

**THE RELATIONSHIP OF NONCOGNITIVE VARIABLES AND THEIR  
CONTRIBUTION TO ATTRITION AMONG HEALTH CARE SPECIALISTS AT  
FORT SAM HOUSTON, TX**

A Dissertation

by

YVETTE WOODS

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2007

Major Subject: Educational Human Resource Development

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## **ABSTRACT**

The Relationship of Noncognitive Variables and Their Contribution to Attrition among  
Health Care Specialists at Fort Sam Houston, TX. (August 2007)

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The Health Care Specialist Course trains Active Army, Army Reserves, Army National Guard and various international students in basic medical care, culminating in the possession of the EMT-B certification. The course is conducted in a stressful environment where students are required to be successful in both academic and nonacademic domains. Within the last decade, course administrators have noticed a higher rate of attrition and requested assistance with understanding why one-fifth of students fail to graduate with their original unit. A high rate of attrition results in an increased use of resources and it decreases the Army's ability to provide qualified Health Care Specialists to forward units.

The purpose of this study was to understand how noncognitive factors contribute to attrition in the Health Care Specialist Program with students who were within their first six months of training. This study specifically focuses on the experiences of the recycled student. The Modified Noncognitive Questionnaire (NCQ) and the Military Environment Noncognitive Adjustment Scale (MENAS), which focused on measuring noncognitive variables, were used with both passing and recycled students. In addition,

an interview was used for recycled students to allow them the opportunity to elaborate on their personal experiences.

This mixed methods explanatory research study revealed quantitatively, using the t-test, that a significant difference exists between the passing and recycled groups in their: level of motivation, realistic self-appraisal, battle buddy support, unit support, preference for long-term goals, ability to successfully handle racism, and their level of stress. Logistic regression revealed the following to be predictive of attrition for students participating in this course: low ST score, unrealistic self-appraisal, preference for short-term goals, low perception of battle buddy support and unit support, a high level of stress and low motivation to complete the course. Qualitative results were consistent with quantitative results and added a deeper understanding of how students negotiated the academic and military environment. The results of this study will contribute to course administrators understanding of the challenges that student's encounter while matriculating through this course.

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## CHAPTER I

### INTRODUCTION

The relationship of noncognitive factors and attrition in the military setting has not been well publicized. For many years researchers have focused specifically on the impact of cognitive factors upon academic performance. The results from their research have contributed to the creation of standardized testing. Recently, noncognitive factors have been deemed important contributors to attrition and have begun to receive more attention. While this is true at the collegiate level, few studies have been specifically geared toward studying its impact on attrition with first-term military recruits.

The order of presentation within this dissertation is divided into six chapters. Each chapter addresses specific noncognitive factors and discusses how they interact to explain attrition in this environment. Chapter I provides a brief background of the process of transitioning to the Health Care Specialist course and some of the challenges students must encounter during the course. Transforming from civilian to soldier requires individuals to utilize the strengths of both their cognitive and noncognitive skills in order to successfully navigate through the course. Chapter II discusses the methodology used throughout this study. Chapter III focuses specifically on the qualitative responses provided by recycled students and discusses the impact of the course structure on their attrition. Chapter IV addresses how motivation, expectations and self-appraisal explain attrition, whereas Chapter V explains the impact of personal

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This dissertation follows the style of *Research in Higher Education*.

relationships on performance. Chapter VI provides a summary and discussion of the findings as well as recommendations and implications that administrators can use to improve the course.

Trainee, student, and soldier is used interchangeably in this study as they all refer to a soldier with less than six months of military training and medic will be used interchangeably with Health Care Specialist.

### **Health Care Specialists Matriculation Process**

#### *Recruiting*

The first major step toward the transformation is the recruitment process. Once applicants demonstrate an interest in the military they first contact a local recruiter. Upon contacting all of the services that they are interested in, applicants determine which Service provides the best incentive package geared toward their needs. The recruiter's job is to promote the Army by describing all benefits and incentives packages available. Once applicants decide they want to join, the recruiter conducts a background check to verify educational history and ensure there is no criminal history. Once their background is found to be clear, they are scheduled to take the Armed Services Vocational Aptitude Battery (ASVAB) to determine in which jobs they would likely perform best. The results provide a list of jobs for applicants to choose from based on their qualifications. The recruiter notifies applicants to inform them if there are special bonuses for selecting a certain Military Occupational Specialty (MOS) or if there are additional schools that can be added to their contract. If applicants want a job that is not available, then they have to choose from the list of offered jobs or decide not to enlist.

Once a MOS choice is made, the recruiter processes the paperwork and allows applicants to select starting dates for basic training and the course to train them in their MOS. Most applicants, if offered the Health Care Specialist course, typically choose it. The next step is to complete the physical exam to determine applicants' physical readiness. Upon receiving a clean bill of health, all final paperwork is processed and the contract is signed, indicating the specificity of the enlistment (bonuses, additional schools, terms of service, etc.). The final step prior to reporting to basic training is to take the oath of enlistment.

I, \_\_\_\_\_, do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations and the Uniform Code of Military Justice. So help me God." (Title 10, US Code)

### *Basic Combat Training*

The second major step to completing the transformation is to complete basic combat training (BCT). BCT is conducted for nine weeks and is located on one of five Army posts: Ft. Leonard Wood, MO; Ft. Jackson, SC; Ft. Sill, OK; Ft. Benning, GA; or Ft. Knox, KY. Several BCT locations are designed for co-ed training whereas a few are geared specifically for males. BCT is designed to transform the "civilian" applicants into "soldiers" whose personal values are consistent with Army's values. These values consist of: loyalty, duty, respect, selfless service, honor, integrity and personal courage

(LDRSHIP). Until this occurs, applicants are called “trainees.” This is a major transition for the typical individual since life as they previously knew it will dramatically change. During basic training “trainees” must submit to a rigid routine and allow the Drill Sergeants to take total control over every aspect of their life.

For the first three to five days of BCT, soldiers are located in a reception area in which they are issued uniforms, provided with identification cards, given immunizations and haircuts, and provided instruction in the basic rules they must follow for the next 9 weeks. During this period of time, alcohol and tobacco products are not allowed and intensive physical conditioning and basic military education commences. The most important person a soldier sees after leaving the reception center is their Drill Sergeant. The Drill Sergeant’s job is to ensure that trainees are taught the fundamentals of being a Soldier. This includes skills such weapon qualification, combat maneuvers or marching, and learning basic Army rules and regulations as well as military customs and courtesies. This is done in a highly stressful context. BCT conducted at Ft. Jackson, SC, for example, has three phases: Red, White, and Blue. The red phase consists of the first two weeks in which trainees:

Learn the Army values; work on physical fitness; learning about communications, basic first aid, map reading, and the military justice system. They also practice drill and ceremony and negotiate Victory Tower [56 foot rappel tower]. Before moving to the next phase, soldiers must successfully complete knowledge and skills test.

