An Evaluation of Outdoor Development Activities

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DECLARATION

I hereby declare that this thesis is the result of my own work and that due reference is made, where necessary to the work of other researchers and authors.

I also declare that this thesis has not been accepted in substance for any former degree and is not currently submitted in candidature for any other degree.

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ABSTRACT

This study responds to an identified gap in the Outdoor Development Activities (ODA) literature. It applies a neo-positivist approach to the evaluation of ODA enabling a greater understanding of the outcomes and processes at work during ODA courses. Evaluation studies on this form of personal development are not new. Here the argument is taken further through a more holistic analysis of the contributions made by both course and participant.

The thesis identifies the key characteristics of ODA and evaluates the role of learning theory in underpinning the provision of ODA. A summary of previous evaluation research findings is provided and the influence of research methodology explored. It is argued that weaknesses in the extant research literature stem from inherent difficulties associated with the subject matter and the unbalanced view gained by pursuing exclusively either a quantitative or qualitative approach. The research methodology adopted in this thesis addresses both of these limitations. The two case studies investigated in the studies, adopted quantitative and qualitative techniques to produce a complex and rich picture of the processes at work during ODA.

The study’s key contribution to the OMD literature is its examination of how task, review and the individual participant shape all learning outcomes. A modified version of the Lewin/Kolb model of experiential learning is advanced that explains the controversy surrounding OMD as a form of management learning and the variable outcomes associated with it.
DEDICATION

To Jan and Calan
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This thesis would not have been possible without the existence of a number of key people who were able to guide me on my journey.

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CHAPTER 1

INTRODUCTION

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CHAPTER ONE: INTRODUCTION

1.1 OUTDOOR DEVELOPMENT ACTIVITIES IN CONTEXT

The increasing rate of change in the business environment has placed greater pressures on both organisations and the individuals they employ. In the quest for competitive advantage, organisations have experimented with many diverse ways of developing their human resources. One such avenue has been the use of Outdoor Development Activities (ODA). Despite the proliferation of courses, especially in the 1980s, these programmes have been dogged by controversy. The claim that ODA delivers real outcomes, both personal and organisational, has been contested, and the mechanisms by which these purported outcomes are delivered is similarly poorly understood. Indeed, it has been suggested that:

the mystique on which much of its reputation rests is seemingly illusory. Its credibility relies almost exclusively on questionable anecdotal evidence, which has led to confusion rather than clarification.

(Irvine and Wilson 1994: 36)

The growth of ODA in tandem with an increasingly complex and changing business world has been well documented (Ibbetson 1997, Jones and Oswick 1993). Yet much of the relevant literature demonstrates an enormous belief in the value of ODA in coming to terms with these changes, without offering supportive evidence. The practice rests upon a number of widely-held assumptions regarding the learning process, course design and the ability of participants to transfer knowledge from courses to the workplace. On the positive side, the work done so far has described ODA's unique methodology based upon a combination of experiential learning methods, perceived risk, individual ownership and process reviews (Beeby and Rathborn 1983, Cacioppe and Adamson 1988, Petrini, 1990).
Some, more sophisticated studies, have attempted to establish relationships between course inputs and broad outcomes (e.g. Dainty and Lucas 1992). They have, by design, highlighted that ODA is not a homogenous entity and that course aims and content are, by definition, legion. Simultaneously they point to a difficulty of research in this area, namely the ability to generalise findings from one case study.

The foregoing discussion highlights gaps in our understanding of ODA as a vehicle for developing personal skills. The focus of this thesis is the practice of using the outdoors as a medium for developing personal skills and is an attempt to establish the nature of ODA outcomes in the individual and the process by which they are brought about. The overall aim of the studies described in this thesis is to enhance understanding of ODA as a vehicle for improving individual performance. This overall aim will be 'unpacked' in section 1.2 where the specific propositions of the studies are outlined.

ODA involves several stakeholder groups, namely course providers, purchasers and participants themselves. In evaluating the effectiveness of ODA, attention needs to be given to each of these component parts and how they relate to one another. Course participants are not a homogeneous group and their learning in an ODA environment may be dependent upon a number of variables. The influence of personality and gender, and the way in which individuals prefer to collect data and process that data into information on which to make their decisions, has yet to be explored. With respect to the actual course, there is controversy over the impact of stressful/physical activities, particularly those that are manifestly remote from the workplace (e.g. canoeing, climbing and abseiling), compared with less physical, problem-solving tasks. The specific contribution of such activities to personal learning is perhaps the nub of the whole issue. Lastly, as with all courses conducted outside the workplace, there is the issue of transferability of learning. This study is not
concerned with general issues but with establishing whether there are specific
difficulties in attempting to derive benefits from ODA that are applicable to the
workplace or another learning environment. Ibbetson (1997) concluded his study by
suggesting that understanding the processes at work within ODA, and the variables
that affect personal outcomes, would be fruitful areas for future research:

Moreover, given evidence for the non-uniform impact, future research
should continue to attempt to unveil variables which mediate
outcomes. This is because certain individuals and groups might be
predisposed to either positive or negative outcomes. Understanding
such variables would thus allow providers to better design and
facilitate fruitful experiences.

(Ibbetson 1997:159)

This provides the starting point for this thesis, which recognises the diversity that
exists within ODA provision but also identifies a number of common characteristics
that underpin the majority of courses (see Chapter Two). By constructing a
programme based upon these characteristics, an attempt was made to focus upon
tasks and processes that are common to ODA programmes rather than having to
attempt a comparative study of different types of provision. The study focussed on
how task design, the review process and the individual affected the immediate
learning outcomes.

1.2 THE RESEARCH AGENDA

Outdoor Development (OD) is a term that embraces a very diverse range of
programmes reflecting a broad spectrum of philosophies and utilising many different
types of activity. This presents the researcher with a major difficulty - the ability to
make valid general inferences about this type of personal development provision
through the study of individual cases. Ibbetson (1997) attempted to deal with this
problem by formulating a ‘typology of provision’ and trying to identify different
learning outcomes with different types of provision. However, the processes by which these diverse outcomes are produced have yet to be uncovered.

An examination of the ODA literature in Chapters Two and Three identifies three broad research aims. These are to investigate: what specific skills or personal attributes are enhanced by ODA?; what influence does the personality of the individual have upon the learning which takes place during an ODA programme?; and finally, how does course design impact upon learning outcomes? In order to achieve these aims, each was 'unpacked' into a limited number of specific propositions that were to be addressed. The first broad aim, investigating the impact of ODA on personal skill areas, was addressed by propositions one and two, namely:

Proposition 1: Participants will identify benefits in narrow and broad skill areas only, there will be no improvements in self-awareness and awareness of others.

Proposition 2: The perceived overall benefit to the participants will exhibit a 'euphoria effect' but gains will not be sustained beyond the end of the ODA intervention.

The work of Dainty and Lucas (1992) suggests that an ODA programme with the characteristics embodied in the case studies would produce benefits in the areas of narrow and broad skills only (as defined in Chapter Three). Ibbetson (1997) recorded sustained personal benefits to participants following a two and a half day programme. The case studies are based on one-day programmes and it is suggested that ODA intervention on such a limited scale will not have such lasting effects.
Chapter two identifies possible ODA course aims. The skills pertaining to the individual are summarised in Table 2.2. These skills were identified by Ibbetson & Newell (1996) and form the benchmark for propositions one and two. The eighteen skill/personal attribute areas identified are: information gathering, overall planning ability, team membership, self-awareness, communication, decision making, giving & receiving information, effective listening, adapting to changing situations, time management, overall problem solving, leadership, self-confidence, managing and resolving conflict, co-ordinating team activities, risk taking, delegation, encouraging & supporting others.

To study the impact of personality on perceptions of learning outcomes (the second broad aim) a specific personality indicator, i.e. the Myers Briggs Type Indicator (MBTI - see 4.6.1 for a discussion of MBTI) was chosen as the basis for measurement. Measurement of changes in perception of learning outcomes against MBTI and gender are the subject of propositions three and four respectively. Specifically:

**Proposition 3:** The participants' personality type (as defined by the Myers Briggs Type Indicator) will have no impact upon their perception of personal learning outcomes

**Proposition 4:** Gender will have no impact upon perceptions of learning outcomes.

Experiential learning requires the participant to engage in several modes of learning (see discussion Chapter Two) and each of these is accorded equal importance within the Lewin/Kolb learning theory which is said to underpin the majority of ODA programmes. Therefore Personality Type, which indicates an individual's preferred
mode of engaging with the environment should not be influential regarding learning outcomes. There is also no indication in the literature that gender influences the overall or type of benefit derived from ODA programmes, although there is some indication that the team nature of ODA and the gender balance of the team can affect learning in ODA (Wagner and Roland 1992).

Lastly, the impact of course design upon learning outcomes (the third broad aim) was addressed by two separate propositions each focussing upon one aspect of course design. These were:

Proposition 5: The degree of physicality / risk affects perceived learning outcomes.

Proposition 6: Debriefs undertaken in the 'process review style' impact most on participants' perceived learning outcomes.

One of the defining characteristics of ODA as a form of personal development is the use of activities based upon 'outdoor pursuits' in order to create stressful learning events (see discussion in Chapter Two, section 2.2.2.). It is expected that participants will find a direct relationship between the degree of physicality / risk associated with a task and their personal learning outcomes. The debrief or review is regarded as an essential element in the learning process. Existing literature (Priest 1991; Thompson 1991; Dainty & Lucas 1992; Peckham 1993; Ibbetson 1997;) suggest that this is indeed the case and that furthermore, learning will be maximised if the review is 'process' oriented.

The thesis also attempted to gain a more holistic view of the ODA experience. Chapter Two indicates that one of the characteristics of ODA is its ability to make a
powerful impact upon the participant (Creswick and Williams 1979; McEvoy and Buller 1997), this phenomenon is the focus of proposition seven. The final task of the thesis is an attempt to better understand the learning theory that underpins ODA provision. To this end, proposition eight was:

Proposition 7: Critical incidents in the ODA experience will relate to high stress events.

Proposition 8: The model of learning adopted by ODA practitioners does not accurately reflect the participant's experience on short duration courses.

ODA programmes are results-oriented. The learning theory underpinning the majority of programmes is the explicit acceptance of a rudimentary version of the Lewin/Kolb Learning Cycle (see discussion Chapter Two). This thesis contends that the practitioners' view of the Cycle is flawed and that this misinterpretation is at the heart of the controversy surrounding ODA as a vehicle for personal development.

The next section describes the way that these propositions are addressed within the thesis. It outlines the journey from literature review, through identifying the research agenda, developing the study methodology and lastly the presentation and analysis of findings.

1.3 OVERVIEW OF THESIS

Chapter Two begins by identifying the chief characteristics of ODA. The construction of course programmes is examined and a typology of course aims produced. Finally,
the difficult issue of transfer of skills from the ODA course to the workplace is analysed.

Chapter Three focuses on the evaluation of ODA, explores the main methodological approaches that have been used to evaluate ODA in the past and also examines the results of existing evaluation studies. It indicates both the problems inherent in each respective approach and the specific difficulties attached to investigating ODA. This exercise highlights the gaps and underdeveloped areas in the current body of knowledge and indicates the methodological issues that need to be addressed in the thesis. Chapter Four locates the research agenda in light of the above discussion. It describes and analyses the neo-positivist methodology employed in the research; its theoretical perspective; the problems and limitations of this approach and explores the impact of the researcher upon the research process. The methodology is evaluated in the light of issues raised in Chapter Three.

Chapters Five, Six and Seven present the results obtained. Chapter Five reports the findings of two case studies with respect to the learning outcomes of participants on one-day ODA programmes. The studies utilise both quantitative and qualitative data and analyse the impact of personality type and gender upon course outcomes. Chapter Six reports and analyses the findings regarding the influence of task design upon learning outcomes. Both quantitative and qualitative data produced by the two case studies on used to formulate a picture of the characteristics of ODA tasks and how they interact to produce the identified learning outcomes. Chapter Seven reports and analyses the impact of the review process upon learning outcomes. Important features of the review process are identified and a comparison is made between the different review formats identified in Chapter Three. The chapter also explores the phenomenon of the 'critical incident' as experienced on ODA programmes. The range of participant experiences recorded indicating that the phenomenon is
generated by more diverse activity than currently quoted in the literature in Chapter Two.

Chapter Eight attempts to model the learning and changing attitudes resulting from the ODA programmes studied. It uses the results from the data to elaborate the existing concept of the Lewin/Kolb 'learning cycle' by highlighting the factors that influence participants during the concrete and reflective stages of the learning cycle. The final chapter summarises the research findings and indicates how the thesis contributes to both theory and practice. Limitations in the study are identified and opportunities for future research are highlighted.
CHAPTER 2

WHAT ARE OUTDOOR DEVELOPMENT ACTIVITIES?

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CHAPTER TWO: WHAT ARE OUTDOOR DEVELOPMENT ACTIVITIES?

2.1 INTRODUCTION

The purpose of this chapter is to briefly define the process of ODA and its chief characteristics (section 2.2). Section 2.3 establishes the aims/outcomes of ODA programmes and section 2.4 identifies the fundamental characteristics of course design. The chapter concludes with an analysis of the process by which knowledge, attitude and skills are transferred from the course to the workplace (section 2.5).

2.2 CHARACTERISING ODA

The use of outdoor activities in ODA programmes has grown in popularity during recent years. Beeby and Rathborn (1983) identify four categories of programme for personal and manager development - adventure education or training; manager or development training; self-development; diagnosis/assessment (see Appendix One). Ibbetson (1997) identifies and characterises seven types of ODA provision from management development outdoors (workshops) which are short, typically one day programmes, with low physicality but a high emphasis on review and theoretical reality, through management development outdoors, adventure-based management development, 'military' management development and personal development to social development 'jollies', which are low to medium physicality events with a low emphasis on review and theoretical reality, often used as a reward or for the social development of teams (see Appendix Two). There has been a corresponding growth in the supporting literature, much of which presents case studies and personal accounts of programmes attended. However, there is a real paucity of analytical work, particularly that which focuses upon the theoretical underpinnings of ODA, the influence of course design and the evaluation of course outcomes.
The terms used interchangeably to describe attempts to improve some aspect of managerial performance via a programme that occurs out-of-doors are legion (see Beeby and Rathborn 1983 and Mossman 1983 for a discussion on terminology). In this thesis the term Outdoor Development Activities (ODA) is adopted throughout, recognising that Outdoor Management Development (OMD) is a prominent subset of the overall provision. Incidentally, much of the literature found under the umbrella of OMD, actually relates to personal development programmes. This problem of terminology is also reflected in the number of definitions of this activity. However, all commentators agree that ODA is a structured learning process, conducted primarily in the outdoors and designed to facilitate changes in participant behaviour. This process is encapsulated by Thompson who describes ODA as:

*a blend of cognitive learning plus subjective interpretations based on the learner's feelings and values... learning must be participative, interactive, rich with feedback, adaptable to the changing needs of the learner and guided by clear expectations for educational outcomes. Furthermore it depends on the structured interactions with the 'real world' (or a simulation thereof) that includes variability and uncertainty.*

(Thompson 1991: 46)

The growth of ODA since the 1980s needs to be seen in the context of a constantly changing business environment which is becoming increasingly competitive and uncertain; where organisations are seeking any means at their disposal to increase the efficiency and effectiveness of their employees and improve productivity (Devine 1988). Many ODA programmes operate under the premise that there is a strong and perceptible parallel between survival in the outdoors and corporate survival (Oddou 1987). The influence of outdoor or adventure centres being as apparent in the development of ODA as any managerial input (see Appendix Three).

ODA was introduced to complement existing personal and management development programmes because it possessed certain unique features when compared with traditional methods. Although ODA courses are typically held in 'wild
country' they can be conducted anywhere, including urban areas (Cole 1993; Thompson 1993). The advantages claimed for ODA arise from a number of unique features (eight in total). These are: reality; perceived risk; the reliance upon experiential learning; incorporation of post-activity reviews; use of metaphors; the emphasis on implementation skills; immediate and visible feedback and developing the whole person. Each feature will be investigated in turn (see sections 2.2.1-2.2.9).

2.2.1 Reality

The first unique advantage claimed for ODA is that it mirrors the reality of the workplace. This is multi-faceted, and the arguments take place along several dimensions. Neffinger (1990) clearly defines the dimensions on which ODA should be judged, namely that it should include real problems done in real time with real consequences. He says:

*Experience based activities are real problem solving tasks that take place in real time, and which have real and clear-cut consequences. There is no ambiguity about success or failure; the participants receive immediate feedback about the efficacy of their decisions and actions. The task does not replicate the work-specific situation. Instead it is selected to represent or have a metaphorical relationship to the issues and processes that come into play in managerial efforts.*

(Neffinger 1990: 28)

Proponents of ODA argue that outdoor tasks resemble the modern workplace to a much greater extent than any classroom environment (Burnett 1994) and that ODA can provide complex problems and generate uncertainty:

*In their normal environment managers often deal with problems that are known and the way to solve them well established. Increasingly, however, today's complex environment presents problems that are unclear which must be solved with established methods or entirely new approaches. Outdoor training is particularly suited for dealing with problems, where the method of solution is unknown while the problem is either clear or unclear.*

(Cacioppe and Adamson 1988: 79)
Neither the subject matter nor the environment of ODA is familiar to the course participant. These factors, together with the many distractions found on the course, mirror the uncharted territory of the business world more closely than the classroom situation. Thus in ODA programmes:

participants are placed in unfamiliar environments where a greater sharing of knowledge and abilities is necessary for optimum results... The formal hierarchy is replaced by a dynamic set of working relationships in which each participant is more likely to contribute according to her or his abilities.... Where most management programmes provide participants with discrete problems to be tackled one at a time, participants on outdoor programmes face the need to anticipate problems and plan for and deal with them on a continuing basis. And whereas in most management programmes the organisers go to considerable lengths to remove distractions, the outdoors - like the workplace - is full of distractions, which participants must learn to manage if they are to be successful.

(Miller and Rooke 1991:76-77)

For the participants outdoor tasks, whilst not 'normal', are real. Events and people are unpredictable, time and resources are limited and a result has to be achieved. Uncertainty exists in ODA to an extent that cannot be replicated in the classroom (Hogg 1988; Cacioppe and Adamson 1988; Dainty and Lucas 1992) and as in the workplace there is not always a clear solution. Indeed:

Each situation presents the members of the group with problems, choices, responsibilities and opportunities. There are also constraints on actions and behaviours, yet there is considerable freedom to act within these limits. As such it is in many respects like the work situation since the environment is a challenging one that can be unpredictable and require different responses, yet without the threat to career and personal integrity.

(Cacioppe and Adamson 1988: 79)

The issue of 'reality' is therefore one of recreating the elements found within the business world which require a managerial response. While ODA programmes do not visually resemble the workplace, they nevertheless contain all of these necessary elements. Furthermore, Dainty and Lucas (1992) argue that during ODA, participants cannot hide behind educational or organisational norms since these no longer exist.
Participants are challenged to confront uncertainties and learn how to manage
themselves and their feelings.

2.2.2 Perceived Risk

ODA may contain activities which, although not dangerous in an objective sense
(Cacioppe and Adamson 1988) due to stringent safety procedures, nevertheless
carry the perception of risk. This induces stress and apes the physical, emotional and
mental realities that managers face in the workplace (Butcher 1991; Reeve 1982).
The literature is infused with anecdotal evidence regarding the efficacy of 'high risk'
activities, and they are credited with enhancing participant learning through a number
of different means. Firstly, they capture the participant's attention and force them to
engage with the learning process:

> A number of activities .... invoke for more people such a degree of
scare that it really is nearly impossible to distance self from the
experience. It is simply that the strength of feeling is enough to keep
the person in the here and now, and involved in the event at more
than a mind level.

(Creswick and Williams 1979)

Secondly, stress increases the impact of the learning situation. It increases self-
awareness and also self-confidence when challenging tasks are overcome (Oddou
1987). It is not simply the type of activity that is important but the fact that participants
are challenged or stretched beyond what they thought themselves capable of. As
Long comments:

> This course gives you confidence and energy, and even a positive
kind of arrogance for dealing with the demands and problems that
seemed overwhelming last week.

(Long 1984: 65)

Gall (1987) regards these activities as providing a critical dimension to the
programme and one that has a lasting impact:

> If you can get people to risk trying something that they are sure they
can't do and they discover they can do it, that realization translates
into their whole attitude about how they approach life, how they approach work, how they approach managing.

(Gall 1987: 54)

He continues, pointing out that:

Most adventure training participants can name specific points in their outdoor experiences that had a profound, lasting impact on how they viewed themselves in the work environment.

(Gall 1987: 55)

While the physical risk is paramount for some participants, the greatest challenge for others is having to open themselves up to members of the group and the personal risk associated with becoming close to and trusting others (Petrini 1990). McEvoy and Butler succinctly note that the stress in ODA events:

.....is due not only to physical risk but also to the emotional vulnerability that is present when someone fails to perform at a certain level in front of a group of peers, supervisors or subordinates. Outdoor activities elicit a range of personal and interpersonal behaviours which are open for all to observe and discuss, and either to model or to avoid.

(McEvoy and Buller 1997: 211)

McEvoy and Buller (1997) also noted that real learning could not take place if the perceived risk or the fear of failure was too high, since both of these elements inhibited the actions of participants. In view of this emotional stress, ODA providers need to establish a supportive psychological climate during the course to enable risk taking, feedback and other key interpersonal skills to flourish.

2.2.3 The reliance upon experiential learning

ODA programmes are based upon a different model of learning to traditional teaching and learning techniques (Cacioppe and Adamson 1988). Traditional techniques are classroom-based and utilise the model of learning shown in Figure 2.1. In this model the participant (a misnomer) receives knowledge and is then asked to apply it to a
given problem or test. In contrast to this passive classroom learning, learning in the outdoors is an active process where participants have to make real choices and develop meaning and knowledge from their own experiences:

_The outdoor development course is based on the different assumption that individuals will learn more by being confronted by a challenge and by having to develop meaning and knowledge from their own experience. The realisation of general guidelines and skills emerge from this type of learning and are a useful set of tools in approaching other management situations._

(Cacioppe and Adamson 1988: 87)

Underlying many ODA programmes is a learning theory based upon the Lewin/Kolb Learning Cycle (Beeby and Rathborn 1983; Patel and Perruzza 1993; Chapman and Lumsdon 1983; Honey and Lobley 1986). The theory as adopted by ODA practitioners defines four phases in the process of learning from experience. In phase one, the participant engages with a problem or task, this is known as the 'concrete experience'. In phase two he or she reflects upon that experience (reflective observation). Phase three involves generating theory from this experience and reflection (abstract conceptualisation) and the final phase involves engaging with a further task and putting this new learning into effect (active experimentation). Participants are seen as moving through this process several times during the course of an ODA programme. This simplistic version of the Lewin/Kolb Learning Cycle is illustrated in Figure 2.2.

The Lewin/Kolb Learning Cycle has been influential in the design of ODA programmes and theorists (e.g. Beeby & Rathborn 1983) have been quick to demonstrate how the two are inextricably linked (see Table 2.1 and Figure 2.3).
Chapter 2: What are Outdoor Development Activities?

Figure 2.1:

**Standard Classroom Learning Cycle**

- **Accumulated theories & knowledge**
  - Teach Theories, facts & current knowledge
  - Present a problem to test knowledge
    - Add new research & theories
      - Conduct research
        - Develop new theories
          - Find new facts
    - Apply learned knowledge, theories & facts to problem
      - Check how answers & responses fit with known theories & facts
        - Assume students are able to apply this approach to new situations

(Adapted from Cacioppe & Adamson 1988: 87)
Figure 2.2: The Lewin/Kolb Learning Cycle

(Adapted from Kolb 1971)

<table>
<thead>
<tr>
<th>Lewin/Kolb Stage</th>
<th>Course Component</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete experience</td>
<td>Indoor and outdoor exercises</td>
<td>Generation of learning data</td>
</tr>
<tr>
<td>Reflection/observation</td>
<td>Process reviews</td>
<td>Identification of emergent issues</td>
</tr>
<tr>
<td>Abstract conceptualisation</td>
<td>Theory</td>
<td>Clarification of experience, insight</td>
</tr>
<tr>
<td>Active experimentation</td>
<td>Planning</td>
<td>Preparation for action on the course and at work</td>
</tr>
</tbody>
</table>

(Adapted from Beeby & Rathborn 1983: 178)
Unlike many other forms of personal development, it is argued that ODA provides a common experience and data for the participants and an equal starting point in the learning cycle:

The tasks provide the ‘concrete experience’ stage of learning, then processing encourages ‘observation and reflection’ and the formation of ‘abstract concepts and generalisations’. The fourth stage of testing the concepts in new situations is provided by additional task opportunities during the programme. Within this cycle, reflection is seen to be the key in getting people to ‘own their own learning’.

(Dainty & Lucas 1992: 180)

Chapman & Lumsdon say:

Very few management development activities comprise all four of the elements described by Kolb in his model of “Circular Learning”. Most programmes rely on the prior existence of Element 1, concrete
experience, in participants. Development training creates it by providing experience in an environment which can be uncomfortable, uncertain, unfamiliar and sometimes hostile.

(Chapman & Lumsdon 1983: 28)

Classroom learning also suits only a limited number of learning styles. Honey and Mumford (1986) acknowledge that different managers have different learning styles. Some managers learn best from activities, whilst others prefer time for reflection; others like to learn theories and concepts and yet others are keen to apply their learning to their working contexts. The four categories of learners can be described as: activists, reflectors, theorists and pragmatists.

One of the benefits claimed for ODA is that it draws upon all these learning styles, so that regardless of a manager’s preferred learning style, he or she should be able to fully engage with the ODA process. Furthermore ODA makes participants more familiar with their own learning style and its consequences and also increases their awareness of the way they interact with people with different learning styles. As Cacioppe and Adamson note:

_The experience and interpretation of the problem and information from the natural environment can differ dramatically from one individual to another. Even though group members go through the same task, each learns what he or she needs to learn at that time. For example, one person may learn not to jump to conclusions, another may learn to be patient with other members of the group who are not physically fit and another may learn the essentials of planning, all during the same problem._

(Cacioppe and Adamson 1988: 80)

The issue of whether ODA provides a common starting point for all participants is controversial. Certainly task knowledge may be limited, if the participants have not engaged with ODA before, whilst the participant's ability to engage with the processes of management and group working (process knowledge) may be affected by prior learning.
Advocates appear to claim that both task and process knowledge is somehow levelled through the use of ODA. It may be reasonable to argue that everyone is starting from the same knowledge position in relation to the requirements of the task. However, the validity of ODA as a training intervention is defended on the basis that it is the process learning which is the significant outcome of the programme and not task learning. It seems unlikely for the above reasons, that all participants are starting from the same knowledge position in relation to the processes required to complete the task. Contrary to much of the literature, high process reality within the ODA task may paradoxically result in existing dominant work-based attitudes and behaviours being elicited and reinforced. This makes the efficacy of ODA as a change agent suspect.

Perhaps of greater significance to the debate on ODA’s efficacy is a more thorough analysis of the Lewin/Kolb theory of learning. The rudiments of the theory have been outlined above but much has been lost in this simplistic interpretation. In his work on experiential learning Kolb explored the whole area of adult life-long learning. The ‘Learning Cycle’ is just part of a much larger theory of personal development in which performance, learning and development, form a continuum of adaptive postures to the environment, varying only in their degree of extension in time and space. Learning is best conceived as a process not as a set of outcomes.

The theories Kolb developed are based upon the work of many authors but principal amongst these are Jung (1960, 1977), Dewey (1910,1934,1938,1958), Lewin (1951) and Piaget (1951,1971). The latter three produced models of experiential learning which describe conflicts between opposing ways of dealing with the world. They suggest that learning results from resolution of these conflicts.
Chapter 2: What are Outdoor Development Activities?

Based firmly on Lewin's Learning Cycle, Kolb models the concrete experience/abstract conceptualisation and active experimentation/reflective observation as two distinct dimensions, each representing two dialectically-opposed adaptive orientations. As Kolb explains:

*The abstract/concrete dialectic is one of prehension, representing two different and opposing ways of grasping or taking hold of experience in the world – either through reliance on conceptual interpretation and symbolic representation, a process I will call comprehension, or through reliance on tangible, felt qualities of immediate experience, what I will call apprehension. The active/reflective dialectic, on the other hand, is one of transformation, representing two opposed ways of transforming that 'grasp of experience – either through internal reflection, a process I will call intention or active external manipulation of the external world, here called extension. Knowledge results from the combination of grasping experience and transforming it. (Kolb 1984: 40).*

For Kolb, learning was by its very nature a tension and conflict filled activity in which apprehension and comprehension were accorded equal importance in the learning process. In order for new knowledge, skills or attitudes to be achieved confrontation was required amongst four modes of experiential learning. To be an effective learner, a person needs four different kinds of abilities – concrete experience abilities (CE), reflective observation abilities (RO), abstract conceptualization abilities (AC) and active experimentation (AE) abilities.

In that it seeks to describe the emergence of basic life orientations as a function of dialectic tensions between different modes of relating to the world, experiential learning is a holistic concept, similar to Jung's theory of Psychological Types (Jung 1923). Both involve the integrated functioning of the whole person – how they think, feel, perceive and behave.

In his theory of psychological types, Jung distinguishes between those who are oriented towards the external world and those oriented towards the internal world. A distinction in his terms between *extrovert* and *introvert*. He identified four basic
functions of human adaptation: two describing alternative ways of perceiving, sensation and intuition and two that describe alternative ways of making judgments about the world, thinking and feeling. He then went on to produce a typology based upon four pairs of dialectically-opposed adaptive orientations. These described an individuals' mode of relating to the world via introversion or extroversion; their mode of decision making via perception or judgment; their preferred way of perceiving via sensing or intuition and finally their preferred way of judging via thinking or feeling.

It is not surprising since Kolb draws heavily upon the work of Jung that he sees a correspondence between personality traits and modes of learning. He links introversion and the experiential learning mode of reflective observation via intentional transformation, and that of extraversion and active experimentation via extension. Similarly, concrete experience and the apprehension process are associated with both the sensing approach to perception and the feeling approach to judgment. The processes of abstract conceptualization and comprehension are related to the intuition approach to perceiving and the thinking approach to judging. He is less willing to make predictions about perception and judgments types since this preference is a second order one; for instance, a person with a preference for perception could perform it via sensing or intuition.

Of all these purported linkages between personality trait and mode of learning, Kolb reported that the 'strongest and most consistent relationship appears to be between concrete/abstract and feeling/thinking and between active/reflective and extravert/introvert' (Kolb 1984: 81).

Kolb's model of learning is firmly rooted within the 'constructivism' school of thought. This is, according to Fenwick (2000), the most prevalent understanding of experiential learning. It is a perspective on learning which is based upon reflection.
The individual learner is seen as the central character in a process of personal meaning making. He (or she) supposedly reflects on their experience then interprets this experience to create a mental picture. Importantly, they are seen as independent constructors of their own knowledge, with the role of the adult educator depicted as just an aid to 'help' them learn.

Several alternative schools of thought have critiqued this perspective. Fenwick categorizes the three main perspectives as follows:

the phenomenological tradition which analyses emotional states suggesting that reflection begins by analyzing the learner's way of observing, communicating, thinking and acting; the critical theory tradition, which views critical self-reflection as a central element of adult learning and development, with the aim of experiential learning being to correct political and social factors that limit a learner's development; and the situated and action theory tradition of situated cognition and enactivism which stress the role of cultural action and analysis criticizing those that divorce the concept from its socio-historical roots.

(Fenwick 2000:5)

Each of these perspectives provides a particular picture of learning that highlights some aspects of learning and obscures others. Collectively they indicate shortfalls in the constructivist (and in this discussion, Kolb's) position. Namely, that experiential learning theorists:

1. have been criticized for emphasizing the individual side of learning and overlooking or even ignoring social aspects.
2. have insufficiently explained and developed the role of the adult educator in designing learning activities. Critics challenge the notion of the 'learner' as a unitary self who can reflect problematically
3. assume that our construction of learning from experience is an intentional act. Incidental learning, which occurs almost unconsciously, is ignored. Similarly,
Kolb does not attend to internal resistance in the learning process – the issue of non-learning.

4. assume that the individual is fundamentally separate from his or her environment and relations with others. Critics argue that that reflection processes cannot be separated from some sort of event called 'experience'. They have critiqued Kolb's assumption that experience is 'concrete' and split from 'reflection' as a sort of dichotomy. This ignores the possibility that all knowledge is constructed within power-laden social processes, that experience and knowledge are mutually determined, and that experience itself is knowledge driven (Michelson 1996).

5. place too much emphasis upon 'reflection' as a cognitive activity. The role of desire in experience and learning is ignored.

These concerns give rise to a number of important questions that need to be asked specifically within the context of ODA. Namely: Is there evidence to support the notions that desire is a motivating force in the learning process? What exactly is the role of the educator? How does the educator influence the learning process? Do all learners benefit equally from ODA? What is the 'concrete experience' and is it separate from the reflective processes of the learner? Are some forms of experience more valuable or useful to learn from than others? What precisely can we learn from experience?

These questions are the subject of Chapters Six and Seven.

2.2.4 The Post-Activity Review

As indicated in Table 2.1, the task, which provides the 'concrete experience', is followed by a review or debrief, which facilitates reflection on the learning which has taken place (Beeby and Rathborn 1983). This involves the integration of indoor and
outdoor elements into one programme (Anderson 1989, Chadwick et al 1987). The onus is upon the participant to analyse the experience gained in the outdoors and make connections with the workplace. Thus ODA:

_"is not just a romp in the woods. It is a carefully designed metaphor intended to involve and empower the learner through active reflection about what the experience means."_

(Thompson 1991: 46)

Structured learning reviews are the key to enhancing the learning from the outdoor activities and this is stressed in a number of texts (Honey and Lobley 1986, Thompson 1991). Priest concurs with this, stating:

_"The key to sound transfer lies in the debrief. Debriefings under the guidance of a trainer, is the opportunity to process new learning by sharing thoughts and to transfer that learning by speculating on ways it can be applied either at work or to the next training task. Debriefing should take place as soon as possible after the experience and should contain five steps: review/recall, affect/effect, summation, application, application and commitment. In general, this sequence of steps should ask clients to remember an instance of positive or negative performance, discuss how that made them feel or how it impacted upon the group, sum up what they learned from this, describe how they can use that learning the next time and detail a plan for acting differently in the future."_

(Priest 1991: 16)

Peckham (1993b) develops an expanded model based upon Kolb's work that represents a learning cycle for an individual, group or organisation (see Figure 2.4). A key part of this model is that:

_"...with attitudinal change the individual can exercise a certain degree of conscious choice, rather than being instrumentally subjected to a closed cycle (and) the critical element that ensures long lasting learning is the ability to enable individuals and teams to become aware of, and accept, their behaviour and hence to generate the desire for change."_

(Peckham 1993b: 13)

Mossman (1983) reports that the quality of reviews in outdoor management courses is felt by some to be 'inadequate', especially when relating learning on the course to aspects of the work situation. The quality of the review is, for Mossman, largely a
function of the skill and sensitivity of the staff conducting them and in particular, their ability to differentiate between content and process (Mossman 1983).

Beeby and Rathborn (1983) categorise essential staff skills as the ability to sustain, modify and model the learning process. The facilitator is seen as crucial to the success of the programme (Wagner et al 1992). Crawford (1998) suggests that the course team will adopt various roles including: tutor, leader, observer or catalyst depending upon the circumstances pertaining at that point in the programme.

However, individuals are encouraged to discover their own weaknesses and to take 'ownership' of their own learning (Williams 1993, Patel and Perruzza 1993). Miller and Rooke (1991) support the view that tutor intervention can disrupt the learning process. They advocate gentle intervention thereby maximising the possibility of participants taking ownership of the learning process. This process can be assisted by a gradual reduction in tutor dependency as the course progresses (Peckham 1993b). Peckham's model is useful in describing the role of the tutor/facilitator in ODA:

*Typically, a group will arrive on a programme with a high degree of tutor dependency and an accompanying low responsibility for learning. This is a period which is best termed 'infancy' in which delegates have an almost child like dependency on the tutor. Typically reviews will be tutor defined and led with theoretical inputs going unchallenged. What can then happen, is that as the delegate grows in confidence the tutor dependency recedes as the individual's responsibility for learning increases.*

(Peckham 1993b: 14)
Recognising the links between behaviour and performance is essential to self-improvement (Oddou 1987) and one of the most significant benefits claimed of ODA is that participants experience immediately and visibly the consequences of their planning and decision-making (Noel and Charan 1988). This factor is further enhanced by the incorporation of process reviews. The onus is upon the participant to analyse the experience gained in the outdoors and to make connections with the workplace.
2.2.5 Activities as metaphor

Courses are ultimately metaphors for the challenge of the workplace and as such activities are metaphors for different aspects of that experience: climbing high walls means overcoming obstacles; falling into the arms of the group equates with trusting team-mates (Broderick 1989; Thompson 1991). Metaphors are a key ingredient in the transference of knowledge from the course to the workplace. The metaphors used often provide highly memorable experiences and the power of this experience produces change. In other words: 'By overcoming our reluctance and fear, the theory goes we would be better prepared to face other challenges' (Rice 1979: 65).

2.2.6 Emphasis on implementation skills

Many classroom-based courses are heavily biased towards analytical skills leading to 'paralysis through analysis', neglecting pathfinding and implementation. In these key areas the importance of leadership and interpersonal skills are crucial, skills allegedly promoted by ODA (Anderson 1989, Miller and Rooke 1991).

2.2.7 Immediate and visible feedback/ consequentiality

In the workplace many decisions that people make, do not have visible effects or even if they do, there may be a considerable time delay. This is in strong contrast to ODA were the consequences of individual and group action are immediately apparent. Proponents of ODA see this as an essential ingredient in the development of the individual:

...recognising the links between one's behaviour and his/her performance is essential to self improvement and improved group or company performance. The physical environment shortens the timeline for learning cause-effect relationships and the feedback is very visible. When your river rafting group decides to negotiate a particular rapid by steering to the right of the river, whether you made a correct choice or not is apparent in a matter of seconds.

(Oddou 1987: 147)
Since the group is 'pitted' against nature and an objective task and not against other individuals, there is no hidden agenda (Oddou 1987). The group and individuals within it are solely responsible for the outcome of their joint efforts. These outcomes are immediate and clearly demonstrate success or failure:

_The power of the Outdoors comes from the immediacy of the consequences of success and failure. The tasks involve the whole person, not just the intellectual part. Management too involves the whole person. Taking a team away together enables them to get to know each other better. It seems that delegates don’t yet know how to behave on an OMD programme. They are therefore forced back into their total reservoir of behaviours. In this way team members become aware of the ‘kind of stuff their colleagues are made of’. That kind of knowledge becomes useful back on the job as team members help each other respond to crisis and opportunities._

(Mossman 1983: 193)

### 2.2.8 The holistic approach: developing the whole person.

The last unique attribute claimed for ODA programmes is that they involve the whole person in the learning experience; that is the activities involve thinking, feeling and doing. It is suggested that this holistic experiential approach results in the events being more memorable than alternative forms of training. The North American literature emphasises that ODA is different because the learning takes place on three levels; the emotional, physical and intellectual, and it is this that differentiates ODA from other 'learning by doing' programmes. According to Mazany _et al_ (1995), people learn through three interrelated processes: their cognitions, their emotions, and their behaviours. These authors believe that the most powerful educational activities that managers experience often incorporate learning from all three learning processes. Since ODA falls into this category it is to be considered a more powerful developmental tool than other traditional methods of management development. Although the general assumptions underlying ODA, as described above, are widely accepted, their individual pertinence to outcomes in managerial performance remains largely untested. The next section attempts to create a typology of courses through an examination of course aims.
2.3 AIMS AND OUTCOMES OF ODA PROGRAMMES

2.3.1 Creating a typology

Authors have attempted to categorise courses by grouping objectives under major banners. Mossman's (1983) categorisation is based upon the purpose of the course, that is personal growth, manager development, team development, management and organisational development, and assessment. Peckham attempts an alternative categorisation based upon inputs (Peckham 1993a, Peckham 1993b). The categorisation is determined by the relative balance between three principal components of ODA: the tasks employed, the use of the outdoors and the degree of theoretical input/review. Despite the plethora of ways of categorising courses one of the simplest means is to identify courses by their intended objective. A summary of common course objectives is shown in Table 2.2 (with an alternative interpretation in Appendix Four).

With numerous possible objectives and a corresponding armoury of techniques it becomes clear that ODA is not homogeneous. There have been a number of attempts to locate ODA within a schema of Management Development. Waters (1980) provides a useful framework (Figure 2.5) for positioning development training within the spectrum of management skills training.

These objectives can be grouped into four major categories: personal development and growth; the development of managerial/interpersonal skills; team building and organisational development (see Table 2.2)
## Figure 2.5 Managerial Skills Framework

<table>
<thead>
<tr>
<th>Long Interval</th>
<th>Context Skills:</th>
<th>‘Wisdom’</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal-setting</td>
<td>1</td>
<td>Charisma</td>
<td></td>
</tr>
<tr>
<td>Work planning</td>
<td></td>
<td>Entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>Designing controls</td>
<td></td>
<td>Strategy formulation</td>
<td></td>
</tr>
<tr>
<td>Building commitment</td>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Short Interval</th>
<th>Practice Skills</th>
<th>Insight Skills</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance appraising</td>
<td>3</td>
<td>Working in groups</td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td></td>
<td>Coping with ambiguity and change</td>
<td></td>
</tr>
<tr>
<td>Active listening</td>
<td></td>
<td>Building trust</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negotiating</td>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Behaviourally specific</th>
<th>Behaviourally non-specific</th>
</tr>
</thead>
</table>

(Adapted from Waters 1980)

The first of these major sets of aims (personal development and growth) may feature as the rationale for the course but often these aims are infused into programmes with other more overt managerial or organisational aims. Pollack captures the relationship between these different aims by saying:

> **Basically OMD uses the outdoors to develop understanding of the managerial role. Often to develop understanding of the managerial role, one first needs to cultivate self-awareness. Thus OMD tends to be a combination of self-awareness and managerial awareness raising.**

(Pollack 1994: 7)

The next three sections will examine how ODA is used to further managerial and organisational aims.
### Table 2.2 Summary Of Possible ODA Course Aims

#### Personal Development & Growth:

- Increase self esteem and self confidence
- Self awareness: by helping participants to understand their own abilities, limitations and motivations
- Improved understanding of others
- Learning to manage stress
- Time management
- Developing confidence in coping with new situations

#### The Development of Managerial & Interpersonal Skills:

- Develop interpersonal communication skills, co-operation and trust
- Giving and receiving feedback
- Creative problem-solving: developing skills in analysing problems, assessing options and different courses of action. Making decisions and taking risks.
- Planning
- Developing leadership skills, understanding management styles
- Managing conflict

#### Team Building:

- Learning to work within a team, understanding how teams work

#### Organisational Development and Change:

- How to create effective strategy and manage its implementation

2.3.2 The development of managerial/interpersonal skills

These skills are numerous and often treated discretely, despite the fact that they are often inter-related. ODA is claimed to develop creative thinking and problem-solving skills. These are necessary today because as managers progress to senior level they require greater creativity and skill since they are dealing with ambiguity and conflicting views on problems and solutions (Reeve 1982). With changes in organisational structure these skills are now required in younger, more junior managers. Allied to this is the need to experiment and take risks in order to be creative and deal with new non-routine problems (Chapman and Lumsdon 1983; Gall 1987).

