A CASE STUDY ON THE OUTCOMES OF OUTDOOR LEADERSHIP COURSE OFFERED BY MT. KENYA SCHOOL OF ADVENTURE AND LEADERSHIP

BY

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APRIL, 2012
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

To Mt. Kenya School of Adventure and Leadership (KESAL) as a price token to advance the good work of developing people.
ACKNOWLEDGEMENT

This work has taken shape after many hours of research and consultation with members of the academia in the Department of Recreation Management and Exercise Science, particularly Dr Andanje and Dr Hellen Muthomi, I wish to acknowledge their guidance and urge them to carry on with the good work. Mr. A.D. Bojana deserves gratitude for his editorial contribution to the final work.

My family’s quality time was often the victim, my wife Jane and children had to bear with me as I pursued a course they were least familiar with. I salute them and promise to be there when they need my attention. Finally, I wish to thank Mt. Kenya School of Adventure and Leadership for allowing me to use the centre for research and providing unique insight in the area of Outdoor Experiential Education, it is a valuable gift to Kenyan citizenry and I am urging everyone to explore it for personal growth.
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<tr>
<td>AEE</td>
<td>Association of Experiential Education</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>CAT</td>
<td>Corporate Adventure Training</td>
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<tr>
<td>CI</td>
<td>Confidence Interval</td>
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<tr>
<td>KESAL</td>
<td>Mt. Kenya School of Adventure and Leadership</td>
</tr>
<tr>
<td>LSI</td>
<td>Leadership Skill Inventory</td>
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<tr>
<td>NOLS</td>
<td>National Outdoor Leadership School</td>
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<td>OBMS</td>
<td>Outward Bound Mountain School</td>
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<tr>
<td>OE</td>
<td>Outdoor Education</td>
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<td>OEE</td>
<td>Outdoor Experiential Education</td>
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<td>OMD</td>
<td>Outdoor Management Development</td>
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<td>Professional Development Program</td>
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ABSTRACT

Outdoor experiential education has been described as an integrated approach to all learning. It involves social development and the acquisition of skills associated with living and journeying in the outdoors. This study explored the effects of outdoor experiential education on leadership development training to senior administrative officers from the Ministry of State for Provincial Administration and Internal Security in Kenya. The study was designed to determine the effects of experiential education based leadership course on participants' selected leadership attributes of decision-making, planning, resource allocation, control, delegation, communication, initiative, interpersonal skills and risk-taking. The study adopted a quasi-experimental research design. A self-report questionnaire was used to evaluate the outcomes of the effects of outdoor experiential education on leadership development training, midway the ten days' course and after the course. The data were analyzed using descriptive statistics, t-test and analysis of variance techniques at p≤0.05 level of significance. Findings after applying a t-test showed that participants' leadership attributes were significantly improved by the course to the following mean scores; communication 4.42, decision-making 4.36, planning 4.39, delegation 4.36, resource allocation 4.25, control 4.36, risk-taking 5, initiative 4, and 3.92 for interpersonal, on a likert scale where 5 was strongly agree and 1 was strongly disagree. There were no significant differences across gender in terms of leadership attributes outcomes after the course. Only three leadership attributes were improved between the fifth and the tenth day of the course. These included risk-taking, initiative, and interpersonal skills. It was observed that the first five days of the course led to more impact on leadership attributes compared to the last five days of the ten-day's experiential education leadership course. It is therefore, recommended that institutions and organizations seek experiential-based leadership courses to enhance their leadership attributes. Mt Kenya School of Adventure and Leadership should organize five to ten days outdoor Leadership courses that target both gender and participants of various age categories since they would all benefit from the programmes.
CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

A coherent philosophy establishes a foundation upon which to build theory and action (Hunt, 1990). An in-depth look at today’s outdoor Experiential Education persuades one to infer that Experiential Education has a philosophical foundation. Hunt (1989) finds in Plato the blocks in this foundation whose thoughts on virtue and experience can be applied by modern practitioners in this area. The philosophy of living and theory of knowledge that emerge from the works of these philosophers provide adventure education with a sound philosophical heritage (Hunt, 1990).

Moral virtues which practitioners in outdoor education must achieve include honesty, compassion, justice and courage, among others. These virtues are best demonstrated through Experiential Education activities which are increasingly being used as training aids in its unique methodology (Miles & Priest, 1990). This is as reinforced by Martin (2006) that everybody experiences far more than they understand, and it is experience than understanding that influences behaviour. This concept is further supported by earlier works of Kurt Hahn, the initiator of Outward Bound programmes in Britain (Priest & Michael, 2005). These views were later adopted and restructured by other players in the outdoor Experiential Education like Petzoldt of National Outdoor Leadership School (NOLS), Association of
Experiential Education (AEE) and National Outdoor Learning Association in Britain.

The use of outdoors for education began in Britain where two men, Baden Powel and Kurt Hahn saw the approach to education as the only way to develop people physically, socially, morally and spiritually or offer what is currently known as development training (Priest, 1999). It is this approach that breeds generic ways of sharpening skills like leadership, since practical leadership cannot be taught in any single workshop course. Priest (1990) suggests that leadership training can be experientially imparted to have long-lasting effects. Phipp and Swiderski (1988) add that outdoor soft skills of group development, conflict resolution and decision-making, among others, are critical to effective leadership. Other leadership attributes that are sharpened through outdoor experiential education are communication, initiative, focus, planning, control, proper problem-solving, co-ordination, risk management, interpersonal skills, team skills and resource allocation. The training uses activities such as group dynamics, mountain expeditions, rock climbing, solo nights, rope courses, navigation, endurance runs, and wall climbing.

Outdoor Experiential Education was introduced in Kenya through Outward Bound School in 1957 and the concept has since acquired contemporary features in educational institutions like Mt. Kenya School of Adventure and Leadership (KESAL). KESAL is a government institution which has taken the
experiential learning approach to the next level by customizing the training to participants’ needs. Other Outdoor Experiential Educational providers in Kenya include; Rift Valley Adventure in Nanyuki, Kigio Wildlife Conservancy in Gigil, Malewa, Out of the Box in Nairobi, Peak Performance, Bracken hurts, Lukenya and Duolos, a Daystar University programme. These institutions run short programmes of 3-4 days and therefore, do not adequately cover the whole spectrum of Experiential Educational activities. They focus mainly on teambuilding through group dynamics. This mirrors what most experiential learning institutions are doing world over, that is, providing professional development programmes to sharpen leadership skills using experiential training. KESAL, the only government institution of outdoor education in Kenya combines both soft skills of group dynamics and hard skills in experiential-based leadership courses. There is, therefore, need for empirical investigation into the effectiveness of this unique experiential leadership training in imparting leadership attributes.

1.2 Statement of the Problem
Leadership development has for a long time been inculcated and enhanced through Outdoor Experiential Educational programmes. Today, there is a much greater recognition of the need for more team-oriented approach to leadership and management (Priest & Michael, 2005). It is, therefore, necessary to explore the strengths and weaknesses of outdoor experiential learning in facilitating leadership courses in Kenya in order to identify the
gaps that contemporary outdoor experiential learning providers should fill to continue being relevant.

In Kenya, most institutions are offering experiential learning with focus on team-building through group dynamics. These programmes take three to four days. KESAL goes a notch higher by offering up to ten days’ leadership programme to middle level managers. KESAL’s ten-day leadership programme includes first five-day soft skills duration and the remaining five days go to hard skills and endurance training. This study was set to investigate the outcomes of the fifth and tenth day of experiential education leadership course at KESAL.

1.3 Purpose of the Study

The purpose of the research was to evaluate and document the effectiveness of experiential education-based leadership course on enhancing participants’ selected leadership attributes of decision-making, resource allocation, control, delegation, communication, interpersonal skills and risk-taking.

1.4 Objectives

The study was guided by the following objectives:

i. To determine the difference between pre, mid and post-test scores of participant’s leadership attributes undergoing an outdoor experiential-based leadership development course; the attributes include decision-making, planning, resource allocation, control, delegation, initiative communication, interpersonal skills and risk-taking.
ii. To determine the difference between the participants’ leadership attributes outcomes of the 5th day and the 10th day during an experiential-based leadership development course.

iii. To determine the difference between participant’s outdoor experiential-based course leadership attributes outcomes in relation to their age.

iv. To determine the difference between participant’s outdoor experiential-based course leadership attributes outcomes in relation to gender.

1.5 Hypotheses

In pursuit of the objectives of this study, the following null hypotheses were tested:

$H_{01}$: Outdoor experiential-based leadership development course offered by KESAL would not have significant difference on participants’ selected leadership attributes that include; decision-making, planning, resource allocation, control, delegation, initiative, communication, team skills and risk-taking.

$H_{02}$: There would be no significant difference between the outcomes of the 5th day and those of the 10th day of the outdoor experiential-based leadership development course offered by KESAL on participants’ leadership attributes.

$H_{03}$: There would be no significant difference between the outcomes of the experiential-based leadership development course offered by KESAL on participants’ leadership attributes in relation to their age categories.
H04: There would be no significant difference between the outcomes of the experiential-based leadership development course offered by KESAL on participants' leadership attributes in relation to their gender.

1.6 Significance of the Study

This study provides a source of knowledge for experiential education practitioners and serves as a reference material for setting standards by those interested in experiential education. By the sheer nature and methods used in experiential training, the findings of this study might encourage employers to seek this training to equip their personnel while economizing on time and getting value for money in terms of skills and knowledge earned. The fact that experiential education could be used to teach most social concepts in an easy, friendly and interesting way, many training institutions and community-based organizations might be interested in adopting its methods to enhance other objectives of training. The study is of significance to researchers interested in other issues related to this field but not covered by the study.

In the Kenyan setup, particularly Mt Kenya School of Adventure and Leadership, the stakeholders are interested in the magnitude of empirical evidence on the effects of experiential learning-based leadership courses. This information will also evaluate and benchmark their services while consumers determine whether the training offers value for money and time spent.
1.7 Delimitations of the Study

(i) This study was delimited to the administrative officers who participated in experiential educational-based leadership development course at KESAL in June, 2010.

(ii) The study was conducted in one training environment (KESAL) and involved the same facilitators.

(iii) The outcomes of KESAL's leadership course were determined on the basis of the trainees' self-responses.

1.8 Limitation

(i) There was no gender parity in the Ministry of Provincial Administration, and specifically among the administrative officers as the males were dominant.

(ii) The findings of the study may only be generalized to participants who took the experiential learning-based leadership development course and not any other group or individual participants.