The White Phase consists of week 3-5 in which trainees:

Continue Army values and physical fitness. Much of this phase is spent learning, practicing and qualifying on the M16A2 rifle. They will also learn about other U.S. military weapons, chemical warfare and bayonet training. Soldiers will participate in the obstacle course, gas chamber and bayonet assault course and pass another knowledge and skills test.

The Blue phase consists of week 6-9:

In addition to Army values and physical fitness this phase includes individual tactical techniques, foot marches, confidence course, and obstacle course. The culmination of basic training is Victory Forge, a 7-day field training exercise combining all previously taught basic combat skills. Soldiers march ten kilometers to their designated training site to start the exercise, occupy the position and establish a defense perimeter. On subsequent days, Soldiers complete the Teamwork Reaction Course, execute tactical exercise lanes and a night tactical and live-fire exercises. The last night includes a return march to the unit area and a ceremony recognizing the successful completion of this challenging operation - and the final transformation as a Soldier in the world's finest Army (Fort Jackson, 2007, Training Phases section, ¶ 2-4).

Another type of phasing is introduced to trainees in terms of privileges granted during BCT. Trainees are placed into a phasing cycle from the beginning of BCT which continues throughout Advanced Individual Training (AIT) which will prepare them for their MOS. There are six phases of training which are provided as milestones for trainees

to strive for. Each phase allows trainees to have more privileges. The rules are as follows:

Phase 1: Week 1-3

- No passes. Soldiers are restricted to the company area except with cadre member
- No driving or riding in automobiles
- No civilian clothes
- No alcoholic beverages or tobacco products
- Must maintain battle buddy system

Phase 2: Week 4-6

- Same as above except:
  - Passes allowed within the brigade area to use swimming pools, theaters, etc. that are not in the brigade area.

Phase 3: Week 7-9

- Same as above except:
  - On-post, yet no overnight passes are allowed; day passes are allowed with battle buddy on family day and on graduation day.
  - With the brigade or battalion commander's discretion, soldiers can ride with family members in automobiles on family day and graduation day.



- Soldiers may ride in automobiles with family members directly to AIT. They may not drive or consume alcoholic beverages when being transported.

Phase 4: Week 10-13 (AIT)

- If soldier passes the Army Physical Fitness Test (APFT) with 50 points per event, pass all academic standards, they will:
  - Receive all previous privileges (on-post and off-post passes to include use of electronic devices)
  - Must remain within a 50 mile radius of post
  - All passes must end no later than 2200 hours (10 p.m.)
  - Must wear uniform as determined by the commander
  - No driving of automobiles, however, may ride with family
  - Must maintain the battle buddy system
- During the second week of AIT, the end of week 11, if soldiers score 60 points per event on the APFT, and pass all academic standards, the commander may allow them to wear civilian clothes at prescribed times and to use tobacco and alcohol (if of legal age)
  - No overnights at Ft. Sam Houston, TX
  - May be included in the random drug testing
- Phase 5: Week 14-20
- Off-post and weekend passes are authorized, however no overnights at Ft. Sam Houston, TX

- Passes must end no later than 8 hours prior to the next training day
- Must maintain the battle buddy system

Phase 5+: Week 21+

- Soldiers are billeted separately from Soldiers in the lower phases; when this can not occur, alcohol and tobacco use is restricted.
- Provided privileges similar to fully qualified Soldiers (those who have completed AIT)
- Soldiers may be included in the random drug testing screening

Soldiers can regain prior privileges, if lost during phasing, by receiving a positive evaluation from the new company, and until that time, they will remain in Phase 4.

Trainees are expected to train from approximately 0530 to 2100 hours each day.

A typical day in the life of a BCT trainee, per Ft. Jackson, SC training schedule, consists of the following:

0530- Wake up

0600-0700 Physical Training

0700- 0800 Breakfast

0830 – 1200 Training

1200 – 1300 Lunch

1300-1700 Training

1700-1800 Dinner

1800-2000 Drill Sergeant time

2000-2100 - Personal Time

## 2100 - Lights Out

Training and Doctrine Command (TRADOC) Regulation 350-6 (2005) indicates that all trainees will participate in a battle buddy program beginning in basic training. This program requires course administrators to place trainees in 2-3 person teams for the following rationale: “mutual support and assistance; teaching teamwork; developing a sense of responsibility and accountability for fellow soldiers; improving safety during training; and reducing the likelihood and opportunity for sexual harassment, misconduct and suicide gestures and attempts” (p.26). Because battle buddies consistently train together they can develop deep relationships and help each other through the program. Many of the battle buddy teams report to AIT together and are again placed into the same platoons, allowing a continued relationship. Other forms of support for trainees may also include the relationships that have been developed with other platoon members, as well as with the unit Chaplain or available mental health personnel.

### *Advanced Individual Training*

The third major and final step toward transformation into a fully qualified soldier is to complete Advanced Individual Training (AIT). AIT is the specific job training that trainees receive immediately following BCT; it requires trainees to cope effectively in the academic and military environment simultaneously. It is conducted at multiple locations within the United States. This study focuses on the Health Care Specialist Course conducted at Ft. Sam Houston, TX; this program currently trains all Army medics, and soon will be where medics of all the services will be trained. The mission of the Army Health Care Specialist Program is to:

“provide the Army with highly motivated, disciplined, warrior spirit Health Care Specialists ...who are National Registry EMT-B certified, possessing the additional necessary medical skills to sustain the force, survive the battlefield and accomplish the mission” (Hastings and Maness, 2007).

#### *Academic structure*

This course is conducted over 16 weeks and trains Active Army, Army Reserve, Army National Guard, and military students from other nations. The majority of the students in this study were Active Army. The course description is as followings:

The curriculum provides a foundation in fundamental health care knowledge and skills involving the administration of emergency medical treatment; evacuation; force health protection; and routine patient care, on the battlefield and in military treatment facilities. The course begins with CPR and a Department of Transportation (DOT)-based Emergency Medical Technician-Basic (EMT-B) curriculum, culminating in the National Registry (NREMT-B) Certification Examination. The remaining 10 weeks curriculum features advanced medical and patient care modules including a clinical experience, a Situational Training Exercise (STX), and a Field Training Exercise (FTX). The training consists of both classroom and practical exercises (Hastings and Maness, 2007, p. 3).