The development of leadership skills is also paramount. This is variously defined (if at all) and includes elements such as: coping with pressure; management styles; team building; coaching; delegation; management functions - setting objectives, planning, briefing, monitoring, supporting and evaluating (Arkin 1991). A useful schema is found in Thompson (1993) which emphasises the twin capabilities of transformational and transactional leadership. ODA develops participants' skills in working with and through others (Reeve 1982) and offers exposure to different decision-making and leadership styles, together with an opportunity to assess their relative merits (Smith 1992).

2.3.3 Team building

The third aim of ODA is the building of team-work skills. This can be seen as an end in itself or as part of wider organisational objectives, e.g. changing attitudes. ODA can be a stand-alone activity or part of other management development programmes. For instance, ODA can be used as an initial element in creating teams (Gall 1987) who later progress onto projects in Action Learning Programmes
Chapter 2: What are Outdoor Development Activities?

(Froiland 1994, Noel and Charan 1988). ODA are used to accelerate the group-bonding process and quickly show if groups are working ineffectively. Functional problems, such as over planning or not listening to group members, soon become apparent (Noel and Charan 1988; Petrini 1990). There is also a growing link between team-work tasks in non-hierarchical groupings and the types of organisational structures emerging in the 1990s and early 2000s (Burnett 1994).

2.3.4 Organisational development

Proponents argue that ODA can make an important contribution to changing attitudes and culture within an organisation. Examples of organisations which have attempted to engineer a change in culture via ODA include Austin Rover (Pickard 1988), the UK Post Office (Patel and Perruzza 1993) and Aston Martin (Williams 1993). The move to Total Quality Management in the Royal Mail, was facilitated in part by the use of the outdoors, which was used to:

promote a commitment to the team ethic through team working;

examine the role and importance of the team and individual in achieving organisational objectives; provide opportunities to experience and observe how change impacts on an individual and the strategies available to deal with this; examine methods of handling conflict and resistance to change; and provide managers with the skills to communicate Royal Mail values to their employees.

(Patel and Perruzza 1993: 25)

An alternative scheme, but again based upon inputs, is presented by Dainty and Lucas (1992) who have produced a typology for distinguishing between potential outcomes of outdoor development programmes. Their model highlights two key variables of ODA: the tasks they incorporate and the style of review process used in the debriefing of those tasks. They argue that, in principle, less structured tasks:

lend themselves to the development experiences most beneficial to managers. However, such tasks alone may not be inherently developmental and it is the review process which is critical in moving an experience from being enjoyable to being developmental.

(Dainty and Lucas 1992: 115)
Dainty and Lucas have classified what they believe to be the major outcomes for ODA into an Outdoor Development Matrix. These outcomes are the development of: self and other awareness; broad concrete skills, e.g. leadership; team building; narrow concrete skills, e.g. active listening and fun/enjoyment. They believe that the comparative advantage of ODA lies in trying to achieve improvements in self, and other awareness and the development of broad concrete skills. To maximise competitive advantage provider units should incorporate task activities which facilitate these potential outcomes. They argue that the outdoors provides one of the most powerful media for the development of self and other awareness. This assertion needs to be tested to see if such a link exists and, secondly, if ODA has a comparative advantage in this area. Furthermore they, like the other authors above, identify relationships between tasks and outcomes. This brings us to the issues surrounding course design.

2.4 THE FUNDAMENTALS OF PROGRAMME DESIGN

2.4.1 General considerations

Much of the literature focuses on the design of ODA in order to maximise the benefits which can be derived and ensure improved managerial performance in the workplace. There is however a key issue which needs to be addressed before actually concentrating on course design. The 'in-house' versus 'open' course debate finds expression in Anderson (1989). The advantages and disadvantages of each needs to be seen in the context of course purpose.

The benefits of the 'open' approach which is used to bring together people from different organisations are: the cross-fertilisation of ideas which takes place when people from diverse backgrounds meet; a greater willingness on the part of participants to take risks and sample new experiences since there is a lower fear of
appearing foolish in front of others (compared with an in-company group); and finally, there is considerable opportunity, away from normal organisational influences, to undertake self-analysis and develop greater personal understanding (Anderson 1989). The benefit of 'in-house' courses can be seen in team-building and other areas where participants return to a common workplace. The success of courses depends upon a multitude of factors, many of which are imperfectly understood. It appears from the literature that the key ingredients occur in three distinct phases in relation to the course itself, namely, preparation, course content, and review and implementation. These three phases will each be discussed in turn.

2.4.2 Phase one: Preparation.

Preparation is vital to the success of the programme and phase one begins before the actual course starts. The purchaser should have clear aims and objectives which should be clearly conveyed to, and agreed, with the provider. To deliver these, customisation of the course is essential (Krouwell and Goodwill 1992). The content should be appropriate to the stated objectives and providers should be able to demonstrate the linkage between proposed activities and intended objectives (Handforth 1993). Furthermore, delivery is contingent upon choosing an experienced provider unit possessing trainers with both ODA and business experience (Gall 1987).

Participants require a multi-purpose pre-course brief, which helps to promote the aims of the course and create a positive approach. The opportunity can also be used to explain the methodology of ODA (Hilton 1992) and any specific techniques that may be employed (Smith 1992). In other words, participants are working for the course before they arrive on it. The brief should also assist in allaying fears concerning safety and highlight the degree of physical effort involved (Chadwick et al
Perceived risk, which is a key element in the learning process (Oddou 1987; Van Zwieten 1984), fosters the impression that ODA activities are unsafe, i.e. that the risk is real. U.S. data indicates a rate of injury of only 1.01 per million participant hours (Thompson 1991), although the injury rate is likely to be uneven between suppliers with the most reputable being preoccupied with safety. On the issue of safety, it is well to note that accidents do occur (often dramatically) and that providers, even established ones, have casualties. This is not surprising statistically given the large number of participants over the years (Cacioppe and Adamson 1988; Gahin and Chesteen 1988) but purchasers need to satisfy themselves that providers offer adequate safety standards.

Trust is a big part of the experiential experience. This point is also addressed by Priest (1991) who stresses the need to establish confidentiality and to safeguard against emotional damage. This can be achieved by establishing a supportive atmosphere as well as a safe one. Guidelines for group behaviour need to be provided which avoid ‘put downs’, encourage listening to all ideas, and openly offer and accept feedback.

2.4.3 Phase two: Course content

There should be continual purchaser involvement throughout. This links the course to reality for the participants and also allows the purchaser to monitor the actions of the providers with respect to the quality of coaching, clarifying, quantifying and assessing that takes place (Handforth 1993). All outdoor activities need to be within the physical ability of the participants for safety and motivational reasons. There should be a satisfactory mix of indoor and outdoor activities. Courses which concentrate on outdoor tasks at the expense of process reviews neglect an important part of the learning process and one of the chief mechanisms for the transference of knowledge from course to workplace (Anderson 1989; Crawford 1988; Handforth 1993; Honey and Lobley 1986).
Chapter 2: What are Outdoor Development Activities?

Process reviews (given numerous labels, such as 'appraisal', 'feedback' or 'debriefing') should be a significant and continual element of the course. In addition to the functions already mentioned, they allow staff to monitor course progress and to adjust accordingly (Crawford 1988). There should also be an end-of-course review, both oral and written, in which each individual is invited to consider how the course has impacted on them and how they can utilise the learning in their workplace. This can be formalised by the use of action plans for individuals.

Action plans can be a useful technique for transferring the knowledge gained back to the workplace. Their effectiveness depends upon how they are utilised. A common fault with many action plans is that participants only find out their development needs at the end of the course, and are unable to address these points within the safety of the course itself (Peckham 1993b). This problem has been avoided by some organisations which require participants to fill in an action plan statement (i.e. what they want to develop personally) before they actually come on the course (Arkin 1991). This is then addressed during the course and the plan modified accordingly.

2.4.4 Phase three: Post-Course

The transference of knowledge from the course to the workplace is central to the whole exercise and to facilitate this there should ideally be a post-course follow-up. This can take several forms: a post-outdoor session, networking between participants or the use of coach-mentor to help keep to the action plan (Gall 1987). To develop a supportive climate for the implementation of ideas generated by the course requires assistance from top management (Hogg 1988; Bassin 1988; Gall 1987), human resource managers and line management (Buller et al 1991; Crawford 1988; Hilton 1992). Building successful bridges between the course and the workplace requires not only a structure for 'spanning the chasm' but also supporting foundations on
either side. This brings us to the issue of transference and the impact of the workplace upon the actual learning process.

2.5 THE TRANSFER OF KNOWLEDGE, SKILLS AND ATTITUDES FROM THE ODA PROGRAMME TO THE WORKPLACE.

There are several major questions here including: how is knowledge transferred? what are the obstacles to transference? how can they be overcome? and, what outcomes can be identified? Each of these questions will be addressed in turn.

2.5.1 The Transference of Knowledge

According to Gass et al (1992) the transfer of learning from ODA can occur at three levels: specific; non-specific; metaphoric. Specific transfer occurs when skills are learned which can be directly translated into another situation (e.g. listening). Non-specific transfer is when processes of learning are generalised into attitudes which the learner will make use of in the future (e.g. tolerance of others). Metaphoric transfer is where processes in one learning situation serve as an analogy for learning in another situation, e.g. adopting a more adventurous approach to work as a result of an abseiling experience (for a fuller discussion regarding these distinctions see McGraw 1993).

The three key factors that assist the transfer process are process reality, the stress factor and the review process. One of the criticisms of ODA programmes is that they take place in an unrealistic environment and that the tasks bear no relation to workplace tasks. The Lancaster model (Crawford 1988) focuses on and develops the importance of reality to the transfer of learning. Three dimensions of reality are identified: task reality - what must be done; process reality - how it is to be done and environmental reality - the context in which it must be done. Crawford (1988: 18) argues that: 'it is only when the reality of both the task and the environment are low
that there will be significant process learning'. Since both task and environmental reality are low in ODA, the learning on such programmes should be about process. The response to the criticism, based on this model, is that on outdoor programmes reality of both task and environment will tend to be low, while process reality is high. Learning in this context is about process; that is participants are bound to see how progress is made (or otherwise) and how improvements can be made. This view is echoed in Hogg (1988) and Hilton (1992), whilst in addition, Kirk (1986) asserts that transferability of knowledge is increased where participants perceive high reality in the learning event and their world of work.

The 'unrealistic' nature of the activities can enhance rather than reduce the quality of learning. Crawford (1988) argues that most people recall events and situations in considerable detail when they are associated with times of high stress. ODA is stressful and there is a probability that ideas and meanings are more likely to be remembered if generated in this environment. This theory is contested by Butcher (1991) who sees a great difference between anxiety experienced during ODA and that experienced in the workplace. The process needs to be managed since participants who fail to cope with activities or stress levels generated by them can become demotivated (Butcher 1991; Hilton 1992).

There seems to have been a development in the industry's perception of what individuals take with them from ODA and how it is transferred. It appears to have changed from 'a hit or miss affair' (Rice 1979) to a more directed process with increasing importance attached to the review process, outlined by Gall (1987) as a transference which:

begins with helping people extract their own learning from how they work together and what they really need to work on. - hence the importance of the review process........... a carefully facilitated feedback session helps to build acceptance, trust and understanding among the team members.

(Gall 1987: 56)
Process reality, stress and the review process have been identified as key variables in the learning process. The mix of these three is unlikely to be standard across all courses and provider units, although how this affects outcomes is not known. The implications of these points for future research will be examined in chapter five.

2.5.2 Overcoming the obstacles to transference.

Many of the transfer problems associated with ODA are in fact common to other types of personal and management development (McGraw 1993). The obstacles to transference and potential solutions can be analysed in relation to the phase of the ODA programme in which they are generated, before, during and after the course. Before the course commences inadequate organisational analysis can result in unrealistic client expectations and the development of a programme irrelevant to client needs (McGraw 1993). A further refinement of this point revolves around the notion of 'skills lag', i.e. organisations defining their training needs on the basis of 'current analysis of skills, rather than on the basis of future needs' (McGraw 1993).

Problems relating to corporate culture may arise if there is a lack of 'fit' between the aims of ODA and the culture of the client organisation. McGraw (1993) gives the example of managers receiving ODA for leadership training and then returning to an organisation that does not give scope for that leadership to be exercised. Similarly, other ODA-inspired initiatives may be blocked in the workplace. Hilton noted that:

*unfamiliar surroundings allow people to gain a self-knowledge which they miss when caught up in the day-to-day life of the workplace. (But) We had a lot of people going back to work with lots of ideas and their managers saying: Look, you have been on your holiday, now get on with the job.*

(Hilton 1992: 46)

A lack of senior management support for ODA can damage the effectiveness of the programme. This can be particularly seen prior to the course, since poorly-conceived development programmes may represent insufficient planning and integration with
the company's organisational aims. During the course senior management attendance is needed to illustrate the importance of the activity since actions speak louder than words in giving credence to the significance of such courses (McGraw 1993; Hogg 1988; Bassin 1988; Gall 1987).

During the course skills development must be tied to real problems in the workplace and learning cannot be left to chance (Dainty and Lucas 1992; Rice 1979; Kirk 1986): Indeed, Honey and Lobley (1986) argue that most ODA programmes place too much emphasis upon he task and not enough upon deriving lessons from them. This is a failure of course design that can be remedied through customisation of courses and an adequate review process (McGraw 1993; Smith 1992). Gass et al (1992) suggest that courses require three characteristics to be effective:

Context refers to the process of structuring key elements during the experience in order to create the necessary connections between the adventure experience and the workplace. Continuity is the insurance that the learning that occurs in the adventure experience will be connected to future learning experiences available for employees in the workplace. Consequences address the fact that the outcomes of adventure experiences are not artificially contrived but provide the learner with valid information and feedback on their actions.

(Gass et al 1992: 35)

This 'fit' between course and work requires close collaboration between provider and purchaser before, during and after the ODA programme. After the course, if there are inadequate reinforcement mechanisms in the workplace the lessons from ODA will have a shorter lifespan. This is directly linked to the need for ODA to be fully integrated with the client company's organisational development process. McGraw (1993) identifies the outcomes of most ODA programmes to be focused on the individual and not on the needs of the group or the organisation. This then becomes a major obstacle to the transfer of learning from ODA to the workplace. ODA will probably provide manager development but not management development in the fullest sense. For ODA to be more effective:
greater consideration needs to be given to the organisational characteristics and circumstances of the client. This has implications for the skills base of the providers and suggests a need for greater understanding of organisational structures and cultures.

(McGraw 1993: 60)

Organisational resistance to change can be reduced through more rigorous follow-up sessions (Gall 1987), establishing support systems and celebrating the ODA initiative in the workplace (McGraw 1993). Perhaps one of the most common transference problems arise when teams are split up after the course on return to the workplace, either because they are in different departments or because the organisational structure has changed (Gall 1987; Patel and Perruzza 1993). These are all however, piece-meal initiatives. The essence of establishing a supportive climate for the transference of knowledge is that provider and purchaser culture are a close 'fit' and that ODA is integrated into the overall organisational development strategy of the company (Flor 1991a; Mossman 1983).

2.6 SUMMARY

This chapter has addressed the question 'what are ODA programmes?' and provided a critical and evaluative review of the extant ODA literature. It has been primarily concerned with defining ODA by means of its chief characteristics, its aims and its mode of delivery. It has established that ODA is not a homogeneous entity, its diversity is guaranteed by providers of differing backgrounds, producing courses of quite varied construction, for purchasers with multiple aims in mind. The concern of this thesis is the whole question of evaluation. What learning outcomes does ODA deliver and how does it deliver them? The body of knowledge regarding both of these questions is the focus of the next chapter.
CHAPTER 3

THE EVALUATION OF OUTDOOR DEVELOPMENT ACTIVITIES

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3.2 The Learning Outcomes of ODA Programmes 3-1
3.3 Stakeholders and the Evaluation of ODA Programmes 3-3
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CHAPTER THREE: THE EVALUATION OF OUTDOOR DEVELOPMENT ACTIVITIES

3.1 INTRODUCTION

This chapter addresses three key areas. It begins by reviewing the literature pertaining to the evaluation of ODA programmes, looking at the learning outcomes from ODA programmes (section 3.2), the issues of stakeholders in the evaluation of ODA programmes (section 3.3) and the evidence to date emanating from the evaluation of ODA programmes (section 3.4). The chapter goes on to identify broad areas for further research (section 3.5). It then examines the existing literature on task and review design and examines how these impact upon an individual's learning outcomes (section 3.6). The chapter concludes by outlining the different methodological approaches that have been employed in the evaluation of ODA (section 3.7). This leads to an understanding of the types of ODA outcomes that each approach will generate and also an appreciation of the difficulties facing a researcher conducting evaluation studies in general and those pertaining to ODA in particular. This discussion informs the research methodology chosen for the thesis and explored in depth in chapter four.

3.2 THE LEARNING OUTCOMES OF ODA PROGRAMMES

A range of articles relating to the outcomes derived from ODA programmes has appeared in the published literature. Reviewing this literature Jones and Oswick (1993) identified over 200 claimed benefits. The most common objectives for ODA programmes are shown in Table 3.1. The supporting evidence for these claims is most commonly found in the form of personal testimony of those providing the training or selective, positive accounts from participants. Only 16% of the articles reviewed attempted any form of systematic evaluation while more than a third of the articles (two-thirds of these written by providers) suggested that ODA outcomes
should be accepted as fact. Jones and Oswick (1993) concluded that this latter group made claims that were unsubstantiated by systematic evaluation.

Table 3.1: Objectives for Outdoor Training Programmes

<table>
<thead>
<tr>
<th>Type of Programme</th>
<th>% of courses indicating this element as a course objective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wilderness Programmes</strong></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>60%</td>
</tr>
<tr>
<td>Decision Making</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Outdoor-centred Programmes</strong></td>
<td></td>
</tr>
<tr>
<td>team building</td>
<td>90%</td>
</tr>
<tr>
<td>self-esteem</td>
<td>60%</td>
</tr>
<tr>
<td>Leadership</td>
<td>40%</td>
</tr>
<tr>
<td>problem solving</td>
<td>20%</td>
</tr>
<tr>
<td>decision making</td>
<td>15%</td>
</tr>
<tr>
<td>sense of corporate ownership</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note: many programmes had multiple objectives

(The adapted from Wagner et al 1991)

The controversy surrounding ODA has much to do with the lack of evidence concerning course outcomes. A survey for Industrial Relations Services (1992) found that 62% of employers who did not use the outdoors for development training justified their stance on the grounds that they were 'not convinced of its effectiveness'. Those who do use the outdoors, collectively, do little to change the climate of knowledge. Many organisations go no further than the use of 'happy sheets' (post-course questionnaires filled by participants) and there is little take up of other evaluatory techniques (see Table 3.2 below). Wagner et al (1991) note that nearly half of the organisations that they surveyed carried out no evaluation of the ODA programme and those that did mostly relied upon trainee evaluations.
Chapter 3: The Evaluation of Outdoor Development Activities

Table 3.2 Evaluation Methods for Outdoor Training Programmes

<table>
<thead>
<tr>
<th>Type of programme</th>
<th>Wilderness programmes</th>
<th>Outdoor-centred programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>trainee evaluations</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>no evaluations</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>follow-up programmes</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>manager evaluations</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>objective data</td>
<td>2%</td>
</tr>
</tbody>
</table>

(Note: some programmes used several evaluation methods)

(Adapted from Wagner et al. 1991)

There are several reasons for undertaking an evaluation of ODA programmes. Firstly, evaluation provides a 'feedback' mechanism for the course provider and facilitates the improvement of programme design and delivery. Secondly, it demonstrates to the purchaser, the value of the training function and can be used as a tool in organisational politics. Thirdly, it provides evidence for the educator of the efficacy of a particular management development technique and can inform future practice and developments in that field. While it is logical that the ODA programme should be evaluated, the process of evaluation itself is fraught with difficulties - both technical and the result of stakeholder politics. The next section discusses the influence of stakeholders in more detail.

3.3 STAKEHOLDERS AND THE EVALUATION OF ODA PROGRAMMES

A stakeholder in this context is any individual or group that will be affected by or use evaluation results. To understand the lack of robust research on ODA programmes one has to take into consideration the interested parties involved, namely: the purchasers, the providers, the participants and the observers. Individually they may
be a cause of either intended or unintended bias. The first three, collectively, form a political environment which makes inquiry from an external agent difficult.

For the purchaser, rigorous evaluation is costly in both time and finance, especially in attempting to establish long-term benefits (see below). It may also undermine the efforts and status of the training department within the purchasing organisation if the ODA courses are 'found wanting'. Research by a third party (possibly an academic) may represent lower direct costs to the purchaser, but the objections on time/distraction of managers still persist as do the concerns that findings may not be in the interests of the training department.

For the ODA provider, as devotees, evaluation of ODA is seen as unnecessary, the benefits being self-evident. Evaluation may also call into question their whole raison d'etre or at least the quality of their product. Their reliance on evaluation in the form of post-test questionnaires (the so-called 'happy sheets') lacks methodological rigour (Industrial Relations Services 1992) and in-house evaluation by the provider may lead to problems of systematic bias (Smith 1990). The attitudes and statements of participants may also be influenced by their perceptions of what is acceptable to their employers, while the insertion of an external observer into the ODA programme may alter the experience and therefore influence both process and outcomes. Furthermore, access to courses by an external researcher is subject to negotiation and relationships have to be managed during the investigation, both of which may compromise the 'neutrality' of the researcher. The existence of multiple stakeholders and their differing needs is reflected in the multiple approaches which have been adopted in investigating ODA.
3.4 THE EVALUATION OF ODA: THE EVIDENCE TO DATE

Against its perceived advantages, ODA has had to cope with a problematic image. Firstly, some courses have gained a reputation for being a 'macho' experience and/or dangerous due to media exposure (Wagner et al. 1991, Cole 1993). Secondly, and more importantly from the perspective of this thesis, the evaluation of courses is a minefield through which one needs to tread carefully. Before examining the scant evidence available it would be advisable to highlight some preliminary issues identified by McEvoy and Buller (1997). Firstly, they identify that ODA programmes have been seen as a holiday or reward. This may be more due to purchaser intentions than course content as for some purchasers ODA represents a 'perk' or reward to participants and is not intended to improve future performance. Secondly, attendance on such a programme may be more symbolic than substantive, i.e. recognition in the form of selection (Chadwick et al. 1987). Therefore any 'evaluation' of narrow course outcomes may easily miss the point of the whole exercise. It follows that ODA can only be evaluated if the purpose of the programme is known beforehand.

More serious disadvantages follow from claims for enhancing organisational performance being unsubstantiated by empirical research (Newstrom 1985, James 1989). There is no way of knowing what you are buying in advance and research indicates that product quality varies between providers with some having little or no industry experience (Oddou 1987, Shepstone 1989, Krouwel and Goodwill 1992). Despite these drawbacks ODA is now either used as part of a broader management development programme or as a stand-alone experience.
Chapter 3: The Evaluation of Outdoor Development Activities

Formal course evaluation appears to be very scant considering the expense involved. Wagner et al (1991) found that the majority of ODA courses apparently do not start with any clear objectives, which suggests little initial planning. Secondly, 45% of programmes were not evaluated and those that were relied overwhelmingly upon trainee evaluations. Less than one in ten organisations use any empirical data to evaluate their programs. These findings are further supported by Thompson (1991) who suggests that most companies either have no formal evaluation (33%-45%) or use subjective evaluation through trainee impressions (55%-60%). Only 2% of client groups have conducted some form of 'objective' evaluation.

Most of the support for ODA comes in the form of anecdotal evidence from past course participants either directly (Osbourne 1991), or via researchers (Chapman and Lumsdon 1983). Much of this evidence is qualitative and imprecise; however some researchers are enthusiastic, stating that:

Managers (show) amazement at how often occurrences during the outdoor programme are referred to during work activities; sometimes as a vehicle for achieving common understanding... or... as a means of keeping things in perspective.

(Miller and Rooke 1991: 75)

The evaluation research on ODA programmes that has taken place, falls into two distinct categories: the overall organisational impact and the impact on people, either as individuals or as groups. On the organisational side, Gall (1987) quotes increased profitability through cost reductions and also via lower labour turnover rates. Labour turnover was also highlighted in Cacioppe and Adamson (1988) with reference to the experience of Martin-Marietta Aerospace who experienced an overall labour turnover of 8.4% but only one of 1.7% for those who attended the company outdoor programme. Newstrom (1985) cites Unigate and Norton Company as two organisations which made considerable cost savings following their employees' participation on ODA courses.
Chapter 3: The Evaluation of Outdoor Development Activities

The focus of the remaining published research is on the impact of the ODA programme on the individual or on group behaviour. This research is reviewed chronologically. A few minor unpublished studies conducted in the 1980s are reported in Priest et al (1993), who citing Roland's (1981) investigation into a three-day outdoor programme focusing on team building and problem-solving through a ropes course experience, reported that:

changes took place on a number of managerial constructs, including: time, planning suggestions, human relations, trust, goals, group process, supervision and feedback. Changes were speculated to have resulted from high levels of participant commitment and emotional involvement.

(Priest et al 1993: 13)

A study of a four-day Outward Bound course by King and Harmon (1983) cited in Priest et al (1993), concluded that three major benefits were evident: greater self-confidence, increased morale and an enhanced sense of teamwork, friendship and respect for co-workers in the company. Participants on the course also had lower turnover rates (1.7% compared to 6%) than other graduates in the firm under study.

A Colorado Outward Bound School study in 1988 with a sample of 274 course participants found that:

the programme was valuable in team building (96%), gave new insights into leadership (86%), and participants gained increased closeness to teammates (92%). Personal gains were evidenced in the areas of personal growth (92%) and the extension of one's personal limits (86%). The program also was found to have value in building professional relationships (80%) and providing fuller understanding of self (80%).

(Priest et al 1993: 13)

On a personal level, the most commonly mentioned personal benefits are: improving self-concept; confidence; self esteem; communication; risk taking; leadership and physical fitness (Chapman and Lumsdon 1983; Oddou 1987).
Chadwick et al's (1987) case study on The Scotrail ODA programme reported a course that continued in operation on the basis that it delivered a number of favourable outcomes. With a strong emphasis on selection, participation in ODA was seen as a vote of confidence in the individual. Participants felt they were worthy of investment, giving them a feeling of increased morale. Other individual comments during course feedback were wide ranging and included:

- gaining a better understanding of one's self and others;
- the opportunity to witness good/bad planning and its consequences;
- seeing the capability of properly motivated people;
- the feeling of having been part of a real team;
- the benefit of having witnessed the power of pressure in the peer group;
- the acceptance of one's strengths and weaknesses learned from the unrelenting environment of the 'outdoors';
- the understanding that the individual's needs must be considered.

A number of studies (Oddou 1987; Noel and Charan 1988; Pickard 1988) indicate that ODA produces group benefits in the form of increased team performance. However none of the above is amenable to quantitative measurement and conversion to monetary gain.

Data analysis in Galpin's (1989) study of a three-day Outward Bound course (cited in Priest et al 1993) revealed that participation in the adventure training programme had a positive impact on the manager's self-concept and hardiness, with females impacted to a greater degree than males, and with older managers affected more than younger ones. Changes were maintained through the follow-up month, with females retaining changes to a greater extent than males. Goldman and Priest (1990) focussed on the transfer of risk-taking behaviours from the adventure training
Chapter 3: The Evaluation of Outdoor Development Activities

course back to the workplace. The study showed that ODA did positively affect employee's risk-taking behaviours in the business setting.

Baldwin et al (1991) suggested that outdoor challenge training had a moderate effect on group awareness and effectiveness and individual problem solving, as measured three months after the training, although no significant changes were observed in trust between participants or their self-concept. The results were based upon questionnaire analysis of 471 ODA civilian participants from a military base.

Dutkiewicz and Chase (1991) cited in Priest et al (1993) produced an experimental design comparing a group of 41 MBA students undergoing ODA against a control group of 43 students. The students who participated in the ODA programme exhibited changes in the domains of trust, confidence in peers, group cohesiveness, group awareness and group homogeneity. Lesser changes were recorded in individual's self assessment and problem-solving abilities.

Lucas' (1992) doctoral dissertation hypothesised that a five-day personal development programme attended by 35 MBA students would produce increased self awareness, ability to learn and enhance the self-confidence of the participant. The quantitative data collected showed no evidence of significant changes in 'self-awareness'. The qualitative data, however, did show an improvement in this dimension. The results concerning enhanced ability to learn were complex. 34% of participants reported increased cognitive complexity (this positive effect had subsided within six months) while 40% reported a decrease. The reported improvement in self-concept was equally short-lived.

Course effectiveness and determining variables are as yet not fully understood but a study by Wagner and Roland (1992) of programmes designed for team building (a
one day, low impact, team-focused programme with a total of 1200 participants from six organisations) indicated that:

- teams who interact at work on a regular basis benefit significantly more than do people from non-intact work groups from OMD programmes.
- Behavioural changes in non-volunteers were not significantly different from those of volunteer participants.
- Groups with an even gender mix showed more improvement in areas of group problem-solving and overall group effectiveness than did groups that were either male or female-dominated.
- The amount of time spent out-of-doors was unrelated to the success of the programme.
- There was no evidence to support the view that follow-ups were influential in course success.

This last point requires further investigation since it appears to fly in the face of the notion of reinforcing the lessons from ODA as discussed in chapter two.

Attarian (1992) cited in Priest et al (1993) examined the effects of ODA on the risk-taking propensity of corporate managers attending a five-day course. Using pre-programme and post-programme questionnaires the data was subjected to both product moment correlations and ‘analysis of covariance’. The study concluded:

- a manager’s age, years of employment and risk-taking propensity were not highly correlated;
- male and female managers did not differ in risk-taking propensity.
- no differences in risk-taking propensity were evident among any management levels; and
- no significant differences in risk-taking propensity were observed between the service company, manufacturing concern and the retail organisation.

Overall, the study concluded that participants showed greater risk-taking propensity through mean score comparison but differences were not statistically significant (at the 0.05 level of probability).
Bronson et al (1992) compared participants on a three-day ODA course against a control group. They found no change in the control group over the study period, but the experimental group showed improvements in team-working skills such as; effective listening; decision-making and encouragement and feedback. No improvements were noted for conflict resolution.

Burnett (1994) aimed to determine whether or not ODA could deliver broad-based personal development objectives. Using the repertory grid as a primary research tool the study identified increased levels of self-esteem and complexity of thought as course outcomes. These are key aspects of personal awareness, which Burnett believes form the basis of managerial effectiveness today. The study found that a significant impact on course outcomes was the individual's perception of the programme itself and key to this was their experience of the review sessions. Maximum benefit was derived from a review process that was challenging but not threatening to the individual.

Ibbetson (1997) has reported the most recent findings on ODA outcomes as a result of a number of case studies. Adopting an essentially positivistic approach he collected primarily quantitative data to measure perceptions of personal benefit and changes in group effectiveness as a result of ODA intervention. In his first case study, a total of one hundred and fifty seven (157) university students participated in a two and a half day residential ODA programme. Students attended the course in groups of approximately 30 people, with five courses running concurrently. There was an overt competitive element with teams collecting points for the successful completion of tasks. Ibbetson (1997) was concerned with individual and group development and utilised his own Personal Benefits Questionnaire (PBQ) for recording the former and the Development Indicator (TDI) developed by Bronson et al (1992) for the latter. His results indicate that:
participants enjoyed the event more than anticipated (as evidenced by their emotional reaction, which was captured in the post course review or "happy sheet").

there was very little change in outcomes over time for the group as a whole.

the aggregate data concealed different results for different teams. Teams that performed well in the 'competition' viewed the event more positively than those that did not perform well. The success of the team was equated with personal benefit. The competitive element of this particular programme was the most important factor mediating outcomes.

weather was also an important variable in moderating participants perceptions of the OMD experience. Good weather was associated with more positive outcomes and extremely poor weather led to negative changes in perception.

preferred learning styles (using the Learning Styles Questionnaire developed by Honey and Mumford 1986) and team role (Teamwork Questionnaire developed by Honey 1984) could not be linked to the outcomes of the OMD programme.

Ibbetson's (1997) second case study was designed to further investigate the issue of 'competition'. Its aim was to determine whether a non-competitive format was more successful at delivering individual and team outcomes than one based on competition. It utilised the same measurement tools as in case study one. Aggregate data suggested that a non-competitive programme was better at meeting the individual and team development objectives set than a competitive format.

The third case study analysed a particular variant of ODA 'the outdoor challenge programme'. Ibbetson (1997) concluded that this programme failed to meet programme objectives by not providing a sustained development in teamwork or fostering 'a real sense of pride and ownership in the company' and improving participant's mental well-being. In case studies four and five significant personal and group benefits were reported immediately post-event. The impact of ODA back in the workplace (transfer of learning) was influenced by the characteristics of the workplace itself. One programme tended to produce positive long-term effects and
the other did not. Important factors identified were the lack of support from the
delegates bosses and a lack of autonomy to effect change and the ability to put
things into practice back in the workplace.

3.5 AREAS FOR FURTHER RESEARCH
The earlier case studies, discussed above, primarily sought to establish the existence
of positive outcomes through questionnaire analysis. Relatively few attempted any
experimental format and it is only the latest (e.g. Burnett 1994 and Ibbetson 1997)
that have attempted to identify mediating variables in the intervention process. Those
case studies reported above have indicated that ODA programmes can produce
immediate positive results in terms of team-working and perceptions of 'personal
benefit' as variously defined by the respective authors.

In the longer term, the problems of evaluating knowledge transfer to the workplace
are significant and explains in large part why so little is done. The timing of the
evaluation is crucial. Evaluation which takes place immediately after the course is
likely to measure course outcomes more accurately than one that takes place back at
the workplace at a later date while a postponed evaluation measures the
implementation of course outcomes (knowledge transfer). The latter is influenced to a
large degree by the host organisation and is outside the control of ODA providers
(Ibbetson 1997). The transfer of knowledge back to the workplace is outside the
scope of this thesis but needs to be recognised as a major area for future enquiry.
The concern of this thesis is the immediate learning process that takes place in ODA.
Currently, this process is imperfectly understood.
Chapter Two outlined the chief characteristics of ODA and the mechanisms by which proponents argue that ODA delivers a variety of outcomes. However, few of these mediating variables have been investigated. The influence of programme design appears critical, with competitive formats failing to deliver positive outcome opportunities to all participants (Ibbetson 1997). It should be accepted therefore that simply by introducing variations in this single dimension the effect of ODA is not uniform and that programmes can, and do, have different impacts upon the individuals involved. The influence of course design will be further investigated in section 3.6.

The course participant can also influence the learning that takes place. The participant brings to the course numerous individual and personal elements that may act as mediating influences. There is limited evidence to suggest that one of these elements (an individual's motivation for attending an ODA event) appears to possibly set a learning agenda and predispose participants to self-fulfilling learning outcomes.

Researchers have hitherto ignored the whole issue of personality and its impact upon the learning that takes place during ODA. This omission may contribute to the imperfect understanding of the efficacy of ODA and the varied experience of individual participants since research on personality and cognitive styles has identified important individual differences in how people approach and solve problems. The whole process of problem solving is one in which an individual perceives and resolves the difference between the current situation and a desired outcome, with the pathway to that desired outcome being blocked by various obstacles. The scenario is generally one in which the problem is novel and the value of past experience is limited. In contrast, decision-making refers to a selection process whereby the individual has to choose a possible solution from a range of options in order to secure a desired outcome. Because the steps involved in both
processes are so similar the two terms are often used interchangeably. Most models of problem-solving and decision-making include at least four phases (adapted from Huit 1992), namely:

1. an input phase in which a problem is perceived and an attempt is made to understand the situation or problem;
2. a processing phase in which alternatives are generated and evaluated and a solution is selected;
3. an output phase which includes planning for and implementing the solution and;
4. a review phase in which the solution is evaluated and modifications are made if necessary.

Each phase of the process includes specific steps that need to be completed before moving to the next phase. How different personality types engage with this process during ODA needs to be studied in parallel with different course provision.

### 3.6 THE INFLUENCE OF TASK AND REVIEW DESIGN ON LEARNING OUTCOMES: A LITERATURE REVIEW.

The diverse nature of ODA programmes has been highlighted in Chapter Two. The aim of this section is to explore that diversity and to delineate the main variables within course design. This is done in preparation for Chapters Five and Six which analyse the impact of task and task reviews upon learning outcomes within the two case studies.

Dainty and Lucas (1992), attempting to make sense of the prolific number of ODA programmes available to purchasers, produced a typology based upon three variables. These were: the tasks undertaken; the review process; and the intended outcomes. These were not meant to be the only variables that apply to the course
design but the ones they considered most important to the experience of the individual participant. The authors held the view that the characteristics of each variable are fundamental to learning outcomes. This typology will be explored below, both for its intrinsic merits and as a vehicle for exploring the literature on tasks and review design.

3.6.1 Task Structure

The first of these three dimensions focuses on the nature of the task itself. Tasks are usually unfamiliar to participants and therefore everyone is starting from the same position with respect to knowledge. The outdoors also removes all vestiges of status attached to the participant's normal existence. Tasks are differentiated on the basis of how prescribed (e.g. rock climbing, canoeing) or flexible they are (mounting a search and rescue operation). Tasks can be placed upon a continuum from those with a 'tight' or highly prescribed structure to those that have a 'loose' structure (Figure 3.1).

Tasks described as having a 'tight' structure have narrow objectives and usually require a higher level of technical input from the course leaders than 'loosely-structured tasks'. In addition, because they leave participants less scope for devising their own means of achieving the task objectives they are more limited as vehicles for learning. This is the case in the well-known 'barrels and planks' exercise, where participants attempt to span a given distance without touching the ground. This exercise really only has one 'solution' and the issue is one of group and individual behaviour and not of creative problem-solving.
Figure 3.1: Task continuum

<table>
<thead>
<tr>
<th>Broad objectives</th>
<th>Narrow objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstructured</td>
<td>Structured</td>
</tr>
<tr>
<td>Little technical support</td>
<td>High technical support</td>
</tr>
</tbody>
</table>

(Adapted from Dainty and Lucas 1992)

Less-structured tasks are also problematic. Participation amongst group members may be uneven, with some participants taking a 'back seat'. Outcomes may also be less obvious than in more structured tasks. Dainty and Lucas argue:

> that in principle such tasks (unstructured) are more likely to lend themselves to the development experiences most beneficial to managers. However, such tasks alone may not be inherently developmental and it is the review process which is critical in moving an experience from being enjoyable to being developmental.

(Dainty and Lucas 1992:115)

3.6.2 Physicality

While recognising the fact that ODA programmes vary in the physical demands made upon the participants, 'physicality' is not considered a defining issue by some authors. In Dainty and Lucas' typology (1992), physically demanding tasks are essentially encapsulated within the concept of 'tightly structured' tasks. This mapping
exercise is not completely satisfactory since 'physicality' is as much a perception of
the individual as an objective reality. What is easy for one participant may be difficult
for another. A search and rescue exercise (regarded as loosely-structured) may be
as physically-demanding to more sedentary types as rock climbing (tightly-
structured) is to the more athletic participant.

Physicality as a concept is not without its own problems. In addition to the point noted
above, within a given physical task there may be varying degrees of participation and
exertion by individuals. The experience of the individual will consequently vary. Also
activities normally associated with outdoor pursuits may not be physically demanding
but nevertheless they may put considerable stress on the participant and move them
out of their 'comfort zones' (Pettigrew 1974; Tuson 1994) – a good example being
abseiling. The rationale being that physical stress helps individuals explore their
limitations and this accelerates learning about both the behaviour of oneself and
others. While the concept of comfort zones does not map perfectly onto the
dimension of physicality it is postulated that tasks which are at the extreme of the
physicality continuum are more likely to push participants out of their comfort zones
than those which are more sedentary (Ibbetson 1997). There is sufficient anecdotal
evidence within the literature to indicate that 'physicality' is an issue as far as
participants are concerned. Since this is the case, it will be included as an additional
task dimension in the case studies examined later.

The level of perceived risk is an additional aspect of both structured and unstructured
from extreme situations'. This concept suggests that a participant's self-awareness is
increased by exposure to intense/dramatic experiences as provided by activities
undertaken in the outdoors. This concept is again problematic in that participants will
have differing perceptions of the risk associated with any given activity depending upon several factors, including their past experience.

### 3.6.3 The Review Process

The second dimension concerns the debriefing activity that takes place after the formal task is completed and:

> it is the review process which is important in highlighting and drawing learning points from the process issues which occurred during the task.

(Dainty and Lucas 1992:109)

The review is critical in achieving learning outcomes. Tasks alone may fail to deliver outcomes or be only partially successful without the input of the course team to explore the relevant issues. During the review participants would be encouraged to reflect on the: ‘what, how and why of their own behaviour in managing themselves and others’ (Dainty and Lucas 1992:120). The authors differentiate between 'low' and 'high' intensity reviews. The degree of intensity refers to the extent that participants are pressured to give and receive feedback (often of a personal nature) at the end of the task. In 'low' intensity reviews personal feedback is minimal and the discussion regarding the task is more general in nature. ‘High process’ intensity would be characterised by a debrief in which there was a high level of interaction between tutor and participants, more challenging questioning and a more direct approach adopted to understanding what went on during the actual task. Again this concept can be expressed as a continuum (Figure 3.2).

Ibbetson (1997) distinguishes between reviews that are pedagogic as opposed to anagogic in focus, the former focusing on outcomes, the latter on process. A pedagogic review assesses how successful a group was at a particular task and how they could have improved their performance in that task. The emphasis is on the specific and not on general principles. An anagogic style review, in contrast,
concentrates on the process at work during the task in order to facilitate the exploration of individual and collective behaviour. If successful, this enables participants to generalise from this learning and understand how to improve their performance across a range of situations in the future.

**Figure 3.2: Process intensity (type of feedback)**

<table>
<thead>
<tr>
<th>General/low personal focus</th>
<th>Specific/personally challenging and direct</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>

(Adapted from Dainty and Lucas 1992).

Dainty and Lucas (1992) do not employ this terminology but their writing suggests that the review they envisage encompasses both elements, with the emphasis being heavily on process (anagogic) in order to deliver complex learning outcomes. The role of the course tutor is intrinsic to the review process and will be analysed in detail in chapter six. Dainty and Lucas indicate a general feeling amongst researchers when they say:

*the personal interpretation of the role and values of the tutor are crucial. This is particularly observable in outdoor programmes, in that entire philosophies of process are acted out according to the course tutor's values and beliefs.*

(Dainty and Lucas 1992: 118)
3.6.4 Theoretical Input

Ibbetson (1997) identifies theoretical input by ODA providers as a further dimension in course design. This is closely linked to the review process, as it is the review session that allows the inclusion of relevant models and concepts in order to make the link between the task recently undertaken and the wider body of knowledge concerning managerial or organisational behaviour. Some providers also supplement the review process with additional seminar sessions in which they frame their outdoor activities against a particular model of development/learning. Again, theoretical input can be placed on a continuum (see Figure 3.3).

![Figure 3.3: Theoretical input](Adapted from Dainty and Lucas 1992).

