

Virginia Military Institute Rat Challenge Evaluation

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THE VIRGINIA MILITARY INSTITUTE RAT CHALLENGE EVALUATION

Karen M. Bednarczyk

(ABSTRACT)

The purpose of this study was to evaluate the Virginia Military Institute (VMI) Rat Challenge program. The Rat Challenge is designed to foster self-confidence and physical conditioning in Fourth Classmen by creating training situations which are stressful enough to show them they are capable of doing tasks which surpass their previously self-imposed mental and physical limits. The program is designed to provide leadership development opportunities for the cadre. It places the responsibility on the cadets for leading and teaching the Fourth Classmen as they advance through the exercises and participate in activities which have calculated elements of risk that make safety paramount.

In designing the Rat Challenge, VMI has named 10 goals and objectives of each Challenge Station. They are: improve physical condition, help conquer fears, improve relations with cadre, improve self-esteem, help build team spirit, improve ability to resolve conflict, improve sensitivity to differences in ability, develop problem solving skills, and have fun.

The physical education department has not assessed these goals and objectives after completion of the program. Two research questions were asked. What level of

achievement was reached by participating VMI cadets by Rat Challenge station? What differences by group (gender, class standing, VMI legacy, siblings at VMI, participation in intramural activities, participation in organized sports, prior military experience, parental prior military experience, parents presently in the military) were observed?

The survey population included the Rats and cadre involved in the Rat Challenge at VMI. A two-part, paper and pencil, self-report questionnaire was utilized. Respondents were asked to respond using a Likert-type scale. An open-ended response section followed. Respondents were asked to write any additional comments regarding each Challenge Station. Significant differences in means were found in 6 out of 10 objectives and 9 out of 21 stations.

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CHAPTER ONE

Introduction

The mission of the Virginia Military Institute (VMI) is to produce educated and honorable men and women, prepared for the varied work of civil life, imbued with the love of learning and confident in the functions and attitudes of leadership. VMI men and women possess a high sense of public service, are advocates of the American Democracy and free enterprise system, and are ready as citizen-soldiers to defend their country in time of national peril. To accomplish this result, the Virginia Military Institute provides to men and women undergraduate education of the highest quality conducted in, and facilitated by, the unique VMI system of military discipline (VMI Admissions, 1997).

The Virginia Military Institute admits both men and women seeking an academic education in a military setting with potential for military commission. VMI has adopted the educational philosophy based on the model of educating the whole student. This model encompasses the following seven essential factors:

1. Mastery of a major field of study
2. Ability to think critically and creatively
3. Ability to communicate effectively
4. Skill in interpersonal relations
5. Ability to succeed in an organizational setting
6. Commitment to ethical inquiry and standards of integrity
7. Commitment to life-long physical health and strength

These factors are stressed in and out of the classroom setting from the moment a cadet steps on post (VMI Institutional Research, 1998). During the freshman year, a cadet is referred to as a Fourth Classman or "Rat." This being one of the most formative years spent at VMI, special programs have been created to provide significant mental and physical challenges to each Rat.

The VMI Rat Challenge

As young men and women see themselves improving physically and surmounting obstacles placed before them, their motivation increases and their sense of accomplishment is such that they can more easily deal with subsequent obstacles they may encounter (Frost, 1971). The VMI Rat Challenge program is designed to foster self-confidence and physical conditioning in Fourth Classmen. This is accomplished by creating training situations that are stressful enough to show them they are capable of doing tasks, which surpass their previously self-defined mental and physical limits.

Members of the cadre, upperclassmen at VMI, facilitate Rat Challenge events. They are very supportive and encouraging of the Rats during this time. The cadre is selected from cadets who volunteer to work in the program. The program is designed to provide leadership development opportunities for the cadre. It places the responsibility on the cadets for leading and teaching the Fourth Classmen as they advance through the exercises and participate in activities which have calculated elements of risk that make safety paramount.

It has further been speculated that these types of experiences are especially valuable to young men pursuing a commission in the armed services or a military career. Leadership traits such as poise, self-confidence, and self-esteem as well as the ability to function under and deal with anxiety, are of vital importance in any endeavor, but especially so military situations (Rigg, 1955).

Problem

In designing the Rat Challenge, VMI has identified 10 objectives of each Challenge Station. They are: improve physical condition, help conquer fears, improve relations with cadre, improve self-esteem, help build team spirit, improve ability to resolve conflict, improve sensitivity to differences in ability, develop problem solving

skills, and have fun. It is the intent of VMI that the Rat Challenge helps each cadet to attain these goals through physical training.

The 10 objectives of the Rat Challenge are based on the VMI model of educating the whole student. The seven essential factors of this model are themes that appear in the different stations of the Rat Challenge. There are 21 stations that the companies rotate through. They are:

1. High ropes require the cadets to traverse several different rope walks approximately 20 feet above ground level. This introduces the height element to cadets as they are belayed for safety.
2. Pugil sticks are utilized for instruction and application of the Marine Corps training technique for hand to hand combat with the rifle. Two Rats are armed with a padded rod and are coached through fighting exercises. Women may only fight women in this station.
3. The ranger pit is an area filled with mud in which Rats wrestle in a combative nature. The aim of this activity is to show the cadets that combat does not have to be a frightening experience. It can also be physically challenging, exhilarating and enjoyable. Women may only wrestle women in this event.
4. The zip wire/vertical entry is a hand-supported slide over and into a river utilizing a "T"-bar pulley on a steel cable. This activity begins with a climb up a ladder to the tree cable. Cadets are unassisted in the climb. This station introduces the elements of height and water into the training.
5. The circuit course is a physical conditioning area, which consists of a series of circuit training stations utilizing exercises to develop muscular strength and endurance.
6. The dirty name and weaver has cadets swing from rope to rope in a very short course. This station takes extreme amounts of upper body strength.

7. The ravine consists of a rope that a cadet swings across onto a net on the opposite side of the ravine.
8. A squad completes the fuel barrel. It involves moving a barrel up a hill using only a rope, the anchoring post, and the barrel. The fuel barrel weighs approximately 500 pounds.
9. The log wire walk allows men to traverse a log and cable walk. The stump jump involves jumping from stump to stump strengthening leg muscles and reinforcing balance techniques and coordination.
10. The swinging log is a freely movable log suspended eight feet from the ground, and is mounted and traversed by a squad of men.
The wall is a group problem involving a 13-foot high board wall that confronts a squad of men. The problem is to find a way to get all the men in the group over the wall without the assistance of any devices.
11. The VMI obstacle course contains several confidence, agility and strength obstacles that must be negotiated in order to complete the course.
12. House Mountain is a forced march exercise where the company ascends and descends a small mountain as rapidly as possible.
13. The rock climbing station has cadets ascend a 125-foot cliff as they are belayed from above.
14. Rappelling is a mountaineering technique in which an individual utilizes ropes to descend a 125-foot cliff.
15. POW escape creates a scenario where the squad has been captured and placed in a pit. The goal is to get the entire squad out of the pit without using any equipment to assist their escape.
The river cross requires the cadets to use ropes for a river crossing.

The electric fence requires a squad to get over a fence in 15 minutes with just the materials they have at hand. Anyone who touches the fence is considered shocked and the entire squad must try again.

16. The howitzer problem requires the disassembly and transport of a large artillery gun. Cadets may use materials provided to lower components to the bottom of a hill and then reassemble howitzer.
17. Tug-o-war is a traditional event where cadet companies line up on opposite ends of a rope in an attempt to pull the other team across a line.
18. The Marine obstacle course is a series of stations that require cadets to complete a variety of tasks focusing on agility, balance, and strength.
19. To escape an ambush, the bridge problem illustrates how a squad would cross a swift stream using only the pilings left from a bridge. The cadets can use any equipment provided, but they must then take it with them.
The bosuns chair consists of a series of wood planks similar to swings. Ropes support the swings. The cadets must travel through the chairs, supporting themselves only with their feet, while carrying a bag of tools across with them.
20. The 5-mile run (Chessie Trail) requires each company to complete the run while remaining in company formation.
21. The Rat Olympics is the culmination of all Rat Challenge stations. It is a day set aside for all companies to compete with each other at every Challenge station. Cadets have the opportunity to try the events for a second time and utilize their teamwork skills. The winning company is awarded a trophy for their accomplishment.

The physical education department, which has responsibility for the Rat Challenge program, has not assessed these goals and objectives after completion of the program. Women did not participate in the Rat Challenge until they began to

matriculate at VMI in 1997. Therefore, objective achievement has not been examined by gender. They also have not examined whether or not cadets with military exposure and athletic experience achieve some of these goals more successfully than others. They have also not assessed whether or not being part of a VMI legacy or having siblings at the institution influences success.

Research Questions

This study focused on obtaining data to respond to the following questions regarding the Rat Challenge:

What level of achievement was reached by participating VMI cadets by Rat Challenge station? What differences by group (gender, class standing, VMI legacy, siblings at VMI, participation in intramural activities, participation in varsity sports, prior military experience, parental prior military experience, parents presently in the military) were observed?

The following hypotheses will be tested:

1. There is no significant difference in the reported objective achievement of cadets by gender.
2. There is no significant difference in the reported objective achievement of cadets by class standing (first class, second class, third class, and fourth class).
3. There is no significant difference in the reported objective achievement of cadets whether or not the cadet has been involved in intramural sports.
4. There is no significant difference in the reported objective achievement of cadets whether or not the cadet has been involved in varsity sports.
5. There is no significant difference in the reported objective achievement of cadets whether or not the cadet is part of a VMI legacy.
6. There is no significant difference in the reported objective achievement of cadets whether or not the cadet has siblings at VMI.

7. There is no significant difference in the reported objective achievement of cadets whether or not the cadet has prior military experience.
8. There is no significant difference in the reported objective achievement of cadets whether or not the cadet's parents have prior military experience.
9. There is no significant difference in the reported objective achievement of cadets whether or not the cadet's parents are presently in the military.

Limitations of Study

There were several limitations in the study. The most significant limitations relate to the fact that the study centers on students in a military-related college. Cadets live by a code of honor, trust and discipline. The cadets may feel pressured to complete the survey although it was declared as an option. Although every step is taken to ensure confidentiality, cadets may answer questions in a biased fashion to show respect to the institution and Rat Challenge program.

As with any study based on self-reported perceptions, response error was likely to occur because respondents gave answers reflecting perceptions that might not accurately portray actual behavior.

The recent introduction of women at VMI will limit the number of female respondents compared to men and may skew the data. The women may not respond honestly in the study in an attempt to prove they are capable of the physical challenges and earn acceptance from fellow cadets.

Organization of the Study

This study is organized around five chapters. The first chapter provided an introduction to the topic of study, the research questions and the significance of the study. Chapter Two includes a review of the literature related to the study. The research methodology is outlined in Chapter Three, including sampling techniques, data collection and analysis procedures. Chapter Four presents the results of the study, while Chapter Five discusses those results and their implication for further practice and research.

CHAPTER TWO

Literature Review

Student development theories applicable to the Rat Challenge were studied. The training and teaching techniques offered by military colleges were also examined. Qualitative research on leadership topics in business and academe was reviewed. Additional areas of study include the relationship between men and women in leadership roles.

Overview of Leadership

Concepts of leadership, ideas about leadership, and leadership practices are subject of much thought, discussion, writing, teaching, and learning. True leaders are sought after and cultivated. Leadership is not an easy subject to explain (DePree, 1989).

A leader is an expert who creates a vision for his or her organization and through a process of exchange with followers motivates them to buy into it. The conventional notions of leadership can be characterized by several themes.

The first theme is that leadership is the property of an individual. A leader interacts with followers primarily to get them to do what he or she wants them to do. A leader may influence either through persuasion or power, but the point is to get the followers to accomplish the goals the leader sets (Rost, 1991).

The second theme is that leadership pertains primarily to formal groups or organizations. The role of the leader is to monitor, control, and direct subordinates to ensure maximum effectiveness in completing organizational tasks. Part of this theme is the notion that leadership is reserved for those who have been given a certain rank within the organization (Komives & Woodward, 1996).

The final assumption is that leadership and management is intertwined. The words leadership and management are often used interchangeably (Rost, 1991; Yukl,

1994). This practice leads to confusion in the definition of what constitutes a good leader.

Additional insights about the nature and definition of leadership are evident in two forms of leadership, transactional and transformational. Transactional leadership results in organization bartering, exchanging wants and needs between leaders and followers. People follow a transactional leader because he or she will help them achieve their goals; it is obvious to followers that it is in their own best interest to do so (Kellerman, 1984).

Transformational leadership goes beyond the idea of exchange. This form of leadership is rational and brings about real change. This type of leadership occurs when one or more persons engage others in such a way that leaders and followers raise one another to higher levels of motivation. The purpose of this engagement is to bring about change, and those involved can be lifted to new levels of personal growth (Burns, 1978).

Transformational leadership is evident in the Rat Challenge. It serves as the training ground for the cadre as they learn to lead and motivate the Rats to achieve their goals. The Rats in turn, forge a relationship with the cadre which helps to elevate them to higher levels of judgement. The cadre learns not to "overpower" the Rats, but rather to empower them.

Although there are countless definitions for leadership, all definitions refer to similar character traits and skills that leaders cultivate and develop. The development of these skills are what educational institutions and corporate America are trying to enhance in their students and management teams through implementation of theory and structured programs.

Student Development Theory

The purpose of creating the VMI Rat Challenge was to provide an environment where cadets could test and exceed their self-defined limitations. Cognitive

developmental theorists can help design appropriate learning environments for students.

Kohlberg, a cognitive developmental theorist, discussed the concept of developmental dissonance. Developmental dissonance is the tension between a person's modes of reasoning and the demands of a learning environment. This tension stimulates stage transition. If the tension is too great, or if there is too much discrepancy between the person's mode of reasoning and the challenge of the environment, then the person tends to ignore, not understand, polarize and harden, or escape the situation (Kohlberg, 1984). Developmental change is not fostered. The Rat Challenge stations serve as VMI's attempt to create developmental dissonance among the cadets and implement stage transition.