Specifically, classes are broken down into seven sections which include seven modules of EMT-B training. Prior to beginning EMT-B module training, students must pass a written and practical Cardiac Pulmonary Resuscitation (CPR) exam during the first week. The first section consists of EMT-B classes that cover: Medical/Legal Issues,

Patient Assessment, Vitals, Airway Management, General Pharmacology, Respiratory, Cardiovascular and Neurological Emergencies, Substance Abuse, Bleeding, Soft Tissue, Eye, Chest, Abdomen, and Head and Spine Injuries, Musculoskeletal Care, Pediatric Airway, Geriatric Assessment and Ambulance Operations. The remaining sections are geared toward acquiring combat medic skills and cover the following areas: Limited Primary Care (medication administration, skin disorders, orthopedics, respiratory disorders) and Chemical Biological Radiation Nuclear Explosives (biological warfare, blood agents, decontamination of chemical casualties); Invasive Procedures (initiate and manage intravenous infusion, assemble a needle and injection, control bleeding and shock); Force Health Protection (Humanitarian laws, waste disposal in the field, heat/cold weather injuries, stress management); Combat Trauma and Evacuation (assessment and management of the trauma patient, head injuries, burn injuries, and litter and manual evacuation); Clinical Rotation and Situational Training Exercise (STX) and a Field training exercises (FTX) which requires the student to utilize all learned medical skills within the field environment (see Appendix F for a complete description of the curriculum).

The course requires students to be evaluated in both academic and nonacademic domains. To earn the MOS of Health Care Specialist, academically, they must be CPR qualified, pass all written and practical course exams, and pass the NREMT practical and written exams. Passing the NREMT is critical because it establishes the criterion by which emergency medical care is evaluated. Nonacademically, they must: adhere to the standards of conduct (not engaging in plagiarism, cheating, fraternization, stealing, drug

use, etc.); be medically qualified; and pass the APFT. If students fail to meet any of the above standards, they are recommended for recycle, reclassification, or relief from the course. Recycling from the course means that the student failed a test twice and is transferred to another company to be given an additional opportunity to successfully complete the course. Relief from the course is recommended when the student fails a test twice after they have already been recycled. Finally, reclassification occurs when the student has been relieved from the course and is given another MOS. Chapter 11 discharges from military service may also occur with students within their first six months of training. These discharges are for entry level performance and conduct difficulties and occur when students demonstrate unsatisfactory performance as evident by: “inability, lack of reasonable effort, failure to adapt to the military environment or minor disciplinary infraction” (AR 635-200, p. 81).

Policies and procedures are strictly enforced when evaluating trainees and these are thoroughly explained to students during formal counseling. Counseling is conducted at least three times throughout the course: initial, midterm, and at the end. Written counseling is also provided as needed for: exam failures, disciplinary action, lack of motivation, etc. Exams issued during the course include written, computer, practical, and the APFT. During the EMT phase of the course, testing occurs once or twice per week, whereas testing during the combat medic phase is conducted approximately once per week. The last six weeks of training is mostly hands on and the last week requires the student to consolidate all of their training and utilize those skills effectively in a field environment.

The pedagogy that is used in the course is highly formalized. Class instructors typically provide a pre-exam review of all covered material. Instruction is by lecture, often with a PowerPoint presentation. Exams are administered after each module. Following the exam, a post-exam review is conducted in which students are given their grades and are told which questions were most often missed by the class. If a student fails the exam, they are immediately counseled. Students are then required to attend a reteach class that evening for retraining of the material. Retesting, using a different version of the test, typically occurs during scheduled PT time at 0515 the next morning, so as not to interfere with regularly scheduled classes. If the student fails the test for a second time, they are again counseled and recommended for recycle to a follow-on class with another company (see Military Structure below). Any student who fails a retest twice is recommended for relief from the course and reclassification into another, less prestigious, MOS. Students are typically given two times to pass a written and practical exam before being recommended for recycle or relief from the program. Students are given approximately three times to pass the NREMT exam. After the first two failures, the student is counseled and required to attend study hall, a mandatory 16-hour retraining course, and to wait at least seven days after the previous exam scores are issued before retesting. During the retesting phase of the NREMT, students remain in class with their original company and continue with the combat medic training. If they pass the NREMT by the third attempt, they continue with the course. If, however, they fail to pass the exam after three attempts they are then recommended for academic relief (See Appendix D).

Some students enter the course already holding a NREMT certification. Once verification of their status is complete and they meet all requirements, they are progressed to a company that is beginning the combat medic phase of training, thereby shortening their length of stay in AIT. Students, however, who eventually recycled to another company, extended their stay in AIT. They typically are required to move to the same barracks that houses their new unit. This move is necessary to ensure that all students training in the same company are kept together for accountability purposes. Along with this move, they are required to integrate into a new unit and are assigned a new battle buddy.

Students who meet all of the academic and nonacademic standards are eligible for graduation and earn the MOS of Health Care Specialist (68W). Once they graduate, they have completed their final step in the process of becoming soldiers and are no longer considered trainees. They have demonstrated that they are willing to live by the Army's values, and that they were able to learn their job and demonstrate their proficiency while in a highly stressful environment. They are expected to perform as entry level Health Care Specialists upon their arrival at their first duty station. The majority of these soldiers are on active duty and will take leave prior to reporting to their new units to perform their jobs. The remaining students are Reservist and National Guard members and will either return to their home units to work as Health Care Specialists, or they will return to their previous jobs or look for new employment utilizing their new skills. For those students who are recycled to new units, many successfully complete the course, whereas some are recommended for relief from the



course. Unless there are extenuating circumstances, students who are recommended for relief from the course are reclassified into another MOS or are discharged from the Army; they leave Ft. Sam Houston shortly after their failure, typically prior to the graduation of their peers.

There are both military and civilian instructors in the course. Military personnel can volunteer or be involuntarily selected for instructor duty. Instructor assignments are based on the following qualifications. They must: be a graduate of the program in which they are going to teach; possess a clean, five year background check; have held a variety of assignments; be physically fit and meet height and weight standards; be a graduate of the appropriate advanced military school, with at least one year of experience afterwards; have no speech impediment; have recently held a leadership position; have demonstrated the ability to be an instructor; and have no questionable personal habits (alcoholism, gambling, financial problems, emotional instability, etc). Civilians instructors are typically retired military Health Care Specialists, but they can also be civilian EMT trained personnel. Drill Sergeants are also carefully selected when being assigned to training schools. They too can volunteer or be involuntarily selected. Drill Sergeants in this course are also fully qualified Health Care Specialists. They are the MOS role models and serve as assistant instructors as needed (TRADOC Regulation 350-6, 2005).

All instructors, whether military or civilian, are required to be highly qualified and current in all aspects of their subject, which includes passing of the APFT for military instructors (TRADOC Regulation 350-6, 2005). Although all instructors are

competent in all aspects of being an EMT and combat medic, they are typically assigned to teach in their preferred specialty area. Instructors are required to maintain their professional credentials. Along with being fully qualified in their skills, instructors of the Health Care Specialist Course are required to take the following courses at least 30 days prior to teaching in the classroom: Instructor Training Course (ITC), Support Cadre Training Course (SCTC), and the Installation Staff and Contractors Training Course (ISCTC). The ITC is an 80 hour course designed to provide basic instruction on the duties, skills, and competencies required of an instructor. The SCTC is a course designed for military personnel to review policies and procedures, installation policies, ethical conduct, Army values, investigations and Inspector General procedures, and Reserve and National Guard liaison activities. This course is also a prerequisite for the ITC course. Finally, the ISCTC is a five hour course for civilian personnel designed to provide a basic orientation to the classroom covering the same topics as the SCTC.