3.6.5 Course Outcomes

As noted in chapter two and above, ODA programmes have been devised for a wide variety of aims or outcomes. Dainty and Lucas (1992) argue that the major outcomes from ODA can be placed into four broad categories. The first of these is a course
designed purely for fun or enjoyment. The second is a course for the development of narrow concrete skills (such as active listening) which be applied in more or less the same way in a number of different situations. The third course attempts to develop broad concrete skills. These include:

*those which have a range of possible approaches depending on the circumstances at hand. Sometimes called contingent approaches, broad concrete skills include leadership and team building skills, skills of implementing change, motivating others and coping with uncertainty and ambiguity. They are largely the abilities considered to be the more complex people management skills.*

(Dainty and Lucas 1992:111)

The final type of course is one which aims to develop self awareness and awareness of other people. Here the emphasis is on helping people to understand their own strengths and weaknesses (by making them aware of how others see them) and also by getting them to set their own learning agenda. This typology of Dainty and Lucas is based upon combining the two variables of task and review and can be expressed as a matrix (Figure 3.4). They postulate that a particular outcome is associated with certain combinations of task and intensity of review.

In quadrant 1, the combination of loosely-structured task and low-intensity processing produces an outcome best described as fun/enjoyment or relaxation. Learning on such a programme is limited since neither the task nor the review produces significant material to provide the basis for individual reflection. In quadrant 2 the combination of tightly-structured tasks and low-intensity processing produces what Dainty and Lucas term 'narrow concrete skills', such as active listening or outdoor pursuit skills. Learning is limited to developing the skills necessary to complete the set task.
Management learning according to this typology only really takes place in quadrants 3 and 4. Quadrant 3, with tightly-structured tasks and high-intensity processing, produces ‘broad concrete skills’, such as aspects of leadership, team-building and building of trust amongst participants. These are all people management skills that are best fostered in a structured environment with (and this is the key point) the assistance of a tutor to develop the skills. Dainty and Lucas characterise the programmes in quadrant 4 (a combination of loosely-structured tasks with high-intensity processing) as those intending to help individuals understand personal strengths and limitations and set their own personal agendas. Here the role of the tutor is of paramount importance in assisting the individual towards a greater understanding of his or her own competences.

The common factor between quadrants 3 and 4 is the high-intensity review which is necessary to overcome the difficulty of developing skills in these categories. In reality
participants will have some awareness of their behaviour and are most likely to lack awareness of some particular aspect of that behaviour. That, coupled with the fact that it would be very difficult to engineer a course to facilitate the outcomes of a specific quadrant means that courses are likely to produce outcomes on the right-hand side of the matrix rather than from a specific quadrant. The overriding aim of the review in quadrants 3 and 4 is to encourage individuals to reflect upon the concrete experience they have just undergone along the lines of the second stage of the Kolb Learning Cycle.

Burnett and James (1994) conducted a comparative study to explore the assumption that quadrant 4 did produce increased levels of 'self and other awareness'. In all four hypotheses were tested, namely that Outdoor Development would lead to: increased level of self-awareness; increased ability to 'learn how to learn'; positive changes to individual's self-concept and increased use of 'openness' behaviours. The participants on the ODA course studied did show a marked improvement in their level of self esteem compared with the control groups. On the other three dimensions there was no significant difference. The qualitative data collected produced a different story however, with 40% of the role set responses mentioning self-awareness as an outcome of the ODA course. ODA was seen as a mirror, allowing participants to see themselves as others see them. The debrief sessions in particular forcing participants to hear what others had to say about their performance. Increased use of 'openness' behaviours was cited by all except three of the participants (out of a total sample of 32) as a direct consequence of the course. This was evidenced by statements indicating how much more positive participants were towards others.

Burnett and James (1994) explain the discrepancy between the qualitative and quantitative results in a number of ways: Firstly, while the qualitative data indicated
changes taking place, the quantitative data (because of issues of sample size and lack of random assignment to experimental, comparison and control groups) failed to register change. Secondly, and more likely, is the fact that the instruments used were not sensitive enough to detect the changes that the ODA programme brought about.

Burnett and James (1994) also observed that the results probably indicated something about the nature of the research topic itself. Namely, that personal change and development are complex phenomena. The concepts themselves are both vague and general. Researchers, in trying to manage this complexity, attempt to disaggregate the concepts by breaking them down into their component parts. e.g. 'self-awareness', 'self-esteem', or the 'ability to learn'. In doing this, they create terms which are equally difficult to define or operationalize for research purposes. This problem was also discovered by Ibbetson, who found that his own work suggested:

...that poor operationalisation of the concepts 'preferred learning style' and 'preferred team role' perhaps mitigated the chance of establishing any links between such preferences and predisposition to certain outcomes.

Ibbetson (1997:158)

A significant difficulty facing all researchers in this area is that the phenomena they wish to explore and understand (personal change and development) are internally-occurring processes. While theoretical models that try to explain these processes exist, they are based upon:

*deductions from observed behaviours which are considered to reflect the personal change and development process. Operationalizations based upon these theories are therefore derived from propositions which are themselves one-step removed from the phenomenon in question.*

(Burnett and James 1994:22)

This literature review has so far identified a number of key variables in the design of ODA courses. These are: task structure; physicality; review process; theoretical input. Authors may disagree over the primacy of these dimensions but all are in
agreement that specific course outcomes are dependent upon the 'mix' of these variables. However, only the Dainty and Lucas (1992) study discussed above, has attempted to link actual outcomes to a prescribed task/review combination. In doing this Dainty and Lucas have produced a positivistic typology in which desired outcomes appear to be the result of prescribed inputs. Further research is needed to explore whether the same outcomes can be achieved by varying the input combinations. In other words, is the relationship between inputs and outcomes as clearly delineated as these authors suggest? The next section examines the impact of the different methodological approaches adopted by researchers upon the nature of the evaluation findings reported.

3.7 METHODOLOGICAL APPROACHES USED IN THE EVALUATION OF OUTDOOR DEVELOPMENT PROGRAMMES

There have been three very different philosophical approaches to evaluation research on ODA programmes. These have been labelled: a scientific or rationalistic (positivist) approach; a systems approach; and naturalistic approach. This section will briefly review the three approaches and their implications for the type of information gathered.

3.7.1 The Scientific, Rationalistic or Positivist Approach

Smith and Piper (1990) identify four major characteristics of a positivistic approach to ODA research. These are: determining the information to be collected in advance; devising methods of collection that permit quantification of data; collecting data both pre and post course; and using control groups to cross check data. A positivistic approach to studying ODA programmes thus involves replicating the scientific or experimental method from the natural sciences. It is a research method driven by questions aimed at collecting generalizable knowledge and involves testing
relationships between variables and describing generalizable phenomena (Flor 1991b).

Through the application of these methods an attempt is made to establish a direct correlation between training and changes in performance, to produce an explanatory theoretical framework. This approach, by establishing ODA programmes as producing positive outcomes and relationships between inputs and outcomes, has particular appeal to purchasers of ODA. However, critics of this approach claim that it fails to take into account the unexpected outcomes and unintended consequences that occur during ODA programmes which make training and management development a dynamic activity (Smith 1993).

3.7.2 The Systems Evaluation Approach

The major concern of the systems evaluation approach to ODA research is the improvement in the quality of training. This focus makes it particularly attractive to providers of ODA. The growth of management development courses, in general, in the 1960s and 1970s is mirrored by the evolution of the systems approach. The two major evaluation methods devised by Kirkpatrick (1967) and Hamblin (1974) respectively (see Table 3.3), both indicate that evaluation varies according to the stage at which it is carried out. The systems approach measures outcomes in terms of pre-set objectives that are either attained or not attained.
Table 3.3 A Comparison of the Stages of Evaluation in the Kirkpatrick and Hamblin Models

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Stages of Evaluation</td>
<td>Cycle of Evaluation</td>
</tr>
<tr>
<td>1. emotional reactions</td>
<td>1. reactions</td>
</tr>
<tr>
<td>2. achievement of learning objectives</td>
<td>2. immediate outcomes</td>
</tr>
<tr>
<td>3. behaviour changes</td>
<td>3. intermediate outcomes</td>
</tr>
<tr>
<td>4. results / organisational impact</td>
<td>4. ultimate outcomes</td>
</tr>
</tbody>
</table>

Emotional reaction refers to the participant's attitude at the end of the course. One of the most common methods of measuring emotional reaction to a course is through the use of post-course questionnaires. Typically, these attempt to gauge the participant's attitude towards course material and delivery. Post-course questionnaires have been subject to criticism regarding their accuracy and bias, as questionnaire construction can greatly affect the answers. Designed by the providers, or training departments they can be skewed to provide a favourable image of the course. In addition the majority of evaluations implemented on training and management development programmes are cursory, the usual method being the end of course "happy sheets" described above. Delegates complete these sheets in order to measure their immediate reaction to the course. Unfortunately, they measure the programme and not its effect on the participant. The second level of evaluation typically occurs at the end of the course to measure the knowledge gained as a result of the training intervention. In order for this to occur both pre- and post-tests are necessary.

While the evaluation of reaction and changes in learning occur close to the end of the course, measuring behavioural changes requires some time to have elapsed in order
for the participants to put into effect their new-found knowledge or skills. Evaluation at this stage usually takes the form of surveys, interviews or observation by a third party. The difficulty here is being able to attribute change in behaviour to a particular course or intervention. In the complex environment of the workplace other factors may be at play. Organisational impact is the fourth level of evaluation in the Kirkpartrick (1967) model. Here measurements may be quantitative (e.g. an improvement in profit level) or qualitative (e.g. a change in attitude or culture shift). However, as with evaluating behavioural change, establishing cause and effect is a difficult task due to the number of factors at work.

Proponents of the systems approach acknowledge that the further one moves away from stage one or ‘reactions’ in the ‘evaluation scheme’ the more difficult it is to measure outcomes. However, none of the stages of evaluation are problem-free (Endres and Kleiner 1990). In addition, Hamblin argues that for training to be successful, each of the preceding training effects have to be realised before progress can be made to the next successive level (Hamblin 1974). Similarly, Kirkpatrick (1967) suggested a causal direction from reaction through to results. Studies have raised serious doubts as to the necessity of having positive reactions to a training programme as a prerequisite for learning. Similarly there is reason to doubt the proposal that learning alone is sufficient to cause behavioural change. Two other possible determinants of behaviour are suggested by Alliger and Janek (1989) cited in McEvoy (1997) namely: attitude and organisational climate (see Figure 3.5). Several authors have noted the problem of ‘post-training euphoria’ in the measurement of trainee reaction, because ODA participants are likely to leave a programme on an emotional high, their immediate reactions may be more favourable than follow up reactions at a later date (McEvoy 1997).
3.7.3 The Naturalistic Approach

The approaches which can loosely be referred to as 'naturalistic' are characterised by a 'goal free' perspective (Scriven 1972), which is the antithesis of the goal-based approaches discussed above. It can be viewed as a direct response to the criticisms of the scientific and systems approaches that neglect unintended or unexpected outcomes (Smith and Piper 1990). Naturalistic research takes an alternative philosophical approach, assuming that there is no one fixed, objective reality and no set of generalizable principles and theories that govern it (Rowley 1987). This approach is not interested in searching for general cause and effect relationships between variables but instead attempts to understand and describe the complex interactions of each setting. There may be the ability to transfer knowledge from

(Adapted from McEvoy 1997: 237)
setting to setting, but not to make universal generalisations across them. Each situation is different and there is not one reality. The rationalistic investigator believes that he or she can maintain an objective and non-reactive relationship with the subject under investigation while the naturalistic investigator acknowledges that he or she interacts with and influences the subject (and vice versa).

Naturalistic evaluation methods rely more on individual impressions of the training received, and evidence is collected in a more informal, less quantitative way. Its primary benefits are the ability to provide a depth and quality of evaluation evidence not provided by other available approaches (Easterby-Smith 1986). It is also the only approach that can be said to measure effectively the higher-level, more sophisticated skills attained (Smith and Smith 1995). From the rationalistic perspective, every action can be attributed to some cause that preceded it in time. Consequently, the researcher seeks to establish cause-effect relationships in human behaviour. From the naturalistic perspective, an action is explainable only in terms of a multiplicity of interacting forces. Consequently, the researcher seeks to understand the relationships between actions and their collective effects on an individual's behaviour. Inquiry is value-free to the rationalistic investigator. Objectivity can be guaranteed because of the objectivity of the research methodology. On the other hand, to the naturalistic researcher, inquiry is value-bound.

Easterby-Smith's (1986) table (see Table 3.4) charting the historical development of evaluation traditions, details the development in the 1980s of a "naturalistic" approach where the features are described as "rigorous" and "highly involved". However, the problems of this approach are described as the potential loss of objectivity and the lack of hard facts. The contention about this methodology is that hard objective data, beyond the detail of age, sex, number of years in post, etc, is difficult to provide in any meaningful way. These 'problem' issues have taxed
evaluation research for some years and there have been dogged attempts to maintain a 'pure' design, whereby the management development activity can be independently tested. Naturalistic methods may also not appeal to a sponsor of evaluation because of their apparent non-quantitative, impressionistic and opinionated nature (Smith and Piper 1990).

<table>
<thead>
<tr>
<th>Table 3.4 Evaluating Corporate Cultures: Three Evaluation Traditions</th>
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<tbody>
<tr>
<td><strong>Scientific</strong></td>
</tr>
<tr>
<td><strong>Period</strong></td>
</tr>
<tr>
<td><strong>Expected outcome</strong></td>
</tr>
<tr>
<td><strong>Typical methods</strong></td>
</tr>
<tr>
<td><strong>Features</strong></td>
</tr>
<tr>
<td><strong>Problems</strong></td>
</tr>
</tbody>
</table>

(Adapted from Easterby-Smith 1986)

### 3.7.4 Methodological Issues

The foregoing discussion indicates the need to adopt a more eclectic approach to data collection due to the weaknesses inherent in each evaluation approach. This need is magnified by the existence of the particular difficulties associated with researching ODA as identified by Priest *et al* (1993). These six difficulties are briefly outlined below.
Firstly, participation in adventure training is strictly voluntary. This means that for the most part, participants are volunteers, with the risk-averse and sceptical likely to avoid participation. Therefore, quasi-experimentation (without random selection or assignment of subjects) is likely to be the type of research conducted, as opposed to true experimentation (with randomisation). This means that the credibility of studies will be slightly compromised at the outset. Secondly, sample sizes will be small. Groups undertaking ODA activities usually consist of 8-12 members. Such small sample sizes mean that the distribution of survey answers will not fit within the normal curve and nonparametric procedures must be used for analysis. Priest (1993) noted that such statistical techniques lacked credibility in the eyes of some researchers and therefore compromised the studies made of ODA programmes. Thirdly, because ODA programmes are customised, it is difficult to overcome the sample size problem by combining small groups from different programmes. Fourthly, it is difficult to exert experimental control because:

Any control group (selected from within the same company as the experimental group) is going to experience a ‘spill-over’ contamination effect as experimental groups return from their treatment training and interact with other employees as part of their daily work. The new enthusiasm and excitement of returning subjects will likely confound the control group, either elevating or depressing the levels of whatever variables are measured in the study, leading to biased results. Selecting a control group from outside the company being studied invalidates the research, since the purpose of the control group is to be influenced by the same environmental variables which effect the experimental group so that any changes can be attributed to the treatment.

(Priest et al 1993:17)

The fifth research problem peculiar to ODA research is that the lack of good instruments to measure key constructs of interest to the researcher, such as leadership, problem-solving and decision-making, hampers quantitative research. These latter concerns point to the possible usefulness of qualitative methods as an
alternative or even enhancement to the more accepted quantitative designs. Lastly, companies sending many employees through such programmes, at vast expense, are often reluctant to permit research in case it produces findings that show the programmes to be ineffective. A review of the evaluation literature and an understanding of the barriers facing research of ODA programmes, in particular, indicated that there is no single best evaluation technique or tool.

Researchers need to have cognisance of the view that there are several ways of gathering evidence and the relevance of each will alter depending upon the research question posed (Smith and Smith 1995). Ibbetson (1997) observed that while quantitative methods provided evidence that an effect had occurred, it did not explain how or why this change occurred. This gap in our understanding, the issue of process, can be explored by means of qualitative techniques. In exploring the outcomes and process of ODA there is therefore a case for embracing triangulation and searching for ways in which the different approaches can complement each other to further our understanding. It is important to recognise that management development programmes are not context-free, but dependent on the cultural baggage of the participants and their organisation. Finally the approach needs to recognise that evaluation is a 'socially-interactive process' and account needs to be taken of the impact of the researcher.

3.8 SUMMARY

This chapter has identified three broad areas requiring further investigation. These are: What specific skills or personal attributes are enhanced by ODA?; How does course design impact upon learning outcomes? and lastly, What influence does the
personality of the individual have upon the learning which takes place during an ODA programme?

In addition, by examining the methodological approaches adopted by previous studies it has highlighted the advantages and limitations of various research designs. These two issues of research objectives and the study’s methodological approach will be explored in much more detail in the next chapter. Chapter Four will define the research proposals chosen to investigate the three broad questions posed above and also advance a coherent research methodology to underpin the investigation.
CHAPTER 4

STUDY METHODOLOGY

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4.2 The Theoretical Perspective 4-1
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CHAPTER FOUR: STUDY METHODOLOGY

4.1 INTRODUCTION

The purpose of this chapter is to operationalise the research proposals that were listed in section 1.2. This chapter has three aims, the first being to explore the theoretical perspective and the theory of knowledge (epistemology) that informs the methodology employed in this research (section 4.2). The second aim is to outline the methodology employed (see section 4.3) and to describe the precise research methods and instruments used in detail (see sections 4.4 and 4.5, respectively). The third and final aim is to offer a self-critique based upon the experience of conducting the research project (section 4.6).

4.2 THE THEORETICAL PERSPECTIVE

All researchers are guided by highly abstract principles. These principles combine beliefs about ontology (what kind of being is the human being? what is the nature of reality?), epistemology (assumptions about the basis for knowledge; what is the relationship between the inquirer and the known?), and methodology (how do we know the world or gain knowledge of it?). Although 'method' tends to be used as a catch-all term, it is important to distinguish between the epistemological position, the research methodology and any specific method (that is, the strategy or technique that is actually adopted). This framework can be used to demonstrate how different theoretical choices link particular epistemologies, methodologies and methods, and thus go beyond the simple technical and epistemological versions of the quantity-quality debate. This section will outline and analyse the particular theoretical perspective adopted in this study.
An analysis of management journals by Johnson & Duberley (2000), indicates that most researchers adopt positivist assumptions even if they do not declare an overtly positivist stance. Furthermore, there is a tendency not to explain the rationale for this choice of perspective. This is a consequence of the dominance of the approach and the way in which it has been 'taken for granted' as the way to conduct management research. Within positivism there are a number of different approaches. However, it can be represented as a set of key assumptions (see Table 4.1).

The aim of positivistic research is to generate laws or causal relationships that govern the way in which organisations behave. This will enable managers to better understand and ultimately, control their environments. However, positivism has two major failings: the first practical; the second theoretical. On a practical level, in searching to identify causal relationships:

The focus has become narrower and narrower, to the extent that propositions being tested do not reflect the complex situations in which managers actually find themselves. While trying to generate theories which enable prediction and control, the result can be propositions which apply such a narrow band of circumstances that they bear little relation to everyday managerial work. The problem here is that in order to have validity, any theory of management has to take account of the context in which management is practised. Hence we have seen a move towards more interpretative methods of inquiry.

(Johnson & Duberley 2000:43)
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Table 4.1: Central tenets of positivism in management research

<table>
<thead>
<tr>
<th>Aim of research</th>
<th>The aim of research should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Approach</strong></td>
<td>The method of the natural sciences is the only rational source of knowledge and should therefore be adopted in the social sciences.</td>
</tr>
<tr>
<td>Unity of natural and social science method. This implies preoccupations with:</td>
<td></td>
</tr>
<tr>
<td>- Internal validity</td>
<td></td>
</tr>
<tr>
<td>- External validity</td>
<td></td>
</tr>
<tr>
<td>- Reliability</td>
<td></td>
</tr>
<tr>
<td>- Operationalization</td>
<td></td>
</tr>
<tr>
<td><strong>Relationship of researcher with researched</strong></td>
<td>The observer is independent of what is being observed therefore the observer can stand back and observe the world objectively.</td>
</tr>
<tr>
<td>Independence theory and neutral observational language</td>
<td>The choice of what is to be studied, and how to study it, can be determined by objective criteria rather than by human beliefs and interests.</td>
</tr>
<tr>
<td>Value Freedom</td>
<td>Theory can be tested against irreducible statements of observation - the 'facts' of the situation. Research is concerned with producing accounts that correspond to an independent reality.</td>
</tr>
<tr>
<td>Correspondence theory of truth</td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Johnson & Duberley 2000: 39)

On a theoretical level:

The focus is on the observable and the approach to the analysis of organisations assumes their reality is objectively given, functionally necessary and politically neutral. Determinism prevails, with human behaviour often reduced to the product of external forces of the environment. Thus social interactions are to be studied in the same way as the physical elements - as a network of causal relations linking aspects of behaviour to context and stimuli in the external environment thus conditioning people to behave in a certain way.

(Johnson & Duberley 2000: 40)

This research perspective has major drawbacks when applied to the study of ODA. Crucially, it ignores an individual's sense-making processes because they cannot be observed and therefore are not amenable to testing. This is the fundamental error in slavishly adopting the natural science method of enquiry when studying the social world and is a failure:

to realise that there is an ontological discontinuity between human beings and it-beings... Persons are distinguished from things in that persons experience the world, whereas things behave in the world.

(Laing 1967 cited in Johnson & Duberley 2000: 34)
Laing (1967) differentiates between the natural and social world on the basis that the subject matters of the natural sciences do not have subjective capacities, while human action has an internal logic of its own which must be understood in order to make it intelligible. Because of this fundamental difference the natural scientist can quite legitimately impose an *a priori* external logic upon its behaviour in order to explain it – a process Laing termed 'erklären', and defined as:

> the explanation of behaviour by providing a deterministic account of the external causal variables which brought about the behaviour in question through the observation of the empirically discernible features and antecedent conditions of that behaviour  
> (Laing 1967 cited in Johnson & Duberley 2000: 34)

In contrast, social scientists should attempt to understand the internal logic of human action, a process Laing termed 'verstehen' which is defined as:

> the interpretative understanding of the meaning a set of actions has to an actor through some form of contact with how they experience their experience.  
> (Laing 1967 cited in Johnson & Duberley 2000: 34)

The social world, and in this case ODA programmes, cannot be understood by excluding the individual participants' subjective basis of action. It follows that social science research must involve the collection of data about the norms, beliefs and values that influence the individuals involved and an analysis of human action generated inductively from an *a posteriori* understanding of the interpretations deployed by the actors who are being studied.

Other tenets of logical positivism do not have to be rejected simply because one accepts the primacy of human subjectivity in explaining human actions. An interpretive approach may also embrace the grounding of warranted knowledge in observation (although there may be debate about what is observable). It may also share the assumption that there exists a neutral observational language and that the
researcher is independent of what is being observed and can present the ‘facts’ objectively.

By virtue of trying to access some form of reality and being able to (re)present that data neutrally, both positivism and neo-positivism share what Rorty (1979) has termed ‘the mirror metaphor’, in which a correspondence theory of truth:

inevitably relies upon the received wisdom that the facts of an external objective social reality can be ‘mirrored’ in the ‘glassy essence’ of the observer. This mirror metaphor construes the relationship between the researcher and their area of interest in terms of an epistemic dualism that by deploying the appropriate methodological rigour it is possible to acquire knowledge that is independent of the observer and is uncontaminated by the act of observation or knowing. In positivism, this would be construed as a subject-object dualism – a differentiation of the knower-researcher from the known-observed.

(Rorty 1979 cited in Johnson & Duberley 2000:35)

Where positivism and neo-positivism diverge is over what they understand to be observable as opposed to metaphysical. Unlike positivists, neo-positivists argue that in order to understand human behaviour we must gain access to actors’ subjective interpretations of reality through ‘verstehen’ (as defined above) and the use of qualitative methods of data collection. Since each of the approaches noted above is underpinned by the notion of epistemic objectivity which:

privileges the consciousness of the researcher who is deemed capable of discovering the ‘truth’ about the world in a correspondence sense, the reflexivity which is deployed is limited to that of methodological reflexivity. Here the researcher’s reflexivity entails a localised critique and evaluation of the technical aspects of their own deployment of a particular methodology from within the positivist or neopositivist epistemological commitments the methodology deploys.

(Johnson & Duberley 2000:181)

The next section examines the research methodology employed while the issue of reflexivity will be re-visited in section 4.6 with a critique of the methods employed and an overview of the success of adopting a neo-positivist approach.
4.3 RESEARCH METHODOLOGY

This section begins by exploring the debate that exists between the proponents of quantitative and qualitative research methodologies and those methodologies relationship to the theoretical perspective outlined above. There then follows a critique of the quantitative and qualitative methodology employed. The section concludes with a justification for the selected research design.

4.3.1. The Tension between Qualitative and Quantitative Methodologies

Positivist approaches to research are generally associated with quantitative methods and this approach dominates the literature in management research, including ODA (see Chapter Two). In an attempt to emulate the natural sciences, the emphasis has been to focus upon the observable (i.e. that which can be measured). The researcher's role is that of detached observer, one whose values and prejudices are only discussed in an attempt to reduce bias within the study. This makes possible a theory-neutral observational language in the favoured methods of: experimental design, quasi-experiments and surveys. Only the latter form of quantitative method is used in this research and therefore the discussion (in 4.2.2) will be confined to an appreciation of this technique.

Bryman (1989) suggests that the distinction between quantitative and qualitative research exists on two levels – the epistemological and the technical. At the epistemological level, quantitative and qualitative research represents different ways of knowing the social world. Quantitative research is seen as tied to a positivist version of both the character of the social world (an external, objective reality) and how it ought to be studied (characterised by an emphasis on precise measurement, causality, replicability, and generalization). In contrast, qualitative research is usually represented as taking an epistemological position that rejects the positivist view of
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the social world. In it, the social world is viewed as socially-constructed and the emphasis of the research is upon taking the perspective of those being studied, on a detailed description of context, on an understanding of the processes at work, and on a preference for theory and concepts to emerge out of data (rather than being posited in advance of data collection as in quantitative research). On an epistemological level an accommodation between the two approaches does not appear possible because of differing assumptions upon which the approaches are based. Proponents of this view do not deny that methods typically associated with quantitative and qualitative research can be combined, but that the qualitative research which takes place in such studies is typically only supplementary to what is primarily quantitative research.

The debate at a technical level does not take the view that quantitative and qualitative methodologies are inextricably linked to positivist and anti-positivist epistemologies, respectively. While it is cognisant of the views expressed above, the crucial issue in this debate is the degree of 'fit' between the research problem and the method. Consequently, quantitative and qualitative research can be viewed simply as different approaches to data collection. In this present study this perspective has been adopted and both methodologies are applied in order to meet the differing demands of the research agenda.

4.3.2 The quantitative and qualitative methodologies employed

The research was characterised by the simultaneous use of both quantitative and qualitative methodologies. Since the first four proposals (see 1.2) appeared to lend themselves to quantification and measurement, a number of quantitative techniques were employed (see section 4.4) and the participants in the case studies were surveyed. The survey method was adopted since:
Chapter 4: Study Methodology

... survey research entails the collection of data on a number of units, usually at a single juncture in time, with a view to collecting systematically a body of quantifiable data in respect of a number of variables which are then examined to discern patterns of association. (Bryman 1989:104)

Unlike experiments, surveys generally supply correlations and not causations, but as Johnson and Duberley indicate:

this had not deterred survey researchers who have developed a wide variety of procedures for elucidating causality by means of a post hoc reconstruction of the logic of causal order that lies behind the cluster of variables generated by a particular investigation. (Johnson and Duberley 2000:47)

Quantitative research is just one approach to social science: manipulating, measuring and specifying relationships between specific variables in order to test hypotheses about causal laws. The forte of qualitative research is its ability to gain an understanding of the meaning of experience, action and events as these are interpreted through the eyes of particular participants. Qualitative methods are also important because they meet a number of reservations concerning the use of quantification, particularly the problem of inappropriately fixing meanings a priori, where these meanings may be variable and renegotiable in relation to their contexts of use.

Research proposals 5, 6, and 7 demanded an insight into the participants' experience of the ODA process. For the reasons outlined above, this part of the research was conducted using qualitative methods. The aim was to generate, rather than verify, theory in the manner described by Gherardi and Turner:

A distinction in research is between that which is concerned with verification and that which is concerned with discovery. In the former type, theory serves as a framework to guide verification. In the latter, theory is the 'jottings in the margins of ongoing research', a kind of research in which order is not very immediately attained, a messy, puzzling and intriguing kind of research in which the conclusions are not known before the investigations are carried out. (Gherardi and Turner 1981:12)
This was achieved through a 'grounded theory' approach (Glaser and Strauss 1967) in which theory is generated by (or grounded in) an iterative process involving the continual sampling and analysis of qualitative data gathered from concrete settings, in this case unstructured and semi-structured reports written by course participants. This approach is characterised by the method of constant comparison and the use of theoretical sampling. The former defines the principal analytical task as one of continually sifting and comparing data elements throughout the lifetime of a research project. In making these comparisons the researcher becomes sensitised to similarities and differences in the data, and these are used to promote conceptual and theoretical development.

The grounded theory approach is characterised by its emphasis upon the importance of viewing the meaning of experience and behaviour in context and in its full complexity (accessed through the use of qualitative data); a view of the scientific process as generating working hypotheses rather than empirical facts; theorizing that is based upon the grounding of concepts in data rather than in a priori reasoning since the latter could not possibly encompass the whole range of possibilities that are likely to be encountered; and the desire to engage with respondents in as neutral a way as possible. These characteristics of grounded theory place it squarely within a positivist epistemology, since a theory that is 'discovered from' data implies that a set of social or psychological relationships exist objectively in the world and are reflected in the qualitative data.

The status of such a theory, generated within a limited number of case studies should be regarded in the light of Popper's observations when reflecting upon the contribution made by The Logic of Scientific Discovery. He observed that:

\[\text{we can never 'justify' a theory. But we can 'justify' ...our preference for a theory, considering the state of the critical debate... for a theory may stand up to criticism better than its competitors ... This itself I linked with the ideal of a better and better approximation to truth, or}\]
of increasing truthlikeness or verisimilitude. According to this view, finding theories which are better approximations to truth is what the scientist aims at ... This involves the growth of the content of our theories, the growth of our knowledge of the world.

(Popper 1976: 149-50)

4.4 THE METHODS EMPLOYED

The methods employed were chosen in order to meet a number of criteria. Firstly, it was necessary to establish that the ODA programmes under review were delivering benefits similar to those evidenced by previous studies (Ibbetson 1997). This required the use of quantitative techniques (similar to those used in previous studies) to measure changes in participants' attitudes to their skill levels. Secondly, as outlined in chapter two, it was necessary to have cognisance of the influence of stakeholders in the research process. The intention of collecting a large amount of data and the consequent demands that this would exert upon participant time before, during and after the ODA programme militated against corporate involvement. In order to overcome this problem of access and simultaneously the problem of bias emanating from the course purchaser it was decided to operate the ODA programmes independently. Thirdly, in order to investigate a number of the research questions there was a need to be able to influence certain course variables, namely: types of task and debrief employed, group size and composition and for important logistical reasons, the course dates. The latter facilitated the application of sequenced data collection techniques.

Finally, methods were required that would enable the researcher to capture the experience of a relatively large number of people on a development programme and to understand the processes at work. To this end a variety of complementary techniques were employed to provoke reflection amongst the participants and to capture the complete experience with both intended and unintended outcomes being recorded. This took the form of qualitative data in the guise of unstructured
participant reports in the first case study and semi-structured participant reports in the second case study. To avoid sample bias data was collected from all those who participated on the programme. These reports were then analysed using the grounded theory approach (as outlined above) in an attempt to understand factors that influenced the learning that took place during the ODA programme.

4.4.1 The Case Study Approach

The investigation took the form of two distinct phases or case studies (see Figure 4.1 for an overview of the research design). The rationale behind using the case study approach will be discussed first before examining the specific research tools and their deployment. Researchers have different reasons for utilising the case study approach. In this instance, two cases were examined to provide insight into an issue (ODA). The cases themselves were of secondary interest only, and were chosen simply to facilitate our understanding of 'something else', in this instance, the processes at work within ODA (Stake 1998). To use Stake's (1998) terminology, the instrumental case study approach was adopted. In this the case study is:

*part of scientific method, but its purpose is not limited to the advance of science. Whereas single or a few cases are poor representation of a population of cases and poor grounds for advancing grand generalisations, a single case as negative example can establish limits to grand generalisation.*

(Denzin & Lincoln 1998:104)
### Case study One (1999)

**Purpose:** to gather quantitative data to address proposals 1-5, and rich qualitative data to begin understanding the processes at work in ODA

<table>
<thead>
<tr>
<th>Research objectives</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. specific skill benefits</td>
<td>Personal benefits questionnaire</td>
</tr>
<tr>
<td>2. overall skill benefits</td>
<td>Personal benefits questionnaire</td>
</tr>
<tr>
<td>3. impact of personality</td>
<td>Personal benefits questionnaire and Myers Briggs Type Indicator</td>
</tr>
<tr>
<td>4. impact of gender</td>
<td>Personal benefits questionnaire</td>
</tr>
<tr>
<td>5. impact of task</td>
<td>Task evaluation questionnaire</td>
</tr>
</tbody>
</table>

### Case Study Two (2000)

**Purpose:** to produce rich qualitative data to enhance understanding of processes at work with respect to proposals 5-8.

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. impact of task</td>
<td>Structured Participant report</td>
</tr>
<tr>
<td>6. impact of review style</td>
<td></td>
</tr>
<tr>
<td>7. the critical incident</td>
<td></td>
</tr>
<tr>
<td>8. understanding the learning experience</td>
<td></td>
</tr>
</tbody>
</table>

This approach echoes that of Popper's quoted above, with the aim being not to infer the findings from a sample to a population, but to engender patterns and linkages of theoretical importance (Bryman 1989). This approach takes cognisance of some of the potential weaknesses of building theory from cases. Firstly, the large quantity of data generated can make it very difficult for the researcher to distinguish the most significant variables from those that are particular to the case being studied. Secondly, Gill and Johnson (1991) argue the theory generated inductively has to have the capacity to be novel, empirically valid and testable. The case study approach to theory building is appropriate when there is little empirical evidence on the subject under scrutiny.
The first case study was designed to collect quantitative data to address research propositions one to five, and qualitative data to address propositions five to eight. The second case study was structured to collect additional qualitative data to address research proposals five, six and seven and specifically to elaborate upon concepts which had been uncovered in the unstructured reports written in case one. The two case studies are therefore linked by their relationship to the research aims and it is important to note that the second was not designed as a test bed for theory generated from case one or as an additional sample population.

4.4.2. The data collection in case study one

At the University of Wales Institute, Cardiff, second year undergraduate students on Hospitality Management, Tourism Management and Recreation and Leisure Management degree courses have the option of undertaking a one-semester module entitled 'Problem Solving'. An intrinsic part of this module is a full one-day problem-solving session out-of-doors, utilising tasks commonly employed by ODA providers.

Data collection took place at six stages surrounding the ODA event, before, during and after (see Table 4.2).
### Table 4.2: Summary of sequence and methods of data collection

<table>
<thead>
<tr>
<th>Tool/Time</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
<th>Stage 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wks 1-3</td>
<td>Week 4</td>
<td>Week 5</td>
<td>End of ODA Event</td>
<td>Week 6</td>
<td>Week 7-15</td>
</tr>
<tr>
<td>Myers Briggs Type Indicator Questionnaire</td>
<td>yes</td>
<td></td>
<td></td>
<td>T2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Benefits Questionnaire</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Evaluation Questionnaire</td>
<td></td>
<td>yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>yes</td>
</tr>
</tbody>
</table>

**Stages 1 & 2.** The ODA event took place in week 5 of the summer semester (8th March 1999). In preparation for the event students completed two questionnaires; the first, to give an indication of how they preferred to take in information and make decisions, the Myers Briggs Type Indicator (see section 4.5.1) and the second to evaluate reactions to the event, any learning achieved and self-perceptions of behavioural changes which may have taken place, a Personal Benefits Questionnaire (PBQ). Both instruments are reviewed in section 4.6.

**Stages 3 & 4.** A total of 96 students were placed randomly into nine groups of between ten and twelve students. These groups rotated through nine tasks (see Appendix Five) each supervised by a different instructor. The tasks were designed by the provider and were representative of those commonly found on an outdoor personal development course. Due to the format of the day and the necessity of
completing a range of exercises in a short period of time, each exercise corresponded with the 'tight task' definition outlined in chapter two. Each task was followed by a review of the activity. This was conducted by the instructor, using a common format supplied by the author. The review was either anagogic with the emphasis on process or pedagogic with the emphasis on the actual task and its outcome (Tuson 1994).

The whole event was conducted in a non-competitive atmosphere in line with Ibbetson's (1997) research which clearly suggests that:

> competitive programme formats produce polarised outcomes depending on how an individual's team fares in the staged competition. In terms of personal benefits perceived to be derived from the OMD programmes in question, 'winners' reported that the learning event had been more beneficial than the 'losers'. The difference in perceptions between 'winners' and 'losers' was statistically significant.

(Ibbetson 1997:157)

The Task Evaluation Questionnaire was administered after each task/review combination and the PBQ was administered at the end of the ODA event (T2).

**Stages 5 & 6.** Data collection post-event took the form of the third and final PBQ in week 6 (T3) and the writing up of a personal report (unstructured) of the ODA experience by end of week 15. An alternative view of the data collection process and the purpose of each method employed is shown in Table 4.3.
Table 4.3: Stages of evaluation in case study one

<table>
<thead>
<tr>
<th>When?</th>
<th>How?</th>
<th>What?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>MBTI Questionnaire</td>
<td>Determine participant’s personality type</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Personal Benefits Questionnaire</td>
<td>Determine participant’s attitude to his/her personal skills level</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Task Evaluation Questionnaire</td>
<td>Determine participant’s attitude to the task/debrief combination just undergone</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Personal Benefits Questionnaire</td>
<td>Determine participant’s attitude to his/her change in skills level immediately post ODA</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Personal Benefits Questionnaire</td>
<td>Determine participant’s attitude to his/her change in skills level one week post ODA</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Personal Reports</td>
<td>Explore participants view of ODA Programme</td>
</tr>
</tbody>
</table>

4.5.3. The data collection in case study two

The Problem Solving module operated again in spring 2000. The ODA event was conducted again with a different cohort of students but with the same providers and with a slightly modified task and review format (see Chapter Six and Seven). The purpose of this data collection exercise was three-fold. Firstly, to introduce a wider range of tasks in order to expand the analysis regarding objectives five and six (namely, the impact of the task and review design on participants’ perceived learning outcomes). Second, to focus on issues raised but not sufficiently developed in the first case study, particularly the value of the debrief in the learning process. This was done by setting up a ‘control’ in the post-activity debriefs (see Chapter Seven) and reducing group sizes. Both of these issues were alluded to in the unstructured
reports but poorly developed. Finally, this phase focused on the concept of the 'critical incident' as discussed in Chapters Two and Three.

The emphasis in the second case study was on the collection of structured reports. These were written after the ODA programme and after the participants had allowed for a period of reflection (see Appendix Six for the instructions given to participants regarding the writing of structured reports and also the discussion on structured reports in the section on research tools below). Rich qualitative data was required in order to understand the actual processes at work during the ODA programme and also to capture non-measured outcomes. The structured reports focused on learning from tasks, critical incident or salient events and the review process. Mintzberg sums up the rationale for this approach when he says:

*For while systematic data create the foundation for our theories, it is the anecdotal data that enable us to do the building. Theory building seems to require rich description, the richness that comes from anecdote. We uncover all kinds of relationships in our 'hard' data, but it is only through the use of this 'soft' data that we are able to 'explain' them and explanation is, of course, the purpose of research.*

(Mintzberg 1979: 587)

There was no other form of researcher intervention in this case study.

4.5 THE RESEARCH INSTRUMENTS

4.5.1. Myers Briggs Type Indicator (MBTI)

Chapter Two identified the need to broaden the scope of ODA research and include the individual participant as a factor for investigation, in addition to the course variables of task and review. This is because the personality of the individual has the potential of being a mediating factor in the learning process. Research into human behaviour has been attempted at different levels including: neural-physiological; individual psychology; group behaviour and sociological. At the level of the individual there are currently three streams of research: behaviourism, cognitive science and
personality theories. Of these three, it is only personality theories that treat the person as a whole:

*Personality theorists are in the unique position in psychology of studying the entire person. Most other psychologists are concerned with only one aspect of humans such as child development, old age, perception, intelligence, learning, motivation or memory. It is only the personality theorist who tries to present a complete picture of the human being.*

(Hergenhahn & Olson 1999: 6, as cited in Wheeler 2001)

The Jungian theory of personality type is a major force within the psychoanalytic stream and one which ‘focuses on the conscious aspects of personality, decision-making, and the effects of personality on understanding’ (Wheeler 2001: 127). Because of this orientation and the fact that the Lewin/Kolb Learning Cycle draws heavily upon it, it was chosen as the underlying theory for the personality dimension of the current study. A number of personality instruments have been developed from Jungian Type theory e.g., the Jungian Type Survey (JTS), the Keirsey Temperament Sorter (KTS) and the Myers Briggs Type Indicator (MBTI). The criteria for choosing an appropriate instrument in this study were: availability, reliability and validity. Only the Myers Briggs Type Indicator (MBTI) was found to be robust against all three criteria. In an independent review of the literature on the MBTI, Gardner & Martinko (1996) indicated that the MBTI was ‘reliable and valid enough to be used as a tool for examining the relationships between manager personality and attributes’. This view is supported by Wheeler (2001) who states:

*The MBTI has been subjected to several reliability tests, evidence from which provides strong support for the reliability of scores produced by the instrument.....The scores from all these tests, including the low scores, are within acceptable ranges and compare favourably to other psychometric instruments.*

(Wheeler 2001: 130)

With respect to validity issues related to MBTI, Wheeler (2001) summarised the findings as ‘not as uniformly supportive of the MBTI as those from the reliability
studies', but strongly indicating that it measured most aspects of personality in a way consistent with Jung's theory.

The theory recognises the existence of predictable and differing patterns of behaviour. These differences are caused by the way in which people prefer to use their minds. According to type theory there are eight principal personality traits. These form four dichotomous pairs and individuals have a preference for one of each of these pairs. These dichotomous traits are listed below together with the Jungian term for the preferences within each trait shown in italics.

Preference 1: attitudes towards the world around them (Extraversion/Introversion)
Preference 2: ways of perceiving or gathering information (Sensing/Intuition)
Preference 3: method of judgement or decision making (Thinking/Feeling)
Preference 4: preferred way of living in the world (Judging/Perceiving)

These four sets of preferences combine to form 16 distinct personality types (see Appendix Seven for overview). An understanding of type preferences and their interactions serves as the core of type theory. For the purpose of this study the focus is upon the impact of personality traits upon the problem-solving process and resultant learning outcomes. Table 4.4 provides a summary of how individuals' different preferences will impact upon the problem-solving situation according to type theory.

Given the existence of sixteen personality types and the small sample in relation to this (n=88) it was decided to restrict the analysis to a study of the impact of traits rather than type upon learning outcomes. When using the MBTI (Form G) it was also decided to use a continuous scoring method for each of the four bi-polar traits due to doubts expressed over dichotomous scoring by Gardner & Martinko (1996).
4.5.2. The Personal Benefits Questionnaire (PBQ)

The second method was a Personal Benefits Questionnaire (based on Ibbetson & Newell 1996, see Appendix Eight) employed to measure perceptions of personal outcomes. The questionnaire was based upon the literature and the aims of the course and included items concerning task issues. These questions related to the individuals’ beliefs about their ability to engage in task functions such as acting as a leader, planning and problem-solving. There were also items concerning maintenance / relationship issues such as listening, communicating and supporting others. Additionally, there were questions relating to how useful participants regarded the course in relation to their other studies and their enjoyment of it. The PBQ was first administered one week before the event (Time 1). Individuals responded to the items on a seven-point Likert scale, using a continuum from strongly disagree to strongly agree. The responses were summed to give a total index score. By calculating the difference between Time 1 and Time 2 in an individual’s scores this would give either a positive or negative score indicating if the individual had found the experience to be more or less personally beneficial.

