropriate, however, many people preferring the challenge of navigating their own way. The responses are broadly consistent with the findings of other academic literature (Section 2.6). Trail markers have been found to be the most desirable trail facility for mountain bikers in Western Australia (Goeft and Alder, 2000), for example. Although Bowker and English (2002) report that trail signage is one of the less important trail attributes to bikers at their study site in the USA, it is still rated as important or very important by 63% of respondents.

Elizabeth feels that one of the advantages of a purpose-built trail is the ease of use, stating that: “tearing round… you want to be sure that every turn you’ve gone the right way – you don’t want to be stopping and referring to maps. That interrupts the flow”. They also have a role to play in promoting safety on the trail, in terms of riders not getting lost, ensuring that people do not ride the wrong way on unidirectional tracks, and also where they: “differentiate beginner, intermediate and extreme - that’s important” (Marty).

As many trail centres have been developed in plantation forests, where there are often myriad access roads, self-navigation in such an environment can be quite difficult, as Troy acknowledged: “[signs] can be quite good, especially when you are going round some of the quite complicated 7Stanes [trails]”. As a considerable number of trails around Nelson are in actively logged plantation forest, there is recognition that information, both
on the ground and available away from the trail, needs to be kept updated to ensure its value.

Nelson’s role as a tourist destination was acknowledged, both for people visiting specifically for mountain biking and also for those who may mountain bike as a more peripheral part of their holiday. Signage is particularly useful for people who are new to an area, and several negative comments were made about signage on Nelson’s trails. Simon was the most scathing:

I think the signposting in Nelson is absolutely shocking, especially as the place is such a tourist attraction. Try explaining to a German biker where to ride, it’s a nightmare. I think [signs are] good, especially for someone who is so bad at map reading. In the [European] Alps there are signs everywhere and they’re graded and you can just concentrate on your riding.

Other riders cautioned against overdoing signage, however, and the negative effect that this can have on their day out. Sandy argued: “too much signage annoys me, where they say ‘don’t do this, don’t that’. You think that ‘my experience of this is not going to be good’. It’s over-zealous”. While Craig feels that signage is “a good thing, certainly at intersections, definitely a good thing”, he went on to state that: “I’m not a fan of trail marking on the trail itself, I think it can detract from the experience”. Feelings about excessive or inappropriate signage are commensurate with national park policy in a number of countries, the USA for example, where signs are felt to inhibit the character of wilderness areas and should only be used to protect natural resources or ensure user safety (Duncan and Martin, 2002).

Similarly, Pauline feels that signage can take away some of the challenge and excitement associated with self-navigation: “it suits some people. I’d rather be going exploring”. Troy added: “that’s fine at Llandegla [trail centre]. If everywhere was like that it would just become a cartoon”. While signage at trail centres is appreciated, essential even, it can clearly be inappropriate to sign trails beyond this environment.
5.8 All-Weather Trails

A further desirable attribute of many purpose-built trails is their resistance to the adverse effects of the weather. Windy or, in particular, wet weather can influence where people choose to mountain bike and thus affect their riding patterns. Adverse weather conditions generally dictate that lower-altitude rides in forests are more likely, as they provide shelter from the wind or rain and thus make the riding more enjoyable. Responses also suggested that certain types of tracks are often avoided in poor weather, as the nature of the trails, for example clay-surfaced tracks around Nelson, means that they are more likely to be impacted by use after or during heavy rain.

The importance of flexibility when making decisions about outdoor recreation activities is recognised (Smith, 1993). After periods of heavy rain, for example, a degree of openness over the choice of route can be necessary to both help preserve the tracks and to have a more enjoyable experience. Craig picked up on this: “some trails I ride can’t cope with sustained periods of rain”. Trail erosion is increased considerably if the trails are wet (Symmonds et al., 2000), and good drainage is considered the most important factor in trail design, to minimise mud and reduce erosion (Goeft and Alder, 2001).

The weather can be an important factor in determining the type of ride people would undertake on any given day, particularly the choice between a purpose-built or natural trail. It is also an important safety factor when participating in outdoor activities in mountainous areas (Smith, 1993). Consequently, Richard thinks that:

In the UK weather has to come into it… If it’s going to be miserable you don’t want to be in the exposed hills so I will go to a trail centre… If it is miserable I can still have a great ride in the forest, at Coed y Brenin say… If it’s a sunny day I rarely ride in the forest… I wouldn’t want to be in a forest when I could be in spectacular scenery… Forests a lot more in winter, open rides more in summer.

Those locations that can offer sheltered activities, such as purpose-built mountain biking centres, can still be popular in bad weather (Martín, 2004). Centres such as Coed y Brenin in Wales, which are usually situated in forested areas, provide shelter from inclement weather and consequently have all-weather, year-round trails (Waterman, 2008).
They are argued to be an important factor in reducing the seasonality and weather-dependence of mountain biking and increasing the accessibility and popularity of the sport.

5.9 A Range of Trailhead Facilities

A factor which may be more appreciated in inclement weather, but one of the attractions of riding at purpose-built centres generally, is the range of facilities that they can offer. A wide range of responses was forthcoming when interviewees were questioned about the trailhead facilities they like to see at riding destinations. A number of different opinions were also expressed about the need for facilities, and whether they add to, or subtract from, the experience. Although the question pertained more particularly to riding on purpose-built mountain biking trails, some responses were appropriate to both types of trails.

5.9.1 Conflicting Opinions about Facilities

The different approach to trail centres in New Zealand and the UK (introduced in Section 3.3.5) is perhaps most apparent in terms of people’s opinions about associated trailhead facilities, although exploring the reasons why lies beyond the scope of this research. The proliferation of trail centres throughout the UK with a range of facilities, such as shops, toilets and parking, has undoubtedly raised people’s expectations of what to expect in terms of riding purpose-built trails. Sean, for example, considered: “a good centre does help a lot. More accurately a bad centre can really dull the experience”. It is significant that most of the larger trail centres in the UK have been developed away from large centres of population, and consequently there may be few alternatives for purchasing provisions for example.

Conversely, many of the most popular trail centres in New Zealand, for example Rotorua, Makara Peak in Wellington or Bottle Lake in Christchurch, have been developed near towns or cities. As a result of this and other pertinent factors, the development of trailhead facilities has generally been much more limited. As George notes of Nelson: “there are none round here with any facilities. All of the rides... involve going through town and I often have a drink afterwards – a coffee. That all happens in town”. In New Zealand the most common suggestions for facilities were for toilets, trail information boards and/or maps and a water supply. It was considered that these ”might encourage you
to stay there the whole day and do more trails” (Gail). This disparity of attitudes towards facilities was evident in the nature of responses, as many more UK interviewees would like to see a café, or other amenities, at a trailhead, compared with those in New Zealand. Possible reasons for this disparity are discussed in Section 3.3.5.

5.9.2 A Range of Home-from-Home Comforts

Dick feels that the attraction of Coed y Benin, arguably Wales’ top trail centre, is “one the trails and two the facilities”. Sandy was fulsome in his praise for the Llandegla centre in particular: “the food in the café is stunning – one of the best lamb burgers in the country”. Changing rooms with showers and a shop are also considered as desirable facilities, along with a place to wash your bike. No facilities at UK trail centres are considered anywhere near as desirable as a café though, as “somewhere to unwind and talk about [the ride] with your mates” (Elizabeth).

Respondents in Bowker and English’s (2002) study ranked site safety and security, parking and toilets as the three most preferred facilities. Research in Western Australia, found that route markers, parking and the supply of drinking water are the preferred trail facilities for mountain bikers (Goeft and Alder, 2000). Interestingly, in both these studies, outlined in Section 2.6,1, more complex features such as changing rooms or a café are not even on the list of preferred facilities.

This arguably represents a conundrum to trail managers, for as mountain bikers have become used to the proliferation of facilities at trail centres, their expectations have been raised and they have become increasingly demanding of such facilities. It is suggested that this development might also represent a commodification of mountain biking and raise a question mark over mountain biking’s status as a ‘hard’ adventure recreation activity, as defined in Section 1.2. Although the demanding nature of the act of riding itself still suggests it warrants such a definition, the provision of increasingly sophisticated services aligns the activity, in some respects, to the creature comforts of home demanded by soft adventurers (Beedie and Hudson, 2003).

These facilities can be viewed as a double-edged sword however. While some facilities might be useful it is felt that they are not an essential part of mountain biking and can even
take some of the fun out of it. Research has found that good facilities at the Scottish 7Stanes trail centres are considerably less important than the variety of trails available (EKOS and Tourism Resources Company, 2004), although the development of new cafés and other facilities at these centres continues unabated (Forestry Commission, 2008).

Gail feels that she would not: “want facilities there as I want that out-of-the-city feel when I go riding”. Even where facilities are available, not everybody wants them as part of their trail experience. Charlie opined that: “we don’t necessarily go there because there’s a café, or a bike wash, or decent parking. We often park elsewhere and don’t go to the visitor centre”. Marty was more forthright: “don’t need a mechanic or coffee machine. For me it’s about the wilderness ride. In a South Island rain forest you could be transported 500 years back – a coffee stand ruins that”. This tension between provisions for visitor enjoyment and conservation of the natural heritage, through ensuring ‘appropriate’ provision of facilities for example, is a core element of the management of national parks and other natural areas by the Department of Conservation in New Zealand (Department of Conservation, 2007).

Although this thesis primarily explores mountain biking as a recreational activity, interviewees were also asked two questions pertaining to biking as a touristic activity, about trips away for the weekend, and a further question of multi-day rides. It was suggested that facilities at a riding destination can be an important attraction for a weekend away riding. While Dorothy does not care where she stays, whether “a bunkhouse or a hostel or a five-star hotel”, Sandy confessed that: “I want my life to be better on holiday, not worse, so no camping. Decent food, a half decent pub down the road, facilities”.

Having examined the importance of trails and facilities at Tsali Recreation Area in the USA, Bowker and English (2002: 16) conclude, however, that “visitors come to Tsali first to mountain bike”. Bob’s thoughts reflected this: “I see the riding, where we are going to ride, as the most important. If we are going somewhere like the Scottish borders, we are going there to do this”. His thoughts confirm that while facilities can be a consideration, they are less important to some riders than the quality of the riding.
5.10 Avoiding Conflict on the Trails

The riding experience can be considerably undermined if conflict occurs with other users on the trail. In Section 2.7 it is concluded that wherever there are different users competing for the same space the potential for conflict between different people or different user groups is ever-present (Moore and Barthlow, 1997). For mountain bikers this potential conflict is most apparent with hikers (Ramthun, 1995). Although mountain bikers in the UK have been regular trail users for over 20 years, Brown et al. (2008: 9) acknowledge that even today “between walkers and bikers there exists both harmony and tension in taking countryside access”. The issue of riders’ feelings about meeting other trail users is also examined in Section 4.6.1.

Interviewees were asked how they feel about meeting other user groups on the trail, and responses were elicited regarding potential conflict issues with hikers or trampers and motorised users. Some comments were also made about the negative implications of meeting equestrians, suggesting that it is not perceived as a problem. The issue of crowding elicited few responses, despite the fact that it can have an important impact on people’s perception of a location and consequent satisfaction (Moyle and Croy, 2007). The few comments regarding overcrowding at trail centres are discussed in Section 5.10.1 below. Participants also commented on means to obviate conflict issues, such as the biking-only trails and one-way trails that are prevalent at many purpose-built centres.

Whether concerns over potential conflict are just negative perceptions of mountain bikers by other users or real issues based on experienced behaviour, they have implications for bikers’ trail decisions. Those with prior experience of conflict, or perhaps others who better understand the potential for conflict, may make a conscious decision to bike elsewhere or perhaps use a dedicated trail. In this regard conflict, or more correctly active avoidance of potential conflict, with other users may in itself prove to be an important environmental attribute.
5.10.1 Meeting Bikers on the Trail

When the interviewees were asked about their thoughts on meeting other bikers on the trail, few negative comments were received; as other bikers form part of the ‘in-group’ this is to be expected (Cessford, 2003). As responses generally pertain to the positive social aspects of such encounters the issue is considered in Section 4.6.1, as a potential motivation for riding. Those concerns raised over the potentially negative aspects were mostly related to perceptions of over-crowding at trail centres, as Patrick lamented:

What I don’t like about man-made trails is the sheer number of people you get there… You turn up and see all the cars and all the bikes and for me that doesn’t thrill me. I’d rather it be empty… I tend to shy away from crowds if I can possibly help it, as that is not what the outdoors is all about for me.

Flo believes that it causes another issue too:

At trail centres, it can be a problem if there are people of different abilities. I’ve had it both ways. Someone quite slow in front of me. Didn’t want to put pressure on them but at the same time, ‘can’t you just pull over and let me past’. But then I’ve had others behind me and I couldn’t get out of the way.

Richard did not differentiate between purpose-built and traditional trails with regards to potential conflict issues. He considered: “I’d rather be on a trail where there’s no-one at all. Selfishly you’d like to have trails to yourself… I’m not a big fan of riding where there are others”. His thoughts suggest that some people do dislike meeting others on the trail, whether the other parties are bikers or not, a further reflection of the individual nature of motivations for being in the outdoors.

5.10.2 Meeting Hikers or Trampers on the Trail

Whether conflict is a real issue on the trail or merely a perceived issue based upon people’s attitudes and expectations (Section 2.7.1), the “introduction of large numbers of mountain bikers has changed the social situation on many popular trail systems” (Ramthun, 1995: 159). Even in countries such as Scotland, which has a very liberal attitude towards land access for bikers, the legal onus on responsible use still suggests an
ongoing moral negotiation by mountain bikers to assert and secure their claims to rural space, to overcome the disruption of traditional, hegemonic and powerful user-groups (Brown et al., 2008).

It is reported that the perceived conflict between hikers and mountain bikers is asymmetric in nature, and that hikers’ attitudes towards bikers is more negative than the reciprocal feelings (Ramthun, 1995). Even accounting for subjectivity, the fact that few negative comments were expressed about meeting walkers on the trail, while considerably more participants had previously been met with some hostility from them, might support this. More pragmatically, most participants used a variety of terms synonymous with tolerance to describe their feelings. All the interviewees were experienced bikers and consequently it is suggested that their probable exposure to repeated previous encounters with other trail users would have had some impact on their subsequent feelings and attitudes.

Those interviewees who are also hikers, or trampers, or have been previously, are able to empathise with them: “I can understand that if you’re tramping and can’t hear a biker, and suddenly one comes round the corner with their brakes screaming it would give you a fright” (Beatrice). George was more succinct: “I’m aware that in no way am I an addition to the walkers’ experience. Even if we get on okay and we’re both polite it can’t be adding anything to their experience”. In the past, this conflict could have resulted from the perception of a new user group imposing itself on traditional trail users (Horn et al., 1994). One of the respondents, Dorothy, alluded to it: “we both have equal rights to enjoy the environment but on the historic side of things they obviously feel that they have more ownership than we do”.

While increased familiarity with bikers may have changed walkers’ perceptions of mountain bikers (Cessford, 2003), and research has found few reported accidents between the two groups (Grost, 1989; Cessford, 2003), hostility from hikers or trampers has still been experienced, to varying degrees: “they think somehow or other you’re ruining their tramp” (Ian). As a result, walkers can be perceived as being “a little bit anti-cyclist” (Jo). Sean thinks that it varies geographically. While in the local area “quite often it’s fine”, he added:
If I’m out just enjoying things and someone has a go at me, which does happen in Surrey an awful lot, that’s more annoying... It depends on whether they are militant ramblers or not, basically.

Others however have only positive things to report. Simon’s experience, and viewpoint, was the most positive of the interviewees: “trampers in New Zealand are great... I’ve not met anyone here who’s been aggressive. Everyone’s a trail user, we’re all in the same boat”. Relative ambivalence towards hikers appears typical: “that’s fine. I’ve never had any problems with them” (Robert). Perhaps unsurprisingly, everyone stated that they are polite to them and considerate of their needs. Craig, for example, recognises that:

You have to carefully manage that process. I always have an awareness of walkers not being totally comfortable with a bike coming towards them. So I am very conscious of minimising any negative experience for the walker.

Walkers and bikers on the same track are not necessarily seen as a problem, and an appreciation of each other, and perhaps a more holistic outlook, is what is needed to keep everyone happy. “We’re both pretty lucky to be in there, it’s such a cool place to be”, relayed Nancy’s thoughts. Beatrice, however, felt that the side can be let down by a minority of inconsiderate riders:

I ride the tracks in Nelson assuming there will be walkers, where it is a walking track. But there are about 5% of bikers who let the 95% down by riding in an uncontrolled manner when they know somebody could be walking towards them. That’s irritating as it gives bikers a bad name.

These findings regarding interviewees’ attitudes towards hikers or trampers generally support the suggestion that mountain biking is becoming more widely recognised and accepted (Brown et al., 2008). Consequently, the relationship between users on shared trails may be more positive (Cessford, 2003) than earlier studies suggest (Horn et al., 1994).

The benefits of riding on mountain biking-only trails, segregated from walkers and other users, are appreciated by nearly all the bikers interviewed. Such trails are the norm at most purpose-built centres, Richard believing that: “no man-made singletrack in the UK allows walkers on it and that’s pretty crucial”. There are obvious safety benefits associated
with segregated tracks, especially when biking downhill, as “you have people travelling at quite fast speeds on a mountain bike, and walkers and mountain bikers just don’t mix” (Patrick). Ian’s point of view is typical: “[on] downhill tracks I much prefer knowing there are not going to be any walkers around the corner, or if there are they shouldn’t be there”.

While Nancy stated that she does not mind sharing tracks with walkers, “you have to hold back a little bit and so you sometimes don’t feel like doing that”. Elizabeth picked this up: “[if] it’s clear of walkers and you know what you are getting in terms of the traffic, on that basis you feel you’ve got a freer rein to tear around”. Riding free from such constraints therefore not only negates potential conflict issues but also has positive experiential implications, as bikers can ride the trails at higher speeds without worrying about the safety implications of meeting other user groups.

Even more so than merely segregated trails, the safety advantages associated with riding uni-directional purpose-built trails, where, typically, forest access roads are used for the climbs and one-way singletrack for descents, are widely appreciated, although Simon wonders: “how far do you go? You can sterilise it a bit too much”. Robert’s thoughts are more typical though: “in a mountain bike park there might be downhill-only tracks so you know you won’t meet anyone and [can] go as fast as you like”. Sandy concurs with the positive safety implications of segregated tracks: “there’s no other way to do it. Somebody coming down at 30mph, somebody going up – it’s not going to work”. The responses, therefore, generally acknowledge both the safety implications of one-way trails and the consequent opportunities for improving the experiential aspects of riding on such trails.

5.10.3 Meeting Motorised Users

Interviewees’ opinions on meeting motorised users on the trail divided them into two camps: those who are tolerant of them, and those who hate the intrusion. It is, however, generally acknowledged that they have a perfect right to use certain tracks. Betty echoed the feelings of others by being relatively ambivalent about meeting dirt bikers or four-wheel drive vehicles, feeling “that if you’re riding in a place where it’s open to vehicles then they have just as much right to be there as you do”. Her thoughts are supported by Sean, who admitted:
I am a motorised user! Absolutely fine about it for the most part. Sometimes you have bike riders who are aggressive and go the wrong way. You also get them using cycle trails and they do make a mess. The key point is if you have a legal right to be there it’s not a problem, as long as you are not behaving like an idiot.

The opposite opinion was more widely expressed, however, and there are believed to be problems with the number of dirt bikers in some areas. Safety issues were raised, related to the speed that dirt bikes can travel at. The noise appears to be the greatest irritant however, considered to be antagonistic to one of the most important motivations for mountain biking, escapism (discussed in Section 4.5), and contrary to the idea of quiet enjoyment as an important purpose of national parks in the UK (Miller et al., 2001). None were quite as vociferous as Gail: “I hate it. ‘Why are you on this trail?’” The issue was rationalised by Ian: “I don’t like it because it’s noisy and they’re travelling really fast and two-stroke really smells”. Dorothy believes that they also cause greater damage to off-road trails:

There is significantly greater damage to the environment by them. If you go to Derbyshire, the same trails I used to ride ten years ago are just a mess now because of trail bikes going up and down. I think something has to be done.

Although the differences in environmental impact between outdoor user groups are still not well understood (Sprung, 2004), Dorothy’s opinion has academic support:

The environmental degradation caused by mountain biking is generally equivalent or less than that caused by hiking, and both are substantially less impacting than horse or motorized activities (Marion and Wimpey, 2007: 14).

Nancy voiced the antagonistic feelings of many riders: “I suppose it’s part of that sense of wilderness. You don’t get that when there’s noise blasting in the background”. A conciliatory message was offered by Bob however:

We did meet some [trail bikers] in the Peaks though. Four fellas on a really stony descent and they couldn’t rip that up if they wanted to. And they were really friendly and really nice. They stopped and cut their engines and were chatting with us. They were really going to put a positive spin on it and I think that they did a lot that day for motor bikers, those four fellas.
Many participants’ feelings, however, are commensurate with research in Wisconsin which reports an absence of motorised vehicles as one of the most important setting characteristics for mountain bikers (Sumathi and Berard, 1997). As Elizabeth states: “there’s something about motorised transport that just doesn’t balance with this enjoyment of the great outdoors”. Her feelings are perhaps a reflection of the importance of accessing natural settings to fully enjoy the opportunities offered by mountain biking.

5.11 Accessible Trails

The issue of accessing trails reflects both a desire for these natural settings to fulfil motivations for mountain biking and the physical ability to reach them. The accessible nature of mountain biking as an adventure recreation activity has been identified as a motivational factor for many interviewees in Section 4.10. Responses have already determined that as an adventure recreation activity it is one of the easiest in which to take part. A key component of mountain biking as a time-deepening activity (Godbey, 1985), discussed in Section 2.5.8, and an attribute that therefore influences where bikers choose to ride, is the provision of accessible trails. This encompasses not only being able to physically access trails, but also access issues that determine where one is permitted to ride. This latter issue is discussed as a potential riding constraint in Section 6.5

The geographical proximity of trails, both purpose-built and traditional, is recognized as being a particularly attractive aspect of being a mountain biker resident, or working, in the study locations. Ewan rationalized the attraction: “it’s great in Nelson having close trails. I can go downstairs, get my gear on and jump on my bike and head off”. Adjacent trails means that some respondents are able to easily fit a two or three hour ride into their lives: “I go to Haughmond Hill on the edge of town, not because it’s fantastic, but because I can ride all the way there and back over a couple of hours” (Troy). In Ruff and Mellors’ (1993) survey to ascertain attitudes towards mountain biking, over two-thirds of respondents cycle less than ten miles from home, suggesting that many mountain bikers choose to access local trails because they are convenient.

There are times, therefore, when the convenience of a ride may outweigh the quality of the riding that it offers. The high cost of fuel may also be a contributory factor in choosing to ride local trails; surprisingly, however, this received little mention. Troy was alone in
being keen to utilise his car as little as possible to access less propinquitous trails, for socio-ecological reasons. He tries to use public transport to access more interesting terrain that lies a little further away, but which is still achievable within a short time period:

I can get to the station in about two minutes, the train to the start is 14 minutes and I can be [on the trail] far quicker than I can drive. I can do a nice two-hour trip using the train, and that’s good as I don’t like using the car.

John was the only other interviewee who stated that he makes a conscious effort not to use the car to access trails, though even he qualified this: “it seems like waste of time to take the car, unless you are going to do somewhere really great”. Accessing great trails may therefore require use of a car, so while mountain biking itself may be a ‘green’ activity, associated transport modes temper this virtue. Troy illustrates the point: “I don’t like using the car it has to be said... If there is a negative side to it, mountain biking is resource intensive, especially as we sometimes drive long distances to go for rides”. No other participants raised the environmentally-friendly nature, or otherwise, of mountain biking as an activity.

If riders are faced with temporal constraints, purpose-built trails can be seen as a better option than traditional trails for a quick ride. Signposting trails removes the need for navigation and the trails are often of a known length; it is therefore relatively easy to gauge how long they will take to ride. They can enable a satisfying experience in a short space of time, as Robert explained: “if you’re limited in time, MTB parks are good because you know for a couple of hours you can go and have a bit of fun”. Ian concurred:

With purpose-built trails you get more bang for your buck in terms of adrenalin, exercise, over a short period of time. So if you have an hour’s ride or an hour and a half after work, then go to the bike park, the trails are really good for that sort of thing.

Due to factors such as signposting and the deliberate design to maximize downhill thrills, purpose-built centres are suggested to offer a more condensed mountain biking experience than traditional trails, both in terms of fun and as a form of exercise.
5.12 A Variety of Riding Opportunities

Being able to access not just purpose-built trails, for example, but a diversity of mountain biking opportunities was identified as an important factor. Marty succinctly illustrated why variety is a key environmental factor for him: “if I did just one style of ride all the time I would be yearning for the others”. Variety can therefore perform a similar, albeit less effective, role to novelty, discussed in Section 2.5.10, as visiting new locations helps to alleviate boredom (Lee and Crompton, 1992). Diversity can manifest itself in a number of different ways: having a variety of trails to ride; being able to choose between purpose-built and traditional trails; and riding on trails that have a variety of features or attributes.

Responses suggest that one of the reasons why Nelson remains a favourite place to ride for New Zealand participants is that it provides a number of different tracks to ride. Although further afield from the UK study location in the Shrewsbury area, the purpose-built trails at Coed y Brenin are liked for a similar reason:

There is such a choice of trails… Such a variety, you can pick and choose whatever you want on the day. It’s the sort of place you could spend a day and not ride the same trail twice (Dick).

One of the reasons why bikers enjoy riding these purpose-built mountain biking trails is that they can “mimic natural conditions, but [their] design can theoretically proceed beyond the natural to ultimate environmental perfection for high adventure challenge or skill development” (Swarbrooke et al., 2003: 235). Research confirms that the variety and difficulty of terrain and the number of trails available to ride are the two of the most important attributes of a riding destination (Green, 2003; Gajda, 2008). Ewan extolled the virtues of Rotorua, arguably New Zealand’s best known centre, particularly the way that the trails have been built:

It’s the way the trails vary. They are built by bikers, so some berms and fast corners, a bit of a climb, then a reward. Some switchbacks. It varies, rather than just a monotonous type trail.

Previous research (Section 2.6) has confirmed the importance of variety, Goeft and Alder (2000) suggesting that mountain bikers desire a variety of natural settings in which to ride.
Different trail features, for example a mix of steep and gentle slopes and the presence of obstacles, also help to maintain bikers’ interest (Symmonds et al., 2000).

In terms of trail features, Glentress, in Scotland, and a local Welsh favourite, Coed y Brenin, received numerous mentions. Glentress has: “an awful lot there, in what seemed to be quite a small area. Interesting, fairly frightening stuff, fairly quick. But there was a variation in it” (Rick). Sean summed up the appeal of Coed y Brenin:

My favourite is Coed y Brenin, without a shadow of a doubt. The variety, there is just so much stuff to do at that trail centre, in so many different ways. The types of trail features, it’s all rocks, but they’re all put together slightly differently. There’s something different about each trail.

The original trail centre in the UK, the centre embodies how designers can strive for the ultimate challenges or thrills on trails. These trail types are purpose-built for this goal, without the restriction of maintaining entirely natural conditions (Swarbrooke et al., 2003).

The importance of having trails available to suit different abilities was raised, from “easy level tracks you can take beginners on through to good technical trails” (Rebecca). As a mother of two who cannot ride to satisfy her own motivations as regularly as she used to be able to, Nancy recognised that that is an advantage of the biking centre at Makara Peak in Wellington: “I like that they make them for everybody – I can take my kids for a ride. Same at Rotorua. I wish we had something like that round here, where a family can go for a ride”. This ‘product gap’, resulting from developing trails for more experienced riders at the expense of family groups and beginners, has been identified as an issue that needs to be further addressed at the Scottish 7Stanes trail centres (EKOS and Tourism Resources Company, 2007).

A diversity of ‘terrain’, however, was cited as an example of one of the attractions of riding on traditional trails. When trails have not been built specifically for bikers, “not knowing what’s round the next corner” helps to maintain interest on a ride, as Simon suggested. Bob also picked out the variety of terrain as a key attribute of natural trails: “it’s the variety isn’t it? There could be grassy climbs, grassy descents, could be anything you are faced with”. Research in New Zealand endorses preferences for a mixture of climbs and descents by riders of all experience levels, while trails set in a variety of terrain
are more important factors for more experienced riders (Cessford, 1995b), such as those interviewed in this study. Despite the age of Cessford’s study, interviewee responses suggest that having a variety of trails open to them is still as pertinent to today’s experienced bikers.