(iii) There were only two respondents in age category 24-29.

(iv) Most of references obtained by the researcher were before year 2005.

1.9 Assumption of the Study

The study made the following assumption:

(i) The information provided was correct and reflected the actual impact of outdoor education course on participant's leadership skills.
1.10 Theoretical Framework

This study was based on David A. Kolb’s Experiential Learning Theory (Kolb, 1995). The theory is a holistic perspective that combines experience, perception, cognition and behaviour in enhancing knowledge and skill development. It was built on earlier works of John Davey and Kurt Levin (Kolb, 1984). Kolb believes that learning is the process whereby knowledge is created through the transformation of experience.

The theory applies to experiential education-based leadership courses because its content delivery heavily depends on experiences presented to participants and the process of reflection, understanding generalization and then application (Priest, 1990). This relates very well with Kolb’s four-stage learning cycle that shows how experience is translated through reflection into concepts which in turn are used as guides for active experimentation and choice of new experiences and application. Participants in experiential education-based leadership courses are involved in experiences that enable them to form abstract concepts and create knowledge, skills and values that led to behaviour change. Experiential-based leadership courses expose participants to real leadership experiences that involve difficult tasks like rock climbing, navigation, ropes course, risk management and fellow participants to test their ability to influence them, providing an excellent experiential education application forum (Hobbs & Spencer, 2002). Through this process, the participants in this study got involved in new experiences that could result in learning that effect behavioural change by enhancing certain competencies.
Kolb’s theory consists of four stages. The first stage is on concrete experience where the participant actively experiences activity such as a field expedition. The second stage is reflective observation, where the participant consciously reflects on that experience. The third stage is abstract conceptualization where participants attempt to conceptualize a theory or model of what was observed. The fourth stage is active experimentation, where a participant attempts to plan and apply in the forthcoming experience. It is in this vein that this study endeavored to find out whether the experiential education experiences and process at KESAL specifically enhanced the selected leadership attributes of co-ordination, decision-making, planning, resource allocation, control, delegation, communication, interpersonal skills and risk-taking. This is reflected in figure1.1.
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Figure 1.1: The Experiential Learning cycle (Adapted from Kolb, 1995: 2)
1.11 Operational Definition of Terms

**Adventure Education** – Learning through undertaking physical activities like rock climbing, navigation and abseiling in the natural setting with uncertain results.

**Communication** -- Letting others to know what one wants by instructing them verbally or showing them by use of signs or symbols in outdoor programmes.

**Control** – Ensuring correctness and enforcing the laid down procedures or quality by participants in charge of their expedition group.

**Decision-Making** -- Selecting or choosing best options in solving a problem or strategizing for outdoor programme activities.

**Delegation** – Assigning duties like; cooking, pitching tents, ration sharing or route mapping in the outdoor programmes.

**Experiential Education** – Imparting knowledge and skills by doing, reflecting and generalizing / applying to situations in the outdoor environment.

**Hard Skills** – Ability to handle physically challenging tasks like rock climbing, mountaineering and first aid.

**Initiative** - Coming up with new ways of doing things or solving problems to make one more adaptable to outdoor conditions.

**Interpersonal Skills** – Ability to relate with one another during an outdoor course activities like hiking, camping and crossing obstacles.

**Leadership Attributes** – Elements and abilities that enable people to guide and influence others in the outdoor setup. These include decision-making,
planning, resource allocation, control, delegation, initiatives, communication, team skills and risk-taking.

**Meta Skills** – The ability to harmonize the activities and desired learning in outdoor education.

**Outdoor Education** – Learning by undertaking physical activities in groups in the natural settings at KESAL.

**Outdoor Leadership** – Guiding individuals or groups in the natural environment through different activities like walking, rock climbing, expeditions, solo night, mountaineering, caving and obstacle crossing.

**Planning** – The process of detailing how something will be done like mapping and work schedule at KESAL training.

**Resource Allocation** – The process of allocating foodstuff, water, equipment and time in the outdoor experiential education programmes.

**Risk Taking** – Undertaking activities with unpredictable outcomes involving perceived dangers such as falling, freezing, and wild animal threats.

**Soft Skills** – These include facilitation, instructional and organizational competencies which are components that contribute to effective outdoor leadership.

**Team Building** – Learning to work together by bonding, breaking interpersonal barriers and enhancing interpersonal skills.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of the literature in relation to the study, and focuses on experiential education, outdoor education, professional development programmes, outdoor leadership, condition favourability, related studies and summary of the literature review.

2.1 Experiential Education

Experiential education is an active process (King, 1988) that involves the learner being placed in unfamiliar environments, outside their positions of comfort and into states of dissonance (Gass, 1993). For the learners to cope with the discomfort and novel conditions they require attributes such as problem-solving, planning, risk-taking, initiative inquiry and reflection (Kraft & Sakofs, 1991). These are the leadership attributes that form the concerns of this study. The principles and definitions of experiential education stated by Carver (1996) and Luckmann (1996), places importance upon process of learning thus emphasizing upon application of direct experiences. Cooper (1994) reinforces this by indicating that lessons from experiential education is holistic, it is concerned with mind, body and spirit. This process could be seen broadly as one that enhances the quality of the learning experience by deliberately providing experiences that a person can actively do what is taught or emphasized in a lesson along with having the opportunity to reflect on the experience (Carver, 1996). It can be used with a variety of subject matter, but
the focus is on participatory interaction with the subject matter in a way that produces a sense of relevancy for the learner (Wuindinger, 1994; Beard &Wilson, 2002). Mt Kenya School of Adventure and Leadership adopted this training method to meet specific client needs, especially those that wanted to equip their trainees with leadership skills and abilities to cope with demanding situations of life and work (Mathenge, 2004).

Leberman (1999) indicates that experiential education and learning had commonly been associated with activities in the outdoors, but not necessarily applied in the wider education context. Itin (1999) suggests that the philosophy of experiential education is particularly necessary as a vehicle for change in the twenty-first century. This emanates from its potential to develop communities that actively involve everyone in solving problems and contributing to the greater good of society, a view that is shared by most proponents of the co temporally experiential education providers (Brett, 1994).

Currently, there are outdoor institutions like Mt Kenya School of Adventure and Leadership and Outward Bound in Kenya offering experiential-based learning through experiential education using the natural environment features such as mountains, rivers, wilderness, rocks and forests to provide teachable moments afforded by the challenges and dynamics inherent in these situations. This is because individuals and groups in these programmes are able to experience the power of nature as they try to relate their experiences and reflect upon the learned skill. Grube (2002) notes the fact that nature has to be
dealt with as provider, a threat and vulnerable entity to be protected, provides leadership trainees with a perfect learning aid. Experiential education providers have gone a little further to construct training elements and systems designed to complement natural features in presenting meaningful experiences. Such elements include artificial walls and rocks made of wood, corporate webs and ropes course system. Leadership attributes like planning, risk-management, interpersonal skills and decision-making are inculcated using such training elements during leadership development courses.

2.2 Outdoor Education

Outdoor education has been identified as being part of the field of experiential learning (Lynch, 1993) and uses an experiential approach to physical and mental development (Gair, 1997). The term outdoor education has been used in a variety of contexts to describe a range of experiences, and there has been consistent growth in outdoor education during the last century. Outdoor education is most commonly associated with an ‘out of the classroom’ curriculum subject for schools (Gair, 1997; Higgins & Humberstone, 1999). It is, therefore, grounded on the idea that learning is perpetual for adventure and discovery, especially during adolescence when maturing young people are finding their boundaries of abilities, control and spheres of influence (Gair, 1997).

It is at this stage that young people are confronted with demands for responsibilities and being in charge of tasks and people. This in essence calls for youth development programmes which put them through experiential-
based learning to enhance their leadership skills and general life skill. It is in this respect that youth organizations like boy scouts, girl guides and Presidential Award Scheme incorporate experiential learning in their programmes to inculcate leadership skills (Frank, 2004). Adult leadership and team-oriented training often uses experiential learning to enhance and revitalize the learning environment through adventure and discovery. These experiences offer a personal exploration of a person’s self and exposes their strengths and weaknesses that are applied to real life situations (Shoel, 2002). This makes individuals understand to what extent they can control others or the environment to achieve desired results as a key component in sharpening individual leadership attributes (Gair, 1997).

Brett (1994) has a similar view and describes outdoor education as a holistic approach to teaching and learning in the outdoors, which synthesizes knowledge, skills, and appreciation of natural resources. Brett proposes that the purpose of outdoor education is to develop skills for life-long learning, for coping and contributing to social change, and for the continuous growth of the individual.

2.3 Professional Development Programme of Outdoor Education

The development of management training in the outdoors was based on the belief that by removing people from their normal environment and challenging them through mainly physical activities, reviewing what happened, and then reflecting on the experience, would enable the skills learnt to be transferred
back to the workplace (Bank, 1994; Flor, 1991; Krouwel & Goodwill, 1994; Priest & Naismith, 1993). The term 'development training' was first used by the Brathay Hall Organization, established in the UK on the shores of Lake Windermere in 1946, to describe the process of facilitating personal and professional development of young employees (Hopkins & Putnam, 1993).

Brathay Hall was foremost (along with Outward Bound) in developing a clearer understanding of the experiential education process (Hopkins & Putnam, 1993). Professional Development Programmes (PDP) (Outward Bound International, 1997), or Outdoor Management Development (OMD) (Krouwel & Goodwill, 1994), or Corporate Adventure Training (CAT) (Priest, 1995) are based on Kolb's (1984) experiential learning model (Loynes, 1990).

The growth of outdoor education has been paralleled by the growth in management development (Bank, 1994). Similarly, at Outward Bound professional development programmes now provide a significant income for many of the schools (Outward Bound International, 1997). Doughty (1991) indicates that the first generation of personal and professional development training emphasized personal growth through physical challenge. The second generation added an intellectual dimension by processing the experience assisted by facilitation and review. Krouwel and Goodwill (1994) support this view, and argue that outdoor education focused on the experience, particularly peak experiences, whereas in development training the experience is a means
to a pre-stated end focusing being on the review and specific management issues.