#### *Health Care Specialists Military Structure*

Each company structure consists of five platoons with approximately 80 students per platoon, depending upon the training rotation. There are seven companies operating within the battalion, resulting in approximately 2,800 students in training at any given time. The classes, depending on the rotation schedule, have an instructor-to-student ratio of approximately 1:50, with a Drill Sergeant-to-student ratio of 1:30. Instructors are primarily responsible for conducting academic training and Drill Sergeants are primarily responsible for nonacademic training.

Students live and train together in on-post facilities. The living quarters vary by AIT location, and the Health Care Specialist course has communal living quarters. This means that there are typically 80-person open bays (sleep areas) and open shower facilities for all trainees. This type of environment, for some trainees, is similar to their BCT quarters; however, for others, these quarters are worse in terms of personal privacy.

Trainees are placed into a phasing cycle during BCT which indicates the level of privileges they receive, as discussed in the BCT section above. Students enter AIT in Phase IV and remain in this status for approximately four weeks. They can, however, be kept in this phase for disciplinary reasons, if needed. After the initial four weeks, and if their performance is satisfactory, they are progressed into Phase V and provided with additional privileges. This phase allows them the opportunity to have on and off post passes, utilize electronics outside of the classroom and finally wear civilian clothes, which had not been worn since they began BCT.

A typical day in the life of a student in this program is extremely busy and tightly structured. Below is an example of a typical weekday training schedule:

0430- Wake up

0515-0630- Physical training (PT)

0630-0700- Personal Hygiene

0730-0820- Breakfast

0820-0830- Value Training (emphasis on Army values)

0830-1140- Class, with breaks every 50 min

1150-1240- Lunch

1250-1720- Class with breaks every 50 min

1745-1835- Dinner

1900-2000- Company time: includes activities such as mail call, reteach (review of previous test material for soldiers who failed their last exam), study hall (for soldiers with grades below 80%), company announcements, issuing equipment, counseling, etc.

2000-2100-Personal time

2100 Lights Out

A typical weekend schedule, depending on the phase, is less demanding. In Phase IV, on Saturdays, the trainees participate in company scheduled activities during regularly scheduled class times, whereas in Phase V, students are typically on pass. Sunday mornings are dedicated to Spiritual Fitness for those who wish to participate and the afternoons are again filled with either company activities or passes, depending on phasing level and the company training schedule.

During the beginning of the course, as observed above in the daily schedule, students are provided with multiple tasks to complete in an assigned day. Students, according to the schedule, are provided with approximately one hour of personal time. This time is usually taken up by: calling home, preparing for the next day, studying and just unwinding. Also as noted from the schedule, some students are required to participate in study hall, when offered, if their exam scores are below 80%, and reteach/retraining, if they failed the test that day. These students are in a more structured environment, whereas students, who are considered above average are allowed to

manage their own personal time. Students who were designated as above average were also able to participate in the study hall sessions on a space available basis only; however, they are seldom able to do this. For students who are passing the course, there is no designated place for them to study; instead they must study in public areas with all their distractions. Some also study by flashlight after lights out. Some students compete for special recognition by maintaining high standards of conduct and maintaining their grades at a high level. The student with the highest course point average is designated as the Distinguished Honor Graduate. Students who are within the top 5% of the graduating class, have an average grade of at least a 90%, pass the initial APFT, meet height and weight standards, pass all written exams, pass all initial practical exams, and have no adverse actions in their records are designated as Honor Graduates. Students who maintain less than 80% in the course are counseled and are required to attend study hall until their grades reach 80% or better. These students are placed in the at-risk group. Because of their poor performance, some students also have their privileges revoked or modified.

#### *Administrator Perspectives*

Course administrators view the Health Care Specialist Course positively. It is the most basic of the prestigious courses for enlisted personnel that the AMEDD conducts. This course was revamped from the 91W, basic combat field medic to a more enhanced 68W. This change creates a more advanced medic who possesses greater medical competency and is able to perform advanced procedures when compared to the former. This greater capability also enables medics to utilize their advanced skills to assist other

medical personnel with clearing the battlefield. The success of this program contributes to the overall mission of Army readiness and is not only vital to the AMEDD community, but also to the Army as a whole. The mission of the AMEDD is to “provide the Army with highly motivated, disciplined, warrior spirit Health Care Specialists who are National Registry EMT-B certified, possess the additional necessary medical skills to sustain the force, survive the battlefield and accomplish the mission” (AMEDDC&S, 2007, Mission Statement, ¶ 1).

Administrators value this course and are most concerned with ensuring that quality Health Care Specialists are being produced. A constant concern in all academic programs is attrition. Although some attrition is acceptable and expected in any course, increases above a set level bring about additional challenges. This challenge contributes to other concerns that the administrator already has. These include, but are not limited to: limited resources in terms of staff, space allocations, and budget. The continued increase in attrition means that more students will be in the course at any given time due to the need to retrain them on deficient skills. This requires additional staff and space in which to conduct the retraining, and it creates a housing problem. All of these issues ultimately result in extra budgetary demands thereby creating a vicious cycle for course administrators. Because of the increased commitment of our soldiers in wartime, more of a demand is placed on the AMEDD to get medics trained and sent forward to support fighting units. When the cause of attrition is fully understood and administrators implement programs to address these issues, attrition will decrease, and more quality soldiers will be sent forward.

*Personal Perspective*

My positionality as an African American female officer in the United States Army Medical Department contributes to the lenses through which I view the world. My prior military and professional experiences as a minority in terms of ethnicity and gender, my diverse educational background and having the opportunity to view challenges as both an enlisted person and as an officer have shaped the way in which I define meaning to all aspects of life. Because of my race, gender, and profession, various challenges have been presented that were geared toward competence and credibility issues. Because of personal experiences dealing with these challenges, both inside and outside of the classroom, I view education as an equal opportunity event. I believe that all individuals should be approached with dignity and respect, regardless of their social status, rank, gender, ethnicity, or educational level and that all individuals, who desire to, can learn and can contribute back to society. I also believe their prior experiences are important to their learning process and that the voices of all students should be heard.

My style as an administrator is teamwork focused. The team (staff) must understand the mission and work collaboratively to get the job accomplished. This collaboration must be between the leadership, the instructors and the Drill Sergeants, and any other entity that interacts in the program. Each section has a specific job to accomplish and must work together in order to make the system work. In addition to this, the leadership must fully support all initiatives and routinely evaluate them to ensure that improvements are occurring within the program.