5.13 A Sense of Adventure

A perceived advantage of traditional trails, over the trails at Coed y Brenin for example, is the fact that they can offer mountain bikers a sense of exploration or adventure, both real and perceived. Exploration is identified in Section 2.5.11 as a key motivation in many adventure recreation activities (Swarbrooke et al., 2003), and as a motivation identified by mountain bikers in this research in Section 4.11. This is a quality that can be missing from purpose-built trails, which are often defined loops in plantation forests and, in New Zealand at least, usually sited close to centres of population.

Traditional trails can also often be more of a journey, with a destination as a focus. Beatrice explained: “on these purpose-built trails it’s all laid out for you and away you go… It’s not a journey”. Most purpose-built tracks are signposted, and therefore the locus of control, at least in terms of route-finding, is shifted away from the individual. Indeed, Philip complained that purpose-built trails are “like a Scalextric track”, using the model car-racing toy as an analogy, where one cannot deviate from the intended line. This correlates with Barton’s (2006) report that:

Among mountain bikers… the 7Stanes-style riding centres have not had universal acceptance. Some critics believe that they are the biking equivalent of out-of-town supermarkets, encouraging people to drive miles at the weekend in order to ride their bike on waymarked trails, and removing the element of adventure and exploration”.

Removing an element of true exploration, and instead providing a ‘perceived’ element of adventure, could suggest that riding on such trails represents a softer type of adventure experience. The provision of trailhead facilities, as discussed in Section 5.9, could also lend credence to this belief. This idea that people can partake in predictable and controlled activities has been termed *McDisneyization* by Ritzer and Liska (1997). Although ostensibly coined for commercialised experiences, it perhaps also attests to some
respondents’ feelings about trail centres. Betty for example, believes that on traditional trails you feel like you are: “getting somewhere, rather than playing around [on purpose-built trails]… I don’t necessarily like being told where to go”. It is argued, however, that the technical challenges and physical demands posed by many purpose-built trails, and the consequent autonomy of decision-making required, can ultimately override these limitations.

Riding on traditional trails compels the rider to accept and tackle any manner of obstacles or deviations, where “you don’t know if it will deteriorate to hike-a-bike” (Marty). Riders may need to contend with interruptions to the flow of their ride, for example having to push their bike on steeper or rougher sections or negotiate overgrown tracks, the type of obstacles that are rarely present on purpose-built trails. Gail recalled such a ride: “over in Golden Bay I rode a trail which was overgrown with gorse. It was real wilderness stuff and a bit scary too”. Experienced mountain bikers have been found to like tight and rough tracks, and are more positive towards the type of rock, root or log obstructions (Cessford, 1995b) that can be found on traditional trails.

The other side of this perceived freedom, however, is the degree of self-reliance that can be placed upon the rider. This can be in terms of: having to navigate one’s own way; being generally more exposed to the elements than in plantation forest; probably being further away from population centres, and therefore help, should anything go wrong; and needing to carry more equipment, and knowing how to use it. Self-sufficiency on traditional trails, however, can be actively embraced. George likes “wilderness rides, remote rides where you don’t meet any one, where you need spare parts in your tool kit”, while Pauline appreciates the need to “often take lots of gear, in case we need to stay out – be prepared”. In order to manage the risks, Elizabeth observed:

I think that it is important to be self-sufficient in that respect. If you want to experience the outdoors you need to equip yourself appropriately and that includes navigation skills.

It is apparent that some riders actively seek out the types of trails that take people a long way from civilisation, where problems can, and sometimes do, occur and where high levels of experience and skills are required to deal with these. This can be reflected in a number of motivations to mountain bike, such as escapism and exploration. Most
pertinently perhaps, it suggests that challenging oneself in natural environments, physically removed from the predictability of everyday life, can be an attractive characteristic of mountain biking.

### 5.14 Enabling a Long Day in the Saddle

Being physically able to cover a long distance in a day can be seen as an attribute of individual riding environments, as well as being a possible motivation for mountain biking as an activity, as discussed in Section 4.11. Its attraction can be rooted in both physiological and experiential goals for riding (see Sections 2.5.1 and 2.5.11). This was one of the factors mentioned in the context of considering a choice between a purpose-built or traditional trail. Betty identified scale as a key difference of the two: “you can have a bigger, longer day, getting somewhere rather than playing around in a confined park or area”. Many trails at purpose-built centres in New Zealand, for example in Nelson, are comprised of a number of short sections that can be linked together to form combinations of rides of differing lengths; far fewer are marked as definitive circuits. In the UK conversely, most purpose-built trails are designed and marked as single looped trails of much greater distance.

The attraction of a natural trail is seen as being: “that you get out a little bit further. If you go up to Coppermine Saddle [near Nelson], it’s more of a destination” (John), where “you start at one point and finish somewhere else… [so] the whole thing feels more like a journey”. It is the mechanical advantage of mountain bikes that allows riders to proceed much further into the back country than hikers (Butler, 2003). This ability to go further into wild areas, however, does have the aforementioned implications for potential conflict (Section 5.10).

The rights-of-way network in the UK is seen as a great way to: “get you to different places… Bridleways open up more opportunities to see areas of the country” (Elizabeth). This is appreciated by Patrick:

I like that quite often a lot of those tracks are quite remote and you won’t see any other people. And you get to see a lot of scenery. If you are getting out for 40-50km you get to cover a vast tract and there are so many vistas to see as you go along, it’s quite phenomenal.
There are few purpose-built trails in the UK over 30km in length and while some of them can be extended through adding in other route segments, it is argued that this changes the nature of a ride at a trail centre, and anecdotal evidence suggests that few riders do so. Traditional trails generally offer the facility to create these longer rides, even if they have to be combined with road sections. A further advantage of longer rides lies in their ability to take the rider further away from an urban environment and access a greater diversity of landscapes and trail types for participation.

5.15 Attractive Scenery

Beatrice encapsulated the effect that attractive scenery, as an attribute of a setting, can have on a mountain biker: “scenery is of huge importance – good views are great, good for the soul and the mind”. While it has been stated that scenery contributes only the backdrop for adventurous activities (Hall, 1992), others believe that “while scenic beauty is an important resource in its own right, it… almost certainly contributes to the value of the recreation experiences” (Brown et al., 1990: 281). When describing their favourite local trails and trails to which they feel they have an element of attachment, attractive scenery was cited as a key characteristic. As Robert suggested: “you have to work pretty hard sometimes to get to the top of these hills. If at the top there’s no view it’s a bit of a shame”. It is suggested therefore, commensurate with the discussions in Sections 2.5.11 and 2.6.3, that the aesthetic character of locations is an important consideration for bikers.

Interviewees’ attitudes vary about whether or not the scenery affects where they ride. Bob, for one, feels that: “it can draw me to a place, in the first place. Like, let’s go to the Lakes”. Dick was unequivocal: “it has to have a nice view. There has to be some point. It’s getting away from the city, the town. The less man-made things the better”. Being in natural surroundings has been confirmed as the most important area characteristic to bikers (Sumathi and Berard, 1997). Other studies (see Section 2.6) have verified its importance as a feature of mountain biking locations (Green, 2003; Gajda, 2008). By way of confirmation, Gail explained how poor scenery can ruin a ride, citing a recently visited example: “when I rode in Christchurch [in New Zealand] I turned around and came back as I hated riding on barren hills, really exposed, windy and cold”.
Conversely, attractive scenery on a ride can be of secondary importance, compared to other elements, such as the trail itself. Jo rhetorically asked: “I wouldn’t necessarily go somewhere because of the scenery or not – would I?” No, it’s an added bonus”. Sandy took this up: “I wouldn’t say ‘let’s go there to mountain bike because the scenery is spectacular’, but at the same time it can be part of it. It adds to the package”. Sean, however, was unequivocal when asked if scenery would affect his choice of location for a ride:

Not at all. It has an influence on how you understand a trail, how you talk about it and how your might remember it. But as something that would make me choose or not choose to go to a place, it doesn’t at all.

Sean’s comments illustrate the disparity of feelings on the issue. Even if is deemed to be of secondary importance, however, compared to the nature of the riding for example, it is apparent that attractive scenery is still very much a desirable characteristic of a mountain bike trail. Rather than just forming a backdrop, as Hall (1992) suggests, responses such as Gail’s confirm that aesthetic aspects are a key part of the experience.

People’s preferred choice of scenery predictably brought varied responses. Some ambivalence was expressed about the types of views they prefer, suggesting that it is only the change that is required. John stated: “it doesn’t matter if it’s mountain or sea. I just don’t want to be somewhere where there are houses all around”. Bob echoed his feelings, liking “everything, apart from flat”. These views are consistent with the findings of Cessford (1995b) who reports interest in a wide range of setting types. Marty rationalised his openness about scenery types: “if you get all the same it’s boring. You have to have some diversity”.

Others, however, were more forthright in their opinions. A preference for hills and mountains was widely cited, and natural landscapes that also offer a feeling of being away from civilisation are also desired settings. The native bush and forest in New Zealand, for example, can often be dense and unbroken, and riding above the bush line was favoured among Nelson respondents. Riding above the bushline around Nelson also has the advantage of often offering views of the ocean, as Gail opined: “in Nelson, at the top of the hills or above the treeline, you can see the sea... You can also look down and see the city, which is a really nice feeling, as you know you’re away from it”.

Being considerably inland, bikers in the Shrewsbury area suggested different aesthetic priorities: “swept valleys, typical Welsh scenery. Forests are good but they limit what you can see. So sweeping rivers, down valleys and things like that – picture postcards” (Dick). Regardless of location, areas with such expansive views are a preferred scenery type. Conversely, Charlie stated that “I equally love it in a forest, where you can hardly see anything and it’s quite contained”. He went on to give a striking example:

We were on the Kerry Ridgeway two or three weeks ago. We followed this track down through the trees. It was a murky old day. But the sun was coming down, angling down through the trees. And if you could have captured that light, it was unbelievable. It was almost ethereal.

His response illustrates that even relatively prosaic settings can be transformed into an engaging and memorable experience. The importance of scenery on a ride may be intrinsically tied into the motivation to physically escape routine settings (Section 4.5), and experience somewhere different that may act as a ‘stage’ for special moments, as Charlie feels. Flo suggested: “[scenery is] important because I don’t see enough of it during my working week, driving between home and work”. While mountains and hills and sweeping vistas may be the generally favoured settings for mountain biking, the range of responses illustrates the range of attitudes and preferences regarding this issue. It also suggests a need for bikers to transpose themselves into locations where their motivations relating to escapism, adventure and novelty, for example, can be effectively realised.

5.15.1 Attractive Scenery: An Important Attribute of Traditional Trails

Great scenery was described as a key attribute of traditional trails, and something that many feel is lacking at trail centres, a high proportion of which are sited in plantation forests in the UK and New Zealand. It has been found that “in terms of settings, respondents clearly preferred... native bush or forest with a lesser preference for plantation forest” (Goeft and Alder, 2000: 268). Robert commented that “mountain bike parks are usually in forests and the forestry is pretty dire mostly”. Dorothy went as far as to say that:

That’s one thing about man-made trails. The Scottish [7Stanes] man-made trails are all in woods, and by the time I got to the end of the week, although it was fun, I was fed up of seeing trees, and wanted to get out onto the open moorland.
Indeed, only 8% of survey respondents at the 7Stanes trail centres consider the scenery or setting to be a factor in their favourable perceptions of the locations (EKOS and Tourism Resources Company, 2004). Experienced riders, however, are more positive than beginners in their preferences towards plantation forests (Cessford, 1995b). Patrick, a UK participant, is one of the few in thinking that purpose-built trails “often take in some great scenery as well”, although Sandy thinks that the purpose-built trail at “Nant y Arian [in Wales] has the mixture of deep, dark woods and open moorland. It has a nice feel to it”.

One of the principal advantages of riding on traditional trails is that they are more likely to be located in areas with what many interviewees deem to be great scenery: upland areas with open views. Sean thoughtfully considered his preferences for natural settings:

I like being out in the countryside. I like the world. We live in built environments and you don’t necessarily want to go out and spend your leisure time in another built environment that’s masquerading as natural.

The ability to access wide open spaces while mountain biking can be a factor when people choose where to ride, a trait considered more pertinent to riding on natural trails. Richard, for example, expressed a penchant for: “riding in the bleak open moorlands of the Peak District and Pennines, the feeling of open space. Anywhere wild and remote, where there are not many people”. Accessing such spaces is not necessarily just for aesthetic reasons, but for the mental well-being associated with getting away from the physical, and psychological, confines of everyday life (Norman and Carlson, 1999).

5.16 Guided Mountain Biking Activities

Commercialised mountain biking trips are able to offer an alternative means of escaping familiar routine. In an attempt to place the activity on the commodification continuum (Varley, 2006), discussed in Section 1.1, it is argued that mountain biking is generally an independently organised and autonomously controlled adventure recreation activity, and that commercialised, guided mountain biking trips, organised and managed professionally by a third-party, are of minority interest. Although no other data are available, the findings of this research support this claim: only Dorothy and Flo have been on a guided trip or holiday. Although guided trips on domestic trails may appeal to less experienced riders, anecdotal evidence suggests that many international commercialised
trips are targeted at more experienced bikers, requiring relatively high levels of technical capability and experience. A general reluctance was shown by interviewees regarding the use of a guide on a mountain biking trip or joining a guided party. When probed further, however, under certain circumstances guided trips might be considered, although these circumstances are heavily qualified (refer to Section 5.16.1 below).

One of the reasons for the rise of commercialised adventure recreation experiences is that people “want to squeeze as much experience into as short a time as possible” (Beedie, 2003: 211). Having everything planned and all transport arranged, for example, can help to maximise the vacation time available. Elizabeth would consider such an option, justifying it on the grounds that:

> With annual leave, if you were to do it on your own it would probably take four-five weeks, but with a guide it’s a three-week trip, as they know what they are doing, where to go and get you to the right place quickly.

Commercialized trips, led by knowledgeable guides, can also be perceived as safer options, while still providing a feeling of risk-taking (Christiansen, 1990).

### 5.16.1 Determining the Need for a Guided Option

The circumstances in which a guided option would be considered by interviewees are fourfold. First, if it is the only option available. Using the Skyline gondola in Queenstown to access the Bob’s Peak mountain bike tracks, for example, is only available via a guiding company. George stated that: “if it was the only way to do a certain ride I would be fine with it. But if I had the option to do it independently I would probably rather do that”. Other interviewees felt similarly.

The second option relates to the novelty factor of doing something different. Doing something new or unique, heli-biking in New Zealand for example, is one of the primary reasons for participating in adventure recreation activities (Todd et al., 2002). Craig considered: “I’d probably use one if it was the only way to access... a different experience”. The third set of circumstances would be if a participant is to ride in a totally new area in their own country, where he or she has no knowledge of local tracks. Robert feels that in such a situation he would utilise a guiding company:
I can see the benefits and I think if I was to go to somewhere new, and I didn’t have a clue about where to go and ride, I probably would ask... what sort of trips are out there. They can get you into the nice spots easily, whereas it could take you a lot of effort to organise.

The last option, that a guided trip would only be considered outside their own country, was by far the most widely considered. Pauline explained: “I feel I have too much access to people and knowledge in New Zealand. So in New Zealand probably not. That local knowledge really helps”. Nancy provided an example: “I’d probably do it to somewhere like Bolivia, a remote location where I don’t want to spend my whole time trying to work out where I am and what’s happening”. Cloke and Perkins (2002: 523) suggest that guided tours are “niche products which permit tourists to... gain access to specialised activities often in far-flung places”. The general homogeneity of responses reinforces this belief, participants being most likely to contemplate commercialised ventures when exploring distant destinations about which little is known.

The experiences of those participants who have actually been on a guided tour were generally positive. The advantage for Dorothy was that: “commercially organised trips were there to help me go riding, when I found it difficult to find likeminded people”. For the duration of her holiday at least, Flo’s narrative ascribed aspects of her mountain biking trip to the realm of soft adventure (Cloke and Perkins, 1998), in terms of providing home comforts for example, even though the action of riding itself might still lay towards the hard end of the spectrum:

I went to Morocco last year and it was lovely. You didn’t have to carry stuff and you had all your luxuries when you arrived at your destination, a nice shower and put on some proper clothes. And have someone cook for you and pamper you. It was a nice pampering experience but you got to see places like you would as an independent traveller. I like that aspect.

While participants who had not experienced commercialised trips felt that their lack of local knowledge would be the principal reason to take a guided option, other riders’ positive experiences, suggest that social factors, as well as a desire to combine adventure with the comforts of their urban frame (Beedie and Hudson, 2003), can make guided trips a desirable choice.
5.16.3 Rejecting Soft Adventure and Embracing the Challenge

While some riders have enjoyed being cosseted as a tourist on a mountain biking holiday, others would rail against the idea of “fluffy white towels and snake-proof tents” (Beedie and Hudson, 2003: 627) on their adventure experiences. A rider who has self-navigated in the European Alps, Rick used the term ‘plastic’ to describe his perception of guided holidays. This potential drawback of commercial adventure experiences is acknowledged:

There exists something of a paradox whereby the more detailed, planned, and logistically smooth an itinerary becomes the more removed the experience is from the notion of adventure (Beedie and Hudson, 2003: 627).

Richard admitted that if: “I went somewhere I didn’t know and that was the only option I would do it”, although he went on to say that: “I would like to think, not being big headed, that I’m experienced enough, can read maps well enough and am a good enough rider not to have to be guided”. Having stated that she has been on guided trips, Dorothy qualified her experience by stating that: “I so much more prefer doing it on my own… I like the challenge of getting through that trip and working it all out”. Only a small number of participants had experienced commercialised trips however, and few appeared very likely to do so. While anecdotal evidence suggests that such trips can be expensive, this was not raised as a constraint to participation. Even when riders were aware of the availability of guided trips, the desire for self-challenge was cited as a principal reason for preferring autonomy.

5.17 Information Sources

Having ascertained the range of site attributes that can attract mountain bikers to individual destinations, the rest of this chapter considers the range of information sources, both tangible and more perceptual, that inform and influence bikers’ destination decisions. Pomfret (2006) extends earlier work on push and pull theory, which suggests that image is a perceptual factor that attracts people to destinations (Uysal and Jurowski, 1994), to include other factors in the “marketing mix” (Pomfret, 2006: 120), both perceptual and tangible, that pull people to locations.
Schreyer et al. (1985) also acknowledge the importance of information in linking motivation to specific recreational environments. Where there may be a discrepancy between the actual settings and people’s perceived image of a destination, for example, accessing information about the destination helps people to choose settings that will more successfully fulfil their motivations. As one of the participants, Dick, suggested:

[It] makes a difference because to actually have someone who has done it is completely different to reading a trail centre advice note for example - it’s important how other people recommend things.

Information, as Schreyer et al. (1985) suggest, provides an important link between motivation and settings. As information about a destination acts to attract people to that location, it is also argued to a pull factor in its own right (Pomfret, 2006). The information that mountain bikers access is derived from a number of sources, starting, naturally, with a search of their own internal memory. Whether a place has been experienced personally, and perhaps an attachment to that place formed, or a location has developed a reputation more vicariously through others’ tales, many riding destinations are accorded their own image, creating their own determination of reality (Bigné et al., 2001) in recreationists’ minds. Interviewee responses suggest that the use of imagery, illustrating the dynamic nature of the activity at a destination, helps to reinforce and strengthen bikers’ perceptions of these destinations.

Information about new locations must be accessed elsewhere, from external sources. These range from informal word-of-mouth recommendations through friends or peers to active Internet searches. This acquisition of information reinforces that already stored in memory and creates new accumulations, either for immediate employment or future use. How this information is utilised can also be dependent upon the influence of others, and how their accumulated experience equips them to make these decisions.

Past experience, place attachment and image and reputation can play an important role in bikers’ cognition relating to destinations, and the discussion starts with these constructs. The range of external sources identified by the interviewees for trail information is then explored, starting with that perceived as the most independent and trustworthy: word-of-mouth recommendations. These information sources are examined individually in this chapter, and discussed in more holistic terms in Section 7.4.
5.18 Past Experience

The discussion in Section 2.11.1 determines that one’s past experience of a place is an important source of information stored in internal memory (Braun-LaTour et al., 2006). Past experience is argued to be an important aspect that determines a biker’s choice of trails, as satisfying experiences at a location are likely to determine further visits (Weaver et al., 2007). Bikers’ satisfaction with destinations or trails is also likely to yield positive word-of-mouth recommendations to others (Kerstetter and Cho, 2004), discussed below.

Other research has confirmed the importance of the link between past experience and intentions to revisit. A survey of the Scottish 7Stanes trail centre users has found that 84% of mountain bikers rated the trail they have ridden as very good, and that consequently 91% of participants were very likely to visit that trail again, while 75 – 89% were likely to visit other 7Stanes trails (EKOS and Tourism Resources Company, 2004). Their past experience, and satisfaction, with this recreational product is therefore likely to result in a repeat visit, as well as a visit to other – untried – products associated with the 7Stanes brand.

When questioned about his favourite local trail, Dick replied: “Coed y Brenin, the first man-made centre I went to, about six years ago. I last went six months ago and thought that it was fantastic, best place in the world”. His past experience of the destination, formed from an initial accumulation of information and confirmed by his actual experience (Echtner and Ritchie, 1993), has been a crucial influence on Dick’s motivation to revisit this location, and his consequent behaviour towards that place. The strength of his feelings suggests a movement towards a deeper, more enduring attachment to that place.

5.19 Place Attachment

Interviewees were asked if they feel a sense of attachment to a particular location or trail, and if so for what reason. The rationale for the question lies in the suggestion that if bikers feel an emotional attachment, or loyalty, to a place they are perhaps more likely to keep visiting it, the attachment overriding any potential issues of ennui resulting from over-familiarity with that place. In some respects, therefore, place attachment is antagonistic to the search for novelty, a motivation to ride for some people.
Although a great deal of research has been undertaken on place attachment (see Section 2.1.1) there has been little consideration of it in the context of mountain biking, despite obvious relevance to trail and destination managers. As part of wide-ranging quantitative research, Skår et al. (2008) asked participants in Norway if they come to the study sites because they are especially attached to them: it was not found to be an especially strong motivational factor. In this research, however, interviewees did appear to be attached to trails, for two principal reasons: more importantly the proximity to where they live, but also recollections of a trail’s involvement in developing formative experiences. In terms of the latter, Marty, for example, feels a special bond with: “Third House and Windy Point. That was where I cut my teeth. I think that that is why I enjoy it so much”. Ian also suggested Dun Mountain, where Third House is located, for a similar reason. He explained:

About six to seven years ago I had a road bike and biked Dun Mountain on it, on thicker tyres. I remembered then, at that instant, why I used to like mountain biking and I went out the next day and bought a mountain bike. That was the transition.

A wife and mother, Jo’s place attachment evoked memories both of learning to mountain bike and of a freer time, before the arrival of her children: “Gisburn Forest, near Clitheroe. Just because we used to go there together.... That was when I first started mountain biking, without all the demands of kids. Happy memories”. The association is more specific for Patrick, relating to a new mountain biking experience and repeated exposure to a place:

The Marin Trail at Betws y Coed is probably one of my favourite rides. That was our first introduction to singletrack and I think that it holds a fond place in my memory as a result of that… I think [the attachment is] actually to [nearby] Betws y Coed because I used to work as mountain leader there one week a month, so I know the area quite well, quite intimately, so I have a strong attachment to it.

An attachment to trails in the locality is considered more important however. In this regard, place attachment might develop through satisfaction with the local area and direct experience of interacting with the surrounding physical environment (Mesch and Manor, 1998). By way of example, Craig rationalised his attachment: “anywhere I can ride from
my home, I’d call it a favourite trail. It might not be in terms of difficulty or challenge but just riding a trail that’s close to home is a real luxury”.

It is suggested that, whether local or not, mountain bikers will only develop a sense of identification with a place through interaction with it (Horn et al., 1994). Sean nominated a local trail-centre as a place with which he has a strong bond, through associations of repeated experience and shared participation. The resulting satisfaction engenders behavioural loyalty:

Locally Llandegla, because it’s somewhere my wife and I go a lot. It’s nice and easy to get to, it’s not too challenging, it’s good fun, and I have fond memories of it. It has associations.

It is recognised that for some people it may be the physical environment that is the dominant place attachment construct, rather than social ties (Williams et al., 1995). Elizabeth went considerably further than others in this respect. Rather than being attached to trails because they are proximate, she went as far as stating that a strong incentive for her to stay in the area has been the accessibility and quality of the local mountain biking: “one of the reasons we have stayed here so long is because the biking is right on our doorstep and the views are stunning… It’s the familiarity as well, knowing where you are”.

Place attachment can also be to places demonstrably away from home, on weekends away for example. It is clear that memories and feelings are not necessarily contingent upon proximity. “Sometimes we go somewhere where we know it will be good, if you’ve been there before. Going back to old haunts that have been good previously” (Elizabeth). A desire, or willingness, to travel to revisit favoured trails or locations is commensurate with the findings of Green (2003) and Gajda (2008) who both found that around 80% of mountain bikers, in the USA and UK respectively, had been on overnight trips to access more distant trails.

5.20 Destination Image

A destination’s image (Section 2.11.2) is considered an important factor in attracting visitors; those with stronger images are argued to be more successful in attracting visitors (Echtner and Ritchie, 1993). While interviewees were not questioned directly about
destination image, or reputation, some of their responses pertaining to their dream place to ride highlight its importance. Dick illustrates how the acquisition of destination information from word-of-mouth recommendations, and subsequent affective evaluation, helps to create his intrinsic image of a destination. His dream place would be: “probably the Canadian Rockies. I don’t know why... I know a few who have been, who say it’s fantastic”. Patrick has created his image of a destination both through the recommendations of others and through his own experience of a place, albeit for a different activity: “I’d love to go the Alps and do some summer biking there, around Morzine, where we have been skiing. You hear great things about it for the summer”. In both cases the receipt of information and consequent image formation has resulted in an intention, or at least a desire, to visit the destination.

Sean, conversely, considered the approach of *MBWales* in actively promoting the image of the country as a mountain biking destination:

> Wales, and the way that it has been promoted, has been quite clever. The current tagline is that ‘you can’t have our mud’. If you live in England, Wales is a place to go to ride your bike. It’s an entity on its own and how I thought about [the country], at least until I moved up here.

Imagery, discussed below in Section 5.21.4, is often used in the creation of destination image (Echtner and Ritchie, 1993). Imagery can reinforce the word-of-mouth recommendations that inform people’s perceptions about a place, through the holiday photographs of friends or riding peers for example. It is arguable that the reputation and image of certain riding destinations is such that people are attracted to them, without necessarily assimilating active promotional material, as Dick’s earlier response would suggest.

### 5.21 External Sources of Information

Five principal sources of external information are generally acknowledged (Fodness and Murray, 1998; Seabra *et al.*, 2007) in Section 2.12. The mountain bikers interviewed identified word-of-mouth recommendations, electronic sources and mass media as being particularly important to their decisions about where to mountain bike. Imagery is extensively used in media sources and on the Internet to portray the excitement of
destinations and trails, and inspirational photography can also help to reinforce recommendations bikers receive from friends and peers. Non-media marketing information and experiential sources were not, conversely, found to be relevant sources for mountain bikers.

5.21.1 Word-of-Mouth Recommendations

Word-of-mouth recommendations (Section 2.12.1) are believed to be perhaps the most influential information source for many consumer purchases, general or recreational. To mountain bikers, informal testimonials are confirmed as being a more important information source than any other. Most interviewees stated that they take advantage of other people’s recommendations, while all said that they are happy to share information with other riders. Beatrice’s response is not atypical: “if you have a good source who has been there and done that, and they can tell you what it’s like… that’s better than anything”. This finding is consistent with other academic studies on mountain biking. In a survey of mountain bikers in the USA, 61.4% of bikers stated that the most popular source of information is family and friends (Bowker and English, 2002). Word-of-mouth is also reported as the most important factor influencing destination choice by other authors (Reiter and Blahna, 2002; Gajda, 2008).

Some riders believe that a word-of-mouth recommendation is more than just being told that a trail exists or where it goes. It can also be an opportunity to portray how exciting or adventurous a trail is, for example, or conversely perhaps that a trail ought to be avoided. If the recommendation is positive and “people have already done them… it gets you excited about going out and doing it” (John). Dorothy, however, was more guarded and saw such recommendations as: “an additional factor. If I didn’t have that information I would probably still do it”.

Other interviewees also recognised that there are sometimes limitations in the ways in which information can be more formally gathered, that it can sometimes be inadequate, or that informal trails exist that are not shown on any map. As Craig put it: “here in Nelson it’s a lot of local knowledge with the trail network that’s outside of the city fringe”. Nancy, conversely, considered the importance of word-of-mouth recommendations when adventuring far beyond the city trails, and the logistical issues and perhaps dangers which
may be inherent in tackling such a trail: “if it’s a wilderness ride we will want to talk to someone first”.