Krouwel and Goodwill (1994) also distinguish ‘standard’ courses from ‘tailor-made’ courses, arguing that although standard courses address common development needs, the shorter, ‘tailor-made’ courses address specific needs. Doughty (1991) state that there was need for a third generation of personal and professional development programmes that include physical, intellectual, emotional, and spiritual aspects and may take place indoors or outdoors. This approach has been adopted in Kenya at Mt. Kenya School of Adventure and Leadership, by developing short programmes aimed at addressing specific personal or organizational needs. In such courses, facilitators design activities like the ‘frenzy’ to teach cross-functional teamwork concept, this activity is best suited for departmental heads who must internalize the fact that though their functions are different, they must support one another to achieve the overall organizational goal (Warner, 2004). This activity involves dividing the participants into four groups and instructing them to do their best to ensure the groups pick tennis balls from a central pool and place them to their loop to win, they are further advised to consult. In many cases, the groups tend to compete rather than consult.

2.4 Outdoor Leadership

Outdoor leadership is an area within experiential education that involves purposefully taking individuals into the outdoors for recreation, education,
teaching skills and problem-solving skills while ensuring that the individual is safe, and facilitating the philosophical, ethical and aesthetic growth of the participant (Ewert, 1996).

Experiential Education takes place primarily, but not exclusively, through exposure to the natural environment (Priest, 1990). This is where outdoor leadership becomes crucial to processing learning in experiential education programmes. The outdoor leader is charged with the task of planning and organizing the outdoor programmes by providing an opportunity for participants to experience and learn. Experiential Education is, therefore, a leadership exercise because it is task or action-oriented, since execution of these activities and processing learning must be done with groups which are rather informal, and it is in such groups that people are nurtured to fulfill different leadership responsibilities that influence other members to create, identify, work, achieve and share mutually acceptable goals (Priest & Gass, 1999). Outdoor leadership is therefore, an art of facilitating meaningful outdoor experiences through provision of skills, attitudes and the environment required by participants to directly or indirectly transfer learned concepts or easily employ metaphors to express themselves (Raiola, 2003). The degree of outdoor-leadership is, therefore, a function of active participation in a variety of outdoor related activities such as classes, workshops, personal experiences, reading, leadership responsibilities and past outdoor-related jobs (Cain & McAvoy, 1990; Ford & Blanchard, 1985; Green, 1990).
2.5 Leadership Attributes

Leadership is the capacity to move others towards shared goals with focus and competency they would not achieve on their own (Graham, 2003). What most often separates good leadership from bad is competence and attributes such as communication, trust, and initiative among others. It is developing and using skills such as these that test one’s spirit, mind and challenges their ability to form positive relationships with those they lead (Martin, 2006).

Leadership skills are normally picked by people when they have opportunities to do so and especially if they have opportunity for trial and error (Graham, 2003). This is perfectly provided in the outdoor leadership settings where every participant has the opportunity to lead real groups and solve real problems. This kind of exposure enables the participant to acquire and practise leadership attributes at their application stage.

Outdoor leadership attributes can be described as the elements or components that an individual uses to influence positive following or change to attain goals or objectives that would not have otherwise been achieved (Martin, 2006). These attributes include planning, initiative, communication, risk-management, control, delegation, resource allocation interpersonal skills, decision-making, initiative and intelligence (Graham, 2003). When participants embark on an outdoor course where conditions are favourable, they are on their own and actually on the driving seat, from which they make all the decisions or at least most of them (Clement, 2004). In these conditions,
they face the consequences of those decisions. The art of decision-making becomes internalized and the requisite process of decision-making is, therefore, learnt (Priest & Gass, 2005). The participants also communicate a great deal in the outdoor programmes and the effectiveness of their communication determines how fast they agree or solve problems. Planning and resource allocation are key components a leader trainee must acquire since outdoor settings are deprived of most luxuries of life and participants will normally find themselves with just enough time or resources to move on. Activities like solo experiences and well designed initiative tests are designed to reinforce these attributes (Priest & Gass, 2005).

Communication is an integral part of any experiential learning pedagogy since skills and information taught are subject to feedback and not straight lecturing (Phipps, 1988). The feedback contributes to the reflective aspect of an educative experience. Communication also exposes experiential education participants and other people's opinions and views on the same topic or scenario. It allows for an outside view of one-self and gives another perspective from which to consider who one really is; it is like hearing yourself sing from a recorded tape (Sugerman, 2002). Constant practice of this attribute in the experiential setting enables participants to improve this skill and therefore, relate better with others. This relationship enhances their leadership since they can easily influence their peers to accept their positions or take up some tasks.
Decision-making is part and parcel of experiential learning since it involves choosing the best option among many, right from deciding the routes, what to pack first before a hike to who attempts a risky section among the group members (Priest, 1997). In experiential learning, participants are continuously immersed in decision-making situations and are bound to improve their decision-making abilities since the consequences are always there to judge the sustainability of the decision made. Better leaders will, therefore, be vindicated more often and get their decision-making attributes reinforced with time and practice (Martin, 2006).

Being in the experiential education-based leadership development course means sometimes being in very unconventional circumstances that require one to be creative enough to initiate processes and actions that would provide solutions on emerging issues (Carver, 1996). For example, participants craving for a bath might suddenly enjoy the idea that with a small pit and waterproof clothing will provide a perfect shower basin. Similar initiatives when hiking, cooking and dealing with inadequate resources enable participants to become thoroughly creative, an attribute that has a direct bearing to improved leadership skills.

The leadership skill of control refers to monitoring the group’s activities, determining whether the group is on target towards its goal or destination, and making corrections as necessary (Richard, 2005). The group leader must ensure that the team is moving towards its goal. This is manifested in outdoor
excursions where participants must navigate to reach the desired destinations. Group members tend to lose focus due to fatigue, misunderstanding or confusion in instrument interpretation. The leader of the day must therefore, be keen to control the groups’ action to make sure they continue in the right direction against all odds; this exercise imparts in an experiential learning participant the control leadership attribute by realizing that monitoring and correcting can prevent a bad situation from getting worse (Richard, 2005).

Planning is a leadership attribute that determines an outdoor programmes objective in terms of the tasks to be accomplished, and the time frame, who is going to be involved and requisite resources. Experiential courses operate as independent units with equipment, participants and facilitators (Gass, 2005). The success of the courses is determined by the quality of planning before and shorter plans made by participants during the course, may it be how they will cook, hike or tackle challenges presented to them. Other leadership attributes like delegation are practised by group leaders practically realizing it is easier to share work amongst the members than struggling with everything. Interpersonal skills are enhanced through intense interaction between participants since all tasks are tackled by the group as a team, enhancing their ability to work with and through other people to achieve both group and individual goals (Richard, 2005).

Risk-taking is a leadership skill that is encountered in almost every outdoor activity because most experiences expose participants to the natural elements;
it is through such encounters that learners discover that nature can be beneficial but sometimes ruthless. Care and safety are however, emphasized to make sure people learn without being necessarily injured in the process (Warner, 2004). The success and satisfaction felt after attempting seemingly risky elements brings forth the benefits of risk-taking even in real life situations; such feelings of success and accomplishment come from activities like summiting dangerous mountain peaks with risks of rock falls, storms and frost bites. Similar to mountain climbing at KESAL during leadership development courses for middle level military officers.

2.6 Conditional Outdoor Leadership Theory

This study also considers the conditional outdoor leadership theory which states that outdoor leaders must go beyond the dimension of relationship, task and group readiness and look at the level of conditional favourability (Priest & Gass, 2005). This theory is generated by combining leadership styles, leadership orientations of relationship and task, and conditional favourability to help leaders determine whether conditions are low, medium or high (Krouwel, 1994). Flexible leadership concepts adopt leadership styles according to situations; autocratic for emergency, democratic for group decisions, and abdicate when everything is fine (Martin, 2006). The theory attempts to complete the leadership matrix by bringing together all aspects that affect leadership execution in any circumstances.
Conditions of low favourability represent a setting where the dangers may be extreme, the leader lacks certain core competencies, the participants are inexperienced and uncertain, the group morale is low, and the consequences of decision-making are major (Priest & Gass, 2005). In this condition, the leader may shift towards a task-oriented, and a more autocratic style. The leader engages a stricter attention to the task to ensure group safety and retains the majority of the decision-making responsibility.

The condition of high favourability is usually desirable because dangers are minimal, the leader is proficient, the individuals are competent and keen, group morale is high and the consequences of decision-making are minor. The leader will be oriented towards relationships and adapt an abdicratic style. This allows the group to have more opportunities of shared leadership, increased group development and opportunities for individual members to grow and learn (Martin et al., 2006). Conditions of medium favourability represent the more typical outdoor setting in which dangers are within acceptable limits and may be more perceived than real, the leader is self-aware and proficient enough, the individuals are responsible, the group gets along relatively well and the consequences of decision-making are reasonable. This as a democratic style may be most appropriate as a means to balance both tasks and relationships.

A leader with a personal orientation towards relationships may prefer an abdicratic style. This leadership style allows participants to freely use their
discretion to exercise leadership attributes like planning, delegating, allocating resources and decision-making. Task-oriented leaders may choose a more autocratic style where participants have limited room to freely exercise leadership attributes but mainly depend on the facilitator’s guidance (Martin et al., 2006). This concept can be summarized as follows: The outdoor conditions will determine the facilitator leadership style that will determine the leadership attributes that will be practised by the participants. This concept is illustrated in figure 2.2.
Conditions are high in favourability
Participants are given more room to exercise leadership attributes

Conditions are medium in favourability
Conditions of medium favourability allow participants adequate room to practice leadership attributes

Conditions are low in favourability
Conditions of low favourability allows participants limited opportunity to exercise leadership attributes

| Figure 2.2: Conditional Outdoor Leadership Theory Model (COLT)  
2.7 Related Studies

Hatie, Mash, Neil and Richard (1997) estimated that about two hundred and fifty (250) studies had directly investigated the effects of outdoor education programmes. However, most of the studies were concerned with one or two outdoor education outcomes. Experiential education-related studies have also mainly been conducted in America, Britain and Australia but Africa has the least (Priest & Michael, 2005). An analysis of a large sample of experiential-based programmes by Marsh, Neil and Richard (1997) self-concept, locus of control and leadership showed that the length of the course and the age of participants increased the effect of the course. They also observed that experiential-based programmes had major impact on the participants especially in the outcome of self-control. Participants also showed improvement on self-reliance and greater sense of responsibility. Other notable positive impacts were on interpersonal skills, leadership skills, assertiveness, increased sense of empowerment and better decision-making skills. Another finding by Hattie et al., (1997) indicated that these impacts were long-lasting. Further findings by Furman and Gookin (2008) showed that participants felt they confidently learned leadership skills, judgment, small group behaviour communication and environmental awareness in that order. The survey involved measuring the target outcomes based on how they believed they learned compared to actual data results.