My perspective as an educator is that all students should be given an adequate opportunity to learn. I am concerned about the overall quality of medic that is being sent to the unit. Although they come to the course possessing the cognitive skills required to be successful, their ability to effectively manage the noncognitive factors that more often impact their lives, is not always as clear. Because not all soldiers will enter the program with the same level of coping skills, resources should be available with which to address these issues as they occur. My perspective as an educator is to allow all students the opportunity to succeed. This means creating an environment which fosters a positive attitude of success and excellence. A staff (administrators, DS and instructors) who presents themselves as caring leaders and who nurtures those soldiers who want to be there should focus on student strengths and steer them toward remaining focused on the goal. Ensuring that soldiers not only know what to do but also know why they are doing it is another one of my educational perspectives. In order to foster this level of understanding, soldiers must learn information in as much detail as is possible. Adequate time must be provided for study and interaction with the material to increase their competence if they are to be expected to provide the level of care being demanded on the battlefield. Finally, understanding that unmotivated students present a strain on the staff as well as the morale of others students, reclassifying or relieving them should continue to be expeditious.

### **Statement of the Problem**

There is a vast amount of literature that discusses the impact of noncognitive factors on student attrition at the collegiate level. While a few studies have explored



noncognitive factors in the military setting, none have focused specifically on how it impacts attrition rates within recruits completing their initial job training during their first six months of military service. Tinto (1993) indicates that noncognitive factors contribute more to attrition than previously thought and that a combination of cognitive and noncognitive factors presents a more thorough picture of an individual at risk for attrition. Because of the shift of focus at the collegiate level to recognize the impact of noncognitive factors in attrition, there is a need for the military to also study the impact of how they help explain attrition rates among military recruits.

The Health Care Specialist, Military Occupational Specialty (MOS) consists of approximately 40,000 active-duty and Reserve personnel and forms the third-largest military occupational specialty in the Army (Army Medical Department, 2007). The course is a continuation of the soldier transformation process and is conducted in a high stress environment designed to challenge soldiers to work under extreme conditions. The Army Medical Department Center and School (AMEDDC&S) commanders have reported attrition rates as high as 20% for Health Care Specialists during AIT. Attrition is measured as the percentage of personnel who are unable to successfully complete their MOS training with their original units. Although all soldiers, upon arrival for training, are deemed qualified to perform successfully as a Health Care Specialist, fully one-fifth of them either recycle and graduate, or fail the course and are reclassified or discharged from the Army. High attrition rates are costly to the Army, in terms of wasted resources and a lower number of fully qualified Health Care Specialists that they are able to

provide to forward units. It is important to understand why recruits who have the cognitive ability to succeed nevertheless fail when in this academic environment.

### **Purpose of the Study**

The purpose of this study is to understand how noncognitive factors contribute to attrition in the Health Care Specialist Program.

### **Research Questions**

The study addresses these specific research questions:

1. What noncognitive factors explain attrition among Health Care Specialist students during AIT?
2. How do these noncognitive factors work together to result in drop out?
3. How do noncognitive factors, when combined with cognitive test scores, serve as a predictor of academic success in the military setting?

### **Definitions**

The following is a list of terms as the researcher defined them for this study:

*Advanced Individual Training (AIT)*. Job training that occurs immediately following basic training that prepares trainees to work in their assigned military occupational specialty.

*Armed Forces Qualification Test (AFQT)*. Multiple choice tests (subtest of ASVAB) used to determine qualification for enlistment in the United States military.

*Armed Services Vocational Aptitude Battery (ASVAB)*. A timed, multi-aptitude test that helps students identify their abilities via eight modules: word knowledge, paragraph comprehension, mathematics knowledge, arithmetic reasoning, general

science, auto and shop information, mechanical comprehension, and electronics information.

*Availability of strong support person.* Seeks and takes advantage of a strong support network or has someone to turn to in a crisis or for encouragement

*Community involvement.* Participates and is involved in his or her community

*Double-tap.* Failure of the same test twice.

*Failing Student.* A student who has failed to meet the minimum standards to move from the training environment to the work environment

*First-term.* Students who are still serving time under their first military enlisted contract.

*GT (general technical) knowledge.* A combination of word knowledge, paragraph comprehension and arithmetic reasoning scores on the ASVAB.

*Knowledge acquired in a field.* Acquires knowledge in a sustained or culturally related way in any field.

*Leadership experience.* Demonstrates strong leadership in any area of his or her background (church, sports, non educational groups, etc.)

*MENAS.* Military Environment Noncognitive Adjustment Scale. The modified Volunteer Survey that was renamed to more accurately describe its function.

*Noncognitive factors.* Factors not measured by cognitive tests, such as self concept, social support, motivation to achieve, leadership experience, community involvement, level of commitment, study skills, level of social integration, and social involvement

*Nontraditional Student.* Defined by Sedlacek (1991) as students who are other than White, middle to upper class, males.

*Passing Student.* A student who is maintaining a “C” average in AIT coursework.

*ST (skilled technical) knowledge.* A combination of general science, word knowledge, paragraph comprehension, mathematic knowledge and mechanical comprehension scores on the ASVAB.

*Preference for long-term goals.* Able to respond to deferred gratification; plans ahead and sets goals

*Positive self-concept.* Demonstrates confidence, strength of character, determination, and independence.

*Reclassify.* Reassignment of the trainee’s MOS because of failure to complete the course.

*Recycles.* Trainees who have failed the current course with their assigned company but are given an additional opportunity to join another company to attempt to pass the remaining coursework.

*Relief.* Trainees who are released from the Health Care Specialist program who may either be reclassified into another MOS or discharged from the military.

*Realistic self-appraisal.* Recognizes and accepts any strengths and deficiencies, especially academic, and works hard at self-development; recognizes need to broaden his or her individuality

*Successfully handling the system (racism).* Exhibits a realistic view of the system on the basis of personal experience of racism; committed to improving the existing

system; takes an assertive approach to dealing with existing wrongs, but is not hostile to society and is not a “cop out”; able to handle racist system.

### **Assumptions**

My approach to this study will be influenced by my own experiences of both participating in Health Care Specialist course as a student and interacting with the course administrators as an officer. I assume that my military experience and exposure to the procedures of the training environment will provide me with the background necessary to understand the experiences of my participants. I also assume that each student will be open and honest when providing feedback.

### **Limitations**

Participants in this study are enlisted military members training in a highly stressful environment and generalizations will be made specifically for that population. The scope of this research will be reduced to include only Army Health Care Specialists within their first six months of military training. Generalizations can only be made to other military AITs with similar characteristics. Having been not only a student in this environment but also an instructor, my experience may limit what I’m able to perceive and in some way it will shape my interpretation of the data for this study.