When questioned how much faith he placed in word-of-mouth recommendations, Simon replied: “I would take word-of-mouth over any magazine review, definitely”. These words echoed the feelings of other participants, who believe word-of-mouth recommendations to be the most reliable source of trail information. Ruth, for example, considers them: “very important. If someone has done a ride they can tell you a bit about it. It’s nice to hear ‘we’ve done a great ride, you need to try it’”. Sandy rationalised his position: “the person’s been there, they’ve done it, they know the topography”.

Beatrice, however, qualified this distinction, stating that a word-of-mouth recommendation “has to be from a known source”; information from such a ‘strong-tie source’ helps to influence people’s decisions (Duhan et al., 1997). In a similar vein, Elizabeth was initially very positive about word-of-mouth dissemination, believing “that you get the truest picture”. She qualified this, however, by adding: “or at least one you can interpret”.

Many interviewees stated that they would take on recommendations from people that they did not know, known as ‘weak-tie sources’ (Duhan et al., 1997). Some of them would need to cross-reference the information however. Marty echoed a few others when realising that there are pitfalls associated with taking recommendations from riders met on the trail: “what is a difficult trail for some might not be for me. It has to be taken with a pinch of salt”. Richard though was happy to take a chance, trusting the judgement of somebody he’d never met, nor even seen, before:

The first time I went to the Belgian Ardennes… I went onto a mountain biking forum, the only time I’ve ever done it, and within about 15 minutes of being on I made contact with a person who used to live out there, who recommended trails to do and posted me the maps. When I got there I did the trails and had a great time. All from a random guy from Scotland on an Internet forum. I trusted what he said and he was exactly right.

When asked how he shares trail information with friends or peers, Bob recognised how easy it is to disseminate news in today’s society, believing “that everyone just gets to know about things in this day and age”. Word-of-mouth recommendations can be verbal, written
or electronic, and interviewees differ little in the means they use. All the bikers verbally share trail information, whether “just sitting around after a ride” (Rick) or “when you are sat [on the trail] having the inevitable cereal bar” (Sean). The variety of electronic media used, from more popular e-mail to less frequently used Internet-based forums, mountain bike club e-newsletters or electronic route plots sent via e-mail, confirm that the Internet is an important means of dissemination for today’s bikers.

5.21.2 The Internet

Responses would suggest that some traditional means of promotion and communication, such as media sources, have been surpassed in importance by those accessed through electronic means (Section 2.12.4). Elizabeth encapsulated the trend towards electronic media, admitting that: “in the past I’ve used books but they seem to be less and less – you can pull off the routes on the Internet now”. These electronic media are important means of both informally and formally communicating information about adventure recreation activities. Even a six-year old study of American mountain bikers confirms that the Internet is the third most important factor affecting choice of destination, after reputation and word-of-mouth recommendations (Green, 2003), while for accessing information about the Scottish 7Stanes trail centres its website is the second most important source, after word-of-mouth recommendations (EKOS and Tourism Resources Company, 2004).

It is perhaps not surprising, given that the majority of the interviewees are in their thirties and forties and likely to be computer-literate, that the Internet appears to be a very popular way to find out about trails. It is acknowledged that one of the great strengths of the Internet is as a convenient and effective information-gathering tool:

The Internet is probably the biggest one – I just type in the name of the ride I want to do, or if I’m going to an area just type in the name of the place plus mountain biking into the search engine. Something usually comes up and I’ll work it out from there (Ian).

Ian’s oblique reference was the closest interviewee response pertaining to the use of non-media marketing information sources. No interviewee explicitly mentioned the use of destinations’ own promotional material, whether Internet sites or commercial printed
brochures, although such material is routinely produced. MBWales, for example, produces a dedicated brochure on mountain biking trail centres, and Christchurch City Council in New Zealand has developed a map of trails. Much of the material available in the brochures is available on their websites however.

Elizabeth feels that the Internet has a more supplementary or complementary role, being useful for reinforcing information gathered by other means. She uses: “a lot of word-of-mouth... from friends who speak highly of somewhere, and I guess you then research on the Internet if you hear about things, to swot up on it”. As a prominent member of the local mountain biking club, Ewan appreciates the value of the Internet, in various guises, as a communications tool:

We have our own club website, with a forum page where members can post subjects. Word-of-mouth with other riders. There are other websites – Vorb is popular. So most of it now is via e-mail and websites.

A variety of these mountain biking forums exist. These can be organised independently, for example the aforementioned Vorb website, in New Zealand; through magazines, such as the UK’s Mountain Bike Rider; or through advocacy groups such as the IMBA in the USA. Few bikers, however, go beyond trawling websites for information to actively use forum pages to elicit word-of-mouth recommendations, posting queries regarding trails and trail conditions. Dick is one of the few: “I go on the forums and have a look at what other people think of trails”. As the majority of recommendations are still communicated verbally, or to a lesser degree by e-mail, it is argued that these other electronic media are still of relatively minor importance.

5.21.3 Media Sources

Media sources are also perceived as independent (Mitra et al., 1999), and participant responses suggest that in mountain biking the printed media remains a relatively important source of information (Section 2.12.2). In a 2002 survey of American mountain bikers for example, 22.1% of participants cited magazines as the most important source of information (Bowker and English, 2002). Interviewee responses in this study suggest that the use of the Internet is more popular than obtaining information from guidebooks or magazines. Nevertheless, both guidebooks and magazines are still used by many bikers.
The use of guide books appears much more popular in New Zealand, while UK interviewees are less enthusiastic about their use. The existence of a single guidebook that covers the whole of New Zealand may be the source of this difference; such books in the UK tend to be more regional. Anecdotal evidence also suggests that more route information is available online in the UK. The most important book on mountain biking in New Zealand for interviewees is overwhelmingly that written by the Kennett Brothers, which saw its seventh edition published in 2008. In fact only one of the interviewees who used guide books did not actually mention it by name. Nancy, for example, merely stated “[the] Kennett Brothers’ book, we use that a lot”. It is probably a sign of the book’s widespread acceptance and ubiquity that few people actually bothered to do more than say its name.

Mountain biking magazines are much more widely used by participants as a source of trail information in the UK, compared to New Zealand. It is suggested that this reflects the greater availability of such publications in the UK. In their 2007 survey in the UK, however, only 3% of participants visiting the 7Stanes trail centres found out about them through magazines (EKOS and Tourism Resources Company, 2007). Other surveys have found guidebooks and magazines articles more important for accessing trail information, but, correlating to the findings of this research, still only of moderate influence (Green, 2003; Gajda, 2008). In both of these quantitative studies, word-of-mouth recommendations were found to be considerably more important.

Interestingly, more negative responses than positive were forthcoming regarding mountain biking magazines. People criticised them for a number of reasons, thereby rationalising decisions not to read or buy them. In New Zealand, Simon attaches very little importance to magazine articles, believing that “they don’t do much in the way of route guides”, a point echoed by Nancy, who thinks that “they don’t have so much about rides, it’s about bikes and gear”. While Patrick, in the UK, admitted that: “if I’m waiting for a train or something like that I’ll tend to buy a mountain biking magazine”, he went on to say, however, that: “I always regret it when I do as there is always the same old stuff in there to be quite honest”.

Sean, conversely, felt them to be “crucial, I always get at least MBR [Mountain Bike Rider, a UK publication] every month”. Ewan thinks that: “New Zealand Mountain Biker
has some interesting articles, from people giving their experiences of a trail, and from overseas too”. Richard is also a big fan:

The last two years I’ve had a subscription to [MBR]. I don’t do a massive number of rides from them, but I have done some. They also review trail centres and I have gone to a couple after reading reviews in magazines. I mainly buy the magazines for these trail reviews, not for gear reviews.

A number of participants store trail reviews as a future source of information, Troy being typical: “I generally keep them in the bathroom for up to five years and when I throw them out I rip out the ride guide”. Justifying another reason to keep them, rather than just as an information source, Rick thinks that it is “also nice to read an article where you’ve actually done it”.

Other participants are more sceptical of reviews however. Sandy, for example, would “read the review and compare it to a map to check, to link it all together and see that it makes sense”. Flo spoke of her negative experience of trail reviews:

I’ve followed some of their trails, they’re dreadful. There was one in Ambleside and it was done completely the wrong way round. We did the opposite way to what they suggested.

Richard and Sean, conversely, were complimentary regarding relevant articles that they had read: “I have read articles about places I’ve ridden and they have been pretty spot on with what they’ve said” stated Richard, while Sean went further in his praise: “one recent one advised, rather unusually I thought, that you shouldn’t go, because it’s getting too damaged. I thought that that was quite good”. The disparity of responses reflects the fact that interviewees appear to be rather more equivocal about the trust that they place in trail reviews in the mountain biking press than in word-of-mouth recommendations, many needing to back up a review with information from another source.

5.21.4 Imagery

While none of the interviewees mentioned the importance of visual imagery when gathering information about bike trails, when questioned explicitly about how photographs of trails or destinations could influence a decision to ride there a number of personal
thoughts became apparent. Some people are influenced by photographs, some are rather sceptical of them, and others feel that they help portray the nature of a location but only in a supplementary role. There are no discernable patterns to account for these variations, and it is suggested that a combination of people’s own beliefs and attitudes, and their experiences of how imagery has portrayed places that they have visited, contributes to their attitudes.

It is argued, in Section 2.12.5, that imagery is very important in promoting sports such as mountain biking, as words by themselves can fail to convey elements of speed and excitement that can be portrayed by clever photography. For instance, action-laden imagery of mountain bikers forms a core part of the promotional literature of VisitScotland (Page et al., 2006). Some interviewees, however, felt that photographs alone are insufficient to persuade them to try a new trail or destination. Robert stated: “you get the odd photo, and think that that looks nice. But it wouldn’t necessarily make me say that I must go there”. Gail agreed: “I think it’s more written, less visual. But if you did see photos of some trails they would definitely make you want to find out more about them”. This acknowledges that photographs do have a role to play in portraying a destination’s image, even if that role is just to encourage people to find out more information regarding a place. Craig differentiated the effectiveness of images of destinations from photographs of trails themselves:

Photos of the Queen Charlotte [Sound] might help. That sort of stuff comes across really well. But photos of trails themselves don’t really do much for me. It’s quite hard to get the feel of a trail from a photo.

Responses suggested that it is no longer felt to be true that ‘the camera never lies’. Comments were made on the subjective nature of photographs and how they can provide a distorted image of a location. As Marty noted: “any photo is of the good part and that may end behind the lens”, while Patrick felt that: “photographs can show most things. They show people what the person taking the photograph wants to show them”.

Simon’s thoughts reflect the findings of Page et al. (2006), whose content analysis of adventure recreation brochures in Scotland found that 19 out of 28 images of mountain biking are action, as opposed to scenic, images. Little can be deduced from such images about the quality of the mountain biking at specific locations or the nature of the terrain,
and they are argued to merely form an idealised image of the activity for the viewer. Magazines can be as guilty in this respect, as Sandy bemoans: “in the mountain bike press there are too many generic photographs, with no obvious reality”.

Conversely, Ewan considers imagery to be an influential factor, responding more conceptually: “I think bikers are very visual. They will look at the terrain, the trail, the riders on the trail, and read the text”. Ian picked up on the possible subliminal nature of photography used in destination marketing, believing that photographs may influence a decision “not consciously, but maybe subconsciously”. Imagery can be so effective in constructing an image of a destination or trail that it can induce impulsiveness in decision-making:

The photos I saw of the Tour du Mont Blanc – I think within three weeks I had started to book hotels, way in advance. I find them inspirational, I do. I think that photos are totally inspirational (Bob).

These images can be portrayed through numerous media. A photograph on an Internet forum struck Philip: “there’s a picture on Singletrackworld of a great descent in Yorkshire and you think, ‘wow, that looks good’”. Richard was influenced to visit a destination by a friend’s holiday photographs: “a mate of mine showed me pictures of biking abroad that I have then gone to do”. It was a magazine article, meanwhile, which created a lasting impression on Flo:

There was a big article [on mountain biking on the Isle of Skye] and the views were just striking. And I thought I want to do that, I want to do that one day. I read that four years ago. Then last Christmas I got invited to Skye with a big group and thought, ‘yes, I’m going to get to do that route’! So that was one that inspired me.

Regardless of media, interviewee responses, typified by Bob’s effusiveness, suggest that images have an important role to play in the promotion of trails and destinations, even if the limit of their effectiveness is to encourage riders to seek more – textual – information about such places.
5.21.5 Mountain Bike Clubs

Although by no means one of the more important information sources for the study’s participants, mountain bike clubs are still used as a resource, both within the local area and when visiting other destinations. In terms of the latter, Gail described the role that clubs can play when planning to visit a new area: “if I’m going somewhere I look up other mountain bike clubs in those areas to find out about trails”. Club websites and club members were acknowledged by Craig as being “usually quite a good source of local information”. Flo extolled the virtues of the local club’s technologically-advanced media for information dissemination: “they’ve got very organised and very ‘techy’, so now with the weekly [e-mail] update you get the route”. Troy, likewise, thought that “one of the lovely things about [the club rides is] it’s not just word-of-mouth, but hang on for long enough and you get to go round all the routes they do”. Despite active club scenes in both study locations, however, it is apparent that mountain bike clubs play a limited role in disseminating trail information.

5.21.6 Maps and GPS Devices

Maps can perform a similar role to brochures: often produced by governmental organisations, they are a non-media source of information that “represent an abstraction of reality and are the most powerful tools to quickly provide information about places and spatial relationships” (Laakso et al., 2003: 1). Different types of maps are used to find information on biking routes, both traditional topographical maps and dedicated mountain biking maps. Ian, perhaps a more adventurous rider, stated that “sometimes I even just get hold of a map and see if I can link up some trails”. Charlie sometimes also uses this approach: “if I go somewhere I just buy the map and look for the bridleways and go for it”.

It is notable that nearly as many participants mentioned the use of Global Positioning System (GPS) devices as traditional maps. Troy confessed to “being slightly techie-nerdy these days” and having “a mobile phone that has a GPS built-in that I run my maps on”. Their popularity is encapsulated by Sandy, who uses GPS technology devices to both find and share routes: “when I came here I got some guide books. That’s transferred onto Memory Map [software]. Or I will share routes with friends through Memory Map”.
Simon, however, admitted that even a GPS unit would not give him enough confidence to navigate his own way.

5.22 Reflections upon Pull Factors

Participant reaction substantiated that there is a wide range of attributes or factors that attract mountain bikers to specific settings where participation is perceived as being able to satisfy their motivations. While some of these characteristics are tangible, such as amenities, others are more perceptual and less easy to define, the constitution of a thrilling trail for example. A similar pattern to that displayed by motivations was identified in terms of factorial multiplicity: participants generally seek a combination of site attributes to realise their motivations, even if some characteristics are deemed to be more desirable than others. Furthermore, the attributes that are perceived as preferable can vary depending on the individual’s needs and desires, and temporal fluctuations in the motivations for participation. The interaction of these factors is discussed in Section 7.5.

Interviewee responses also identified that while some attributes might be universally sought, rhythmic, flowing singletrack that provides a more exciting mountain biking for instance, a general dichotomy of characteristics exists between traditional trails and purpose-built mountain biking tracks. This suggests that they can offer different types of riding experiences, and, in doing so, satisfy different motivations for riding. This issue is examined briefly below and in more detail in Section 7.5.4.2. While these attributes are important factors that mountain bikers consider when faced with a choice of riding destinations, no destination can be accessed without some knowledge about it. Information sources therefore provide a necessary link between a decision-maker and a location, and as they serve to attract recreationists to destinations they are argued to act as pull factors themselves (Kim and Lee, 2003).

A principal advantage of many purpose-built trails is perceived to be their ability to be ridden regardless of the weather. This is considered to be an important factor in determining spatial decisions when a biker has a choice of riding on either type of trail. The range of facilities available at many trail centres is also considered to represent a primary attraction, at least in the UK. Amenities such as a café are regarded by some as an integral part of the trail centre experience, even if the trails remain the primary attraction.
While meetings other bikers on the trail is subsumed in the sociability of mountain biking as a motivation, trails where undesirable conflict can be avoided, especially with people outside the mountain biking ‘in-group’, are seen in a very positive light. Although a few interviewees have experienced some hostility from hikers on the trail, general, albeit occasionally reluctant, acceptance of each user group appears the norm. Regardless of hikers’ feelings towards mountain bikers, respondents were fairly unanimous in their positive feelings towards riding on unidirectional purpose-built biking trails segregated from other user groups, citing both the safety aspects and the consequent abandon with which trails can consequently be ridden.

A further advantage of purpose-built trails was suggested to be the ease with which one can fit an adrenalin-filled ride into a working life, as they offer a concise riding experience that is designed specifically for that purpose. The accessibility of both purpose-built and traditional trails as a site attribute can manifest itself in another way, for the accessibility of the activity as a motivation is more easily realised when proximate trails are available to ride, although it is accepted that other riders outside this research, without nearby trails to ride, may be equally motivated to mountain bike. Similarly, having a variety of trails available to ride within easy reach is a widely appreciated attribute of the study areas. The availability of both types of trails at both study locations, plus a variety of trail characteristics or features, helps to inject an element of novelty into participants’ riding patterns and negate the frustration or boredom that could result from over-familiarity.

Traditional trails are believed to possess three principal characteristics that are missing, wholly or partially, from purpose-built tracks. First, several riders bemoaned the artificial nature of some purpose-built trails, wondering if the experience has become too manufactured, even though many riders would appear to accept this characteristic in exchange for the thrilling nature of the trails. The naturally-evolved feel of many traditional trails can create an element of adventure and the unknown, even if these elements are more perceived than real. Second, travelling further into the backcountry gives bikers the opportunity to access a variety of landscapes. While most riders dislike the commonplace plantation forest settings of purpose-built centres, traditional trails are considered to be more likely to be located in natural settings and offer the uniformly desired diversity of scenery types and great views. Third, the psychological challenge of self-navigation on unmarked traditional trails is considered a positive attraction of such
trails, even if well sign-posted purpose-built trails are considered appropriate for that environment. The ‘ungroomed’ nature of traditional trails, as one participant termed it, can also render the tracks more physically challenging, on both climbs and descents, exacerbated by their surfaces’ greater susceptibility to seasonal weather variations.

In developing an understanding of the interaction between such site attributes and motivations for participation, the provision of information plays an important role (Schreyer et al., 1985), Pomfret (2006) suggesting that marketing information in itself is a pull factor. This information can be found either in a rider’s own memory, accrued through past experience, or sought from external sources. Attachment to a place is an influence on decision-making stored internally, and is suggested to result from either places that evoke positive sentiments for the role that they played in people’s development as mountain bikers, or, more particularly, from the proximity of great trails to where people live. Riders can also harbour the desire to ride at a place they have never visited, as positive reviews, verbal or textual, create mental impressions of places, reinforcing the importance of image in suggesting future intentions.

Hearing about great places to ride was confirmed as the most important source of external information for participants, these word-of-mouth recommendations being regarded as generally independent and trustworthy. The Internet forms another important media, which, as a convenient and cheap means of gathering information, is suggested to have usurped, to a degree, more traditional sources of information. Printed media are still extensively used to elicit trail information however, whether magazines in the UK or the ubiquitous Kennett Brothers’ book in New Zealand.

In such media imagery can play an important role in conveying messages about destinations. While some participants are rather sceptical of photographs, feeling that they can be easily manipulated, many more riders can be influenced by attractive imagery. Though most of these riders would require textual information about a location, people can be influenced to seek out trails, inspired by great images provided by friends for example. Friends and peers can play a host of different roles in mountain biking; these issues, and a consideration of how people’s motivations can change with increasing experience, are the focus of the next chapter.
Chapter Six: Research Findings – Other Factors that Influence Participation in Mountain Biking

It is suggested that there are a number of other pertinent factors reflecting people’s personalities and behaviour that influence their participation in adventurous activities, both managed and autonomously controlled (Pomfret, 2006). A number of factors have also been identified by participants as potentially constraining their riding patterns. An examination of these factors pertains to the thesis’ third objective. This seeks to understand other factors, besides the push and pull factors discussed in the preceding two chapters, which may influence people’s participation in mountain biking.

McGillivray and Frew (2008: 71) assert that so-called ‘weekend warriors’, who experiment with commercialised adventurous activities, do so as “an avenue to the accrual of valuable symbolic capital within their social network”. In other words, injecting these activities into their lives is believed to bestow a certain level of status among their friends or peers. Individuals signal their membership of their peer group in order to become accepted (Pomfret, 2006), and participants in adventure activities are recognised for their mastery of the activity, within a predominantly meritorious social group (Celsi et al., 1993). It is argued however, that while technical competence or the mastery of quintessential trails are examples of generally meritorious achievements, other aspects are also relevant, such as the perceived association of a sophisticated or expensive mountain bike with the identity of the rider.

Participant responses suggest that, as a non-commodified adventure activity, mountain biking might be undertaken to accrue prestige, but this symbolic capital is only likely to be meaningful within the biker’s peer group (McGillivray and Frew, 2008). A certain level of antipathy towards, or ignorance of, mountain biking as an activity by people outside the peer group would appear to support this.

While being part of a peer group has undoubted benefits (Ungar, 2000), it can also create potential issues for bikers, in terms of the pressure that they feel to perform in a certain manner, riding beyond their limits in the company of others for instance. Peer
pressure can also play a role in determining when and where people ride, especially if they play a more subservient role to others in a network. More positively, being the recipient of peer pressure could inspire a person to ride when self-motivation is deficient.

Pomfret (2006) also suggests that past experience influences people’s motivations for participation in adventure activities. Ewert’s influential (1987) adventure model seeks to make predictions regarding the shift in motivations with changing experience levels, through a comparison of motivations between less-experienced and more-experienced participants, while his later (1994) research on mountaineering charts a general move from extrinsic to intrinsic motivations as experience is accrued. While it has been stated in Section 3.3.8 that experience as a mountain biker was one of the criteria for selecting interviewees, it is recognised that people’s motivations are unlikely to remain constant in their mountain biking ‘career’. Consequently, participants’ feelings regarding their development as mountain bikers are pertinent to an understanding of their current motivations.

Participants also identified a number of factors that could negatively affect their riding patterns. Legal access rights are complex issues (Booth and Bellingham, 2004), specific to individual countries, and it lies beyond the scope of this research to examine them in great depth. It is clear, nevertheless, that access affects where mountain bikers can legally ride, and a brief consideration of participants’ feelings towards access issues in the context of the research locations is appropriate. As both New Zealand and the UK have changeable maritime climates, the weather can also play a role in both determining whether people ride on a given day and influencing where they ride, both for fear of ruining trails (Symmonds et al., 2000) and to find more sheltered locations at which to recreate (Martín, 2004). Issues of seasonality can likewise determine participation, as a potential constraint but also in an enabling role, as riders can take advantage of the winter months to go night-riding. These factors, and other potential constraints, time and money for example, are very personal issues, and other factors discussed in this chapter, such as peer pressure, can play a role in determining how great a constraint they pose.
6.1 Chapter Structure

This section is structured to examine, first, participants’ feelings about being recognised as mountain bikers, principally within their peer group, but also by people who form part of their social groups outside the activity. Embedded in the development of identity within a peer group is the pressure that can be placed upon bikers to behave in a certain manner, or to make choices that might depart from those made completely autonomously. Next, the ways in which bikers’ motivations change as they become more experienced are tentatively explored. Although it is beyond the scope of this thesis to examine how recreationists’ motivations change with experience in the manner of Ewert’s (1987) research, for example, it nevertheless provides an insight into how people believe that they have developed as mountain bikers. Finally, Section 6.5 discusses a range of factors that can potentially constrain participation, access rights and issues of seasonality for example.

6.2 Social Recognition

A synonym for social recognition was only mentioned once when participants were asked in open-ended questioning why they enjoy mountain biking, referring to an element of competition between peers out on the trail. When explicitly asked about the importance of social status amongst their mountain biking peers, however, and how non-peers perceive them, it was apparent that social recognition is still quite an important aspect of the activity. Mountain biking is a sociable pursuit that is heavily imbued with connotations of belonging and status and which can therefore affect one’s own feelings of self-esteem. Some interviewees, however, do feel that their perceived status as a biker is irrelevant to them, or that the make-up of their social world renders it unimportant.

Mountain biking, to many people, is perceived as a demanding and dangerous activity (Muller and Cleaver, 2000). When she first started biking, for example, Jo acknowledged that developing her social identity was an important factor: “when I was younger... you wanted to say you had done a ride because it looks good... You wanted to say that you were a mountain biker”. Being acknowledged as a mountain biker therefore yields a certain prestige, as the person’s identity and character is associated with the adventurous and daring stories that they tell about their exploits (Bell and Lyall, 1998).
6.2.1 Belonging to the Mountain Biking Community

George feels that one of the attractions of being a rider is that: “we’re a community of mountain bikers and even though we don’t know them there is an instant and recognisable commonality”. As well as having obvious shared interests, belonging to such a ‘fraternity’ can help to create a sense of personal identity: these are believed to be two of the most important reasons for undertaking activities with a peer group (Hultsman, 1993). A commonality of interest can both add value to an existing friendship and be the foundation for a new one. Bob, for example, considered that riding with other people is an essential means of maintaining friendships:

I’m sure that if we didn’t have this common thing, mountain biking, we wouldn’t see half as much of other as we do, as there would be no real reason. The banter, it’s tremendous. I think that it’s indicative of a certain level of friendship. From an outsider’s point of view it could be strange, but I’ve grown up with it and feel I need it.

Some of the interviewees were contacted through the local mountain biking club, and they extolled the virtues of riding within the group. Flo recognised that: “it leads onto other things – I met [Dorothy] through it and we’ve holidayed three times, and other weekends we’ve ridden together as well”. Sandy recalled the important role played by the local club when he first came to the area:

It’s the shared camaraderie that you don’t get anywhere else. When I arrived… I knew nobody here so joined a club. Suddenly you have a shared interest. It’s like what I believe the army would be like, that camaraderie. You’re out against the elements, people coming off their bikes. There’s a sense of group belonging, people pulling together.

Having a shared passion therefore meant that mountain biking was able to give Sandy a social outlet when he first arrived in a new area, and enabled him to become immersed in the local biking culture, learn more about local riding and make new friends with whom his chosen activity could be shared. This bonding potential results from: “the instinctive empathy of identification you get when you feel you belong to a community” (Seaton, 2009: 133).
6.2.2 Attaining Symbolic Capital

A riders’ status within wider society may be no more than just as a generic mountain biker, albeit with all the positive, and negative, associations that that yields. It is proposed in Section 2.5.13 that it is only within one’s social world, however, that people’s achievements as an individual can be recognized, yielding the desired symbolic capital within that sub-culture (McGillivray and Frew, 2007), and increasing their status amongst their peers (Kane and Zink, 2004). This correlates with Sean’s thoughts about the accumulation of social capital associated with mountain biking: “it’s certainly nice to be able to say that we have done that, amongst a group of people who are aware of what each other’s aspirations are”. Similarly, Ewert (2008) reports that being able to prove one’s abilities is one of the most important motivations for whitewater kayakers.

Sandy expressed a desire to be perceived favourably as a mountain biker by his peers, admitting that: “I’m back in the B group now and not good enough to be in the A group. You want the recognition that you’re in that group and not one of the guys at the back”. Beatrice agreed that the kudos of being perceived as a good rider is important to her. She also considered the negative aspect of self-signalling, relating to the failure to achieve one’s goals:

The kudos of being a good rider? I guess the ego does come out doesn’t it. I think of myself as having a healthy ego because I like being able to achieve things. And if I can’t do something and everyone else can then I feel like it’s a bit of a downer.

A number of UK participants in particular have been on extended mountain-biking trips away from their home country, principally in the European Alps. Elizabeth suggested that: “the bigger the ride the more prestigious the ride. Extra, more energised conversation, you feel like you’ve got something to talk about that’s not just your bog standard weekly ride”. Richard enthused about the positive social recognition from tackling a challenging multi-day ride:

Two summers ago I did the Tour du Mont Blanc with a mate. I came back full of stories, telling people how good it was. Five of the lads from work I ride with went off and did it last summer on my recommendation. It’s not an ego trip but it is a nice feeling when people ask you about your biking.
As well as status accorded to ability, there is great symbolic capital to be accumulated from riding in areas, such as the Alps, which have positive images or reputations among these sub-cultures (Kariel and Draper, 1992).

Many interviewees, however, appear ambivalent to the issue of status. Betty was typical: “I don’t really care – I have a reflector and rack on the back of my bike”. Her response contrasts with Dodson’s (1996) assertion, discussed above, that a mountain bike acts as a symbol for people’s feelings about mountain biking, and suggests that riders’ attitudes towards such issues vary greatly between individuals, reflecting personal characteristics and values.