In Kenya, leadership development has for a long time been inculcated and enhanced through Outdoor Experiential Education Programmes offered by
Outward Bound, National Outdoor Leadership School and Mt Kenya School of Adventure and Leadership, among others. However, very little applied research in form of quasi-experimental design has been conducted in outdoor leadership (Priest & Miles, 1990). This has left a grey area in empirical evidence and benefits of these programmes. Despite the fact that Kenya has been the growth centre of experiential education in the region since Outward Bound was established in 1957, there has been limited research on the same in the country (Muthomi, 2008). A study carried by Muniu et al., (2006) at Mt. Kenya School of Adventure and Leadership involving 120 army cadet officers focused on physical fitness and found that officer’s leg muscles; cardiovascular endurance and back muscles strength were enhanced. The study did not assess the programmes effect on cadets’ leadership. Muthomi (2008) assessed the impact of a three-day outdoor education on the perception of life effectiveness qualities of staff trainees in the corporate setting in Kenya. The study focused on finding out the effectiveness of outdoor education during staff trainee’s programme in Kenya’s corporate setting.

A quasi-experimental research design was used during a three day programme, where a life effectiveness questionnaire was used for pre and post-test on the staff trainees. The study found those life skills such as initiative, self-confidence and task leadership were enhanced (Muthomi, 2008). However, this study only assessed a three-day programme and did not
cover all activities in outdoor education programmes and did not assess the impact of the course on participants' leadership attributes. Other studies on experiential education have focused on various expected outcomes such as self-concept by (Bacon, 1987), self-actualization and well-being (Kaplan & Talbot, 1983; Young & Cranded, 1984) and education (Gass, 1987). This study explored the effectiveness of experiential-education based leadership course in all conditions of experiential learning, that is, the group dynamics, the hard skills and endurance phases.

Benshoff and Glass (2002) findings on small group behaviour showed that there was a significant increase in participants' interpersonal skills and group cohesion after participating in outdoor-based programmes. The study involved participants of different gender and age categories who underwent a wilderness outdoor course that subjected them to hiking, rappelling and group initiative tests among other outdoor activities. A pre-test and post-test survey was carried out to determine if there would be meaningful effects on the participants' self-efficacy and leadership skills.

A study by Wang and Woon-Chia-Liu (2005) on one hundred forty nine (149) female students undergoing an Outward Bound experiential education course, revealed that there was a significant difference between the pre-test and post-test scores on their leadership, interpersonal skills and personality aspects like self-esteem. The researcher adapted Behaviour Assessment system for Children (Reynold & Kampaus, 1992) to measure the skills associated with
leadership, social, communication and interpersonal skills. To examine whether there were any differences between pre and post-course scores of the variables, paired t-test analysis were conducted. The findings indicated that the students scored moderately high on leadership, social and interpersonal skills on the seven-point scale, their mean ranging from 4.42 to 4.89. This led to the recommendation that a five-day outdoor experiential-based course had positive effects on students' leadership and social skills and therefore, provided justification for the programme. It was noted that the effects were higher than those established for typical educational interventions. The current study sought to find out whether a similar course at KESAL would result in positive effects on other selected leadership attributes.

Mac and Priest (1993) conducted a study that focused on the influence of ropes experience on risk-taking in an experiential outdoor-based programme. The study involved three groups of twenty fire-fighters with already high risk taking propensity. The high ropes course experience consisted of eight elements built within a circle of six forty feet tall utility poles. The standard program involved completing those elements without structural alteration while the isomorphic programme involved completing a modified version to mirror work-related situations faced by fire-fighters. There were set time limits to mimic limited oxygen supply and blindfolds to represent smoke-filled rooms. A choice dilemma survey instrument outlining ten risk-taking scenarios was used before and after the programme for both groups. The subjects were required to disclose the odds against which they would consider
acceptable before taking the risk and the data subjected to two-way Anova for analysis. Findings indicated that there was no difference between pre and post-measurements of the control group, indicating that their risk-taking propensity did not change during the study and suggesting that any changes to the other two groups would likely be due to the ropes course. Risk-taking attribute of leadership was one of the concerns of this study. However, this study used high ropes course and mountain peak summiting among others in investigating the effects of the course on this leadership attribute.

A study by Hopps and Spencer (2002) that attempted to quantify the impact of experiential education on students' leadership development, subjected twelve students in experiential education-based leadership course to completing a leadership skill inventory (LSI) before and after a two-weeks course. The course concluded ten days of field experience in camping, hiking and canoeing. Each student assumed the leadership role in the group for one day, just like the current study. This included planning and communicating the day's activities, teaching lessons and helping in the debriefing at the end of the day. The study showed that four of the nine leadership components analyzed showed significant changes when pre and post-test scores were compared. The areas showing significant changes were fundamentals of leadership, speech and communication skill. This study sought to find out whether similar education has specific effect on selected leadership attributes at KESAL in Kenya.
2.7 Summary of the Literature Review

This chapter has largely dwelt on the understanding of experiential education, outdoor education, professional development programmes, outdoor leadership and experiential learning which form the foundation on which this study is based. The chapter has highlighted related studies on experiential learning and outdoor leadership. Most of the studies on outdoor experiential education programmes have been conducted at Outward Bound Schools outside Kenya (Neil & Richards, 1998; Krouwel, 1994; and Mackenzie, 2000). However, this study administered experiential education-based leadership course and assessed its effect on participants’ leadership attributes at Mt. Kenya School of Adventure and Leadership in Kenya.
3.0 Introduction

This chapter presents procedures for data collection and analysis to answer research questions. The focus is on research design, location of the study target population, sampling procedures, descriptions of research instruments, instrument's reliability and validity, procedures for data collection and data analysis.

3.1 Research Design

The study used a case study approach to investigate the outcomes of experiential education-based leadership development course on participants' leadership attributes. According to Creswell (1994), a case study is a generic term for the investigation of an individual group or phenomenon and characterized by the use of multiple method of data collection (Yin, 1994). Findings of a case study cannot be generalized to all situations but the findings of the research can be applicable to similar settings and groups in experiential learning, thus fulfilling the purpose of the study. In this study, a quasi-experimental time-series research design was used. A quasi-experimental time series research design analyzes variables at successive time periods with some measures taken before the treatment and other measures taken after. Therefore, a pretest was carried out at the beginning of the ten-day outdoor
leadership course and another test at the 5th day of the course and another at 10th day of the course.

3.2 Variables
The independent variable was the experiential education-based leadership course and the dependent variables were the selected leadership attributes, namely; planning, decision-making, resource allocation, control, initiative, delegation, communication, interpersonal skills and risk-taking. The differences across gender and age of participants were also assessed.

3.3 Location of the Study
The research was conducted at Mt. Kenya School of Adventure and Leadership (KESAL) at Mt. Kenya in Kenya. This is the only public outdoor experiential institution in Kenya. It conducts experiential training programmes for government departments, organizations and institutions through bookings scheduled throughout the year. The institution was preferred for the study since it was the only government recognized facility with the capacity to handle a leadership development outdoor course in Kenya.

3.4 Target Population
The population targeted by this study consisted of fifty-one district officers from the provincial administration who participated in an experiential education-based leadership course at KESAL.
3.5 Sampling Techniques

The sample size consisted of all the fifty-one district officers from the Ministry of Provincial Administration and Internal Security who participated in an experiential education-based leadership course in the year 2009. All participants were used in the study because it was a case study and the number could be easily analyzed.

3.6 Research Instruments

A questionnaire designed by the researcher and assessed for appropriateness and content validity by experts in the Department of Recreation Management and Exercise Science at Kenyatta University was used for pretest and post-test in investigating the impact of experiential education-based leadership development course. A questionnaire was considered appropriate due to its ability to investigate an individual's perception/awareness, attributes, motivation and attitude (Mugenda & Mugenda, 2003). The questionnaire consisted of a section on demographic data of age and gender and 28 statements covering nine leadership attributes (Appendix A). The statements had a likert scale of which the participants were required to respond on according to the extent at which the statements applied to them at that particular time.

3.7 Pilot Study

A pilot study was conducted with the purpose of familiarizing the researcher with the administrative procedures of the instrument, length of time to fill it, validity and reliability of the questionnaire since it was constructed by the
researcher. The pilot study also assisted in training research assistants. Ten representatives from the middle level management (Senior Sergeants) taking leadership development training through outdoor experiential learning at Mt Kenya School of Adventure and Leadership (KESAL) were selected for the pilot study. Ambiguities detected in the instruments were corrected before actual administration in consultation with university supervisors.

3.8 Validity

Two experts in outdoor education in the Department of Recreation Management and Exercise Science were asked to assess the relevance of the content used in the research instrument. After examining the research instruments individually, they provided feedback to the researcher. The input from the experts was incorporated in the final research instrument (Orodho, 2004).

3.9 Reliability

A split-half method was used to determine the reliability of the instrument. This was done by administering the questionnaire to the middle-level officers and subjecting the responses to a correlation test to check if the two potions correlated. A strong correlation of 0.8 demonstrated reliability (Mugenda & Mugenda, 2003).

3.10 Data Collection Techniques

A request to conduct research was made to Mt. Kenya School of Adventure and Leadership (Appendix A). The study administered a KESAL designed
experiential education-based leadership course to the fifty-one district officers, where a self-reporting questionnaire (Appendix B) was used. The questionnaire was administered before the course, the 5th day and the 10th day of the course. Participants were given the questionnaire after explanation of the purpose of the study, in reference to the informed consent letter (Appendix C). The researcher then adopted a typical KESAL’s 10-day outdoor leadership course syllabus (Appendix D) for the purpose of investigation and acquainting the instructors who were research assistants in the study. The course followed the standard KESAL leadership development course programme and timetable, involving physical fitness, morning dip, group dynamics, initiative tests, team tasks, individual challenges, jungle expeditions, solo nights, rock climbing, mountain climbing. Discussion, debriefing, brainstorming and frontloading after experiences were used.

3.11 Data Analysis

The data were coded and analyzed using the Statistical Package for Social Sciences 11.5 version (SPSS). The data were summarized using percentages, means and frequencies which were presented in graphs and tables. The outcomes of experiential education-based leadership development course on participants’ selected leadership attributes were compared on duration, age, gender using t-test and One-Way Analysis of Variance (ANOVA). This is a statistical tool used in cases where there is more than one dependent variable and where the dependent variables cannot simply be combined. It gives information on the nature of independent measures, relationships and
differences seen in the dependent variables (Mason, 2004). The study used 0.5 level of significance in testing the hypotheses.