Kohlberg expands on developmental dissonance when he speaks of the "plus one principle." The structure of the learning environment should force an individual to operate at one level above their current stage of development (Kohlberg, 1969). The Rat Challenge stations are designed to be physically and mentally imposing. They are also designed to allow an individual to succeed over time. This station design is supported by Kohlberg's theory in that the learning environment continually supplies difficult yet attainable challenge for the Rats.

The VMI Rat Challenge uses the cadre as a support system for the Rats as defined by the psychosocial theorist, Nevitt Sanford. Challenge and support facilitate change according to Sanford. He states that people do not grow without challenges, and the amount of challenge we can tolerate is a function of the support available (Sanford, 1967). If support is available to students, the amount of challenge can increase.

One of the main objectives measured by the Rat Challenge is "improved relations with cadre." Throughout the program, the cadre serves as a support network cheering on the Rats as they attempt to complete each station. The cadre offer varied

techniques for success at each station, cheer the Rats on to completion, and console those cadets that may fail at certain events.

Leadership at Military Colleges

Part of the mission of VMI is to teach leadership. Graduates of military colleges are true products of their environment. Graduates are often referred to as citizen-soldiers. They are prepared for civilian leadership in their professions and for military leadership in times of national need (VMI Admissions, 1997).

Leadership typically is seen as a set of innate personality characteristics and that leadership cannot be taught (Kouzes & Posner, 1995). Viewing it as a set of non-learnable characteristics dooms society to having only a few good leaders. Contrary to this belief, VMI sees the Rat Challenge as a method for teaching their students to lead. Leadership is a set of skills which can be strengthened, honed, and enhanced if the proper motivation, desire, practice, feedback, role models and coaching are provided.

A military education combines the academic work of a rigorous college curriculum and the regimen of military discipline. Many demands are placed upon cadets. The physical, emotional, and intellectual rigors are designed to instill and reinforce personal character traits that will serve a cadet throughout life.

The mission of the Academy at West Point is to educate and train the Corps of Cadets so that each graduate shall have the attributes essential to professional growth. This growth is centered on their career as an officer of the Army and strives to inspire each to a lifetime of service to the nation (McNally & Gerras, 1996).

Every aspect of cadets' lives at West Point is designed to contribute to their development as leaders of character in each of three distinct pillars: intellectual, military, and physical development. West Point is interested in developing leaders of character who not only do things right, but who also do the right things under conditions of intense pressure and frequent scrutiny (McNally & Gerras, 1996).

To be effective in the 21st century, leaders must possess critical thinking skills. At military colleges, there is a unique struggle between soldier and scholar. Service academies exhibit a unique friction that separates them from their civilian counterparts. Lovell's (1979) book, "Neither Athens nor Sparta?", details the struggle between the Athenian values of a liberal education curriculum with the Spartan values of the professional military officer. In other words, one emphasizes academic excellence and independent thinking while the other advocates the value of "duty, honor and country." This struggle represents the contrast between education and training. It is this fine line that teachers negotiate in a leadership course.

The Virginia Military Institute combines the academic work of a rigorous college curriculum and the regimen of military discipline. Qualities of a strong character become integrated only as they are made part of a cadet's daily life. They live with classmates in barracks under a system of military governance. Cadets are offered leadership opportunities outside of the classroom as they undergo rigorous field exercises and participate in collegiate sports, which test the stamina of cadets in a physical capacity. This synergy creates successful students, competitive athletes, and conscientious leaders resulting in the complete person (VMI Admissions, 1997).

The military has a hierarchical structure consisting of many ranks, grades, and levels. The military also recognizes that leaders do not just command and control, they also serve and support (Kouzes & Posner, 1995). VMI sees leadership as a process and the Rat Challenge is a key component of this process for the first year of a cadet's academic career.

Wilderness Experience Programs

The VMI Rat Challenge presses the mental and physical limits of the cadets. Paralleling this type of leadership development in the private sector are outdoor wilderness programs. Many of the Fortune 500 companies use professional development funds to send employees to leadership training camps, which provide

similar physical challenges to the participants. These companies hope for the similar results expected of the VMI Rat Challenge such as marked improvement in communication skills and teamwork.

One example is the Hurricane Island Outward Bound School. The mission of this school is to provide safe and challenging educational experiences in a wilderness setting. These programs are carefully structured to improve teamwork, self-esteem, self-reliance, concern for others, and care for the environment. They pioneered this rigorous form of experiential education that placed groups of students in wilderness settings to develop these skills (Clark, 1987).

Hurricane Island Outward Bound School is divided into two sections including special programs and public courses. Special programs are courses frequently contracted through government agencies for specific groups. Typical populations of this group include Vietnam Veterans, emotionally and developmentally handicapped youth, juvenile delinquents, and substance abusers.

Public courses include the Professional Development Program (PDP). The goal of the PDP was to put managers together under adverse conditions and watch them respond. The PDP course focused on leadership, team building, stress management, communication and goal setting (Clark, 1987).

An example of how Hurricane Island fulfills its mission is through the Maine Sea Program. The objectives of the school are accomplished by having team members navigate and sail a 30-foot open pulling boat. The students learn lessons of survival on land and sea. Classes on ecology are also part of their daily training. The program also contains segments on rock climbing and a Hurricane Island ropes course. This program is offered in Maine and similar programs are also offered in the tropical wilderness of the Florida Keys.

Special program participants often have issues of low self-esteem and limited physical capabilities. Courses like the Maine Sea Program stimulate personal growth by

forcing students to experience new tangible obstacles. The nature and isolated environment of the experience brings about feelings of fear and confidence. Through their involvement, students realize their value to the team. They are forced to share their personal and diverse skills and ultimately overcome their fear of failure. This mission is accomplished because they learn to support and offer each other encouragement.

In addition to the physically challenging outdoor portion of the program, the Outward Bound experiences for public courses are mixed with a more traditional training presentation. For example, General Electric's group attended a seminar and a three-day course before reporting to GE's New York training center for four weeks of in-house work (Clark, 1987).

Although there was no formal feedback mechanism to collect information from the companies involved, informal follow-up elicited numerous comments. Responses from human resources professionals at the companies who participated suggested that managerial participants showed a greater sense of confidence. They were also better at meeting deadlines, and had stronger presentation and communication skills than they had shown in the past. In addition, feedback suggested that seeing peers surpass their mental and physical limits was transferred to the workplace. Managers became more open and able to cope with emotions (Clark, 1987).

The Outward Bound school offers several courses ranging in length from 3 to 101 days. Like VMI, all courses are carefully constructed to provide challenges while ensuring safety. The instructors concentrate on teaching skills necessary for course activities assuming no prior experience. Although learning wilderness survival skills was an important part of each course, more important was learning to work with a group under often trying circumstances, gaining self-confidence and the ability to trust fellow team members.

The similarities of the VMI Rat Challenge and the Outward Bound School exceed the mission and goals of the program. Both educational experiences include the same types of events such as high rope courses, rock climbing, rappelling, hiking and multi-element obstacle courses. Informal feedback of both programs exhibits the same objective achievement and personal growth.

Cognitive developmental and psychosocial theorists believe that growth involves a period of disequilibrium, anxiety, and dissonance, out of which a new stage is established. Sanford (1962) says:

We could run an institution in the interest of positive mental health that would so protect individuals from challenging stimuli that they would not develop at all. ... We have to find challenges that are sufficient to require that the individual make a really new kind of adaptation, but not so intense or disturbing as to force a student to fall back on earlier primitive models of adaptation which will serve him badly in the long run. (pp. 11, 13)

The ability of participants to exceed self-imposed limits in the VMI Rat Challenge and the Hurricane Island Outward Bound School is supported by Sanford's theory of challenge and support.

Men and Women in Leadership

In the 1997-1998 academic year, VMI began the assimilation of women into their Corp of cadets. This introduction has forced the entire school to adapt and modify their culture and educational techniques from adding shades on barrack windows to the physical elements of the Rat Challenge. While they have changed tangible elements, VMI works hard to continue the development of leaders with character and integrity. These traits remain a constant expectation amongst the men and women.

The belief that men and women are "different yet equal" often ends when women are evaluated in leadership roles. Most often women are judged relative to the

leadership standards previously established by their male counterparts in those positions (Annis, 1995). Women leaders often feel compelled to adopt this leadership style. She will act the way she believes a man would in that position. It is this action, which is foreign to her, which makes a woman unsuccessful at times.

Men tend to be more aggressive, even militaristic, in leadership roles. Women prefer to rely on their interacting with others and their ability to energize others, while men prefer to rely on the authority of their position to influence and motivate (Annis, 1995). Male cadets rely on their rank in the cadre as a means of motivation. Female cadets may still rely on their skills to influence others. However, even with abundant skill, the female leader must work harder to convince students, staff members, and peers that she can lead effectively.

Howeth (1985) and McShea (1979) discovered that the most inhibiting factor to women in leadership positions was the reaction of men in a profession toward women in the same profession. Once in a position, women have noted that they must continue to expend considerable time and energy convincing significant others that they are capable and competent leaders.

Setting high standards for themselves and high expectations for others influence a female's accomplishments. In a study conducted on female education administrators, female leaders explained that part of their need for over achievement is striving for position and acceptance in a "man's culture." There were different expectations for male and female leaders. Based on their experiences, the women believed that men and women led differently (Barbour, Daneo, Tipping & Rutledge, 1994). Women tend to be more nurturing. They give people more support than men do.

VMI's history spans more than 100 years. It is only the second year that women are enrolled at VMI. They are currently striving to fit into a "man's culture." The Rat Challenge serves as a playing field for them to exhibit their capabilities to fellow male cadets and hone leadership skills.

CHAPTER THREE

Methodology

The researcher chose to utilize the formal assessment procedure of a survey. This decision was supported by several sources, which indicated the benefits and risks of using this type of analysis. Some of the benefits include the characteristics of the instrument. The researcher was able to design the survey and tailor it to the specific needs of the VMI Rat Challenge (Stage, 1992). The VMI Department of Physical Education asked that a qualitative open-ended response section be included in the instrument that allowed the cadets to comment on specific parts of the Rat Challenge. By designing the survey, the researcher was able to meet this need.

A survey was cost effective in this situation. Every cadet agreed to participate in the study. Designing and distributing a survey was the most convenient way to reach the respondents (O'Sullivan & Rassel, 1995).

VMI cadets live by a regimented schedule. The cadets were most accessible at a set time and place. This made the survey a plausible way to collect raw data as opposed to conducting interviews, focus groups, or other research methods.

The survey was systematically conducted using established procedures. The time, location, and general environment were the same for each cadet completing the survey (Gall, Borg & Gall, 1996). In response to the VMI culture and recent assimilation of women into that culture, it was important to provide confidentiality and anonymity to all respondents (Suskie, 1996). A survey satisfied this need.

Some of the risks involved in conducting a survey at VMI included the unwillingness to participate in formal studies. The familiarity of surveys was a drawback. Recipients tend to ignore them and the average response rate has been 15% (Patton & Sawicki, 1993). These surveys were not being mailed. For this reason, the researcher expected a higher response rate. The researcher was also informed that the cadets have been historically surveyed on numerous occasions. Cadets may

have become immune to concentrating on the questions asked. They may not respond honestly (King, 1990).

A Likert scale has a tendency to yield biased results because people are more likely to agree than disagree with a statement. The researcher chose a Likert scale format for simplicity sake in conducting descriptive statistics and analysis on the data.

Survey Population

The survey population included the cadets at the Virginia Military Institute, a small military-related, four-year college that recently changed to a co-ed status. The military college is located in a mid-Atlantic state. The survey population was defined as first, second, third, and fourth year students who had been enrolled at the institute for their collegiate career.

The data collected was examined by nine demographic characteristics: (a) gender, (b) class standing, (c) VMI legacy, (d) siblings at VMI, (e) participation in intramural activities, (f) participation in organized sports, (g) prior military experience, (h) parental prior military experience, and (i) parents presently in the military.

The gender demographic was chosen because of the recent assimilation of women into VMI. Class standing was selected to separate the Rats from the cadre in the study. VMI has a rich tradition and strong alumni following. For this reason, many cadets are the sons and daughters of VMI alumni classifying these cadets as part of a VMI legacy. The same is true for siblings. Cadets also have previous exposure to both varsity and intramural athletics. In a large percentage of cadets, the military has a strong presence in the lives of the cadets as well as their families. For this reason the final three demographics were chosen.

Every Fourth Classman is considered a Rat and expected to participate in the Rat Challenge. Cadets involved in organized athletic sports that are in season at the time of the Rat Challenge are excused from participation. All other Fourth Classmen cadets are mandated to participate. The Rat Challenge events take place every

Monday and Wednesday from September 9th through November 19th from 4 p.m. until 6 p.m.. The scheduled time of Rat Challenge activities may vary depending upon weather conditions and the effects of daylight savings time.

The Rat Challenge is divided into stations. Each station has a member of the cadre serve as the station leader who will also oversee the cadre volunteers for that particular event. The station leader is also responsible for the instruction and safety of cadets. Emergency Medical Technicians (EMT) are present on the course each day the Rat Challenge is scheduled. Companies at VMI are arranged according to height for appearance in parade. Each company rotates from one Rat Challenge Station to the next to experience all events. A complete schedule of companies and dates they participate in the events are included in Appendix A.

Every Rat involved in the Rat Challenge was asked to participate in the study. Every cadre member, who volunteers their time to this program, was also selected to participate in the study.

Instrumentation

A two-part, paper and pencil, self-report questionnaire was designed by the researcher (See Appendix B). The survey is comprised of 21 items related to specific objectives. These objectives are to be fulfilled by the Rat Challenge program.

Respondents were asked to respond to the survey using a Likert-type scale (1 = was not achieved; 2 = achieved at a minimum level; 3 = achieved substantially; 4 = achieved fully). Each level of the scale was assigned a numerical value for comparative analysis. For example, the Rat would circle the appropriate numerical value in the cell pertaining to the objective "helped overcome fear of heights" in regards to the high ropes course.