Philip felt that his attitude towards social recognition had changed: “being the quickest used to be quite important. Now it’s not”. His response also illustrates how social recognition and peer pressure (discussed in Section 6.3.4) are inextricably linked: the freedom to ride how one chooses to, without the perceived pressure to conform to how others ride, inevitably means that one might eschew an element of social status for the privilege. Simon’s feelings were typical of a couple of older interviewees: “it used to be, but doesn’t bother me in the slightest now. I think it comes with age and experience”. Ewert (1994) found a similar pattern in mountaineers, for whom recognition and image are more important factors for beginners, but unimportant for experienced climbers. Social recognition might once have been important to some of the bikers in this research, but has become less so over the years, reflecting changes in personal characteristics and consequent motivations as people become older and more experienced (see Section 6.4).

6.2.3 The Mountain Bike as an Extension of the Self

As a branch of the wider extreme sports culture that has grown in breadth and popularity over the last thirty years, mountain biking as a pursuit has developed its own sub-culture, with its own cool image and jargon (Wagner, 2008). Although Wagner writes about ‘generation Y’, this sub-culture is argued by the author to transcend such boundaries. Mountain biking is also a high-technology activity (Horn et al., 1994), which helps to reinforce its image to bikers, even if it can potentially alienate them in the eyes of other trail users (Section 5.10). It is suggested, furthermore, that the bike is “a symbol that acts to identify the person socially with the characteristics of the chosen leisure activity...
provid[ing] others with information about who they are” (Dodson, 1996: 317). Many adventurous activities involve the use of hi-tech equipment and there is a certain image that is associated with its use (Wagner, 2008). The technology inherent in today’s mountain bikes, and other equipment associated with the activity, can be an attraction for participants, as Troy illustrates:

[Mountain biking] has all the techie bits to it as well, the engineering of the components and how the ride is affected by the set up of the bike… When work goes well I treat myself to something for the bike.

While the mountain bike can become associated with the pleasurable and satisfying feelings aroused by the act of biking (Dodson, 1996), responses indicate that there is also affective pleasure to be found in other aspects of the machine, such as in its purchase and maintenance. Rick, for example, feels that checking out other people’s gear is one of the attractions of meeting other riders on the trail: “it’s nice… sometimes just having a look at different machinery, bikes, bits of kit”. GPS navigation devices are used by a few riders, appealing to a biker’s technical side: “being slightly techie-nerdy these days I have a mobile phone that has a GPS built-in that I run my maps on” (Troy). Without entering into a debate regarding gender stereotypes, it is interesting that this particular aspect of mountain biking was only mentioned by male interviewees, suggested to result from male formative socialization into playing with mechanical toys (Kleif and Faulkner, 2002).

The nature of Rick’s response suggests that social capital can also be accrued by the type of mountain bike a person rides. This also reflects Dodson’s (1996) assertion that the bike that people ride can create perceptions in other riders’ minds about the type of rider that person is, for “a bicycle expresses your personality… [as] both a physical extension and an emotional part of you” (Seaton, 2009: 51). Whether these perceptions are right or wrong is probably immaterial, as these first impressions, through chance meetings on the trail for example, are the most vivid. As discussed in the preceding section, it is argued that, while members of the wider population may show interest in the level of technology inherent in today’s mountain bikes, perhaps comparing them to the bicycles that they have previously owned themselves, the social capital attached to the mountain bike as an extension of the rider’s self can only be properly accrued from this interaction with members of the peer group.
6.2.4 Perceptions from Outside the Peer Group

How people outside the interviewees’ peer group perceive them as bikers yielded comments ranging from esteem, through ignorance or ambivalence, to bewilderment as to how enjoyment is derived from such an activity. Dick feels that his friends are “if anything… a little bit in awe of me because normally they just go to the pub while I’m out on the bike”. Ewan qualified his perception of their thoughts: “probably they see me as being adventurous, and fit. The level of adventurism and fitness is probably swelled beyond reality but that is probably what they see”.

Craig believes that “a lot of non-mountain biking people I know don’t have a lot of appreciation for what we do”. As a result of general ignorance, craziness appears to be a common perception. Dorothy’s work colleagues are a case in point: “people at work just go, ‘what have you been doing’? Things like your bruises, and, ‘oh my God, look at the state of you’, rather than, ‘wow that must have been great’”. This differentiation, from other individuals or from society, however, is often seen as a valued symbol, bestowing status upon the individuals. The descriptions of their activities can be used by adventure recreation participants to not only associate themselves with a distinct peer group, but also differentiate themselves from others (Kane and Tucker, 2004).

At the other extreme to feelings of awe or esteem, Elizabeth tried to explain why her friends had more negative attitudes towards mountain biking: “they just see the tough side don’t they. They see it as being exhausting, cold, wet, sweaty, ‘what do you do when you get problems’”? Nancy was more forthright: “I have some girl friends who don’t like mountain biking and they think we’re stupid and crazy”. Her thoughts illustrate the preconceptions, right or wrong, that people outside the peer group may hold, and add credence to the argument that social capital can only be accumulated when stories are related to peers (McGillivray and Frew, 2007).

6.3 Being Motivated by Others: Peer Pressure

Heavily linked to social status, interviewees’ responses determined that pressure from their peers is not a reason why people enjoy mountain biking, and therefore it is not, in itself, a motivation. Peer pressure is not an issue that appears to have been the subject of
much research on mountain biking research, nor to any great extent in studies on wider adventure recreation (see Section 2.5.12), with the exception of Wallia (2008). Participants believed, however, that peer pressure can be relevant and the following discussion is centred on its influence on the patterns and levels of people’s participation in the activity.

As “being seen to be adventurous has become a desired, socially valued condition” (McGillivray and Frew, 2007: 58), it follows that in order to be recognised socially as being adventurous, many mountain bikers may be susceptible to being influenced or pushed by others, riding trails at or beyond the outer edge of their ability for example. Such pressure may not be real, merely perceived, where the competition to beat others is something that has been internalised, as Dorothy explained: “my perceived peer pressure, what’s going on in my head, won’t be anything that they are thinking. They won’t care if I’m at the front or back”. Whether perceived or real, peer pressure can manifest itself in a number of different ways, influencing others on taking up mountain biking, or affecting the manner in which they ride, for example. It can also play a part in making decisions about where or when to ride; or motivating people to get out and go riding.

6.3.1 Peer Influence on Spatial Decisions

In terms of where and when people mountain bike, almost all the participants felt that peer pressure affects their riding patterns. Marty was one of the few who did not think it was relevant, asserting that: “if I want to do it I will go and do it, if I don’t I will say no”. When it is a factor, the dominant role played by a strong personality within a group dynamic was recognised. Sometimes, however, a decision can be more of a consensus.

Betty’s response displays a classic symptom of conforming to peer demand, of doing something even if she does not personally want to (Ungar, 2000): “peer pressure probably does affect where I ride as I would rather go along with [friends] and walk the bike a bit so they could have a real ride if they want”. Ruth also admitted to yielding to peer pressure from others: “I suppose the people with the strongest characters in the group will decide generally where we are going and the rest will follow along. I do that to a certain extent”.

Peer pressure on Rebecca was more oblique, yet still centred on her conforming to peer beliefs: “I don’t tend to go out on wet rides as my partner would say that the tracks are affected, bad for the tracks. That’s changed my attitude towards riding”. The issue was examined introspectively by Troy from a different angle, playing the more dominant role himself due to the personal circumstances of others:

In the group of Welsh friends, I am part of the peer pressure rather than the pressured, because a lot of them now have babies, so they mostly look to me to say where we’re going and they’ll come along.

The decision to ride on either purpose-built or traditional trails was accepted by some as being the result of a group decision or acceding to the wishes of others in a party. For Sean, differing levels of experience between himself and his riding partner renders the decision black and white:

It is all to do with what my wife wants to do… My personal preference is for unmarked trails across the countryside. Hers is for trail centres. But because I am considerably more experienced than her and not wishing to alienate her I will always defer to where she would like to go. It’s just nice to have her enthusiastic about where we are going rather than screaming about a huge climb that she wasn’t expecting.

Such responses confirm that peer pressure does play a role in determining decisions about where, and also when, to ride. It appears to be individual situations, in terms of the personality characteristics of the parties involved and the choice of riding peers for example, that determine how decisions are made.

6.3.2 Motivated by Others to Ride

Organising a ride with others can mean that people are encouraged to ride, regardless of the weather or other adverse factors that may inhibit people from going out by themselves. Ian, for example, feels that “there have certainly been times when I’ve not felt like going for a ride and friends have persuaded me to go, and I have, and felt good for it afterwards”. This may be for a number of reasons: not wanting to let other people down; the need to maintain social recognition from peers by not being perceived as the sort of rider who would miss a ride; or, perhaps most importantly, and heavily linked to social status, it is related to peer pressure.
In this respect, Troy considers peer pressure a motivating factor: “partly it’s the incentive, getting you out there… It’s the ‘well other people are going out, surely I can go along as well’”. Rebecca echoed his feelings: “there are lots of people doing it in Nelson so it’s easy to get a bunch of people together, so you have the motivation to do it”. Simon concurred: “I tend to be a bit of slacker. Sometimes I can’t be bothered but somebody will persuade me, and you’re glad you did”. In this respect at least, peer pressure can indeed act positively, as a motivation to mountain bike.

6.3.3 Consensus, not Peer Pressure

In-between the extremes of conforming or not lies the grey area of consensus, a compromise that “allow[s] groups to combine members’ knowledge and produce higher quality decisions” (Michaelson et al., 1989: 834). Consensus was suggested by Bob and Dick as the means by which decisions are made: “we all come to some sort of common agreement, bounce stuff around” (Bob). Dick feels that the basis for a decision would just be a desire to maintain freshness in the group’s riding pattern, believing: “it’s a compromise. Somebody will say ‘we haven’t been there for a while, we’ll go there’”. Richard’s response was the most interesting of all:

The group of lads I go out with from work, I often get rung up and told, ‘we are going to wherever, do you want to come’? So I will go and do pretty much what they want to do. This friend I ride with, we both have ideas for rides and e-mail each other with suggestions and plans, so feed off each other. I must admit when I ride with my wife I tend to decide where we go, and she is quite happy with that.

Richard therefore felt that, depending upon the circumstances, when making decisions about where to ride, a person can play all three roles. Sometimes a rider can be the dominant decision-maker among peers, for example when local knowledge can override natural characteristics of dominance. Conversely, the biker can play an antagonistic role, subservient to other decision makers with more assertive personalities, or where others have greater knowledge. Finally, where a group of similarly vociferous people need to make a decision, a consensus dynamic can achieve a mutually satisfactory solution.


6.3.4 Pressure to Perform on the Trail

Considerations of peer pressure relating to rider behaviour on the trail are also important. Naturally, given the breadth of ages and experience of the participants, there is a wide variety of thoughts on this issue. As much of the research on peer pressure has been centred on the impressionability of youth (Hultsman, 1993; Caldwell and Darling, 1999; Gardner and Steinberg, 2005 for example), it is not surprising that a number of the older bikers feel no pressure to ride in a particular way or on a particularly difficult section. The oldest participant, George’s response typifies this: “I find it very easy to bail. I have no problems with that. I’m too old. If I don’t want to do it I will say I’ll go this way and see you at the bottom”. Beatrice explained why she does not feel it is an issue: “I won’t push myself if I’m not comfortable any more, whereas I used to. I’ve matured in my decision-making”.

Similarly, her ambivalence to peer pressure means that Pauline does not worry about her image on the trail, stating that: “if I have to get off and walk a section, that’s not a problem”. Dick was more forthright: “I couldn’t care less what they think! I do what I do”. These responses are consistent with recent research, which found that, for Norwegian bikers, getting attention and appreciation was the third least important motivation for mountain biking, of the 27 factors tested (Skår et al., 2008). Ewan contentiously tried to widen his thoughts to the greater biking population: “my perception of mountain biking is that it’s free of peer pressure. I think every biker has ridden with people who are superior to them so there’s a good understanding”. Other people do not put pressure on Bob as such but influence him in different, more positive, ways: “I’ve been inspired by people. I see people and they’ve done things and it’s inspirational. But no peer pressure – I’ll either try it or say ‘no thanks’”.

Many riders, however, feel that peer pressure does affect their riding behaviour. When Sandy was asked if peer pressure affects how he rides he responded: “yes, it definitely does. Some of the guys in the local club are mad ex-downhillers and you might not want to emulate them, but you want to beat them”. Elizabeth introduced an interesting aspect, suggesting that a group of riders will naturally evolve into a riding order. Although she does not say so herself, it is possible that once the order is established people feel more comfortable with their position in the hierarchy and pressure is reduced:
The downhill stuff it’s a bit like skiing – you get to the top of a run and as you’re about to go down you get into a pecking order, don’t you. The fastest one tries to go first and in the early parts of the ride you’re trying to establish where that pecking order is.

Determining one’s place in the pecking order can create its own kind of pressure. Nancy’s response centred around possible negative connotations of peer pressure on the trail: “sometimes if you ride with people who are better you can get left behind and start to feel inadequate and anxious, which affects my performance on the bike”. Wallia (2008: 40) considers that “factors like fear of failure, fear of being laughed at, peer-pressure and self-esteem influence a participants’ ‘actions’, in this case the choice about their level of participation”. Nancy’s feelings reflect this. While she: “get[s] a buzz out of the boys telling me I ride like a boy”, peer pressure on the trail is obviously a double-edge sword. When the pressure to perform or the challenge becomes overwhelming, anxiety and feelings of inadequacy can be the result.

6.4 How Motivations Change with Mountain Biking Experience

When asked if they considered peer pressure an element in influencing where, when or how they ride, a number of responses pertained to the declining importance of this factor with age and experience: “I’m not too worried about that now. If I’m not happy with riding something I won’t ride it” (Robert). His response reflects a change in his attitude towards the activity, and suggests that the rewards for participation, and their antecedent motivations, may also have changed as they have become older or more experienced.

These findings reflect other research in adventure recreation that confirms that people’s motivations to participate in such activities do change with increasing levels of experience. As mountain bikers become more experienced and competent they generally prefer greater physical challenge, greater speed, excitement and risk, and more technical riding (Cessford, 1995b). Similarly, as their skill levels increase, some of their preferences with regards to trails change, notably a desire amongst more experienced bikers for steeper terrain and the presence of obstacles such as roots and rocks (Symmonds et al., 2000). These changes correlate with those undergone by mountain climbers, more experienced climbers valuing more intrinsic motivations, for instance challenge, personal testing and making decisions (Ewert, 1985).
Patrick articulated his thoughts on being better equipped to deal with these kinds of challenges, not so much in terms of how his motivations had changed but the processes they went through in the act of change:

I think that they change almost imperceptibly. I think it’s been a gradual change over the last 11 years as the bikes have got better and I’ve done more and more biking and I’ve exposed myself to more and more. There’s no one time when I would say that my motivation has changed – my motivation has just evolved now with my ability to mountain bike.

Commensurate with Cessford’s (1995b) findings, greater experience was seen as enabling people to challenge themselves on more difficult terrain. In Section 4.7.2 it was suggested that greater experience enables people to better gauge and meet challenges (Martin and Priest, 1986); this was confirmed by some of the interviewees’ feelings. Ruth, for example, feels that she might be more willing to tackle greater challenges: “it’s made me realise that I can do more than I think I can. It’s encouraged me. The more I ride the more I know that I can take a bit more of a risk”. Ian also feels that he would: “look for a bit more risky stuff and a bit more challenging stuff as my ability’s increased”. Creyer et al. (2003: 251) confirm that with an increase in mountain biking competence “many participants ‘push the envelope’”, and in the desire to experience greater ‘thrills’, bigger risks need to be taken (discussed in Section 4.9). As riders become more accomplished, however, the risk involved is said to become normalised and people are better able to perceive the level of risk involved (Celsi et al., 1993).

These changes are consistent with Martin and Priest’s (1986) adventure experience paradigm: as participants become more astute with experience, they are better able to balance risk and their competence. Ian’s thoughts support this: “I take on more as I get more experienced, but I don’t think the level of risk is any higher as I am more confident to deal with it”. These changes also correlate to Todd et al.’s (2002) testing of Ewert’s (1987) adventure model, when it was found that motivations change from extrinsic at the beginner level – such as status and image – to intrinsic in experts, for example self-efficacy and learning. Jo’s aforementioned thoughts about the perceived kudos of being a mountain biker when she was a novice rider support these findings.
Conversely, some participants suggested that they choose less difficult rides now: this might be the result of an accident engendering caution, mellowing with age or a loss of enthusiasm, for example. Pauline termed it: “‘conscious incompetence’ – I realise what my barriers are and don’t really want to keep pushing and pushing to get better. I’m happy where I am at”. Simon went as far as admitting that:

I’ve lost a lot of my motivation. Sometimes I wish for the earlier days when it was all new, the riding was new, the bikes were new. It takes a bit more to get me enthused now and get the heart pumping with excitement.

Contrary to Ewert (1985), however, some bikers suggested that they are more motivated by extrinsic goals, such as the sociable side of the activity. Sean considered that it is now: “less about conquering that particular whatever it is, and more about just being out and enjoying the people I am with and the circumstances I am in”. Rick also feels that: “I’m motivated by the company... sometimes on the more subtle rides you go on, it’s the company you enjoy then”. This reflects Fluker and Turner’s (2000) research, which found that commercial whitewater rafters with no previous experience focus on the action of the rafting and are happy to take risks, while more experienced paddlers are more relaxed and content to be with friends in a natural environment.

6.5 Potential Constraints on Participation

Discussions with interviewees about the broad range of factors that affect mountain bikers’ riding patterns introduced a number of issues which, rather than being specific site attributes, can potentially inhibit their participation. These factors can manifest themselves in terms of spatial constraints, legal access rights for instance or decisions about where to ride in poor weather, or more temporally-oriented constraints such as issues of seasonality or family or work commitments affecting the time available to ride. Considerations of fitness and finance may be other constraints that can potentially affect riders’ ability to engage in mountain biking. These constraints are justifiably examined before a holistic discussion of the range of push and pull factors that influence participation.
6.5.1 Access to Trails and Land

Where people are able to mountain bike is naturally influenced by legal access rights to tracks and land. The access rights for mountain bikers in the UK (excluding Northern Ireland) and New Zealand have been examined in some detail in Section 2.9. Interviewees’ perceptions and thoughts about access rights are examined below, in the context of the access legislation. As the system of access rights is so different, and invariably complex, in the two study countries, out of necessity interviewees’ thoughts about the issues are discussed separately. As stated in Section 2.9, it is beyond the scope of this thesis to consider the complicated issue of legal access rights ‘in depth’. The purpose of this discussion on access rights is to give an overview of how they can impact upon people’s decisions regarding where to mountain bike.

6.5.1.1 Legal Access Issues in the United Kingdom

The issue of legal access to trails in England, Wales and Scotland elicited a range of opinions. Only Jo seemed unsure of her rights, which would appear to confirm that the UK’s system of linear routes, as opposed to access areas, makes access rights easier to understand (Curry, 2002). General satisfaction with legal access rights in the UK (see Section 2.9.1) was expressed.

Bob, for example, thinks that: “using bridleways is great. I don’t necessarily think that they should open up footpaths to use. I think that we have enough haven’t we…? Plenty for a lifetime”. This was an opinion echoed by Richard: “there are not many places in the UK that I would want to ride that I can’t. While you walk some paths that you think would be terrific to ride, I don’t think it’s a big issue”. He believes it to be “so ingrained here, that bikers aren’t allowed on footpaths”, confirming the suggestion that most mountain bikers in the UK do ride legally (Ruff and Mellors, 1993).

Of a minority opinion, Philip believes that: “we should have more access, on footpaths. There’d be no problem if you’re responsible”. Troy casts an envious eye at Scottish mountain bikers, who have a right of access to most land for recreation (Scottish Natural Heritage, no date): “partly that is why Scotland is my favourite, because you can ride more or less anywhere”. He went on to add: “it’s quite odd that England, Wales and Scotland
are different in their legal approach to it. In Scotland a bicycle doesn’t count as a vehicle. In the others it does”.

Flo, however, considered why such a system of open access might not work in England: “I can see why you can’t just ride on all the footpaths. There is not so much wild land here as there is in Scotland”. Dorothy recognised that the current system of access rights in England does have advantages, in such a densely-populated country: “if it was open access you would obviously have the issue of people abusing it, by razzing down a place that was very popular for walkers. So it does police it quite well”. Patrick picked up on this, and was quick to point out the problems associated with widening access rights for mountain bikers:

If it’s a footpath, then just the same as [purpose-built] singletracks are no places for walkers, then a footpath is no place for a mountain biker, as you expect to find walkers on them. Not all mountain bikers are conversant with the countryside… I think it’s better just to keep them out of some areas.

The issue of potential social conflict has been examined earlier in Section 5.10; evidence (for example, Cessford, 2003; Brown et al., 2008) suggests that some traditional users of footpaths still have an issue with mountain bikers. Undoubtedly a causal factor, a few bikers admitted that in certain circumstances they do ride on footpaths, in line with findings in previous research (Ruff and Mellors, 1993). Flo owned up to riding illegally on occasion: “there are some places where we know we shouldn’t be riding, but to make it a circular route we are going on a footpath. We shouldn’t be doing it, but…” Philip, for one, tries to avoid confrontation on footpaths by only riding them after dark: “certain places we will only ride at night, when it’s dark, as we’re not really meant to be there”. These actions can have repercussions however:

Access restrictions, such as the ban on mountain bikes on Snowdon during summer daytime, have happened because people haven’t given a damn and there have been complaints. The old story – a minority can spoil it for the majority (Sandy).

It is argued that the current situation on Snowdon, the highest mountain in Wales, is the result of previous conflict issues, not an abuse of access rights. Sandy’s point nevertheless
illustrates how inappropriate behaviour by mountain bikers can lead to repercussions: in this instance a curtailing of access rights.

6.5.1.2 Legal Access Issues in New Zealand

Despite the fact that a relatively complicated system of access rights is currently in operation in New Zealand (McIntyre et al., 2001), only Pauline and Simon admitted that they are not too sure about access regulations (see Section 2.9.2). Pauline, for example, admitted: “I don’t really understand my rights, and you take the lead from mountain biking books – who to contact, or if you need to”. Simon also feels that: “I’m not too sure about access regulations – I’m not sure anyone else is from what I can work out”. The other interviewees, however, appear confident that they know where they are allowed to ride.

It was notable that fewer than half the interviewees in New Zealand appeared happy with their access rights. Pragmatism was displayed by Beatrice, who thinks that: “[access issues] don’t affect me hugely as there are rides all around me, all legal rides… People are building tracks all over the place and new tracks pop up”. Similarly, while Robert accepts that “there are some access issues at the moment here” he feels that “there’s so much choice of places to go that if people don’t want you to go on their land you just go somewhere else”. These access issues pertain generally to the closure, temporary or permanent, of trails due to logging operations, and restrictions on riding in national parks.

A number of concerns were raised regarding access to trails in national parks, which, with a few exceptions, is prohibited, although the situation is perhaps changing in favour of mountain bikers (Wynn-Williams, 2007). Beatrice knows that: “I can’t go into the Kahurangi and Abel Tasman National Parks, and I haven’t”. Not generally being able to ride off-road within national parks in New Zealand was an issue raised by many participants. Ewan considered that: “the only access issues I know of are from DoC [the Department of Conservation] with regards to access in national parks, and the opposition from walkers”.

This issue is exemplified by the well-known contentions over the Heaphy Track, which is within relatively easy reach of Nelson, and access to which ceased when it was subsumed into the Kahurangi National Park in 1997 (McDonald, 2003). Ian bemoaned
that “some of the best rides in the Nelson and Golden Bay areas are the Heaphy Track and the Abel Tasman [Track], which bikers aren’t allowed on”, and feels that: “DoC... needs to be brought up-to-date and accept that mountain bikers are a mainstream part of outdoor users and try to include them where possible in its management plans”.

The closure of the Heaphy Track to mountain bikers, however, is potentially being overturned. Under the 2009 Draft Partial Review of the Kahurangi National Park Management Plan seasonal access for mountain bikes could be trialled from 1 May to 1 October annually from 2010, while two other routes in the area are also being opened up for general access to bikers (G. Wynn-Williams, pers. comm.). This naturally widens the range of trails available, and also has implications for the displacement of bikers from other popular tracks in the Nelson area, such as the Queen Charlotte Track. An analogy was drawn with the situation on the Queen Charlotte Track, which can be biked all year round, apart from some sections during peak season, and is generally seen as a successful way to accommodate both bikers and hikers (Cessford, 2003). “That’s where the Queen Charlotte works well, with a section being closed to bikers over the summer” is Todd’s opinion. The author acknowledges that DoC operates with a different remit to local government, managing land with objectives for both conservation and enjoyment. Nelson City Council, however, is believed by Ewan to be more progressive than DoC in its attitudes towards mountain bikers: “the Council now recognises biking as an important part of the population’s fitness and there are plans for a lot of new trails to be put in by the Council”. It has also developed a popular booklet on local mountain bike trails, also available online (Nelson City Council, 2009).

It is appreciated that some trails run through private land and permission for access needs to be sought. Although there is no common law right of access across private land (Booth and Bellingham, 2004), “de facto access has a strong tradition in New Zealand rurality, based on a presumption that recreationists seek permission from the landholder” (Booth, 2006: 114). Nancy stated that she is: “quite happy to ring up people and ask to access their property. I’m from a farming background and am pretty sympathetic to them”. Betty, however, thinks that: “if the access is closed or through private land, as it often is in New Zealand... getting permission in advance can get tricky”. Her thoughts correlate to previous research which confirms problems in identifying who owns rural land and how to obtain permission to access the land as potential issues (Wilson et al., 2002).
Another potential conflict of access is that which arises between bikers’ desires to use trails and the operations of a commercial forest. Around Nelson this is an important consideration as it was suggested by Craig that “about three-quarters of the trails around here are on forestry estate”. Over 97% of the commercial forests in the Nelson area are privately owned (Ministry of Agriculture and Forestry, No Date), and in many forests, including around Nelson, a permit is required to access trails in these privately-managed forests. The issue is perceived to be twofold: areas of the forest can be temporarily out-of-bounds to bikers when logging is taking place, while logging can sometimes close down trails permanently. Beatrice complained: “Turners has been logged... so I won’t be able to access that anymore, so that’s annoying”. She does pragmatically think, however, that “after it’s been logged it will all be built again”.

At the time of writing, bikers are not allowed weekday access to the purpose-built trails in the Hira Forest adjacent to the city, and a prominent notice advising them of such is posted on the access road to the forest. Some riders do not believe this is a big issue, but for two very different reasons. John is empathetic towards the loggers: “I know that if I was a forestry owner I would try to keep access restricted to protect my investment. So I can see where they are coming from”. Rebecca, meanwhile, takes a more controversial stance: “on Fringed Hill they said no trespassers on tracks that we had been using for ages and everyone just continued using them. So it doesn’t really affect us”. It is apparent, however, from interviewee responses in Nelson that logging operations do form an additional consideration when making decisions about where to mountain bike. Having a wide range of tracks locally available therefore helps to obviate this constraint.

6.5.2 Weather as a Constraint

A further potential spatial constraint, the weather can affect both a decision to ride or not ride and, consequent to a positive decision, considerations regarding where to ride in inclement weather. Interviewees’ opinions were divided to a degree on the issue of the weather forming a barrier to riding. Some interviewees do not care about rain or the cold at all. While few admit that they do not go out because of adverse weather conditions, Jo, for example, was honest enough to admit that: “we’ll ride in the rain [but] if it’s absolutely torrential when we’re setting off, we’ll give it a miss”. The effects of poor weather are
both physiological and psychological (Martín, 2004), Rick conceding that “people’s motivations aren’t as great in poor weather”.

Interviewees such as Ruth insist that adverse weather does not alter their riding plans. Her role as a mother determines that she is quite restricted in the time she has to ride and therefore she is adamant that: “it doesn’t [affect my riding] at all. If it’s pouring with rain I will still go out. It makes no difference, because I am so intent on going out”. While Elizabeth admitted that: “if it’s good I’m more inclined to be spontaneous” she was resolute that: “if I’ve made a commitment it wouldn’t stop me”. Patrick was even more determined to ride, reasoning that “the weather doesn’t influence where we ride, it just affects what you wear”.

While Todd, for instance, has more negative feelings about riding in the rain, others, such as Gail, do not mind the rain, although dislike starting a ride when it’s raining: “I don’t like going out when it’s already raining. If it starts raining when I’m already out I’m fine”. Other riders feel that the rain, in particular, can alter their choice of destination. While the weather may not significantly influence those living near recreational areas, when a longer journey is required to access facilities the weather becomes more important (Brandenburg and Arnberger, 2001), and flexibility is required (Smith, 1993). How the weather might affect the choice of riding destination is examined in Section 5.8.