3.12 Logistical and Ethical Considerations

Approval to conduct the pilot study and actual data collection were sought from both National Council for Science and Technology and Mt. Kenya School of Adventure and Leadership respectively (Appendix D). The researcher also sought the subjects’ consent to participate in the study (Appendix C). The respondents were also assured that the data provided would be treated confidentially.
CHAPTER FOUR
FINDINGS AND DISCUSSION

4.0 Introduction

This chapter covers the findings and discussion of the study, which sought to assess the effectiveness of outdoor leadership course offered by Mt. Kenya School of Adventure and Leadership in imparting leadership attributes. The leadership attributes investigated included; decision-making, planning, resource allocation, control, delegation, initiative communication, team skills and risk-taking. These formed the basis of the findings presented in this chapter.

4.1 Demographic Characteristics of the Respondents

4.1.1 Gender of the Respondents

Table 4.1: Gender Distribution of the Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>62.1</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>37.9</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1 shows that 62.1% (31) of the respondents were male while 37.9% (20) were female. This shows that both sexes were represented in the study. However, there were more males than females, which is typical in the administration career where cultural factors such as beliefs that leadership is for men discourage women from seeking administrative jobs. Administrative
jobs in Kenya are also associated with disruptions due to frequent transfers, sometimes to the remotest parts of the country.

4.1.2 Age Categories of the Respondents

Figure 4.1 shows the distribution of the participants based on their age categories.

Figure 4.1: Age Categories of the Respondents

The findings showed that most respondents 49% (25) were within the age category of 30-35 years. While 36 years and above age category accounted for 47.7% (24). Only 3.3% (2) of the respondents were within the age category of 24-29 years. From the findings, over 90% of the respondents were over 30 years. This could be explained by the fact that by the time administrative officers are identified for the leadership course; most of them have served for several years. However, few talented officers get identified for the programme.
regardless of their age or years of service; this explains why those in age category 24 to 29 years accounted for only 3.3%.

4.2 The Outcomes of Outdoor Experiential Leadership Development Course

The study sought to determine the outcomes of outdoor experiential-based leadership development course on participants selected leadership attributes that included; decision-making, planning, resource allocation, control, delegation, initiative communication, team skills and risk-taking. To determine this, the sample data were classified into three groups based on periods when the data were collected, namely; start of the course, middle and end of the course. Mean and standard deviation were computed for each of the three periods. Figure 4.2 shows the means of various leadership attributes at the start, middle and end of course.
Figure 4.2 Mean Score of Participants' Leadership Attributes at the Start, Middle and End of Course

The findings show that participants' leadership attributes were enhanced by the course with the following mean scores, communication 2.5 to 4.4, decision-making 2.5 to 4.3, planning 2.5 to 4.3, resource allocation 2.5 to 4.2, control 2.47 to 4.35, delegation 2.47 to 4.35 and risk-taking 2.65 to 4.11 at the end of the course. Initiative and interpersonal skills were also enhanced with 2.6 to 4 and 2.7 to 3.9 respectively. This revealed that outdoor experiential-based leadership development course was effective since it had positive outcomes on all the participants' leadership attributes although with varying magnitudes.

A study by Hopps and Spencer (2002) that attempted to quantify the impact of Experiential Education on students' leadership development, subjected twelve students in an Experiential Education-based Leadership course. The data were
collected by completing a leadership skill inventory (LSI) before and after a two weeks outdoor experiential-based course. The course concluded 14 days of field experience in camping, hiking and canoeing, where each student assumed a leadership role in the group for one day, just like the current study. This included planning and communicating the day’s activities, teaching lessons and helping in the debriefing at the end of the day. The study showed that four of the nine categories of the leadership skill inventory (LSI) showed significant changes when comparing pre and post-test score. The areas showing significant changes were fundamentals of leadership, speech and communication skill. The outcomes this study compares with Spencer’s finding by recording similar outcomes on leadership after participation in an experiential learning leadership programme; this was particularly in communication, an attribute that showed great enhancement.

4.2.2 Testing of Hypothesis One

The study sought to determine whether the outdoor experiential-based leadership development course had any significant difference on participants' selected leadership attributes that included; decision-making, planning, resource allocation, control, delegation, initiative, communication, interpersonal skills and risk-taking at the end of course. This was tested using t-tests. The test was done to establish if there were notable significant changes on the participants' selected leadership attributes across the periods. The following hypothesis was tested.
HO: The outdoor experiential based-leadership development course would have no significant difference on participants' selected leadership attributes at the end of the course.

Table 4.2: T-tests on Participants’ Leadership Attributes at the Start and End of Course

<table>
<thead>
<tr>
<th>Leadership Training Attributes</th>
<th>Mean Score and CI at start of Training</th>
<th>SD</th>
<th>Mean Score and CI at end of training</th>
<th>SD</th>
<th>MD</th>
<th>T-statistics</th>
<th>DF</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>2.47 (CI: 2.28 - 2.65)</td>
<td>0.65</td>
<td>4.42 (CI: 4.28 - 4.55)</td>
<td>0.49</td>
<td>1.95</td>
<td>-17.2843</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Decision-making</td>
<td>2.65 (CI: 2.36 - 2.74)</td>
<td>0.68</td>
<td>4.36 (CI: 4.22 - 4.50)</td>
<td>0.51</td>
<td>1.71</td>
<td>-15.2530</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Planning</td>
<td>2.52 (CI: 2.32 - 2.71)</td>
<td>0.70</td>
<td>4.39 (CI: 4.23 - 4.54)</td>
<td>0.54</td>
<td>1.77</td>
<td>-15.0643</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>2.52 (CI: 2.30 - 2.73)</td>
<td>0.76</td>
<td>4.25 (CI: 4.09 - 4.40)</td>
<td>0.55</td>
<td>1.73</td>
<td>-13.1472</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Control</td>
<td>2.48 (CI: 2.27 - 2.69)</td>
<td>0.74</td>
<td>4.36 (CI: 4.23 - 4.49)</td>
<td>0.45</td>
<td>1.88</td>
<td>-13.4607</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Initiative</td>
<td>2.69 (CI: 2.51 - 2.87)</td>
<td>0.64</td>
<td>4.00 (CI: 3.81 - 4.19)</td>
<td>0.66</td>
<td>1.31</td>
<td>-10.1453</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Delegation</td>
<td>2.48 (CI: 2.27 - 2.69)</td>
<td>0.74</td>
<td>4.36 (CI: 4.23 - 4.49)</td>
<td>0.45</td>
<td>1.88</td>
<td>-13.4607</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>2.76 (CI: 2.62 - 2.91)</td>
<td>0.52</td>
<td>3.92 (CI: 3.73 - 4.10)</td>
<td>0.66</td>
<td>1.66</td>
<td>-9.7990</td>
<td>100</td>
<td>0.000</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>2.65 (CI: 2.48 - 2.82)</td>
<td>0.60</td>
<td>4.11 (CI: 3.91 - 4.31)</td>
<td>0.70</td>
<td>1.46</td>
<td>-11.2494</td>
<td>100</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The findings in Table 4.2 indicate that the computed t-statistics were all significant at 95% level of confidence (P-value ≤ 0.05) for all the selected leadership attributes. This led to rejection of the null hypothesis at 5% level of significance. The null hypothesis was therefore not accepted since the findings showed; the outdoor experiential-based leadership development course had significant outcomes on participants’ selected leadership attributes. These attributes included; communication, decision-making, planning, resource allocation, control, initiative, delegation, interpersonal and risk-taking.
Decision-making is probably one of the most crucial and common thinking processes involved in leadership. Traditional models dictate that there are distinct steps to be followed in making-decisions. However, more and more are realizing that intuition and situation factors affect decision-making in ways that may not be accounted for in traditional models (Robbins, 2004). In this study, decision-making was enhanced with a pre-test mean of 2.65 to a post-test mean of 4.36, with $t = -15.2530$ at $p \leq 0.05$. This could be due to increased situations that require decision-making in the outdoors; like getting the trainees to decide whether to leave a weak participant unattended, to go back or to sacrifice one of them to stay with the casualty and when to do an evacuation.

Similarly, this study found that interpersonal skills were significantly enhanced with a pre-test mean of 2.76 to a post-test mean of 3.92 and $t = -9.799$ at $p \leq 0.05$, which is in agreement with a study by Benshoff and Glass (2002) which showed that there was a significant increase in participants' interpersonal skills and group cohesion after participating in outdoor based programmes. Outdoor experiential-based leadership programmes are able to enhance interpersonal skills by affording an opportunity where participants have considerable amount of time to interact and engage at various levels, sometimes on life-threatening circumstances where compassion is tested. Participants with good interpersonal skills are able to influence others easily and they are able to demonstrate leadership more overtly.
Initiative is intended to capture the dynamic ability that is demonstrated by an individual who actively and independently initiates new actions and thoughts in a variety of personal and work settings. However, very little research literature is available to test this attribute (Neil, 2002). This study shows that initiative was significantly enhanced during a ten days' experiential education course with a pre-test mean of 2.69 to a post-test mean of 4.0 with $t = -10.1453$ at $p \leq 0.05$. The study also showed that there was marked enhancement of the risk-taking attribute of leadership with a pre-test mean of 2.65 to a post-test mean of 4.11 with $t = -11.2494$ at $p \leq 0.05$. This could be attributed to activities used in the programme that included high ropes course shown in figure 4.3, rock climbing and abseiling. This finding is in line with the findings of the study by Mac and Priest (1993) that showed that there was marked increase in risk-taking propensity among fire fighters who participated in an outdoor leadership course involving high ropes course.
4.3 Outcomes of the Fifth day and the Tenth Day of the Outdoor Leadership Course

The study sought to determine whether 5 days of outdoor experiential-based leadership development course has similar outcomes with 10 days of outdoor experiential education-based leadership course. A t-test was computed to ascertain the specific differences across the two periods for all the selected leadership attributes. The findings are presented in Table 4.3.
Table 4.3 T-test of the Fifth Day versus the Tenth Day of Outdoor Leadership Course