The researcher determined that several objectives were not applicable to certain Challenge Stations. These 12 cells were shaded and eliminated to minimize

confusion among the respondents. Analysis done on these cells would have no meaning since the objective did not logically apply to the station.

An open-ended response section followed. Respondents were asked to write any comments or recommendations regarding each Challenge Station. Each station was listed vertically down the page and space was left for respondents to make any comment. Respondents were asked to rate their overall experience in the Rat Challenge. They were also asked if they would like to participate in the Rat Challenge the following year and specify the role they would like to fulfill.

Data Collection Procedures

Steps involved in administering the instrument included (a) obtaining approval from the Commandant of the military institute to conduct the study, (b) obtaining approval from the Physical Education department of VMI, (c) obtaining approval to conduct research on human subjects from Virginia Polytechnic Institute and State University's Institutional Review Board, (d) distributing the instrument, and (e) collecting the completed questionnaires.

Approval was obtained from the Commandant of the military institute to collect the data on campus. The Commandant made a request on November 1, 1998 that he be given a copy of the results after the study had been completed.

The VMI Department of Physical Education approved the study in August of 1998. They invited the researcher to observe and participate in a Challenge Station. They also provided videos of the Rat Challenge.

The proper form was completed and sent to the University Institutional Review Board to request permission to conduct the study on human subjects. The University Institutional Review Board sent written notice of approval for conducting the study on November 17, 1998 (See Appendix C).

The cover letter outlined a brief description of the study and provides instructions. It also served as an informed consent form assuring anonymity (See Appendix D).

The data were collected one week following the completion of the Rat Challenge program. The distribution of surveys took place on Wednesday, December 2, 1998. Cadets were called to a meeting to complete the surveys. They were asked to complete the surveys and hand them in before leaving the meeting. If a cadet could not attend this meeting, a survey was addressed to the cadet and delivered to barracks. A stamped return-envelope was included for those that would complete the survey at a later time.

Validity and Reliability

A valid questionnaire measures accurately what it is supposed to measure. A valid survey means that inferences made from the survey will be accurate.

Initial testing of the Rat Challenge Evaluation shows that it has face and construct validity. A panel of experts examined the questionnaire for face validity. Since the survey is a first of its kind, there is no means of comparison for concurrent validity. A reliable questionnaire elicits consistent responses. Reliability for the Rat Challenge Evaluation was computed using a split-half coefficient after the data were collected.

Data Analysis Procedures

Hypotheses were tested using Microsoft Excel Data Analysis-Analysis ToolPak for Windows. The Likert survey was coded on a scale of 1 to 4. Each level of the scale was assigned a numerical value for comparative analysis (1 = was not achieved; 2 = achieved at a minimum level; 3 = achieved substantially; 4 = achieved fully).

The data were analyzed using t-tests and analysis of variance. Hypotheses one and three, four, five, six, seven, eight and nine were tested using a t-test to compare

group mean scores. Hypotheses two was tested by measuring significant differences using analysis of variance (ANOVA) across the class standing of the cadets.

The overall event rating mean scores were compared for each group. For example, mean scores were compared to determine whether there was a significant difference in the overall event rating of high ropes between men and women. This was done for each Challenge Station. The overall objective rating mean scores were compared for each group. For example, mean scores were compared to determine whether there was a significant difference in the overall objective rating of improved physical condition between men and women. If a significant difference occurred, the researcher examined the qualitative responses regarding the specific objectives and stations to draw conclusions.

The open-ended response section elicits comments from the Rats and cadre. The responses may have been positive or negative regarding each Challenge Station and the Rat Challenge experience as a whole. The cadets also had the opportunity to provide feedback and suggestions on their experience, the equipment used, or the evaluation process. They were also asked if they would like to participate in the program next year.

This section was analyzed according to cadet responses. Responses were coded and classified according to several factors such as: positive responses, negative responses, and questions most frequently answered.

CHAPTER FOUR

Results

Demographic Information

A descriptive presentation and analysis of the data received from the responses to the survey instrument are included in this chapter. The population consisted of 237 cadets participating in the Rat Challenge.

In total, 180 Rats and 57 cadre participated in the study. A response rate of 100 percent was attained. The data collected were examined by nine characteristics: (a) gender, (b) class standing, (c) VMI legacy, (d) siblings at VMI, (e) participation in intramural activities, (f) participation in organized sports, (g) prior military experience, (h) parental prior military experience, and (i) parents presently in the military. Numbers and percentages of participants according to each demographic category are presented in Table 1.

Summary of Findings

Means and standard deviations were calculated for each of the 10 objectives specified in the instrument. The Likert survey was coded on a scale of 1 to 4. Each level of the scale was assigned a numerical value for comparative analysis (1 = was not achieved; 2 = achieved at a minimum level; 3 = achieved substantially; 4 = achieved fully). These were calculated for the cadre and Rats. A combined score is also included in Table 2. Non-responses to specific objectives were acknowledged as "missing data" and removed from any statistical equation for that particular objective. As a result, the number of respondents to a particular objective does not always equal the total survey population of 237.

The majority of standard deviations in Table 2 fell under the 1.00 scale. Two exceptions are the objectives "improved sensitivity to differences in ability, " and "help overcome fear of heights."

Table 1

Demographic Data from Rat Challenge Respondents

Category	n	Percent
Gender		
Male	231	97
Female	6	3
Class		
1st-senior	11	5
2nd-junior	18	8
3rd-sophomore	30	13
4th-freshman(rat)	178	75
Legacy		
Part of legacy	37	16
Not part of legacy	200	84
Siblings		
Siblings at VMI	9	4
No siblings at VMI	228	96
Intramurals		
Participated in intramurals	54	23
Did not participate in intramurals	183	77
Varsity		
Participated in varsity athletics	135	57
Did not participate in varsity athletics	102	43
Prior Military		
Prior military experience	35	15
No prior military experience	202	85
Parents past military		
Parents had past military experience	128	54
Parents had no past military experience	109	46
Parents present military		
Parents presently in military	23	10
Parents not presently in military	214	90

Note.Percentage error may occur due to rounding

Table 2

Means and Standard Deviations for Cadre, Rat, and Combined Sample Scores by Objectives

Objectives	Cadre		Rat		Combined	
	n	Mean(SD)	n	Mean(SD)	n	Mean(SD)
Improved physical condition	42	3.26 (0.70)	168	3.46 (0.71)	210	3.42 (0.71)
Helped conquer fears	42	3.12 (0.74)	167	2.87 (1.07)	209	2.92 (1.02)
Improved relations with cadre	41	2.59 (0.95)	169	3.20 (0.82)	210	3.08 (0.88)
Improved self-esteem	40	3.25 (0.74)	167	3.32 (0.78)	207	3.30 (0.78)
Helped build team spirit	40	3.50 (0.55)	169	3.61 (0.61)	209	3.59 (0.60)
Improved ability to resolve conflict	40	3.15 (0.74)	168	3.14 (0.90)	208	3.14 (0.87)
Improved sensitivity to differences in ability	40	2.80 (1.02)	167	2.89 (1.03)	207	2.87 (1.02)
Developed problem solving skills	38	3.08 (0.78)	169	3.23 (0.84)	207	3.20 (0.83)
Helped overcome fear of heights	39	2.90 (0.94)	166	2.71 (1.20)	205	2.75 (1.15)
Had fun	38	3.50 (0.76)	166	3.56 (0.72)	204	3.55 (0.72)

The objective "improved sensitivity to differences in ability" has a standard deviation of 1.02 for the combined scores of cadre and Rats. The broad standard deviation reflects the wide range of scores attributed to this objective. One reason for this could be that the female cadets assigned very high values to this objective while the men did not. The mean scores listed in Table 2 for this objective may not be a true reflection of attitudes towards differences in ability.

In regards to the objective "helped overcome fear of heights" the combined standard deviation score of 1.15 is attributed to the Rats and their range of responses with a standard deviation of 1.20. Since the Rats were the only direct participants physically involved in these stations, they were the ones afforded the opportunity to truly overcome this fear of heights. The role of the cadre was to supervise certain events. Many members of the cadre were not involved in stations having height and therefore they could not truly respond to this objective. The cadre were forced to choose an answer based on stations they may not have been involved with since their own participation in the Rat Challenge as a Fourth Classman.

Means and standard deviations were calculated for the 21 stations specified in the instrument. These were calculated for the cadre and Rats. A combined score is also included in Table 3. The number of respondents for the combined score varies between the different stations because non-responses to specific stations were acknowledged as "missing data" and removed from any statistical equation for that particular station.

Research Question One

The first research question asked: What level of achievement was reached by participating VMI cadets by Rat Challenge station? Table 3 indicates that the ranger pit scored the highest with a mean of 3.68. The dirty name and weaver received the lowest station score with a mean of 2.77.

Table 3

Means and Standard Deviations for Cadre, Rat, and Combined Sample Scores by Stations

Objectives	Cadre		Rat		Combined	
	n	Mean(SD)	n	Mean(SD)	n	Mean(SD)
High ropes	47	3.17 (0.79)	170	3.30 (0.70)	217	3.27 (0.72)
Pugil sticks	45	3.33 (0.67)	161	3.24 (0.85)	206	3.26 (0.81)
Ranger pit	44	3.55 (0.64)	162	3.72 (0.58)	206	3.68 (0.59)
Zip wire vertical entry	43	3.33 (0.64)	161	3.46 (0.77)	204	3.43 (0.74)
Circuit courses	42	3.14 (0.78)	163	2.75 (0.93)	205	2.83 (0.91)
Dirty name weaver	41	2.90 (0.80)	136	2.73 (0.93)	177	2.77 (0.90)
Ravine	40	2.90 (0.87)	143	2.91 (0.92)	183	2.91 (0.91)
Fuel barrel	40	2.98 (0.80)	159	2.92 (0.96)	199	2.93 (0.93)
Log/wire walk; stump jump	42	2.98 (0.81)	164	2.98 (0.88)	206	2.98 (0.87)
Swinging log; wall	41	3.32 (0.69)	162	3.09 (0.88)	203	3.14 (0.85)
VMI o'course	41	3.27 (0.81)	166	2.98 (0.93)	207	3.04 (0.91)
House mountain	42	3.40 (0.63)	155	3.55 (0.70)	197	3.52 (0.69)
Rock climbing	47	3.47 (0.75)	151	3.58 (0.72)	198	3.56 (0.73)
Rappelling	46	3.59 (0.65)	147	3.48 (0.84)	193	3.51 (0.80)
POW; river cross; elec. Fence	41	2.90 (0.86)	154	3.16 (0.92)	195	3.11 (0.91)
Howitzer problem	40	3.03 (0.83)	123	3.01 (0.97)	163	3.01 (0.94)
Tug-o-war	41	2.95 (0.77)	122	3.09 (0.97)	163	3.06 (0.92)
Marine obstacle course	41	3.32 (0.82)	170	3.28 (0.86)	211	3.28 (0.85)
Bridge problem; bosuns chair	41	3.05 (0.86)	138	3.00 (0.90)	179	3.01 (0.89)
5 mile run (chessie trail)	42	3.43 (0.59)	150	3.30 (0.97)	192	3.33 (0.90)
Rat Olympics	44	3.41 (0.73)	168	3.70 (0.60)	212	3.64 (0.64)

Five stations had a mean score greater than or equal to 3.50. They are ranger pit, house mountain, rock climbing, rappelling and the Rat Olympics. These stations proved to be the most popular for cadets. Most rats have not been previously exposed to these types of events. This made these activities new and exciting. They also have a tendency to be very fun and dirty. These stations are team oriented and Rats need instruction in order to safely complete the exercises. This results in an opportunity to bond with fellow Rats and the cadre. The excitement of overcoming a new obstacle results in positive growth. This may be the reason for such a positive response to the five high scoring stations.

Five stations had a mean score less than 3.00. They are circuit courses, dirty name/weaver, ravine, fuel barrel, and log/wire walk/stump jump. Qualitative comments regarding each of these stations were much more negative compared to other events. Common responses indicated that several events were too difficult for anyone to succeed. Some were viewed as dangerous and repetitive. These stations were also individual based. This means that cadets did not work with each other on a particular task. Cadets also seemed to grow frustrated with events that require problem-solving skills. If the cadets had no sense of accomplishment, they felt as though they gained nothing positive from the experience. The exception is that the cadets expressed desire to try again but time constraints would not allow this. The remaining 11 events fell within the range of greater than or equal to 3.00 and less than 3.50.

Research Question Two - Objective Achievement

What differences by group (gender, class standing, VMI legacy, siblings at VMI, participation in intramural activities, participation in varsity sports, prior military experience, parental prior military experience, parents presently in the military) were observed? The hypotheses were tested using an alpha level of .05.

Hypothesis One: There is no significant difference in the reported objective achievement of cadets by gender

A t-test was used to determine if there were significant differences between male and female cadet responses with regards to objective achievement. Significant differences were identified in five objectives including (a) improved relations with cadre, (b) improved self-esteem, (c) helped build team spirit, (d) improved sensitivity to differences in ability, and (e) developed problem solving skills (See Table 4).

Ninety-seven percent of the respondents were male. This can be explained because females had just begun to enter VMI in 1997 and only six females participated in the Rat Challenge.

A t-test was computed to test the null hypothesis that there is no significant difference in the reported objective achievement of "improved relations with cadre" by gender. The hypothesis was rejected ($p = .04$). (See Table 4).

One possible reason for the difference in male and female results regarding "improved relations with cadre" could be that women may feel unwanted at VMI and be particularly intimidated by the cadre who have not been exposed to female Rats in prior years of study.

T-tests were computed to test the null hypotheses that there is no significant difference for the objectives "improved self esteem" and "helped build team spirit." A P-value of .02 and 0.00 respectively, were computed (See Table 4). Therefore, the null hypotheses that there are no significant differences in the reported objective achievement of "improved self-esteem" and "helped build team spirit" by gender are rejected.