4.5.3. Task Evaluation Questionnaire

The course was a circuit of approximately two miles in total. Each task was located where it was not visible to any other group save the one actually engaged on it. There was only one exception to this rule and that was necessitated by the terrain. The participants were not made aware of the rationale behind the choice of activities other than the fact that they were all problems to be ‘solved’. After each task / review combination students completed a short nine-item questionnaire similar in design to the PBQ (see Appendix Nine). This was designed to capture their immediate thoughts about the learning that had taken place during the activity (the items on the
questionnaire were; information gathering, planning, team working, communication, decision making, problem solving, leadership, listening skills and fun).

<table>
<thead>
<tr>
<th>Table 4.4: The influence of MBTI on problem-solving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENERGISING</strong></td>
</tr>
<tr>
<td><strong>Extrovert</strong></td>
</tr>
<tr>
<td>• talk through their ideas in order to clarify them</td>
</tr>
<tr>
<td>• continually seeking feedback from the environment about the viability of their ideas</td>
</tr>
<tr>
<td><strong>Introvert</strong></td>
</tr>
<tr>
<td>• take time, clarify ideas before talking.</td>
</tr>
<tr>
<td>• more likely to be concerned with their own understanding of important concepts and ideas</td>
</tr>
<tr>
<td><strong>ATTENDING (gathering information)</strong></td>
</tr>
<tr>
<td><strong>Sensing</strong></td>
</tr>
<tr>
<td>• pay attention to facts, details and reality</td>
</tr>
<tr>
<td>• tend to select standard solutions that have worked in the past.</td>
</tr>
<tr>
<td><strong>Intuition</strong></td>
</tr>
<tr>
<td>• attend to the meaningfulness of the facts</td>
</tr>
<tr>
<td>• the relationship between the facts and the possibilities of future events that can be imagined from these facts</td>
</tr>
<tr>
<td>• tendency to develop original solutions.</td>
</tr>
<tr>
<td><strong>DECIDING (evaluation of data)</strong></td>
</tr>
<tr>
<td><strong>Thinking</strong></td>
</tr>
<tr>
<td>• use logic and analysis.</td>
</tr>
<tr>
<td>• be impersonal in drawing conclusions.</td>
</tr>
<tr>
<td><strong>Feeling</strong></td>
</tr>
<tr>
<td>• more likely to consider values and feelings in the decision making process.</td>
</tr>
<tr>
<td>• tend to be subjective and consider how their decisions will affect others.</td>
</tr>
<tr>
<td><strong>LIVING (utilisation of data)</strong></td>
</tr>
<tr>
<td><strong>Judging</strong></td>
</tr>
<tr>
<td>• more likely to prefer structure and organisation.</td>
</tr>
<tr>
<td>• will want the problem solving process to demonstrate closure.</td>
</tr>
<tr>
<td><strong>Perceiving</strong></td>
</tr>
<tr>
<td>• prefer flexibility and adaptability</td>
</tr>
<tr>
<td>• concerned that a variety of techniques are considered</td>
</tr>
<tr>
<td>• provide for unforeseen change</td>
</tr>
</tbody>
</table>

4.5.4. Personal Reports (unstructured)

At the end of case study one, the participants were asked to write a report of their experience on the ODA programme. In the report they were asked to reflect critically upon the experience and the benefits to themselves. There was minimal guidance as to the required content of the report in order to allow participants their own frames of reference for describing and interpreting circumstances and events on the problem-
solving day. This was important as the attitude of participants and the logic underlying these attitudes were important factors to be taken into consideration. Each of these was coded by group (Gp1, Gp2 etc), by gender (M or F) and given a personal identification number.

4.5.5. Personal Reports (structured)

After completing the ODA event in case study two, students were given a more structured format for their evaluation report (see Appendix Six). These reports were coded as explained above with the distinction of groups being designated Gp1b, Gp2b etc. These documentary methods were chosen instead of post-event interviewing because they offered significant advantages. Chief amongst them was the ability to handle a larger sample than if the researcher had had to interview each participant individually. This would have introduced an additional complexity in the form of 'time lapse' if the researcher worked alone. The first interviewee would have been interviewed soon after the event with fresh recollections of the experience whereas the last would realistically have been interviewed several weeks, if not months, later. The introduction of multiple interviewers, while theoretically possible, was not feasible for a non-funded project and would also have introduced the question of 'reliability'. The benefit of not needing to tape and transcribe all interviews provided an immediate time and cost-saving. An alternative method of coping with a large sample size is the focus group, however this was rejected as the self-reporting format avoids the possibility of 'group think' and gives the less vocal an equal voice in response to the questions posed.

Since participants had a two-week period in which to consider, reflect and respond to the questions posed in the report the quality of the data was enhanced and the incidence of 'off the cuff' responses which can occur during interview was reduced.
Self-reporting also reduces the influence of the researcher upon the participant. Bryman (1989) outlines several problems associated with the presence of interviewers. These include the influence of the interviewer's age, gender, race and social class upon the interviewee and the responses they provide. Furthermore, the interviewer's expectations may be communicated to the interviewee in addition to some responses appearing more 'socially acceptable'. All of these factors may affect the validity of the survey.

4.6 A CRITIQUE OF THE METHODOLOGY AND METHODS EMPLOYED

This next section scrutinises both the methodology and methods employed. This is done under a number of headings, namely: the impact of the researcher; the sensitivity of the research tools and unanticipated problems.

4.6.1. The Impact of the researcher on the research outcomes

There is a need to acknowledge the probable impact that overt evaluation (i.e. that intended specifically for this research) had on the learning process and therefore the programme outcomes in both phases of the data collection. In the first case study the use of the task evaluation and PBQs impacted upon the 'Reflection Stage of the Learning Cycle (see Chapters Six, Seven and Eight for evidence and discussion). The PBQ forced reflection and analysis of both the start position of participants with respect to the named skills and also reflection on the changes that took place over time. Implicit was a reflection on how the ODA experience impacted upon these skills. As one participant commented:

The questionnaires were a useful tool as they identified the improvements I have made over a period of time. These answers also give me the chance to identify my strengths and weaknesses and where I need to make improvements for the future.

(Gp1, M, 65)
The initial administering of the PBQ (T1) forced participants to evaluate themselves and produced a benchmark position regarding their feelings, capabilities and position prior to the event (Smith & Piper 1990). These outcomes were obviously beneficial from the research perspective but represent an intervention that, although desirable, is not common on ODA events.

The qualitative data collected from participants in the first case study was characterised by the type of language employed by the researcher in the administered questionnaires. Despite being encouraged to write freely on their experience on the ODA event many students couched their reports in the language used on the PBQs and this provides limited insight into what they actually felt. For example as one said:

Another activity I thought was valuable was the rescue activity. Again because this involved the whole group and also developed a range of skills such as information gathering, leadership, delegation, team working and communication.

(Gp4, M, 16)

4.6.1. The sensitivity of the research tools

There were problems attached to the utilisation of each of the research tools. The PBQ was problematic for several reasons. Firstly, the scores given in T1 were set in some type of everyday life context, e.g. writing essays, playing for the football team, etc. These would be different from the ODA context which influenced participants' thinking in scoring in T2 and T3. Secondly, some participants indicated that it was difficult to carry out a self assessment, particularly for T1. ODA provides a concrete experience with which to benchmark one's own performance or skill level. Some participants found it easier to complete T2 than the other questionnaires because of this.
Thirdly, students did not have access to their original questionnaires when completing the PBQ for the second and third time. Some had difficulty in actually recording the same score if they felt there had been no change (i.e. they forgot their previous scores for each of the dimensions). Fourthly, one has to ask the question: How truly self-critical were students when answering these questionnaires? There may be an in-built tendency for participants to see themselves in a favourable light. This point is acknowledged by the participants themselves:

I think I needed to be more critical with myself when filling in the questionnaires.

(Gp1, F, 77)

In evaluating the contribution of the PBQ the following quote sums it all up:

The results from the questionnaires were very interesting and revealed an insight into what I've gained as a person resulting from the outdoor pursuits day.

(Gp4, M 121)

The key word here is insight. The numerical values have little meaning other than to indicate the direction of change in an individual's perception of him or herself. While both questionnaires and self-reporting were useful in the study of participant perceptions they are not designed for and therefore cannot measure improvements in skill level. The 'open' or unstructured report writing, while allowing a measure of reflection, produced in some instances too little focused data. Many of the reports generated in phase one were descriptive in nature, the extract quoted above (G4, M, 16) being typical of much of the weaker 'analysis' to be found in phase one reports. A further difficulty with some of the reports was the way in which individuals subscribed their own feelings to others. In some instances this could not be verified by the other participants' accounts because they did not record feelings on the issue. For example, one female participant wrote:

but all of us felt we learnt nothing from this task.

(G4, F, 13, author's emphasis)
However the reports provided a vehicle through which other issues which affected the programme could be identified by the participants. This would not have been the case had the research relied solely upon the closed questions used in the PBQ.

4.6.3. Unanticipated problems

A number of issues/problems arose during the course of the ODA event that had not been anticipated. A particular problem related to the quality of the 'debrief' session given by individual instructors. Despite the use of a common written format/instruction, there was no way of ensuring that instructors did not deviate from the intended briefing. The variable nature of the debrief session was documented in the participant reports as being due to various factors including time constraints. In addition, the task evaluation questionnaires completed after each task (although short and easy to fill in) became monotonous and the degree of credibility of the scores awarded by students to each task has to be questioned. There was also the issue of non-returns which was reduced by making the report writing and completion of questionnaires part of the students' assessment on the module. Absenteeism was the sole cause of the reduction in total data collected.

4.7 SUMMARY

The previous literature on ODA reflects the dichotomy between the positivist and anti-positivist traditions, with the emphasis in volume being on the former. This research is an attempt to draw upon the strengths of both approaches by adopting a neo-positivist methodology. The rationale behind using both quantitative and qualitative techniques despite their being derived from underlying theoretical perspectives with essentially conflicting assumptions, is defended by proponents of 'methodological pluralism'. Trow, for instance, proposed that:
Different kinds of information about man and society are gathered most fully and economically in different ways, and the problem under investigation properly dictates the methods of investigation... This view seems to be implied in the commonly used metaphor of the social scientist's 'kit of tools' to which he turns and finds the methods and techniques most useful to the problems at hand.

(Trow 1957: 33)

Gill & Johnson (1997: 156) also conclude that:

_all research approaches may have something to offer and that there is no independent form of evaluating different research strategies in any absolute terms._

They add the rider that the consensus of researchers is in favour of multi-method strategies. They define such a strategy as one that:

_Requires not only a convergence of substantive findings derived from a variety of methods of study but also debate about the contribution of each approach used: debate that is possible only if a detailed methodological justification is available..._

(Gill & Johnson 1997:156)

This research adopts both quantitative and qualitative methodologies to pursue its objectives. The research was conducted through two case studies and involved the construction of theory and generalisation as an outcome of observed experience. The first of these findings, relating to participant learning outcomes is reported and discussed in the next chapter.
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<th>Section</th>
<th>Page</th>
</tr>
</thead>
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</tr>
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<td>5.2 The Specific Skills Benefits of OMD</td>
<td>5-1</td>
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<td>5.3 The Perceived Overall Benefit to the Participants</td>
<td>5-8</td>
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<tr>
<td>5.6 Summary</td>
<td>5-13</td>
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</tbody>
</table>
CHAPTER 5: PERSONAL LEARNING OUTCOMES

5.1 INTRODUCTION
The purpose of this chapter is to present the quantitative and qualitative data generated by the first case study in relation to the first four propositions of the research project. The first proposition concerned with the specific skill areas that participants perceived to have benefited from the ODA intervention (see section 5.2). The second was to measure the perceived overall benefit of the ODA intervention to the participants and whether this changed over time (see section 5.3). The third was to measure the effect of the participants' personality type (as identified by the Myers Briggs Type Indicator), on his or her perception of learning outcomes (see section 5.4) and the last was to measure the effect of the participants' gender on perceptions of learning outcomes (see section 5.5).

5.2 THE SPECIFIC SKILLS BENEFITS OF ODA
The PBQ was the instrument used to measure changes in participants' perceptions of their individual skill levels or personal attributes. Participants responded to statements about eighteen skills or attributes by indicating whether they agreed or disagreed with the statements. The range of answers were recorded on a seven-point Likert scale. This exercise was conducted at three key stages - before the ODA course (T1); immediately upon completion of the course (T2); one week after completion of the course (T3). In addition to the questions on skill areas, there were four questions on the ODA course itself.

Table 5.1 shows the recorded changes in participant perception regarding each of these skill/attribute areas between three time periods: T1 to T2; T2 to T3; T1 to T3. The first time period (T1 to T2) shows the immediate change in perception as a result
of the course; the second time period (T2 to T3) the effects of reflection or a 'cooling off period'; and T1 to T3 the change in perceptions which occurred over the duration of the study. The figures displayed represent changes in mean scores for each skill/attribute and also the significance level of that change.

The participants perceived positive change in fourteen of the eighteen skill / attribute areas recorded. These were: overall planning; being an effective team member; the ability to communicate ideas to others; decision making; giving and receiving information; adaptability to changing situations; time management; overall problem solving; leadership; self-confidence; managing or resolving conflict; co-ordinating team activities; delegating; encouraging and supporting others.

Of the fourteen skills/attributes recording an improvement, there was a statistically significant improvement in participants' perception of their own skill level in nine of these areas across both time periods T1 to T2 and T1 to T3. These skill areas were: decision making; time management; overall problem-solving ability; leadership; self confidence; managing or resolving conflict; co-ordinating team activities; delegating and encouraging and supporting others. In the three areas of being an effective team member, communication and adaptability to changing situations, participants, overall, recorded an initial improvement in period 1 to 2, but this view was not sustained for period 1 to 3 for the whole cohort.
### Table 5.1: Perceived changes in individual skill levels

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>T1 to T2</th>
<th>T2 to T3</th>
<th>T1 to T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Description</td>
<td>Change in Mean</td>
<td>Sig. (2-tailed)</td>
<td>Change in Mean</td>
</tr>
<tr>
<td>01</td>
<td>Information Gathering</td>
<td>.1477</td>
<td>.174</td>
<td>2.27e</td>
</tr>
<tr>
<td>02</td>
<td>Overall planning</td>
<td>.2955</td>
<td>.055</td>
<td>-5.68e</td>
</tr>
<tr>
<td>03</td>
<td>Effective team member</td>
<td>.3977</td>
<td>.000</td>
<td>.2955</td>
</tr>
<tr>
<td>04</td>
<td>Self awareness</td>
<td>.1477</td>
<td>.273</td>
<td>5.682e</td>
</tr>
<tr>
<td>05</td>
<td>Communicate ideas</td>
<td>.2614</td>
<td>.019</td>
<td>6.818e</td>
</tr>
<tr>
<td>06</td>
<td>Decision making</td>
<td>.3182</td>
<td>.012</td>
<td>5.682e</td>
</tr>
<tr>
<td>07</td>
<td>Giving and receiving feedback</td>
<td>.2045</td>
<td>.126</td>
<td>-2.159</td>
</tr>
<tr>
<td>08</td>
<td>Listening to others</td>
<td>7.95e</td>
<td>.373</td>
<td>7.955e</td>
</tr>
<tr>
<td>09</td>
<td>Adapt to situations</td>
<td>.2841</td>
<td>.011</td>
<td>.2727</td>
</tr>
<tr>
<td>10</td>
<td>Time management</td>
<td>.4773</td>
<td>.002</td>
<td>.1364</td>
</tr>
<tr>
<td>11</td>
<td>Overall problem solving ability</td>
<td>.6250</td>
<td>.000</td>
<td>.1364</td>
</tr>
<tr>
<td>12</td>
<td>Leadership</td>
<td>.7273</td>
<td>.000</td>
<td>.1591</td>
</tr>
<tr>
<td>13</td>
<td>Self confidence</td>
<td>.3182</td>
<td>.002</td>
<td>-4.55e</td>
</tr>
<tr>
<td>14</td>
<td>Managing or resolving conflict</td>
<td>.2727</td>
<td>.008</td>
<td>-1.14e</td>
</tr>
<tr>
<td>15</td>
<td>Co-ordinating team activities</td>
<td>.4432</td>
<td>.000</td>
<td>.1136</td>
</tr>
<tr>
<td>16</td>
<td>Risk taking</td>
<td>7.95e</td>
<td>.489</td>
<td>-3.41e</td>
</tr>
<tr>
<td>17</td>
<td>Delegating</td>
<td>.6364</td>
<td>.000</td>
<td>.2045</td>
</tr>
<tr>
<td>18</td>
<td>Encourage and support other people</td>
<td>.2159</td>
<td>.025</td>
<td>.000</td>
</tr>
<tr>
<td>19</td>
<td>Confidence in coping with the Outdoor Problem Solving Tasks</td>
<td>.6705</td>
<td>.000</td>
<td>-.7045</td>
</tr>
<tr>
<td>20</td>
<td>Enjoyment of tasks</td>
<td>.1705</td>
<td>.083</td>
<td>-4.545e</td>
</tr>
<tr>
<td>21</td>
<td>Benefit from the Outdoor Problem Solving Tasks</td>
<td>-2.273E-02</td>
<td>.840</td>
<td>.3409</td>
</tr>
<tr>
<td>22</td>
<td>The Outdoor Problem Solving Tasks will benefit my other studies.</td>
<td>-.2025</td>
<td>.129</td>
<td>.1818</td>
</tr>
</tbody>
</table>

(Paired sample test. Statistically significant scores shown in bold)

Conversely, for the other two skill areas of overall planning and giving and receiving feedback, participants revised their initial opinions and the time period T1 to T3.
showed a more significant improvement in these skill levels than those recorded immediately post-event (T1 to T2). In four of the skill/attribute areas there was no statistically significant change in the data between time periods T1 to T2, or T1 to T3. These skill areas were: information gathering; self-awareness; listening to others and risk-taking.

While the quantitative data does not support the view that overall there was a statistically significant improvement in participant's information gathering, self-awareness, listening to others and risk-taking skills as a result of ODA, there is a wealth of qualitative evidence from the participant reports to substantiate the view that these skill areas were improved for a number of participants. The qualitative data not only indicates the direction of change (as does the quantitative data) but also in many instances, it indicates the mechanism by which that change takes place.

Firstly, ODA gives participants an experience that allows them to 'benchmark' themselves. Due to a lack of opportunity prior to the course, participants may be unaware of their skill levels or may not even have considered them. The following extract from a male participant's report illustrates this point well:

On the pre-field trip questionnaire I answered many of the statements with 'somewhat agree'. This was mainly because I had not had any way of measuring accurately how good I was these qualities. After the trip I felt I had an improved sense of how well I had coped in the activities and which qualities had been strengthened or shown to have a weakness.

(Gp7, M, 7)

This was by no means an isolated example and was typical of the respondents' reflections, as this female student reflected:

I think I had a vague idea of what I was all about beforehand, but the field trip allowed me to see my skills in action. So at the end of the day I was much more aware than I had been.

(Gp1, F, 75)
Whereas the above student describes her general skills, others discussed specific attributes, such as delegation. As this participant noted:

*In T1 I was unsure about my delegation skills because of my lack of experience.*

(Gp4, M, 16)

Participants who had already formed a view of their own capabilities were able to reassess them during the course. The following four report extracts illustrate this aptly:

*Looking over the questionnaire in general it is clear to see that the majority of replies, pre-test and post-test are the same ... I generally believe this is due to having good self-awareness, realising my strengths and weaknesses.*

(Gp5, M, 32)

*From past experience I have always thought my listening skills were good. This was really confirmed in the field trip, in particular, the rapid descent activity.*

(Gp4, M, 16)

*Before the activities, I somewhat agreed my problem solving ability was good, and at this point during the day I was beginning to feel that this was not the case.*

(Gp2, F, 50)

*I have always thought I was an okay leader, however watching some of the people in the group made me realise that there were more skills involved than I thought.*

(Gp1, F 68)

The period of reflection post-course allowed participants to take a more considered view of what had actually taken place. In some instances participants 'down graded' their own skills assessment as a result of the experience. The ODA experience allowed the following female student an opportunity to assess her own weaknesses:

*I think the main point about these questionnaires was that I realised that in some cases I was not realising some of my weaknesses. This is why I have given lower marks as I progressed but at least I have recognised how I can improve my team working skills.*

(Gp3, F, 19)
This realisation was not an isolated occurrence, as witnessed by the next three report extracts which highlight the power of ODA in confronting people with their own abilities or lack of them:

Apart from decision-making all the other components (on the questionnaires T2 / T3) dropped by one point. I believe the reason for the drop was through an actual realisation of my present skills, I believed prior to the ODA my skills were better than they actually were.

(Gp5, M, 30)

from T1 to T2 my ability to manage conflict dropped from ‘somewhat agree to somewhat disagree’ as rather than confronting a difficult situation on two occasions during the day I chose to ignore it. ... Since ODA I have tried to confront this problem in a constructive way.

(Gp6, F, 83)

Results T1 and T2 show that I was good at resolving conflict. Result T3 shows that I feel I am not good (at resolving conflict). The reason for this change was the experience of the ODA. During the ODA I found myself causing conflict rather than trying to resolve them. Whenever I thought that the group was doing something wrong I spoke out and was prepared to argue my case ... I began to appreciate how stubborn I actually am and how bad I am at resolving conflict. The results of the questionnaires articulate my feelings on the subject of my ability to resolve conflict. The ODA has opened my eyes to this weakness and helped me to try not to create conflict of interest were there is no need to do so.

(Gp6, M, 49)

Other participants were able to see themselves in a more favourable light as a result of the experience:

I believe the improvement is not something which has actually come about due to the day itself, but more a case of the day or more likely a specific event has made me realise that I am actually quite effective at information gathering.

(Gp5, M, 32)

This adds a level of complexity to the interpretation of the raw quantitative data. While proponents of ODA would wish to see a recorded improvement in participants' self-assessment of their skill levels, the ODA experience may in some cases, produce the reverse effect by increasing the participants' own self awareness and a realisation of their own inflated perceptions.
Numerical data does not uncover the mechanisms by which any improvements in learning take place. The participant reports indicate that, in addition to 'learning by doing', participants learn by observing others in action. Compare these three report extracts from women in groups one and three:

I feel that I have made a slight improvement in my overall planning. This was helped through working in a team environment and observing how other people approach and tackle problems.  
(Gp3, F, 51)

I had been able to watch all the others be leaders and I knew what I wanted to do.  
(Gp1, F, 68)

Escape was the only activity we did where I felt the leadership was bad. ... This activity taught me the importance of assessing the immediate situation and not jumping in before you are clear yourself of what is involved.  
(Gp1, F, 68)

Some participants were able to attribute learning to specific tasks. This male participant was able to attribute improvements in planning ability to specific events:

in T1 I said that my planning ability was poor, while in T2 and T3 my perception had changed to 'somewhat agreeing' then 'disagreeing'. I think that this was fairly accurate. In the past I would always leave things to the last minute whereas now I like to think that I plan what I'm doing more. Challenges such as electric fence helped me improve on this as we had to plan before hand.  
(Gp4, M, 16)

The majority however, saw learning as the result of accumulated experiences. The following two extracts being typical of this type of observation:

since the ODA I have realised how important planning your actions really are and I have now used this experience in relation to completing assignments.  
(Gp5, F, 58)

My planning abilities have improved as I realise that I think a lot more before diving straight into the situation and weigh up the pros and cons first.  
(Gp9, F, 1)

Finally, participants indicate that the skills and attributes recorded do not exist in isolation. The practise of ODA develops the individual in a more holistic sense than
the usual course aims (described in Chapter Two) would sometimes indicate.

Enjoyment was also evident in the activity for this student, who wrote:

*I did enjoy the day as a whole and I do believe I personally gained a lot out of the day. Not only in terms of improving my problem solving skills but in terms of understanding myself and realising how I work in certain situations and what situations I tend to work best in.*

(Gp8, M, 35)

Others, such as this woman felt that they gained considerably from the experience:

*After I had a chance to prove myself as team leader it gave me self confidence and the ability to note down that I felt that I was far more effective as a team leader than I initially thought.*

(Gp9, F, 1)

### 5.3 THE PERCEIVED OVERALL BENEFIT OF ODA TO THE PARTICIPANTS

The overall benefit of ODA to the participants was calculated using the PBQ (see Chapter Four) measured at T1, T2 and T3 (see section 5.2). There was a shift in the participants' perception of their overall skill level as a result of participating in the ODA course between T1 and T2. A paired t test indicated an increase in mean scores of 5.25 (p= .000) on the PBQ between T1 and T2.

This perceived benefit was also apparent for the period T1 to T3. Paired t-test indicated an increase in mean scores of 4.0568 (p= .000). In the period T2 to T3 the marginal fall in mean scores (-1.1932, p=.078) was not statistically significant. The quantitative data therefore indicates that the one-day ODA course provided benefit to participants as judged by their perception of increased skill levels.

These results mirrored those of longer ODA courses (Ibbetson 1997) and also captured the 'euphoria effect' felt immediately post-course. This is illustrated by the reduction in mean scores between periods 2 and 3. The experience was captured by one participant and described in these terms:
The strongly agree column in T2 though has an additional 5 ticks ... which simply vanish two weeks later. This may be due to the 'happy effect', which is caused by a generally euphoric feeling which comes with having completed the task, feeling that we worked well together and the overall effects of a good day out. I probably looked at each question with reference to a specific task on the day and then gave myself a good evaluation as I felt that most of the tasks went exceptionally well.

(Gp1, F, 75)

In conclusion the quantitative data is useful in assessing the direction of change and the relevance of that change to a whole cohort of participants. The additional qualitative data as supplied by the participant reports lends further evidence to substantiate the changes that have taken place. For many of the participants the ODA experience provided them with the means to form a judgement regarding their skills and personal attributes in areas that they had not contemplated before. For others it afforded an opportunity to confirm or adjust their own self-perceptions. Only in the third instance, the development of skills, did the questionnaire actually record a benefit to the individual. Sole reliance upon the questionnaire method therefore fails to capture the complete experience of ODA.

5.4 THE EFFECT OF THE PARTICIPANTS' PERSONALITY TYPE ON LEARNING OUTCOMES

The influence of personality upon learning outcomes was measured using the Myers Briggs Type Indicator (MBTI). Details of the instrument and the theory underpinning it are outlined in chapter four. The investigation produced two sets of results. The first set of results sought to establish whether any relationship existed between the PBQ results at T1, T2 and T3 respectively, with the four individual personality dimensions measured by the MBTI (Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling and Judging-Perceiving). The second set of results, sought to establish
whether there was a relationship between these personality dimensions and changes in PBQ results over time (T1 to T2, T2 to T3, and T1 to T3 respectively).

The influence of each of the four 'dimensions of personality' on how individuals perceived themselves on the PBQ varies. The Extraversion-Introversion scale indicates the degree to which people focus their attention on external events, experiences and interactions (Extraversion) or on their own world of thoughts, feelings and reflections (Introversion). On the continuous scale constructed for the research individuals with a preference for extraversion indicated low scores and those with a preference for Introversion indicated high scores. There was a negative correlation between this scale and the PBQ scores recorded at T1, T2 and T3 (see Table 5.2). This indicates a disposition by participants with a preference for Introversion to rate themselves as having lower skill/attributes levels than participants with a preference for extraversion.

Table 5.2 MBTI dimensions and participants' assessment of skill/attribute levels (Pearson Correlation).

<table>
<thead>
<tr>
<th>MBTI Dimensions</th>
<th>PBQ Score T1</th>
<th>PBQ Score T2</th>
<th>PBQ Score T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion/Introversion</td>
<td>-.426**(.000)</td>
<td>-.375**(.000)</td>
<td>-.317**(.000)</td>
</tr>
<tr>
<td>Sensing/Intuition</td>
<td>.209(.051)</td>
<td>.133(.217)</td>
<td>.104(.337)</td>
</tr>
<tr>
<td>Thinking/Feeling</td>
<td>.153(.155)</td>
<td>.074(.495)</td>
<td>.177(.098)</td>
</tr>
<tr>
<td>Judging/Perceiving</td>
<td>-.180(.093)</td>
<td>-.126(.241)</td>
<td>-.132(.219)</td>
</tr>
</tbody>
</table>

(*) Correlation is significant at the 0.01 level (2-tailed).

The sensing-intuition scale reflects how people like to take in their information. Those who prefer sensing like to take their information in through their senses and focus on what is real and actual. Those who favour Intuition like to take in information by seeing the big picture, focusing on the relationship between facts. On the continuous scoring system used in the research sensing was indicated by low scores and
intuition by high scores. There was no relationship found between this personality dimension and the personal benefits score at any of the three times recorded (see Table 5.2).

The thinking-feeling scale indicates the degree to which people prefer to use analytical, logical reasoning (thinking) in their decision making in contrast to those who focus on what is important to themselves and others (feeling). The preference for thinking was indicated by low scores and the preference for feeling, indicated by high scores. No relationship was found between this scale and the personal benefits scores recorded at T1, T2 and T3 (see Table 5.2).

Finally, the judging-perceiving scale indicates how people like to orient themselves to the outside world. Those who prefer to use their judging process tend to live in a planned, organised and methodical way while those who favour the perceiving process tend to be more flexible and spontaneous. On this scale those who favoured judging had low scores while those who favoured perceiving had high scores. No relationship was found between this scale and the scores recorded on the PBQs at T1, T2 and T3 (see Table 5.2).

The changes that took place in participants' perceptions of their skill levels in all three time periods (T1 to T2, T2 to T3 and T1 to T3) were analysed with respect to the four personality dimensions (extraversion-introversion, sensing-intuition, thinking-feeling and judging-perceiving). A summary of findings is given in Table 5.3. For only one of the personality dimensions on the Myers Briggs Type Indicator was a relationship found between it and the changes that occurred in participant perceptions of skill change. That relationship was between the first personality dimension, extraversion-introversion, and the skill changes that occurred in the time period T1 to T3. The positive correlation indicates that those participants indicating a preference for
Introversion show a higher gain in personal benefits as a result of the ODA intervention.

Table 5.3: Spearman Correlation of MBTI dimensions and changes in PBQ scores $T_1$ - $T_2$ and $T_1$ - $T_3$

<table>
<thead>
<tr>
<th>MBTI dimensions</th>
<th>$T_1$ to $T_2$</th>
<th>$T_1$ to $T_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion/Introversion</td>
<td>.173 (.108)</td>
<td>.268* (.012)</td>
</tr>
<tr>
<td>Sensing/Intuition</td>
<td>-.081 (.451)</td>
<td>-.201 (.062)</td>
</tr>
<tr>
<td>Thinking/Feeling</td>
<td>-.120 (.265)</td>
<td>-.093 (.391)</td>
</tr>
<tr>
<td>Judging/Perceiving</td>
<td>.089 (.410)</td>
<td>.102 (.349)</td>
</tr>
</tbody>
</table>

(2-tailed significance in brackets: Statistically significant shown in bold)

5.5 THE EFFECT OF GENDER ON PERCEPTIONS OF LEARNING OUTCOMES

The mean scores for each of the PBQs for both male and female participants are shown below in Table 5.4. The raw scores indicate very little difference in the mean score awarded by both males and females to their respective skill levels at each of the three time periods at which the PBQ was administered.

Table 5.4 PBQ scores by gender

<table>
<thead>
<tr>
<th></th>
<th>Mean PBQ at $T_1$</th>
<th>Mean PBQ at $T_2$</th>
<th>Mean PBQ at $T_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>94.3810</td>
<td>99.0952</td>
<td>98.0238</td>
</tr>
<tr>
<td>Female</td>
<td>93.7609</td>
<td>99.5000</td>
<td>98.1957</td>
</tr>
</tbody>
</table>
The change in personal perception of skill levels across the two time periods (T1-T2 and T1-T3) according to gender were analysed using an Independent Samples Test. For the time period T1 to T2 there was no statistically significant difference in variance (t=.520, Sig.=.605). There was also no statistically significant difference in variance for the time period T1 to T3 (t=.493, Sig.=.623). From these results the study concludes that gender does not impact upon perceptions of overall learning outcomes.

5.6. SUMMARY

The quantitative data collected in phase one indicated that the ODA intervention was successful in producing positive change in participant perceptions of their skill/attribute level in a number of specific areas. For the majority of these areas the change was sustained for the duration of the study. The data indicate that the ODA intervention produced an overall improvement in participants’ perceptions of their skill levels.

The influence of personality as depicted by the four dimensions of the MBTI was limited to the extraversion–introversion scale. Participants indicating a preference for extraversion indicated higher scores on the PBQ at each of the three time periods (T1, T2, T3). However, it was the participants with a preference for Introversion who indicated a higher degree of change in personal benefits as a result of the ODA intervention. It was significant that this was recorded for the longer time period T1 to T3 not the immediate reaction time of T1 to T2. The expectation being that those displaying a tendency for Introversion would need to internalise the experience and reflect upon it before registering a change in attitude. The study found that gender was not an influencing factor in the recording of personal benefits during the ODA programme. The first case study produced quantitative data indicating that participants did benefit during the ODA intervention. However, there was insufficient
qualitative data to indicate the mechanisms by which these changes came about. The second case study was an attempt to address this weakness and the results are presented in the following three chapters.
CHAPTER 6

TASK DESIGN AND PERSONAL LEARNING OUTCOMES

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Chapter 6: Task Design and Personal Learning Outcomes

CHAPTER 6: TASK DESIGN AND PERSONAL LEARNING OUTCOMES

6.1 INTRODUCTION

The purpose of this chapter is to report and analyse the research findings on the impact of different task designs on the individual’s perceived outcomes. The actual tasks utilised are described in Appendix Five. The length of the tasks varied but each task and accompanying review could be completed within 45 minutes. The students were allocated into groups prior to the event (n = 8) and the groups were approximately of equal size comprising either ten or eleven students. The students then rotated through all nine activities, each supervised by an instructor. The instructor was given a 'script' for his/her particular post-activity review so that all the students underwent the same experience.

In the first case study, quantitative data was collected by means of questionnaires at the end of each task and qualitative data was collected by means of an unstructured report after the completion of the course. In the second case study, data was all qualitative in nature, and was collected through a semi-structured report. These two case studies are reported in sections 6.2 and 6.3 respectively. In contrast to the Ibbetson (1997) study the ODA events were deliberately conducted in an atmosphere of 'non competition'. This eliminated a key variable (Ibbetson 1997). However, instructors recorded whether the groups were successful or not at completing each particular activity, which provided an objective measure of how each team had performed.

6.2 QUANTITATIVE RESULTS

Participants were asked to indicate the impact the tasks had on nine different skills/attributes, using a post-task questionnaire. These skills/attributes were:
information gathering; planning; team-working; communication; decision-making; problem solving; leadership; listening and fun (i.e. the enjoyment they gained from doing the particular task). These skills were drawn from those on the PBQ. It was decided not to ask questions about all the skills in order to limit the interruption to the task/review process. Additionally, the process of completing the task questionnaire was itself laborious, even on such a limited scale, and it was thought sensible not to unduly lengthen the process as losing participant support for the exercise would affect the results. Table 6.1 shows the tasks ranked by how participants perceived the overall benefit gained from each one.

### Table 6.1: The tasks and their overall benefit to participants' learning

<table>
<thead>
<tr>
<th>Name of task (code)</th>
<th>Ranking by benefit</th>
<th>Review style</th>
<th>Structure</th>
<th>Physicality</th>
<th>Perceived Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Fence (9)</td>
<td>1</td>
<td>pedagogic</td>
<td>tight</td>
<td>medium</td>
<td>yes</td>
</tr>
<tr>
<td>Escape (4)</td>
<td>2</td>
<td>pedagogic</td>
<td>tight</td>
<td>low</td>
<td>no</td>
</tr>
<tr>
<td>Blackdown Survival (6)</td>
<td>3</td>
<td>anagogic</td>
<td>tight</td>
<td>low</td>
<td>no</td>
</tr>
<tr>
<td>Minefield (3)</td>
<td>4</td>
<td>anagogic</td>
<td>tight</td>
<td>low</td>
<td>no</td>
</tr>
<tr>
<td>Swamp Crossing (2)</td>
<td>5</td>
<td>anagogic</td>
<td>tight</td>
<td>high</td>
<td>some</td>
</tr>
<tr>
<td>Night Camp (8)</td>
<td>6</td>
<td>anagogic</td>
<td>tight</td>
<td>low</td>
<td>some</td>
</tr>
<tr>
<td>Hidden Gen (5)</td>
<td>7</td>
<td>pedagogic</td>
<td>tight</td>
<td>low</td>
<td>yes</td>
</tr>
<tr>
<td>Rescue (7)</td>
<td>8</td>
<td>pedagogic</td>
<td>tight</td>
<td>medium</td>
<td>no</td>
</tr>
<tr>
<td>Rapid Descent (1)</td>
<td>9</td>
<td>pedagogic</td>
<td>tight</td>
<td>low</td>
<td>yes</td>
</tr>
</tbody>
</table>

All tasks were designated 'tightly structured' using the Dainty and Lucas (1992) criteria, meaning that there were in reality only a limited number of possible solutions to each task.
An analysis of the results in Table 6.1 shows that no discernable overall pattern emerges if one uses the factors of review style, structure, physicality and perceived risk as the basis for comparison. A surprising feature is that the two tasks of an overtly outdoor pursuits nature, Rapid Descent and Hidden Gen (abseiling and caving respectively), produced relatively low overall benefit to the participants. Conversely, Escape and Blackdown Survival, both static exercises (which could be accomplished indoors) were ranked second and third, respectively.

Table 6.2 shows a breakdown of the benefits by skill/attribute type that participants perceived each task provided them with. These results mirror those in Table 6.1 with the same tasks performing well (Electric Fence and Escape) and Rapid Descent at the bottom of the rankings. While there is some differentiation between the perceptions of benefits derived from the different tasks when viewing the mean scores awarded, an analysis of the modal scores indicates how little difference exists in the minds of the majority of participants. This indicates that the task questionnaire used in case study one was too insensitive an instrument to gather precise information as to which combinations of task and review were most effective in producing the stated learning outcomes. Additionally, the questionnaires were not designed to help explain ‘how’ the tasks worked. It was the function of the qualitative data to assist in accessing this process. The results are presented in the next section.
Table 6.2: The relationship between perceived specific learning outcomes and individual tasks.

<table>
<thead>
<tr>
<th>Skill/Task</th>
<th>Information gathering</th>
<th>Planning</th>
<th>Team working</th>
<th>Communication</th>
<th>Decision making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Descent</td>
<td>3.66 (4)</td>
<td>3.43 (4)</td>
<td>3.51 (4)</td>
<td>3.77 (4)</td>
<td>3.38 (4)</td>
</tr>
<tr>
<td>Swamp Crossing</td>
<td>4.49 (5)</td>
<td>4.92 (5)</td>
<td>5.56 (6)</td>
<td>5.22 (5)</td>
<td>4.80 (5)</td>
</tr>
<tr>
<td>Minefield</td>
<td>4.66 (5)</td>
<td>4.94 (5)</td>
<td>5.48 (5)</td>
<td>5.05 (6)</td>
<td>4.80 (5)</td>
</tr>
<tr>
<td>Escape</td>
<td><strong>5.10 (5)</strong></td>
<td><strong>5.00 (5)</strong></td>
<td><strong>5.63 (6)</strong></td>
<td><strong>5.80 (6)</strong></td>
<td>4.99 (5)</td>
</tr>
<tr>
<td>Hidden Gen</td>
<td>4.27 (5)</td>
<td>4.39 (5)</td>
<td>4.88 (5)</td>
<td>4.86 (5)</td>
<td>4.49 (5)</td>
</tr>
<tr>
<td>Blackdown Survival</td>
<td><strong>4.81 (5)</strong></td>
<td>5.01 (5)</td>
<td>5.38 (6)</td>
<td><strong>5.25 (6)</strong></td>
<td><strong>5.17 (6)</strong></td>
</tr>
<tr>
<td>Rescue</td>
<td>4.61 (5)</td>
<td>5.16 (6)</td>
<td>5.60 (6)</td>
<td>5.27 (6)</td>
<td>4.98 (5)</td>
</tr>
<tr>
<td>Night Camp</td>
<td>4.16 (5)</td>
<td>4.25 (5)</td>
<td>4.88 (5)</td>
<td>4.75 (6)</td>
<td>4.37 (4)</td>
</tr>
<tr>
<td>Electric Fence</td>
<td>4.93 (5)</td>
<td><strong>5.52 (6)</strong></td>
<td><strong>6.15 (6)</strong></td>
<td>5.68 (6)</td>
<td><strong>5.40 (6)</strong></td>
</tr>
</tbody>
</table>

(Number scores represent mean scores with modal scores in brackets. NB: figures have been rounded up to two decimal places. Highest mean score for each skill development shown in bold).

<table>
<thead>
<tr>
<th>Skill/Task</th>
<th>Problem Solving</th>
<th>Leadership</th>
<th>Listening</th>
<th>Enjoyment Factor</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Descent</td>
<td>3.43 (3)</td>
<td>3.40 (4)</td>
<td>4.28 (5)</td>
<td>4.39 (5)</td>
<td>29.09</td>
</tr>
<tr>
<td>Swamp Crossing</td>
<td>5.06 (5)</td>
<td>4.15 (4)</td>
<td>5.03 (5)</td>
<td>5.90 (6)</td>
<td>39.90</td>
</tr>
<tr>
<td>Minefield</td>
<td>5.18 (5)</td>
<td>4.57 (4)</td>
<td>5.40 (6)</td>
<td>5.81 (6)</td>
<td>40.07</td>
</tr>
<tr>
<td>Escape</td>
<td>5.25 (5)</td>
<td>4.61 (5)</td>
<td><strong>5.73 (6)</strong></td>
<td>5.88 (6)</td>
<td>42.10</td>
</tr>
<tr>
<td>Hidden Gen</td>
<td>4.64 (5)</td>
<td>4.11 (4)</td>
<td>4.99 (5)</td>
<td>5.39 (6)</td>
<td>36.63</td>
</tr>
<tr>
<td>Blackdown Survival</td>
<td>5.20 (6)</td>
<td>4.22 (4)</td>
<td>5.40 (5)</td>
<td>5.27 (5)</td>
<td>41.81</td>
</tr>
<tr>
<td>Rescue</td>
<td>5.22 (5)</td>
<td>4.55 (5)</td>
<td>5.25 (6)</td>
<td>5.67 (6)</td>
<td>35.65</td>
</tr>
<tr>
<td>Night Camp</td>
<td>4.64 (5)</td>
<td>4.33 (4)</td>
<td>5.26 (6)</td>
<td>4.99 (6)</td>
<td>36.64</td>
</tr>
<tr>
<td>Electric Fence</td>
<td><strong>5.52 (6)</strong></td>
<td><strong>4.76 (5)</strong></td>
<td><strong>5.43 (6)</strong></td>
<td><strong>6.28 (6)</strong></td>
<td><strong>43.41</strong></td>
</tr>
</tbody>
</table>
6.3 THE QUALITATIVE RESULTS FROM CASE STUDIES ONE AND TWO

This section will examine the tasks employed in the two ODA events with a view to understanding their characteristics and how they function. The qualitative data gathered from the participant reports indicate that the tasks 'produce learning experiences' through the following mechanisms:

1. creating challenging group problems that can only be solved by whole group participation;
2. breaking down personal barriers by their physical nature and or demanding participants to 'trust' one another;
3. producing scenarios which allow participants to witness and understand how teams work and develop;
4. providing controlled opportunities for the exercise of leadership;
5. emulating problems found in the workplace in order to foster problem solving/management skills. Namely, understanding the problem, gathering information, exploring possibilities /searching for options, creative thinking, planning, adapting the plan, implementation, communication, decision making;
6. generating immediate outcomes which allow participants to analyse cause and effect;
7. providing all of the above in a short time frame.