<table>
<thead>
<tr>
<th></th>
<th>Means for End of Course, Ten days</th>
<th>Means for Middle of Course, Five days</th>
<th>DF</th>
<th>MD</th>
<th>t-statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>4.42 (CI: 4.28 - 4.55)</td>
<td>4.21 (CI: 4.08 - 4.34)</td>
<td>100</td>
<td>0.21</td>
<td>-2.2226</td>
<td>0.0285*</td>
</tr>
<tr>
<td>Decision Making</td>
<td>4.36 (4.22 - 4.50)</td>
<td>4.17 (CI: 4.02 - 4.32)</td>
<td>100</td>
<td>0.19</td>
<td>-1.8145</td>
<td>0.0726</td>
</tr>
<tr>
<td>Planning</td>
<td>4.39 (CI: 4.23 - 4.54)</td>
<td>4.32 (CI: 4.20 - 4.44)</td>
<td>100</td>
<td>0.07</td>
<td>-0.6822</td>
<td>0.4967</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>4.25 (CI: 4.17 - 4.40)</td>
<td>4.29 (CI: 4.09 - 4.40)</td>
<td>100</td>
<td>-1.96</td>
<td>0.4083</td>
<td>0.6839</td>
</tr>
<tr>
<td>Control</td>
<td>4.36 (CI: 4.23 - 4.49)</td>
<td>4.40 (CI: 4.25 - 4.54)</td>
<td>100</td>
<td>-1.96</td>
<td>0.4142</td>
<td>0.6796</td>
</tr>
<tr>
<td>Initiative</td>
<td>4.00 (CI: 3.81 - 4.19)</td>
<td>3.59 (CI: 3.42 - 3.77)</td>
<td>100</td>
<td>0.51</td>
<td>-3.1549</td>
<td>0.0021*</td>
</tr>
<tr>
<td>Delegation</td>
<td>4.36 (CI: 4.23 - 4.49)</td>
<td>4.40 (CI: 4.26 - 4.54)</td>
<td>100</td>
<td>-1.96</td>
<td>0.4142</td>
<td>0.6796</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>3.92 (CI: 3.73 - 4.10)</td>
<td>3.46 (CI: 3.26 - 3.66)</td>
<td>100</td>
<td>0.46</td>
<td>-3.3917</td>
<td>0.0010*</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>4.11 (CI: 3.91 - 4.31)</td>
<td>3.80 (CI: 3.63 - 3.97)</td>
<td>100</td>
<td>0.31</td>
<td>-3.3917</td>
<td>0.0181*</td>
</tr>
</tbody>
</table>

* denotes significance at 5% level (P-values < 0.05)

As indicated on Table 4.3, the means, t-values and p-values of the leadership attributes assessed after the 5th day and the 10th day of the course showed that there was a significant difference in some leadership attributes, between the fifth and the tenth day of experiential-based leadership course. These were as follows: communication with a mean of 4.21 after five days and 4.42 after ten days a mean difference of 0.21, t= -2.2226 and p-value of 0.0285(p≤0.05); initiative with a mean of 3.59 after five days and 4.0 after ten days a mean difference of 0.51, t= -3.1549 and p-value of 0.0021(p≤ 0.05); interpersonal skills with a mean of 3.46 after five days and 3.92 after ten days a mean difference of 0.46, t= -3.3917 and a p-value of 0.001(p≤ 0.05); risk-taking with a mean of 3.8 after five days and 4.11 after ten days a mean difference of 0.31, t= -3.3917 and a p-value of 0.0181(p≤ 0.05); but there was no significant difference in the outcomes of experiential-based leadership course on the
other leadership attributes between five and ten days of the course, which included: Decision-making with a mean of 4.17 after five days and 4.36 after ten days, \( t = -1.8145 \) and a p-value of 0.07269; planning with a mean of 4.32 after five days and 4.39 after ten days, \( t = -0.6822 \) and a p-value of 0.04967; resource allocation with a mean of 4.29 after five days and 4.25 after ten days, \( t = 0.4083 \) and a p-value of 0.6839; control with a mean of 4.40 after five days and 4.36 after ten days, \( t = 0.4142 \) and a p-value of 0.6796; delegation with a mean of 4.40 after five days and 4.36 after ten days, \( t = 0.4142 \) and p-value of 0.6796.

4.3.1 Testing of Hypothesis Two

H\( _{02} \): There would be no significant difference between the outcomes achieved on 5th day of the outdoor experiential-based leadership development course and those of the 10th day of outdoor experiential-based course. The findings on Table 4.3 indicate that initiative, interpersonal skills and risk-taking were significant at 95% levels of confidence (P-value ≤ 0.05). This means that there existed a significant difference in the outcomes achieved between the 5th day of the outdoor experiential-based leadership development course and the 10th day of outdoor experiential-based leadership development course on these attributes. These attributes were significantly enhanced by the 10th day of the course. Communication recorded a mean of 4.2108 after the first five days and 4.4167 after ten days with a mean difference of 0.2059; this indicates that this attribute was only mildly enhanced in the second part of the programme. This could be attributed to the fact that during this phase, no
formal communication is actually practised since it consists of more individualized activities like hiking.

Decision-making had a mean of 4.1699 after five days and 4.3595 after ten days showing a mean difference of 0.1895; this could be explained by the fact that at the second phase, decisions are more guided by the facilitators on high-risk activities like high cliffs to safeguard against accidents. After five days, planning recorded a mean of 4.3203 and 4.3856 at the end of ten days with a mean difference of 0.0654 and a p-value of 0.560, therefore, no gains were made on this attribute; this could also be attributed to the fact that planning was done before hand and no new plans were done at this phase. Resource allocation had a mean of 4.7628 after five days and 4.2484 after ten days with a mean difference of 0.0392; this showed that participants were relying on facilitator’s instructions and therefore, took less note of this attribute, as they followed minimum impact and minimum wastage principles. This was same for the control and delegation attributes both of which recorded negative mean differences.

Initiative was however, significantly enhanced after five days where survival skills are necessary, participants required more creativity to cope with a more hostile environment, and therefore, came up with more novel actions. Initiative recorded a mean of 3.5987 after five days and 4.0 after ten days with a mean difference of 0.4052 and a p-value of 0.002. Interpersonal skills were also significantly enhanced, this attribute recorded a mean of 3.4575 after five
days and 3.9150 after ten days and a p-value of 0.000, this enhancement could basically be due to more cumulative time spent together and general familiarity as Priest (1993) puts it, that greater teamwork gains come from group oriented activities such as socializing, group imitative tools and tests and low ropes course (with spotting). Individually-oriented activities like orienteering, high ropes and rappelling with staff belaying, were powerful adjuncts to interpersonal skills and teambuilding provided they were followed at least by two days of group-oriented activities that build on the strong teamwork foundation created by those days. Without this precedent, individually-oriented activities could have detrimental effects on teamwork when offered too early in the programme. This negative influence could be due to the potential for competition, avoided in groups that had at least two days to master cooperative behaviour similar to the one shown on figure 4.4. This study agrees with one done by Priest & Lee (1998) showing that a group of participants exposed to a five-day outdoor experiential course had their interpersonal skills enhanced regardless of their gender.
Risk-taking attribute recorded a mean of 3.7974 after five days and 4.1111 after ten days with a resultant mean difference of 0.3137 and p-value of 0.015 indicating there was a significant enhancement of this attribute in the second phase of the programme; this could be due to the input of the increased risk propensity acquired due to engagement in high-risk perceived elements and activities like the solo night, high cliff activities and extreme high altitude conditions similar to the one shown in figure 4.5. This supports Mac Rea (1993) findings that showed that participation in experiential education where high element system activities were engaged in enhanced risk-taking propensity for fire fighters.
As observed, the P-values for decision-making, planning, resource allocation, control and delegation were not significant at 95% levels of confidence (P-value ≥0.05). This means that there was no significant difference in the outcomes achieved between the 5th day of the outdoor experiential-based leadership development course and the 10th day of the course, based on these attributes. Therefore, the extra days of the course did not add any significant input to participants’ decision-making skills, planning, resource allocation, and control and delegation skills.

Findings by Ewert and Hayashi (2006) revealed that the more one got exposed to Outdoor Experiential Education, the more they developed their...
interpersonal skills. This study showed that the interpersonal attribute was enhanced further after the 5th day more than the other attributes. However, this study partially contradicts Gookin, Paisley et al., (2007) which indicated that the length of a programme was a significant factor in developing characteristics, and that the longer the course, the more participants learned. This is because observations revealed that some attributes made no further gains as the programme progressed. A National Outdoor Leadership School outcome instrument similar to a ten-point likert scale with different subscales for each of the six targeted categories was used in the study. This could be attributed to the fact that National Outdoor Leadership School courses tend to cover some concepts in theory and their students are from diverse background, while this study used a homogenous group with a similar background. The null hypothesis was rejected since in general four out of the nine attributes were enhanced significantly.

### 4.4 Outcomes of the Course on Participants Based on Age Categories

The study sought to establish the outcomes of experiential education-based course on participants’ leadership attributes on the basis of their age categories. To achieve this, Analysis of Variance (ANOVA) was conducted to compare all the age categories and establish if there were notable significant changes on the participants’ selected leadership attributes. The third hypothesis was tested which stated that there would be no significant difference between the outcomes of experiential education based leadership course on participants’ leadership attributes in relation to their age categories.
4.4.1 Testing of Hypothesis Three

H03 There would be no significant difference between the outcomes of experiential education based leadership course on participants’ leadership attributes in relation to their age categories.

Table 4.5.1: ANOVA Results on the Outcomes of the Course on the Participants’ communication in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>1.36</td>
<td>0.3273</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>73.29</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>140.27</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As indicated in Table 4.5.1, there was a significant difference between the outcomes of the experiential-based leadership development course on participants’ communication attribute in relation to the age category since this attribute recorded an F-statistics of 1.36 and a p-value of 0.3273, meaning this age category’s communication attribute was not significantly enhanced by the course. While there was a significant effect on the same attribute (communication) for age categories 30-35 and 36 years and above, age category 30-35 recorded an f-statistics of 73.29 and a p-value of
0.000 ($p \leq 0.05$), while age 36 and above had an $f$-statistics of 140.27 and a $p$-value 0.000 ($p \leq 0.05$). This finding therefore shows that the two age categories benefited more from the programme as far as the communication leadership attribute is concerned.