### 6.5.3 Seasonal Riding Patterns

Many people regard mountain biking as an all-seasons activity, temporally extending its flexibility and accessibility, and while some bikers ride more in summer, some, rather more surprisingly, think that they bike more in winter, for various reasons. Others feel that their riding is fairly consistent throughout the year, and where it might differ is in the duration of a ride or its location. Bowker and English (2002) report that at Tsali Recreation Area in the USA there is little seasonal variation in riding between spring, summer and autumn, but a large drop-off in winter. Purpose-built mountain biking centres are argued to have had a big impact in reducing this seasonality of mountain biking, thereby increasing the accessibility and popularity of the sport (Section 5.8).
Craig is a rider for whom: “riding is a year round activity. The only thing that will affect things is heavy periods of rain”. He feels that in Nelson: “the trails are usually in pretty good condition all year round. There’s usually no reason we can’t ride a trail all year round”. Ewan explained why mountain biking for him is a: “twelve-month activity. We have warm gear for winter, we have light systems”. The novelty and excitement of night riding is an attraction for many of the interviewees.

Among those who ride less in the wintertime is Beatrice. Supporting the assertion that temperature is one of the most important seasonal factors affecting outdoor activities (Crowe, 1975), she confessed that: “I’m just useless in the winter, I’m scared of the cold. When it’s really cold I don’t like going out. I’m more of an autumn, summer and spring rider”. Ian was honest about his approach: “I definitely ride much more in summer. It’s harder to motivate myself at this time of the year, if it’s cold and windy and the tracks are wet”. John was one of several bikers who, conversely, ride more in winter: “I probably find more time to ride in the winter than in the summer, because I’m so busy with other things during summer”. Dick is another: “in the summer I spent too much time road racing so I do less mountain biking in the summer than in the winter – probably the opposite to most”.

Others think that their riding might change, seasonally, in other ways, the greater number of daylight hours permitting bigger rides. Sean considered that: “I take longer, I guess, over rides in summer, because you can. In February it’s cold so things tend to be a bit more furious”. Bob concurred: “I do longer rides in the summer... I probably have less time to ride in the summer. But when I do ride I go out for a bit longer”. Seasonality, in terms of daylight hours and weather patterns, can therefore affect not only how many times people go riding, but also the nature of those rides. Time constraints relate to wider considerations however, particularly riders’ work or familial responsibilities.

6.5.4 Time Constraints

Time, as a potential constraint to riding, obviously presents different issues to different riders. Depending upon personal circumstances it may be seen as a considerable barrier: work and, especially, family commitments are the greatest constraints mentioned by
interviewees. Accordingly, freedom to ride varies greatly depending on whether the interviewee has familial obligations more than anything else.

While interviewees without dependents may feel relatively unconstrained in terms of their ability to undertake long rides or be flexible about when they ride, Betty knows that: “my riding has been quite significantly affected by my baby and so I go when I can”. Simon feels the pressure of both work and family on his riding patterns: “with a family and work it’s a case of grabbing three or four hours when I can. Time constraints are probably the biggest issue I have with my riding”. Rick even went as far as saying that: “if they felt that my activities were unduly affecting the family, mountain biking would be one of the things to go”.

Other riders without families feel that they are constrained to a degree by the hours that they work. While Richard admitted that: “[time constraints] affect where I ride when I’m working”, he added that: “at weekends, it depends how far you’ve driven to ride… Riding from home I may ride all day”. It is apparent that compared to other participants with familial responsibilities, however, Richard is relatively free to ride when he likes, work notwithstanding.

6.5.5 Other Potential Constraints

Two other possible constraints were identified by interviewees; neither, however, appears to significantly affect riding patterns. When the riders were interviewed in 2008 it is perhaps surprising that only two riders raised the issue of the financial commitment required to mountain bike, particularly in the context of the global economic downturn. Sandy was one, admitting that: “I’ve just moved house so money is tight. Petrol prices have really affected things”. Troy, meanwhile, considered the “constraint of just affording to keep [the bike] going”. Neither, however, suggested that such a constraint would force them to consider giving up or even reducing the number of times that they mountain bike. In tougher economic times, it is suggested many people just cut costs elsewhere or save money in order to be able to participate in favoured leisure activities (Kay and Jackson, 1991).
Conversely, Rick considers mountain biking to be a cheap activity, and it is argued that rather than being a constraint, the costs associated with gaining access into the activity could potentially increase participation rates. Mountain biking is an accessible pursuit that allows people to get into the outdoors relatively cheaply (Horn et al., 1994). Once the capital cost of purchasing a bike has been met, there are few direct costs associated with ownership and use, maintenance notwithstanding.

The other constraint mentioned relates to mental and physical health. Dorothy admitted her stress levels from work could be a constraint, “if I didn’t have some very good friends who kick my butt occasionally”. Richard has suffered sports injuries in the past which has affected his participation in certain activities: “I used to run a lot but don’t anymore because of injury. They don’t affect my riding at the moment but they could”. The effect of previous injuries, and the constraints that this can create, was mentioned by others, such as Sean. He suggested, however, that it is not so much the quantity of riding that has changed as a result of accidents, but his mental attitude towards trail behaviour. In this respect however, a more reserved approach to riding can still act as a constraint.

6.6 Reflections upon Other Participatory Factors

In conclusion, while responses determined that social recognition is not perceived as an actual motivation to mountain bike, it is apparent that, while a few riders believed that they are not affected at all by considerations of social status, many riders do consider their status as mountain bikers, and can be influenced in their actions by the consequent pressure that this can place upon them. This can have positive aspects, such as the feeling of belonging to a group or community, while others went as far as feeling that the activity is what bonds their relationship with some friends.

Membership of the mountain biking community permits participants to accumulate social capital, through recognition as ‘one of the boys’ on the trail, or someone who has completed great rides in the European Alps for example. Interviewees recognised that accumulating capital can have positive implications for a rider’s own self-esteem. The ramifications, conversely, can be negative if a rider feels that they are performing below the standard of peers, as one of the participants suggested. This illustrates one of the
detrimental consequences of riding with other people: pressure, whether actual or just internally perceived, to perform on the trail.

It is also clear that participants’ spatial and temporal riding patterns are also frequently influenced by pressure from other riders. Some riders were honest enough to admit that peer pressure could force them to do trails that they would not choose to do, although others were seemingly happy to play this more subservient role. An element of consensus or compromise was felt to be a more common means of determining decisions. More positively, a few riders suggested that peer pressure could persuade people to ride, even before decisions about where to go are made, while many participants highlighted the roles that other people played in influencing a decision to actually take up mountain biking as a pursuit.

A number of responses pertaining to peer pressure reflected how their riding styles or patterns may once have been influenced in this manner, but increasing experience has put them ‘beyond it’, to quote one interviewee. While the thesis only aimed to establish a cursory understanding of how participants’ motivations may have altered with the accumulation of experience, their development as mountain bikers was considered relevant to how they are motivated today. Increasing experience was principally seen as enabling riders to use their greater skills and knowledge to test themselves on more technical trails. Being able to accomplish more was also suggested as motivating people to want to achieve more. The negative implications of this, however, manifest themselves in the bigger risks that riders may take, along with the potential injurious consequences. Apposite to these feelings, however, were suggestions that increasing age has seen some riders feeling that they have nothing to prove. This can result in them becoming more relaxed about their riding and taking more holistic enjoyment from a ride.

Interviewees introduced a number of issues which, rather than encouraging their participation, can potentially inhibit it. These factors can manifest themselves spatially, temporally or in terms of socio-demographic factors. These spatial constraints include legal access issues. The participants generally considered themselves well informed in terms of their rights and acknowledged the potential dangers of straying from the permitted path. Particular issues in New Zealand were raised concerning the active logging industry in the Nelson area constraining where people could ride, and the contentious question of
mountain biking in national parks. Decisions about where to ride in poor weather can be another spatially-oriented constraint. While some riders were nonchalant about riding in the rain, for example, and conversely others were honest in their dislike of disagreeable elements, the advantages of riding on often sheltered purpose-built trails were acknowledged.

More temporally-oriented are constraints such as seasonality or work commitments affecting the time available to ride. While it might be natural to expect increased levels of riding in the more benign summer months, and this was widely supported, this is an equivocal pattern, and some participants believed that they ride more in the winter. This might result from occupational downtime or, in particular, because night riding is widely embraced as an exciting and novel mountain biking activity. Socio-demographic issues such as familial patterns and activity-related costs are other factors that were recognised as potentially constraining riders’ ability to engage in mountain biking. While the financial implications of mountain biking appear to be of relatively little concern, family obligations for parents was raised as one of the greatest single constraints, and one that could seriously impact upon participation. How these potential constraints, social influences and changing motivations interact with the factors that pull riders to destinations is the subject of the next chapter.
Chapter Seven: A Holistic Discussion of Findings

Having presented and discussed in depth the research findings in Chapters Four to Six, the purpose of this chapter is to amalgamate them into a broad theoretical discussion, undertaken in the context of a new conceptual framework that illustrates the range of factors that influence people’s participation in mountain biking. The chapter discusses the key findings of the research, and examines how site attributes and information sources, as specific pull factors, relate to mountain bikers’ push motivations. Other influences on participation, potential constraints and personal factors for example, are also examined in this holistic discussion. In this way, the different method and findings of this research to previous academic literature are presented, and the study’s original contribution to academic knowledge explained and rationalised.

7.1 Chapter Structure

The chapter commences with the introduction of a new conceptual framework for participation in mountain biking (Section 7.2). The end result of the analytical method discussed in Section 3.3.12, the model has been developed to illustrate the range of factors that influence participation in the activity. Its introduction precedes, and facilitates, a holistic discussion of the push and pull factors, and an examination of the thesis’ contribution to academic thinking in this field. The structure of the framework is discussed in the context of the conceptual studies of Schreyer et al. (1985) and Pomfret (2006), which both influenced the design of this research.

Section 7.3 presents a brief explanation of the two key differences in findings between New Zealand and the UK, having explained in Section 3.3.5 why a comparison of findings is not one of the research objectives. Using the aforementioned framework as a means of understanding the complexities inherent in participation, Section 7.4 discusses the key findings of the research, pertaining to both mountain bikers’ push motivations and the site characteristics, and other pull factors, which attract them to biking destinations. The inter-relationships formed by these factors forms the focus of Section 7.5, as motivations need to be explored in the context of specific attributes of destinations, and other pertinent
factors, in order to understand recreationists’ experiences (Pan and Ryan, 2007). Section 7.6 examines how the findings fit into the existing body of knowledge and their consistency with, or contradiction to, current theories. In this way the new theoretical insights that are discussed and rationalised in Sections 7.2 and 7.4 to 7.6 help to build the case for the research’s contribution to academic knowledge. The chapter culminates with a series of conclusions about the research findings.

7.2 A Framework of Participatory Influences on Mountain Biking

One of the principal goals of the general induction method used to analyse the research findings, discussed in Sections 3.2.3 and 3.3.12, is “to develop a model or theory about the underlying structure of experiences or processes that are evident in the text” (Thomas, 2006: 238). The outcome is typically a framework that illustrates the key themes and sub-themes emanating from the findings (Thomas, 2006). In this research, in-depth interviews of mountain bikers yielded large numbers of findings regarding influences on their participation. The analytical technique involved total immersion in the findings and an iterative process to identify principal themes and sub-themes to which the findings were coded. The result is three themes and a range of sub-themes to explain the different aspects of people’s participation in mountain biking.

The framework developed through the inductive process is often in the form of an open network, which displays the findings without hierarchy or sequence (Thomas, 2006). The conceptual framework in Figure Three on the following page proposes that people’s participation in mountain biking is influenced by the interaction of push motivations, pull factors such as environmental attributes and information sources, and other social factors that influence participation. These form the three key themes. The framework also illustrates factors that can act as constraints on taking part in the activity, including lifestyle influences such as time and money, and the intrinsic rewards that can result from mountain biking without necessarily motivating participation. An open network of influential factors rather than a causal network that explains processes inherent in riders’ decision-making, it seeks to illustrate the why, where and when of participation in a holistic manner.
Push Factors
Motivations to Mountain Bike
- Seeking Novelty
- Escapism
- Adventure and Exploration
- Physical Exercise
- A Sociable Activity
- Mastering the Challenge
- Seeking Risk
- Seeking Thrills
- Fun and Enjoyment
- An Accessible and Flexible Pursuit

Intrinsic Rewards for Participation
- Optimal Experiences
- Feelings of Flow

Key Influences on Participation in Mountain Biking
- Constraints on Participation
  - Access Rights
  - Seasons
  - Weather
  - Time
  - Money
  - Health and Fitness

Pull Factors
A: Site Attributes
- Singletrack
- Flowing Trails
- Thrilling Trails
- Rideable Climbs
- Challenging Trails
- All-weather Trails
- Well-marked Trails
- Accessible Trails
- Variety of Trails and Features
- A Range of Trailhead Facilities
- Avoiding Conflict on the Trail
- Attractive Scenery
- The Sense of Adventure
- Enabling a Long Day in the Saddle
- A Guided Option

B: Information Sources
- Destination Image and Reputation
- Past Experience
- Place Attachment
- Word-of-mouth Recommendations
- The Internet
- Media Sources
- Mountain Bike Clubs
- Maps and GPS Devices
- Imagery

Figure Three
A Conceptual Framework of Influences on Dedicated Mountain Biking Participation

While the framework usefully illustrates the important participatory factors as a stand-alone network of influences, its importance can only be understood in the context of the discussion of the different factors (Section 7.4) and how they interact with each other to determine mountain bikers’ behaviour (Section 7.5). The discussion therefore concentrates on identifying and examining the most important findings of the research. The qualitative nature of this research determines that it is not the aim of framework to measure or rank
the importance of the factors however. The approach considers the relevance of motivations, site attributes and other influences in their own right and also holistically tries to determine, using the framework to illustrate the process, how the push and pull factors identified interact to influence participation.

7.2.1 The Motive-Environment Conceptualisation (Schreyer et al., 1985)

The influence on the development of this research’s framework of the conceptual work of Pomfret (2006) and Schreyer et al. (1985) has been acknowledged and briefly discussed in Chapter Two. There is a principal commonality between these conceptual studies, and between them and this framework of participatory influences on mountain bikers. This pertains to the acknowledgement that a wide range of factors affect people’s participation in recreational or adventure recreational pursuits: motivations, environmental settings and information sources for example.

The model developed by Schreyer et al. (1985), in ‘Reconceptualizing the motive/environment link in recreation choice behaviour’ (in Proceedings – Symposium on Recreation Choice Behavior. Ogden: USDA General Technical Report, INT. 184, 9 – 18), is acknowledged to influence a number of key elements to this framework. Most pertinently, it recognises the important link between motivations and the search for environments that will allow recreational behaviour to deliver the outcomes sought. This relationship forms the core of the framework developed in this thesis. The authors also recognise that information availability can act as a link between motivations and settings, and that previous experience and other factors are also pertinent variables on recreation behaviour. Pomfret (2006) suggests that marketing information can act as a pull factor, and this research acknowledges both the value of information in attracting a person to a destination and the role of destination knowledge as an interface between motivations for participation and the site characteristic that can satisfy those needs and desires.

The influence of Schreyer et al.’s (1985) conceptual work on this research, however, is less important than Pomfret (2006), for a number of reasons. First, their model remains one of recreational participation and it is argued that adventure recreation activities introduce a range of factors over and above recreation, of which danger and uncertainty of outcome are probably the most relevant (Carpenter and Priest, 1989). Second, the model
describes the ‘process’ of recreation behaviour, from use history, through behaviour, to satisfaction (Schreyer et al., 1985). The open network of the framework of mountain biking participation in Figure Three (on page 219), conversely, and indeed Pomfret’s model, does not describe the ‘process’ of adventure recreation behaviour, but the range of influences on participation.

It is argued that Schreyer et al.’s (1985) assertion that recreation settings need to be defined in terms of associated behaviour and not physical features neglects the role that physical attributes can play in defining settings, certainly in terms of the activity studied here. The range of different motivations that can be satisfied in individual riders by the presence of physical features at trail centres, for example, suggests that settings can be defined by both their characteristics and the behaviour that they facilitate. While many trail centres offer generic thrills and possibilities for sociable recreational behaviour, their physical attributes can be the core of the centres’ individuality.

7.2.2 A Conceptual Framework on Mountaineering Adventure (Pomfret, 2006)

The conceptual framework in Figure Three has been directly influenced by the research of Pomfret (2006). In differentiating these two frameworks from the model of Schreyer et al. (1985), a number of similarities between Pomfret’s framework and this research have been established. Ignoring the different adventure recreational focus, the model in this thesis diverges from the work in one fundamental way. Pomfret’s conceptual framework on mountaineering adventure, in ‘Mountaineering adventure tourists: a conceptual framework for research’ (Tourism Management, 27, 113 – 123), considers both non-commercialised and commercialised forms of mountaineering. This thesis, while acknowledging the role of guided mountain biking in certain environments, recognises that mountain biking as a commodified activity still forms a comparative ‘niche’, although, other than the tentative findings of this research, this assertion is based upon anecdotal evidence and no data confirming this are available.

It is argued that some of the factors identified by Pomfret (2006) as being influential on mountaineering adventure tourism, pertaining to escapism and the fulfilment of needs as push factors, are also relevant to participation in mountaineering as a ‘recreational’ activity. Furthermore, Pomfret’s mountaineering adventure tourism pull factors, such as
information searches, increasingly using the Internet, are also contended to apply to autonomous mountaineering activities. As the interviewee responses from this research illustrate, information is arguably even more useful for autonomous decision-making.

Similarly, it is considered that marketing stimuli, and other locational information sources, are important influences on mountaineering as both a recreational and tourism pursuit. The image and reputation of destinations are important factors that influence people’s perceptions of destinations and their willingness to recreate there. In the context of mountain biking for example, Koepke (2005) states that destination image is facilitated by the accumulation of mental images about a place; photography and imagery should therefore also play an important role in Pomfret’s (2006) recognition of tourism marketing stimuli. Furthermore, while social identity is recognised as a lifestyle factor by Pomfret (2006), it is contended that peer pressure, while not identified as a motivation itself in this research, nonetheless does play a role in determining spatial and temporal participation patterns. This thesis attempts to address these minor weaknesses by taking a wider range of exogenous factors into consideration for mountain biking as an adventure ‘recreation’ activity. These perceived flaws do not diminish the influence of this conceptualisation however.

7.3 Mountain Biking in New Zealand and the UK: Homogenous Influences on Participation

In Section 3.3.5 it is stated that it has not been an objective of this research to undertake a comparison of motivations, site attributes or other influential factors between mountain bikers in New Zealand and the UK. Analysis of the findings has determined that there are no substantial differences between participatory influences on mountain biking in the two countries. There are no appreciable differences in motivations to mountain bike for instance. It is beyond the scope of this research to determine the reasons for this relative homogeneity. Mountain biking is a well-established activity in both countries, however, with a high level of participation and a vibrant biking ‘scene’, which may result in a correlative maturity of attitudes and motivations. Mountain biking is a highly internationalised pursuit, and, for example, New Zealand readers are able to buy mountain biking magazines from Australia, the USA and the UK, while Internet access naturally facilitates the acquisition of information about bikes and biking culture. There are also
strong cultural ties between the two countries and, as suggested by the range of nationalities of the New Zealand mountain bikers sampled (Table Two on page 87), the population is demographically cosmopolitan, which may have resulted in the importation of beliefs and practices from other mountain biking cultures.

The only significant differences in mountain biking pull factors pertain to factors that are argued to be of relatively marginal import, the contradictions related to the importance of guidebooks and magazines as printed media, and antagonistic feelings towards the provision of trailhead amenities. While there has been great variance in the evolution of the system of access rights that have developed in the two countries, this is considered in Section 6.5.1 above, not as a factor that positively influences participation, however, but as a potential constraint.

There was a notable difference in the use of mountain biking magazines and guidebooks between the two countries: this is discussed in Section 5.21.3. In New Zealand the Kennett Brothers’ book, now in its seventh edition, is a respected and well-used guide to trails in New Zealand. In the UK, the well-established and extensive rights-of-way network dictates that guidebooks tend to be regional, and, perhaps as a consequence, less well used. A wider range of mountain bike magazines in the UK, conversely, perhaps explains why they are more widely read than in New Zealand, even if they appear to be no more trusted as sources of trail information.

Finally, as Section 5.9 discusses in detail, there were significant differences in interviewees’ feelings about the provision of facilities, at purpose-built trail centres in particular. A tentative explanation for these attitudes is proffered in Section 3.3.5. It is suggested that as many trail centres in the UK are located away from population centres, unlike in New Zealand, these riding destinations may need to offer a wider suite of biking facilities to attract potential users, particularly those riders, such as family groups, who may place less emphasis on the technical quality of the trails. Different levels of funding for purpose-built mountain biking centres could also account for the differing levels of facilities’ provision in New Zealand and the UK. This is argued to have consequently led to different expectations towards facilities among mountain bikers, and possible anomalies in motivations for visiting such trail centres. The findings determine, however, that amenities at trail centres and differences in usage levels between guidebooks and
magazines as sources of trail information are relatively insignificant factors. Furthermore, the research findings regarding settings attributes pertain to where people are legally allowed to ride, and therefore a detailed examination of access rights to such areas, while tentatively explored in Sections 2.9 and 6.5.1, strictly fall outside the scope of this thesis.

7.4 Discussion of Core Findings

Chapters Four to Six have discussed the range of influential factors on mountain biking. Each influence has been examined in detail with extensive use of quotations to ‘give a voice’ to the participants, and in the context of previous academic research undertaken on adventure recreation. In Section 4.1 it was explained that the detailed discussion of findings in those three chapters would not involve considerations of the relative importance of findings. The purpose of these following sub-sections is to address these issues and discuss the most important findings of this research, in the context of the existing literature.

This section is structured to consider, first, the key findings pertaining to mountain biking push factors: the motivations for participation. The most important pull factors identified by participants are then discussed, examining the key attributes of settings for the activity, followed by a dissection of the important sources of trail information accessed by bikers. An examination of the other principal social factors that can influence bikers’ decisions and actions are woven into these discussions as appropriate.

7.4.1 Motivations for Dedicated Riders’ Participation in Mountain Biking

Figure Three on page 219 illustrates the range of factors identified through this research that act as push factors, motivating people to mountain bike. These motivations are related predominantly to questions of why, but also explain, to varying degrees, aspects of the how and when people ride. They are predominantly, but not exclusively, intrinsic incentives to ride. The preponderance of affective motivations identified by the mountain bikers interviewed illustrates, and confirms, that people do not generally enjoy the sport for rational reasons. While some people do participate in mountain biking because it is a proven form of exercise, no participant does so purely for fitness. Recreational mountain biking is an activity that has few external rewards, and the range of affective motivations
identified confirms that interviewees take part predominantly for personal satisfaction and intrinsic benefits.

Responses also confirm that people do not tend to be motivated by a single defining factor, all the participants citing a range of motivations when asked in open-ended questioning about why they enjoy mountain biking. Conversely, no one interviewee identified the whole range of motivations as being relevant to them. Interviewees suggested that they can seek any combination of these motivations when they ride. This combination depends on the type of experience they desire: for example, it may be one based around mastering a challenge, where elements of risk or thrill can be prominent motivations, and the end result may be the type of optimal experience that is the preserve of those more intensive, demanding and rewarding activities.

The range of pertinent motivations that influence riding patterns therefore varies according to both the individual and the particular set of circumstances in which a biker chooses to ride. These circumstances can pertain to people’s feelings at any given time: if a person feels physically tired, for example, he or she may be motivated more by aesthetic appreciation and escapism, rather than the more dynamic motivations of thrill or challenge. To other interviewees, a ride, or indeed mountain biking as an activity, can purvey enjoyment of a different texture, relating to affective interaction with peers or the natural environment.

No one interviewee is motivated by the same combination of goals; similarly, no two rides will offer the ability to satisfy exactly the same motivations. It is suggested, therefore, that a rider’s behaviour can be influenced by both a set of deep-seated motivations for riding and more ephemeral motivations dependent on a prevailing mood or disposition. Analysis of their responses, however, has confirmed that a number of factors are perceived as being of particular importance, and can perhaps be viewed as core motivations to mountain bike.

**7.4.1.1 Physical Exercise**

Most interviewees commented they that enjoy the physical nature of mountain biking. While a few participants suggested that they ride for training purposes, in order to improve
their fitness for holidays or an occasional event for instance, many responses pertained to biking as an excellent way of keeping, or getting, fit. The activity’s efficacy as a means of physical exercise has been proven by previous research (Impellizzeri and Marcora, 2007; Pretty et al., 2007). While Cessford (1995b) reports that exercise is more important for beginners than more experienced riders, this research has confirmed it to be a key motivation for experienced and frequent mountain bikers.

7.4.1.2 Escapism

Responses confirmed that riding by oneself can be driven by the need to maintain fitness, although mental catharsis also figures prominently as an inspiration for solo riding. The breadth of responses regarding the mental release that riding can offer confirms previous research suggesting that relaxation and contemplation can be a principal reason for participating in mountain biking (Probert, 2004; Skår et al., 2008). The physical act of riding can act as a mental release in two ways: long, non-technical uphills can be a time for contemplation, while on downhill sections riders are focussed intently on what they are doing.

Some responses pertain to just removing oneself physically from the usual environment, which can have meaningful effects on riders, reinforcing an important link between physical escapism and a mental release. Terms such as ‘getting away from it all’ and ‘blowing off steam’ were used by interviewees to describe the positive effect that biking can have on their everyday lives. Almost antagonistic, however, were beliefs that interaction with others while riding also provides an element of escapism, as an opportunity to share problems. The potentially cathartic nature of personal interaction also helps to confirm the importance of mountain biking’s sociability as a core push factor.

7.4.1.3 A Sociable Activity

Most participants stated that they generally like to ride with other people, supporting previous research (Hollenhorst et al., 1995; Cessford, 1995b, for example) and confirming the inherently sociable nature of mountain biking as an important finding of this research. This motivation for riding can manifest itself in a number of ways, many participants using the time to catch up with friends. Others see riding with others, particularly those more
technically accomplished, as an opportunity for self-improvement. It was also suggested that mountain biking can represent a way of meeting new, like-minded people, as a shared activity acts as a focus and an avenue for meeting like-minded people. Finally, quite a few interviewees just felt that a good experience, a long and adventurous day out for instance, can become a great one when it is shared with other people.

Heavily imbued in the idea of the mountain bikers’ community is the idea that social recognition, or status, is an influence on people’s participation. The findings suggest that while social recognition is not considered by mountain bikers to be a motivation, commensurate with the findings of Skår et al. (2008), it is nonetheless an influential factor for many riders. Some interviewees stated that appreciation from other mountain bikers or one’s status in this peer group is not important to them, but they were in a minority.

As McGillivray and Frew (2007) suggest, in such adventurous pursuits the positive perceptions of others in the peer group, who can appreciate the meritorious nature of accomplishments from the recounting of risk-laden narratives for example, can reinforce both a sense of belonging to that community and a rider’s self-esteem. Interviewees’ thoughts on social recognition confirmed, however, that although there is an attraction in having a certain status among biking peers, it does not form, in itself, an inspiration to ride.

Another aspect of mountain biking related to the social groups with whom people ride is the role of peer pressure in affecting when, where or how people mountain bike. An issue that has received little or no academic attention in this field, many participants admitted that they could be influenced by others in these respects. A desire to be socially recognised can be inextricably linked in certain circumstances to pressures to perform. Interviewees suggested that peer pressure can be positive, through motivating riders to overcome inertia, or through developing skills by biking with accomplished riders.

Peer pressure also has negative connotations, however. Although few participants suggested there may be unwanted side effects of being pressured to perform, some were honest enough to admit that anxiety can set in when riders are struggling to keep pace. The nature of the interviewees’ feelings about peer pressure confirms that while it does not act as a push motivation, for many people riding in the presence of peers can motivate riders to conform to how they want to be perceived by others. In that respect, therefore,
the personal challenges presented by peer pressure and social recognition act as social factors affecting participation (see Figure Three on page 219), and form important components of mountain biking’s sociability as a motivation.

### 7.4.1.4 Mastering the Challenge

Mastering the challenges posed by trails, conversely, was confirmed as a key motivation in itself. The mental test associated with self-navigation, and self-sufficiency, in the back-country was identified by participants as quite an important motivation. More widely considered as an inspiration to ride are the psychological and physiological challenges posed by the technical nature of trails, which some riders felt elevated mountain biking beyond other sports in which they participate. Even easy climbs were seen by some riders as presenting a physical test.

As people become more skilled and experienced, and consequently better able to assess and overcome challenges (Martin and Priest, 1986), they are more inclined to seek ways of challenging themselves (Ewert and Hollenhorst, 1989). Only experienced bikers were interviewed for this research, and many participants suggested that the element of challenge is important to them. Mastery of a challenge can help create the necessary conditions for having ‘optimal experiences’ during participation, as people become totally absorbed in their activity. Several interviewees described how they try to manage their circumstances through the correct application of skill, which enables the peak experiences that can result from participation in adventure recreation. The findings of this research reinforce Varley’s (2006) belief, however, that ‘flow’ is not an important element in some adventurous experiences, but it can be a bonus or side effect.