Each of these 'properties' will now be investigated in turn.

6.3.1 Challenging tasks demanding whole group participation

The tasks used provided the groups with varying degrees of challenge. Some of the participants perceived these as difficult on first acquaintance; as this male student noted:
Our first activity was the Spider's Web and at first glance and after being told what we had to do, looked impossible.  

(Gp1b, M, 7)

Other participants were deceived by initial appearances and only came to realise the degree of difficulty when the task was underway. Note the reactions of these three participants:

As with the rock climbing we learnt not to underestimate the task (Tent) since it proved to be a lot harder than we first imagined.  

(Gp6b, M, 7)

This was probably the hardest task out of all of them (tent or Night Camp exercise).  

(Gp6b, M, 5)

at first it appeared relatively easy. However, as is often the case, things are not as they appear.  

(Gp3b, M, 5)

Not only were the tasks perceived to be difficult but some tasks were beyond the abilities of many groups. This participant was impressed by her group's capabilities:

I enjoyed this task as it was very challenging and was very hands on. I must also add that we were the only group to actually erect the tent. I feel that this was a great achievement.  

(Gp9, F, 70, my emphasis)

This lack of success was either because the group encountered the task too early in their stage of development or it simply proved beyond the combined skills of the group. The following extract evidences the first of these possibilities:

I personally think this was the hardest task [Night Camp] throughout the day and we were unfortunate to get it first.  

(Gp8, F, 17)

Others provided varying degrees of challenge depending upon existing group skills:

(Hidden Gen) The strengths to the task were that it was challenging, it encouraged teamwork and trust as it was an unusual and strange environment. Individually it developed self-confidence.  

(Gp3, F, 64)

This was particularly the case with the orienteering exercise where existing map reading skills were quite influential in the way in which the task was accomplished.
and also in its affect upon the individual experience. If those skills were invested in only one or two people within the group the activity tended to have a successful outcome but limited group involvement. Compare the first three extracts from reports from a range of groups with the last extract below:

This exercise was different to the others in that it was the only one that did not seem to promote the value of teamwork. Due to the narrow paths and the fact that there was only one map, it was difficult for everyone to contribute.

(Gp1b, M, 8)

everyone tended to just follow the nominated leader (who knew how to read a map and had been orienteering before).

(Gp6b, M, 7)

This resulted in two team members being heavily involved in the activity and the remaining five members following them around the woods. Because of this certain team members quickly lost interest and were not really involved in the task.

(Gp3b, M, 5)

but due to the ease of the task we were able to complete it within the time allocation.

(Gp6b, M, 6)

For teams lacking this particular skill the task was too difficult from the onset. Map reading skills were not something that could be ‘cobbled together’ by group thinking in a short period of time. For this group it was a disaster from the start!

When looking at this activity I do not think that it helped in team building and problem solving as none of us could map read.

(Gp2b, M, 6, my emphasis)

This experience illustrates two very important points. Firstly, groups must be adequately equipped with the basic skills to enable them all to participate in the activity. Secondly, the over-dependency within a task on an overtly outdoor pursuit type skill (in this case orienteering) can detract from the learning that takes place in problem-solving and managerial skills.
Chapter 6: Task Design and Personal Learning Outcomes

The design of tasks necessitated various degrees of group participation. At one extreme, tasks such as orienteering, abseiling or climbing, could be accomplished with only a few key participants, despite the fact that they were designed as group exercises and were more easily solved with a group rather than an individual effort. At the other extreme, tasks (such as the Spider's Web and Swamp Crossing) were designed such that whole group involvement was required in order to complete them successfully. This can be seen in this comment on the Swamp Crossing:

...due to the structure of the event it required that everybody had to be aware of what was going on, because everybody had to do it. I realised that there was no room for people to slack off and to take the back seat, everybody was involved.

(Gp4b, M, 6)

When teamwork was not total then tasks such as Blackout could not be completed:

the reason we did not complete it was because not everyone was involved and people in the group were just standing around.

(Gp2b, M, 6)

The evidence indicates that participants require involvement in a task in order to register benefit from it. The abseiling activity in phase one is an example of an activity in which few members of the group were actively involved. There is a clear division of views about the usefulness of this task, depending upon whether or not the group member was involved or not. Note the views of these three unhappy participants:

The rest of the team hung around doing nothing, taking into consideration that it was very cold that day. Having to stand around in these conditions on the first task was very off-putting for the rest of the day's activity...I felt that I learnt nothing of value from that particular activity...However, the two members who were abseiling had an enjoyable experience.

(Gp1, F, 21)

I found this activity to be a waste of time for myself and other members of the group who were not participating. It may have been fun for the two participants abseiling but the rest of the group were left at the bottom of the cliff with nothing to do.

(Gp6, M, 59)

As far as team work goes this task was a bit dismal, because most of the group simply stood around waiting for their turn to climb the wall.

(Gp 1b, M, 1)
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Here the issue revolves entirely around the ability to participate. While those not actively engaged were negative regarding this exercise, participants who were able to abseil reported positive experiences:

*Rapid Descent was my favourite of all the activities, it was probably the one that I was most highly involved in.*

(Gp1, F, 68)

In the following instance the participant was able to increase his personal confidence by overcoming an existing fear while still recognising the inadequacies of the task as a team-building exercise:

*As an activity (abseiling) involving the whole group it was extremely poor, for myself it was good experience as I personally had a fear of heights and by completing the task it increased my overall confidence.*

(Gp2, M, 12)

Within the course design it is important to have a variety of tasks. While in this particular guise the abseiling exercise did not allow 100% physical participation it generated particular learning outcomes (in terms of conflict management and decision-making) because of the nature of the restrictions it imposed upon the group:

*the abseiling activity was a little pointless as a group activity and I 'm sure that I learnt nothing from it. It caused the only conflict within the group during the day, when four members of the group wanted to abseil and only two could. This was probably the most difficult decision any of the leaders had to make because it meant that he or she needed to elect two from the four to do the task.*

(Gp7, M, 74)

The orienteering exercise also received much criticism, as it appeared that its design did not offer scope for teamwork or a group challenge other than route finding. Many participants took a very narrow view of the skills required. The following four extracts represent typical responses:

*There was no skill involved apart from reading the map.*

(Gp3b, F, 1)

*it was an exercise that could have been easily completed by an individual unlike all the other exercises.*

(Gp7b, F, 2)
The orientation exercise was compared to the other activities slightly boring. As there was, besides finding the correct way on the map, no real challenge.

(Gp1b, F, 5)

This lack of involvement had meant that some people were getting bored and were not very focused on the challenge, to overcome this, individuals need to feel they have something to offer to solving the problem by basically being involved.

(Gp10b, M, 9)

However, the task produced endless learning opportunities, limited only by the participants' awareness of what was happening during the event and, importantly, how they perceived the task. Some participants, because they were not involved in the route-finding directly, perceived the exercise as being more individualistic in nature, and something they felt excluded from, others were able to see the group dimension within the task. Participants from the same groups (one and three) were able to present a more positive view of the orienteering exercise:

I learnt in this activity to be able to recognise an individual's skill and then be able to apply it to a group situation.

(Gp3b, F, 2)

This second task (orienteering) was important to us as a group as we learnt more about each other what were our strengths and weaknesses.

(Gp9b, F, 4)

The following comment comes after the group find some of the clues are missing:

The lesson was that not everything you think you need to reach a solution is always necessary to solve problems. You can complete the task by using what resources are available and your imagination and experience to fill in the gaps.

(Gp1b, M, 1)

I learnt a very important lesson in this exercise. It was that it is important to be patient with people who do not have as much knowledge about things such as map reading.

(Gp2b, F, 5)

He calmed the situation down, because after getting lost on the way to the orienteering exercise the group was starting to argue a little.

(Gp7b, M, 1)
In each of the above statements the participants allude to skills and attributes necessary for working in a group or team situation. Therefore, simply focussing on comments regarding the primacy of route-finding skills indicates a degree of myopia on the part of the reporting participants. Orienteering also offered one of the more strenuous activities, which challenged some of the groups physically:

It was probably the most physically tiring of all the six activities, as it involved jogging a fair distance.

(Gp6b, M, 7)

This in turn produced the need for team support, something that was not forthcoming in all instances and again illustrates the varying degrees of awareness by individuals of the group dimension to the exercise:

A feeling of mutual encouragement and concern that everyone was keeping up was very evident during this activity.

(Gp9b, M, 8)

I felt that not all the members of the group took into consideration these slower members.

(Gp9b, F, 4)

The individual's perception of the nature of the task is clearly a mediating influence between the physical constraints, if any, within the task design and the method adopted by the group in solving the problem. This in turn affects the actual learning that takes place, and ultimately, the benefit to the individual. The different group and personal outcomes which is the product of different team attitudes are clearly seen in the following contrasting participant analyses of the Climbing and Tent (Blackout) exercises:

As far as teamwork goes this task was a bit dismal, because most of the group simply stood around waiting for their turn to climb the wall.

(Gp1b, M, 1)

It was often the case that during this exercise [Blackout] many of us had nothing to do which I think was a big error on the behalf of the whole team as a lot more could have been done, resulting in the job getting done quicker. Perhaps we should have asked what we could do as an individual.

(Gp1b, F, 3)
Although to a few members the task looked a bit daunting, each member of the team took part in the activity (Climbing). Initially, it seemed like an individual effort because the first two team members completed the task on their own but later when one of us was struggling, co-operation from other team members proved useful. We also realised how valuable it was to trust each other during the whole process.

(Gp1b, F, 2)

This task was probably the one that brought us together the most.

(Gp5b, F, 1)

In summary, challenge and group participation are key ingredients to the learning that takes place in ODA. Both of these elements exist within the tasks analysed. However, the participants themselves are largely responsible for defining these dimensions for each given task. Individuals will experience different learning outcomes depending upon how they engage with the task. This is influenced partly by task design but more importantly by decisions made by the group.

6.3.2 The role of trust

There are two inter-linked features at play here - co-operation and trust. In order to solve the problem, participants have to first co-operate in the planning of the solution and then again in the implementation of the group plan. In ODA the implementation phase often requires the giving and receiving of trust. The Spider's Web exercise (alternatively known as the Electric Fence) epitomises the need for co-operation, an increasing awareness of others, and a real reorientation from self to the group in order for the team to be successful. The process begins with the individual being self-centred. How this manifests itself on the task is described by this female participant:

When the exercise was explained to the group, all the team members were thinking about themselves, i.e. trying to figure out which hole they would be able to go through most conveniently instead of thinking about the rest of the members.

(Gp1b, F, 2)

However, realisation that an individual cannot solve the task alone generates an increased awareness of the others in the group and the need for communication.
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Without either of these two factors the group will fail. This increasing awareness of others is seen in the next two report extracts:

*Then as the time began to disappear and the urgency increased we began to communicate more as a whole group, discussing the different options available to us.*

(Gp1b, M, 1)

*The major lessons from the exercise were the importance of communication in group work, the need for planning before tackling the problem and to think of all the other group members as well as ourselves.*

(Gp1b, M, 1)

Emerging from increased communication is the need to co-operate. Co-operation between individuals is not optional; it is implicit in the task design of ODA. The relationship between communication and task success was not lost on this female participant:

*If we had thought this exercise through and helped each other instead of just trying to get yourself across I think we would have definitely have got everyone through to the other side.*

(Gp3b, F, 1)

Ideally, this then leads to the realisation that all members of the group are able and required to participate in order for the group to achieve maximum success. Participants in several groups experienced this factor as evidenced below:

*The most important lesson ... was that we had to all contribute at some stage of the task [Spider's Web].*

(Gp3b, F, 4)

*Again everyone agreed that with all of us encouraging each other and supporting each other made a difference to whether we completed the exercise or not.*

(Gp1b, M, 6)

ODA tasks create a state of dependency between participants. Trust was a key characteristic that featured in the accounts of the Spider's Web and Blackout exercises - two very different types of activity. The former created the need for trust because of physical contact and possibility of physical injury, while the latter did it by handicapping individuals and making them dependent upon others.
The Spider's Web is a physical exercise in two senses. Firstly, it requires the participants to be able-bodied (no more) and secondly, it requires participants to be in physical contact with one another. This second aspect quickly acts as an icebreaker and is a unique feature of ODA. Female participants were quick to identify the invasion of personal space and equally quick to see normal inhibitions disappear:

*We were all a little wary of getting too close to one another's personal space....*

(Gp5b, F, 3)

The first task we were set was the Spider's Web, which as a result turned out to be an ideal exercise to enable us to get to know each other quickly and effectively, as we had to touch and lift people through the holes. At first we were slightly uneasy at this thought as we barely knew each other, however it provided us all with a fun situation where we could 'break the ice' quickly between each member of the group.

(Gp7b, F, 7)

The physical dimension accelerated the breaking down of barriers between members of the group since physical contact, especially between sexes demands a high degree of trust. As one participant noted, the additional risk factor in some activities accentuated the need for trust:

*Trust was also a very important element because people were being lifted fairly high off the ground by other members of the group.*

(Gp6b, M, 8)

ODA tasks therefore appear to be able to generate advanced levels of team-working by demonstrating the relationship between task success and the attributes of trust and co-operation. These two female participants pick up the point; the first referring to ODA in general and the second to the Spider's Web activity in particular:

*The physical element of this exercise broke down any barriers that might have held us back as a team by not trusting each other.*

(Gp7b, F, 2)

*This is where co-operation played an important role. Every team member was prepared to do whatever it took to complete the task, whether it be using their strength or even putting their trust into another group member.*

(Gp1b, F, 4)
High-risk activities are not the only way of creating dependency and the need for trust. In the Blackout exercise, dependency was created by handicapping participants and making them reliant on the one, sole, sighted team member. The simplicity of the techniques belies the effect it had upon the participants and the level of trust it generated. The unnerving effect it had on both male and female participants is highlighted in these two report extracts:

I was blindfolded in this activity; it was a very strange and horrible feeling that you had to trust people that you had only met that same day.

(Gp5, F, 11)

You have to trust in your leader as you cannot see anything, and it is quite a nervy experience being blindfolded and you are in a bit of disarray.

(Gp11b, M, 9)

In establishing a trust relationship between group members the exercise also emphasised other key skills such as effective listening, as noted by this female participant:

again proved the importance of trust and having the ability to listen to what is being said to you.

(Gp5b, F, 3)

The themes of dependency and trust were also present in some of the other activities. Referring to the Swamp Crossing, this female participant readily recognises the linkage between trust and group success:

The team members learnt to trust one another, as without trust it was impossible for all members to cross the swamp.

(Gp3b, F, 7)

What is special about the ODA experience is the speed at which the group bonds. This was also noticeable to the participants themselves. This report by a male student was representative of the general feeling amongst the participants:

The critical incident of the day in my opinion was the speed in which all the individuals became a team. Before the start of the day none of the team really knew each other, so we all thought this may have an affect on the way in which the group bonded. But I was astonished at
how quickly all the team seemed to introduce themselves to each other and become accustomed to each other's strengths and weaknesses.

(Gp7b, M, 1)

While many forms of group activity would be expected to produce closer working ties between individuals, the demands upon trust made by some ODA tasks greatly accelerates the process. This female participant singles out the Spiders Web as a catalyst for change:

Taking part in the activities and spending all day together helped to build better relationships with other team members, some of who were only vague acquaintances beforehand. I believe the activity called the Spider's Web encouraged this change, as it involved everyone. Physical support as well as emotional support took place, which meant we had to trust each other.

(Gp2, F, 86)

The experience of the participants on this ODA event strongly endorses the view of ODA as unique in the demands that it places so quickly upon participants in the areas of trust and co-operation. Chapter Two identified perceived risk as the significant feature of ODA (Cacioppe and Adamson 1988, Gall 1987, McEvoy and Buller 1997). This discussion has identified the creation of trust as being the salient factor with risk being only one mechanism for generating it. The proposition, 'that the degree of physicality/risk affects learning outcomes' was not substantiated.

6.3.3 Exposing the processes of team-working

The tasks provide an opportunity for participants to experience varying degrees of effective teamwork and also to understand and develop the elements that contribute to working effectively within a team environment. The tasks are designed to show the superiority of group or combined effort in comparison to individual attempts. One male participant made reference to this in his analysis of the climbing activity:

Once again this activity demonstrated the importance of teamwork over individual efforts, in order to complete a relatively simple task.

(Gp3b, M, 5)
Others attributed task success to specific dimensions of team-working, such as democracy and making yourself available. These are both in evidence in the extracts below:

The major lesson learnt from this exercise was the value of democratic teamwork. The results we achieved through working collectively were far better than those achieved by each of us individually.  

(Gp1b, M, 1)

The main lesson learned was that in order to be a successful team you should always try to make yourself available to help, even if the leader has not asked you.  

(Gp1b, M, 8)

The actual demands of being an effective team player came as a surprise to some. This female participant compared it with the leadership role:

I learned that being part of a team is as demanding as leading it and that an individual's achievements can be magnified through teamwork.  

(Gp1b, F, 2)

ODA tasks assist the participant in understanding how the group operates as a resource and how that resource can be most effectively utilised. The strengths and weaknesses of individuals quickly becomes apparent and the need to compensate for individual shortcomings essential. It interesting to note, that although the quantitative data indicated that there were no gender differences in aggregate learning outcomes, the observations on this particular dimension of team-working all come from female participants:

Teamwork helps in maximising each person's strengths and compensates for his/her weaknesses.  

(Gp1b, F, 2)

It was also important to learn the abilities of each member of the team.  

(Gp2b, F, 5)

This again made us recognise people's individual skills and how we could use that to improve the group's success.  

(Gp3b, F, 2)

The lesson to be learnt from this was that people have different areas of expertise and they should be used to their full potential.  

(Gp7b, F, 2)
With no structure or hierarchy imposed upon the group (the leader was internally selected for each exercise) the group soon discovers for itself the concept of team roles or functions. Despite the criticisms the climbing activity received from many participants (due to its appearance of being a task for the individual) these two students used it to highlight the concept of team roles:

*We also saw from this exercise that working together as a team involved playing different roles. The members of the group that were not directly involved in the lifting or climbing contributed towards the success of the project by standing back and pointing out footholds and shouting out directions which could not necessarily be seen from very close to the rock face.*

\[(Gp7b, F, 2)\]

*I learned from this that people within a group can find their own roles without them being designated.*

\[(Gp5b, F, 3)\]

Tasks also required individuals to be flexible and adapt themselves to changing circumstances:

*Sometimes you have to adapt yourself when in a group as there are other people to consider.*

\[(Gp5b, F, 6)\]

Once these roles were established and individuals comfortable within them, groups were often quick to formulate their own preferred method of working and some individuals responded to this by taking appropriate action:

*Once I had obtained the objective from the instructor I felt it necessary to discuss the task within the group having learnt from previous problems that this was the how the group worked best.*

\[(Gp9b, M, 6)\]

*Discussing everything, listening to everyone's views and making collective decisions leads to far more objective and critical analysis, leading to a better outcome, providing all group members are comfortable and have equal say.*

\[(Gp1b, M, 1)\]

Although the tasks are short in duration they demand in addition to problem-solving skills the practise of group 'maintenance functions': the support, encouragement and inclusion of all group members. Since the tasks are not simply paper exercises, real
issues of fear, nervousness and physical effort have to be negotiated. These obstacles are perceived to be more easily overcome if the individual has assistance from the group. Participants again make the link between helping one another and task success:

The only way we were able to effectively get everyone through was through a lot of physical effort and effectively giving support to one another...We learnt that the support we gave others was vital if we were to succeed.

(Gp4b, M, 6)

Again everyone agreed that with all of us encouraging each other and supporting each other made a difference to whether we completed the exercise or not.

(Gp1b, M, 6)

These extracts show how artificial the distinction between task and maintenance functions really are, 'on the ground'. Other participants were also able to see the linkage between the two functions, as evidenced by the next three report extracts:

The important lesson here was that it was that it is often best to step back, assess the problem rather than going in feet first without considering the rest of the team.

(Gp2b, F, 5)

it is important to support other members of the team and give a sense of unity. If one person is made to feel isolated or inferior then it breaks down team union and can affect the performance of the group as a team.

(Gp7b, F, 2)

Another strength (of the group) that I thought was more apparent in this task was the groups attempt to involve as many peoples possible and therefore increasing peoples interest levels and therefore motivation for the successful completion of the task.

(Gp9b, M, 6)

While solving the problem is a group success, there is significant room for individuals to be seen to 'fail'. The emotional consequences of failure for the individual are easily underestimated, and therefore participants are appreciative of the support they receive. In turn the significance of group maintenance functions becomes more salient. In describing the climbing activity this woman brings together the elements of risk; personal success/failure; trust and group support:
I learnt a lot from this exercise as initially I had great difficulty in completing this task and it made me feel a bit inferior as I was the only one who seemed to have problems. However, I overcame the situation as the rest of my group adapted our approach to make the task easier for me and gave me lots of encouragement. I found that through teamwork a lot more can be achieved and that by forming relationships in this way, it enabled us to trust one another more.  

(Gp1b, F, 3)

Another woman participant found the group helped her and others overcome difficulties in the climbing activity:

I also learnt not to be so stubborn, and that sometimes assistance is necessary however determined I am to complete a task on my own! I noticed how motivating working in a group can be, in that everybody in the group completed the task, even though some of the members were uneasy about it. The encouragement and praise given had great effect.  

(Gp2b, F, 8)

In the discussion on task design the issue of participation was given prominence. While some participants focussed on the more obvious and limited roles and functions to be fulfilled and lamented the lack of opportunity for all group members, there is evidence here that it was an overemphasis on the 'hard' problem solving skills at the expense of 'soft' maintenance skills that gave the impression of 'not enough to do'. For instance, when analysing the climbing activity one male participant commented:

the team leader for this exercise was very involved and I feel he possibly took some responsibility away from other team members. However there were only a few key roles that could be taken to solve the problem and these were mostly occupied but people could have come forward and offered to help support people up the rock face.  

(Gp1b, M, 1, my emphasis)

This discussion has evidenced the way in which ODA exposes the processes of team working and indicates the superiority of group action over individual effort. The importance of 'soft skills' or maintenance functions is demonstrated and the linkage between these and task success made clear.
6.3.4 Providing the opportunity for exercising leadership skills

The course was designed so that the leadership role was rotated through the group with the intention that each individual had one formal opportunity to lead the group. Such an opportunity may be the first that an individual has had to exercise leadership in a problem-solving situation. By adopting this format it afforded individuals the opportunity to witness different styles of leadership. The following three extracts illustrate how participants were able to utilise this opportunity to improve their own leadership attempts:

I believe this lesson improved my overall leadership skills, as although I was not the leader in this particular task, from observing I could see where we went wrong and that you must communicate well with all your team before making an important decision.

(Gp6b, M, 5)

I saw first hand the importance of an appropriate leadership style in maximising the potential of a group. 'N' was an effective leader as she adopted a democratic approach to finding a solution. Everyone within the group was given an opportunity to voice their individual opinions and ideas. Had she adopted an autocratic or military approach, it would have made people feel inferior and therefore less likely to provoke the same level of interest and enthusiasm.

(Gp11b, M, 8)

'C' displayed an ability to organise his team into an efficient unit. He maintained our motivation through regular feedback in the form of positive reinforcement. From this approach I have learnt that in order to get the best out of people you must maintain their level of interest and enthusiasm.

(Gp11b, M, 8)

Participant observation allows individuals to experience different leadership styles, their impact upon the group and how effective they are in achieving task aims. A critical analysis of other people's efforts enables an individual to mentally model their ideal leadership style. Sometimes this was done by reflecting upon the leader's actions:

She was similar to 'P' in the way she led... I also felt that she needed to be more assertive at times as the more assertive members were beginning to take over. (Gp1b, M, 8)
On other occasions it revolved around the appropriateness of the leadership style to a particular task:

...I feel that this was the type of exercise where even though we had to work as a team, it was also the type of exercise where we needed a leader who could delegate and be authoritative.  
(Gp1b, F, 3)

On a one-day ODA event the formal opportunity to be leader is limited. However, the existing opportunity gives the individual the chance to make mistakes in a controlled environment and to discover their own personal traits or attributes and also uncover their weaknesses. These two participants found their weaknesses quickly exposed:

I was the team leader for this one [the Swamp Crossing] and I realised I have bossy tendencies which I had to avoid if we were to reach an effective solution.  
(Gp1b, M, 1)

I decided to become the leader [for the Escape exercise] little did I know, it probably challenged which I realise now my weakest characteristic-communication... This challenge really stressed to me the importance of communicating successfully.  
(Gp1, F, 18)

The leadership role also enhances the experience of the task for the individual. Participants commonly refer to how much more they were involved in that particular task (this is further investigated in chapter eight). This woman expresses a feeling commonly experienced upon taking up the leadership role:

I was the designated leader for this exercise and as a result I think I tried to involve myself more because I felt it was my responsibility to set a good example to my team mates.  
(Gp1b, F, 3)

There was a common perception amongst participants that certain tasks were more difficult to 'lead' than others. With the focus upon the sighted participant in Blackout, the leadership here was deemed to be particularly crucial.

The chosen leader bore a greater proportion of responsibility for the group succeeding in this exercise, than in other tasks.  
(Gp6b, M, 7)
This was undoubtedly the case in so far as it was virtually impossible for other members of the group to attempt to challenge the leadership or over-ride it in any way. The focus was clearly upon the leader. Whether this made it harder or easier to be leader is open to question since leadership of an uncooperative group would pose challenges of a different kind.

6.3.5 Fostering problem-solving skills

Participant reports identified nine key factors in the problem-solving process. These were: understanding the problem; information gathering; exploring possibilities and generating options; encouraging creative thinking; the importance of planning; adaptability in the planning process; the importance of implementation skills; the development of communication skills and decision-making. This section will now examine each of these in turn, evidencing the fact that ODA tasks provide opportunities for all stages of the problem solving process to be experienced and relevant skills practised and developed.

The first issue is the recognition of the task confronting the group. Tasks may be deceptive in appearance. For example, the exercise involving rock climbing led many groups on the wrong track (as noted above). This produces the realisation that past experience may be useful but is not necessarily the answer to a given task as one woman quickly found out:

*My initial reaction when the task was explained to us was excitement at doing some more climbing. I realise now that I was missing the point and not focusing on the task in hand, or the fact that other members of the group were looking particularly uneasy about scaling the face of a quarry. I had not even considered that there might be a quicker, easier way of reaching the karabiner, and that some may not be able to reach the karabiner without assistance.*

(Gp2b, F, 8)
Because ODA tasks do not originate in the workplace and are generally unfamiliar to the participant there is a need to approach them differently to many common everyday problems. It is necessary to start the problem-solving process at 'stage one' by framing the question. Several participants attributed failed attempts to their groups inability to start the problem-solving process correctly:

...we hadn't been very successful because our understanding of the problem was not very clear. By analysing our performance in the debrief it was clear to see that we hadn't framed the problem properly and many of the team had not interpreted the scenario in the same way.

(Gp10b, M, 9)

Everybody had a different perception i.e. visualising a different sort of tent which means that we should have defined the problem in the beginning and then ventured into solving it.

(Gp1b, F, 2)

It was only after we all got frustrated with his attempts, that were failing, that we stood back and looked at the situation properly.

(Gp2b, F, 5)

In order to correctly understand the problem, groups need to gather in all relevant information. This started with the briefing from the instructor:

I quizzed the two instructors at the beginning ensuring that I had gathered all the information necessary for the task.

(Gp6b, M, 6)

The consequences of incomplete data collection are quickly evident.

we hadn’t realised that you could use the black rope as a support to haul yourself up and all climbed up without even touching it. This showed how important it is to be aware of what resources are available to you before tackling such a problem.

(Gp10b, M, 9)

Once the group is satisfied that it is in possession of all the available information then it is in a position to begin the process of generating a solution. While this may seem part of the logical or rational method it involves people skills and the recognition that the solution is the result of a 'political process'. Again participation and inclusion are seen as key to a successful outcome:

The most important lesson we learnt was that we had to listen to everyone in the group and take on board all of the suggestions and...
ideas that were presented to us because some members of the group were more overpowering than others but weren't necessarily the ones with the best ideas.

(Gp4b, F, 4)

Where participants have experienced similar situations before we have an attempt to apply previous knowledge to the task. A participant when reflecting upon the Blackdown Survival task said:

I found that rather than learning from this activity I was able to use knowledge that I had gained from previous experience, such as Duke of Edinburgh.

(Gp5b, F, 3)

In the case of the tent exercise previous experience was a distinct advantage since the sighted person would be familiar with all the materials and the method of construction. The tent had to be erected in a certain manner and there was no element of creative thinking involved, as noted by this participant:

I learnt that problems with a set answer as with this (tent) problem do not allow for creative thoughts and therefore past experience is a major advantage.

(Gp9b, M, 6)

However, there were many constraints and the emphasis was upon the clear communication of instructions by the sighted person to those who were blindfolded. Surprisingly, the issue of the applicability of previous experience to a new task is a complex one. It can produce undesired group dynamics (see Chapter Eight) and also restrict the options explored by the group, sometimes to the extent that the wrong plan is implemented. The climbing activity was a perfect example of this:

I learnt from this task [rock climbing] that although previous experience can be useful in some circumstances, it can also narrow your creativity and make you decide on a solution before investigating the alternatives.

(Gp2b, F, 8)

When there is no apparently relevant experience within the group, the tasks are sufficiently ambiguous to require the exploration of a whole range of possible solutions. The Planks and Crates exercise was useful in this respect:
I found this challenge to be beneficial as it helped me to understand the need to look at all possibilities to solve a problem. (Gp8, M, 81)

...at first it appeared relatively easy. However, as is often the case, things are not as they appear. I quickly realised this and attempted to encourage idea generation from the entire group. (Gp3b, M, 5)

By building-in ambiguity, the task design encourages creative thinking and group participation. Unlike other forms of brainstorming and planning exercises the ideas generated here can be quickly implemented and evaluated. The value of creative thinking and whole group involvement is therefore immediately apparent and again evidenced in this analysis of the planks and crates exercise:

Also giving every idea a chance and keeping an open mind...The actual solution we used I was quite surprised by, because I did not think it would work, but it did, again illustrating the importance of keeping an open mind and listening to the suggestions of others. (Gp1b, M, 1)

This was one activity where everybody's contribution and ideas became very vital, as the solution didn't look very obvious initially. (Gp1b, F, 2)

One participant also noted the impact of this part of the problem-solving process on group maintenance functions. In analysing the Spiders Web exercise he noted that:

The most significant element I gained from this exercise was the importance of creative thinking...it is vital in management that you allow your subordinates to be inventive and not subdue creative minds. Whilst they can be beneficial in problem solving and decision-making their involvement provided them with a sense of belonging that can lead to increased motivation. (Gp11b, M, 8)

The timeframe within which the tasks have to be completed is sufficiently restrictive to penalise groups adopting unsuccessful trial and error techniques. Additionally, on some tasks there are penalties inbuilt which make this form of problem-solving the least likely to be an effective solution. In the case of the Swamp, anybody or thing touching the 'out of bounds area' requires the group to start the exercise all over again, therefore losing valuable time. Groups were quick to appreciate the
disadvantages associated with this approach as witnessed by the raft of groups that tried it:

- If there had really been a bottomless pit underneath the planks then we would have lost a couple of members of our group as we used a bit of trial and error method to solve the problem.
  (Gp6b, M, 7)

- This challenge highlighted the mistake to rush into an activity and do it fast without planning.
  (Gp5, M, 3)

- We only solved the problem through thinking about it in depth as the trial and error system did not work.
  (Gp11b, F, 3)

- Half way through we needed to rethink our initial idea...this taught us that we needed to think through our ideas before we launched into them.
  (Gp4b, F, 5)

The importance of 'thinking things through' or even visualising the whole process before enacting it is commonly recounted in the participant reports. This lesson was the result of both unsuccessful and successful attempts at the task as described by these three participants:

- The most important lesson was forward planning and to think things through before rushing into solving a problem. This was learned when halfway through the exercise, we realised that that the problem was a lot harder than first thought.
  (Gp1b, M, 8)

- The major lessons from this problem were the importance of planning all stages of the process and not just jumping in only to find out the negative consequences later.
  (Gp1b, M, 1)

- From the beginning of the task [Planks & Crates] it was also in our minds about how the last person would get across, thus trying to envisage the whole process we were going to go through from beginning to end.
  (Gp1b, M, 1)

Individuals were able to attribute the success on a particular task to this aspect of the problem solving process. The importance of planning was therefore experienced
directly by the participants. These two men demonstrate that the link between task success and correct planning was recognised:

*We only solved the problem by actually thinking about what we were going to do rather than attempting to do it without assessing the situation first.*

(Gp4b, M, 6)

*Before we started rushing into the actual execution of the task we had a full in depth discussion of the task ahead. In hindsight I learnt that this discussion led to our group completing the task in the best time compared to all the other groups.*

(Gp9b, M, 6)

Planning is not purely a task function. The human dimension to planning also becomes evident during the task. These three participants chose to highlight different elements of the human side of the planning process when they said:

*We learnt as a group that we had to listen to people’s views as there were a couple of possible solutions to the problem.*

(Gp6b, M, 7)

*The important lesson learnt here was that it is often best to step back assess the problem rather than going in feet first without considering the rest of the team.*

(Gp2b, F, 5)

*You have to consider one another’s attributes when planning.*

(Gp6b, M, 2)

Whilst effective initial planning was a process clearly promoted by the task design, groups also saw the value of being adaptable once the ‘solution’ was underway. This was again demonstrated in the climbing exercise. Here a group who had made an incorrect diagnosis of the problem to begin with realise the need for adaptability:

*Whilst it is obviously useful to be able to make correct decisions to begin with it is also useful to be able to recognise when something is not working and to communicate effectively enough to make the necessary changes which will see the challenge succeed. This was what was learnt in the second exercise and it proved useful later on.*

(Gp7b, M, 6)

One of the key features of ODA programmes is the importance attached to implementation skills (see discussion chapter two). Not only are the solutions planned but they are also need to be put into effect. With ODA tasks participants are
required to do both. The significance of implementation skills was highlighted for these two groups by their failure to put well constructed plans into action:

We spent a lot of time planning the process out to the finest detail. The tactics had been worked out and everything was ready. It then came to actually carrying out the activity and we rushed it and got it wrong. .... For all the planning that had happened, we had been slack in the completion of the activity and so all the planning was wasted.

(Gp6, M, 16)

This challenge was quite frustrating because on a number of occasions we nearly completed the task but one mistake would see us all have to go back to the beginning

(Gp7b, M, 1)

Because the tasks require a group action, participants are compelled to communicate with one another. Not only does this become a necessity, but also it becomes seen as a vital skill. The various elements of communication: listening; explaining; persuading; body language and interpretation are all highlighted in the participant reports. Failure to listen effectively can lead to task failure:

I now know the importance of listening to other group members carefully and making sure that I keep constant concentration as one lapse can cause a major effect to the end result.

(Gp4, F, 71)

While failure to explain ideas clearly led to misunderstandings within the group (Gp5b, F, 6) and also good ideas going waste:

Some people came up with ideas that turned out to be correct although they were not able to justify why they thought they were important so we did not take their suggestions into account.

(Gp3b, F, 2)

Blackdown Survival, outwardly a simple pen and paper exercise, provided a vehicle for debate and an opportunity for the exercise of persuasion.

The most important lesson learnt from this activity was the importance of listening to others and sometimes accepting someone else's view even if you don't agree with it. It showed me how to construct a balanced argument and how to make people listen to what you say when you wish to say something.

(Gp11b, F, 3)
The tent exercise highlighted the use of body language in normal discussion, because its absence made one participant realise:

how much I rely on people's body language and I may not always listen as carefully as I should as I think I know what people are going to tell me.

(Gp3b, F, 2)

Finally interpretative skills were necessary for a successful outcome on the Escape exercise:

I thought this activity was of particular importance in highlighting the essential need of good communication skills in problem solving as your ability to interpret and rely information will ultimately decide the outcome.

(Gp7, M, 80)

For some participants, communication was seen as the most important outcome of particular tasks:

The most significant thing learnt from this exercise (tent) was the need for good communication between members of the group.

(Gp1b, M, 1)

The most important lesson we learnt was that we had to listen to everyone in the group and take on board all of the suggestions and ideas that were presented to us because some members of the group were more overpowering than others but weren't necessarily the ones with the best ideas.

(Gp4b, F, 4)

We learnt that as a group we had to listen to people's views as there were a couple of possible solutions to the problem.

(Gp6b, M, 7)

Since the effective solution to each task was not obvious participants were required to make decisions. By focussing on one of the tasks, Blackdown Survival, we see how participants had to come to terms with the dynamics of decision-making within a group context. It is also evident that underpinning the problem-solving methodology are certain key values; participation; respect; negotiation and democratic decision-making. The human element of decision-making as well as the logical dimension are highlighted in some reports:
Constructive discussions provide the possibility of pooling of knowledge and ideas in finding solutions to the problems. Discussions allow people to test the appropriateness of various ideas and gives them the feeling that their decision counts. Whilst working in a team, all views should be respected.

(Gp1, F, 2)

There were recorded instances when the group allowed decisions to be made without the issues being fully debated and controversy being confronted. Sometimes this was done in order to avoid any emotional upset:

The order of importance is where we lost marks, mainly because we did not want to upset each other by disagreeing, and we were not eager and forceful enough to state a point or offer reasoning as to why the order of importance should be altered.

(Gp2b, F, 8)

On other occasions the debate was conducted on an intellectual plane:

I felt that it was also good that no one tried to monopolise the conversation to the extent that they were forcing their views to be decided yet we all tried to be critical of each other so that we could see the downside of each others ideas.

(Gp1b, F, 3)

However, decision-making produces the possibility of conflict and the need for groups to be able to deal with this situation by establishing simple procedures or giving the leader authority to resolve the problem. These two groups resolved the problem in different ways:

Although some listened and compromised, there were few members of the group who had very strong opinions and felt that their way was the only way, this therefore lead to disagreements between members of the group.... But all the disagreements were resolved by compromising and taking group votes.

(Gp2b, F, 4)

Although team leading was not so important for guiding the exercise, [the leader] did assert his authority with final decision making... when the team found it difficult to choose between items (the leader) made the final choice.

(Gp1b, F, 4)

Of all the ODA tasks used in the event Blackdown Survival stands out as the one that most promoted learning about negotiation and conflict management:
As a leader, I personally learnt the importance of conflict management and negotiation during this period.

Negotiation and listening skills played an important role in this activity and its reasonably successful completion.

The method of working was adopted by the groups not imposed from outside. The rationale for such a choice was the effectiveness of this method in delivering successful outcomes:

The major lesson learnt from this exercise was the value of effective democratic teamwork. The results we achieved through working collectively were far better than those achieved by each of us individually.

Discussing everything, listening to everyone's views and making collective decisions leads to far more objective and critical analysis, leading to a better outcome, providing all group members are comfortable and have equal say.

One of the chief aims of ODA discussed in Chapter Two is the development of interpersonal skills. This section has evidence firstly that these are indeed enhanced by ODA tasks. Secondly, while specific tasks do place greater stress upon certain skills, participants were able to derive a wide range of benefits from each type of activity.

6.3.6 Consequences: Immediate outcomes showing cause and effect

One common problem with decision-making is that often the act of making the decision is divorced from its consequences. As one participant indicated:

Before the outdoor problem solving day I did have to make decisions, but you often do not see the result of your action.

This participant also differentiated between having to make decisions that involved him alone and those decisions that in the ODA scenario involved other people. This
was a new learning experience for many. In this sense, ODA tasks provide a direct link between process and outcome. In many instances participants are able to attribute failure to achieve success to a specific cause:

As with many of the following exercises, the group forgot the whole planning principle and dived straight in. This led to immediate failure.  
(Gp2, F, 50)

I learnt a great deal about leadership in ‘minefield’. This was because we failed first time in this task due to lack of leadership. It also reinforced the planning aspect to problem solving.  
(Gp1, M, 84)

I think this was probably the area where I had the biggest learning experience of the day, as it was the only exercise (tent) where we failed miserably. This taught me the value of communication, teamwork, trust and co-operation. I think it must have been hard for the team leader for this particular task. She had a lot of pressure on her as the rest of the group were relying mainly on her to help us through the task and we should have relied more on each other so as to give (her) more support.  
(Gp1b, F, 3)

Often a realisation of what had gone wrong on particular task enabled the group to improve its performance. This male participant recounts how disaster on the tent exercise led to an immediate improvement of group performance when attempting the Electric Fence:

After the blunder on the previous base we sat back and talked the scenario through thoroughly before starting. There was a vast improvement here in the group work and this led to things running smoothly...on the Electric Fence. ...I feel that as a group we performed best at the electric fence and were at our worst at the Night Camp. Although it is quite bizarre that these bases were after one another. I feel that we realised how bad the team worked together on the tent and tried much harder on the electric fence communicating well and putting forward ideas and input as well as effort.  
(Gp3, M, 69)

These accounts echo the work of Cacioppe and Adamson (1988) who argued that groups gained more valuable learning from a task failure than they did from task success. Being unsuccessful at a task initiates a closer scrutiny of the processes at work during the task and the reasons for failure.
6.3.7 Achieving results in a short time frame

One of the characteristics of ODA is its ability to generate very quickly the results already discussed above. This factor was transparent to two male participants on the first case study who described it in terms of a progression:

"... as the day progressed, people spoke out more and the ideas were discussed and a group decision was made, which the leader then carried out."

(Gp1, M, 65)

"I found that as the day went on, we all became more confident, suggesting out ideas, communicating with each other and becoming a team. At first we stayed in our own subgroups with those we knew, yet as the day progressed we definitely became friendlier and more approachable and merged as one group as opposed to various subgroups."

(Gp4, M, 121)

6.4 TASK DESIGN AND INDIVIDUAL LEARNING

How does the experience of the two ODA events reported in this study compare with the existing literature on task design? The most developed and schematic analysis of task/review design, the Outdoor Development Matrix (Figure 3.4) was reviewed in Chapter Three. The evidence in this study would indicate that this model is too prescriptive and very difficult to operationalize in practise. In operational terms it is problematic on three counts: firstly, the concepts that underpin the two dimensions are imprecise; secondly, it is difficult to control the actual event/debrief on the ground such that it corresponds to the intended format; thirdly, the internal or personal elements brought to the experience (see Chapter Eight) act as a mediating influence. Given these caveats, the likelihood of all the tasks constituting a course or programme falling wholly within one of the quadrants is difficult to envisage.

The two ODA events outlined above appear to straddle quadrants 3 & 4. The review process seen in its entirety (instructor/facilitator input plus researcher input via questionnaires and personal reporting) corresponds with high intensity process
reviews. Many of the tasks used sit firmly in the 'tight task format' (abseiling, climbing, tent construction). The evidence from the present study suggests that the others (e.g. Swamp, Electric Fence) could also be included in this definition since although they appear to be less constrained and guided at the onset, they have only a very limited number of solutions and means of securing a successful outcome.