Possible reasons for the differences in male and female results regarding "improved self-esteem" and "helped build team spirit" are exhibited by some of the qualitative comments. Team spirit was not shown by the comment "we pushed hard and won, but only after the women dropped out." This showed that a male cadet did

Table 4

Results of Objective t-tests by Gender

Objectives	Gender	
	Male	Female(p)
Improved physical condition	3.43	2.83 (0.20)
Helped conquer fears	2.94	2.00 (0.11)
Improved relations with cadre	3.10	2.40 (0.04)
Improved self-esteem	3.32	2.40 (0.02)
Helped build team spirit	3.60	3.00 (0.00)
Improved ability to resolve conflict	3.15	2.40 (0.14)
Improved sensitivity to differences in ability	2.89	2.00 (0.05)
Developed problem solving skills	3.23	2.20 (0.05)
Helped overcome fear of heights	2.77	1.80 (0.06)
Had fun	3.56	3.20 (0.15)

not care for a woman's involvement. The women were seen as harmful to the team's ability to win and this may cause feelings of low self-esteem. A comment was received noting that "the girl was the weak link."

A t-test was computed to test the null hypothesis that there is no significant difference in the objective "improved sensitivity to differences in ability" by gender. The hypothesis was rejected ($p = .05$). One reason for the difference in "improved sensitivity to differences in ability" is because the women appear to be the cadets lacking the ability and strength in the Rat Challenge events. The stations have been built to be very difficult. Even large men of great strength and stature struggle with certain stations. Small framed men and particularly women have a very difficult time with some of the obstacle courses because of their physical traits.

The final difference appears in the objective "developing problem solving skills." A t-test was computed to test the hypothesis that there is no significant difference in the objective "developing problem solving skills" by gender. The hypothesis was rejected ($p = .05$). Many of the male cadets have been trained in the boy scouts and attained the level of eagle scouts. Perhaps upbringing has better prepared the men for these activities. However, once again it must be stressed that there is a tremendous difference in the number of male and female responses.

Hypothesis Two: There is no significant difference in the reported objective achievement of cadets by class standing (first class, second class, third class, and fourth class).

Using an analysis of variance, significant difference was identified in the objective "improved relations with cadre" (See Table 5). The hypothesis was rejected ($p = 0.00$). The Rats mean score was much higher than the remaining classes and the researcher expected this behavior. The Rats scored a 3.19. A main objective of the Rat Challenge is for Rats to feel more comfortable with cadre. This objective is being achieved and the other classes are part of the cadre. Comments include: "great bonding

Table 5

Results of Objective 4-Way Analysis of Variance by Class Standing

Groups	n	Mean	Variance
Improved relations with cadre			
1st-senior	7	2.71	0.90
2nd-junior	9	2.22	1.19
3rd-sophomore	27	2.74	0.81
4th-freshman(rat)	167	3.19	0.67

Source of Variation	SS	df	MS	F	P-value
Between groups	12.74	3	4.25	5.91	0.00
Within groups	148.04	206	0.72		

experience," "fun pummeling cadre," and a female responded by stating it was "fun, bonded with cadre." Cadre also reported a bonding experience with their fellow cadets of all classes. The cadre has had the opportunity to spend much time together over their academic career and they are already familiar with each other. The Rat Challenge gives the fourth classmen the opportunity to see the cadre as supporters of their success. It has been reported that many friendships develop out of the Rat Challenge experience.

Hypothesis Three: There is no significant difference in the reported objective achievement of cadets whether or not the cadet is part of a VMI legacy.

A t-test was computed to test the hypothesis that there was no significant difference identified by the legacy demographic (See Table 6). The null hypothesis was accepted. Sixteen percent of the Rat Challenge population is part of a VMI legacy. This means that the cadet's father, grandfather, or close relative also attended VMI. The Rat Challenge has also been a part of VMI history and the researcher expected that the cadets are familiar with the existence of the program prior to admittance to the military institute. Statistical analysis shows that this knowledge has no effect on objective achievement for the VMI legacies.

Hypothesis Four: There is no significant difference in the reported objective achievement of cadets whether or not the cadet has siblings at VMI.

Using t-tests, there were no significant differences identified by the sibling demographic (See Table 6). The null hypothesis was accepted. Although only four percent of the cadets have siblings at VMI, the researcher expected that the cadets would be familiar with the Rat Challenge program and their siblings may be more supportive and encouraging during this time affecting objective achievement. Statistical analysis shows that this was not the case.

Table 6

Results of Objective t-tests by Legacy and Siblings

Objectives	Legacy		Siblings	
	Part of legacy	Not part of legacy(p)	Siblings at VMI	No siblings at VMI(p)
Improved physical condition	3.34	3.43 (0.58)	3.00	3.43 (0.36)
Helped conquer fears	2.78	2.94 (0.46)	2.43	2.93 (0.29)
Improved relations with cadre	2.97	3.10 (0.47)	3.14	3.08 (0.86)
Improved self-esteem	3.13	3.33 (0.26)	3.00	3.31 (0.51)
Helped build team spirit	3.41	3.62 (0.12)	3.14	3.60 (0.30)
Improved ability to resolve conflict	3.13	3.14 (0.94)	3.29	3.13 (0.61)
Improved sensitivity to differences in ability	2.94	2.86 (0.68)	2.71	2.87 (0.75)
Developed problem solving skills	3.23	3.20 (0.87)	3.00	3.21 (0.65)
Helped overcome fear of heights	2.63	2.77 (0.52)	2.14	2.77 (0.17)
Had fun	3.56	3.54 (0.90)	3.57	3.55 (0.94)

Hypothesis Five: There is no significant difference in the reported objective achievement of cadets whether or not the cadet has been involved in intramural sports.

Using t-tests, there were no significant differences identified by the intramural demographic (See Table 7). The null hypothesis was accepted.

Hypothesis Six: There is no significant difference in the reported objective achievement of cadets whether or not the cadet has been involved in varsity sports.

T-tests were computed to test the hypothesis. Two significant differences were identified by the varsity demographic. They include (a) improved physical condition ($p = .02$) and (b) improved relations with cadre ($p = 0.00$) (See Table 7). The null hypothesis was rejected for these items.

Participating in varsity athletics provides the fundamentals of physical conditioning and training. Because of this frame of reference, participants may be more in tune with their body and recognize that they have "improved their physical condition" more so than someone who wasn't in athletic shape.

Varsity athletics historically instills teamwork and camaraderie in its players. These cadets may be more open to working as a group and learning from cadets who already have situational experience. This may explain the improved relations with the cadre.

Hypothesis Seven: There is no significant difference in the reported objective achievement of cadets whether or not the cadet has prior military experience.

T-tests showed there were no significant differences identified by the prior military experience demographic (See Table 8). The null hypothesis was accepted. This acceptance of the null hypothesis comes as a surprise to the researcher. Fifteen percent of the cadets participating in the Rat Challenge have prior military experience. VMI is run very similar to the military. One would expect that prior military experience

Table 7

Results of Objective t-tests by Intramurals and Varsity Athletics

Objectives	Intramurals		Varsity	
	Participated in intramurals	Did not participate in intramurals(p)	Participated in varsity athletics	Did not participate in varsity athletics(p)
Improved physical condition	3.48	3.40 (0.50)	3.51	3.28 (0.02)
Helped conquer fears	2.83	2.94 (0.51)	2.91	2.92 (0.94)
Improved relations with cadre	3.21	3.04 (0.28)	3.24	2.85 (0.00)
Improved self-esteem	3.40	3.27 (0.31)	3.33	3.27 (0.59)
Helped build team spirit	3.66	3.57 (0.30)	3.63	3.52 (0.17)
Improved ability to resolve conflict	3.25	3.10 (0.29)	3.18	3.07 (0.35)
Improved sensitivity to differences in ability	2.92	2.85 (0.71)	2.91	2.81 (0.50)
Developed problem solving skills	3.27	3.18 (0.52)	3.25	3.13 (0.31)
Helped overcome fear of heights	2.64	2.77 (0.52)	2.74	2.75 (0.93)
Had fun	3.62	3.53 (0.46)	3.57	3.52 (0.64)

Table 8

Results of Objective t-tests by Prior Military Experience, Parents Past Military Experience, and Parents Presently in Military

Objectives	Prior military		Parents past military		Parents present military	
	Prior military experience	No prior military experience(p)	Parents had past military experience	Parents had no past military experience(p)	Parents presently in military	Parents not presently in military(p)
Improved physical condition	3.32	3.43 (0.45)	3.36	3.48 (0.19)	3.45	3.41 (0.76)
Helped conquer fears	2.76	2.94 (0.45)	2.89	2.94 (0.75)	2.91	2.91 (0.98)
Improved relations with cadre	2.94	3.11 (0.33)	3.01	3.17 (0.18)	3.32	3.05 (0.15)
Improved self-esteem	3.23	3.31 (0.56)	3.23	3.38 (0.18)	3.14	3.32 (0.43)
Helped build team spirit	3.67	3.57 (0.35)	3.58	3.60 (0.76)	3.59	3.59 (0.97)
Improved ability to resolve conflict	2.97	3.16 (0.24)	3.12	3.16 (0.71)	3.10	3.14 (0.81)
Improved sensitivity to differences in ability	2.68	2.90 (0.26)	2.86	2.87 (0.95)	2.76	2.88 (0.61)
Developed problem solving skills	3.13	3.22 (0.60)	3.17	3.24 (0.54)	3.24	3.20 (0.83)
Helped overcome fear of heights	2.52	2.78 (0.27)	2.80	2.68 (0.45)	2.62	2.76 (0.62)
Had fun	3.62	3.53 (0.51)	3.46	3.65 (0.07)	3.57	3.54 (0.88)

would set cadets apart from each other in regards to objective achievement. This was not the case.

Hypothesis Eight: There is no significant difference in the reported objective achievement of cadets whether or not the cadet's parents have prior military experience.

Using t-tests, there were no significant differences identified whether or not the cadet's parents have prior military experience (See Table 8). The null hypothesis was accepted. Fifty-four percent of the cadets participating in the Rat Challenge have parents who were in the military. Explanations for no significant difference on the part of cadets whose parents have prior military experience may include that the cadet was not born during parent's time of service. Therefore, they would not have been exposed to this culture. Parents may not have been career military personnel. Their involvement may have been result of national need during wartime and parents may have been in the reserves as opposed to full-time.

Hypothesis Nine: There is no significant difference in the reported objective achievement of cadets whether or not the cadet's parents are presently in the military.

T-tests showed there were no significant differences identified whether or not the cadet's parents are presently in the military (See Table 8). The null hypothesis was accepted. Similar to the VMI legacy demographic, it is surprising that this would have no effect on objective achievement.

Research Question Two - Station Achievement

The appropriate t-tests or ANOVA were calculated on the stations of the Rat Challenge to determine whether significant differences existed between the nine demographics variables. Twelve significant differences were found.

Significant difference according to gender was found in three stations: (a) fuel barrel ($p = .02$), (b) log/wire walk, stump jump ($p = .02$), and (c) swinging log/wall ($p = .02$) (See Table 9). The null hypothesis was rejected.

Table 9

Results of Station t-tests by Gender

Objectives	Gender	
	Male	Female (p)
High ropes	3.28	2.83 (0.21)
Pugil sticks	3.27	2.80 (0.28)
Ranger pit	3.70	3.00 (0.09)
Zip wire vertical entry	3.43	3.33 (0.66)
Circuit courses	2.84	2.60 (0.59)
Dirty name weaver	2.78	2.20 (0.20)
Ravine	2.92	2.50 (0.26)
Fuel barrel	2.96	1.50 (0.02)
Log/wire walk; stump jump	3.00	2.33 (0.02)
Swinging log; wall	3.17	2.00 (0.02)
VMI obstacle course	3.05	2.67 (0.13)
House mountain	2.52	3.40 (0.78)
Rock climbing	3.56	3.20 (0.39)
Rappelling	3.53	2.80 (0.13)
POW; river cross; elec. fence	3.13	2.50 (0.21)
Howitzer problem	3.03	2.50 (0.18)
Tug-o-war	3.06	2.75 (0.30)
Marine obstacle course	3.30	2.83 (0.20)
Bridge problem; bosuns chair	3.03	2.25 (0.21)
5 mile run (chessie trail)	3.34	3.00 (0.50)
Rat Olympics	3.66	3.17 (0.18)

The fuel barrel takes extreme amounts of strength. Women would become very frustrated with this event. Cadets noted that this event was "frustrating, seemed impossible," and asked to "make barrel lighter." The log/wire walk and stump jump required agility and balance. The swinging log/wall was very challenging to cadets. The wall requires a team of Rats to pull each other over a very tall wall using only their bodies. It is a teambuilding exercise. However, as noted earlier, the women do not feel as though they are part of a team and may feel as though they could not contribute the strength required to the team.

Significant difference according to class standing was found in Rat Olympics (See Table 10). A P-value of .01 was reported. The Rats thoroughly enjoy this event. It is a day of fun for them. The cadre serves as judges. The Rats noted that they enjoyed the competition and "had a great sense of accomplishment afterwards" and "it's the best time you have being a Rat." All classes thoroughly enjoy the Rat Olympics, but for the Rats it means much more. It is the culmination of their hard work and they can see how much they have improved from day one.

Significant difference according to legacy was found in Rat Olympics (See Table 11). A P-value of .05 was reported. If you are a part of a VMI legacy, you have probably heard about the Rat Olympics for years and look forward to this experience to share with your family. Almost every comment received was positive.

Significant difference according to sibling status was found in the VMI obstacle course ($p = .01$) (See Table 11). The comments focus on the difficulty level. Perhaps Rats with siblings have been conditioned to believe it is self-defeating. This event was repetitive for the Rats as well.

Significant difference according to intramural demographic was found in the stations: (a) pugil sticks ($p = 0.00$), (b) ranger pit ($p = .03$), and (c) ravine ($p = .05$) (See Table 12). These events are very competitive and train you to fight against your own. Rats fight Rats, and the women who participate in these events fight each other.