While mountain bikers may regard flow as “the epitome of the off-road experience” (Brown et al., 2008: 15), it is recognised that flow is an elusive state (Jones et al., 2003), and such feelings can be both very individual and so embodied that it is difficult for mountain bikers to adequately narrate the intimacy of the experience (Brown et al., 2008). Such peak experiences can therefore be “characterized by individuals saying, ‘you have to do it to understand’” (Dodson, 1996: 317). In this research no interviewee mentioned optimal experiences or suggested that they can form a motivation to mountain bike. All of the components of flow (Csikszentmihalyi and Csikszentmihalyi, 1990), however, were
individually described quite accurately by a number of interviewees as feelings experienced while mountain biking. Interviewee feelings while riding attested to the ability to lose oneself in the moment, which can render one’s actions almost to the level of unconsciousness. Responses therefore imply that while optimal or flow experiences do not motivate people to mountain bike, they can certainly form intrinsic rewards for participation, as illustrated in Figure Three on page 219.

7.4.1.5 Seeking Thrills

Another component of flow is the matching of skill to the challenge or risk (Csikszentmihalyi and Csikszentmihalyi, 1990) posed by the trail. A key finding of this thesis, however, is that risk is considered a less important motivation than thrill. Many of the experienced riders interviewed did agree that ‘an element of risk’ is important in the activity. While risk can induce moments of anxiety, participants recognise the rewards which can result, both extrinsic in terms of recognition, and intrinsic feelings associated with flow. While most participants considered risk to be a desirable element of their riding, however, it was not considered to represent an important motivation to ride.

Substantiating a number of studies on adventure recreation, Ewert (1994) and Cater (2006) for example, the findings of this research suggest that seeking thrills for mountain bikers is a more important motivation than the seeking of risk. While Cater’s research is focussed on commercialised adventure experiences, the findings of this thesis accord with his research despite antagonistic loci of control, shifted from a professional operator to the self. A number of interviewees used a synonym for thrill when describing their enjoyment of mountain biking, such as the buzz, while some participants considered that the thrill comes from the notion of speed. Going ‘hell-for-leather’, as one interviewee termed it, undoubtedly also involves an element of risk, and many interviewees therefore saw a blurred line between thrill and risk. An inherent relationship between the two constructs supports Balint’s (1959; cited in Vester, 1987) definition of thrill as lying somewhere between harmful and harmless, but still exhibiting elements of danger and uncertainty. Some responses suggested that a thrill is unattainable without a degree of risk being taken, while others reflected that the thrill comes from taking a risk.
Taking a risk in itself, however, suggests an altogether more dangerous undertaking. The nature and breadth of responses confirm an inherent relationship between thrill and risk: achieving a thrill necessitates taking a risk, and if there was not a risk it would not be thrilling. In other adventure activities the role of risk is believed to have been overstated and motivations such as thrill or excitement are more pertinent (Weber, 2001). In mountain biking, participants appear more readily motivated to seek thrills without necessarily wishing to expose themselves to the greater degree of uncertainty or danger inherent in seeking risks. The discussion now turns to consider the attributes of settings that can satisfy these and other motivations.

7.4.2 The Key Attributes that Attract Mountain Bikers to Specific Recreational Settings

Site, or environmental, attributes, illustrated in Figure Three on page 219, generally refer to factors that pull people to individual locations, where mountain bikers try to satisfy their motivations. These factors do not necessarily pertain to the physical attributes of destinations however; sources of information can also attract people to locations at which to recreate. While many of these factors influence where people recreate, they can also account for temporal variations in participation, the all-weather characteristics of many purpose-built trails suggesting greater suitability for riding in winter for example.

Some of these site attributes refer to more socially-oriented characteristics, for example avoiding conflict with other users on the trail. Others pertain to perceptual qualities, mountain bikers’ attachment to places or trails for example. A few site attributes identified are activity-related, such as undertaking a guided trip, although such an option has obvious social and physical components as well. Most of these attributes, however, describe the physical properties of trails or riding destinations: tangible destination qualities (Yoon and Uysal, 2005). An interviewee, therefore, might describe their favourite ride, or perhaps an ideal trail, in terms of its material qualities, such as singletrack or trailhead facilities.

Other characteristics are more functional, being more cognitive than affective in orientation. Trailhead facilities, for example, range from the most basic provisions of water or facilities for ablutions to the more urbane facilities that cater for different riding motivations. Well-marked trails in a plantation forest environment also appear, ostensibly,
to be another functional attribute of a purpose-built mountain biking centre. It is apparent, however, that even such prosaic functional qualities can have affective implications. Well-marked trails may cognitively facilitate riding, as the rider doesn’t need to evaluate the route, but the affective benefit is the uninterrupted riding pleasure which may manifest itself in terms of thrill or fun.

Correlating to motivations to mountain bike, interviewee responses suggested that people do not generally seek one particular attribute, even on a single ride. While a decision to ride at a trail centre may be based around the attraction of riding singletrack trails, other factors are also usually pertinent. The knowledge that the trail will be free of walkers, and bikers riding in the opposite direction, may have a subtle, almost subconscious bearing on a decision to ride there, for example.

Similarly, a number of characteristics will determine a decision to ride on a traditional trail, such as the scenery or the sense of adventure. While the key attributes, which pertain to both traditional and purpose-built trails, are discussed in this sub-section, responses confirm that these factors rarely, if ever, act in isolation. While some attributes are clearly more important than others to interviewees, a variety of site characteristics determine where people ride to satisfy their motivations, the interaction of which is discussed in Section 7.5. The discussion of key attributes begins with perhaps the most highly prized biking setting (Koepke, 2005): flowing singletrack.

7.4.2.1 Singletrack and Flowing Trails

The terms ‘flowing’ and ‘singletrack’ were common responses when people were asked about their favoured types of downhill trails, and emerged as core site attributes for mountain bikers. More often than not the terms were used in conjunction, and their inter-relationship determines that they are considered together here. The advantages of singletrack, over forest roads for example, are the lack of motorised vehicles and the narrowness of the trail (Koepke, 2005), engendering a closer and more immediate interaction with the landscape. These trails also demand a high level of skill to negotiate either the technical obstacles encountered or the high speeds that smooth singletrack encourages. While some riders expressed a preference for technical trails, many favour these fast, flowing descents, synonymous with speed.
7.4.2.2 Variety of Trails and Features

A diversity of opportunities for mountain biking was cited as another core site attribute. Diversity pertains to having a variety of trails available, having the facility to choose between purpose-built and traditional trails, and being able to access trails that contain a variety of features or attributes. Having a range of trails to ride was suggested to be a key attraction of living in each of the research locations, one participant suggesting that a key attraction of the Shrewsbury area is the myriad local routes that enable the creation of different trail options to minimise over-familiarity.

Variety can also manifest in terms of trail features (Goeft and Alder, 2000; Symmonds et al., 2000). A track that can offer both technical sections and faster, more flowing options is therefore perceived favourably. The Hackett Track near Nelson was cited a few times as a good example, being generally an easy, scenic trail but with occasional technical sections. It is suggested that one of the reasons that variety is an attractive characteristic relates to the different motivations that can consequently be realised on a single trail, an issue discussed in Section 7.5.

Diversity, in terms of trail features and a range of accessible riding opportunities, is felt to be an important attribute of purpose-built mountain biking centres, such as Coed y Brenin in Wales. Most trail centres, in both New Zealand and the UK, offer a variety of different trails to ride, many catering for bikers of different abilities too. This can have implications for decisions about where to ride when members of a party may have different skill levels or have different motivations to ride. As the tracks are purpose-built for mountain biking, trail designers can engineer obstacles into the trail, a key characteristic of such trails (Swarbrooke et al., 2003). As well as attributes of the trails themselves, diversity can also pertain to the landscapes in which the trails are set, particularly in terms of their aesthetic characteristics.

7.4.2.3 Attractive Scenery

Attractive scenery was almost universally regarded by the mountain bikers interviewed as another core characteristic of riding destinations, one about which all participants had positive things to say. This finding supports a number of previous studies (Goeft and
Alder, 2000; Bowker and English, 2002; Heer et al., 2003, for example). While some interviewees suggested that the scenery is not a principal attribute that attracts them to individual settings, even these bikers admitted that it is still an important consideration.

In general terms, natural settings are the preferred sort of scenery. Only one interviewee felt that purpose-built trails can be sited in beautiful areas, many trail centres having been developed in plantation forest, which are negatively perceived by many riders in this respect. The aesthetics of their settings is considered to be one of the advantages of riding on traditional trails. While such routes can offer a rawer riding experience, either in terms of the ‘ungroomed’ nature of the tracks, as one participant termed it, or the sense of adventure that their setting can instil, traditional rights-of-way were popularly extolled for the diversity and beauty of their settings. One interviewee took a more philosophical perspective and explained that bikers feel more ‘embedded in the landscape’ on traditional trails.

Particular scenery types that riders enjoy appear very personal and cover a range of settings. Indeed some interviewees suggested that only a ‘change’ of scenery is required, experiencing landscapes that are demonstrably different to or contrast with their immediate environment. Although both study locations are located in very scenic areas, many of the interviewees live in urban or peri-urban settings, and can therefore desire natural settings in which to recreate. While some riders like to be in natural bush, others prefer to be above the bushline. A unifying factor, however, was the importance of great views that permit an appreciation of the landscape. Expansive vistas can mean more than just aesthetic appreciation, as the types of views that can be more readily found on traditional trails are felt to impart a greater sense of scale and one’s place in nature.

7.4.2.4 The Sense of Adventure

While the exploration of new areas has been identified in this research as a motivational factor, a sense of adventure is also a desirable property of traditional trails. Undertaking rides away from the generally manipulated settings of trail centres can result in an inherent sense of adventure, where self-reliance and direction can determine the outcome. This was considered to be important to a number of riders. These trails can convey riders well beyond the suburban realm, instilling a sense of exploration and space, whether literal or
metaphorical. Perceptions of such routes as an antidote to the *McDisneyisation* (Ritzer and Liska, 1997) of ‘commercialised’ trail centres can be reinforced by the longer, wilder rides into the backcountry that can often define traditional trails. The depth of feelings from many participants confirmed that a key attribute of traditional trails is their ability to offer a sense of adventure that is felt to be missing from trail centres.

### 7.4.2.5 Avoiding Conflict on the Trail

Conversely, interviewees suggested that a core attribute of purpose-built mountain biking trails over traditional trails is that they offer riders an experience devoid of conflict with other recreational mobilities, especially the often hegemonic walkers. While few issues with walkers were reported by interviewees, the potential for conflict was recognised. Many of the interviewees also enjoy, or have previously enjoyed, hiking, and therefore appreciate that there is an inherent tension on mixed-use trails, an issue that has been the subject of considerable academic attention (Ramthun, 1995; Carothers *et al.*, 2001; Cessford, 2003, for example). All the interviewees ride a mixture of traditional and purpose-built trails, however, and accept that compromises are required to enable all trail users to enjoy the outdoors, their responses suggesting an appreciation of potential conflict issues, commensurate with the findings of Heer *et al.* (2003) and Brown *et al.* (2008).

Trail centres negate at source potential discord with other users who are perceived to impinge upon bikers’ experiences, through the provision of unidirectional, mountain bike-only routes. In the context of such trail centres these features are universally liked. The findings of this research suggest that the intrusiveness of motorised users on some rights-of-way undermines a number of affective motivational qualities sought in natural environments, escape and relaxation for example. These constructed riding environments therefore obviate such disadvantages associated with riding rights-of-way where other user groups may recreate. Aside from reducing potential conflict, purpose-built trails also have a number of other identified attributes that makes them popular settings for interviewees.

### 7.4.2.6 Other Pull Factors: Information Sources

The analysis of findings in Chapter Six confirms that a range of key information sources, both intrinsic and extrinsic, can also act as situational pull factors and influence
mountain bikers’ decisions about where to ride. If riders have internalised knowledge about places, or seek information from an external source, that knowledge can serve to attract them to these locations, where motivations for riding can be consequently reinforced. While external information sources can also arguably affect how people ride, for example through articles on riding techniques in mountain biking magazines, it is the influence on people’s destination decision-making that is considered the most important use of these important sources of information. These factors are shown in Part B of Figure Three on page 219.

7.4.2.7 Place Attachment

The interviewees’ own past experience of locations can result in return visits if the experience is satisfactory, as well as inducing an attachment to a place or generating positive feedback to peers (discussed in Section 7.4.2.9). Interviewees’ place attachment was suggested to be developed in two ways: either from riding trails close to home or from trails nostalgically associated with their formative years as mountain bikers. The findings of this research confirm that place attachment is an influence in determining where bikers ride. While Skår et al. (2008) found no great sense of place attachment among bikers in Norway, the findings of this thesis reinforce Horn et al.’s (1994) suggestion that mountain bikers need to interact with a place to be able to identify with it. A few riders indicated that they feel a special affective bond to a location because that place played an instrumental role in their formative biking years, where they first rode a mountain bike for example. It is suggested that contemporary rides on those trails can induce a sense of nostalgia from mountain biking memories as a child.

Many interviewees, however, confirm Mesch and Manor’s (1998) belief that place attachment develops through experience of the local environment. Interviewee responses suggested that if people feel an attachment to a single place, it is most likely due to its proximity. Being able to access trails on a frequent basis facilitates an enhanced level of interaction with the location. While repeated use of more prosaic trails may result in ennui and a desire for novelty, if the trails have sufficient characteristics to attract riders back the resulting attachment to the place can override such limitations. While some participants nominated local rides because they combine proximity with the trail features that are considered desirable, others suggested local areas not because of the physical qualities they
possess but for the opportunities to satisfy different motivations, escapism for instance. If new experiences are sought, however, then external sources of information will probably need to be accessed.

7.4.2.8 External information Sources

If a search of internal memory for relevant information fails to yield the desired results, external sources of situational knowledge suggest a range of possible origins. These range from traditional media to more contemporary electronic sources. When interviewees were asked in open-ended questioning about the information sources they use, a number of core media were identified: word-of-mouth recommendations, printed sources in the form of guidebooks and magazines, and the Internet.

Word-of-mouth recommendations are the most important factor influencing destination choice reported by interviewees, a similar finding to the quantitative studies of Bowker and English (2002), Green (2003) and Gajda (2008). All the participants stated that they would be happy to make such recommendations to others, while nearly everybody uses them as sources. The key characteristic of word-of-mouth sources are perceived to be their credibility and trustworthiness, some interviewees even trusting the integrity of recommendations from people they had never met before. Although most interviewees would be more sceptical about trusting information from somebody they did not know, a surprising number were more willing to put the knowledge received to the test.

The Internet is also frequently used to access trail information, although deemed by interviewees to be less important than other people’s recommendations, a finding also reported by Gajda (2008). Interviewees felt that one of the principal advantages of the Internet is that it is a convenient means of gathering data. The Internet is used both as a primary source and also to reinforce information gathered from elsewhere. While websites, those of mountain bike clubs for instance, and the use of e-mail for disseminating information are popular information sources, other electronic means, for example forums, are much less widely used.

While one participant suggested that electronic means have displaced traditional printed media, magazines and guide books are still widely read and used for trail information,
although they perform roles of differing relevance, as discussed in Section 5.21.3. While some interviewees felt that the dynamic imagery used in books or magazines can help to portray the qualities of destinations, others felt that imagery of mountain biking can be very generic in nature (correlating to the research of Page et al., 2006), or that it plays a secondary role to textual information, precipitating actions to discover further information. A number of participants were enthusiastic about photographs they had seen of trails, inspiring them to visit these destinations. While great imagery can help people visualise locations or trails, responses indicated that other forms of dissemination play a much more important role in terms of learning about new places to mountain bike. The following section examines how the whole range of pull factors, including information sources, interact with motivational push factors to influence participation.

7.5 The Interaction of Mountain Biking Push and Pull Factors

The research objectives have established that the purpose of the thesis has been to identify the range of factors that influence people’s participation in mountain biking, and to develop a conceptual framework to illustrate these influences. The framework displays these factors not in a causal network, but an open structure. The discussion now progresses, however, beyond such illustration to explore, in theoretical terms, the relationships between the push and pull factors and other aspects that may influence or result from participation.

7.5.1 Other Conceptual Research on the Interaction of Push and Pull

It is believed that understanding recreationists’ behaviour “requires consideration... of both generalised intrinsic motives and reactions to site-specific attributes that are the ‘pulls’ that enable the ‘push’ motives to be satisfied” (Pan and Ryan, 2007: 303). It is the interaction of these push and pull motivations that determine a satisfactory experience (Yoon and Uysal, 2005). This accords with the conceptual work of Schreyer et al. (1985) and Pomfret (2006) that has been influential in shaping this research on mountain biking (Section 7.2.1). Other authors have encapsulated this relationship differently. In their research on mountain bikers’ claims for recreational space in Scotland, Brown et al. (2008: 10) propose that:
When planning an outing, mountain bikers place a variable emphasis on the *place* to be visited or the *experience* sought. With outings that are place-led mountain bikers seek particular landscapes... it is just a question of *how*. Conversely, with more experience-led outings, mountain bikers wish to have a particular experience... it’s just a question of *where*. The ways in which this unfolds are, in practice, far more complex and appear to depend on a whole host of factors.

Decisions about where to mountain bike are therefore influenced to varying degrees by ‘place’, or the attributes of that place, and ‘experience’, the motivations for that experience. The authors suggest that some rides are led by motivations to ride and settings are sought to satisfy these motivations. The authors depart from the findings of this research, through the proposal that sometimes the choice of location to mountain bike is place-led, where riders are seeking specific landscapes. The discussion of scenery in Section 7.4.2.3 suggests that while participants do generally desire attractive settings for mountain biking, this attribute for many riders is of secondary importance and their general participation is more likely to be experience-led. Regardless of whether rides are experience- or place-led, the inherent complexity of such decisions is acknowledged, and Brown *et al.* (2008) suggest a range of other factors that can affect these judgements, the social context, weather and time constraints for example.

### 7.5.2 Recognising Interactional Complexity

The findings of this research confirm that the range of factors that influence the choice of location at which to ride is indeed complex. The framework in Figure Three on page 219 illustrates that explanations regarding why people participate in mountain biking cannot be limited to just considerations pertaining to why they enjoy it, but are the result of a broader range of interrelated factors. In the context of this specific activity for example, motivations may explain the reason for both a mountain biker’s general participation in the activity and, more specifically, their intrinsic goals for riding on an individual occasion.

While some interviewees were particularly vociferous in proclaiming motivations such as thrill to be the principal reason why they love mountain biking, all were motivated by a range of push factors, rather than by one factor alone. It is very unlikely that people seek to satisfy only one motivation at a time, and a single trail will have a series of characteristics that realise a number of different motivations. Riders can also seek to
satiate very different sets of motivations on a ride: escapism and relaxation as opposed to challenge and thrill for example.

It is apparent that some factors pertain to both motivations to mountain biking and the environmental attributes that draw a rider to a particular location. For example, while accessing areas of beautiful scenery, and the consequent affective outcomes, may be seen as a motivation for participating in mountain biking as an activity, a multitude of landscapes exist in which one can ride. These locations offer varying degrees of aesthetic attraction, from plantation forest to high-altitude alpine scenery; great scenery can therefore be an attribute that is sought at a particular location, as well as a motivation for riding.

There are also a number of commonalities in meaning between a number of motivational factors and site attributes. The activity’s accessibility, for example, is seen by many interviewees as an important motivation for mountain biking, as people can ride at relatively short notice without needing a great deal of organisation. Accessibility, however, also pertains to the proximity of trails to the study locations that enables the pursuit to be readily consumed.

7.5.3 The Multi-Dimensional Nature of Cross-Country Mountain Biking

The wide variety of settings that can be accessed and the diversity of motivations that can be satisfied are argued to form a key aspect of mountain biking as a form of adventure recreation. It is proposed that having a range of motivations that can be realised simultaneously is core to the activity’s appeal. This helps to differentiate it as an activity, it is argued, from other easily accessible, mainstream sports, hiking for example, that are unable to offer such a range of dynamic and passive benefits. Conversely, the variety of mountain biking settings and their proximity to the study locations illustrate how accessible mountain biking is, compared to more spatially constrained adventure recreation activities, those that are water-based for instance. The ability of cross-country mountain biking to satisfy multi-dimensional motivations is argued to be in itself a holistic motivation for participation. Compared to downhill biking for example, it offers a diversity of challenges and strenuous physical exercise, two core motivations, as discussed
in Section 7.4.1. Cross-country riding is therefore argued to satisfy a diversity of affective and cognitive motivations that downhill does not.

7.5.4 The Interaction of Push and Pull Factors: A Discussion of Research Findings

However participants are inspired to ride, motivations can only be realised by participation at certain settings. It is the combination of the attributes of potential settings and push motivations for mountain biking that determine the choice of playground for the reproduction of their needs and desires. With reference to Figure Three, it is apparent that some identified motivations correlate quite easily to a number of site attributes. A mountain biker motivated by mastering the challenge is likely to be attracted to destinations that promise technical or challenging trails. Being perceived as a biker who relishes challenge also has positive connotations in terms of increasing his or her social status among peers, and his or her self-esteem. Similarly, traditional mountain biking trails, that offer the potential for a long ride in wild areas and a consequent sense of adventure, can appeal to a person inspired to explore the natural environment.

Conversely, various push-pull relationships are inherently antagonistic in nature. Riding on marked trails at a purpose-built mountain biking centre, where the trailhead provides a range of sophisticated amenities, might frustrate a biker in search of peace and escapism. These trail attributes are therefore very subjective in terms of their desirability. A few riders expressed a desire for open landscapes, for instance: while such a setting may satisfy a need for both exploration and escapism, its unattractiveness to other bikers also has connotations in terms of negating potential social conflict. Other riders, however, positively disliked such landscapes.

In reality, it is improbable that mountain bikers choose destinations based upon individual attributes, in the same way people are arguably predisposed to be motivated to undertake a ride by a range of push factors. Similarly, individual attributes can satisfy a range of push motivations. Most interviewees considered attractive scenery to be a core setting characteristic, and it is suggested that great scenery can satisfy a number of motivations, from adventure and exploration to escapism, for a change of perspective. Several participants implied that excitement can also be inspired by great scenery, where
thrill is more holistic in nature than the dynamic motivation that has been discussed previously in this chapter.

A number of factors are evident in Figure Three, on page 219, that have not been identified as push motivations, but which can still have an important influence on destination decisions. Poor weather can act as a constraint, but can be very influential in affecting destination decisions, especially a choice between purpose-built and traditional trails (as discussed in Section 7.5.4.2). Access rights also constrain where people are permitted to ride. This has obvious spatial implications, although the findings of the research are based upon an assumption that people only ride where they are legally able to. Peer pressure can also have a significant impact of the choice of location, whether acting as a constraint or an enabling factor. Many interviewees admitted that they can be pressured into riding at certain destinations by their friends or others in the riding community. Even consensus can pressurise decisions. While not a motivation in itself, from responses it is apparent that peer pressure inarguably plays a key role in choosing settings.

7.5.4.1 Thrill, Flow and Flowing Singletrack: Mountain Biking Nirvana?

Other interactions between push and pull factors, that may ostensibly be more oblique, are considered to be core relationships for mountain bikers. Many riders expressed a desire to be thrilled on the bike (Section 7.4.1.5). While trails that promise thrills are naturally commensurate, a number of responses reinforced how it is the potential thrills offered by flowing singletrack trails (Section 7.4.2.1) that can motivate people to seek out the environments where these attributes are perceived to exist.

This relationship can be explained generally in terms of smooth trails encouraging fast riding, many bikers professing a love of speed. Flowing trails can be characterised by their relatively smooth surfaces that allow the rider to achieve a certain level of momentum and enable the trails to be ridden without this momentum being interrupted by obstacles. These two factors combine to create the desirable rhythm that symbolises a flowing trail. The perceived association of the terms ‘fast’ and ‘flowing’ by a number of participants suggests that flowing trails are often conducive to speed on the bike. It was suggested by one participant that the thrill on downhills comes from riding fast flowing trails,
encapsulating the inextricable link between a fast, flowing trail and thrill as a core motivational factor. The aforementioned association between ‘flowing’ and ‘singletrack’ highlights why these narrow trails that demand immediate and reactionary handling skills, and that reward with a heightened sense of interaction, are such popular and desired mountain biking settings.

The link that may be suggested by the trail characteristic ‘flowing’ and the intrinsic rewards that are exemplified by the feelings of ‘flow’ is ostensibly more difficult to establish. The lack of direct interviewee response pertaining to the feelings of flow during participation in mountain biking was discussed in Section 4.7.5. The fact that participants responded to other open-ended questions, regarding their psychological feelings while riding for example, with feedback that was directly commensurate with the components of flow implies that intrinsic rewards are experienced however.

Deeper exploration of responses uncovers links between these optimal feelings and trail characteristics. Flow is described as requiring a balance of challenge of skill, intense concentration, clearly defined goals and immediate feedback (Csikszentmihalyi and Csikszentmihalyi, 1990), and can be characterised by feelings of exhilaration (Varley, 2006). All of these elements have been described by participants, many of whom are more likely to seek fast and flowing (singletrack) trails as desirable site attributes than slower, technical trails.

When asked about their psychological state while riding downhill, participants narrated feelings such as ‘thinking about nothing but the trail ahead of you’ or ‘riding without consciously processing’. In Nelson for example, the Dun Mountain trail was cited as a great trail by a few riders, of whom Simon is one, particularly for its ‘flowing downhill singletrack’. Explaining that the speed of the trail is one of his favourite aspects, he went on to explain how he could ‘totally lose himself in the riding’. These feelings correlated elements of the flow experience – intense concentration and losing track of time – with an obvious desire for speed, on the sort of flowing singletrack that characterises the Dun Mountain trail.

Riding on technical trails might facilitate some of these characteristics of flow, most notably in terms of intense concentration or applying the correct level of skill to the
challenges encountered. The nature of responses regarding trail psychology suggest that flowing trails, however, characterised by momentum and rhythmic action, are more likely playgrounds for the ‘loss of self-consciousness’ or the ‘unconscious sense of control over actions’ that reward endeavour and application. Such smooth and flowing trails are therefore arguably the environment most likely to induce intrinsic rewards.

7.5.4.2 Purpose-Built and Traditional Trails: Attributes to Satisfy Different Motivations

A number of site attributes have already been identified in this section that pertain directly to traditional routes or purpose-built trail centres. It is apparent that the widely-perceived characteristics of these two broad types of settings for mountain biking can offer diverse experiences to riders and satisfy different sets of motivations. A number of interviewees made concise judgements when asked how they might decide whether to ride on purpose-built or traditional trails, rationalising differentiation of the two experiences in terms of the adventure or the journey aspects of traditional trails for example. Responses suggested that a ride on a purpose-built track may be motivated by more dynamic motivations such as thrill or challenge, and may be seen as offering a condensed biking experience.

Most trail centres have unidirectional routes segregated from other users that offer safety advantages, and enable bikers to satisfy dynamic motivations, challenge and thrill for example, without concerns of conflict. They are also able to offer a variety of trails in a single location and a diverse range of trail features engineered into the trails. Singletrack trails can be specifically constructed because they are mountain bikers’ preferred trail types (Cessford, 1995b). It is apparent that riders today, to varying degrees, are demanding much more sophisticated facilities than those typically identified in earlier studies (Goeft and Alder, 2000; Bowker and English, 2002). A café, showers and a shop at a trail centre are increasingly expected these days, and are provided at many purpose-built centres, especially in the UK (see Section 5.9.1).

Several riders considered that the availability of all-weather tracks at many trail centres is the key to deciding whether to ride on purpose-built tracks or traditional rights-of-way, as a number of interviewees appreciated that both purpose-built trails and their often
sheltered settings make them a more appropriate choice in wet weather. Conversely, some riders expressed a definite preference for more open settings on sunny days. While all-weather trails enable mountain biking to be accessible as a year round activity for many, responses suggest that for some riders the weather conditions on the day can override all other considerations, regardless of the season.

Traditional trails, conversely, can offer a very different riding environment, with a number of characteristics of their own that make them desirable settings for mountain biking. These include the natural landscapes in which they are often located, a more organic feel to their naturally-evolving trail surfaces, a greater challenge from both riding these trails and navigating one’s way around them, and the greater sense of adventure that can result. A ride on a traditional trail can offer possibilities for adventure, something that may be, as one interviewee suggested, better enjoyed in the company of others. Participants used terms such as ‘the unknown’, ‘more scary’ or ‘more of a mission’ to describe rides on such trails. It is apparent that these settings can offer very different riding experiences, and being able to choose between the two is a desirable position for mountain bikers, as well as a principal reason for the choice of study locations (discussed in Section 3.3.6).