Table 4.5.2: ANOVA Results on the Effects of the Course on the Participants' Recourse Allocation in Relation to Age Category

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision Making</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>2.56</td>
<td>0.2080</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>46.38</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36 &amp; above</td>
<td>Between group</td>
<td>2</td>
<td>127.35</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings on Table 4.5.2 show that experiential-based leadership course outcomes on participants' decision-making attribute in category 24-29 were significantly different from those of age categories 30-35 and 36 and above. Since the two age categories recorded a $p$-value of 0.000 ($p \leq 0.05$), while age category 24-29 recorded an $f$-statistic of 2.56 and a $p$-value of 0.2080. This means the two age categories benefitted more from the course in improving their decision-making skills when compared to age category 24-29.
Findings in Table 4.5.3, indicate there was significant difference between the outcomes of experiential-based leadership course on participants’ planning attribute of age category 24-29 and age categories 30-35, 36 and above, with age category 24-29 recording an f-statistics of 1.36 and p-value of 0.3273. Age category 30-35 and 36 and above recorded an f-statistics of 76.03 and 96.15 respectively with p-values of 0.000 (p<0.05).
Table 4.5.4: ANOVA Results on the Outcomes of the Course on the Participants’ Resource Allocation in Relation to Age Category

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Allocation</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>5.0</td>
<td>0.1114</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>74.58</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>67.51</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5.4 indicates that while there was no significant difference between the outcomes of experiential-based leadership course on participants’ resource allocation attribute, for age categories 30-35 and 36 and above, age category 24-29 did not show significant outcomes of the course on this attribute. This attribute recorded an f-statistic of 5.0 and a p-value of 0.1114, while age categories 30-35 and 36 and above had f-statistics of 74.58 67.51 respectively and p-values of 0.000(p≤0.05).
Table 4.5.5: ANOVA Results on the Outcomes of the Course on the Participants' control in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>0.50</td>
<td>0.5311</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>101.39</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>79.50</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings on Table 4.5.5 show that experiential-based leadership course outcomes on participants’ control attribute in category 24-29 were significantly different from those of age categories 30-35 and 36 and above. Since the two age categories recorded a p-value of 0.000(p<0.05), while age category 24-29 recorded an f-statistic of 0.50 and a p-value of 0.5311. This means the two age categories benefited more from the course in improving their control leadership attribute when compared to age category 24-29.
Table 4.5.6: ANOVA Results on the Outcomes of the Course on the Participants' Initiative in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>12.27</td>
<td>0.0394</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>24.72</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>28.39</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings on Table 4.5.6 indicate that there were no significant differences in the outcomes of the experiential-based leadership course on participants' initiative attribute in relation to their age category. Age category 24-29 recorded a p-value of 0.0394(p≤0.05), age category 30-35 and 36 and above recorded p-values of 0.000(p≤0.05).

Table 4.5.7: ANOVA Results on the Outcomes of the Course on the Participants' Delegation in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delegation</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>0.50</td>
<td>0.5311</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>101.39</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>79.50</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Findings on Table 4.5.7 show that experiential-based leadership course outcomes on participants' delegation attribute in category 24-29 were significantly different from those of age categories 30-35 and 36 and above. Since the two age categories recorded a p-value of 0.000 (p ≤ 0.05), while age category 24-29 recorded an f-statistic of 0.5 and a p-value of 0.5311. This means the two age categories benefited more from the course in improving their delegation leadership attribute when compared to age category 24-29.

Table 4.5.8: ANOVA Results on the Outcomes of the Course on the Participants' Interpersonal Skills in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal skill</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>12.21</td>
<td>0.0393</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>2.05</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>20.77</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings on Table 4.5.8 indicate that there were no significant differences in the outcomes of the experiential-based leadership course on participants' initiative attribute in relation to their age category. Age category 24-29 recorded a p-value of 0.0393 (p ≤ 0.05), age category 30-35 and 36 and above recorded p-values of 0.000 (p ≤ 0.05).
Table 4.5.9: ANOVA Results on the Outcomes of the Course on the Participants’ Risk-Taking in Relation to Age Categories

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Age</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Taking</td>
<td>24-29</td>
<td>Between group</td>
<td>1</td>
<td>0.84</td>
<td>0.4270</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30-35</td>
<td>Between group</td>
<td>2</td>
<td>30.32</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>36&amp;above</td>
<td>Between group</td>
<td>2</td>
<td>46.25</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within group</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings on Table 4.5.9 show that experiential-based leadership course effects on participants’ risk-taking attribute in category 24-29 were significantly different from those of age categories 30-35 and 36 and above. Since the two age categories recorded a p-value of 0.000 (p≤0.05), while age category 24-29 recorded an f-statistic of 0.80 and a p-value of 0.4270. This means the two age categories benefited more from the course in improving their risk-taking leadership attribute when compared to age category 24-29.

The findings on Table 4.5.1 to 4.5.9 indicate that the most of the computed f-statistics were significant at 95% levels of confidence (P-value ≤0.05), there were therefore, no significant differences on the effects of experiential-based leadership course on participants’ selected leadership attributes that in include communication, decision-making planning, control, resource allocation, delegation initiative, interpersonal skills and risk-taking in relation to age.
categories. However, these applied to age categories 30-35 and 36 and above, because 24-29 age category showed that only two of the selected leadership attributes were significantly enhanced by the course. These include; initiative and interpersonal skills. This led to the acceptance of the null hypothesis that there would be no significant difference on the outcomes of experiential education-based leadership course on participants’ leadership attributes in relation to their age categories since only age category 24-29 seemed no to post positive outcomes. This tended to agree with the findings of Gookin and Paisley (2007) on outdoor education skill development gains, which showed that older participants had higher post-test scores in the categories of leadership and communication. This study also supports a study by Muthomi (2008) on staff trainees’ life effectiveness qualities outcomes during an outdoor education programme. This study indicated substantial differences in some areas of life effectiveness qualities, namely open thinking, active initiative, time management and self-confidence, showing that the older the participants were the more they benefited in these life effectiveness areas after the training.

4.5 Outcomes of the Course on Participants Based on Gender

The study sought to establish the effects of gender difference on the outcomes of outdoor experiential-based leadership development course. Analysis of Variance (ANOVA) was used to compare the differences in gender and establish if there were any notable significant changes on the participants’ selected leadership attributes. Additionally, the fourth hypothesis was tested
which stated that, there was no significant difference in the outcomes of experiential education-based leadership course on leadership attributes in relation to participants’ gender.

4.5.1 Testing of Hypothesis Four

H04: There would be no significant difference between the outcomes of experiential education-based leadership course on participants’ leadership attributes in relation to their gender.
Table 4.6: ANOVA Results on the Outcomes of the Course in Relation to Gender

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Gender</th>
<th>Source</th>
<th>DF</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>121.32</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>79.79</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision-making</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>118.01</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>35.07</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>120.06</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>61.54</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>89.50</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>58.95</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Male</td>
<td>Between Group</td>
<td>2</td>
<td>111.45</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>66.15</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiative</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>62.44</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>7.05</td>
<td>0.0019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delegate</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>111.45</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>66.15</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>35.15</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>10.10</td>
<td>0.0002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>Males</td>
<td>Between Group</td>
<td>2</td>
<td>56.99</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Females</td>
<td>Between Group</td>
<td>2</td>
<td>18.20</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Group</td>
<td>55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The test relied on a decision rule of rejecting the null hypothesis if the P-values obtained were less than 0.05 (P-value ≤ 0.05). The significant variables...
were extracted by applying F-test to all the leadership attributes at 5% level of significance. The findings in Table 4.6 indicates that the computed f-statistics were all significant at 95% levels of confidence (P-value ≤0.05) for all the selected leadership attributes in relation to gender, across the training period. This led to acceptance of the null hypothesis, that there was no significant difference between the outcomes of experiential education-based leadership courses on participants' leadership attributes in relation to gender. This outcome could be explained by the fact the participants had a common background of training, including paramilitary training which might have reduced the gender influencing factors. This finding, therefore, tends to dispel the perception that challenging experiential education could best benefit male participants. However, the study had a lower percentage of female participants, that is, 37.9% compared to 62.1% male in the case study.

These results tend to agree with a study done by Muthomi (2008), on the impact of a three-day outdoor education programme on the perceptions of life effectiveness qualities of staff trainees in Kenya corporate settings. The study showed that both men and women had similar benefits from the outdoor education programme. This study's findings also tally with Hattie et al., (1997) results that indicated that, both genders derived the same benefits from outdoor education programmes, and another one done by Priest and Lee (1998) showing that a group of participants exposed to a five-day outdoor experiential course had their interpersonal skills enhanced regardless of their gender.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter includes hypotheses, summary of the findings, conclusions and recommendations on analysis of effectiveness of outdoor leadership course offered by Mt. Kenya School of Adventure and Leadership in imparting leadership attributes.

5.1 Hypotheses and Summary of Findings

The purpose of this study was to assess the effectiveness of outdoor leadership course offered by Mt Kenya School of Adventure and Leadership in imparting leadership attributes. The leadership attributes included communication, control, planning, decision-making, delegation, team skill, risk-taking, initiative and resource allocation. The study also sought to find out the effects of course duration and gender on the leadership attributes. The following hypotheses were formulated to guide the study;

H01: Outdoor experiential-based leadership development course offered by KESAL would not have significant difference on participants’ selected leadership attributes that include; decision-making, planning, resource allocation, control, delegation, initiative, communication, team skills and risk-taking.

H02: There would be no significant difference between the outcomes of the 5th day and those of the 10th day of the outdoor experiential-based
leadership development course offered by KESAL on participants’ leadership attributes.

H0₃: There would be no significant difference between the outcomes of the experiential-based leadership development course offered by KESAL on participants’ leadership attributes in relation to their age categories.

H0₄: There would be no significant difference between the outcomes of the experiential-based leadership development course offered by KESAL on participants’ leadership attributes in relation to their gender.

5.1.1 Demographic Characteristics of the Respondents

The total number of participants who participated in the study was 51, all of them Administrative Officers drawn from the Ministry of State for Provincial Administration and Internal Security. Sixty two point one per cent (31) were male while 37.9% (20) were female. Forty nine per cent (25) were within the age category of 30-35 years while 47.7% (24) were 36 year and above, 3.3% (2) were from 24-29 years age category.

5.1.2 Outcomes of Outdoor Experiential –Based Education Leadership Course on Participants’ Leadership Attributes

The study found that outdoor experiential-based leadership course at Mt. Kenya School of Adventure and Leadership enhanced participants’ leadership attributes although with varying magnitude; initiative being the least improved and communication being the most improved. The course had significant outcomes on participant’s selected leadership attributes which included;
communication, decision-making, planning, resource allocation, control, initiative, delegation, interpersonal skills and risk-taking.