Table 10

Results of Station 4-Way Analysis of Variance by Class Standing

Groups	n	Mean	Variance
Rat Olympics			
1st-senior	8	3.13	0.13
2nd-junior	11	3.27	1.02
3rd-sophomore	27	3.52	0.41
4th-freshman(rat)	165	3.71	0.37

Source of Variation	SS	df	MS	F	P-value
Between groups	4.79	3	1.60	4.04	0.01
Within groups	81.80	207	0.40		

Table 11

Results of Station t-tests by Legacy and Siblings

Objectives	Legacy		Siblings	
	Part of legacy	Not part of legacy (p)	Siblings at VMI	No siblings at VMI (p)
High ropes	3.33	3.26 (0.54)	3.22	3.27 (0.83)
Pugil sticks	3.31	3.25 (0.65)	3.29	3.26 (0.92)
Ranger pit	3.66	3.69 (0.76)	3.38	3.70 (0.27)
Zip wire vertical entry	3.45	3.43 (0.85)	3.00	3.45 (0.33)
Circuit courses	2.82	2.83 (0.94)	2.43	2.84 (0.50)
Dirty name weaver	2.74	2.77 (0.87)	2.80	2.77 (0.96)
Ravine	2.79	2.93 (0.46)	2.33	2.93 (0.14)
Fuel barrel	2.81	2.95 (0.45)	2.83	2.93 (0.84)
Log/wire walk; stump jump	2.91	2.99 (0.61)	2.50	3.00 (0.18)
Swinging log; wall	3.03	3.16 (0.46)	2.75	3.15 (0.31)
VMI obstacle course	2.78	3.09 (0.12)	2.00	3.08 (0.01)
House mountain	3.39	3.54 (0.42)	3.00	3.53 (0.35)
Rock climbing	3.45	3.57 (0.39)	2.88	3.58 (0.09)
Rappelling	3.45	3.52 (0.70)	3.22	3.52 (0.44)
POW; river cross; elec. fence	3.31	3.07 (0.18)	3.11	3.11 (0.99)
Howitzer problem	2.86	3.04 (0.43)	2.50	3.03 (0.28)
Tug-o-war	2.96	3.07 (0.59)	2.86	3.06 (0.63)
Marine obstacle course	3.38	3.27 (0.42)	3.00	3.30 (0.52)
Bridge problem; bosuns chair	3.04	3.01 (0.85)	3.00	3.01 (0.96)
5 mile run (chessie trail)	3.23	3.35 (0.57)	3.14	3.34 (0.69)
Rat Olympics	3.79	3.61 (0.05)	3.86	3.63 (0.18)

Table 12

Results of Station t-tests by Intramurals and Varsity Athletics

Objectives	Intramurals		Varsity	
	Participated in intramurals	Did not participate in intramurals (p)	Participated in varsity athletics	Did not participate in varsity athletics (p)
High ropes	3.44	3.22 (0.06)	3.33	3.18 (0.15)
Pugil sticks	3.54	3.18 (0.00)	3.22	3.31 (0.44)
Ranger pit	3.81	3.65 (0.03)	3.73	3.62 (0.20)
Zip wire vertical entry	3.38	3.45 (0.59)	3.45	3.40 (0.63)
Circuit courses	2.98	2.78 (0.23)	2.77	2.91 (0.25)
Dirty name weaver	2.90	2.73 (0.29)	2.70	2.86 (0.26)
Ravine	3.15	2.84 (0.05)	2.94	2.87 (0.60)
Fuel barrel	3.13	2.87 (0.08)	2.95	2.91 (0.76)
Log/wire walk; stump jump	3.04	2.96 (0.59)	2.94	3.03 (0.44)
Swinging log; wall	3.19	3.12 (0.64)	3.10	3.18 (0.51)
VMI obstacle course	3.23	2.98 (0.08)	2.92	3.21 (0.02)
House mountain	3.46	3.54 (0.53)	3.50	3.55 (0.60)
Rock climbing	3.47	3.58 (0.39)	3.55	3.57 (0.86)
Rappelling	3.51	3.51 (0.98)	3.54	3.46 (0.45)
POW; river cross; elec. fence	3.26	3.06 (0.15)	3.09	3.14 (0.71)
Howitzer problem	2.94	3.03 (0.62)	3.07	2.93 (0.33)
Tug-o-war	3.25	3.00 (0.11)	3.09	3.01 (0.62)
Marine obstacle course	3.45	3.23 (0.08)	3.27	3.31 (0.71)
Bridge problem; bosuns chair	3.14	2.97 (0.23)	2.90	3.16 (0.06)
5 mile run (chessie trail)	3.07	3.41 (0.06)	3.27	3.42 (0.24)
Rat Olympics	3.58	3.66 (0.50)	3.65	3.63 (0.75)

Intramural athletics are comprised of teams who compete against each other. One cadet commented on the ranger pit as "very unique and causes a good sense of unity."

Significant difference according to varsity demographic was found in the VMI obstacle course ($p = .02$) (See Table 12). Varsity athletes have diverse training exercises. These cadets may find the VMI obstacle course boring compared to the type of training to which they are accustomed.

There was no significant difference whether or not cadets had prior military experience (See Table 13). Cadets who have prior military experience do not report any different than those cadets that do not. The researcher assumed that those with prior military experience would be more successful than other cadets. One would assume that they have experience in these types of activities.

Significant difference according to the parents having past military experience was found in rock climbing ($p = .02$) (See Table 13).

Significant difference according to the parents presently being in the military was found in the fuel barrel ($p = .02$) (See Table 13).

Qualitative Analysis

Overall, the qualitative comments received highlight problem areas as well as reinforce positive attributes of each station. Several comments focus on equipment that may need to be replaced. Applicable comments have been used to support the quantitative analysis. A complete listing of comments is included in Appendix E.

The high ropes course had very positive comments. One cadet responded that he "quickly overcame fear of heights." Many cadets commented that the zip wire/vertical entry was enjoyable and very cold. Suggestions included having a

Table 13

Results of Objective t-tests by Prior Military Experience, Parents Past Military Experience, and Parents Presently in Military

Objectives	Prior military		Parents past military		Parents present military	
	Prior military experience	No prior military experience (p)	Parents had past military experience	Parents had no past military experience (p)	Parents presently in military	Parents not presently in military (p)
High ropes	3.33	3.26 (0.59)	3.25	3.30 (0.62)	3.09	3.29 (0.27)
Pugil sticks	3.48	3.22 (0.08)	3.28	3.23 (0.68)	2.95	3.29 (0.17)
Ranger pit	3.69	3.68 (0.97)	3.70	3.66 (0.64)	3.70	3.68 (0.88)
Zip wire vertical entry	3.29	3.46 (0.26)	3.39	3.49 (0.33)	3.55	3.42 (0.36)
Circuit courses	3.03	2.79 (0.20)	2.88	2.77 (0.40)	2.68	2.85 (0.40)
Dirty name weaver	2.69	2.78 (0.62)	2.81	2.72 (0.51)	2.68	2.78 (0.68)
Ravine	2.96	2.90 (0.71)	2.86	2.96 (0.46)	2.89	2.91 (0.92)
Fuel barrel	3.07	2.91 (0.39)	2.89	2.98 (0.51)	2.33	2.99 (0.02)
Log/wire walk; stump jump	3.06	2.97 (0.56)	2.89	3.09 (0.11)	2.81	3.00 (0.35)
Swinging log; wall	3.19	3.13 (0.75)	3.14	3.13 (0.95)	3.19	3.13 (0.77)
VMI obstacle course	3.00	3.05 (0.79)	3.00	3.09 (0.50)	2.70	3.08 (0.08)
House mountain	3.63	3.5 (0.34)	3.49	3.56 (0.47)	3.38	3.53 (0.38)
Rock climbing	3.59	3.55 (0.74)	3.45	3.69 (0.02)	3.47	3.56 (0.55)
Rappelling	3.47	3.52 (0.76)	3.47	3.55 (0.49)	3.50	3.51 (0.96)
POW; river cross; elec. fence	3.03	3.12 (0.63)	3.09	3.13 (0.74)	2.95	3.13 (0.51)
Howitzer problem	3.15	2.99 (0.38)	3.06	2.94 (0.42)	2.88	3.03 (0.52)
Tug-o-war	3.20	3.03 (0.41)	3.09	3.01 (0.62)	2.93	3.07 (0.58)
Marine obstacle course	3.25	3.29 (0.80)	3.27	3.31 (0.75)	3.18	3.30 (0.50)
Bridge problem; bosuns chair	3.04	3.01 (0.86)	2.92	3.13 (0.11)	3.00	3.01 (0.96)
5 mile run (chessie trail)	3.34	3.33 (0.91)	3.33	3.32 (0.93)	3.05	3.36 (0.22)
Rat Olympics	3.64	3.64 (0.95)	3.62	3.67 (0.55)	3.67	3.64 (0.86)

steeper incline for the zip line and the drop be longer to raise their awareness of heights.

The cadets enjoyed the pugil sticks station because it was fun fighting with the cadre. It was a great bonding experience and let the cadets rough house in an organized fashion. Some cadets showed concern that the equipment needed to be replaced. Specifically, the helmets need to be larger and have face covers.

Like the pugil sticks, the ranger pit was a great bonding experience and promoted team unity. Concern was shown that there were rocks in the pit that should be removed to ensure safety. It can be improved "by having different phases of pugil sticks or perhaps introduce close quarter combat drills."

The circuit course was good conditioning and a great endurance builder although some cadets felt as though it was a bit boring compared to the other events. A suggestion was included to add more obstacles. The VMI obstacle course was found to be boring but beneficial. The repetition was a point of contention for the Rats.

The dirty name and weaver were not enjoyable to the majority of respondents. Very few comments were received.

The ravine was reportedly "too easy." It seems as though the cadets are looking for a greater challenge. However, several comments were received in regards to the safety of the event including " have a medic on constant standby," the request to wear helmets by two cadets, and "at least no one died."

The fuel barrel was most frustrating to cadets because of the level of difficulty and high failure rate. The Rats requested additional time to try again and practice different ideas to accomplish the task.

The log/wire walk, stump jump proved to be a good exercise in balance. The swinging log and wall event was a great team builder. The request was made to have more events like this.

House mountain was "a blast that really brought out the leaders." Cadets reported that it was a beautiful view once cadets reached the top of the mountain. It appears that cadets who enjoy running particularly like this event and stand out from the other Rats.

Rock climbing and rappelling were two of the most popular events. Almost every comment received was positive. The heights were thrilling and the cadets really press to do these events more than once to perfect their technique. A longer descent would improve the course.

The POW, river cross and electric fence improved quick thinking and helped build team unity. One comment lacking the team unity theme was received in regard to female participation. "The girl was the weak link." The bridge problem and bosuns chair improved critical thinking skills.

The howitzer problem was difficult yet rewarding. The tug-o-war could be improved by implementing a weight and person limit. The sides should be made equal and the event would be fun over the mud pit.

The marine obstacle course was repetitive and overdone. It was a very intense work out; however, splinters need to be removed from the course.

The five-mile run was motivating and a great run. Like the house mountain station, cadets commented on the beautiful scenery. More time needs to be spent on stretching prior to this run.

The Rat Olympics was a fabulous event that gave cadets a great sense of accomplishment after the eleven weeks of the Rat Challenge. Although some cadets felt as though it was not representative of how much the cadets improved over time, overall it was tremendous fun and a final bonding experience for the cadre and Rats to end this time period.

Six female cadets completed the Rat Challenge evaluation. Every female cadet who completed the survey was a Rat. Two women supplied qualitative comments. These comments are noted in Appendix E. The comments were similar to those received from the male cadets. One woman indicated that they would like to return to the Rat Challenge as a cadre member. One woman indicated that she did not want to return to the Rat Challenge as a cadre member and four did not respond to the question.

Summary of Results

A total of 237 cadets who participated in the Rat Challenge responded to the request for information regarding their experience in the program. This total includes 180 Rats and 57 cadre. A 100 percent response rate was realized.

The purpose of the study was to describe the level of objective achievement reported by participants in the Rat Challenge program at the Virginia Military Institute. T-tests were conducted across nine demographics and ANOVAs were conducted on one to determine significant differences amongst groups. Significant differences among the demographics were found in 8 objectives and 12 stations using an alpha level of .05. Qualitative comments were collected on each station and used to support quantitative findings.

CHAPTER FIVE

Overview of the Study

The Rat Challenge program at the Virginia Military Institute has been a part of physical training for Fourth Classmen for more than two decades. Over the years, VMI has undergone many changes with the most recent and dramatic change being the assimilation of female cadets into the institution. The Rat Challenge is a valuable program which tests the mental and physical limits of cadets, teaching them skills needed to overcome self-imposed limitations.

The Department of Physical Education has not conducted an in-depth study of the objectives and stations involved in the program since the addition of female cadets. The additional eight demographics including familial ties, athletic involvement and military experience have not been studied. VMI embraced the study of their program and allowed the cadets to be part of this research.

The purpose of the study was to describe the level of achievement reported by participants in the Rat Challenge program at the Virginia Military Institute. The 21 stations that make up the Rat Challenge were evaluated. Station and objective differences by group (gender, class standing, VMI legacy, siblings at VMI, participation in intramural activities, participation in varsity sports, prior military experience, parental prior military experience, and parents presently in the military) were explored. Qualitative comments were collected from the respondents to buttress the quantitative conclusions.

The self-assessment instrument used is known as the Virginia Military Institute-Physical Education Department Rat Challenge Evaluation. Data were collected from the VMI Rat Challenge participants including both the Rats and cadre involved in the program on Wednesday, December 2, 1998.

Discussion of Findings

T-tests and ANOVAs were computed to find significant differences across the nine demographics. Differences in objective achievement by gender were improved relations with cadre, improved self-esteem, helped build team spirit, improved sensitivity to differences in ability, and develop problem-solving skills. Three of the objectives (improved relations with cadre, helped build team spirit, and improved sensitivity to differences in ability) were directly related to working with other participants. Two of the objectives (improved self-esteem and develop problem solving skills) were related to self-perception of the individual.