### **Significance of the Study**

Few military research studies have explored the impact of noncognitive factors on attrition and none specifically on how noncognitive factors impact upon attrition rates within recruits completing AIT during their first six months of military service. Research

specific to this population, within this environment, is extremely important in order to improve the Health Care Specialist program overall. Understanding how these students negotiate their environment to accomplish the task of learning is essential to administrators attempting to improve the course. Ultimately, the beneficiaries of this course will be injured soldiers on the battlefield who will rely on treatment provided by the medics that were produced by this course. I believe that the results from this study will increase the awareness of administrators and improve their ability to recognize important factors which influence attrition. Along with being aware of these factors, it is also believed that administrators will be able to use the results and recommendations to develop and implement future programs by which to decrease attrition, ultimately impacting the success of the medical mission.

## **CHAPTER II**

### **METHODOLOGY**

This chapter explains the research methodology which was employed for this mixed methods research study. The chapter summarizes the overall research design, sampling method and sample, data collection and data analysis for the study. The purpose of the research was to understand how noncognitive factors contribute to attrition in the Health Care Specialist Program. This population was selected for study because of their high attrition rate. Commanders indicate that in the last several years the attrition rate has climbed to approximate 20%, whereas an acceptable rate is 12%. All students selected for the course have met the cognitive requirements as demonstrated by their aptitude scores; however the reason for their continued attrition is not fully known. The data analysis methods that were used for this study included descriptive statistics, logistic regression, and constant comparative method. The goal for this mixed methods study was to make recommendations to commanders for increasing retention of students enrolled in the Health Care Specialist Course.

The research questions are:

1. What noncognitive factors explain attrition among Health Care Specialist students during AIT?
2. How do these noncognitive factors work together to result in drop out?
3. How do noncognitive factors, when combined with cognitive test scores, serve as a predictor of academic success in the military setting?

## **Research Design**

This study was conducted as a mixed methods design consisting of both quantitative and qualitative inquiries. Mixed methods, as defined by Tashakkori and Teddlie (2003) and Creswell and Plano Clark (2007), is accomplished by integrating both quantitative and qualitative data within a study in order to get a better understanding of the research problem. They believe that neither method can paint a thorough portrait when used independently, but when used together they complement each other and allow for better understanding of the subject of study. This mixture of data therefore was chosen in order to provide a thorough understanding of the attrition phenomenon.

I chose Creswell's (2003) mixed-methods sequential explanatory design which involves collecting and analyzing first quantitative and then qualitative data in two consecutive phases within one study. Not only would using mixed methods in this study assist in determining the most important noncognitive factors and their significance in academic attrition but it will also enable us to better understand student perception of their academic failure.

Data collection consisted of quantitative data obtained by using a modified version of the Noncognitive Questionnaire (NCQ) developed by Tracey and Sedlacek (1984) and a modified version of the Volunteer Survey (Rice, Woods, & Bundy, 2004). The students were asked to provide information about their past academic performance, personal characteristics, general background and their perceptions and personal experiences with learning prior to the beginning of their AIT training, using the



Modified NCQ, and again, at the midpoint of their training using the MENAS. This information assisted the researcher in determining which factors (cognitive and noncognitive) influenced attrition within the Health Care Specialist Course. For those students who were unable to successfully complete the course with their peers, termed recycled, qualitative data were obtained by using a semi-structured, face-to-face interview. Recycled students were transferred to another unit to be given an additional opportunity to be successful in the course. Qualitative interviews were designed to allow the student to elaborate on specific factors that they attributed to their attrition.

### **Sample**

The sampling method used for this study was purposive sampling. This type of nonprobability sampling, defined by Merriam (1998), consists of selecting subjects with the most knowledge about the phenomenon of study and was appropriate as this explanatory study represented a collection of data from a unique population. Purposive sampling is also useful in qualitative studies to explore the personal experience of a particular population (Merriam, 1998). This method therefore allows for a greater understanding of the experiences of students transitioning through the Health Care Specialist Course.

Soliciting for a research sample through military channels requires permission from and coordination with multiple commands. Initially, a description of the study was presented to the Dean of the Army Medical Department Center and School (AMEDDC&S), Ft. Sam Houston, TX. This description was necessary in order to receive approval of the research topic and permission to conduct the research in the

subordinate commands. This presentation was again presented to the Director of the Combat Medic Training and the Health Care Specialist Battalion Commander to gain access to the military unit as well as to coordinate administrative and logistical support required to complete the study.

The AMEDDC&S conducts the Health Care Specialist Course at Ft. Sam Houston, TX, which trains Active Army, Army Reserve, Army National Guard and international military students. The course is sixteen weeks in length and “provides a foundation in fundamental health care knowledge and skills involving the administration of emergency medical treatment, evacuation, force health protection, and routine patient care, on the battlefield and in military treatment facilities” (Hastings and Maness, 2007). The first six weeks focused on performing as a basic emergency medical technician (EMT-B), whereas the remaining ten weeks focused on performing as a combat medic. The training consisted of both classroom and practical exercises.

The target sample size for this study, based on the estimations by Krejcie and Morgan (1970), was 335, in order to provide an appropriate ratio of students per independent variable. A total of 434 students from two companies [Company C (Charlie Company): N=80; and Company E (Echo Company): N=357) who were within their first six months of training, volunteered to participate in the study; these were combined into one group for analysis purposes. There were approximately 2,500 students in the training environment at any given period. The attrition rate in the last several years, as reported by various commanders, had been approximately 20% and because of these statistics approximately 87 students were expected to be in the attrition group. The actual

attrition rate for this study was N=82 or 19%, therefore the attrition rate within this study was an adequate sample of students typically training within the Health Care Specialist course.

Demographic information for the participants is provided in Tables 2.1, 2.2, and 2.3. All participants were within their first six months of military training.

**Table 2.1. Gender and Ethnicity**

Demographic Characteristic	Frequency	Percent	(N=434)
<b>Gender</b>			
Males	281	65	
Females	153	35	
<b>Ethnicity</b>			
African-American/Black	28	7	
White	325	75	
Asian	19	4	
Hispanic	45	10	
American Indian	3	.7	
*Other	13	3	
No response	1	.2	

\* The Other category included thirteen students who identified as bi-racial.

**Table 2.2. Highest Level of Education**

Demographic Characteristic	Frequency	Percent	(N=288)
High School Diploma	121	42	
Some High School with With GED	11	4	
GED	12	4	
Some College	113	39	
College Diploma	31	11	

**Table 2.3. Age and Aptitude Scores**

Demographic Characteristic	Mean	Standard Deviation	(N=434)
Age	22	4.73	
Aptitude Scores			
Skilled Technical	116.92	7.838	
General Technical	116.74	7.080	

## Data Collection

The purpose of this study was to understand how noncognitive factors contribute to attrition in the Health Care Specialist course during AIT. Two quantitative surveys were used: the Modified NCQ and the modified Volunteer Survey. The NCQ developed by Terrence Tracey and William Sedlacek is a 29-item instrument with both Likert scale and open-ended questions which has been validated in predicting grades and student retention at the college/university level. This questionnaire was designed to measure eight noncognitive factors: positive self-concept, realistic self-appraisal, understand and deals with racism, prefers long-range goals to short-term needs, availability of strong support person, successful leadership experience, demonstrated community service and knowledge acquired in a field, which may impact student academic performance and ability (Sedlacek, 2004). Slight modifications were made to the survey to gear the questions to students in a military educational environment. For example, Sedlacek stated, "I am as skilled academically as the average applicant to this school" was changed to "I am as skilled as the average student at AIT."