5.1.3 Outcomes of the 5th Day and 10th Day of the Outdoor Leadership Course

The study showed there was a significant difference between the outcomes achieved by the 5th day of the outdoor experiential-based leadership development course and the 10th day of the outdoor experiential-based leadership development course on initiative, interpersonal and risk-taking leadership attributes. However, there were no significant differences between the outcomes achieved by the 5th day of the outdoor experiential-based leadership development course and 10th day of the course on participants’ leadership attributes of communication, decision-making, planning, resource allocation, control and delegation.

5.1.4 Outcomes of the Course in Relation to Participants’ Age and Gender

The outcomes of the outdoor experiential course did not significantly differ across gender but the outcomes differed between age categories, where age category 30 years and above recorded more impact than age category 24-29 of the participants. Hypothesis three was, therefore, not accepted.
5.2 Conclusions

The conclusions drawn from the findings of this study include those on the effectiveness of outdoor leadership course offered by Mt. Kenya School of Adventure and Leadership on leadership attributes, difference in the outcomes for the 5th day and the 10th day of the course on the same attributes and effects on age and gender to the impact of experiential-based leadership course on the attributes of communication, decision-making, control, planning, delegation, interpersonal skills, initiative, resource allocation and risk-taking.

5.2.1 Effectiveness of Outdoor Experiential-Based Leadership Course

This study concluded that the outdoor experiential-based leadership course offered by Mt Kenya School of Adventure and Leadership is effective since it enhanced participant’s planning, control, decision-making, resource allocation, risk-taking, delegation, interpersonal skills, communication and initiative leadership attributes, though at varied magnitudes.

5.2.2 Outcomes of Fifth Day versus the Tenth Day of the Outdoor Leadership Course

The study concluded that initiative, risk-taking and interpersonal skills were significantly enhanced at the end of the 10 days’ duration of the course, while five days’ duration of the course was adequate in enhancing decision-making, planning, resource allocation, control and delegation.
This implies that shorter programmes would be adequate in training the later attributes, while longer programmes would be necessary to develop interpersonal skills, risk-taking and initiative. It is, therefore, important to note those teams skills are enhanced more in longer out-door courses, contrary to the belief that short courses are adequate for complete teambuilding.

5.2.3 Outcomes of the Course on Participants in Relation to Age Categories and Gender

The outcomes of the outdoor experiential course did not significantly differ across gender but the outcomes differed between age categories, where age category 30 years and above recorded more impact than age category 24-29 of the participants. Hypothesis three was therefore not accepted.

5.3 Recommendations for Practice and Policy

i. Public and private organizations could seek experiential-based courses to enhance leadership attributes of their middle management levels whenever they have limited time of up to 10 days.

ii. KESAL could recommend a five days' programme for organizations that seek to develop communication, decision-making, planning, delegation, resource allocation, planning and control leadership attributes among their staff.

iii. Experiential-based leadership course offered by KESAL is beneficial to both gender and varied ages categories of participants. KESAL
should therefore, organize such courses that target both gender and participants of various age categories.

5.4 **Recommendations for Further Research**

i. Outcomes of experiential-based outdoor education studied in the current study were noted during and immediately after the course. Further studies to assess the impact of such courses after a longer duration is recommended to assess whether the outcomes are sustained for long periods.

ii. The current study was a case study of a homogenous group with administrative duties. Further studies to assess a cross-section of participants from different backgrounds participating in different experiential-based programmes should be carried out to assess whether similar outcomes would be achieved.
REFERENCES


I am a graduate student at Kenyatta University, pursuing a Master of Science degree in Leisure and Recreation Management. I am conducting a study to investigate the impact of experiential education-based leadership development course on participants selected leadership attributes. I am therefore, requesting you to be a respondent in this study.

Your response will be treated with utmost confidentiality

Participants Gender (tick as appropriate) Male ---- Female----

AGE (years) PLEASE TICK ONE CATEGORY:

18 - 23 ( )
24 - 29 ( )
30 - 35 ( )
36 and above ( )

Here are twenty eight practices commonly demonstrated by leaders. Read each statement carefully and decide the extent to which you are practising each characteristic by circling the appropriate number to the right of each practice, on the scale of 5 to 1 where 1 indicates don’t agree with the statement, and 5 indicates you strongly agree.

<table>
<thead>
<tr>
<th></th>
<th>I express thoughts clearly and strongly.</th>
<th>Strongly Agree (5)</th>
<th>Agree (4)</th>
<th>Not Sure (3)</th>
<th>Disagree (2)</th>
<th>Strongly Disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I express thoughts clearly and strongly.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>I consult with others before making decisions.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>I prefer working with organized schedules.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>I give more tools to trusted people</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I provide enough structures to create a cohesive feeling among subordinates.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>I enjoy doing things differently.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>I get things done by other people without bias.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>I feel comfortable relating with my junior officers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>I have a good appetite for discovering things regardless of their effect or importance.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>I speak well from a platform.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>I have made solid decisions relentlessly.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>I arrange tasks in advance.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>I strive to utilize what is available.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>When necessary I get tough.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>I use unconventional way to do tasks.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>I find it fine for others to use my powers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Emphasize with my colleagues in all situations even when they are wrong.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>I consider risk as opportunities that could be exploited.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>I have a good listening skills</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>I stage and communicate decisions with pride and decisiveness.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>21</td>
<td>I consider issues even before its time to tackle them.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>I feel relaxed when out of my workstation</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>I make people use what they have and expect the finest results.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>I utilize role, personality, knowledge and power in a balanced and effective manner.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>I come up with new ideas more often in my group.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>I tend to value people issues than work issues.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>I feel at ease working in unpredictable situations.</td>
<td>5</td>
<td>4</td>
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<td>28</td>
<td>I attract others to want to hear what I say.</td>
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APPENDIX B: APPROVAL LETTER

MINISTRY OF HIGHER EDUCATION
NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY
P.O. BOX 30623 – 00200
NAIROBI.

Dear Sir/Madam,

REQUEST FOR RESEARCH APPROVAL

I am a graduate student taking a Master of Science degree in the Department of Exercise Recreation and Exercise at Kenyatta University. Consequently, for my research I am investigating on the effectiveness of Outdoor Leadership Course offered at Mt. Kenya School of Adventure and Leadership in imparting leadership attributes.

I am therefore, requesting your approval to conduct the research at Mt. Kenya School of Adventure and Leadership involving 51 administrative officers for ten days.

Attached please find a copy of the programme and the questionnaire to be used.

J. K. MWANGI
APPENDIX C: INFORMED CONSENT LETTER

EFFECTIVENESS OF OUTDOOR LEADERSHIP COURSE OFFERED BY KESAL IN IMPARTING LEADERSHIP ATTRIBUTES IN TRAINEES

Department of Recreation Management & Exercise Science
Kenyatta University - Kenya

Investigator
MWANGI JOHN

The main purpose of this study is to determine the impact of experiential education-based leadership course on participant’s selected leadership attributes of decision-making, resource allocation, control, delegation, communication, initiative, planning, team skills and risk-taking. The study will require that I complete a questionnaire (honestly and to the best of my knowledge) giving the required details.

1. Confidentiality
I understand that information provided to this study may be used for research purposes, including publications in research journals. All individual information will be coded and at no time will my personal identity be revealed.

2. Voluntary participation
The nature and purpose of the study procedure has been explained to me. I understand that participation in this study is voluntary and refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I understand that my completing of the questionnaire may be tiring and time-consuming. I may withdraw from participation at anytime I choose, without penalty.
3. Benefits of participation
My participation in this study will contribute towards further understanding of the impact of experiential education-based leadership course on selected leadership attributes of co-ordination, decision-making, resource allocation, control, delegation, communication, team skills and risk-taking thus my contribution can be used to draw programmes and make adjustments in the current regime.

4. Liability
I have voluntarily agreed to participate in this study. I release all involved researchers in the study from any liability on any arising issues subsequently occurring in connection with the study.

5. Persons to contact with questions
I understand that my principal investigator is Mwangi John and I may contact him if I have any additional questions.

6. Consent to participate
I certify that I have read all of the above and received satisfactory answers to any questions that I asked. I willingly give my consent to participate in this research study. (I will be provided with a copy of this signed informed consent.

I...................................................... have volunteered to participate in a study being conducted by the above listed investigator.
APPENDIX D: OUTDOOR LEADERSHIP DEVELOPMENT SYLLABUS

- Mt. Kenya School of Adventure & Leadership (KESAL) specializes in the field of personal growth and development by use of outdoor-based activities to promote learning and realization of the fullest human potential. They strive to develop self-awareness, self-confidence, self-discipline, leadership and teamwork skills, and a sense of caring for others and the environments.

- The programmes consist of challenging team and individual initiative exercises, overnight plains expeditions, mountain climbing, solo experiences and other outdoor activities.

TEN DAY SYLLABUS

Day 1 to day 3

- Participants’ orientation to self and high altitude.

- Ice-breaking activities of dipping experience, endurance run.

- Introduction to outdoor /outward bound philosophy.

- Environmental awareness

- Minimal impact practices.

Camp Craft:

- Selection campsite

- Pitching tents

- Natural resources utilization

- Safe travel in the wilderness

- Animal behaviour & interaction
First Aid
- Basic first aid procedures and practices
- High altitude first aid

Map Reading
- Orienteering
- Use of map and compass
- Navigation skills (sharpening skills)
- Back bearing

Group dynamics / Leadership / Teambuilding
- Initiative tests and activities to sharpen leadership skills.
- Briefing and debriefing, brainstorming and simulation to process actual leadership challenges and team skills.

Ropes / Course Circuit Training
- Inculcate
  - Courage
  - Determination
  - Fitness
  - Tolerance
  - Check height phobia
Day 4

- Jungle Expedition (areas covered)
  o Practical use of navigating equipment.
  o Teamwork – interaction
  o Hiking Skills
  o Interpersonal skills.
  o Leadership demonstration
  o Endurance

Day 5

- Solo Experience (areas covered)
  o Survival skills
  o Self-reliance
  o Intra personal skills
  o Utilization of natural resources
  o Independence
  o Cooking skills.

Day 6

- Rock Climbing
  o Courage
  o Determination
  o Motivation
  o Individual effort and self-drive /tenacity in pursuit
  o Endurance
Day 7 – Day 10

- Mountain expedition (areas covered)
  - Mental and physical endurance
  - Emotional control
  - Teamwork
  - Leadership/control/co-ordination
  - Vision and focus
  - Resilience