Significant differences in station achievement by gender were found in fuel barrel, log/wire walk/stump jump, and swinging log/wall. Physical attributes such as strength and agility are key components to the success or failure in the events. VMI is historically a single-sex population. The events have always been geared to be extremely difficult for men. This amplifies the level of difficulty for women giving them a lower success rate. Events have not been redesigned since the introduction of women. However, accommodations have been provided to compensate for the gender differences such as providing lifts on the obstacle course for women who are shorter. The women refuse to use them and be treated differently. VMI may want to consider redesigning events that allows women to compete on a level playing field without compromising their integrity.

In all these instances, the women scored themselves significantly lower in achieving these goals and objectives. The differences in score are most likely attributed to the fact that the women are in the minority. The recent assimilation of women in the program does not allow for equal distribution of females across the class standings and companies. The researcher believes that if women constituted a larger portion of the population and were more evenly distributed among the companies, the data would be more consistent with the male scores.

Female cadets who are not involved in the Rat Challenge participate in varsity athletics. Females competing in the varsity sports program have prior athletic experience and have been physically conditioned since high school. These women may be more agile, stronger, faster and have greater physical stamina compared to the women participating in the Rat Challenge. If these women also participated in the Rat Challenge program, the women may score the objectives relating to physical ability higher. Perhaps male cadets would also value the contribution of the female cadets to the team.

A difference in objective achievement by class standing was improved relations with cadre. A significant difference in station achievement was found in the Rat Olympics. This difference was expected since the program was designed to bring the cadre and Rats together in a fun and exciting learning environment. They are exposed to each other outside the barrack walls and the cadre not only act as a support system and educators, but also as Brother Rats. The Rat Olympics is the culmination of all the hard work the Rats put into succeeding at these events. It is a day of competition among brother Rats and a day for them to showcase their skills. The Rat Olympics is one of the most memorable days in a cadet's four years at VMI.

No significant difference was found in objective achievement by being part of a VMI legacy. Significant difference was found in the station Rat Olympics. A VMI legacy would be very familiar with the Rat Olympics through stories told by their relatives. This creates a sense of tradition in the family and allows the Rat to become the most recent carrier of this tradition.

No significant difference was found in objective achievement by having siblings at VMI. Significant difference was found in the station VMI obstacle course. The researcher has not been able to draw solid conclusions for this difference.

No significant difference was found in the objective achievement by having been previously involved in intramural athletics. Significant difference was found in

three stations including the pugil sticks, ranger pit and ravine. The pugil sticks and ranger pit include elements of combat against fellow Rats. Intramurals are based on competition amongst fellow classmates and team members. A correlation can be seen between these two programs.

Significant difference was found in two objectives including improved physical condition and improved relations in cadets with varsity experience. Significant difference was found in the station VMI obstacle course. The objective, improved physical condition can be attributed to the formal physical conditioning to which varsity athletes are accustomed. For this reason, these athletes may be more in tune with their bodies and recognize physical changes quickly. In regards to the objective, improved relations with cadre, varsity athletics serve as a training ground for learning respect for senior members in the unspoken hierarchy that exists on varsity teams. These Rats with varsity experience are more apt to bond with cadre sooner. The station VMI obstacle course received many qualitative comments pointing to its repetitive nature. This may be too standard for varsity athletes who look for diversity in challenges.

There were no significant differences found in objective achievement or station achievement for cadets with prior military experience. This was the most surprising finding of the study. One would expect that prior military experience would condition the Rats for this type of physical training program and they would benefit greatly from reinforcing skills they may have already learned compared to those cadets with no prior military experience. This was not the case.

No significant difference was found in objective achievement for cadets whose parents have prior military experience or are presently in the military. Significant difference was found in the station rock climbing for cadets whose parents have past

military experience. Significant difference was also found in the station fuel barrel for those cadets whose parents are presently in the military. The researcher was unable to draw conclusions as to why this may be the case.

Limitations

There were several limitations to the study that must be considered when interpreting results. The most significant limitations relate to the fact that the study centers on students in a military-related college. Cadets live by a code of honor and discipline. They may feel pressured to take the survey even when it is an option. Random sampling was not conducted for this study. Every member of the Rat Challenge was selected to participate in the study. Out of the 237 cadets participating in the Rat Challenge, 237 filled out a survey and responded to the need for participants. Although grateful for the level of participation, this leaves the researcher the impression that cadets may have not realized that they had the option to participate in the study.

Although every step was taken to ensure confidentiality, cadets may have answered the questions in a biased fashion. As with any study based on self-reported perceptions, response error was likely to occur because respondents gave answers reflecting perceptions that might not accurately portray actual behavior.

Another limitation regards the demographic of gender. Since VMI has recently integrated females into their student population, there are limited numbers of female respondents for comparison by gender. Significant difference was noted in several

objectives and stations across the gender demographic. Once again, the researcher wants to stress the ratio of men to women.

Implications for Practice

Information gathered in this study is useful for the development of a comprehensive Rat Challenge program. Many of the qualitative comments indicate the importance of bonding with cadre in this type of environment. The in-season athletic teams are not exposed to the environment created by the Rat Challenge. The Rat Challenge is designed to be a leadership training course as well as a tradition. Respondents stressed the importance of bringing in the athletic teams who are not exposed to this program. Perhaps it is in the interest of VMI to mold the Rat Challenge into a time frame that can include every cadet.

The qualitative comments received highlight problem areas as well as reinforce positive attributes of each station. Several comments focus on equipment that may need to be replaced. Additional comments exhibit worry among the cadets that certain stations may be dangerous and that additional safety precautions need to be in place to ensure safe completion of exercises.

The information gathered can also be useful to other collegiate environments as colleges continue to develop orientation programs and leadership workshops with physical elements. Based on the study, certain events can be selected and grouped by objective achievement to develop a comprehensive workshop pertaining to that specific objective.

As the female population continues to increase at VMI, the researcher believes that the physical education department will see a positive shift in the overall objective achievement by female cadets. This may happen as the women receive greater support from the cadre and as the female Rats of today become cadre members of the program and station leaders.

The stronger and more physically adept female cadets are most likely involved in varsity athletics. Should all women at VMI merge and participate in the Rat Challenge, the male cadets may begin to value the contribution in teamwork that the women can offer. In the meantime, the office of Institutional Research may want to consider conducting focus groups with the women to determine ways to improve their experience in the Rat Challenge in ways that would not compromise their integrity as cadets. This could not be captured in a survey.

Recommendations for Future Research

There are several recommendations for future research that could improve the current study, should it be replicated. The first is that the qualitative data collected added depth to the research. A complete analysis of the qualitative data may provide further information independent of the quantitative data.

It is recommended that the study be replicated in the future to determine significant differences when there are many more female respondents.

A similar study could be conducted on the counterpart to the Rat Challenge. Rats not participating in the Rat Challenge are members of a sport in season at the time. Perhaps this group should be examined in comparison to the Rat Challenge participants since both groups are to accomplish the same goals and objectives in their years of study at VMI.

A pre and post-testing survey could also be conducted on a sampling of students to examine change in level achievement from the beginning of exercise to completion.

A more explicit phrasing of prior military experience is needed. Prior military experience can mean years of active duty service in one of the four armed forces, participation in the Persian Gulf War, service as a part of the Reserves, National Guard or Coast Guard. It can also refer to attendance at another military institute among others. More discreet categories may exhibit different results from those attained in the current study.

Conclusion

The Virginia Military Institute Rat Challenge is a comprehensive program that is meeting its goals. VMI's educational mission is based on seven essential factors including study, creativity, communication, teamwork, organizational success, ethics and physical conditioning. Through creative physical conditioning, these factors are carried out of the academic classroom and onto the training fields with success. The Rat Challenge is not just a physical training program designed to foster self-confidence and conditioning in cadets. It is also a tradition that has become part of the history of VMI.

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APPENDIX A

RAT CHALLENGE 1998

CADRE TRAINING

August 26, 1600 NEB Lecture Rm
 Org. meeting for all Rat Challenge Cadre
 Aug. 31, Sept. 1, 1600 on site Training for Station
 Cadre, Plt Ldrs, Plt Sgts.

CADRE TRAINING

Sept 2,3 All Rat Challenge
 Cadre (on site training)
 September 9, 1600 First
 Day of Rat Challenge

PHASE I OBSTACLE
 ACTIVITIES COURSE

September

October

		9	* 15	16	21	23	28	30	5	7	1 Oct
High Ropes I	1615 Marine O' Course by Squad	A	B	C	D	E	F	G	H	Bd	M/U Day
Pugil Sticks Ranger Pit	-----	B	C	D	E	F	G	H	Bd	A	M/U Day
Zip Wire/ Vertical Entry	-----	C	D	E	F	G	H	Bd	A	B	M/U Day
Circuit 1 + DirtyName; Circuit 2 +Weaver	-----	D	E	F	G	H	Bd	A	B	C	M/U Day
Ravine 11" Log Pole w/tire Fuel Barrel	1630 Marine O Course	E	F	G	H	Bd	A	B	C	D	M/U Day
Log/wire walk ; Stump jump; Swinging Log, Wall	1730 Marine O Course	F	G	H	Bd	A	B	C	D	E	M/U Day
VMI O'crse (3 reps)	-----	G	H	Bd	A	B	C	D	E	F	M/U Day
House Mtn	-----	H	Bd	A	B	C	D	E	F	G	M/U Day
Rock Climbing	VMI O'crse By squad	Bd	A	B	C	D	E	F	G	H	M/U Day

* Tuesday

**RAT CHALLENGE 1998
PHASE II**

Cadre Training: October 6,8

(Daylight Savings Time ends Oct. 25)

ACTIVITIES	OBSTACLE COURSE	October						November				
		12	14	21	26	28	2	4	9	16	5	**19
Ldrship Reaction II- POW Escape, Two Piling River Crossing, Electric Fence	-----	A	B	C	D	E	F	G	H	Bd	M/U Day	Rat Olymp.
Howitzer Problem, Tug-O-War	1715 VMI O'Course	B	C	D	E	F	G	H	Bd	A	M/U Day	Rat Olymp.
Marine Obstacle Course (3 Repts)	1615	C	D	E	F	G	H	Bd	A	B	M/U Day	Rat Olymp.
Leadership Reaction III - Bridge Problem, Bosuns Chairs	Marine O'Crse By Squads	D	E	F	G	H	Bd	A	B	C	M/U Day	Rat Olymp.
VMI Obstacle Course (Run from barracks and back)	1600	E	F	G	H	Bd	A	B	C	D	M/U Day	Rat Olymp.
Circuits I, II, I	-----	F	G	H	Bd	A	B	C	D	E	M/U Day	Rat Olymp.
5 MILE RUN (Chessie Trail)	-----	G	H	Bd	A	B	C	D	E	F	M/U Day	Rat Olymp.
Rappelling	Marine O' Crse by Squads	H	Bd	A	B	C	D	E	F	G	M/U Day	Rat Olymp.
High Ropes II	-----	Bd	A	B	C	D	E	F	G	H	M/U Day	Rat Olymp.

20, 22 Oct. No Rat Challenge (Bloodmobile)

11 Nov. No Rat Challenge (Founder's Day)

18 Nov. -Practice day for Rat Olympics

** Thursday (Rat Olympics)

APPENDIX B

VIRGINIA MILITARY INSTITUTE - PHYSICAL EDUCATION DEPARTMENT
RAT CHALLENGE EVALUATION

SECTION I

Each Challenge Station and each stated objective of the events are listed below in a matrix. Please indicate the extent to which each objective was achieved in each event using the following scale: 1=was not achieved, 2=achieved at a minimum level, 3=achieved substantially, 4=achieved fully. You may add comments about each Challenge Station in Section II.

CHALLENGE STATIONS	OBJECTIVES										OVERALL EVENT RATING
	Improved physical condition	helped conquer fears	Improved relations with cadre	Improved self-esteem	helped build team spirit	Improved ability to resolve conflict	Improved sensitivity to differences in ability	developed problem solving skills	helped overcome fear of heights	had fun	
1. High Ropes	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
2. Pupil Sticks	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
3. Ranger PI	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
4. Zip Wire/Vertical Entry	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
5. Circuit Courses	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
6. Dirty Name/Weaver	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
7. Ravine	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
8. Fuel Barrel	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
9. Log/Wire Walk; Stump Jump	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
10. Swinging Log; Wall	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
11. VMI O'Course	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
12. House Mountain	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
13. Rock Climbing	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
14. Rappelling	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
15. POW; River Cross; Elec. Fence	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
16. Howitzer Problem	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
17. Tug-O-War	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
18. Marine Obstacle Course	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
19. Bridge Problem; Bosuns Chair	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
20. 5 Mile Run (Cheese Trail)	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
21. Rat Olympic	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
22. OVERALL OBJECTIVE RATING	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
1. Sex (circle one)		Male	Female								
2. Class Standing	4th Class	3rd Class	2nd Class	1st class							
3. Are you part of a VMI legacy?	yes	no									
4. Do you presently have siblings at VMI?	yes	no									
5. Have you participated in Intramural sports?	yes	no									
6. Have you ever participated in a varsity sport?									yes	no	
7. Do you have prior military experience?									yes	no	
8. Do your parents have prior military experience?									yes	no	
9. Are either of your parents presently in the military?									yes	no	

SECTION II

Write comments or recommendations to improve the program in the space below. You may use the other side of this sheet if you need more space.