The Volunteer Survey was developed by behavioral science researchers at the Army Research Laboratory (ARL) in the early 1990's and was modified by Rice, Woods, and Bundy (2004) to address a variety of attrition factors. It was one of two questionnaires developed to be administered to soldiers and their battle buddies after their attrition from the Health Care Specialist course. It consisted of a mix of 83 closed and open ended questions. The content of the questions was based on the results of focus groups with Health Care Specialist instructors, Drill Sergeants, and Command Staff, and

areas identified as being predictive of academic failure in the general literature. The primary variables in the original questionnaire included: motivation, sleeping patterns, studying habits, stress perception, coping strategies, learning disabilities, health status, leadership abilities, unit cohesion, morale, indices of family status, demographics and other situational and organizational factors that may contribute to attrition (Rice, Woods, & Bundy, 2004). The Volunteer Survey was modified by the researcher to specifically focus on the areas of noncognitive factors and renamed the Military Environment Noncognitive Adjustment Scale (MENAS). For the remainder of the paper, MENAS will be used to identify the modified Volunteer Survey. Variables chosen for this study included motivation, sleep patterns, stress perception, coping strategies, unit cohesion, and morale. After modification, it consisted of a 46-item Likert scale instrument which also contained several open ended questions. It was designed to further explore noncognitive factors which may have influenced the student's academic performance since the student started the course.

A face-to-face semi-structured interview was administered to only the recycled students. It allowed them the opportunity to elaborate on various factors that may have contributed to their academic status. The interview followed the administration of the MENAS and consisted of a series of audio-taped, semi-structured, open-ended questions designed to focus on any factors that the student perceived as contributing to their academic performance. These questions were especially important to: gain a greater depth of the phenomenon (Creswell, 2003); and clarify, restate and receive further elaboration from specific responses on the questionnaire and survey (Merriam and

Simpson, 2000). The interviews also served as a tool for the researcher to observe the student's emotional demeanor. The questions asked of the students were two fold; first, they allowed the student the opportunity to elaborate and provided valuable input as to what factors they perceived to have had an impacted upon their academic performance and secondly, they informed the researcher of factors that may not have been expressed during either the NCQ or the MENAS.

All 434 students participated in the Modified NCQ, however, only 288 participated in the MENAS due to student attrition and schedule conflicts. The sample of N=288 therefore is used with any data taken specifically from the MENAS. Of these, a total of 20 students participated in the face-to-face interview.

Because the military environment is based on a rank structure, the researcher did not want student interactions to be overly influenced by the perception of power and negatively impact their participation in the study. Although the researcher introduced herself using rank during all interactions, she chose not to wear her military uniform. This allowed all interactions to be focused on the student's concerns and not on rank and/or perceived positions of power. The actual process of data collection is described below.

Upon receiving approval to conduct the study, an incoming company of students were provided a description of the study and volunteers were solicited during their first inprocessing week. Only the researcher and the ombudsman were allowed to remain in the room during the presentation to the students in order to prevent any external influences either for or against the study by course faculty. The ombudsman was an

impartial third party that served as an advocate for the proposed population. They were familiar with the nature of the study and their role was to address any student concerns regarding the research and ensure that student's rights were respected by the researcher. The researcher provided them with specific details pertaining to the nature of the study, their rights as participants, and any risks and benefits that would be associated with participation. Students who agreed to participate in the study were asked to complete the first survey instrument (NCQ). The NCQ was administered at this time in order to obtain the student's perception of their past academic performance, their personal characteristics and information about their general background at the beginning of the course. The completion of the Modified NCQ took approximately 20 minutes.

The MENAS was administered to both passing and recycled students. All passing students completed the MENAS, which was distributed between Weeks 11 and 12, after the National Registry of Emergency Medical Technician (NREMT) Exam, the most academically challenging portion of the course. Again, the timing for administering the second survey was to receive another picture of the student's perception of their academic performance at that point and any other information that they attributed to their current academic status during the course.

Any student who was unable to successfully progress with their original unit was recycled to the next training unit, typically two weeks behind in the curriculum from the original unit. A student recycled when they failed an exam, was retrained, and subsequently failed the same exam again; in the Army this is called "double tap." Once a student was recycled from the course, personnel from the academic support division of



the Department of Combat Medic Training (DCMT) notified the researcher of their status by email. The researcher then coordinated arrangements with the receiving unit to administer the MENAS. The survey was administered individually and was immediately followed by a face-to-face tape-recorded interview which took approximately thirty minutes. This interview was conducted in a private room without external influences from the student's supervisory personnel. The interview was audio-taped to provide qualitative data which would aid in gaining a better understanding of which factors the student attributed to their performance in the course. Prior to this session the researcher reviewed and analyzed the failed student's NCQ responses and used them to probe for noncognitive factors that may have affected the student's academic performance.

Although data received from the face-to-face interviews achieved saturation at N=20 and the researcher discontinued using this method for data collection, the remaining recycled students continued to participate in the MENAS and were provided additional space to elaborate on any personal experiences during the course which may have influenced their academic status.