The model would therefore indicate that participants were engaged in a programme engineered towards quadrant three outcomes, the development of broad skills. Taking the course as a whole the participant reports evidence both the development of broad skills and the development of self and other awareness. On a task-by-task basis, there is evidence for the development of these broad skills:

We found that this task [Minefield] used several skills. The major two skills were teamwork and co-ordination.

(Gp4, M, 121)

Regarding specific activities, I feel that the Hidden Gen and the Swamp Crossing benefited my communication skills the most. The Hidden Gen activity which involved searching a cave as a group, helped me considerably, having never experienced anything similar to this before. The cave, being dark made it difficult to communicate easily, and so group work and trust was required.

(Gp6, F, 36)

Of more interest is the contribution made by tasks defined as fitting the 'tight task format' to the development of self-awareness as reported in Chapter Five. The evidence from this study is that the experience of ODA programmes cannot be as tightly defined as suggested by in the existing literature.

In this chapter the focus has been upon trying to reveal the features of ODA tasks that produce learning outcomes. The information has therefore been assembled in such a way that the 'feature' becomes the centre of attention. This has served its purpose but does not offer a complete picture of what happens when different individuals encounter the same task. Contrasting views on the efficacy of tasks have already been presented above, but for some other purpose. Here the contrasting
views are important in their own right. Examine the following passages which describe the same event, but seen from different perspectives:

The first task that the group undertook was that of Night Camp. The communication between the two leaders and the rest of the group in this challenge had to be at its most effective as the rest of the group were wearing blindfolds. This meant that group team-work was somewhat restricted as the people blind folded were unable to see and assess the problem and so could offer little help. So the success of the challenge was dependent solely on the approaches and decisions made by the leaders. I therefore feel that this challenge did little in the way of promoting team work and the collaboration of ideas and therefore did little for personal skills.

(Gp8, M, 81)

This was the next activity which the group and I felt created the good team work and spirit which lasted throughout the day. We felt this was due to the fact that the task involved the whole group and we all enjoyed performing the task. We felt this was a difficult task which we did well in considering the time.

(Gp7, M, 45)

There was little communication except from the leaders, and no one was asked for ideas. It was assumed that, because we couldn't see, we couldn't help, which I think was a mistake ... During this exercise I felt pretty helpless and frustrated by the time we were taking I felt that if knowledge had been sought I could have helped.

(Gp7, F, 67)

These extracts depict two totally different perspectives on the same task. Even more important is the fact that the contrasting views offered in the last two passages are from members of the same group, doing the same task, at the same time.

The evidence indicates that the learning from the ODA tasks is not deterministic, i.e. that there is no 'specific lesson' to be learnt from each specific task. Rather, it is the case that individuals may gain something different from same task. There is no set pattern to the learning associated with any given task. Learning is a highly individual affair. It depends upon many factors and these will be outlined and discussed in detail in chapter eight. The variation in scores given by participants in the task questionnaire to each of the tasks would appear to support this argument.
The learning on an ODA programme is cumulative and changes registered by individuals on their personal benefit questionnaires are likewise the result of the whole day rather than an individual experience. This point is clearly made by these two male participants:

*Much of the success (on this task-the spider's web) is owed to what we learned from the previous exercise.*

\[(Gp6b, M, 2)\]

*The reason for such a change does not relate to specific activities or events, but is clearly linked to the activities throughout the entirety of the day.*

\[(Gp6, M, 8)\]

Tasks which offer the most rewarding learning experience, are those that are both challenging and demand a group response rather than tasks which give the illusion of being capable of solution by the individual. So often the latter type of task were successful in their deception and did not elicit a group response. A male participant sums it up thus:

*I found that the most successful challenges and activities of the course proved to be those which involved the whole group and needed a strong dependence on teamwork and communication to ensure their completion. As the group benefited from the input of all its members in generating a response to the challenge and its success wasn't just dependent on two or three people.*

\[(Gp7, M, 80)\]

Incidentally, there appears to be no intrinsic merit in simply being out-of-doors. Several students queried/commented upon the need to do certain tasks out of doors when they could easily have been done inside in a classroom (e.g. Blackdown Survival) or even in a hall or gymnasium (e.g. Minefield and The Swamp). The quantitative results also indicated that participants thought the paper exercise (Blackdown Survival) and Escape promoted learning more successfully than the overtly physical outdoor pursuits-based activities of abseiling and caving.

While tasks are constructed with specific aims in mind (intentional learning outcomes) one cannot discount the unintentional learning outcomes that occur and
which can be equally as valuable. One of the main aims of the abseiling exercise was
to highlight the importance of trust and communication between individuals in a team.
However, for one particular group it proved to be a lesson in conflict management
and decision-making:

_I also thought that the abseiling activity was a little pointless as a
_ group activity and I'm sure that I learnt nothing from it. It caused the
_only conflict within the group during the day, when four members of
_the group wanted to abseil and only two could. This was probably the
_most difficult decision any of the leaders had to make because it
_meant that he or she needed to elect two from the four to do the task._
_(Gp7, M, 74)_

This again reinforces the point that learning is an individual affair. This is a theme
that will be revisited in Chapters Seven and Eight.

6.5 SUMMARY

This chapter began by reporting the quantitative results from participant
questionnaires on combined task & review activities. These indicated that
participants perceived differences between activities with respect to the learning
outcomes forthcoming from each. However, the questionnaire method used was
unable to discriminate greatly between the activities neither could it, by design,
account for the processes at work during each activity.

This task was fulfilled by the qualitative data in the form of semi-structured participant
reports. By comparing and analysing these reports it was possible to outline the
dimensions present in task design that promote learning in the individual. These were
identified as: challenges which required group participation; the creation of trust
amongst group members; exposing the processes of team-working; providing the
opportunity for the exercise of leadership; fostering problem-solving skills; showing
cause and effect; and achieving all of these in a very short time frame.
What becomes increasingly apparent from the participant accounts is that despite the fact that these task features are present for all participants; each individual experiences a unique learning event. The next chapter focuses upon the participant experience of the review process and the alleged power of the ODA experience (the critical incident) to influence the learning that takes place.
CHAPTER 7

THE REVIEW PROCESS AND CRITICAL INCIDENTS IN ODA

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CHAPTER 7: THE REVIEW PROCESS AND CRITICAL INCIDENTS IN ODA

7.1 INTRODUCTION

This chapter will begin by analysing and evaluating the role of the debriefing session (section 7.2) and then proceed to explore the phenomenon of the 'critical incident' within the ODA programme (section 7.3); these two sections address research propositions six and seven respectively. These themes, together with the results of Chapters Five and Six, will then form the basis for the model of learning and attitude formation that attempts to explain the experience of ODA programmes. This model will be outlined and discussed in Chapter Eight.

7.2 ANALYSING AND EVALUATING THE ROLE OF THE DEBRIEFING SESSION

Participants in both case studies were asked to consider the contribution that the debriefing sessions made to the learning process as a whole. From an analysis of these reports five main themes emerge. Firstly, the debrief was capable of being an important element in the learning cycle but its utility was heavily dependent upon how it was conducted (section 7.2.1). Secondly, the academic distinction between task and process review is not clearly recognised by the participants in terms of its effect upon the utility of the debriefing session (section 7.2.2). Thirdly, the personality of the instructor influences learning outcomes (section 7.2.3). Fourthly, the debriefing process should be tailor-made to the group and the programme they are undergoing and also the stage of the programme at which the debrief takes place (section 7.2.4). Finally, operational issues can affect the planned review process (section 7.2.5). Each of these themes will now be examined in turn.
7.2.1 The value of the review session

The literature review in Chapter One located the review/debrief in the learning process and emphasised its importance. Participant reports in this study confirmed this position with comments such as these two:

The value of the debrief sessions was important as this is where a lot of the learning from the day occurred.  

(Gp3b, M, 5)

The debrief sessions were helpful in that we were forced to evaluate our performance.  

(Gp2b, F, 8)

The debrief serves several purposes, not least it helps to 'bridge the gap' between the participant's initial bewilderment when confronted by an unusual task and their understanding of the management processes needed to solve the problem. It facilitates change and allows the exploration of different perspectives. The following three extracts show how important it is for participants to know the 'purpose' of the activity. With so much going on in such a short space of time, issues need to be 'signposted' otherwise they will often go unnoticed. For example:

After talking to the instructor the purpose of this task became a lot clearer and so did the reasons for our failure.  

(Gp1b, M, 1)

What was said did make it easier to see the purpose behind every exercise and allowed us to change our way of doing things or at least look at things from a different angle which maybe wouldn't have been done without the debrief sessions taking place.  

(Gp7b, M, 6)

From this (the debrief) I could see that the whole basis of this exercise was team involvement. It became clear to me at the end, when the instructor told us, that this was probably the best (task) to start with. I could not see this at the time but now looking back, I could see that as a group we all became rather "touchy, feely", in a very short space of time.  

(Gp7b, M, 5)

In a course operating successful debriefing sessions the benefits are to be seen on the level of the individual, in terms of their increased personal awareness. One participant referring to the debrief said:
Chapter 7: The Review Process and Critical Incidents in ODA

The debriefing sessions throughout the day helped me personally as I became aware of my individual strengths and weaknesses.

(Gp3b, M, 5)

At a group level, the debrief affects both morale and is a vehicle for group development. Through evaluation, strengths and weaknesses are identified and become the focus in successive activities. In terms of the Lewin/Kolb Learning Cycle the debrief acts as a condensed Reflective Stage and ideas are generated which become the basis for stages 3 & 4 of the Cycle. These three extracts evidence how participants progressed through the learning cycle during the day:

Anyway, through having the opportunity to talk freely in the debriefing session, it was easy to depict where our strengths and weaknesses as a group lay. It also helped us identify skills, which we need to master. All of these were put to good use as we used these experiences to improve our performances through the tasks later on in the day.

(Gp1b, F, 3)

The debrief sessions did serve a purpose as the feedback gained enabled us to target certain areas to improve in the next activity.

(Gp6b, M, 7)

The Spider's Web was the most satisfying activity of the day, most notably because it was the last task where we were able to use our knowledge from the problems encountered throughout the day and effectively apply our debrief evaluations...

(Gp8b, M, 1)

Without the debrief it is evident that much of what happened during the task (concrete stage) would have gone unscrutinised. As this female participant indicates, it was only the review that made her 'look back' and consider what had actually happened:

At the end of the first task we weren't expecting the questions so it did make us look back and consider what we had learnt. It did make me realise the processes we had gone through to complete the task and also what our weaknesses had been so it made me aware of how we could work better on the forthcoming tasks.

(Gp4b, F, 5)

The debrief produces a common thread, in terms of process analysis, which links together all the disparate physical activities. As this participant points out, it kept key issues foremost in her mind:
On this task we were expecting the questions so I think the whole way through we had remembered what we had done last time and tried to improve.

(Gp4b, F, 5)

Alternatively, the debrief highlights concepts, such as team-working, which need to be applied throughout the day. For this female participant, the issue was the superiority of team effort over individual action:

The debriefing session for this exercise was very helpful in showing us that when you work together you usually achieve better results because the combination of many different opinions and ideas predominantly prove to be better than any one individual’s.

(Gp4b, F, 4)

However, none of these benefits are automatic. Several factors were identified which contribute to the success of the review or debrief sessions. These are the role and influence of the instructor (7.2.3.) and the changing nature of the review during the course of the ODA programme (7.2.4.).

7.2.2 The distinction between task and process reviews

In the second case study there were 11 groups of students. Groups one to six took part in the ODA course held on 8th May 2000, and groups seven to eleven on a similar course one week later. The tasks on each course were identical but the review formats used after each task were changed. There was a task review format to accompany the activities on the first course and a process review format to accompany the activities on the second course (see Figure 7.1). The instructors were asked to keep to these formats and not modify them in anyway. The students were not aware that different questions were asked on the two courses, they were simply asked to evaluate the usefulness of the review or debrief session to their individual learning. Participants clearly differentiate between debriefs that were useful to them from those which were not. This is the case for participants experiencing both types of review format. The utility of the debrief session cannot simply be attributed to whether it corresponds to a task or process format.
There is a remarkable similarity between the remarks made by both sets of participants regarding the range of utility to be derived from the debrief sessions.

Firstly, the opinions of those who experienced task debriefs show a range of benefits, as these five extracts illustrate:

*The debriefing session did not really enlighten us to any improvements that we could have made, we completed the tasks successfully, and therefore there was nothing much to say in the debriefing session.*

(Gp5b, F, 3)

*The debriefing sessions that were conducted at the end of each task were of great value to the group. Especially the first and second debriefing sessions.*

(Gp6b, M, 6)

*The debriefing after the Spider’s W was one of the most productive sessions of the day and probably taught me more than any other had all day. Although we thought that we were helping each other a lot at the time we realised through the debriefing session that there was actually a lot more that we could have been doing for each other.*

(Gp5b, F, 3)
By this time the debriefs weren't as useful as we were saying the same thing in each one.

(Gp4b, F, 5)

The debriefing was short and I found it very much a meaningless experience. The second session was the best.

(4b, M, 3)

The debriefs, although utilising the same format, were conducted by different instructors at different points in the programme. The responses indicate that the benefit of the debrief was influenced by two factors, namely: the personality of the instructor involved and the stage of group development. The format of the debrief, whether it was task or process oriented was less important. Participants experiencing the process reviews were able to discriminate between the utility of the various debrief sessions in a similar manner:

The debrief sessions at the end of each activity in general were very informative. I found them especially important at the start of the day.

(Gp9b, M, 6)

In my opinion the debriefing session started off being very helpful but during the day became repetitive and less useful.

(Gp8b, M, 6)

There was an expectation (see Chapter Three) that participants who experienced task reviews would be less able to 'access' the underlying management skills need to tackle problems in real life than those who benefited from process reviews. This is primarily because the focus of the review is concerned directly with the specific task in hand rather than the application of general management principles to problems in general. Participants experiencing the task review format were able to indicate the value of the debrief in the context of the overall learning that took place during the course. Specifically, participants were able to demonstrate how the debrief from earlier tasks contributed to success in tasks later in the course. Implicit in the following four extracts is the notion that knowledge about themselves, others and group working is being carried forward from one task to the next as a result of the debrief session:
I found the debriefing sessions very useful in that we were able to discuss what went okay and what didn't go okay, we then tried to rectify any problems on the next task.

(Gp1b, M, 6)

The debrief sessions did serve a purpose as the feedback gained enabled us to target certain areas to improve in the next activity.

(Gp6, M, 7)

I felt that the debriefing session at the end of each task was very useful, in that I could see what everyone thought their weaknesses were and how, by overcoming these weaknesses they could possibly have improved the success of the task and future tasks.

(Gp1b, F, 3)

I thought that there were certain times when the debriefing sessions after the exercises were valuable as they got the group together to talk about what had gone on during the exercise. It was a good chance to see what other people thought of how we did as a group and what they thought of themselves as an individual throughout the exercise.

(Gp6b, F, 4)

Some participants were able to extrapolate from these task reviews, ideas of a more general nature:

I found the debrief sessions very valuable. They helped draw out the personal and organisational relevance of the physical activities...The sessions helped the participants know more about themselves and their peers.

(Gp1b, F, 2)

The debriefing sessions throughout the day helped me personally as I became aware of my individual strengths and weaknesses.

(3b, M, 5)

For these participants the debrief sessions contributed to a greater awareness of self and others. The organisational relevance was less apparent, with few participants voluntarily making the link between ODA and the workplace. However, this bridge was crossed by a few, and while the following remarks makes no reference to the review format it comes from participants who experienced the task review format, the inference being that review type does not preclude individuals from drawing wider real life relevance from the ODA activities:

I can see how useful this type of day would be to companies, to enhance team work, leadership and build trust among employees.

(Gp3b, F, 7)
The overall day was very enjoyable and a great learning experience, teaching us leadership qualities that we will be able to use individually in the future.

(Gp6b, M, 6)

In a similar manner participants who experienced the process reviews were also able to see how the debriefs allowed them to apply the learning from one task to those undertaken later in the day. These two comments exemplify the remarks made:

The ability to pinpoint how we succeeded and where we could have improved created positive aspects for the next stage.

(Gp9b, M, 8)

Many people put forward good ideas and it gave us valuable information to consider which was taken on to the next activity.

(Gp11b, F, 1)

From the literature review there was an expectation that participants who underwent the process reviews would allude more to general management concepts and their applicability to the wider world. This was evidenced to some degree as witnessed by the extracts below, but not to the extent expected:

I found the debrief sessions at the end of each exercise...made us realise the importance of the tasks and highlighted some important points concerning our individual communication, leadership and teamwork skills.

(Gp7, F, 3)

As a general comment I found the function of these sessions very useful. It helped me understand the direction we, as a group had actually taken in an attempt to solve these challenge. It also enabled us to understand the importance of supporting the leader, especially when developing solutions, as well as the importance of group communication, teamwork and encouragement.

(Gp10b, M, 4)

The key point emerging from this study is that it is having a review that is the most important factor. Review type was less influential than who gave it and the tailoring of the review to the stage of group development. We move on to look at the first of these two factors in the next section, returning to the tailoring of review sessions in section 7.2.4.
7.2.3 The importance of the instructor

Participant reports identify several ways in which the instructor influences the learning process. Firstly, the ability of the instructor to establish a rapport with the participants is important. In the case of predominantly young people in this study this manifested itself in terms of 'friendliness/unfriendliness'. This contributes to the 'comfort factor' and encourages the participants to engage with the review process. When asked to comment on the review process in their reports, paramount in the minds of many was the personality of the instructor involved. The following three extracts illustrate how crucial the soft skills of the instructor are to the success of the debrief:

The majority of the instructors were approachable which meant that everyone felt comfortable enough to voice their opinions as to what and where they thought they could have improved and where we had done particularly well, both as a group and as individuals.

(Gp6b, M, 7)

The instructor here was a very laid back individual and he would listen intently to each person and their opinions. This allowed us to all throw ideas to the group without fear of ridicule.

(Gp7b, M, 1)

The instructor let us say our opinions at the end of the session and she was easy to talk to as she seemed an approachable person. The instructor in the orienteering task seemed very distant and not approachable.

(Gp9b, M, 5)

These are important attributes in an instructor because even when confronted with an 'approachable' instructor, some participants find the review process threatening:

He was friendly but when he started asking questions individually, I had the feeling that he was examining everyone. This made me feel very uncomfortable to express myself.

(Gp11b, F, 1)

It is interesting that while 'risk' is commonly perceived in the physical sense (see chapter two) many participants felt vulnerable at the debrief stage. The risk factor here is double-edged; if the debrief is not handled sensitively by the instructor then he or she risks losing the confidence of the individual and their engagement with the
rest of the course. The instructor was also seen as a motivating influence. This factor was often associated with the previous attribute of approachability, to the extent that it is difficult to disentangle the two. Referring to the Swamp exercise one participant commented:

I found this instructor to be very friendly. After the event had been completed the feedback given to us by the instructor was very motivating and this helped to improve my confidence considerably in preparation for the next event.

(Gp1b, F, 4)

In contrast, there were instructors who were less approachable and this had a negative effect upon the contributions made by participants during the debrief session. This female participant tries to be objective about the instructor but the negative aspects of the debrief come through in her comments:

I found this instructor to be quite miserable and not at all approachable. Unlike the previous instructor, this tutor did not motivate me at all, in fact I was very hesitant to express any ideas or thoughts that I had regarding the activity and for the majority of the time kept silent...Although I did not particularly like the instructor I found his criticism to be constructive and applicable to the situation.

(Gp1b, F, 4)

While the notion of the group learning by discovery and becoming aware of their own weaknesses is present in the literature, these participants were very responsive to instructor input during the debrief.

There were some instructors that made it interesting and one that stood out for me was the instructor on the 'spiders web' as he unlike the majority of the others also gave us his feedback after he asked us what we thought. There was one instructor in particular that I found quite aggressive throughout the whole exercise and then with the questions afterwards, which I didn't enjoy and didn't feel confident in answering.

(Gp6b, F, 4)

Participants took the view that the instructor offered an objective and also an authoritative perspective on what was happening during the task. One would expect the instructor to increasingly withdraw from the review process and encourage participants to take ownership of their own learning (Peckham 1993b). However on a
short course, such as this one, instructor input is both useful and appropriate. These three extracts are quite explicit in conveying that message:

I believe having an external person’s view on how we conducted ourselves as a group has significant importance as their perception would be unbiased and truthful which is very useful if you want to improve and better yourself.

(Gp6b, M, 8)

The debrief session also gave the instructor a chance to say what he/she thought of the team’s performance, suggesting ideas of how the group could have improved performance or commending the team on their efforts.

(Gp3b, F, 7)

The instructors provided us with objective comments based on our performance, as they were able to stand back and observe us working together and then provide us with feedback.

(Gp7b, F, 8)

There is some value in this perspective since participants may be so focused on aspects of the task they may be unable to take a holistic view of what transpired during the task.

It was only after the discussion with the instructor that I really thought about our weaknesses concerning this task although I was aware during it that it was not really a team effort. He highlighted our lack of communication and the fact that many of the group members did not get involved until it was their turn to climb the wall.

(Gp1b, M, 1)

This view could be taken to extreme, with the instructor seen as the fount of all wisdom and his/her ideas being slavishly followed at the expense of the participants working through the options themselves. This element can be seen creeping in, in this report:

Our instructor ‘N’, gave us excellent and invaluable advise on efficient leadership....During this session I could totally understand his point of view and how it would have helped as a more efficient approach to the activity. I was able to apply this to the next and final activity.

(Gp8b, M, 1)
While participants were respectful of the view of their peers, they were more influenced by the instructor input. This harks back to the instructor having a more holistic view of the activity as indicated by this male participant:

> It was interesting to take into consideration the views of your peers in understanding how they respond to your style of leadership, but more importantly to listen to the ideas of the instructors who have the ability to observe the whole functioning of the group from a wider perspective.

(Gp10b, M, 4)

The instructor/facilitator has several functions within the debrief or reflection stage of the learning cycle. How these are fulfilled cannot be separated from his/her personality and enthusiasm for the job. When summing up the benefits of the review, the participants invariably spoke of the process and the personality of the instructor. These two extracts tackle the same issue but from different perspectives:

> The debriefs at the end of each exercise made us analyse what we had done in order to successfully complete the task. They made it easier to break down exactly what we had done or not done within each exercise. The instructors did make a difference in their attitude, helpfulness and obvious enthusiasm for what they were doing.

(Gp7b, M, 6)

> The questions did, however, (as the day went on) become a bit repetitive and the same things tended to be said at the end of each activity. This was not helped by the fact that some of the instructors seemed to be just asking the questions because they felt they had to.

(Gp6b, M, 7)

The debrief is integral to the learning process and cannot be treated as a bolt-on extra by instructors more or solely interested in the physical tasks preceding it. The instructor is instrumental in the learning process. The ability to handle delicate personal issues can be the difference between a learning experience and a missed opportunity, as this female participant was perceptive enough to capture in her report:

> The debrief for this session was quite difficult because we had to feedback negative information about our group leader for this task. It felt like everybody knew about the problems that had occurred but it was awkward actually voicing them. The instructor for this was not much help to us. He was too passive and because of the difficult
situation we would have benefited from a bit more leading in the discussion.

(Gp7b, F, 2)

This group was unable to bring the key issue to the fore without assistance. In this instance it was the role of the instructor to facilitate an evaluation of the experience and promote learning, in an atmosphere that did not cause damage to the individual involved. The interpersonal skills required in order to achieve this are considerable and are far more pertinent than the bland debate over process versus task review format. The following extract shows how one instructor achieved the right balance:

'W', who was the instructor of the first exercise, made us realise what we had done wrong and why, without criticizing anyone. He also praised us on what we had done and on the fact that we had successfully completed our task he then presented us with alternative suggestions of how this exercise could have been completed and asked us why we chose the method that we did. This course of questioning made us look at other possible solutions and it also emphasised what we had learnt whether it was individually or as a member of the group.

(Gp4b, F, 4)

In contrast, an instructor adopting a negative approach does very little to enhance the developmental process:

This debriefing session just seemed to be about all of the bad things that we had done and I felt that the instructor wasn't interested in helping us to realise why we had done things wrong only telling what we had done wrong.

(Gp4b, F, 4)

This study emphasises the role of the instructor in influencing the review process. While the mechanics of the review can be formatted (type of question, duration, etc) it is impossible to be prescriptive about the soft skills required to be a successful facilitator. However, it is in this area that providers need to concentrate their developmental efforts in order to improve the quality of course provision. The ODA tasks used required very low levels of technical input, the chief attribute of the instructor was therefore the ability to manage the review process.
7.2.4 Focussed debriefing sessions

The imposition of a common format on the debriefing session had the inevitable result of producing a narrowing of participants' perspectives rather than allowing them to explore new problem areas. This is alluded to in the following extract and in addition there is the notion that there is a 'right' and a 'wrong' approach to the management of these group activities:

However, after two or three debrief sessions, we knew exactly what questions were going to be asked, which undermined the whole purpose of the debrief. Instead of our minds opening wider, they contracted to focus on just the questions and what the instructors wanted to hear.

(Gp6b, M, 2)

Even more detrimental is the 'turn-off' effect that such tedium engenders amongst some of the participants. There was widespread criticism of the use of the same set of questions throughout the day. This is resulted in comments such as:

I found that after a couple of the exercises we were just giving the same answers and there were members of the group that were loosing interest and not giving answers which means that the benefit of the session was lost.

(Gp6b, F, 4)

While in this case the problem was precipitated by the researcher, it is possible to envisage a similar situation arising if a course provider attached insufficient importance to the debrief session and simply 'went through the motions', repeating the same debrief format throughout the course.

As participants progress through the course the nature and format of the debrief needs to change. While initial sessions need to concentrate on generic issues later ones can 'home-in' on problems specific to the group or the latest activity. These two extracts illustrate how and why the review needs to develop:

The debriefing sessions that were conducted at the end of each task were of great value to the group. Especially the first and second debriefing sessions, both of helped the whole group understand the meaning of each task and what the aim was so that each member of the group now knew for the forthcoming tasks how and what should be done.

(Gp6b, M, 6)
For the first few exercises the debriefing session was useful, as we found that each person was making valid points that we could use for the following exercises. This way we were able to use a system almost like trial and error to develop the team, by trying to develop and work upon the points that we had made in the exercise before. However, by the end of the third exercise we had all started repeating points that had previously been made as none of us could think of anything original to say. This was not because we had become the perfect team, but because we knew what the team should be like, it was just a case of improving ourselves and learning to act upon those points raised.

(Gp2b, F, 5)

Some participants were helped by the common format since it established a theme for the day, as this woman describes in her account:

The questions helped us analyse our performance as a group and individually and, because the same questions were asked at the end of each task, we were able to find a theme in our performance at each activity.

(Gp2b, F, 8)

But the degree of uniformity in participant responses should signal to the facilitator the need to be more sensitive to evolving issues and more imaginative in eliciting participant views.

When the instructor asked you individually what you thought you had achieved and learnt by this activity I felt very intimidated, I did not want to sound big headed so I often said nothing, but some instructors often made you say something and I found this hard, as sometimes someone else had made the same point you wanted to make.

(Gp2b, F, 4)

The evidence in this study demonstrates the need for a review process that evolves during the course of the ODA event. The process needs to be managed by the facilitator in response to changes in the type of task, group performance and their stage of group development.

7.2.5 Operational Issues can affect the planned review process

Course design should allow sufficient time for the review process to be conducted efficiently. However, participants getting lost between tasks can reduce the time available. The review sessions often absorb this time deficit, with a number of
possible outcomes: (1) no review takes place; (2) the review is too short to be effective; (3) the lack of time allocated to the review is so insignificant that the process loses its saliency, and participants do not participate in a worthwhile manner. Each of these situations was observed during the duration of the ODA event. These are evidenced by the three extracts below; each one dealing with a specific problem:

(1). When we got to the final activity we got straight into orienteering. By the end of the activity we were late for the finishing time so the debriefing session did not really take place.

(Gp4b, M, 3)

(2). The de-brief from this exercise was short because we did not have much time. If we had had longer or had had a discussion about the exercise, then the issue of me assuming leadership might have come up. It would have been useful to me to find out what the others actually thought of this instead of assuming. My self-analysis may have been wrong about this.

(Gp7b, F, 2)

(3). Some people did not take the debriefing sessions seriously, so did not put any effort or thought into answering the questions. These sessions were also often rushed so that individuals had not had enough time to think over the exercise they had just done and consider what they could have done better and how they may have improved the overall performance of the team.

(Gp2b, F, 5)

Whichever of these three permutations is the result, the learning outcomes for the individual are greatly diminished. These findings suggest that future course design needs to be less rigid. If operational issues reduce the time available for review then the provider would be advised to sacrifice some latter tasks in order to 'create' time for discussion. The debrief stage was also cited as a critical incident for five of the course participants. This phenomena is becomes the focus of the next section and the power of the debrief is further evidenced.
7.3 EXPLORING THE PHENOMENON OF THE 'CRITICAL INCIDENT' WITHIN THE ODA PROGRAMME

The ODA literature (Beeby & Rathborn 1983, Oddou 1987, Gall 1987) indicates that ODA produce memorable learning experiences, through the 'power' of perceived high-risk activities. The evidence reported in this section suggests that many participants are able to identify 'critical incidents' or 'defining moments' during the ODA course but attribute these to a whole range of factors, not solely high-risk, physical activities.

In summary, an examination of participant reports in the second case study demonstrated three key issues. Firstly, that critical incidents are: individual in nature - there is no pattern, some come from tasks, some from moments of reflection, some from informal conversations or incidental activities. Secondly, that the critical incident cannot be manufactured - the task is manufactured but whether or not this produces a critical incident is unique to the individual concerned. Thirdly, that the learning that comes from the critical incident is specific to the individual. A summary of the critical incidents reported in case study two is shown in Table 7.1 with a breakdown of each event, per group, shown in Table 7.2.

7.3.1 The Individual nature of critical incidents

Critical incidents are individual in nature. The diverse range of elements that participants associate with such events testifies to this. The elements named in the reports include: adopting a leadership role; overcoming fear; reflecting upon events (including the debrief session); success or failure as a team; informal moments; the development of trust; group development; the role of dominant personalities and incidental occurrences. Each of these will be examined in turn.
### Table 7.1: Overall Summary of Critical Incidents reported in case study two.

<table>
<thead>
<tr>
<th>Categorisation of Critical Incident</th>
<th>Detail of task</th>
<th>Total Number of critical incidents reported for each category</th>
<th>Number of males/females reporting critical incident in that category</th>
</tr>
</thead>
<tbody>
<tr>
<td>The group experiencing task success</td>
<td>Web</td>
<td>15</td>
<td>7M 8F</td>
</tr>
<tr>
<td></td>
<td>Planks</td>
<td>07</td>
<td>4M 3F</td>
</tr>
<tr>
<td></td>
<td>Abseil</td>
<td>01</td>
<td>1M</td>
</tr>
<tr>
<td></td>
<td>Tent</td>
<td>01</td>
<td>1M</td>
</tr>
<tr>
<td></td>
<td>Blackdown</td>
<td>03</td>
<td>2M 1F</td>
</tr>
<tr>
<td></td>
<td>Survival</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The group experiencing failure to complete a task</td>
<td>Tent</td>
<td>02</td>
<td>1M 1F</td>
</tr>
<tr>
<td>The experience of task leadership</td>
<td></td>
<td>05</td>
<td>3M 2F</td>
</tr>
<tr>
<td>The Instructor</td>
<td></td>
<td>03</td>
<td>1M 2F</td>
</tr>
<tr>
<td>The Debriefing</td>
<td></td>
<td>05</td>
<td>3M 2F</td>
</tr>
<tr>
<td>A Personal Experience</td>
<td></td>
<td>11</td>
<td>5M 6F</td>
</tr>
<tr>
<td>Getting Lost</td>
<td></td>
<td>02</td>
<td>2M</td>
</tr>
<tr>
<td>Conflict within the group</td>
<td></td>
<td>04</td>
<td>3M 1F</td>
</tr>
<tr>
<td>A domineering Personality within the group</td>
<td></td>
<td>06</td>
<td>2M 4F</td>
</tr>
<tr>
<td>None reported</td>
<td></td>
<td>23</td>
<td>16M 7F</td>
</tr>
</tbody>
</table>
### Table 7.2: An analysis of Critical Incidents experienced within each group

<table>
<thead>
<tr>
<th>Group</th>
<th>Categorisation of Critical Incident</th>
<th>Detail of task</th>
<th>Number reported and gender of participant</th>
<th>Number sharing the same event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B</td>
<td>Task Failure</td>
<td>Tent</td>
<td>M F</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Task Success</td>
<td>Web</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leader Task</td>
<td></td>
<td>M F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debriefing (of task failure event reported above)</td>
<td>Tent</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A Personal Experience</td>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None reported</td>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>2B</td>
<td>Task Success</td>
<td>Web Planks</td>
<td>F F M</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Conflict</td>
<td></td>
<td>M F M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None reported</td>
<td></td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>3B</td>
<td>Task Success</td>
<td>Planks</td>
<td>F F</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Leader Task</td>
<td>Planks</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debriefing</td>
<td>Web</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Instructor</td>
<td>Web</td>
<td>M F</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>A personal experience</td>
<td>Abseiling</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>None reported</td>
<td></td>
<td>MF</td>
<td></td>
</tr>
<tr>
<td>4B</td>
<td>Task Success</td>
<td>Abseil Web</td>
<td>M F F M</td>
<td>****</td>
</tr>
<tr>
<td></td>
<td>A personal experience</td>
<td></td>
<td>MM</td>
<td></td>
</tr>
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<td>Task Success</td>
<td>Web</td>
<td>FF</td>
<td></td>
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<td>None Reported</td>
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<td>M</td>
<td></td>
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<tr>
<td></td>
<td>Instructor</td>
<td></td>
<td>F</td>
<td></td>
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<tr>
<td></td>
<td>A personal experience</td>
<td>Abseil Abseil</td>
<td>M F M</td>
<td>**</td>
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<td></td>
<td></td>
<td></td>
<td>M (but different to the critical incident above)</td>
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<td>Task Success</td>
<td>Tent</td>
<td>M</td>
<td></td>
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<td>Leader Task</td>
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<td>M F</td>
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<td>Abseil</td>
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<td></td>
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<tr>
<td></td>
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<td></td>
<td>M F MM</td>
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Table 7.2: continued.

<table>
<thead>
<tr>
<th>Group</th>
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<th>Detail of task</th>
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<th>Number sharing the same event</th>
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<tr>
<td>7B</td>
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<td>F M F F F F</td>
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<tr>
<td>8B</td>
<td>Task Success</td>
<td>Blackdown Survival/ Web/ Planks</td>
<td>M</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>M M (But different aspects of the same event)</td>
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</tr>
<tr>
<td></td>
<td>Debriefing</td>
<td></td>
<td>M</td>
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</tr>
<tr>
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<td>None reported</td>
<td></td>
<td>MMM</td>
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</tr>
<tr>
<td>9B</td>
<td>Task Success</td>
<td>Blackdown Survival/ Planks/ Web</td>
<td>F M</td>
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<td>M</td>
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<td>A personal experience</td>
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<td>Instructor</td>
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<td>Web/ Planks</td>
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<td>Conflict</td>
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<td>Task Success</td>
<td>Web</td>
<td>MMF</td>
<td>***</td>
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<td></td>
<td>Getting Lost</td>
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<td>MM</td>
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</tbody>
</table>

The leadership role appears to produce a more challenging situation for participants than simply being a team member and this focus produces a heightened experience. In addition to the novelty and unfamiliarity of the ODA experience, the participant is forced into a new role. The two elements combine to increase the level of anxiety felt by the individual, as described in these two extracts:
The most critical incident of the day for me was when I was the team leader. As this was the first time I had done anything like this...This for me was the most challenging experience of the day.

(Gp6b, F, 3)

The critical incident of the ODA for me was when I acted as team leader for the 'crossing the swamp' exercise. This was the most striking moment during the day as I was a bit nervous about taking control of the group and co-ordinating our efforts. I think I was nervous and slightly apprehensive about being team leader because I had to attempt to lead people that I did not know very well.

(Gp3b, M, 5)

However, success in this new role produces a feeling of personal achievement and increased self-confidence. Peer or instructor recognition may contribute to this feeling of success or it may be a case of increased self-awareness. For these three men it was a defining moment:

It was especially rewarding for me, as team leader, to be congratulated on my efforts by another member of the team following the activity. This gave me increased confidence and boosted my self-esteem. Because of this I don't think I would be so nervous and would probably look forward to being placed in a similar position of authority.

(Gp3b, M, 5)

The most important point of the day to me personally was the task that I was in charge of... The task gave me a great sense of achievement.

(Gp1b, M, 6)

The highlight of the day for me was not a specific activity or what someone said, instead for me it was at the end of the day when I was thinking over the day's events. It was then that I remembered the satisfaction and pride I felt within myself for leading the group of nine people on two different tasks and successfully completing both of them within the allotted time.

(Gp6b, M, 6)

Participant reports confirm the existing literature (Oddou 1987) and substantiate the notion that ODA which overtly resemble outdoor pursuit activities (e.g. climbing, abseiling & caving) do push some participants outside their 'comfort zones'. Overcoming the fear associated with these tasks becomes a personal challenge, and if successful, produces a tremendous feeling of achievement. However, there was no indication that such an experience had any relevance to other aspects of their
working lives or that it was carried over. For both of these women participants the climbing activity posed the biggest challenge, as they recount below:

The most striking moment during the whole day for me personally was when I was standing on the face of the cliff on my own. I had got to that point with help from my group members but once I was there I had an incredible feeling that I was on my own. At one point I froze because I just didn't know what to do next, I think it was due to having been helped up to that point and now apart from the harness I felt like I was alone on the side of the rock. ... Also I think that it was probably the only exercise that I felt like I wasn't in control.

(Gp6b, F, 4)

The most striking moment for me was when I found the courage to do the third activity (rock climbing). When I realised what we had to do, I informed the instructor that I am not going to take part because I am afraid of heights. The only thing I was doing was observing the others during the exercise. A member of the team approached me while he had already done the 'great leap'. He advised me that it is not difficult and risky. I had mixed feelings because the one part of my mind was telling me "this is too risky, you may hurt yourself", and the other part was insisting "why not? Everyone is trying, you do not want to be the only timorous person". I think that person played a major role for my decision, as after a while I persuaded myself that now is the most appropriate time to fight against my fear of heights. I admit that it was the most exciting moment I had during the whole day and I would like to try again in the future in a similar activity.

(Gp11b, F, 1)

Physical activities were powerful instruments in the creation of trust amongst participants. This factor has been discussed already, but in its extreme form it was a defining moment for this female participant during the Spider's Web exercise:

I had to have a huge amount of trust in the group as I was in their hands at about 7ft (off the ground) and also have faith in them to get me over in one piece. Once this had been achieved, it led to others having faith in the rest of the group to get them over as well. It built up a huge level of trust throughout the whole group, and brought us together as we did so well.

(Gp4b, F, 2)

Relating to the same incident, another participant recognises both the seriousness of the task and the speed with which the group were able to come to terms with its requirements:

This was a critical moment as it was quite dangerous, if we had dropped G she would have been hurt quite badly & it was even more impressive as this was only our second task and we had not been working together long.

(Gp4b, F, 5)
In contrast to the physical tasks, the debrief or reflective phases of the course were also cited as key moments for a number of participants. The input of the instructor was important in drawing out the lessons learnt in the tasks (see section 7.2.3.) and also allowing the participants to draw parallels with their working lives:

I found there were a few critical incidents of the day. These were mainly responses by the instructors to our achievements. This showed me that encouragement could come from the fact that a task had been completed or the instructor telling us that we had done a good job. This then means that if this were put into a workplace then it is important for a manager to ensure that his employees receive encouragement personally or are made aware that they have completed a task successfully.

(Gp9b, M, 1)

I found the debrief sessions very valuable. They helped to draw out the personal and organisational relevance of the physical experience.

(Gp1b, F, 2)

The instructor gave us a bit of a grilling for doing so poorly during the exercise and I think it was rightly deserved. As a group it knocked our confidence. There was a positive element to come from all this though. The leader suggested that on our long walk to the next activity we learnt each other's names and learnt how to communicate with each other better. This was the critical moment as it opened our eyes to certain aspects in working as a team and it defined the reason for communication, it made us think and try harder at the following activities as I think the fear of failing again was too much for the team.

(Gp1b, M, 7)

Not all of the formative experiences in this category were the result of organised debrief or reflective activities. Several participants reported key moments that were associated with intervals between tasks or free time periods. These two participants found informal discussion to be the key their understanding of the day's events.

During our half hour lunch break the team engaged in conversation that lightened the atmosphere, and enhanced the team work in our next exercise. The planks exercise brought the team together, and could be described as the group's most critical incident. Previously the team lacked morale and motivation and it was as if the members in the group held back from expressing opinions, ideas, and approaches, because of the fact we were all strangers. Having idle chit-chat... over lunch encouraged and enthused members to participate in the team exercises.

(Gp3b, F, 7)
The critical incident for me was during the lunch break. This was because we were all sat together as a group and discussing how well we were doing. (Gp4b, M, 8)

Many participants were impressed by the speed at which the group had bonded and the success which the group was then capable of. This awareness was forthcoming at different points within the course and can be associated with both physical and cerebral activities, as these reports illustrate:

The most striking point of the day was when we all came up with the correct answer to the hiking trip problem, after producing such different lists as individuals. This was one of our last activities and I think it really showed how far as a group we had come. This activity may not have seemed very important to other groups but it was definitely a key moment in our day as a group. (Gp9b, F, 3)

The single most striking moment of the day was at the spider's web exercise. I found that the whole team really came together and worked as a tight group. This exercise made me realise that in everyday life, teamwork, communication, motivation and co-operation are absolutely essential to complete many tasks. From that exercise the team performed efficiently during the time outdoors apart from a few short moments ... There was not one person who didn't get very involved in the task so to me feeling part of a productive team was great. (Gp11b, M, 6)

The speed with which groups bond has been evidenced above. One participant saw the defence of a group members' performance in the face of instructor criticism, as a critical incident, benchmarking that development. She expressed it in the following way when she analysed the climbing activity:

The critical point came when he gave his debrief. He was indicating the leadership from 'A' was poor, that we could have worked better in a group etc etc etc...Without hesitating all the team members were quick enough to put the instructor back in his place. Everybody reassured 'A' that he was a good leader ... At the beginning of the day we hardly knew each other and by activity four we were protecting each other like we had all been friends for years. (Gp10b, F, 6)

Participants felt that group success was not a transient factor and although there may be some slippage or variability in group performance in future activities, the general
trend was one of improvement. This showed itself in both physical and mental tasks as evidenced by the following two statements. In the first, the participant describes his experience on the Blackdown Survival exercise while in the second, a female participant describes in detail the way in which the group had developed sufficiently to cope with the demands of the Spider's Web:

The feeling that working as a team really did help us to get better results gave the whole team a big confidence buzz. This helped us to complete the next activity in half the allotted time and we had the most fun doing it. I would have liked to have completed this task earlier in the day as it really helped to boost the team spirit.