- 1. High Ropes
- 2. Puff Sticks
- 3. Ranger Pit
- 4. Zip Wire/Vertical Entry
- 5. Circuit Courses
- 6. Dirty Name/Weaver
- 7. Ravine
- 8. Fuel Barrel
- 9. Log/Wire Walk; Stump Jump
- 10. Swinging Log; Wall
- 11. VM O'Course
- 12. House Mountain
- 13. Rock Climbing
- 14. Rappelling
- 15. POW; River Cross; Elec. Fence
- 16. Howitzer Problem
- 17. Tug-O-War
- 18. Marine Obstacle Course
- 19. Bridge Problem; Bosuns Chairs
- 20. 5 Mile Run (Chessie Trail)
- 21. Rat Olympics
- 22. OVERALL RATING OF YOUR EXPERIENCE

SECTION III


Would you like to participate in the Rat Challenge next year?
What would you like to do?

yes no

APPENDIX C

MEMORANDUM

TO: Karen M. Bednarczyk
Educational Leadership and Policy Study (0302)

FROM: H. T. Hurd 
Director

DATE: November 17, 1998

SUBJECT: IRB EXEMPTION APPROVAL - "Virginia Military Institute Rate
Challenge Evaluation" IRB #98-300

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that the research falls within the exempt status.

Best wishes.

HTH/baj

cc: M. D. Alexander

APPENDIX D

Virginia Polytechnic Institute & State University

Informed Consent for Participants of Investigative Projects

Project: Virginia Military Institute Rat Challenge Evaluation
Investigator: Karen M. Bednarczyk

Purpose of Research

You are invited to participate in thesis research about student leadership objective achievement at VMI. This study involves analysis of responses to the enclosed questionnaire.

Instructions

A two-part questionnaire will be used to collect data for this research. Estimated time for completion of this questionnaire is 20 minutes.

Please complete the survey. A second page is attached where you may write comments. After completing the instrument, return both pages to the researcher. You may then be excused from the room.

Surveys not completed in this meeting can be returned in the enclosed postage paid envelope by December 10, 1998. Return survey to:

Karen M. Bednarczyk
1207 Snyder Lane, Apt 1200 C
Blacksburg, VA 24060

Extent of Anonymity and Confidentiality

The results of this study will be kept anonymous. At no time will the researcher release information that identifies individuals with their response.

Approval of Research

This research project has been approved as required by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University.

Subject's Permission

I voluntarily agree to participate in this study. I have read and understand the Informed Consent and conditions of this project. I hereby acknowledge the above and give my voluntary consent for participation in this project.

VMI CADET

Karen M. Bednarczyk

APPENDIX E

High Ropes

Rat Qualitative Answers

More times

Make a longer course

Fun

Not scary

Fine

Lots of fun

Fun

More jumps

Good experience

Totally clean and fun

I had trouble at first, but then I ended up on the rope team as an alternate

Fun

More ropes

Good

Make higher

I conquered my fear of heights here

Cool

Great time

Set up equipment on time

Very challenging, very fun

Make it higher

Was fun, keep it

I quickly overcame fear of heights

Awesome

Helped with fear of heights

Had lots of fun

Fun

Helped condition me for heights

Overcame fears (female)

Cadre Qualitative Answers

Fun as usual

Too long, no training

Conquers fear of heights, that's all

Fun

All good

Takes too long

Was station cadre for high ropes

Love it! Only way it could be any better is if we were not forced to attempt to get so many rats through at once.

An excellent course. I feel everyone worked well and professionally. I don't see any need for improvement.

Excellent

Needs to be more intimidating

Pugil Sticks

Rat Qualitative Answers

More instruction

Better headgear

Do it more often instead of just once

Fun

Timing

hooah

Fun

Fun

Fun

Too many rules, it would be more fun to just go at it

Great event

Let us fight more!!

More time to practice using the sticks

Round robin for Rat Olympics and allow rats to practice

Need to let the Rats go at it more

Better explanation of rules and how to score points

Points should be awarded for any blow to the head or body. Rules need to be followed more.

Was fun-made it to the semifinals

Real fun

More fights

Match up persons of like abilities

Did not enjoy getting snot beat out of me by brother rats

Fun

More of this

Too short

Don't break your thumb!!

Motivating

Not enough time to enjoy it

Make bigger helmets

Fun, keep it

Hurting each other fun

More hits. One hit should not mean a win

Fun

Fun, but need helmet that covers face, not just top of head

Good time

Get better equipment

Fun

Didn't do it much

Better explanation (female)

Cadre Qualitative Answers

Brutal

2 possibly 3 days would be better

Very fun and motivating

We ran a good station. My cadre were professionals. It could be improved by having different phases of pugil sticks or perhaps introduce close quarter combat like drills. It would be an improvement since this is supposedly a military school.

Increases competition

Good

Great

High motivation, huah!

Excellent station cadre

Went well, look forward to another successful year

Ranger Pit

Rat Qualitative Answers

Love it
Get the rocks out of the pit
Awesome
More mud
Fun
hooah
Great
Very unique and causes a good sense of unity
Fun
I love it!
Make pit bigger
Get better tasting mud
Awesome
Loved it!
Fun
Less water
Great
Great
Fun
Great bonding experience
The best event by far
No explanation need, objective is pretty clear
The best was when the cadre comes in
Fun
More mud
Fun pummeling cadre
Have EMTs ready after I finish cadre
Fun
More of this
Make head-to -head with other CO's
Fun with cadre
Fun
Spend more time there
More time needed for this event
Heck of a good time
Make it deeper
Best
Fun, keep it
Hurting cadre was better
Awesome. More times. Put into Rat Olympics
Awesome

Fun
Excellent against cadre
Give more time for us to shower and change
Fun
Wrestle cadre more often
Fun, bonded with cadre (female)

Cadre Qualitative Answers

Muddy
Keep the pit wet (really wet)
Good time for rats
Gives rats a chance to beat upon cadre
We ran a good station. My cadre were professionals. It could be improved by having different phases of pugil sticks or perhaps introduce close quarter combat like drills. It would be an improvement since this is supposedly a military school.
Improves relations with cadre
Good
Great
We kicked their bottoms
Need more time

Zip Wire; Vertical Entry

Rat Qualitative Answers

Love it
Helped my fear of heights
Fun time and helped to improve relations with cadre
Fun
Great
Drop should be higher
Awesome
Steeper incline for zipline would be nice
Make you dive
Fun
I thought it was one of the best events
Zip wire needs to be higher and longer
Do something to make it go faster
More zip
Nice cold water
Good
Fun when it's warm
Fun
Too short
Do more than once
Too cold
Darn fun
Really exhilarating
Make platform higher
Fun/cold water
Fun, keep it
I quickly overcame fear of heights
No many regulations?
Fun
Helped with heights again
We stood around a lot, waiting
Very Fun (female)

Cadre Qualitative Answers

Good time for rats
Decreases fear of heights
Fun
All good
whoopy
Could use separate platform for vertical entry. Wouldn't have as much standing around.

Circuit Course

Rat Qualitative Answers

More
Help determine problem areas
No more
Good conditioning
This sucks
Hard
I think it's pointless
Worthwhile
It was a good workout but a lot of repetition
Too long
Less circuits
Hard
Good physical training
Fast, good conditioning
Done too many times
Keep it
Tons of running
Boring
Finally lifted weights
Not much fun, not too enjoyable
An excellent workout! Splendid!
Very challenging
Tough
Got in shape (female)

Cadre Qualitative Answers

Hard work
Add more obstacles
Good time for cadre, good training
Excellent
Endurance builder
All good
Great fun!

Dirty Name/Weaver

Rat Qualitative Answers

Hate it

I hurt myself

Don't remember

New (clean) name

Stupid, stupid, stupid

Not really sure what this is

Enjoyed. Helped with balance

N/a

Dismantle it

Keep it

Everyone fell

Okay

Heights

N/a

Cadre Qualitative Answers

Challenging

Good obstacles; more obstacles like these

Excellent

All good

Wish I remembered

This event is useless and a waste of time

Ravine

Rat Qualitative Answers

na
Fun
Alright
Fun
Fun
Kind of boring
Boring
Fun
Helmets
Fun
Could have been more fun
Have a medic on constant standby
Fun
Alright
Too easy
Fun
Heights
Didn't do
Fun
Did it once
Need to wear helmets (female)

Cadre Qualitative Answers

Not a really good event, serves no real constructive purpose
Excellent
All good
At least no one died

Fuel Barrel

Rat Qualitative Answers

Good
More time to try different ideas
Fun
Teamwork
Okay
Impossible
Pointless
Less fuel (definitely less)
Frustrating, seemed impossible
Team
Too hard
Too hard
Seemed to just waste time
Very challenging, good motivation
Make barrel lighter
Sucked
Alright
We failed, need more time
Cool
Hard but fun
Good team work event
Fun
Fun

Cadre Qualitative Answers

Waste of time
Excellent
All good
Easy way to slim down

Log/Wire Walk; Stump Jump

Rat Qualitative Answers

Good

Fun

Alright

Fun

Very challenging

Shorter wire

Fun

It's fun

Good exercise in balance

Something to kill time

Fun

Keep it

Boring

Fun

Fun

Did it once

Cadre Qualitative Answers

Excellent

All good

Geez, what a rush

Swinging Log; Wall

Rat Qualitative Answers

Good

More time to try

Fine

Cool

Physical

Brother Rat least likely to get over log was the only one to do it

Swing log was tough

Fun

Built self-esteem

Good for teamwork

Wall problem built much team unity

Cut the log down

Fun, keep it, challenging, teamwork

Good teamwork

Wall was cool

Fun

Need more time on them

Interesting, very fun. The wall was a good team building event

Fun/challenging

Fun

Cadre Qualitative Answers

More obstacles like these

Excellent

All good

These kids weren't no acrobats

VMI obstacle course

Rat Qualitative Answers

Better equipment, ie. Fix splinters on hand walk

Not so many times

Tough

This sucks

Hard course, good conditioning effects

Alright

Too boring

Physical, challenging

Hard, but good

Great

Hard

Sucks but beneficial

More obstacles - 2 extra laps

Was very tough

Hard stuff

Hard

Tiring but fun

Make it shorter

Keep it, challenging

Great

Grueling

Cool the first time

Not fun after being run three times

Challenging

Fun

More tactics (female)

Cadre Qualitative Answers

Just run the course once for time, not 3 times

Good PT

Excellent

All good

House Mountain

Rat Qualitative Answers

Love it

Another great team builder, we all come together

Bomb

Need to run it not hike it

Good event

Fun

Team spirit, great

Need a higher mountain

Fun, but hard

Race back down

This was the best event, would like to do it again

Challenging

Good

Let us run it

A blast. Really brought out leaders

Make us camp out there

Never did

Keep it, challenging, motivating

We pushed hard and won, but only after women dropped out

Cool

Slow people in back

Fun

Tough, but a beautiful view from the top

Fun

Good workout

Do more than once (female)

Cadre Qualitative Answers

Prepare better ways of responding to emergencies

Excellent

All good

Rock Climbing

Rat Qualitative Answers

More of this

Harder terrain to climb would be nice

Provide more time, did not get to do

Fun

Climb should be higher

Fun

Need a more obstacles

Good

The best and most fun of all the events

Need to go through it more than once

Very fun except the part where go and do the (moving O????)

Fun

Best activities

Good stuff

Should do more

Lots of fun; longer course

Good

It's fun!

Fun

Great

A challenge but very fun

Leave it as it is

Was fun

Keep it

Great

Awesome

Ok. Heights

Excellent, loved it

A very fun and thrilling event

Fun

Did it once, need more

Enjoyed (female)

Cadre Qualitative Answers

Fun, Challenging

Put in another rope and let 4 Rats climb at a time

Too much time wasted

Excellent

All good

Because I was the station cadre this was the only station I really saw. I thought it went really well. It built a lot of confidence in the rats and by the time they came back for rappelling, it was a good time.

This was a great station. It allows people to get a chance to get of their heights.

Overall went well, had a lot of fun. Taught responsibility. Good group working skills

Overall, I liked participating in the Rat challenge program. It was fun and I learned new skills as well.

Keep the same officers

Keep getting cool officers

Rappelling

Rat Qualitative Answers

More of this

A longer decent

More time

Love it

Fun

Fun

Awesome

Awesome

Good

Great

I believe rappelling should be done on a mountain and a wall with Swiss seats

The best and most fun of all the events

Awesome!

Best activities

Good stuff

Should do more

Lots of fun; longer course

Good

Let us go Australian style

Fun, learned a lot

Had a lot of fun

Great time

Get to do it more than once

Self explanatory (awesome)

Leave it as it is

Was fun

Keep it

Even better

Cool. More slack in rope

Awesome

Excellent loved it

Fun

Need more

Enjoyed (female)

Cadre Qualitative Answers

Fun, Challenging

Too much time wasted

Excellent

All good

Because I was the station cadre this was the only station I really saw. I thought it went really well. It built a lot of confidence in the rats and by the time they came back for rappelling, it was a good time.

Again fear of heights is conquered

Overall went well, had a lot of fun. Taught responsibility. Good group working skills

Keep the same officers

Keep getting cool officers

POW; River Cross; Electric Fence

Rat Qualitative Answers

Good

Improved quick thinking

Blows

Fine

Pointless

The groups should be smaller

These were fun

Challenging

A lot of team work

Fun

Built unity

Made me think

Have medic on constant stand by

Worked good as a team skill

Keep it

The girl was the weak link

Tough but rewarding

Fun

Cadre Qualitative Answers

Excellent

All good

Howitzer Problem

Rat Qualitative Answers

Good
Blows
Fun
Alright, too boring
The best event
The groups should be smaller
Too hard to get tires up
Team work
More time
Fun
Built unity
Another event that seemed to waste time
n/a
Use a real howitzer
Good until we rolled cannon into Marine O
Great teamwork
Tough but rewarding
Good teamwork involved
n/a

Cadre Qualitative Answers

Waste of time
Find a way to keep cement filled tire from hauling ass down the hill taking out everything in its way
Excellent
All good

Tug-O-War

Rat Qualitative Answers

Need to do it over the mud pit

Fun

Fun

Very fun

Even better

Weight and person limit

Boring

Team work

Fun

This was pretty worthless being that we never did it until Rat Olympics

Lost, but it was fun

Built unity

n/a

Make sides equal

Not done enough

Fun

Fun

Fun

Didn't do it

Spend more time on (female)

Cadre Qualitative Answers

Excellent

All good

Marine Obstacle Course

Rat Qualitative Answers

Good

Overdue

Don't make rats do it so much

Overdone

Fun

Great

Very fun

Physical

Good

Great

When running for time, don't do it after running it 3 times

Challenging and fun at times

Replace ropes

Did it too many times

Hard

Worked my body

Some logs are beginning to break down making it bad for getting splinters

Did this too much

The best of the best. Totally cool

Leave it as it is

Too many times

Awesome, keep it

The best part, most intense

Too many times

Fun the first few times

Fun after I could do it all

Had a great time

a good workout and fun!