It is accepted that not all purpose-built routes offer such qualities, nor do they necessarily lack the aforementioned characteristics of traditional trails. Likewise, traditional rights-of-way can be sited near to facilities and provide well marked trails for example. Some such routes are also located in landscapes that have been extensively modified by human endeavour, precluding such a sense of aesthetic appreciation or sense of exploration. The patterns suggested are interviewees’ thoughts and feelings regarding not individual locations but typical ‘traditional trails’ and ‘purpose-built tracks’.

7.5.5 The Problems Inherent in Examining Push-Pull Relationships

While these responses may suggest a degree of homogeneity of thought regarding why mountain bikers would choose to ride one trail type over the other, participants’ feelings illustrated the danger of pigeon-holing people’s motivations. While some riders thought that purpose-built trails offer a greater sense of challenge, others felt the opposite, believing that traditional trails offer the greater challenge. This bifurcation of responses
confirms the difficulties inherent in matching the highly personal motivations of individuals with two different recreational spaces.

In general terms, the dichotomy of participants’ thoughts and feelings reinforces the difficulties inherent in matching push motivations with pull attributes, as suggested by Klenosky (2002). Interviewees suggested a number of reasons: different levels of experience, either their own or their peers’; people enjoying different types of terrain; or merely reflecting people’s changing moods. Experience, for instance, can play a role in decision-making, and while many trail centres cater for less-experienced riders, a ride over naturally-evolved trails in wild areas may be too daunting a prospect. Enjoyment may be related to technical ability or experience, but riders have trail preferences regardless of skill. This is illustrated by the fact that more participants preferred smooth, flowing trails to technical ones, even if they are experienced enough to ride them.

Other participants considered their own preferences for trail types in relation to those of their riding peers. In doing so they admitted that in an effort to please friends they may ride on trails that surpass their comfort zone. The range of feelings, and contradictions inherent in establishing patterns, confirm the very personal nature of needs and desires and the diversity of settings that are required to satisfy people’s motivations to ride.

7.6 Contributions to Academic Knowledge

It is argued that the research undertaken for this thesis contributes new and original material to the existing pool of academic knowledge, in the fields of both adventure recreation and, in particular, mountain biking. This contribution is fivefold: first, examination of the whole range of factors that influence the participation of dedicated, experienced riders in mountain biking; second, the identification of previously undiscussed participatory influences on mountain biking; third, confirmation of the usefulness of qualitative research in the identification of participants’ thoughts and meanings; fourth, the illustration of these factors in a new conceptual framework; and finally, the thesis also has implications for understanding participation in general, non-commodified adventure recreation activities.
7.6.1 Examination of the Wide Range of Participatory Influences on Mountain Bikers

It is suggested in Section 1.3 that no previous research in the field of mountain biking has attempted to examine the full range of influences on dedicated riders’ participation in the sport. Furthermore, the site attributes for mountain biking are very specific to this activity, and many desirable attributes for mountaineers, for example, are arguably irrelevant to mountain biking. The thesis’ attempt to identify and explain the site attributes that delineate riding on traditional rights-of-way and at purpose-built mountain biking centres also represents a novel research approach, as no previous studies have been identified that examine the different characteristics that motivate participation on these different types of trails. As discussed in Chapter Five, these two riding environments, while undoubtedly sharing many attributes, each have their own desirable characteristics: accordingly, purpose-built and traditional trails can satisfy different combinations of motivations.

Those studies that have attempted to understand these issues more holistically, moreover, including all the aforementioned studies, have utilised quantitative research methods. While the breadth of information that can be garnered using this technique is acknowledged, it arguably fails to convey the essence of motivations and site characteristics that qualitative research permits. Furthermore, to date no research has incorporated wider associated considerations related to other factors that influence destination decisions, for example the importance of word-of-mouth recommendations or magazine articles as sources of knowledge. A few studies have quantitatively tested some important information sources (Gajda, 2008; Green, 2003, for example), without ascertaining, for instance, the reasons for their significance, credibility or trustworthiness.

It is contended that a true understanding of participation remains elusive unless all such influences are considered. The contribution of this framework, and the analogous research, is not, for the greatest part, to suggest new theory. Most theoretical elements pertaining to motivations and environmental attributes, for example, are acknowledged to have been examined. Those new factors that have been identified by this research are discussed in Section 7.6.2 below. The multi-dimensional approach to understanding participation in mountain biking in this thesis, as illustrated in Figure Three on page 219, is
one of the defining and original characteristics of this research, and represents an important contribution of this research to the existing academic knowledge in this field.

### 7.6.2 Identification of New Participatory Factors

The use of open-ended questioning in this research allowed interviewees to identify the wide range of factors that influence their participation in the activity, and to elucidate upon their personal importance. As a consequence, while the research may confirm, or indeed refute, the importance of certain motivations identified in other mountain biking research (Cessford, 1995b; Skår et al., 2008, for example), it has been able to establish a number of factors that, the author believes, have yet to be examined in existing research on mountain biking.

New influential factors that have been identified and discussed pertain to both motivations and site attributes. It is believed that no mountain biking research previously undertaken has considered the issue of peer pressure for example. A considerable number of participants in this research, however, believe that pressure from peers can influence not only how they ride, but also where and when they mountain bike. A number also identified the role of others in influencing their decision to take up the activity.

It is also argued that a number of new environmental attributes have been introduced into the mountain biking literature. Participants identified a number of key preferred characteristics of trails that have been previously ignored. A sense of adventure and the potential for exploration is considered an important asset of traditional rights-of-way for example. Conversely, the variety of trails and trail features offered on purpose-built mountain biking routes is an important attribute, especially as the nature of the trail design and implementation renders many of these trails relatively impervious to the weather and therefore able to be ridden all year round.

In more general terms, interviewees extolled the virtues of flowing and thrilling descents. Fun and thrill are terms have arguably been under-researched in adventure recreation research, but responses highlighted their importance as trail characteristics. The term flow has obviously been used in adventure recreation in terms of intrinsic rewards for participation (Csikszentmihalyi and Csikszentmihalyi, 1990), as discussed in Section 4.7.5.
A number of participants however described flow or flowing as a trail attribute however. Often used in conjunction with the term fast, it highlights the importance of speed to many interviewees, and the consequent dynamic motivations that that trail attribute satisfies.

The accessibility of mountain biking as an adventure recreation pursuit has not been examined previously, but is seen by many interviewees as both an important motivation and a key site attribute. A mountain bike ride can be organised at a very short notice compared to most adventure activities, and the plethora of routes available locally, within the study locations for example, enables the satisfaction of this motivation. Finally, while the subject of this research has been the autonomously-managed riding that forms the greatest percentage of riding patterns, using a professional guide to explore new countries, for example, was identified as a potentially attractive option for many interviewees. The commodification of mountain biking is another area yet to be researched: anecdotal evidence regarding the number of professional operators in this field suggests this increasingly important option warrants further study.

The research has also been able to update previous findings that have become obsolete for a number of progressive reasons. Interviewees explained, for example, how the Internet has become a more important information tool than printed media such as guidebooks and magazines, a finding that contradicts the earlier data of Bowker and English (2002). Similarly, the trailhead facilities examined by authors such as Goeft and Alder (2001) are much more limited in range than those identified and discussed by interviewees in this research. Cafés and showers for example were not examined in the earlier study, illustrating the changing nature of mountain bike participation, as discussed in Section 5.9.

7.6.3 Contributing to a Deeper Understanding of Participation: the Role of Qualitative Research

This thesis does not represent the first research on mountain biking to have been undertaken using a qualitative method, although its employment has been scarce: it has been used by Probert (2004) on escapism and Brown et al. (2008) on conflict, two highly-focussed studies. While Horn et al. (1994) report qualitative findings as part of mixed-
method research, considerations of motivations are incidental to the focus of the study, also on conflict.

The majority of academic research on mountain biking, therefore, has used a quantitative method. This includes the work that has been more influential on this thesis, and discussed extensively in Chapter Four to Six as a result (Cessford, 1995b; Bowker and English, 2002; Skår et al., 2008, for example). While a quantitative method can undoubtedly yield worthwhile and more generalisable findings, it is argued that a deep understanding of experiences and their related meanings is only enabled through the use of a qualitative approach (Patton, 2002), and motivations cannot be adequately explained by numbers (Tolich and Davidson, 1999).

The use in this thesis of a qualitative method to research mountain biking is unique, in that no in-depth research has asked bikers through open-ended questioning what motivates them to ride. Similarly, no open-ended questions have asked of mountain bikers the site attributes and sources of information that are important to them and, crucially, the reasons why these factors are important. In these respects, therefore, the research is believed to confirm the relevance of qualitative research in deepening understanding of adventure recreationists’ participation in their chosen activity.

7.6.4 A New Conceptual Framework for Participation in Mountain Biking

Taking cognisance of a range of conceptual research in the fields of recreation and adventure recreation (particularly Schreyer et al., 1985 and Pomfret, 2006), as discussed in Chapter Two and Section 7.2, this research has introduced a new conceptual framework that illustrates the range of participatory influences on experienced, dedicated mountain bikers (Figure Three on page 219). The framework illustrates, in an open network, the factors that interviewees in this research have identified as influencing participation in mountain biking.

Research has been undertaken on mountain bikers’ motivations (for example Skår et al., 2008), site attributes (Bowker and English, 2002), or a range of participatory influences on mountain bikers (Cessford, 1995b). No previous studies in this area have attempted to understand the breadth of participatory influences, however, including socially-oriented
factors for instance, or to illustrate these factors in a model. This framework is therefore the first that has been developed specifically for the adventure recreation activity of mountain biking.

A strength of the framework is as a readily understood illustration of the wide range of participatory factors. Not just a simple list of influences, it acknowledges that participation in mountain biking is comprised of motivations that push a person to recreate and factors that pull them to individual trails or destinations at which they believe their motivations to ride will be realised. Furthermore, the framework, concordant with Pomfret (2006), suggests that information about those destinations can act as a pull factor in its own right, yielding the necessary knowledge about those places to inform a decision to recreate there. It also presents other elements that can occur as by-products, such as the intrinsic rewards associated with feelings of flow, or that can influence participation in a negative manner, acting as constraints upon participation. The consideration of these temporal and spatial constraints introduces a new perspective to other adventure recreation conceptualisations (Fluker and Turner, 2000, for example). Rather than just being subsumed as aspects of mountain biking as a sociable activity, the framework also recognises that while factors such as peer pressure and social recognition may be significant influences on how or where people ride they do not act as motivations to participate at the more fundamental level. While it lies beyond the remit of this research to examine the mental processes through which these factors interact, participation is a state that can only be properly understood at the conflux of these influences.

The framework is also argued to positively build upon previous research. While the influence on this thesis of Pomfret’s (2006) conceptual framework is acknowledged, in Section 7.2.1 it has been argued that the work has a number of weaknesses. First, it ignores the relevance of factors such as peer pressure, found in this research to be an important influence on participation. Second, it ascribes other variables such as escapism or the Internet as an information source as influences on mountaineering as a touristic activity, but not as a recreation activity. This research has found that both these influences are important recreational factors push and pull factors respectively. In that respect, this framework adds to and improves elements of previous, related work. Finally, Pomfret’s model remains a conceptual work (although see Pomfret, 2009), while the framework in
this thesis has been developed as the end result of inductive analysis of empirical research, basing its structure on the thoughts and feelings of mountain bikers.

The model also makes notable contributions to the wider research on adventure recreation. It is argued in the next section that a number of similarities exist between mountain biking and other examples of ‘hard’ adventurous activities with an internal locus of control, such as mountaineering or whitewater kayaking. While elements of the framework, site attributes for example, are acknowledged to be more activity-specific, all the other participatory influences, from motivations to social factors, can arguably correlate to a high degree to other autonomously-controlled adventure recreation pursuits. The framework could be used as the basis for empirical testing of other adventure-related activities, or for pursuits that share other characteristics with mountain biking, road cycling for example. It is therefore argued to have direct academic application beyond the narrow scope of mountain biking alone. Through its basis on empirical research, its relevance to other adventure recreation activities and its originality in the field of mountain biking, the framework is argued to make an important contribution to academic research on mountain biking.

7.6.5 Implications of the Findings for Adventure Recreation Research

This thesis is argued to have a number of other applications to the wider adventure recreation field other than the framework discussed in the preceding section. While the site attributes of trails and destinations that attract riders are inherently particular to mountain biking, and the research findings pertaining to these characteristics therefore cannot generally be translated to other adventure recreation activities, motivations and other decision-making influences are contended to differ in this respect. While they naturally pertain specifically to mountain biking, the discussions surrounding a number of motivations are also arguably relevant to wider adventure recreation research, the debate over the importance of seeking thrills and seeking risks for example. Considerations of peer pressure affecting participation patterns are also not exclusive to mountain biking, and they are argued to be relevant to issues of how, when and where people participate in other adventurous pursuits.
Such findings have particular resonance with adventurous activities that also lie towards the ‘hard’ end of the adventure recreation continuum, and therefore share a number of similar characteristics with mountain biking, such as autonomous control, uncertainty of outcome, physical demands and a required level of skill (Ewert, 1989; Cloke and Perkins, 1998; Beedie, 2003; Swarbooke et al., 2003). Sharing these characteristics, mountaineering and whitewater kayaking are two examples of activities that are believed to have significant motivational correlation with mountain biking at this hard end of the spectrum.

A number of studies have been undertaken on motivations in other adventure recreational pursuits (for example, Ewert, 1994 on mountaineering; Kane and Tucker, 2004 and Morgan et al., 2005 on whitewater sports). It is the author’s assertion that the findings of this research are able to be assessed in the context of these studies, confirming a number of previous conclusions regarding motivations for participation. The findings of this thesis are also commensurate with certain data from research on commodified adventure activities, for example on thrill (Cater, 2006) and locational aesthetics (Cloke and Perkins, 1998). These are discussed in the context of each motivational factor in Chapter Four.

The range of influential information sources may also have a number of similarities with other adventure recreation activities. Very little research has been identified that has examined media factors in the context of other activities however (Page et al., 2006 on promotion and Pomfret, 2006 on tourism marketing in mountaineering, for example, are exceptions). The findings of this thesis, pertaining to the range of internal and external sources of information, are believed to be relevant to other recreational activities. Word-of-mouth recommendations, the Internet and specialist publications for example, would suggest themselves as important information sources for mountaineering participation for instance.

The range of findings of this thesis, resulting from the broad scope of the research, precludes comparison with other conceptual research on adventure recreation, Martin and Priest (1986) and Ewert (1987) for example. Martin and Priest’s adventure experience paradigm, for example, considers adventure as a state of mind arising from an interplay of risk and competence. While these are undeniably important in mountain biking, risk and challenge are but two factors within a much broader range of motivations relevant to
mountain bikers. As Ewert’s adventure model principally sought to make predictions regarding how people’s motivations change as their experience changes, its focus departed from this thesis, where experience related pre-assumptions were made when selecting research participants. It is the wide-ranging nature of this thesis that differentiates it from such research, and that draws its influence from the other conceptual frameworks discussed above.

7.7 Concluding Remarks

The value of the conceptual framework in Figure Three (page 219) is as an easily comprehended means of disseminating the core findings of this thesis: a spectrum of push motivations and pull factors influences people’s participation in mountain biking, as a generally autonomously organised and controlled adventure recreation activity. While a number of potential constraints on participation have been identified, a range of push factors act as motivations to mountain bike, in both general and temporally-specific terms. Mountain bikers, using either internal or external information sources, seek various combinations of attributes and characteristics in settings at which to ride, while a number of personal and interpersonal factors, pressure from peers for instance, can also manifest themselves as influential considerations.

These settings are anticipated to satisfy riders’ motivations, and in the process can provide opportunities for the types of feelings that intrinsically reward their participation. An examination of the interaction of the push and pull factors identified by participants confirms the complex nature of their relationship. While a small number of these connections are straightforward in nature, many other linkages are unique to each individual.

The framework does not aim to represent the complexities of these relationships, and it is argued that a model would be unable to do so effectively. It seeks instead to illustrate that people’s motivations for riding, attributes of individual riding locations and information sources that inform their choice of destination all need to be considered to fully comprehend riders’ participation in and enjoyment of mountain biking. The final chapter concludes the thesis through an assessment of whether the thesis has achieved the
research objectives, consideration of research limitations and implications, and directions for possible future research.
Chapter Eight: Conclusions

Over the last 25 years, mountain biking has developed into one of most popular adventure recreation activities in the world. In many Western countries in particular the activity generates billions of dollars in the recreation and tourism industries effects (IMBA and Shimano, 2008). While the strenuous nature of the activity can make a significant contribution to combating endemic health issues, it is suggested that many of the reasons for participation are less rational in orientation, and the activity appeals to hedonic motivations that can represent an antidote to the routine of everyday life.

This thesis has been undertaken to attempt to identify the range of such factors that influence people's participation in mountain biking, in what is argued, at the level of experience examined in this research, to be a ‘hard’ form of adventure recreation. Utilising a qualitative methodological approach, exploration of these factors, in the context of pertinent previous research, has used participants’ ‘voices’ to illustrate how these elements influence their patterns of mountain biking behaviour. This final chapter is structured to summarise the core findings of this qualitative research from previous chapters and discuss their implications, consider the methodological, and other, limitations of the research, and discuss the degree to which the findings correspond to and satisfy the research objectives. After a discussion of suggestions for potential future inquiry on this subject, the thesis is concluded with final reflections upon the research.

8.1 Implications of Research Findings

The aim of this thesis, introduced in Chapter One, has been to make a contribution to academic knowledge of mountain biking as an adventure recreation activity, through conducting an examination of the range of factors that influence people's participation in mountain biking. Since the advent of mountain biking in the 1970s, the activity’s popularity has increased dramatically, and millions of people worldwide own a mountain bike (IMBA-UK, 2005; IMBA and Shimano, 2008, for example). As interviewees’ responses suggested, it is perceived as an accessible and energetic form of adventure
recreation, which can combine some of the more sedate attractions of hiking for example, while fulfilling a range of dynamic, affective motivations.

Grounded in a philosophical perspective of critical realism and guided by the research objectives, the analytical method identified a range of factors that influence interviewees’ participation in mountain biking. These influences, illustrated in Figure Three on page 219, are diagnosed as push factors that motivate people to mountain bike and factors that pull them to destinations, in the form of both physical site attributes, for example, and sources of information that attract riders to trail and locations. A diversity of other influential elements has also been identified: constraints upon mountain biking; social factors that can affect bikers’ riding patterns; and the optimal experiences that can intrinsically reward participation. The purpose of this section is to discuss the theoretical and empirical implications of the thesis through presentation of the key findings of the research.

As discussed in Section 7.6, it is believed that this research makes a significant contribution to academic knowledge of both mountain biking and wider adventure recreation. The thesis confirms the effectiveness of utilising a qualitative method to identify mountain bikers’ deeper thoughts and meanings, which complements the range of quantitative data available. The research makes an original contribution by examining the whole range of factors that determine the participation of dedicated, experienced mountain bikers, in the process identifying previously unexamined participatory influences. The research is unique in presenting this wide range of factors in a new conceptual framework; this not only aids comprehension of the mountain biking phenomenon, but also has implications for understanding participation more generally in non-commodified adventure recreation activities.

8.1.1 Mountain Biker’s Motivations

The findings in Chapter Four have direct implications for academic understanding of the factors that motivate people to mountain bike, as well as more practical interest and application. Interviewee responses confirm that bikers are inspired by a range of factors. While some motivations are inherently more important, a mountain bike ride can satisfy a number of different reasons for participating. Some of these motivations are more
functional in nature, the physical exercise for instance, but many are affective in orientation, suggesting that feelings of thrill or escapism can be important drivers to mountain bike. While it is apparent that these influences are very personal and their importance varies between bikers, a number of core motivations to ride have been identified (discussed in Chapter Seven).

Nearly all the interviewees mentioned how they are motivated by the physical nature of mountain biking. A proven workout, some participants commented how mountain biking is more fun than running and more experiential than going to the gym. Mountain biking can perform a functional, extrinsic role as a means of keeping fit, and have associated intrinsic benefits, such as the mental well-being associated with being fit. Most of the core reasons for enjoyment, however, are intrinsic motivations related to the experiential nature of riding.

The opportunity to use mountain biking as a means of keeping fit while accessing the great outdoors can facilitate both a physical escape and mental release from routine. Whether catharsis is found in riding alone, or social interaction with friends, escape from an urban or suburban realm provides opportunities to reflect on life or escape the routine of everyday life. Most of the interviewees do prefer riding with other people. The enjoyment they derive from this can be in terms of social interaction, opportunities to improve their technique, and, importantly, sharing experiences on the trail.

Mountain bikers are perceived by many interviewees as a community of riders, where participation can have mutual benefits, through the adventurous narratives they tell and consequent opportunities for increasing self-esteem and social status. Conversely, riding with others can generate sufficient peer pressure to move riders out of their comfort zone and create anxiety. While responses suggested that peer pressure and social recognition are not in themselves motivations to mountain bike, they do nonetheless affect how people ride. These social factors were discussed in Chapter Six.

Mastering the challenges posed by technical trails or self-navigation in wilder areas was identified as a key motivation. These environments can pose a variety of physical and psychological challenges. Overcoming these tests, however, is an attraction in itself for many riders, not least because it can result in optimal experiences for riders. These
feelings have been tested inconclusively in the context of mountain biking (Dodson, 1996), while other authors have examined ‘flow’ experiences in whitewater kayaking (Jones et al., 2003) for example.

The findings in this thesis regarding the components of flow are argued to have implications for adventure recreation research, in terms of their validity, as these feelings arose not through quantitative testing but from open-ended questioning about mountain bikers’ psychological feelings while riding. Adventure recreation activities – such as mountain biking – are recognised as having few extrinsic benefits (Csikszentmihalyi and Csikszentmihalyi, 1990), but the intrinsic rewards that can result can be a desired side effect of participation. All the components of ‘flow’ experiences were described by interviewed, but the research confirms that it is not considered a motivation to ride but, as Varley (2006) suggests, an important experiential bonus.

8.1.2 Desired Settings for Participation

A further set of research ramifications stems from the identification of a diverse range of factors that serve to attract mountain bikers to destinations (Chapter Five). These factors can pertain to both the physical attributes of destinations and sources of information, both tangible and perceptual, that can attract people to locations at which to recreate. These physical attributes can be functional in orientation, for instance the provision of amenities, but many serve to satisfy affective motivations, through challenging trails for example. Responses suggested that just as people are influenced by more than one motivation, mountain bikers do not generally seek one particular attribute, even on a single ride. While a decision may be based around a core motivation, such as a need to be thrilled, other factors are usually pertinent.

A diversity of opportunities to ride was cited as a core site attribute, as having a variety of trails available or being able to access trails with different features can realise diverse motivations and introduce an element of novelty into the experience. A variety of settings was also identified as a key characteristic of locations. Those destinations that offer diverse ‘natural’ landscapes and offer grand vistas of upland scenery are perceived as desirable settings in which to mountain bike. While for many riders scenery plays a
secondary role to the quality of the riding, all the interviewees extolled the virtues of scenic landscapes in which to recreate.

The sense of adventure engendered by such wild, natural landscapes is considered a particularly desirable property of traditional trails. Conversely, the popular purpose-built mountain biking centres that have seen a proliferation over the last decade are considered by some participants to be manipulated recreational landscapes that have removed an element of adventure and autonomy from mountain biking. Their settings, often in plantation forest, can also be negatively perceived.

The reasons for the popularity of these centres are apparent from other interviewee thoughts and feelings about them. While extensive sign-posting and urbane facilities that can characterise these settings arguably softens mountain biking’s image as a ‘hard’ adventure recreation activity, trail centres can offer riding free from conflict with other users, whether riding peers or, particularly, hikers. Such user-group conflict, while confirmed as a relatively minor issue for interviewees, still has the potential to dilute the wilderness experience offered by many traditional trails.

Trail centres are universally perceived by participants as great riding environments, where the emphasis is on the quality of the trails and the condensed experiences that fit into many people’s time-constrained contemporary lives. Traditional and purpose-built trails are often perceived as representing diverse mountain biking opportunities, their sometimes antagonistic settings, in terms of their perceived wildness or potential for user group conflict for instance, offering different experiences and satisfying different motivations. The differentiation of expectations regarding these two settings, and further consideration about the types of motivations that each may satisfy, is argued to be a key finding of this thesis, and one with implications for understanding the respective attractions that they present to mountain bikers.

8.1.3 Information as a Pull Factor

Information is suggested to provide the necessary link between recreationists’ reasons for participation and the settings that they choose in which to recreate (Schreyer et al., 1985). Little previous research has been undertaken on bikers’ sources of knowledge,
Green (2003) and Gajda (2008), for example, quantitatively testing key sources as part of much wider research. This thesis’ attempt to understand ‘why’ these media are important therefore resulted in significant findings regarding information as pull factors for mountain bikers.

When making destination decisions, people search their own memory for recollections of great past experiences, the most intensive of which can result in riders developing a bond to a location. Participants suggested that such place attachment is most likely to be with trails proximate to where to live, where certain desirable characteristics can outweigh the ennui of over-familiarity. If new destinations or riding experiences are sought, information is sourced externally, and word-of-mouth recommendations from peers or friends, perceived as independent points-of-view, are the most trusted means of dissemination. Traditional printed media – guidebooks and magazines – are used to varying degrees by interviewees to access trail information, although the Internet is proving to be an increasingly important tool, both as a primary source of information and to reinforce recommendations from elsewhere. Whatever the source, such information serves to pull people to locations where their motivations to recreate can be satisfied (Pomfret, 2006).

8.1.4 Illustrating the Range of Participatory Influences

The conceptual work of both Schreyer et al. (1985) and Pomfret (2006) has been acknowledged as influencing this thesis, in particular the development of the conceptual framework for participation in mountain biking in Figure Three on page 219. Schreyer et al. (1985) conceptualize the link between motivation and environment settings in determining recreational behaviour, and acknowledge the importance of information in the interaction between motivation and environment. Examining the specific adventure pursuit of mountaineering, both as a recreational and touristic activity, Pomfret (2006) presents a straightforward conceptual model that illustrates the range of factors that affect mountaineering participation.

This conceptual research has both helped to determine the development of the mountain biking framework in Figure Three, and, alongside other work (Pan and Ryan, 2007; Brown et al., 2008 for example), illustrates the importance of taking into account the interaction
of motivations and pull environmental factors. The development of a novel framework for this specific adventure recreation activity illustrates the combination of push motivations for mountain biking and the desired pull factors that determine mountain bikers’ choice of setting to realise their needs and desires. The diverse landscapes that can be accessed for mountain biking is believed to be one the most important attractions of the activity. This has consequent, positive implications for the different motivations that can be satisfied as a result of situational interaction.

8.1.5 Comprehending Factorial Interaction

The interaction of push and pull factors is inherently complex, and manifests itself in different ways for each participant. While their relationship may be straightforward in some respects, in the search for a challenging trail to satisfy a motivation for overcoming challenges for example, many other push-pull relationships are both tangential and multifarious. While individual site characteristics can arguably satisfy a range of push factors, responses suggest that bikers’ choices of recreational environments are based on the manifestation of many interrelated characteristics and attributes, which in turn satisfy a diverse range of motivations.

Numerous relationships between attributes and motivations can be identified from interviewee responses. Attractive scenery is a universally desired site attribute and one that participants suggest can realise different motivations: adventure, exploration and mental catharsis for instance. Similarly, a setting offering a variety of trails or trail types can satisfy a search for novelty, increase the fun and thrills that can be experienced, and facilitate social interaction where trails can cater for bikers of different abilities, encouraging wider groups of people to visit.

A more intriguing relationship is suggested to exist between the types of flowing singletrack trails that are so desired by interviewees and the resultant thrills and challenges that can create intrinsic rewards for mountain bikers. It is argued in Chapter Seven that flowing trails, particularly on narrow singletrack that demands immediate and reactive handling skills, are conducive to experiencing feelings of ‘flow’. The rhythmic nature of these flowing trails is believed to facilitate and encourage the types of psychological states that can characterise these rewards: a perceived loss of time, a narrow and immediate focus
and a subconscious control over actions. As a state characterised by freedom from their external world, the interaction of these settings, motivations and intrinsic rewards are arguably mountain bikers’ idea of nirvana. While reflection on this factorial interaction was not a research objective, and further exploration is therefore an exciting area for future research, the discussions in Section 7.5 on this subject nonetheless provide illuminating insight in mountain bikers’ behaviour.

8.1.6 Employing a Qualitative Research Method

It is argued that a true understanding of why people participate in and enjoy mountain biking can only be achieved through an examination of all the pertinent influences on their behaviour. Those studies that have been previously undertaken on behavioural influences have tended to use a quantitative method to empirically test predetermined motivations (Skår et al., 2008 for example) or motivations and setting characteristics (Cessford, 1995b). None of these studies have considered wider issues such as information sources that attract riders to destinations. Alternatively, these factors have been examined as part of much wider research (Hollenhorst et al., 1995; Green, 2003). A holistic examination of the wide range of factors that influence people’s participation in mountain biking had previously been yet to be completed.