(Gp8b, M, 6)

The single most striking moment during the whole day was doing the Spider's Web. This would have to be my Critical Incident... The Spider's Web was the first activity that required us not only to discuss, plan and listen to each other but we had to physically help each other get to the other side. Felt that as this activity needed a lot of work from the team as a whole it helped to bring us together... if we had to do that activity first I think that we would have felt uncomfortable lifting people we did not really know. As it was we had spent half of the day together so we were at ease with everyone. We all cheered when people made it through and when the last person got there we all clapped. This made us feel proud and happy that we had done it.

(Gp5b, F, 6)

Outdoor development activities are capable of generating strong emotions, both in the euphoria of successfully completing a difficult task and also in the process of actually working through the task itself. This female participant shows the level of group development she believed possible within the designs of such a brief ODA event when she says:

There was a belief created when doing the web that we could achieve anything if we worked together, helped each other and stayed as a team.

(Gp5b, F, 6)

In the heat of the moment, this female participant describes how the task generated extremely strong emotions, illustrating how ODA works on an emotional as well as physical and intellectual level:

The critical incident for me was on the last activity, the Spider's Web. We had agreed that the two boys in the group should be the last through the web, so they could help lift everyone else through. One of
the pair had tried unsuccessfully throughout the day to take control of the group, and refused to listen to other people's ideas, even though the rest of the group had already agreed an approach to solving the problem...He found it difficult to accept that there were other options to be taken into consideration...The critical moment was when another group member got so angry that he was adamant that he knew better than the rest of the group that she snapped and shouted at him...From this point onwards he paid attention to the group and completed the task almost immediately...I think our whole group learnt from this incident that working as group means exactly that.

(Gp2b, F, 8)

The reports also illustrate a 'dawning' or that 'penny drops' moment when the participant becomes aware of key ingredients in the team building and problem solving processes. These actual occurrences are quite varied. The first relates to the need to plan and have trust in the rest of the group:

The most critical moment of the day was during the Spider's Web exercise...it made me realise that I wasn't thinking logically but in fact just steaming ahead. Also that this point I think we all realised that if we were to successfully complete this exercise we had to have more confidence in each others abilities and put more trust in the other members of the group.

(Gp4b, F, 4)

For this female participant, failure to complete the tent task was the critical moment of the day:

It really taught me how if everyone doesn't work together for the good of the team then things can all fall apart.

(Gp1b, F, 3)

While the Swamp exercise brought a new dimension to group working for this participant and exposed him to a new set of skills:

The conflict not only made the group have to think a bit harder but also brought the concept of negotiation into the problem, which hadn't occurred previously...The outcome of the conflict followed by negotiation resulted in a much better understanding of each other within the group. I believe this lead to a much better morale within our group throughout the rest of the day. During the following activities individuals were a lot more understanding and the previous negotiation had shown a good commitment to resolve any differences we had in order to solve the problems. The critical incident had proved that we could resolve conflict to our own advantage and I believe this was a big turning point in the success of the day.

(Gp10b, M, 9)
The final category of critical incident involves the effects of dominant personality types on other members of the group. This produced very focussed learning experiences in which participants were quick to draw their own conclusions on the appropriateness of different leadership styles and team-working roles. In the extracts below, ‘J’ was a very dominant personality type. Her behaviour formed the basis for the critical incidents for two other females within that group. The effect she had on these participants is clearly shown in their writing:

_The most striking part of the whole day to me though, was when ‘J’ completely overruled me in the activity whereby I was designated leader. Though ‘J’ completely overruled me and took control of the situation, I realised that the most effective approach to the solution was on a group basis, as opposed to an individual one._

(Gp7b, F, 8)

_The most striking incident that made an impact on me throughout the day was the way ‘J’ continuously kept trying to manage the group even though it was not her turn. Although she aimed to efficiently organise the group, her style of leadership obviously does not suit everyone in the workplace. By learning from others’ mistakes it has made an important point to me as in the future I will know not to adopt this style of approach._

(Gp7b, F, 7)

A similar situation existed in Group 11b, with the same effect:

_...his necessity to be in control led to resentment from certain factions of the group... learnt from this incident that although some people abstain from direct control of proceedings, most people like and expect to be consulted on decisions that affect them._

(Gp11b, M, 8)

Importantly, all participants show that they were able to turn these experiences to their advantage and learn from them.

7.4 SUMMARY

The preceding discussion verifies the importance accorded to the debrief or review stage within the ODA programme and indicates the mechanisms that can influence the power of this stage within the learning cycle. The debrief forces evaluation of the task, it allows the exploration of different perspectives and facilitates change.
Through the debrief participants see a common thread linking disparate activities. The importance of the debrief lies in its very existence, rather than whether it conforms to a particular format. The role of the facilitator/instructor is pivotal in making the debrief significant to the learning process. Participants place such emphasis upon this point that it makes the role the primary function of the facilitator. The ability to manage the review process, modifying it to fit the stage of group development and any incidental learning which might have occurred are necessary elements of that function. It was noted that operational issues may impinge upon the ability to conduct satisfactory debriefs. Facilitators need to be aware of this possibility and create a buffer space in order to allow reflection at the end of the day/course so that learning from tasks does not go unexplored.

Not all participants reported a critical incident during the course of the ODA programme. Twenty-three participants reported no such experience; this represents 26% of the sample. Those that did reported diverse experiences. Critical incidents appear to be individual in nature. The diverse range of elements that participants associate with such events testifies to this. The elements analysed in the reports include: adopting a leadership role; overcoming fear; reflecting upon events (including the debrief session); success or failure as a team; informal moments; the development of trust; group development; the role of dominant personalities and incidental occurrences. This suggests that while tasks and debrief formats can be manufactured by the provider, whether they combine to produce a critical incident for the individual is a chance occurrence, and dependent upon the individual concerned. Secondly, the learning that comes from these critical incidents is also specific to the individual involved. The next chapter integrates the evidence from this and the preceding chapters in an attempt to model the experience of ODA taking cognisance of both the course elements and the impact of the individual participant.
CHAPTER 8

UNDERSTANDING LEARNING AND ATTITUDE FORMATION DURING ODA

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8.1 INTRODUCTION
This chapter will attempt to integrate the several themes discussed so far with the rich qualitative data contained in the participant reports from both case studies in an effort to develop a greater understanding of the processes at work during ODA programmes. The argument has been structured such that each the first two stages of the Lewin/Kolb Learning Cycle are examined in the light of participants reported experiences, beginning by analysing stage one - the concrete experience.

8.2 THE CONCRETE EXPERIENCE
One of the important elements of ODA as advanced by advocates of ODA is its ability to generate common experiences for the course participants (the 'concrete experience' in the Lewin/Kolb Learning Cycle (Kolb et al 1971)) as outlined in Chapter Two. This study suggests that the terminology used is misleading. The participant reports evidence a number of factors that combine to create different experiences between groups and between individuals within the same group. The factors can be categorised into internal factors that appertain to the individual and external factors that are independent of the individual (see Figure 8.1).

Whilst all members of a particular group participate in the same task, each individual member derives a unique learning experience from the event. This is primarily due to factors internal to the participant. The internal factors identified in the reports include: initial mindset; personal agenda; previous experience; personality of the individual. External factors exist independently of the individual and include: the group; the task; consequences of failure; new experiences; sequence of events; level of participation; leadership role; level of team development; comfort factor; level of
purchaser/provider input. The internal factors are presented in turn in Section 8.3 and the external factors in turn in Section 8.4.

**Figure 8.1: The concrete stage revisited**

![Diagram showing internal and external factors]

**8.3 INTERNAL FACTORS**

**8.3.1 Initial Mindset**

In addition, the 'Cycle of Learning' and the participant's attitudes do not begin with the 'concrete experience'. The participant approaches the event or experience with both a skill/knowledge set and a degree of self-awareness regarding his/her own capabilities. This can produce either a positive or negative mindset. Prior to the ODA event some participants display concern with aspects of the experience that they perceive to lie ahead. This can manifest itself in several ways. There may be nervousness about coping with the physical environment. Even 'experienced' participants were apprehensive, as revealed in this woman's report:

*(My) work at the centre can be physically demanding and tiring so I didn't feel too intimidated about the outdoor problem solving*
adventure. However, even as an ex-lifeguard I was nervous that we
might be required to plunge into freezing water at some stage.
(Gp1, F, 18)

Anxiety about working with others, particularly strangers was a consideration, as
evidenced by both male and female participants:

Thinking of taking part in the outdoor problem solving activities made
me feel extremely nervous and anxious, working within a group and
not knowing the others made me feel uneasy.
(Gp1, F, 21)

The activity day required us to be split up into groups with people I’d
never met before, this was a little nerve racking at first.
(Gp7, M, 74)

The whole idea of being segmented into groups of people we didn’t
know was a bit worrying to start with, because everybody has
someone they don’t want be put in a group with for various reasons.
(Gp5, F, 11)

There is also anxiety and self-doubt about the personal ability to cope with the
demands of the course, compared with others in the group. A case of 'how will I
measure-up':

I did find myself worrying that the others in my group doubted my
capabilities and I in turn wondered in turn whether I was as
intellectually astute as these young fresh- learning individuals.
(Gp1, F, 18)

8.3.2 Personal agenda

Participants may also approach the course with their own personal agenda:

I have always thought of myself as quite a good leader, with quite a
bit of experience of leading rugby and cricket teams.... From the first
minute I learnt of the activity day I looked forward to the experience
and maybe compare my leadership skills to those of others.
(Gp7, M, 74)

This agenda can also determine the way participants set out to interact on the course
and the types of behaviour that they will exhibit:

From the very start I decided that I did not want to take a leading role
within the group unless it was necessary. I wanted to enjoy the day,
watch other people at work and hopefully see how adverse weather
conditions would affect the group.
(Gp7, M, 100)
This modified behaviour may become a goal in itself:

I realised that there was a tendency for me to try and take control of the group in a very authoritative manner. With this thought, I had prepared myself before the trip to observe and control the way in which I contributed to the group. My primary aim was for me to control my personal urges to "take over" and also to overcome the anxiousness I held for working with people I did not know. I felt that these were realistic goals for me to strive for.

(Gp 9, F, 23)

8.3.3 The Impact of previous experience

Whilst the ODA experience is relatively novel, contrary to the literature, it does not necessarily represent a new experience to all group members. Previous experience brought to bear on a task does have an effect on the learning that takes place as illustrated by the following extracts:

Everyone had done this exercise (the Spider's Web) before and so many were aware of the pitfalls of rushing it.

(Gp6b, M, 2)

A person in the group had already done this exercise on a previous trip they had been on. This meant that she told the group how it should be done.

(Gp1, M, 79)

In both of these instances, the groups faced a different learning situation to the one facing groups whose members encountered the task for the first time. A female member of the group explains how that impacted on the experience:

The Minefield activity was one of the worst one for my group. We all rushed in to it, as one girl had done the activity before, the leader didn't really take command or control and we all just rushed to complete it.

(Gp1, F, 68)

The designated leader for that task puts it this way:

Unfortunately, 'x' had done a similar task before and knew exactly what was required so she took charge and told everybody what he or she had to do. I took a bit of a back seat and didn't really get involved at all.

(Gp1, F, 75)

This experience affects the learning of the whole group and not just the individual who carries the knowledge. Several students reported occasions when the past
experience of a group member resulted in a diminished learning opportunity for them personally:

*I was the leader of the exercise, but it was all ruined when someone already knew how to remove the mine.*

(Gp5, F, 11)

*Because he had done this before he expected everyone to know after explaining it once what we needed to do, this was not the case. I did not really enjoy this activity as the challenge had been taken away due to someone else's experience.*

(Gp3, F, 73)

However, it is not always the case that past experience will automatically result in task success and as some participants learnt the processes involved in successfully managing a task are not mechanistic and easily transferred from one task environment to another. As the following extract illustrates, the participant was sensitive to this process:

*I have been in similar situations before so I have been aware of the tasks involved, however it is impossible to calculate or predict the human factor and this is where the majority of learning occurred.*

(Gp5, M, 30)

That was not the case with these two men, who thought they could replicate past success in a new environment:

*I thought that through my experience with outdoor activity centres that I would automatically know the best method for attempting a problem scenario. On reflection it may have been better to take each situation as a new one and applying what I had previously learnt to assist in the solving of the new situation, without just thinking that the same type of problem will always be solved by the same method.*

(Gp7, M, 100)

*Due to my past experience I was imagining a different design of tent. This made me more aware of perceptual barriers we place in our way, due to past experience, which affect our ability to solve problems.*

(Gp1b, M, 1)

The learning experience is also influenced by arrange of external factors. These form the basis of the rest of this section on the concrete experience stage of the Lewin/Kolb Learning Cycle.
8.3.4 The personality of the individual

Chapter Five presented the quantitative data gathered during the investigation on how personality, as represented by the four MBTI personality traits, affected the learning experience during ODA. This section presents the key themes that emerged from the qualitative data. The notion of 'personality' used here is different from the technical definition above. In this discussion the term is used in the everyday sense and as used by participants in their reports.

Firstly, the individual's personality is a major determinant of how the ODA programme and the external factors discussed above are experienced; it is a mediating variable. Secondly, the many facets of an individual's personality act directly upon the learning process. There is effectively a continuum with zero engagement with the activity at one extreme, and the need to dominate it and other people, at the other. A person's self concept can act as a denial mechanism, whereby they erect a barrier to learning prior to, and during the programme. They effectively say that there will be no advancement in a certain skill area or attribute as this man did:

*Leadership is a quality that I do not possess. I don't think the day improved this quality either, because people like me are just not leaders and I did not wish to lead when doing any of the activities.*

*(Gp4, M, 16)*

Less extreme is the participant who displays a reluctance to get involved in the initial stages of the course. This behaviour only limits the learning that takes place for part of the course. This man explains how he engaged more with the activities as the course progressed:

*At first I was reluctant to get involved in the activities. This was because I really didn't know any of the other members in the group. This made me feel a little bit uncomfortable to begin with. My personality was probably another reason for this because I am quite a quiet and reserved person. As the day progressed so did my involvement and I was much more pleased with my participation at the end of the day.*

*(Gp4, M, 16)*
Moving further along this continuum we witness varying degrees of self-assertion.

From the participant who defers to dominant group members:

*I also noted that I felt after the day I disagreed that I was an effective team leader. This could be as a result of not really getting a chance to lead my team as the more dominant members were more than happy to guide the rest of us for most of the day. This was also partly my own fault as I should have taken more control over my actions and stated that I wanted to lead.*

(Gp5, F, 58)

To the other extreme, where there are those participants who have to dominate the group to the extent that the conventions or rules of the game no longer apply:

*Maybe it was the break for lunch that had caused it but in my opinion the group fell apart. Some of the dominant boys in the team totally took over and the leader didn’t even get a word in. The leader had been the quietest member of the group throughout and she didn’t really stand a chance to assert this authority.*

(Gp6, F, 83)

8.4 EXTERNAL FACTORS

8.4.1 The group

The group itself impacts upon learning outcomes through its size, dynamics (see section 8.3.4. for discussion on personalities) and gender composition. The size of the group is not a completely independent variable since its effect is linked to the type of task engaged in and the course design. However it is a contributory factor in influencing participation levels and type of input. The tent exercise was one in which it was difficult to engage all members of the group. As one man put it:

*I felt that basically there were too many of us in the group to get really involved.*

(Gp4, M, 16)

This was also evident in the abseiling and caving exercises during the first case study when groups were 10-12 members in size:

*One disadvantage of the day that I think was felt by everybody was the group size. Although this could not really be helped the groups were far too big for all the bases. Especially on Rapid Descent and on the Minefield there were not enough jobs to go round.*

(Gp3, M, 69)
There were twelve people in our team and this did cause problems for some of the tasks. For example, when it came to Hidden Gen only eight people were allowed to go in to the cave which meant some team members were excluded, and so didn’t learn anything from the task.

(Gp3, F, 41)

Similarly, opportunities to experience different roles was limited if the group was too large:

Due to the size of our group, not everybody had a chance to be a leader, which I felt was shame as it was definitely a worthwhile experience. However, because there were a lot of people it meant we had more ideas and comments to help us through the tasks.

(Gp4, F, 25)

The composition of the group in terms of the personalities involved also affected the experience for the individual, this individual being in one sense quite fortunate:

I found that our group was very relaxed and there were no barriers to communication. This enabled me to express my opinions freely without fearing any embarrassment or inadequacies, which resulted in my self-confidence improving.

(Gp8, M, 38)

Other individuals were not so fortunate, and faced individuals or groups of individuals with a tendency to dominate, as this female evidently did:

There was a definite leader in our group which could be an advantage but also resulted with friction forming within the group. This particular person made it difficult for me to exercise most of my skills to their full potential.

(Gp7, F, 10)

In both this and the next instance the learning of other members of the group was affected:

Each activity was supposed to have a different leader, who would call the shots. This task, like most of the others during the day, was decided by the three members of the group who all saw themselves as group leader. It was frustrating at times as other ideas put to the group were instantaneously rejected on behalf of their ideas.

(Gp6, M, 59)

Individuals have different perceptions of how the group behaved and the effect this behaviour was having upon the actual group members. Contrast these views from two members of the same group, on the positive side:
Chapter 8: Understanding Learning and Attitude Formation During ODA

As a whole the group worked well as a team, there were no major fallouts as the day progressed and everyone seemed to get on really well together and enjoy tackling the problems.

(Gp4, M, 9)

On the whole our group got on really well even though we were not the most sociable at first. There was hardly any arguing and all were prepared to listen to what the others had to say and we did well in the majority of activities...Another thing I noticed about the group was that most of the group was reluctant to become the leader and take control of the situation.

(Gp4, M, 16)

A completely different view of the situation is given by a participant who was not a member of the dominant subset in group four:

However, I did notice again that it was the more confident members of the group who were doing all the talking and making all the decisions. I remember feeling very left out by now, not because I am not confident but because nobody was listening to me. I felt that people who knew each other within our group tended to stick together and ask each other's opinion, they almost had a group of their own within ours.

(G4, F, 13)

This perspective is shared by two other females in the group, who describe the situation as one in which:

Overall the group did not work well as a team. There was a mixture of people who did not previously know one another. There was also, on the other hand, people who did know each other, but had a mutual dislike towards one another.

(Gp4, F, 71)

I really felt I had to be forceful so I could be included in the activities. A few people already knew each other and at the start of the day they were not very accommodating in involving everyone else. The quieter members of the group found it difficult to participate in some instances. There were some very strong personalities in the group as well, which at times caused conflict.

(Gp4, F, 4)

This type of experience was found in other groups but not in all. Group one experienced a similar situation with the presence of a dominant subset, but here again we have the existence of different perspectives on the same set of events. Compare and contrast these two views:
some of the perhaps weaker personalities, when it came to their turn to be in charge, they were influenced by other stronger personalities, who weren’t afraid to make their views heard.

(Gp1, M, 76)

I felt very lucky to have been put into the group that I was in. Everybody got on very well...our team skills and co-operation were fantastic and from the comments that I heard from other groups they were not replicated.

(Gp1, F, 75)

In summary, the existence of dominant personalities within the group can affect an individual’s level of confidence; the opportunities that they have to participate; exercise skills and influence the process by which task issues are resolved. Dominant personalities, all things being equal, have the effect of diminishing the learning experience of less dominant members of the group.

8.4.2 The task

This study indicates that there are four task dimensions that influence the experience of the individual. Those evidenced are: physicality; risk; degree of participant involvement and the level of challenge afforded by the task. The first, physicality, is a more complex issue than the existing literature would have us believe. The physicality of tasks is: perceived differently by participants and also impacts to varying degrees upon participants according to the roles that they choose to adopt in carrying out the task. For some participants there was insufficient challenge on this ODA event:

My experience on the day was overall enjoyable but I felt slightly disappointed with the lack of physical and mental challenge

(Gp8, F, 65)

For others it was quite the reverse:

It was also quite physical as the stretcher got quite heavy after a while.

(Gp4, F, 13)
I did however find the day to be quite physically tiring, it was a long day from our 8.30 a.m. to our 6pm arrival back at college, and the day did involve a lot of walking up and down hills.

(Gp8, M, 35)

The literature review highlighted perceived risk as a characteristic of ODA. The evidence from participant reports indicates that participants can invest tasks with high levels of risk even when none exist in an objective sense. A short venture of 10-15 minutes into a cave where participants were able to remain standing throughout, produced these comments:

This was my first time in a cave and I found the experience rather daunting. Fortunately with support from the rest of the group, we completed the exercise successfully and I emerged feeling a sense of achievement as a result of coping with the situation.

(Gp6, F, 36)

This exercise [Hidden Gen] did involve risk taking, as there was only one instructor and a fairly large group in the cave. If anything had gone wrong during the exercise, it may have taken time for help to reach us, therefore I was taking a risk but I also had trust in the instructor and other team members to ensure the safety of each of us throughout the experience.

(Gp2, F, 50)

I was quite scared to start with because I hate the feeling of being underground, and I hated the feeling of being stuck in a cave, but I thought I had just as well take part and try.

(Gp5, F, 11)

These examples show that perceived risk increases dependency and promotes group development (see section 6.3.2. for an expanded discussion on this point).

The actual design of a task may limit the number of participants who are able to meaningfully contribute to solving the problem and consequently limits their ability to practise certain skills:

There was little learning in ‘Rapid Descent’ as it only involved three members of the group. However, as an observer it showed that the language used had to be clear in order for the problem to be solved.

(Gp1, M, 84)
Further, although tasks may be designed to develop particular skills only some (not all) individuals within the group will have to exercise these skills, others won't. While it may be possible to approach tasks utilising the whole group, often the group will seize upon an approach which itself limits the number of people who can be involved.

There is no objective view and therefore no objective measurement of the degree of difficulty or challenge involved in a particular task. Perceptions of 'difficulty' varied amongst participants. It was felt that some tasks were 'harder' than others, and that some were more difficult to 'lead' than others. There appears to be a relationship between the level of challenge and degree to which the group absorbed or were motivated by the activity. Participants were quick to put the exercises into 'pecking order', as this man explains:

Other tasks, which as a group we felt were dull, 'Blackdown Survival' and 'Rescue'. Blackdown Survival involved just mental simulation rather than both physical and mental. The group showed very little interest and participation during the exercise. As the team leader of this exercise it was very difficult to motivate the group. I tried my hardest to encourage responses to the questions, but the group was not interested. As for 'Rescue' we were convinced that it was a difficult task. However, to our disappointment, it was very easy, thus, again diminishing group morale.

(Gp6, M, 59)

Certainly, there seem to be a consensus amongst participants that the 'best' tasks were the ones that afforded the greatest challenge:

The remaining tasks proved to be a great success, due to the fact that they were both mentally and physically challenging and required the participation of the entire group at some point during the exercise.

(Gp9, F, 29)

8.4.3 The consequences of failure

One of the characteristics of ODA is its ability to generate learning in a safe (both physically and emotionally) environment, i.e. that there are no adverse consequences for the individual should they fail. This encourages experimentation and discovery. However, there sometimes needs to be an adverse consequence resulting from failure, in order to motivate groups to engage with a task in a
meaningful way. This was recognised by the participants themselves. Reflecting on the Swamp exercise, participants commonly produced analysis along the lines of:

*The main problem with the exercise was its simplicity hence it was not really taken seriously. It should have been understood that a real situation, could have meant life or death and that our approach with no planning was just not an acceptable way to undertake the exercise.*  

(Gp6, M, 8)

*Minefield ... but if this particular activity was really life threatening, I would have thought about it a lot more before attempting to solve it.*  

(Gp7, F, 10)

*The swamp crossing involved no swamp and without the realism the team didn't take it seriously enough.*  

(Gp2, F, 86)

The following participants indicate how the lack of serious consequences for failure impacted upon the way in which the exercise was conducted:

*If there was a danger that we would actually fall into the swamp, the reviewing stages would have taken longer and the optimal solution discovered sooner. The lack of reality encouraged us to rush the decision making process.*  

(Gp2, M, 46)

*As it wasn't an electric fence, group members were not concerned with the consequences of touching it. This in turn, contributed to an uninterested group who found the task pointless.*  

(Gp4, M, 121)

The concept being developed in this study is this that serious consequences as a result of failure will affect the process by which the task is attempted and secondly, influence the learning outcomes of participants.

### 8.4.4 Opportunity to experience new situations.

While ODA tasks generate learning opportunities there is no guarantee that individuals will experience the necessary situations to develop every aspect of their management or problem-solving skills. For instance:

*Generally there wasn't a great deal of conflict in the group so this didn't really help me to change my views on the skill of resolving conflict.*  

(Gp4, M, 16)
Opportunities can be viewed as either organised or spontaneous. By organised we mean created for the individual. For instance, when an individual is assigned the leadership role within a group, they then have the opportunity to practise certain skills. In a spontaneous situation this opportunity is seized. The following student shows how he compensated for the lack of organised opportunity by grabbing spontaneous ones:

I feel that I lead the team effectively as we solved the problem, however it needed little leadership skill, because only three members of the team participated. I did find myself in some activities becoming a joint leader, because the person elected to lead did not want the responsibility.

(Gp1, M, 65)

However, opportunities of either type do not guarantee take-up by course participants. This student reflecting upon the lack of change registered on her personal benefits questionnaires said:

Therefore I justify this no change in skill by the fact that I did not take the opportunities provided on the outdoor trip to improve my decision making skills.

(Gp3, F, 51)

The length of the course, but probably of more significance, the number of times a participant is exposed to a particular learning situation, will influence the uptake of ideas. 'Success' as leader may be a hit or miss affair or linked to experience relating particularly to the leadership task. Tasks may require different leadership styles. Participants need more opportunities to practise effective leadership. Being a leader only once, did not allow lessons learnt to be put into action second time around. This element is linked to the debriefing factor as explained by the following student:

Throughout the day we gave feedback to the leaders of the group after each activity, and also received feedback from the instructors concerning the leaders and the groups participation. This proved extremely useful as you're getting someone else's views on how you performed, this, therefore gives you the chance to improve for the future. That is why it would have been beneficial if you could have taken charge of more than one activity, as you could have used the
advice from the previous activity and applied it to the next problem solving activity.

(Gp1, M, 79)

On a short course there may be insufficient opportunity for the active experimentation stage of the Lewin/Kolb Learning Cycle to be enacted. The comparison this student makes with a longer course she had experienced supports this argument:

I have been on days/courses like this before 3 or 4 times with my previous employer. They were run over a weekend or a week away. I always found them particularly helpful and felt I had developed skills and achieved something by completing them. I felt that this was due to the fact that they were run over a longer time. We had longer to get to know everybody and developed friendships and a team bonding. Also as the tasks were more complex you had to rely on each other a lot more and I felt this was a good thing.

(G4, F, 13)

In conclusion, opportunities can be manufactured by the OMD provider but take-up is the responsibility of the participant.

8.4.5 Sequence of Events

The order in which tasks are tackled can have an individual and a group effect. For the individual it can impact upon his/her confidence and has repercussions for the duration of the course. For the following participant, responsibility came too early in the course, with negative consequences:

But unfortunately, here on the very first test I found my self-confidence was actually much lower than I first thought. When faced with the challenge of speaking on behalf of everyone else and being responsible for the direction we took, I was not actually willing to take the risk.... My lack of willingness to provide the information that I had, was actually quite demoralising afterwards.

(Gp4, M, 6)

The same participant suggests that personal outcomes could have been very different had the tasks been in reverse order:

Despite the fact that I am actually slightly scared by heights I really wanted to get up on the mountain and do some abseiling. I felt that I had missed out on a few chances to take the team forward during the day when I could have really helped. So now was my chance to really take part. It is a shame that this came last and not first of all because if
I had done this at the beginning of the (day) I feel that my confidence would surely have improved.

(Gp4, M, 6)

Others found the leadership function particularly difficult if they were expected to lead on the first task that the group encountered:

When we first started the tasks no one knew each other, this made leading a group of people they did not know very awkward.

(Gp4, F, 25)

This example suggests a clear linkage between task sequence and opportunity for the individual. Some students were of the view that the order of the tasks was important due to the intrinsically-demanding nature of particular tasks. The electric fence with its demands on team working was seen as particularly difficult:

Starting with the least group-oriented task, the abseil and ending in the most, the electric fence. I think that this is extremely important, as having to start the day with the 'electric fence' would have been a different matter.

(Gp1, F, 75)

If this activity [Electric Fence] had been first I think we would have encountered difficulties due to the planning elements and close physical contact involved.

(Gp1, F, 18)

In contrast, the Blackdown Survival exercise was seen by this man as a good starting point:

The first activity that we encountered was the Blackdown Survival. This was perhaps the best activity that we could have hoped for the first one of the day. The reason for this is that, being a discursive activity; it allowed us to get to know each other slowly.

(Gp6, M, 16)

However, as the following report shows there is no consensus on this issue. While some saw it useful to progress to more demanding tasks, others saw challenging physical tasks as an ideal icebreaker, and a catalyst for forming relationships within the group:

I feel that the most critical incident of the day came in the order that we did the group initiative projects. This is because we were presented with the two that needed the most physical contact and planning first. We didn't really know each other very well but the fact
that we had to get so close to each other and communicate with each other so early in the day really broke the ice and set us up as group for the rest of the day...After completing these tasks and in particular after having to physically pick each other up meant that everyone was able to trust each other for the remainder of the day.

(Gp11b, M, 4)

8.4.6 Level of participation

The enjoyment and benefit of ODA to the individual participants is greatly influenced by the extent to which they immerse themselves in the activities. The degree of participation is influenced in turn by both internal and external factors. Shyness can reduce personal involvement and the degree of learning which takes place, as this woman recorded:

From the three questionnaires I can see that my overall opinions hardly altered at all. This doesn't surprise me as throughout the day I kept feeling that I wasn't part of team. I think this is because I am quite a shy person who prefers to work alone. I tried to involve myself in some of the activities but my lack of confidence held me back.

(Gp7, F, 67)

Others achieved the same effect simply by taking a laid-back approach to the day:

I found that in the majority of problem solving events I was quite happy to let others take over and complete the challenges with a minimal amount from myself.

(Gp4, M, 9)

External factors such as group size and task design may also limit the individual's input. Contrast the following two experiences on the abseiling task. This task had a design fault in so far as only part of the group have active roles to play:

Rapid Descent, was my favourite of all the activities, probably as it was the one that I was most highly involved in.

(Gp1, F, 68)

Then all the others (excluding the three involved) had to watch the quite slow and tedious process. Almost everyone lost interest which to me shows that a group must ensure participation from every member no matter how insignificant it may seem it is very hard to stimulate interest after losing it.

(Gp3, F, 19)
However, active participation is not a prerequisite to learning as the following extract concerning the same task indicates:

This activity was the one that I felt least involved in but learnt a lot from. I was unable to partake in the activity as I had a back injury but this allowed me to take an observational role in which I was able to stand back and see how the group were working.

(Gp4b, M, 8)

As noted earlier, there can also be a 'crowding out effect' that achieves a similar outcome to poor task design. In this instance the group or leader organises the 'solution' to the problem in such a way that some members of the team are given limited roles to play or are excluded altogether.

8.4.7 The leadership role

It is difficult to overestimate the significance of the leadership role within the learning experience (see also the discussion on critical incidents). It heightens the experience of the task as well as affording the individual the opportunity to engage with a whole array of skills that are not necessarily practised as a team worker. The task of leadership is also seen as more challenging than simply being part of the team. This report is typical, describing the effect the leadership role had on the individual concerned:

This was the first activity we completed and was one which had the biggest influence on my individual development. As it was our initial task no one really knew each other and the group seemed apprehensive as to what the day involved. I volunteered to lead the group through this activity. I found it challenging as I knew no one's name and felt uneasy delegating to individuals I did not know at all. However, the group responded well to what I asked of them, in what was one of the most challenging activities of the day...I realise that I could have done better although I was pleased I had the confidence to be the only volunteer of the day's first activity which proved to be the hardest time to lead the group....My self-confidence increased a lot by leading this activity, I feel it helped set me up to contribute my opinions throughout the day.

(Gp7, M, 45)
Not only do the individuals see themselves measured against the success of the group in relation to the task but there is also a peer assessment at work that acts as an additional motivator:

*because our group had been successful throughout the day I felt that I needed to succeed. This is true in most leadership situations; if you take control of a situation the there is certain expectancy by the group.*

(Gp7, M, 74)

The programme was designed so that each participant would have an opportunity to experience the lead role for one of the tasks. All the participants did not look upon this prospect favourably. It obviously created anxiety for some, as the following extracts illustrate:

*Being a team leader terrified me and trying to defer being leader was to be my personal task for the rest of the day.*

(Gp1, F, 21)

*On completion of the task I felt a huge relief, now I could relax and enjoy myself.*

(Gp1, F, 21)

In conclusion, the degree an individual participates during the ODA programme can only be influenced to a limited extent by the course/task design and the level of compulsion to be physically involved or to adopt specific roles. While the providers can engineer opportunities it is up to the individual to seize them. If there is a 'let-out' clause in any shape or form some individuals will take the easy option:

*I didn't go down the cave, there was only a certain number that could go down, plus I wasn't too keen on going into the cave.*

(G4, F, 88)

### 8.4.8 Level of team development

As the course progresses the expectation is that individuals will develop better problem solving and team working skills. Early tasks will act as a basis for reflection and the subsequent development of new and more appropriate methods of working, which can then be experimented with on later and subsequent tasks. The level of
team development should therefore influence performance and hence the experience of performing given tasks. These participant reports show evidence of such an improvement in group performance as the day event progresses:

However once we got to know each other we felt more confident to express our opinions, I certainly felt a little apprehensive at the start but became much more confident towards the end of the day, we certainly began to perform the tasks much better as we got to know one another. Our performance as a group improved as we learnt what was expected of us in each activity. We began incorporating the ideas we gained from the feedback session into the subsequent activities, again as I mentioned we were told early on that we didn’t plan a certain activity well, so we took this suggestion and used it for the rest of the day.

(Gp8, M, 35)

The team leader did not take control because we all worked as a team so did not need any directions.

(Gp4, M, 9)

However, group development is not linear, or even in some instances, guaranteed. These two groups failed to perform as well as expected as they drew towards the end of the ODA event:

I think that the group should have worked better together on this task than we actually did as it was one of the last tasks we had to perform as a group, and therefore we should have had a better group analysis.

(Gp6, M, 59)

I felt very disheartened at this stage, it was our penultimate task and it showed we had learnt nothing from the day, if only we had listened to the Instructors and taken their comments on board as the same comments kept being told to us each time, more listening and planning involved.

(G4, F, 13)

This is a crucial point. It establishes that barriers to learning do exist and that progression through the Lewin/Kolb learning cycle is not automatic.

8.4.9 The comfort factor

The ‘comfort factor’ (mainly an external factor, but the individual’s past experience and propensity for such events also play a part) influences perceptions prior to the event:
The group was really concerned about the discomfort factor and the use of words like Swamp Crossing invoked some fear within the group.

(Gp7, M, 100)

It also affects the mood of participants during the activities and their enthusiasm to engage with the learning process. Cold, hunger and tiredness are all elements affecting the 'comfort factor' and each is highlighted in the extracts below:

The problem with this task was that people were getting cold because we were sat on open land and this in turn made them lose interest. Weather conditions clearly have a knock on effect with the group performance.

(Gp3, F, 19)

I don't think anyone had realised how cold it would be up on the hills. I feel that if everyone had been wrapped up warmer, the whole day as an exercise would have been more successful, as the activities were not very physical in the slightest, well not enough to keep everyone warm.

(Gp5, F, 11)

People were hungry at this stage. Motivation was suffering and lack of interest creeping in.

(Gp3, F, 73)

8.4.10 The level of provider/purchaser input

The tenth and final external factor to be identified was the level of input by both provider and purchaser organisations. The course provider has significant influence on learning outcomes by virtue of both course design and in how effectively the course is operated to achieve maximum learning opportunities on the actual day. In conjunction with the purchaser, the provider is responsible for setting the ground rules for the event. In this case the format was one of non-competition between groups (see Ibbetson 1997 for discussion on effect of formal competition between groups upon learning outcomes). However, even with no competitive framework there was informal rivalry between groups, with some trying to improve upon the performance of other groups:

Although there was no time constraint we wanted to compare our time with other groups to see how successful we were.

(Gp2, M, 102)
The provider or the purchaser organisation also has to take a decision with respect to group formation. Composition of the group by random selection of individuals produces different group dynamics compared to allowing friendship groupings or work teams to operate together. Similarly, a decision has to be made regarding the leadership of these groups throughout the day. In this case study, the protocol was imposed upon the groups in order to rotate the leadership. This appears to have been successful. As one participant put it:

For each exercise we had been told to change the leader therefore resulting in there being no overall group leader, instead we each took a turn. I feel that this was to be of great benefit for our group as the day progressed, because we had a considerable amount of our group that appeared to be natural leaders, therefore avoiding the possibility of bickering and ill feeling amongst the group.

(G1, M, 27)

Once the course is underway, the provider is responsible for the strict application of the rules governing each activity. This forces the participants to take the activities seriously, reduces the incidence of cheating and the participants ability to 'take the easy way out'. The provider is also responsible for the quality of the course team and their ability to modify the tasks to maximise learning. For example, taking cognisance of the prior experience of the group and making the task suitably difficult for that particular group. This was practised on the event, and in at least two cases groups faced modified tasks:

as three people, including myself, had completed the same activity in the past. However, the instructor caught on with this fact and made the rest of the team solve the activity without any help from those who knew the solutions.

(Gp5, F, 58)

One member of the group knew how to complete this activity and immediately set about organising everyone. His actions were stopped by the instructor, so making the problem more challenging for everyone else.

(Gp7, M, 100)

The activities may also have been set at an inappropriate level of difficulty. For instance in the case of the Escape exercise:
In conclusion, the contention of this study is that the term 'concrete experience' does not fully capture the range of internal and external factors which a participant experiences during the task or activity stage of the ODA event. The term lends itself to an understanding of this stage as being uniform and consistent between participants, an understanding that is not shared by the participant reports from these two case studies. These reports indicate that participants do not share the same experience of a given 'event'. Different groups may experience differences in the ten external conditions in the operation of a given task, while members of the same group will perceive the task differently, depending upon variations in the four internal factors discussed above, namely, initial mindset, personal agenda, own personality and past experience.

8.5 THE REFLECTIVE STAGE

The reflective or second stage of the Lewin/Kolb Learning Cycle (Kolb et al 1971) may also consist of several elements (see Figure 8.2). On a typical ODA programme, there will be a post-activity review (see Chapter Seven) and an end-of-course review. Participants regarded these as important to their reflection on the activities undertaken. Additional influences were the instructor, other members of the group and the impact of the research tools used. This research therefore needs to take cognisance of the effect of the additional research and review methods employed upon the participant learning outcomes and the emphasis placed upon the 'reflection stage' in these particular ODA events.
The post-activity review takes place immediately after the completion of a task and is intended to draw out and reinforce the lessons that can be learnt from the task experience. The debrief experience is determined by the instructor and the role adopted by other members of the group.

The quality of the debrief is highly dependent on the individual instructor and despite the use of a common debrief format in the second case study (see Chapter Seven for discussion on both of these elements) participants were able to discern differences in the debrief experience:
The feedback from the sessions varied greatly from a quick chat by the instructor on how the group had done and a congratulation to a full debrief involving questions and answers being asked of the group to make us think about the problem. The best debriefs done were from what seemed to be the more confident and possibly more experienced activity instructors. These debriefings showed our developments as a group through the exercises and provided positive analysis.

(Gp7, M, 100)

During the debrief, the instructor’s role involves: drawing attention to negative aspects of group/individual behaviour or actions; questioning; praising and encouraging the group in order to draw out the potential lessons from the preceding activity:

It was only afterwards, when the instructor asked the group ‘what kind of planning did you do before entering the cave?’ That I realised that we hadn’t.

(Gp4, M, 6)

I found although we successfully completed this task in record breaking time, we did not fully understand the principles behind it and the processes involved. My growth on this activity came through the feedback stage.

(Gp5, M, 30)

The generation of positive or at least constructive feedback acts as a morale booster and increases self-confidence while providing a ‘neutral’ or objective view of the task experience was a function that was highly regarded by participants:

The feedback at the end of the exercises I felt was very worthwhile, because it gave you the opportunity to listen to the views of someone outside the group, giving a neutral opinion as to the groups ability and weakness. This allowed us to look at our work and be pointed to our weaknesses and strengths allowing us to use this information to effect later on.

(Gp1, M, 27)

The debrief was seen as a valuable tool in its own right and separate from the preceding activity:

Although I did not enjoy the activity I did appreciate the feedback we had received and the importance of the topics we had spoken about.

(Gp3, F, 73)
The value of the debrief as a tool for learning is also dependent upon the participation of group members and their willingness to be critical of themselves and others in a positive way. Too little criticism was seen as unproductive:

As a group we tended not to criticise enough, this maybe down to not wanting to make enemies whilst on the trip and also to have nobody over criticising when your turn comes along.

(Gp1, M, 79)

While really negative feedback can have a demoralising effect. This female participant was particularly upset that the rest of the group and the instructor were not appreciative of the difficulties she had faced and the effort she had put into the task:

I noted a drop in my opinion of having effective leadership skills from 'somewhat agree to unsure'. I think that if I 'd had more support in the feedback session I would have been more confident for the future but I just felt that I had let my team down and they let me down... I have however, learnt from these mistakes and am now a lot more conscious of their importance within problem solving.

(Gp6, F, 83)

In the same way as there is 'team development' there is also a development process at work within the review or debriefing stage. Early on in the programme there is a lack of willingness to criticise (see above) and it is possible that this would not happen in the later stages of a longer course, after participants have become more at ease with one another. The impact of course duration upon the salience of the review process is a subject for future research as is the time allocated to the review stage.

In addition to the factors discussed above, these ODA events also had the additional element of being the subject of investigation. Researcher intervention in the process manifested itself in several different ways.

In an attempt to control the quality and provide a uniform experience, the debriefing followed the same pattern after each exercise. Consequently, students complained of the 'monotony' of the questions and the debriefing session suffering from diminishing returns. Similarly this procedure did not allow any discretion or autonomy to the
instructor, a situation that is not a true reflection of commercial ODA courses. The use of the researcher's task questionnaires produced a similar response: 'This process grew tedious after the fifth activity' (GP2, F, 54).

This intervention affected the immediate post-activity review. The researcher's personal benefits questionnaires had a more positive impact on reflection in the longer term, by provoking greater consideration of the issues involved:

The answers I gave on the two (T2 & T3) questionnaires were quite different from the first. I feel that I was being far more realistic and honest with regard to my information gathering/planning/problem solving and time-management skills. I realised that the answers that I had given to begin with weren't based upon any solid experience, they were just my ideas and feelings put onto paper without any forethought. I look back on my questionnaire results now and realise that in my everyday college and working environment problems are constantly appearing in many shapes and forms. But how I look at them and deal with them will always vary. However, I have become more aware of the need to address problems in a systematic and orderly way rather than rushing head first into the problem. 

(Gp6, F, 33)

I think the questionnaires do relate to how you feel before you go on the ODA and how you feel about yourself after it. By completing them it helps you realise your strengths and your weaknesses. They are a valuable part to completing the ODA day.

(Gp3, F, 73)

In conclusion, I did not feel that any one task related to any one particular skill, but they all taught you about how to use the different skills of each team member and when to use the skills. At the time I felt that some of the tasks were too easy and some were not as beneficial as others, but looking back at them and with the use of the questionnaire I think that I have learnt a lot about myself and how I react to different situations. The questionnaire in particular helped me, by making you answer questions about yourself it makes you think about your character and personality.