Fun/challenging

It's cool

More tactics (female)

Cadre Qualitative Answers

Best PT on post

Excellent

Best event

All good

Bridge Problem; Bosuns Chair

Rat Qualitative Answers

Good

Fun

Built team spirit

Teamwork crucial

Boring

Fun

Thinking wins the game

Dismantle it

Good for team building

Boring

Boring

Good strategy

Fun

Good problem solving

Cadre Qualitative Answers

Waste of time

Excellent

All good

5 Mile Run (Chessie Trail)

Rat Qualitative Answers

Great
Most team building of all
Excellent
Fun
Great
Easy
Good
Longer
It's a great run. I just had a bad personal experience.
Never did it - had the flu
Unimaginative
Waste of time
Hard
Do not do
Motivating
Great! Really motivating
Built my confidence
A challenge (thought I could not do)
Leave it as it is
Sucked
Challenging, keep it
Great, two-group system helped
Fun-maybe a little longer next time though
Nice scenery, not enough time to stretch
A good event to push yourself-very motivating!
Long run but great teamwork
Challenging/fun
Good run
Nice scenery (female)

Cadre Qualitative Answers

Make sure the groups are properly briefed
Bring back BV run
Prepare better ways of responding to emergencies
Incredibly increased group unity
Excellent
Good - tough, builds team spirit
hellacious

Rat Olympics

Rat Qualitative Answers

Better officials

Great sense of accomplishment afterwards

Awesome!

Fun

I thoroughly enjoyed the competition of the Rat Challenge

Good to go

Excellent, had fun

Fun

Lots, lots of fun

Very fun

Awesome

Loved it

Best time you have being a rat

Fun

I think it would be better if it was two or three days long

Best

Not representative of how much a company improved

Alpha has no chance

Everyday

Tiger Echo!

Make competitions more competitive and even matched by separating the women

Have a women's pugil sticks competition

A good bonding experience

My company won! Go echo!

A lot of fun

Good time

Fun

Great time

Impartial refs

It's fun!

Fun and motivating

Great time

A lot of fun overall

Have it more organized

Was most fun/brought rats and cadre together

Challenging, keep it, fun

More spread out

Awesome

Very fun

Great-lots of fun

Incredible! Brought the whole company together. Very motivating.

More points should have been awarded

Very challenging/very fun

Good ending

Good bonding experience / showed all the hard work people did (female)

Cadre Qualitative Answers

Don't let the rats see how their companies are doing

Needs more corps support, like the football team except we're cheaper and we win

Very well run

Excellent

Next year don't just announce top 3 finishers - every company deserves recognition of effort

#1

Overall Rating of Your Experience

Rat Qualitative Answers

It is great

Very good

I really enjoyed Rat Challenge and the many challenges both mental and physical that it presented

Fun, great

Good, but leave more empty spaces at the end for makeup sessions

Oh hell yeah

Good, but running there and back was tough

Fun

I enjoyed Rat Challenge

Ok

I enjoyed it

Rat Challenge was great

A worthwhile

It was great

Great experience, more unity could be resolved if cadre wasn't around all the time.

Had a good time

Good

Excellent

Good

Awesome!

It was a unique experience but in the leadership reaction courses, the groups should be smaller.

Increases everyone's physical abilities, but hurts those who aren't in best shape.

Good

I liked it and I'm glad I decided not to do a sport so that I could do Rat Challenge

Improved in all areas, physically, mentally

It was great until I got injured at the dirty name

I'm in the best shape of shape of my life

It was fun

Good, I had fun and learned a lot

I enjoyed it overall greatly, but dreaded some of it

Overall everything serves its purpose

It was all good and it made for a very beneficial experience

Had fun except for running so much

Very good

Great for all rats

Good

Good, I'd do it again

Good

I never push my physical abilities more than I did during Rat Challenge

Good experience, every Rat should be required to do it
I had a great time as it got us to gather as a company and improved our health
Time of my life
I truly enjoyed the experience
Good experience
Very good
I would do it again
Rat Challenge kicks ass!
Good time
Loved it
Great, but I am glad it is done
Good, but got kind of out of shape during Rat Olympics
Great
Definitely learned a lot. Get to know company better
Very positive
Good events but got bored and tired towards the end
Great
Liked it, could have been more beneficial if it was more than twice a week (female)

Cadre Qualitative Answers

Good
Good
I got in shape and help train rats. It wasn't always fun, but overall I'm glad I did it.
I enjoyed it and the rats enjoyed it
Excellent
Pretty good - need to have more running days for the rats
Rats should not be allowed to be in clubs until after Rat Olympics- NCAA sports and that's it
Very good
Good, but girls can't hang
It was good, I had fun
I love rat challenge

Section III

Would you like to participate in the Rat Challenge next year?

Rat Qualitative Answers

No
Yes
No
No
No
No
No
No
Yes
Yes
No
No
Yes
No
Yes
Yes
No
Yes
No
Maybe
Yes
Yes
Yes
No
Yes
Yes
No
No
Yes
Yes
Yes
Maybe
Yes
Yes
Yes
Yes
?
No (female)

Yes
Yes
Yes
Yes
Yes
Yes
No
No
No
No
No
Yes
Yes
Yes
Yes
Yes
I don't know
Yes
Yes
Yes
Not sure
Yes
Yes
Yes
Possibly
Yes
Yes
Yes
Yes
Yes
Yes (female)

Cadre Qualitative Answers

Yes
Yes
Yes
No - 3 years is enough
Yes
Yes
Yes
Yes
Yes
Yes
Yes

Yes
Yes
Yes
Yes
Yes
No
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes- if I was going to be here
Yes
Yes
Yes
No

What would you like to do?

Rat Qualitative Answers

Tug of war, fuel barrel
Station cadre
Rappelling and climbing
Anything
Cadre
Anything
Stations
Cadre or station cadre
Cadre
Squad leader
I would like to do it all over again
Station cadre
Ranger pit or company cadre (The ones who run you to the events)
I don't know
Get good grades
Corporal
Cadre
Rat challenge cadre
Station cadre - rock climbing and rappelling
Cadre
Interested in rat challenge cadre
Station cadre - high ropes, rappelling, House Mountain, problem solving stations
Cadre - pugil sticks
Anything
Rat Olympics, rock climbing
Not sure yet
Section cadre
Cadre
Cadre/station cadre - rappelling
Company cadre or station cadre
Rock climbing/ rappelling (female)

Cadre Qualitative Answers

Station CIC or Company Cadre
Company cadre
Cadre again
Company cadre
Rock climbing, rappelling
House Mountain and 5 mile run
Be a sergeant
Company cadre Sergeant

High ropes
Company level
Station cadre
Company cadre
Sergeant
Rat Challenge cadre
Continue driving and helping
Cadre
Company cadre-sergeant
Continue truck driving
Rock climbing/rappelling
CIC
Zip wire again
High ropes, house mountain
CIC
High ropes
Climbing/rappelling
Company cadre

Miscellaneous

Rat Qualitative Answers

More running

Run more

All this depends on your cadre, they make it fun or not

All good!

Cadre Qualitative Answers

This survey sucks

All fine

In one survey for answers 11-22, the following was written: For the rest of these comments I am just going to take up space as my protest to this long worksheet. I mean no offense and hope you turn out to be a good doctor. Have fun.

VITA

KAREN M. BEDNARCZYK

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Olyphant, PA 18447
(570) 586-9270

EDUCATION:

Master of Arts in Educational Leadership and Policy Studies, May 1999
Virginia Polytechnic Institute and State University, Blacksburg, VA 24060
RESEARCH - Student Leadership Development Cumulative GPA: 3.67 / 4.0

Bachelor of Science in Accounting, minors in Finance and Management, May 1996
DEAN'S LIST - Cumulative GPA: 3.50 / 4.0 Cum Laude
Wilkes University, Wilkes-Barre, PA 18766

RELEVANT EXPERIENCE:

Program Advisor - *Program Advising and Student Entertainment, Blacksburg, VA* Aug '97-May '99
Oversee and directly advise four student committees in the planning of entertainment: Alternative Sounds, Festevents-Homecoming, Special Events and House & Hospitality. Negotiates, reviews, and processes program contracts with agents. Work closely with students to develop programming budgets on a per show basis and prepare students for annual Budget Board hearings (\$300,000+). Facilitate several student workshops for a three-day leadership retreat. Offers ongoing needs assessment, marketing strategies and program consulting. Extensive advisor assistance on concert productions include the Dave Matthews/Tim Reynolds, Busta Rhymes (1999) Smashmouth, Third Eye Blind, Carrot Top, Marcy Playground, Tori Amos, and Everything (1998), Indigo Girls, Adam Sandler, Henry Rollins, and Bela Fleck (1997). Current projects include General Colin Powell and Sheryl Crow. Serve as the advisor of "Students for a Free Tibet."

Chairperson- *Wilkes University Programming Board, Wilkes-Barre, PA* May '94-Jun '96
Schedule and coordinate campus entertainment with a budget of \$62,000. Oversee six student committees and the production of each event including large-scale concerts, blockbuster film series, coffeehouse and novelty events, comedy showcases and promotion. Initiate communication with agents and negotiate contracts.

Concert Chairman- *Wilkes University Programming Board, Wilkes-Barre, PA* May '94-Jun '96
Aid the Director of Student Activities in the planning of concerts with production costs exceeding \$50,000. Experienced in various aspects of concert production including ticket sales, publicity, hospitality, security, and crew. Supervise professional, union, and student crews consisting of up to 70 people. Work with entertainers includes Alanis Morissette, Rusted Root, Joan Osborne (1995), Live, Weezer (1994), Chicago, and the Moody Blues (1992). Also, worked with comedians Carrot Top (1996), Adam Sandler (1995), and George Carlin (1993). Served as a private consultant for Billy Joel performance (1996).

Manager in Training - *FAO Schwarz, Fifth Avenue, New York, NY* May '95-Aug '95
Managed 14 different shops including Walt Disney's Pocahontas shop. Prepared reports, utilized merchandising techniques, ordered and maintained inventory levels, scheduled, reviewed, and administered disciplinary action to associates. Prepared floor plans and assisted in semi-annual store inventory. Worked with corporate buyers, safety and loss prevention team and attended numerous seminars to learn the workings of the corporate structure.

PRACTICUM EXPERIENCE:

Ancillary Time/Space Assistant - *ACPA, Blacksburg, VA* July '98-Mar '99
Member of the national convention planning team for the American College Personnel Association. Schedule rooms for convention sessions, coordinate audiovisual needs of session presenters, and work closely with convention chair, CONFERON, and Marriott Marquis Atlanta. 4000 people expected to attend.

Karen M. Bednarczyk (cont.)

Web Page Designer - Virginia Military Institute, Lexington, VA **Summer '98**
Researched, designed, and launched the homepage for the Office of Career Services using FrontPage'98.
Explore at www.vmi.edu/career

Public Relations Assistant - Virginia Tech Alumni Association, Blacksburg, VA **Spring '98**
Serve as chair in the development of a public relations committee that will help the campus community better understand the activities of the Alumni office. Create an awareness and loyalty to Virginia Tech as students arrive on campus. Work with staff on relaying information to Alumni chapters and the community.

ADDITIONAL EXPERIENCE:

Payroll Administrator- Watkins Engineers and Constructors, Mehoopany, PA **Jun '96-Aug '97**
Operate the contractor payroll system for the world's largest Procter & Gamble site with gross wages exceeding \$1,000,000/month. Develop a working relationship with the local union halls, act as the Employee Campaign Manager for the United Way, and coordinate company special events.

Financial Services- The Prudential Asset Management Group, Moosic, PA **Jan '96-Jun '96**
Perform financial services for the Defined Contributions branch of Retirement Savings. Collect and interpret data for key client groups. Prepare Asset Participation Profiles on various clients for use of the marketing department. Prepare quarterly financials, Schedule A & 5500s during the tax season.

Director's Assistant- Wilkes University Student Activities, Wilkes-Barre, PA **Aug '94- Jun '96**
Assist the Director of Student Activities in maintaining the financial records of more than 60 campus organizations. Review annual activity budgets (\$175,000), process check requests and perform various other financial transactions.

Phonathon Coordinator - Wilkes University Development Office, Wilkes-Barre, PA **Sept '92-Jan '96**
Assist the Vice President of Development and the Director of Annual Giving in the telephone solicitation of the campaign. Duties include managing staff, preparing mailings, updating alumni files, researching prospective donors, keeping running totals of all donations pledged, and accounting for corporate matching gifts.

PUBLICATIONS:

"Confessions of an Accounting Major": tribute to Student Activities and Entertainment - Compass Sept 1996

PROFESSIONAL ADVANCEMENT:

National Association for Campus Activities
Elected Member of the University Council
Delta Mu Delta, National Honor Society in Business Administration

COLLEGIATE AWARDS and ACTIVITIES

Ambassador, Wilkes University
Selected Accounting Mentor
Wilkes University Speech & Debate Team

VITA, Volunteer Income Tax Assistance Program
Accounting and Business Club

Alumni Award for Leadership, '96
Who's Who Among Students in American Universities
Student Leadership Scholarship, '94 - '96
Daniel S. Wilcox, Jr. Acct. Scholarship, '92-96
National Campus Activities Scholarship, Feb '94

Programmer of the Year Award, '95 & '96
1995 Homecoming Court Nominee
Presidential Scholarship, '92 - '96
PICPA (PA Institute of CPAs) Scholarship, '95
Robert C. Byrd Scholarship, '92