Consequently, a qualitative research method was employed to interview mountain bikers, from April to October 2008, in research locations in New Zealand and the United Kingdom. While it is acknowledged that a quantitative method can yield generalisable findings, a deep understanding of experiences and related meanings is enabled through the use of a qualitative approach (Phillimore and Goodson, 2004). It is not considered possible to portray the depth of feelings associated with participation in such a socially-oriented activity using quantitative research (Patton, 2002).

Open-ended interviews were undertaken, the questions divided into three core categories: what motivates people to mountain biking; what site attributes influence decisions to ride at certain locations; and what other factors influence these decisions. Interviews were carried out until it was considered the findings were saturated, resulting in a total of 30 transcripts. The fieldwork locations of Nelson, New Zealand, and Shrewsbury, England, were chosen because they have large populations, vibrant mountain
biking scenes and a range of trails within easy reach. Criterion and snowball sampling were employed to select representative interviewees, using a number of criteria. Participants were chosen who ride recreationally on both purpose-built mountain biking trails and traditional rights-of-way, as it was hypothesised that their motivations for riding these different types of tracks might differ.

It was considered that those bikers to whom the activity might represent serious leisure (Stebbins, 1992) in terms of perseverance, personal effort and a strong identification with mountain biking and its social scene, would yield more comprehensive findings. Dedicated bikers were therefore chosen who ride at least once a week on average and all year round. The research concentrated on cross-country riding, as it is by far the most popular form of mountain biking (Green, 2003). Mountain bikers of at least intermediate standard were interviewed, as experience opens up a wider range of motivations for mountain bikers (Cessford, 1995b).

Analysis entailed the use of a general inductive method, as a practical and systematic set of procedures for analysing qualitative data. The method is guided and focussed by the research objectives, where reliable and robust findings arise directly from the raw data, not from preconceived expectations (Thomas, 2006). The first step was to conduct multiple close readings of the findings to condense textual data into summaries to convey key themes and sub-themes. Clear and justifiable links between these themes and the research objectives were established, and appropriate quotations used to illustrate the meanings of themes. The final stage was to create a framework to illustrate the structure of these themes and sub-themes that emerged from the findings (ibid.).

8.2 Research Limitations

All research demands justification of the methodology, method and selection of research locations and subjects. The choices made in this thesis are discussed in detail in Chapter Three, which is also the platform for introducing the limitations of this thesis. The purpose of this section is to summarise these limitations, in order to understand any difficulties encountered during the research and suggest areas for future research (discussed in Section 8.4).
Undertaking doctoral level research invariably necessitates a degree of temporal constraint. Manual transcription of interviewee transcripts inevitably meant that pre-analysis categorisation of the findings was time-consuming. The use of a general inductive approach demands total immersion in the findings, however, and as these manual processes entailed repeated readings of (and listening to) the interviews, they therefore facilitated the analytical process.

The design of the interview questions, for analysis using a general inductive approach, introduced a method-related limitation, in terms of how a researcher should ideally have no preconceptions about the findings (Thomas, 2006) when the development of questions require a number of preconceived ideas to enable the questions to be developed. This issue was addressed by the use of open-ended questions rather than structured, closed-ended questions (Patton, 2002), while acknowledging that in reality no research can be totally free from preconception. The use of open-ended interview questions is argued to allow participants to describe their feelings and thoughts without being pigeonholed into categories predetermined by the researcher. In this research any preconceptions held by the researcher were discarded as far as possible before the fieldwork, and the themes and sub-themes that were identified during analysis emerged through total immersion in the findings (Thomas, 2006). A degree of potential researcher bias was introduced by the need for minor interpretation of a few interviewee responses, in light of a degree of ambiguity which became apparent during the analytic process. Generally coding the findings to more than one theme or sub-theme, or only coding findings where the researcher was confident of their meaning, enabled this potential issue to be minimised.

A small number of issues were discovered with the structure of the interview questions, which had not been identified in the pilot interviews. Without changing the questions themselves, it was deemed necessary to reorder some of the questions to improve the flow of questioning. It also became apparent that some of the questions, that were used to encourage interviewees to open up, yielded few useful findings. While all the interviewees were asked all the questions, these ice-breaking questions were generally superfluous to the research.

After the analytical process, it was decided to examine and discuss the ‘interaction’ of the push motivations and informational and situational pull factors identified by
participants. The nature of interviewee responses, whereby site attributes were often discussed in the context of their motivations for mountain biking for instance, meant that the discussions in Section 7.5 utilised participants’ feelings, and were illustrated using narrative ‘voices’. It is acknowledged, however, that including specific questions pertaining to this interaction would have facilitated the discussion and led to the identification of other possible linkages, even though the open-ended questions allowed thoughts on this interaction to surface.

The qualitative method employed in this thesis has determined that the influences on participation in Figure Three on page 219 pertain to the thoughts and feelings of the participants. Undertaking the interviews with open-ended questioning and no preconceptions about the responses – the aforementioned limitation notwithstanding – has resulted in a wide range of influential factors identified. Attention is drawn, however, to the specific sampled segment of the mountain biking community: experienced and dedicated cross-country riders in New Zealand and the UK. There are obvious problems in trying to transpose the findings to mountain bikers of different abilities, riding styles or in different locations.

It is apparent that previous research, undertaken using quantitative questionnaires, has identified a small number of factors not discussed by participants in this qualitative research. It is suggested by Gajda (2008), for example, that developing and improving skills is a motivation, albeit recognised as less important than all but one of his eight grouped motivational factors. No interviewees in the research for this thesis identified skills improvement as a motivation, although several people recognised it as a by-product of challenging oneself or peer pressure extending them beyond their comfort zone.

A wide range of motivational factors was empirically tested by Skår et al. (2008), the use of a questionnaire enabling the authors to quantitatively test 27 factors. This allows different, detailed facets of single factors to be explored. For example, five separate factors pertaining to exercise are examined, some of which go beyond the findings of this thesis. Other factors tested by Skår et al. fall outside the scope of motivations examined in this thesis, although those relating to being with family and testing bicycle equipment, for example, were poorly supported.
8.3 Reflections on Research

The research findings have been presented in four sections, Chapters Four to Six examining push motivations, pull factors and social influences respectively, with a synthesis of the key findings in Chapter Seven, where they are discussed in the context of a conceptual framework. Section 8.1 summarises the core research findings, while this section reflectively examines the degree to which the findings correlate to and fulfil the research objectives introduced in Chapter One.

Research Objective One: To identify the factors that motivate people to participate in, and enjoy, mountain biking.

An examination of motivation is suggested as being key to understanding why people participate in their chosen recreational activity (Manfredo et al., 1996). These motivations are generally multi-dimensional in nature (Baloglu and Uysal, 1996), while sometimes even seemingly antagonistic motivations can drive people’s recreational behaviour (Iso-Ahola, 1980). Motivations for participation in mountain biking identified from interviewee responses are discussed in Chapter Four.

A series of open-ended questions, ranging from reasons for enjoying mountain biking to questions about people’s psychological processing while on the bike, determined a broad range of push factors that motivate participation. In Chapter Seven the most important motivations are discussed, determined through their popularity or the regularity of responses. While people enjoy the exercise function that mountain biking plays, most core motivations are hedonic in nature, ranging from the opportunities it presents for mental catharsis to the thrills that riding can create and the satisfaction to be found in mastering the challenges encountered on the trail. Other, less well supported motivations suggest that the activity’s ability to also be able to offer elements of adventure and simple fun and enjoyment, while being a flexible and easily-accessed form of adventure recreation, accounts for much of its popularity.

The research thus contributes to the existing academic understanding of mountain bikers’ motivations. The most wide-ranging previous work on this subject (Cessford, 1995b; Skår et al., 2008) has involved quantitative testing of predetermined factors. The
Research Objective Two: To ascertain the environmental, or setting, attributes of trails or riding destinations that influence where mountain bikers ride.

Further open-ended questions elicited a diversity of feelings about the types of intangible characteristics or physical attributes of settings that mountain bikers want in their riding destinations. Recreationists seek those settings with the desired combination of attributes that they believe will satisfy their motivations for participation (Schreyer et al., 1985). Indeed it is argued that only in the context of these characteristics can their motivations be properly understood (Pan and Ryan, 2007).

While a number of attributes were discussed generally, in terms of creating the type of setting that participants seek, many responses pertained to the different biking experiences offered by purpose-built mountain bike trails and traditional rights-of-way. Flowing singletrack is regarded by many riders as the pinnacle of physical trail attributes, regardless of location. Other attributes are more setting-specific. Responses suggested that the core attributes of traditional trails are the great scenery in which such tracks are often sited, and the sense of adventure that long rides in the back country can instil, creating its own challenges to be faced. In these respect they can be perceived as offering a less manicured experience than purpose-built trail centres.

These centres, in contrast, offer a variety of riding settings, often appealing to bikers of different abilities, while their unidirectional, bikes-only trails create desirable conditions free of potential conflict with users from outside the peer group. While well-marked trails and often sophisticated facilities may arguably ‘soften’ the mountain biking experience, the trails are expressly designed to thrill bikers, and offer year-round biking in many locations. The combination of these factors determines their popularity with many mountain bikers. The diversity of site attributes that were identified by participants has determined that this objective has been fulfilled. The exploration of the different riding experiences offered by purpose-built and traditional trails, both in terms of their characteristics and the consequent discussion of push and pull factor interaction, is argued to provide further explanation of objective satisfaction.
Research Objective Three: An identification of the other factors that influence mountain bikers’ decisions regarding where to ride.

A spectrum of other factors that can act to shape participation was also distinguished from participant responses, most pertinently relating to the sources of information that attract mountain bikers to destinations. Marketing information that helps people to determine their recreational settings serves as a pull factor (Pomfret, 2006), through providing the necessary link between their motivations for participation and the attributes that they seek perceived as fulfilling those motivations (Schreyer et al., 1985). While interviewees suggested that they use a variety of sources for accruing knowledge about riding destinations, word-of-mouth recommendations, the Internet and printed media, in the form of guidebooks and magazines, were cited as the most frequently used. They display a number of key characteristics: the Internet is perceived as a convenient and cheap tool, while personal recommendations are considered independent and trustworthy for example. Textual or verbal information plays the central role in the dissemination of information, although imagery is recognised as providing visual stimulation and sometimes inspiration for visiting destinations. Analysis of responses determined that information sources be categorised as pertinent pull factors, and they are therefore discussed with site attributes in Chapter Five.

Other factors suggested by participants as influencing their patterns of riding include a number of social factors, with personal and interpersonal elements, and an emotional state that is believed to be a by-product of participation. The sociability of the activity was suggested to be a core motivation for riding (satisfying Objective One), the virtues extolled of sharing trail experiences, social interaction and learning from others. Riding with peers is perceived as having both positive and negative connotations however. While many participants acknowledged that being perceived as an accomplished mountain biker increases their self-esteem, pressure from peers can force people to compromise trail choices and induce anxiety on the trail. When the trail conditions are right, however, mastery of the challenge can result in intrinsic rewards being experienced: a euphoric state where a person is so absorbed in the riding that all sense of time is lost and biking becomes an almost subconscious process. Situations like these are rare however, and Varley’s (2006) belief that they occur as a by-product of participation in adventure recreation is supported.
Finally, a number of other factors were identified that satisfy Objective Three that have been classified as potential constraints to participation, rather than factors that positively influence it. These include the interrelated constraints posed by the weather and the different seasons, both of which can affect spatial and temporal patterns of riding. Time constraints were identified by many participants with families as potential barriers, along with minor concerns about the cost of participation and health issues acting as limitations. While access issues as a constraint are discussed for contextual purposes, this thesis only examines in detail factors pertaining to settings where people can legally ride.

While a wide range of other influences was identified through responses, and Objective Three has consequently been met, this is qualified to a degree by the change of emphasis of information sources. Pre-fieldwork they were believed to represent ‘other influences’, but analysis of responses and further consideration of pertinent academic literature determined that they were more readily classed as ‘pull factors’ and therefore are aligned more correctly to the site attributes addressed in Objective Two. Furthermore, issues such as optimal experiences, social recognition and peer pressure had been identified as possible motivational factors from the review of the academic literature of adventure recreation. Analysis of participants’ thoughts and feelings on these subjects determined that they do not act as motivations to ride in themselves, but are either by-products of riding (optimal experiences) or they more subtly influence patterns of participation (social recognition and peer pressure).

Research Objective Four: To develop a conceptual framework to illustrate the factors that influence people’s participation in mountain biking

Contingent upon developing a thorough understanding of mountain bikers’ push and pull factors and other influences on participation, the fourth objective was the development of a conceptual framework. The creation of this model was influenced in particular by Pomfret’s (2006) conceptual framework for participation in mountaineering. Such a model often results from the employment of a general inductive method of analysis, and is used to illustrate the key themes and sub-themes and their relationships.

The framework in Figure Three on page 219 has resulted from this analytical method. It illustrates both the range of push motivations and the factors that attract mountain bikers
to destinations, in terms of site attributes and sources of destination information. A number of factors that were determined through responses to be constraints upon participation form a separate set of influences. As discussed above, social determinants were identified as playing a different role in participation to motivations, while optimal experiences form bonus intrinsic rewards for participation.

During the development of the research method, it was intended that a framework resulting from the analysis of responses would be an open network, seeking to demonstrate the ‘influences’ on mountain bikers. It did not aim to explore the processes whereby motivations are satisfied by recreating in landscapes possessing desired characteristics. Although the discussion in Section 7.5 is centred on the interaction of the push and pull factors, this did not form one of the research objectives.

8.4 Directions for Future Research

As discussed in Section 8.1, it is believed that this empirical research has significant implications for the understanding of mountain biking as an adventure recreation activity. In the development of this thesis, however, a number of opportunities for appropriate future research have been demonstrated, following a number of different avenues. Some of these subjects have arisen as a result of limitations to this study, including the focussed nature of this research, while others have been uncovered through the analysis of participant thoughts and feelings.

It is believed that there are a number of general reasons why further research is required into mountain biking. First, much of the core literature is now 10-15 years old, and many aspects of the sport have changed. An increasing numbers of riders in many countries may be a cause for increased concern by resource managers, but can also have positive impacts, in terms of economic and health benefits for example. Interviewee responses highlighted the changing nature of the activity, for example in attitudes towards access for mountain bikers, the increasing importance of electronic information sources, and the proliferation of purpose-built trails. Mountain biking is now a relatively mature outdoor pursuit, and although this research has addressed some of the issues that were identified and examined 10 or 15 years ago others, such as land-use conflicts, may need to be re-evaluated.
The research explored a range of subjects that have received very little academic attention and may therefore form interesting topics for further study. Empirical study of the importance of imagery, for example, as an information source, and of the perceptual relevance of reputation or image, were of secondary importance to this research. These subjects could provide useful data to comprehend their roles in influencing destination choice.

The interrelated constructs of peer pressure and social recognition were identified as influential social factors. Identity and mountain biking sub-cultures, for example, could form the basis for insightful theoretical and empirical research on how they influence mountain biking, taking into account factors such as the constantly changing mountain bike technology that can attract status-conscious recreationists to the sport. While whitewater kayaking and mountaineering have been the subject of related study (Loewenstein, 1999; Kane and Tucker, 2004; Kane and Zink, 2004, for example), mountain biking could equally form the focus of such discourse.

Dodson’s (1996) study has been the only work to examine optimal experiences in the context of mountain biking, with mixed results. It is argued that mountain biking forms an excellent platform from which to study intrinsic rewards, for example the embodied nature of aspects of the mountain biking experience. In this thesis certain settings are suggested to be particularly conducive to facilitating these feelings, and these contextual aspects of optimal experiences also suggest research possibilities. Scope exists for an assessment of the implications or application of the research findings to other adventure recreation activities, regarding not only flow but also many of the other participatory variables identified.

Some more recent innovations in the sport may also be ripe for research. The mountain biking niches of freeriding and downhillng have received no scholastic attention. Anecdotal evidence suggests that these niches are particularly popular with younger riders, whose motivations for riding could form a further area for investigation. Mountain bike racing is a popular activity in many countries, including the study locations, and could create another interesting niche to explore in terms of motivating factors. Other forms of mountain biking have been developed over the past decade. Many countries in the European Alps and North America, as well as New Zealand, have seen the expansion of
winter ski fields into summer time activities. The attraction of these venues was mentioned by a number of interviewees, as mountain biking has been at the core of this expansion in many resorts. With growing concerns over the possible effects of climate change on the reduction of the snow season, the expansion of this area of the sport is set to continue.

Finally, anecdotal evidence suggests that guided mountain biking tours are increasingly popular in many countries, and many participants would contemplate them when riding overseas. Although the commodification of many adventure recreation activities has been the subject of extensive research, the attraction of mountain biking as a ‘softer’ adventure activity warrants empirical research. Ongoing research into the many aspects of mountain biking discussed above is considered necessary in order to fully comprehend its continuing popularity as an outdoor pursuit, and the many impacts and issues that are consequent to its widespread enjoyment.

8.5 Conclusion

The contribution of this thesis to the well-established academic research on mountain biking is embodied in its attempt to use a qualitative empirical method that encourages bikers to identify and elucidate the range of factors that characterise their participation in their chosen activity. While previous academic study has tended to quantitatively explore factors that motivate bikers or attract them to appropriate destinations, this thesis allows the voices of mountain bikers to portray both the reasons why they choose to perform in this adventure activity and the desirable attributes that they demand of settings to realise these motivations. A new conceptual framework for mountain biking illustrates the range of relationships of these participatory influences.

Despite mountain biking being a relatively well-established adventurous activity, there are still disparities in its academic understanding. The activity has progressed considerably in the decade since many of the seminal studies were undertaken, not only in its popularity, but also in how the needs of participants have been catered for and, arguably, in terms of its social and institutional acceptance. Further theoretical and empirical work is required to understand the myriad ways in which the activity is changing, and the dynamics of its development. As usage statistics and other research
illustrate, mountain biking is very much in vogue, and this research helps to further develop academic comprehension of the mountain biking phenomenon.
Bibliography


Colorado Department of Transportation (2000) *The Economic Impact of Bicycling in Colorado.* Denver, CDOT.


Makara Bike Mountain Bike Park Supporters (no date) *Makara Peak Mountain Bike Park Available from: http://www.makarapeak.org/supporters (accessed 22 June 2009).*


University of Otago (no date) *Policy for Intellectual Property Rights of Graduate Research Students*. Available from: [http://oupolicy.otago.ac.nz/policies/FMPro?-db=policies.fm-&format=viewpolicy.html&-lay=viewpolicy-&-op=cn&Title=intellectual-&-recid=32773-&find](http://oupolicy.otago.ac.nz/policies/FMPro?-db=policies.fm-&format=viewpolicy.html&-lay=viewpolicy-&-op=cn&Title=intellectual-&-recid=32773-&find) (accessed 16 October 2009).


Warde, A. Tampubolon, G. and Savage, M (No Date) Recreation, informal social networks and social capital. ESRC Research Methods Programme Working Paper No 17, School of Social Sciences, University of Manchester.


Appendix A: Interview Questions

This interview is being carried out to try to understand how mountain bikers choose destinations at which to ride, in the expectation that these destinations will fulfil their motivations, needs and desires.

You have received an information sheet and consent form, which indicates your consent to this interview. The interview is going to be recorded and transcribed, but your identity will remain anonymous.

I’d like to start by asking questions about your motivations to mountain bike, before moving on to talk about where, how and what you like to ride.

Part I: What Motivates People to Mountain Bike?

• Could I begin by asking you to describe your last mountain bike ride for me please

• Why do you enjoy mountain biking?
  • Probe: What aspects do you particularly like?
  • Probe: What does mountain biking offer you that other outdoor activities can’t?
  • Probe: Are there parallels between mountain biking and other sports you partake in?
• Why did you start mountain biking in the first place?
• Why do you choose to ride cross country (as opposed to downhill or freeride)?

• Could you tell me what you think you are going to get mentally out of a ride when you get on your bike?
  • Probe: Why are you riding (if it’s not just for the exercise or the scenery say)?
• How would you describe your mental feelings as you are actually riding?
• Can you explain please the importance of a sense of risk?
• Can you explain please the importance of a sense of thrill?
• If you feel that thrill is more important than risk, or vice versa, why?
• If you have had a mountain bike-related accident how has this affected your approach to riding?
• How does mountain biking affect you mentally in your day-to-day life?
  • Probe: How does it affect your general physical and mental wellbeing?
  • How does it offer an escape from the routine?

• Who do you mostly ride with?
  • Probe: With friends, in a club, or do you ride by yourself?
• Do you enjoy riding with other people?
• If yes, what do you enjoy about riding with other people?
• If you ever ride alone, why?
  • Probe: What are the advantages of riding alone?
• How does peer pressure affect when or where you ride?
  o Probe: How might biking with friends affect when and where you ride compared with when, where and how you ride alone?
• Does peer pressure affect how you ride?
• How important is social recognition amongst your mountain biking peers?

• How do you think non-mountain biking friends perceive you when you mountain bike?
  o Probe: How do you think that people perceive mountain bikers or mountain biking?

• How do you feel that your motivations changed as you became a more experienced rider?
  o Probe: What does mountain biking offer you now compared to when you were beginning to ride?
  o Probe: What aspects of riding do you enjoy more now?

So far we have been talking about the factors that motivate you to mountain bike. Is there anything else that you would like to add?

Part II: What Influences Bikers to Ride at Certain Destinations?

Now I’d like to ask you some questions about the factors that influence where and when you ride.

If we could start by thinking about the factors that affect where you choose to ride.

• You must have ridden some great trails around here. Can you tell me your favourite local ride.
• Where else have you biked?
• Where is your favourite place to mountain bike?
• What do you especially like about these places or trails that makes them such a great ride?
• What other factors make for a great ride?
• What sort of downhills do you prefer?
• What sort of uphills do you prefer?
• Where is your dream place to bike?

Okay, I’d like to think about some of these factors that influence where you ride. If we could start with your thoughts on the differences between purpose-built trails at MTB parks, such as in the Hira Forest here at the back of Nelson (UK: MTB centres such as Coed y Brenin) and traditional trails, that were previously walking tracks, like the Rameka Track or Queen Charlotte Track (UK: bridleways, as on the Long Mynd or in the Berwyns).

• How do you decide whether to ride at purpose-built MTB parks (centres) or on traditional rights-of-way?
• What are the attributes that attract you to MTB parks (centres)?
• What trailside facilities are important to you?
• What are your thoughts about having trails marked out for you?
• How do you enjoy riding on tracks segregated from walkers?
• How do you feel about riding one-way trails?

• What attracts you to traditional trails?
  o Probe: What do traditional trails offer you that MTB parks (centres) don’t?
• What are your thoughts about having to navigate your own way while biking?
  o Probe: Why is it important to you to find your own way?
• How do access issues affect where you ride?

• How do you feel about the access rights for mountain bikers in New Zealand (the UK)?
  o Probe: To what extent do you understand your access rights?

• How do you feel about trying a new trail that you hear or read about?
• Why do you think trying a new trail is important?

• What trails or locations do you have a particular attachment to?
• Why do you have an attachment to them?
  o Probe: What are the attributes that make you return?

• How does scenery as an attribute affect where you ride?
  o Probe: What importance do you place on scenery in deciding where to ride?
  o Probe: Why is it important?
• What types of scenery do you prefer?
  o Probe: Why are these preferable?

**Having discussed the factors that you think are important when deciding where to ride, could we turn our attention now to when you choose to mountain bike.**

• Could you describe for me how your riding differs between the seasons?
  o Probe: How does your riding differ between summer and winter, say?
  o Probe: How does it affect where you ride?
• How does the weather influence where you ride?
  o Probe: What difference to your decision does it make if it is raining?
• How do time constraints affect where you ride?
  o Probe: How much biking do you do during the week?
• Could you tell me if there are any other factors that constrain your riding?

• If you go away for the weekend mountain biking what factors affect your choice of location?
• What factors are more important for weekends away riding than for day trips?
• What are your feelings about multi-day mountain bike trips?
• What such trips have you done in New Zealand (UK)?

• How do you feel about riding at night?
  o Probe: What is the specific attraction of night riding?

**If we could discuss now your thoughts regarding meeting others on your rides.**
• How do you feel about meeting other riders on the trail?
• How do you feel about meeting trampers/hikers?
• Could you describe how you behave when you meet trampers/hikers?
  o Probe: How do you alter your riding when you meet hikers?
  o Probe: Have you had any specific problems?
• How do you feel about meeting motorised users?
  o Probe: Why do/don’t you like meeting them?

We have discussed the most important influences for you in deciding where to ride. Finally I’d like you to think about sources of information that you may use in helping you to make these decisions.

• Could you tell me what different sources you use for information about trails or locations?
• What importance do mountain biking magazines have in influencing where you ride?
• How much faith do you place in media reviews of trails?
  o Probe: How impartial do you think they are?
• If you read the mountain biking press, which article or photo about mountain biking really struck a chord with you?
• Could you describe how important a word-of-mouth trail recommendation from a friend or peer would be to you?
  o Probe: Why do you think they are important?
• How much trust do you place in word-of-mouth trail recommendations?
• How much do you share trail information with friends or peers?
• How do you share this information?
  o Probe: Do you use e-mail, blogs etc, or just talk about them?

• How does seeing photographs of trails or destinations influence a decision to ride there?
  o Probe: Are photos more important than descriptions? Do they complement descriptions?
• Would you choose to ride somewhere on the strength of photographs alone?
• How do you feel about riding on a commercially organised day trip?
• Why might you choose to ride on a commercial trip?
  o Probe: Where might you choose to ride on a guided trip that you wouldn’t ride otherwise?
  o Probe: Why might you these not be of interest?

Thank you. That covers everything I wanted to ask you. Is there anything you think I should have asked you that I didn’t, or anything you would like to add?
Appendix B: Interviewee Consent Form

Fulfilling Needs and Motivations: How Mountain Bikers Choose Their Destinations

The Project

This project is being undertaken as requirement for a PhD in Tourism in the Department of Tourism at the University of Otago. The research is being conducted by:

Steve Taylor
Department of Tourism
University of Otago

03 479 8107
Cell: 021 179 2668

Consent Form

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

- My participation in the project is entirely voluntary.
- I am free to withdraw from the project at any time without any disadvantage.
- The data (audio-files) will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed;
- This project involves an open-questioning technique where the precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops and that in the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.
- The results of the project may be published and available in the library but participants’ identities will remain anonymous.

I agree to take part in this project.

.........................................................................................................................
(Signature of participant) (Date)

This project has been reviewed and approved by the Department of Tourism Ethics Committee.
Appendix C: Interviewee Information Sheet

Fulfilling Needs and Motivations: How Mountain Bikers Choose Their Destinations

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate, thank you. If you decide not to take part there will be no disadvantage to you of any kind and thank you for considering my request.

The project
This project is being undertaken as requirement for a PhD in Tourism in the Department of Tourism at the University of Otago. The aim of the research project is to contribute to an understanding of how mountain bikers chose destinations at which to ride. The objectives are to develop a deeper understanding about the socio-psychological motivations and personality characteristics of mountain bikers that influence the fulfilment of motivations and establish the relative importance of destinations’ characteristics and attributes and exogenous decision-making variables, in order to develop a framework to understand the interplay of these motivational variables.

Participation in the project
Should you agree to take part, you will be asked to participate in an interview that aims to explore:

- Motivations for mountain biking
- External information sources
- Factors affecting destination choice
- Psychological factors affecting decisions

Please be aware that you may withdraw from participation in the project at any time, without any disadvantage to yourself of any kind.

Data collection
The interview will be semi-structured, which means that the interviews will involve an open-ended questioning technique where the precise nature of the questions to be asked cannot be entirely determined in advance, but will depend on results of previous interviews and on the way in which the interview develops. Consequently, although the University of Otago Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used. In the event that the line of questioning develops in such a way that the participant feels hesitant or uncomfortable he/ she may decline to answer any particular question(s) and/ or may withdraw from the project without any disadvantage of any kind. The interview will be tape-recorded, and it is anticipated that it will last up to 90 minutes.

Processing of data
The data collected will be securely stored in such a way that only the researcher will be able to gain access to it. At the end of the project any personal information will be destroyed immediately, except that, as required by the University's research policy, any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed. The results of the project may be published and will be available in the library but participants’ identity will remain anonymous.

Questions
If you have any questions about the project please feel free to contact:

Steve Taylor, Department of Tourism, University of Otago, 03 479 8107 or 021 179 2668, or
Dr. Anna Carr, Department of Tourism, University of Otago, 03 479 8057, or
Dr. Jan Mosedale, Department of Tourism, University of Otago, 03 479 9046

This project has been reviewed & approved by the Department of Tourism Human Ethics Committee.