(Gp9, M, 60)

The duration and emphasis placed upon long term reflection as opposed to the immediate post-activity debrief, also increased through the writing of the individual report post ODA event.
In summary, the learning which takes place during the debrief is affected by a number
of elements. In a similar manner to the 'concrete experience' stage of the learning
cycle, these elements may vary between groups (different personalities), between
tasks (different instructors) and between courses (different research/theoretical
input). In total they produce potentially different learning experiences for each
individual.

8.6 THE LEARNING CYCLE AND ODA

ODA practitioners have adopted a simplistic version of the Lewin/Kolb Learning Cycle
as the theoretical underpinning for their programmes. The learning cycle provides the
rationale for the task/debrief format and the provision of further tasks upon which to
experiment with new theories and approaches. The discussion in this and preceding
chapters develops our understanding of the learning that takes place during ODA by
indicating the range of factors that influence learning within both the concrete and
reflective stages of the learning cycle. Furthermore, the evidence from this study
indicates that learning in ODA programmes is not inevitable.

This inability of the team as a whole to think out the problem was one
which persisted throughout the day. It was clear that we preferred to
go straight into trying to carry out the task without weighing up the
option.

(Gp2, F, 57, my emphasis)

Why don't individuals learn? There is considerable evidence that individuals are
aware of what is wrong within their group but groups still persist in being
dysfunctional. There does not appear to be an automatic progression from one stage
of the learning cycle to the next, as ODA practitioners seem to think. For some
reason/s groups are unable either to formulate new theories (stage three) or put
them into effect (stage four).
Why barriers to learning exist and what forms they take are topics for future research. The author believes that two of the principal barriers to learning in the ODA events observed were: lack of difficulty/challenge posed by the tasks and the lack of serious consequences resulting from any failure by the group. The learning that does take place is particular to each individual. This accounts for the range of experiences that ODA provides for participants and the controversy within the existing literature. While ODA may alter some participants' perceptions of their own skill levels, the exercises also serve to further consolidate and confirm opinions and ideas regarding personal skills for others. For a further group of participants, it may leave them feeling after the course that their true set of skills and attributes was indeed inferior to that which they initially believed they possessed.

The quantitative and qualitative data collected focused upon the perceptions of participants. The evidence presented suggests that ODA programmes in addition to affecting participants' knowledge also alters their attitudes regarding their own skill levels and their awareness of self and other people. The data indicates that not only does learning take place within the OMD course, as witnessed by changes in the participant between tasks, but also as a result of the cumulative OMD experience.

8.7 SUMMARY
This chapter attempted to integrate the several themes discussed in the thesis in an effort to develop a greater understanding of the processes at work during ODA programmes. The key idea to emerge from the data is that ODA practitioners have, by simplifying the Lewin/Kolb Learning Cycle, produced a misrepresentation of what actually happens during the course of an ODA programme. The early stages of the cycle, the concrete and reflective stages are both made up of many internally and
externally influencing factors. Such is the make-up of these factors that course participants effectively undergo an individual learning experience.

Learning on ODA is not automatic and barriers to learning exist. The study proposes that the lack of challenge and insufficient consequences for group failure are two of these barriers. Progression through the Lewin/Kolb Learning Cycle is therefore not inevitable and is not as mechanistic as proposed by ODA practitioners. In revealing the variation in learning experience and consequent learning outcomes during ODA the study contributes to our understanding of the controversy surrounding ODA as a tool for personal development.
CHAPTER 9

CONCLUSION

9.1 Introduction 9-1
9.2 Major Findings and Contributions to Theory 9-2
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9.5 Opportunities for Further Research 9-7
9.6 Final Thoughts 9-6
CHAPTER 9: CONCLUSION

9.1 INTRODUCTION

The thesis began by demonstrating that ODA is a term that embraces a very diverse range of programmes reflecting a broad spectrum of philosophies and utilising many different types of activity. This presents the researcher with a major difficulty - the ability to make valid general inferences about this type of personal development provision through the study of individual cases. Ibbetson (1997) and Dainty and Lucas (1992) attempted to deal with this problem by formulating a 'typology of provision' and trying to identify different learning outcomes with different types of provision. However, the processes by which these diverse outcomes are produced had yet to be uncovered. This formed the starting point for this thesis.

An ODA programme was devised to incorporate the characteristics common to the majority of ODA (as discussed in Chapter Two). This programme was operationalised in two separate case studies with a total of nearly two hundred participants. Using both quantitative and qualitative data gathering techniques an attempt was made to investigate eight research propositions (outlined in Chapter One).

This final chapter of the thesis outlines the major findings and contributions to theory that the study makes (section 9.2). It then explores how these may contribute to improvements in the practice of ODA in section 9.3 before analysing the limitations of the study in section 9.4. In conclusion, opportunities for further research are indicated.
9.2 MAJOR FINDINGS AND CONTRIBUTIONS TO THEORY

Chapter One identifies eight propositions upon which the research study is based. This section summarises the research findings with respect to each of these propositions and indicates the contribution that the thesis makes to existing theory.

Proposition 1: Participants will identify benefits in narrow and broad skill areas only; there will be no improvements in self-awareness and awareness of others.

The first major finding of the study is that the one-day ODA intervention was successful in producing positive change in participant perceptions of their skill/attribute level in a number of specific areas (i.e. decision making; time management; overall problem-solving abilities; leadership; self-confidence; managing or resolving conflict; co-ordinating team activities; delegating and encouraging and supporting others). Previous research by Dainty and Lucas (1992) suggested that this type of ODA programme would produce benefits in the areas of narrow and broad skills (as defined in Chapter Three) and would not improve self-awareness and awareness of others. While the aggregate quantitative data supported this proposition the qualitative data in the form of participant reports indicated that self-awareness and awareness of others had indeed improved for a number of participants.

Proposition 2: The perceived overall benefit to the participants will exhibit a 'euphoria effect' but gains will not be sustained beyond the end of the ODA intervention.

Previous research by Ibbetson (1997) had been conducted on programmes of two and a half days duration. Participants on these programmes had evidenced a prolonged benefit from the development activities. It was postulated that on these
one-day programmes participants would perceive an immediate overall benefit but
that this 'euphoria effect' (see Chapter Three) would not be sustained. The
participants did record an immediate personal benefit from the ODA programme and
this benefit was sustained in a number of skill/attitude areas (outlines above) for the
duration of the research study.

Proposition 3: The participants' personality type (as defined by the Myers
Briggs Type Indicator) will have no impact upon their
perception of personal learning outcomes

Chapter Two outlined the Lewin/Kolb Learning Cycle which is cited as the underlying
theory informing the majority of ODA programmes and is itself heavily influenced by
the Jungian theory of Personality Types. During the process of learning the
participant requires skills in the four areas of experiential learning, namely: concrete
experience abilities; reflective observation abilities; abstract conceptualisation
abilities and active experimentation abilities. Jungian theory of Personality Type
indicates that participants would be predisposed towards particular learning modes
dependent upon their 'Type'. No previous research had been conducted within the
context of ODA as to which personality type would benefit the most from the
development activities. Since Kolb (1984) regards each of these learning abilities as
equally important in the learning process it was postulated that Personality Type
would have no impact upon the participant's perception of their learning outcomes.

The study showed that personality type, as measured by the Myers Briggs Type
Indicator, was related to learning outcomes, but the influence was confined to the
impact of the extraversion–introversion dimension. Participants indicating a
preference for extraversion indicated higher scores on the personal benefits
questionnaire at each of the three time periods (T1, T2, T3). This indicated a higher
initial self-evaluation, a perception that persisted throughout the study. However, it
was the participants with a preference for introversion that indicated a higher degree of change in personal benefits as a result of the ODA intervention. It was significant that this was recorded for the longer time period T1 to T3, not the immediate reaction time of T1 to T2. One interpretation is that those displaying a tendency for introversion need to internalise the experience and reflect upon it before registering a change in attitude.

Proposition 4: Gender will have no impact upon perceptions of learning outcomes.

The quantitative and qualitative data collected supported the proposition that gender had no impact upon perceptions of learning during the ODA programme.

Proposition 5: The degree of physicality/risk affects perceived learning outcomes.

One of the defining characteristics of ODA as a form of personal development is the use of activities based upon 'outdoor pursuits' in order to generate stress and create an effective learning event (see Chapter Two). It was postulated that the degree of physicality/risk associated with a task would affect perceived learning outcomes. The analysis of task design indicated that participants did perceive differences between activities with respect to the learning outcomes forthcoming from each. However, these differences did not correspond directly with the physicality/risk dimension. The dimensions present in task design that promote learning in the individual were identified from qualitative analysis of participant's reflective accounts of their ODA experience as: challenges which required group participation; the creation of trust amongst group members; exposing the processes of team-working; providing the opportunity for the exercise of leadership; fostering problem-solving skills; showing
cause and effect. All of these results were achieved in a very short time frame. What becomes increasingly apparent from the participant accounts is that despite the fact that these task features are present for all participants the saliency of each of these factors is different for each participant.

Proposition 6: Debriefs undertaken in the 'process review style' impact most on participants' perceived learning outcomes.

The study verifies the importance of the debrief within ODA and indicates the mechanisms that can influence the power of this stage within the learning cycle. The debrief forces evaluation of the task, it allows the exploration of different perspectives and facilitates change. Through the debrief participants see a common thread linking disparate activities. The importance of the debrief lies in its very existence, rather than whether it conforms to a particular format. Neither the quantitative or qualitative data supported the proposition that 'debriefs undertaken in the process review style impacted most upon participants' perceived learning outcomes'.

The role of the facilitator/instructor is pivotal in making the debrief significant to the learning process. Participants place such importance upon this point that it emphases this role as the primary function of the facilitator. The ability to manage the review process, modifying it to fit the stage of group development and any incidental learning which might have occurred, are necessary elements of that function. It was noted that operational issues may impinge upon the ability to conduct satisfactory debriefs.

Proposition 7: Critical incidents in the ODA experience will relate to high stress events.
Much is made in the literature (see Chapter Two) of the ability of ODA to produce stress within the individual and that stressful events become defining moments on the ODA course. It was postulated that critical incidents would therefore relate to high stress events. Nearly three quarters of the participants in the second case study experienced a critical incident during the course of the ODA programme. These were diverse experiences and individual in nature. They involved a diverse range of elements, including: adopting a leadership role; overcoming fear; reflecting upon events (including the debrief session); success or failure as a team; informal moments; the development of trust; group development; the role of dominant personalities and incidental occurrences. Only in a small minority of instances did they correspond to the high stress events reported in the literature. This suggests that while tasks and debrief formats can be manipulated, whether they combine to produce a critical incident for the individual is a chance occurrence, and dependent upon the individual concerned. Secondly, the precise nature of the learning that comes from these critical incidents is also specific to the individual involved.

Proposition 8: The model of learning adopted by ODA practitioners does not accurately reflect the participant's experience on short duration courses.

The findings relating to this proposition are perhaps the most significant of those reported and make the major contribution of the thesis to theory. Firstly, Chapter Two indicated that ODA practitioners have oversimplified the model of learning that seeks to explain the processes that take place during experiential activities. Essentially, learning is seen as a four-stage cycle (based on Lewin/Kolb) through which participants are led by the course tutor in a mechanistic fashion. The relationship between these four stages of the learning cycle and ODA course design is illustrated
in Table 2.1. By viewing learning as a series of outcomes and the process of learning as deterministic, ODA practitioners are able to perceive of ODA courses as input-process-output models of personal development. In such a model learning outcomes can be predetermined.

However, it is the contention of this thesis that such a view of the learning process is both misconstrued and is responsible for much of the controversy over the efficacy of ODA as a tool for personal development. The findings reported in Chapter Eight indicate that contrary to Tuson (1994) the learning process during ODA is not cyclical and participants are not moved through the process several times. Participant reports evidenced non-learning, incidental learning and most importantly that the reflective stage of the learning cycle was both prolonged and took place outside of the debrief phase of the course. Participants are rotated through the ODA tasks but not necessarily through the learning cycle between tasks.

Secondly, Chapter Two outlined generic concerns with the constructivist view of experiential learning (including Kolb). Constructivists have been criticised for over-emphasising the individual side of learning and ignoring social aspects particularly the role of the educator in adult education (Malinen 2000). The findings reported in Chapter Seven indicate the central role of the educator and challenge the view of the learner as a unitary-self, able to reflect unproblematically on the learning process.

Thirdly, the assumption of constructivists that learning from experience is an intentional act ignores the additional evidence that much incidental learning occurs during ODA. Additionally, some participants self-reported their resistance to learning during ODA, an area that is ignored by Kolb.
Fourthly, critics of the constructivist stance argue that the reflection processes cannot be separated from some sort of event called 'experience', that the dichotomy between experience and reflection is fallacious. Participants, who had previously taken part in other ODA programmes, shed an interesting light on this issue (see Chapter Eight). Their preconceptions influenced their experience of certain events within the ODA programme. Not only did they interact with the event in a different way to other participant but they also influenced the experience of the event for others in their group.

Fifthly, constructivists are also criticised (especially by psychoanalytical theorists) for over emphasising the role of reflection in the learning process and ignoring the role of 'desire' as a motivating force. The primacy of the reflection stage has been alluded to several times already. However, the role of desire is underplayed. Participant reports indicate that it is a motivator and that the participants' agenda on encountering the ODA course influences both participation levels and learning outcomes.

Finally, the thesis attempts to draw upon participants' reported experience to unlock the diverse range of factors that make up the concrete and reflective stages of the learning cycle during ODA (see Chapter Eight). While these factors are highly contextualised in this study, they nevertheless attempt to fill avoid left in Kolb's work. The forgoing discussion has implications for the practise of ODA and these are the focus of the next section.

9.3 CONTRIBUTIONS TO PRACTICE

The design of the two ODA events produced learning outcomes that were contrary to the model proposed by Dainty and Lucas (1992). Self-awareness was also generated in the ODA tasks that spanned quadrants 2 & 4. These programmes produced
evidence of positive outcomes in self-awareness and awareness of others, in addition to the anticipated improvement in a number of 'broad and narrow skill' areas. This outcome indicates how difficult it is to predetermine specific course outcomes. However, benefits to the participants were sustained beyond the initial 'euphoria period', indicating the efficacy of the ODA intervention even in such a short time-frame.

The research is of practical value since it enhances existing knowledge of ODA programme design and its effects upon the participant. The primacy of reflection within the learning process has been highlighted and the pivotal role of the course tutor/instructor in enabling this to take place has been emphasised. This requires that providers should engage in considerable staff development to ensure that the course instructors/facilitators are able to maximise learning through the conduct of appropriate debrief/review sessions. Furthermore, given the findings that the reflective stage is extensive and exists beyond the debrief session, participants would benefit from the use of reflective devices, such as questionnaires, reports and log books. These bring out the lessons of ODA and increase self-awareness by charting the changes in the individual's attitudes. Use of such devices would enhance the efficacy of ODA programmes and help the transfer of knowledge back to the workplace.

Providers need to ensure that programmes consist of tasks with diverse physical challenges requiring team, rather than individual, participation for successful completion. This takes cognisance of the findings regarding the range of factors that influence learning in addition to the high stress/high risk element alluded to in the literature.
The role of desire in the learning process needs to be taken into account. This is an aspect that providers have to address. Participants vary in their preparedness to engage in the ODA programme. The efficacy of such an intervention requires participants to be prepared for the event, supported through it and shown the relevance of the programme to them as individuals.

9.4 STUDY LIMITATIONS AND OPPORTUNITIES FOR FURTHER RESEARCH

The usual critique applying to case studies and the difficulty of making valid generalisations from such studies was alluded to in the introduction. While the researcher has justified this approach in the context of the present study it is recognised that theories put forward gain further support should they be evidenced in the context of additional programmes.

There are difficulties inherent in trying to operationalize the concept of 'Personality' and utilise it for research purposes. The Myers Briggs Type Indicator provided a well-documented and reliable instrument that could be easily administered by the researcher after appropriate training. However, with sixteen personality types, it would require an extremely large sample to draw valid conclusions about 'Type' as opposed to the four bi-polar 'Traits' and its impact upon ODA learning.

The research has relied upon perceptions of self at both a quantitative (questionnaire) and qualitative (report) level. As Ibbetson (1997: 165) indicates:

Although perceptions of self are considered important in development contexts, they nevertheless pose problems of systematic bias due to the possible distortion associated with the 'rose tinted spectacles' syndrome.

To overcome this problem, future research might consider a 360 degree approach, where data are collected from participants' peers, family and friends as well as
themselves. While this approach would provide a more complete and accurate picture of the behavioural changes which have taken place it is a technique requiring considerable time, effort and resources to administer and may also pose problems of access to appropriate numbers of research subjects.

Existing research contains few in-depth analytical studies. The field is therefore fertile for further investigation in almost any quarter. The difficulty of isolating and testing specific variables, in the positivist tradition, has been eluded to already. Such an approach is fraught with difficulties and loses sight of the holistic nature of the ODA process. More beneficial would be research work conducted in unison with a provider to measure outcomes, both quantitative and qualitative, of entire programmes. These cases could be compared and contrasted with others of varying lengths, physicality, risk, etc. The results would provide a comprehensive feedback (evaluation) on course effectiveness and subsequently inform the practise of the provider. Through this mechanism the quality of ODA provision might improve and the controversy over the efficacy of the ODA concept diminish.

9.5 FINAL THOUGHTS

The purpose of this thesis was to gain a better understanding of the processes at work during ODA programmes and how they affect the learning outcomes of participants. In recognising the diversity of ODA providers (Chapter Two) and the political nature of evaluatory studies (Chapter Three) the author sidestepped two of the major hurdles that have beset researchers in this field. By acting as purchaser, programme design was controlled, in order to replicate tasks/review formats commonly found on ODA programmes and one of the principal stakeholders (the purchasing firm / organisation) was removed from the equation. Using undergraduate students as a vehicle for the evaluation of ODA enabled the collection of a large data
set – the sample size in this thesis, particularly in relation to the qualitative data, is probably unique in ODA research. This enabled the author to overcome issues of small sample size. It also enabled the collection of rich reflective accounts of the participants' reactions to the ODA experience at a point in time which would not have been possible had semi-structured interviewing been employed.

The research design was influenced by the need for tools capable of describing and understanding complex processes at play in learning activities. Chapter Four explored the research traditions in ODA and indicated the need for an eclectic approach but one firmly anchored in qualitative techniques.

It was concluded that the design of ODA programmes is diverse, but that diversity can best be understood by reference to two main dimensions: task and review. These can be further refined by the elements of physicality and risk in the task dimension (Chapter Six). However, as indicated in Chapter Eight these are only two factors in a complex web that influence the individual and their learning. The role of the course tutor and individual participation being identified as two, particularly key variables.

The learning process that occurs during ODA is complex. While the Lewin/Kolb Learning Cycle adopted by ODA practitioners is attractive as an explanation for what happens during ODA, it is essentially flawed, being too mechanistic and ignorant of the tensions taking place between the different modes of learning within the individual. The thesis emphasises the role of reflection, the tutor and the range of diverse factors that constitute the concrete and reflective stages of the learning cycle.
For providers, the research indicates the need for highly-trained facilitators, able to give purpose to and draw lessons from a wide range of diverse activities that are designed to elicit the participation of the individual course member.

Finally, the issue of methodology cannot be underestimated. The choice and impact of methodology upon the nature of evaluation studies was outlined in Chapters Three and Four. While the debate over the superiority of one methodology over another is perennial, it was demonstrated that by utilising both quantitative and qualitative approaches, this research benefited through "triangulation" and was able to explore some of the ambiguities that resulted from the quantitative data.

In revealing the basis for the variation in learning experience and consequent learning outcomes during ODA the study contributes to our understanding of the controversy surrounding ODA as a tool for personal development.
REFERENCES


References


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References


References


References


APPENDIX 1

USES OF THE OUTDOORS FOR THE DEVELOPMENT OF INDIVIDUAL MANAGERS
Uses of the Outdoors for the Development of Individual Managers

*Activities tend to involve personal challenges such as climbing, scuba diving, canoeing, abselling: tasks involve solving problems and may use particular activity skills*

<table>
<thead>
<tr>
<th>Adventure Education (AE)</th>
<th>Manager Training (MT)</th>
<th>Self Development (SD)</th>
<th>Diagnosis (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Alternative Labels</strong></td>
<td>Alternative Adventure Training Development Training (Beeby &amp; Rathbom 1983)</td>
<td>Uses outdoor tasks to help delegates develop skills and knowledge in areas which they, the delegates, have identified as important to their own lives and jobs. Learning occurs in the field and in personal and group reviews. Also serendipitous learning i.e. not linked to pre-defined goals.</td>
<td>Uses outdoor tasks to assess managerial strengths and weaknesses. Can be orientated to improving participants own awareness and/or that of their employers. In the latter case it might be used to aid promotion or selection decisions. In either case it can contribute to decisions about future Management Development action.</td>
</tr>
<tr>
<td><strong>2. Outline Description</strong></td>
<td>'Uses as a medium those outdoor pursuits which are potentially dangerous. It involves the presentation of a meaningful challenge to people within a framework of safety in order to give them a deep personal and social awareness.' (CJ Mortlock quoted by Williams 1980, 259)</td>
<td>Outdoor tasks and activities* are used to help delegates learn specific skills. Learning takes place both in the field and in subsequent review sessions. The needs of delegates are assumed to be similar. 'Adventure is used purely as an educational vehicle.... In an effort to realise specific objectives... in relation to the individual's personal development and the work situation.' (Williams 1980, 259-60)</td>
<td>Uses outdoor tasks to build awareness. ' (CJ Mortlock quoted by vehicle.... In an learning Le. not Management</td>
</tr>
<tr>
<td><strong>3. Distinctive Features</strong></td>
<td>- Uses tasks and activities almost exclusively 'outdoors'. - Delegate is left to sort things out for self. - Instructors tend to focus on technical (cf. Social) issues.</td>
<td>- Outdoor tasks and activities are formally reviewed - Review focusses on social and process issues of a group or intergroup nature. - Approach is basically functional - to improve delegate behaviour in the workplace.</td>
<td>Reviews of tasks likely to focus on personal and interpersonal, group and intergroup issues. - Approach is based on holistic ideas of Humanistic Psychology. Nature of reviews and view of delegate depends on attitudes of staff and diagnosis. (See MT and SD)</td>
</tr>
<tr>
<td><strong>4. View of Delegate</strong></td>
<td>Delegate is seen as 'explorer'</td>
<td>Delegate is seen as a manager.</td>
<td>Depends - see 3 above.</td>
</tr>
<tr>
<td>6. Philosophic al basis</td>
<td>Often expressed as 'in corpore sana' - a fit mind requires a fit body</td>
<td>There are experts who 'know' what is best; who 'know' what managers need.</td>
<td>Delegate knows more about own needs than others; others can build on that knowledge (Johari window).</td>
</tr>
<tr>
<td>-------------------------</td>
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<td>-------------------------------------------------</td>
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<tr>
<td>7. Objectives</td>
<td>Tends to be in terms of personal development (tends to be for younger people).</td>
<td>Pre-set by trainers - Key objectives are in terms of managerial process issues.</td>
<td>Objectives negotiated personally by each course member with staff and other course members.</td>
</tr>
<tr>
<td>8. Control of task</td>
<td>Tasks are pre-set by trainers/instructor s</td>
<td>Tasks are pre-set by trainers to their (the trainers') Objectives. (Except that delegates may, in theory, opt out of a task).</td>
<td>Delegates decide what they wish to explore and, working with tutors, select tasks to enable that to happen. Specific tasks may (intentionally) surprise the delegates but the learning and development objectives will not. Trust between tutor and delegate is important here.</td>
</tr>
<tr>
<td>9. Control of process</td>
<td>Delegates usually control the way in which they tackle tasks (activities) - specific roles (e.g. leader) may be allocated to particular delegates</td>
<td>Delegates control the way in which they tackle tasks. This may be influenced by learning from previous tasks and/or</td>
<td>Delegates control the way in which they tackle the task. Roles may be allocated so as to further individual learning objectives.</td>
</tr>
<tr>
<td>10. Control of Review Process</td>
<td>Delegates review informally if at all (there are no formal reviews). Tendency will be to review task.</td>
<td>Review process dominated by trainers. Trainers generally draw out the learning points they wish to focus on. Emphasis will be on process issues.</td>
<td>The management of the review process is shared by all participants. Issues of a personal, interpersonal and group process nature are discussed.</td>
</tr>
<tr>
<td>11. Attitudes to Risk</td>
<td>Emphasis is likely to be on personal risk taking - meeting personal</td>
<td>Risk taking is generally encouraged especially in</td>
<td>Risk taking is encouraged and supported at all levels.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Physical</td>
<td>interpersonal and group settings. Activity risks are a metaphor for this and for the support it requires (presence of 'company' trainers may reduce risk taking - cf. Cole 1983).</td>
<td>Group and individual tasks and activities may be combined to meet each delegate's objectives. There may therefore be a number of tasks going on simultaneously - some could be indoors.</td>
<td>Low - the technology is or is believed to be fairly well calibrated. To change it could lead to a challenge to the validity of the results.</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Ditto - except that reviews may briefly focus on individuals and hence encourage individual thought and reflection.</td>
<td>Tutors and delegates will meet prior to event to review learning and development needs. This also enables tutor to have appropriate range of opportunities available.</td>
<td>High - the process of the event is reviewed as well as the tasks and activities. Event process can be re-negotiated</td>
</tr>
<tr>
<td>Approach</td>
<td>Tasks and Objectives tend to be completed in and by most</td>
<td>Course is designed to meet anticipated needs of delegates. Design may involve delegates' company training officer. No interaction with delegates.</td>
<td>Some to cater for weather or to highlight particular problems which emerge during the event</td>
</tr>
<tr>
<td>May reduce</td>
<td>A combination of group and individual tasks and activities. Individual tasks will tend to be psychological tests or similar designed to complement experiential elements of the programme.</td>
<td>Diagnostic programmes tend to be fairly standardised. Could be geared toward particular skills or abilities.</td>
<td>Low - sufficient to make allowance for weather</td>
</tr>
<tr>
<td>Delegates'</td>
<td>Employers' willingness to take risks. This is unlikely to be a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Attitudes - of provider - of delegates - of employers</td>
<td>training technology</td>
<td>consultancy when appropriate.</td>
<td></td>
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<tr>
<td>---------------------------------------------------------</td>
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<tr>
<td>'We know what's needed. 'This should be a bit of a larf! 'What you need is a good dose of ......!'</td>
<td>'Delegates know what's needed - but we don't always show it'. 'Cos we've got to keep the client happy'. 'Sock it to me - you're the experts.' 'This event has been designed to meet your needs and anyway it has worked with other people'. (*i.e. our definition of your needs).</td>
<td>'We know how to (help delegates) identify their learning needs.' 'How can you help me?' 'How can we help you develop yourself?' (Occasionally 'MD is not our business - if you want it, do it yourself!')</td>
<td></td>
</tr>
</tbody>
</table>

| 20. Why do delegates attend? | Because I was sent. Because it sounded good fun. Because all my mates are going/have already been. | Because I have....... needs and this seemed an appropriate way to deal with them. Because my boss/T.O. recommended it. Because people who come seem to get more promotions. Because I want to know more about me. Because I was sent. |

| 21. Origins | WWII attempts to increase resilience and self-reliance of young merchant marine crews. Dissatisfaction with AE feeling that it should involve more intellectual 'stuff' and contain systematic review (mirroring) of individual and group performance. | Dissatisfaction with MT and feeling that Self-Development experiences should use the whole person intellectual, physical, social and emotional. Dissatisfaction with current assessment centre activities because they do not involve the whole person. Need to involve physical and emotional elements as well as intellectual and social assessment. |

| 22. Actively engages..... | Social and physical aspects of person - may also hook emotional and intellectual parts. Intellectual, social and physical aspects - may also hook emotional | Intellectual, social, physical and emotional aspects of person. (Depends on nature of diagnosis and stance of trainer). |

| 23. In Bert Juch's terms (1983, pp. 47-44) | More like training than even 'liberal' education. Emphasises planning and doing. Sensing and thinking tend to be underplayed (at least formally). | 'Learning in public' and 'Learning in private' are balanced |

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APPENDIX 2

THE CHARACTERISTICS OF THE DIFFERENT TYPES OF PROVISION
<table>
<thead>
<tr>
<th>TYPE OF PROVISION</th>
<th>DEFINING CHARACTERISTICS</th>
<th>GENERAL CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Development Outdoors (Workshops)</td>
<td>Physically: Low</td>
<td>• Short programmes (one day)</td>
</tr>
<tr>
<td></td>
<td>Emphasis on Review: High</td>
<td>• Part of more holistic T&amp;D programme</td>
</tr>
<tr>
<td></td>
<td>Theoretical Reality: High</td>
<td>• HRM staff with knowledge of the outdoors</td>
</tr>
<tr>
<td>Management Development Outdoors</td>
<td>Physically: Low-Medium</td>
<td>• Variable duration (2-5 days)</td>
</tr>
<tr>
<td></td>
<td>Emphasis on Review: Medium-High</td>
<td>• Tend to be integrated into larger T&amp;D programmes</td>
</tr>
<tr>
<td></td>
<td>Theoretical Reality: Medium-High</td>
<td>• HRM staff with outdoor qualifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mix of HRM staff &amp; outdoor staff</td>
</tr>
<tr>
<td>Adventure-based Management Development</td>
<td>Physically: Medium-High</td>
<td>• Variable duration (2-5 days)</td>
</tr>
<tr>
<td></td>
<td>Emphasis on Review: Low-Medium</td>
<td>• Tend to be 'inoculations'</td>
</tr>
<tr>
<td></td>
<td>Theoretical Reality: Low-Medium</td>
<td>• Outdoor staff with HRM interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mix of outdoor staff &amp; HRM staff</td>
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<tr>
<td>&quot;Military&quot; Management Development</td>
<td>Physically: High</td>
<td>• Tend to be focused on personal development</td>
</tr>
<tr>
<td></td>
<td>Emphasis on Review: Low</td>
<td>• Ex-military staff</td>
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<tr>
<td></td>
<td>Theoretical Reality: Low</td>
<td>• Tend to be competitive, motivational/fun events run for companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Can have developmental objectives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tend to be longer programmes (4-5 days)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Outdoor education staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Younger populations</td>
</tr>
<tr>
<td>Outdoor Challenge Events</td>
<td>Physically: Medium-High</td>
<td>• Reward</td>
</tr>
<tr>
<td></td>
<td>Emphasis on Review: Low</td>
<td>• Company holiday</td>
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<tr>
<td></td>
<td>Theoretical Reality: Low</td>
<td>• Can be focused on social development of teams</td>
</tr>
<tr>
<td>Personal Development</td>
<td>Physically: Medium-High</td>
<td>• Reward</td>
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<td></td>
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<tr>
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<td>Theoretical Reality: Low</td>
<td>• Can be focused on social development of teams</td>
</tr>
</tbody>
</table>
APPENDIX 3

A SCHEMATIC REPRESENTATION OF THE ROOTS OF OUTDOOR MANAGEMENT DEVELOPMENT
APPENDIX 4

POTENTIAL OUTCOMES AND METHODS OF OUTDOOR DEVELOPMENT PROGRAMMES
### Potential Outcomes of Outdoor Development Programmes

<table>
<thead>
<tr>
<th>Theoretical basis</th>
<th>Likely objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traits</td>
<td>To develop the individual participants characteristics; personal qualities. E.g. Confidence, fitness, risk taking, courage, communication skills, responsibility.</td>
</tr>
<tr>
<td>Values</td>
<td>To explore and develop the participants understanding of his or her beliefs and values; relating situations and actions to principles and possibly competing values.</td>
</tr>
<tr>
<td>Motivation</td>
<td>To develop the individual participants self awareness and motivation; increasing understanding and awareness of self and others' needs; developing mutual trust and leading to enhanced personal fulfilment.</td>
</tr>
<tr>
<td>Behaviour</td>
<td>To develop the individual participants understanding of the leader follower influences; the transactional and transformational processes; increasing awareness of the symbolic and cultural dimensions of leadership; recognising concepts such as vision and empowerment.</td>
</tr>
<tr>
<td>Power &amp; influence</td>
<td>To develop the individual participants understanding of the leader follower influences; the transactional and transformational processes; increasing awareness of the symbolic and cultural dimensions of leadership; recognising concepts such as vision and empowerment.</td>
</tr>
<tr>
<td>Learning</td>
<td>To develop the individual’s ability to learn.</td>
</tr>
<tr>
<td>Theoretical basis</td>
<td>Likely methods</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td>Conditioning</td>
<td>By developing/modifying behaviour through association, practice, feedback, reinforcement.</td>
</tr>
<tr>
<td>Information transfer</td>
<td>By transmitting information; organising, sequencing, reinforcing; lecturing/telling.</td>
</tr>
<tr>
<td>Cybernetic</td>
<td>By achieving objectives through analysing, testing and adjusting strategies and actions towards intended outcomes; adjusting to changing environmental demands and questioning governing values.</td>
</tr>
<tr>
<td>Cognitive</td>
<td>By rational and insightful questioning of experience and knowledge; extending and revising the individual's mental map through action, discussion and reflection. Learner centred; problem centred. Starting with the whole person/problem to help understand and see the natural parts.</td>
</tr>
<tr>
<td>Experiential</td>
<td>By relaxing norms, removing blocks in structured and unstructured exercises; encouraging self understanding/actualisation through reflection on attitudes, behaviours, perceptions, emotions and judgements towards people, events and objects. (Recognising an individual's complexity but not trying to understand it)</td>
</tr>
<tr>
<td>Social Influence</td>
<td>By identification, modelling, suggestion, affirmation. Defining/adjusting the self image in terms of an individual's relationships to others through formal and informal feedback. Role playing.</td>
</tr>
<tr>
<td>Pragmatic</td>
<td>By methods that appear to work; using common sense.</td>
</tr>
</tbody>
</table>
APPENDIX 5

A DESCRIPTION OF THE ODA TASKS EMPLOYED IN THE CASE STUDIES
A description of the ODA tasks employed in the case studies

All exercises are against the clock.

Tasks in Case Study One:

Rapid Descent
Two students must abseil down a cliff to collect details of the location of the next task. Only one student is briefed by the instructor on the purpose of the task and how to fit the necessary safety equipment. That student must convey all the information to the abseilers but must not touch the safety equipment him/herself.

Swamp Crossing (Planks & Crates)
An area of ground is designated a swamp (or abyss in some exercises). Students must cross this area using the planks and crates provided. If anybody or piece of equipment falls in the swamp the group has to start the exercise all over again. Success is measured by the number of students who reach the other side.

This exercise is also known as the ‘Barrel and Planks’ or ‘Planks and Crates’ exercise in other ODA programmes.

The Minefield
The secret to the location of the next task is held in a container. However the container is located in the middle of a area designated out of bounds (the minefield). It must be removed from that area by the use of ropes and an assortment of other pieces of equipment. Group members are not allowed within the minefield or to let their bodies touch the ground within the minefield. If the container is dropped within the designated area (the minefield) the group is blown up (the task failed).

Escape
The group is sub-divided into two units. One unit has been arrested and imprisoned; the other is still free and waiting outside the prison. The two groups are unable to see one another. In order to escape, the imprisoned group must convey by verbal communication alone, the exact shape of a complicated symbol drawn on the floor of their cell.

The 'free group' must reproduce this symbol using materials given to them by the instructor.

Hidden Gen (Caving Exercise)
The group must search a cave for a hidden container. The location of the next task is to be found in the container. One student is briefed by the instructor as to the nature of the task and how to equip the group with necessary safety equipment.
Blackdown Survival
Scenario: It is winter and the group has gone hill walking. They are now lost. The weather has deteriorated and it looks as if snow will fall. Unfortunately, they have not informed anyone of their intended route so no one will come looking for them. One of the group is showing acute signs of Hypothermia and cannot be moved. It seems that the only chance the team has of survival is to send the strongest three members for help.

Task: the group must choose the ten most useful items (from a list of 20) of equipment for the group of three to take with them. Success is measured by comparing the group list with that of the instructor.

Rescue
Scenario: The group is out hill walking and one of the group has fallen and broken a leg. The injured person is unable to move by him/herself. The group must make an improvised stretcher from the equipment given to them and carry the injured person to safety (a distance of 400 metres).

Night Camp or Blackout
The purpose of the exercise is to erect a tent. One member of the group is designated leader and the rest of the group is blindfolded for the duration of the task. Only the leader can see. The leader has to organise the building of the tent by verbal communication alone. He/she is not allowed to touch anybody or any piece of the equipment.

Electric Fence or Spiders Web.
The instructor builds a complicated criss-crossed rope network between two trees. This rope network and the trees are 'electrified'. The group must pass through, over or under the network without touching either the rope or the trees. Each member of the group must pass through a different portion of the network. i.e. no hole may be used twice.

Tasks in Case Study Two:

In phase two of the data collection, four of the exercises; Swamp Crossing; Blackdown Survival; Blackout and Spiders Web were used as described above. In addition there were two new exercises.

Climbing replaced the abseiling exercise (Rapid Descent). This task takes place in a disused quarry. The instructor has placed a piece of rope against the side of a cliff, approximately 12 feet above the ground. The group must climb up the rock face, individually, and touch the rope. Each member of the group wears the necessary climbing/safety equipment. The success of the task is judged by the number of participants who actually touch the rope.

Orienteering

The instructor has placed a number of markers throughout a small wooded area. On each marker is a portion of a clue to the next task’s location. The group are given a map indicating the position of the markers. They must find the markers, put together the clues and find the next task location.
APPENDIX 6

ASSIGNMENT FOR PERSONAL DEVELOPMENT IN THE OUTDOORS
Assignment for Personal Development in the Outdoors

You are required to write a report (maximum length 2500 words) on your experience on the Outdoor Problem Solving Day. Hand in date: 26th May.

Structure of Assignment

There are three sections or elements to the assignment.

Element 1

You are asked to analyse and evaluate each of the activities as a learning experience. Do not describe the exercise. Discuss the activity in terms of what you learnt & why this learning took place. For example: 'Planks exercise';

The most important lesson learnt was the need for co-operation between members of the team. Jill had a plan that would have worked but we failed because the boys insisted on using a method which they reckoned had worked in the past. By the time they had made a mess of it, there was no time to put Jill's plan into effect.

Element 2

The 'Critical Incident'. What was the single most striking moment during the whole day and why? Write as full an analysis as possible. For example:

...the critical incident of the day was when Jack turned around and said- why don't you stop bossing people around and listen for a change. It was only then that I realised that I try to dominate the group and this style of leadership does not suit everybody in the work situation.

Element 3

At the end of each task you had a debrief session. Analyse the value of the debrief session to you personally. For example:

It was only through the discussion at the end of the activity that I could see the point of the exercise. And,

I found the instructor too aggressive and did not feel confident enough to put forward my own ideas.

NB. How much you write on each element is up to you. You are expected to write something on each element. But put the emphasis on what was important to you. You will not be penalised for criticising ODA as a learning process but you must argue your view. You are strongly advised to take a notebook with you so that you can record your thoughts on the day.

JMJ
APPENDIX 7

THE 16 PERSONALITY TYPES WITH GENERAL CHARACTERISTICS
<table>
<thead>
<tr>
<th>Judging (J)</th>
<th>Thinking (T)</th>
<th>Feeling (F)</th>
<th>Feeling (F)</th>
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<td><strong>IFSJ</strong></td>
<td><strong>INFJ</strong></td>
<td><strong>INTJ</strong></td>
<td><strong>INTP</strong></td>
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<td>Management and administration</td>
<td>Education, healthcare and religion</td>
<td>Religion, counselling and teaching</td>
<td>Science, computing and technical fields</td>
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<td><strong>Perceiving (P)</strong></td>
<td><strong>ISTP</strong></td>
<td><strong>ISFP</strong></td>
<td><strong>INFP</strong></td>
<td><strong>ENTP</strong></td>
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<tr>
<td>Skilled trades and technical fields</td>
<td>Healthcare and business</td>
<td>Counselling, writing and arts</td>
<td>Science, management and technology</td>
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<tr>
<td><strong>Perceiving (P)</strong></td>
<td><strong>ESTP</strong></td>
<td><strong>ESFP</strong></td>
<td><strong>ENFP</strong></td>
<td><strong>ENTP</strong></td>
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<td>Marketing, business and skilled trades</td>
<td>Healthcare and teaching</td>
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<tr>
<td><strong>Judging (J)</strong></td>
<td><strong>ESTJ</strong></td>
<td><strong>ESFJ</strong></td>
<td><strong>ENFJ</strong></td>
<td><strong>ENTJ</strong></td>
</tr>
<tr>
<td>Logical, decisive, objectively critical, practical, systematic.</td>
<td>Factual, personable co-operative, practical, decisive.</td>
<td>Compassionate, loyal, imaginative, likes variety, supportive.</td>
<td>Analytical, assertive, conceptual thinkers, innovation planners.</td>
<td></td>
</tr>
<tr>
<td>Management and administration</td>
<td>Education, healthcare and religion</td>
<td>Arts, religion and teaching</td>
<td>Management and leadership</td>
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</tr>
</tbody>
</table>

(Adapted from Wheeler 2001)
APPENDIX 8

PERSONAL BENEFITS QUESTIONNAIRE
Personal Benefits Questionnaire

Please respond to the following statements by ticking the appropriate box.

1. I feel that I have effective information gathering skills

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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2. I feel that my overall planning ability is poor

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3. I feel that I am an effective team member

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4. I feel that my self awareness is poor

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5. I feel that I communicate ideas effectively

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6. I feel that my decision making skills are effective

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7. I feel that I am good at giving and receiving feedback

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8. I feel that I am effective at listening to other people

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<th>Disagree</th>
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9. I feel able to adapt to a situation as it develops

<table>
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<tr>
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<th>Disagree</th>
<th>Somewhat Disagree</th>
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10. I feel that I manage my time effectively

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<th>Somewhat Disagree</th>
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</table>
11. I feel that my overall problem solving ability is good

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<tr>
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<th>Strongly Disagree</th>
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<th>Somewhat Disagree</th>
<th>Unsure</th>
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</table>

12. I feel that I am an effective leader

<table>
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<tr>
<th></th>
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<th>Somewhat Disagree</th>
<th>Unsure</th>
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13. I feel that I am very self-confident

<table>
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<tr>
<th></th>
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14. I am good at managing or resolving conflict

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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<th>Somewhat Disagree</th>
<th>Unsure</th>
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15. I am effective at co-ordinating team activities

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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16. I feel able to take risks when attempting to solve a problem

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<tr>
<th></th>
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17. I feel that I am able to delegate effectively

<table>
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18. I feel that I encourage and support other people well

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<th>Somewhat Disagree</th>
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<td>7</td>
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</table>

Please respond to the following statements as they read:

19. I feel confident that I WAS able to cope with the Outdoor Problem Solving Tasks

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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20. I feel that I enjoyed the Outdoor Problem Solving Tasks

<table>
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<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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### 21. I feel I will benefit personally from the Outdoor Problem Solving Tasks done

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<tr>
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### 22. The Outdoor Problem Solving Tasks will benefit my other studies

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**TASK/REVIEW EVALUATION SHEET**

Name of Task__________________________________________

Name of Student________________________________________

Group_________________________________________________

**AS A RESULT OF THIS TASK:**

1. I feel that my **information gathering** skills have improved

<table>
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<tr>
<th>Strongly Disagree</th>
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2. I feel that my **planning** skills have improved

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3. I feel that my **team working** skills have improved

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4. I feel that my **communication** skills have improved

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5. I feel that my **decision making** skills have improved

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6. I feel that my **problem solving** skills have improved

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7. I feel that my **leadership** skills have improved

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8. I feel that my listening skills have improved

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9. I enjoyed this task

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