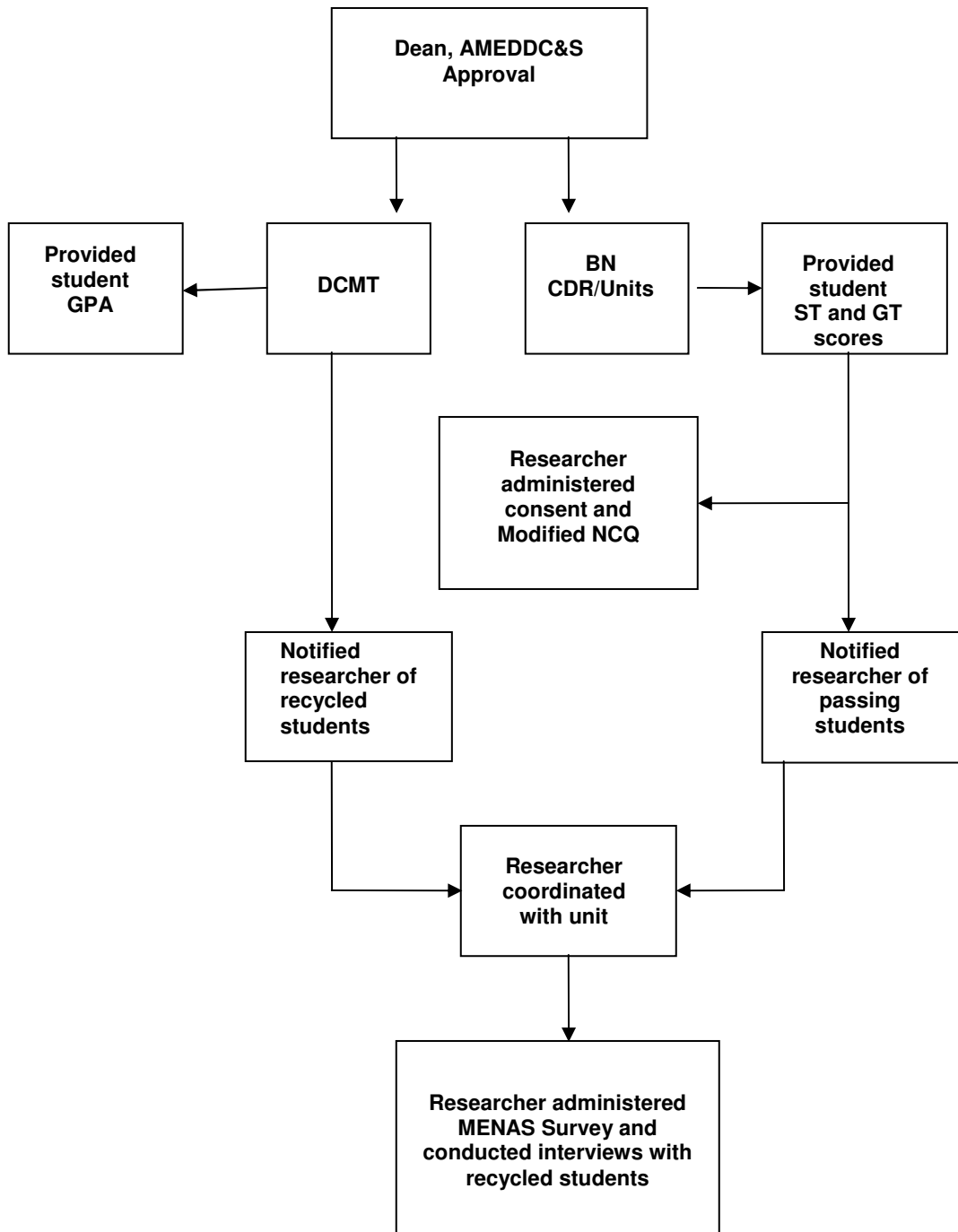
As a final step in the process, the student's GT, ST and GPA test scores were retrieved from DCMT staff to be analyzed as cognitive factors. The ST and GT scores are cognitive/aptitude scores taken from the Armed Services Vocational Aptitude Battery (ASVAB). The results are deemed valid predictors of performance in high school, post-secondary education courses, job skill training, and various military enlisted and civilian occupations (Personnel Procurement, 2005). These scores were retrieved to provide a historical view of prior cognitive scores on standardized qualifying exams. The

course GPA provided a current view of the student's cognitive performance in the program. All surveys and interviews were conducted during the student's off time to avoid interference with other course requirements.

A snapshot of the order and typical timing of the procedures are listed below:

1. Researcher received approval and coordinated administrative support and briefing time to explain research study to incoming students with the Battalion Commander (BN CDR)
2. Researcher completed consent process and administered Modified NCQ
3. Researcher retrieved ST and GT scores from unit personnel
4. DCMT personnel informed researcher of course recycles
5. Researcher coordinated with receiving unit to schedule the MENAS and interview with the recycled student.
6. Researcher contacted unit personnel to coordinate a time to conduct the MENAS with passing students.
7. DCMT personnel provided GPA scores for all students

This process is represented schematically in Figure 2.1.



**FIG. 2.1.** Schematic showing the levels of approval required for the data collection process.

## **Data Analysis**

Data analysis was accomplished using the SPSS 12.0 statistical package.

Descriptive statistics were used for demographic data; inferential statistical methods were used to answer quantitative questions, whereas the constant comparative method was used to answer the qualitative questions. The goal of the data analysis was to: explain what noncognitive factors explain attrition; understand how these noncognitive factors work together to result in attrition; and understand how noncognitive factors when combined with cognitive test scores serve as a predictor of academic success.

Logistic regression was used to analyze the closed-ended, Likert scale questions on the Modified NCQ and the MENAS. It was used to study the relationship between attrition and the cognitive and noncognitive variables when answering questions one and three. The goal was to identify the variables that were most useful as predictors for attrition. This approach allowed the researcher to understand which noncognitive variables displayed enough variability to influence academic attrition. Descriptive statistics were also used to analyze demographic information of the sample.

### *Modified Noncognitive Questionnaire*

Because the original version of the NCQ was modified to better accommodate the military population, various levels of modifying and recoding were necessary to correctly score the NCQ prior to statistical analysis. The first question which requested the student's social security number was omitted since each student was provided with a traceable number. Because of this omission, the Modified NCQ had 28 questions instead of the original 29; therefore scoring for the Modified NCQ began with number six

instead of number seven. Since this questionnaire was primarily geared for university students, various questions had to be modified and geared to the military population. The following were the modifications for the Modified NCQ:

Q6: How much education do you expect to get during your lifetime? Choices: college, but less than a bachelor's degree; B. A. or equivalent; One or two years of graduate or professional study (master's degree); or Doctoral degree such as M.D., Ph.D., and so on.

Modification: How much education do you expect to get during your lifetime? Choices: military training only; college, but less than a bachelor's degree; B. A. or equivalent; One or two years of graduate or professional study (master's degree); or Doctoral degree such as M.D., Ph.D., and so on. The addition of "military training only" increased the options to five.

Q8: About 50 percent of university students typically leave before receiving a degree. If this should happen to you, what will be the most likely cause? Choices: absolutely certain that I will obtain a degree; to accept a good job; to enter military service; it will cost more than my family can afford; marriage; disinterest in study; lack of academic ability; insufficient reading or study skills; other.

Modification: Approximately 20% of trainees typically leave before completing 68W AIT. If this should happen to you, what will be the most likely cause? Choices: absolutely certain that I will complete 68W AIT; to change my MOS; to

accept a civilian job; marriage or family distractions; disinterested in study; lack of academic ability; insufficient reading or study skills; other.

Q10: The University should use its influence to improve social conditions in the state.

Modification: The military should use its influence to improve social conditions.

Q11: It should not be very hard to get a B (3.0) average at this school.

Modification: It should not be very hard to get a B (3.0) average in AIT.

Q20: I am as skilled academically as the average applicant to this school.

Modification: I am as skilled academically as the average student at AIT.

Q21: I expect I will encounter racism at this school.

Modification: I expect I will encounter racism during AIT.

Q23: My friends and relatives don't feel I should go to college.

Modification: My friends and relatives didn't feel I should come into the military.

Q24: My family has always wanted me to go to college.

Modification: My family has always wanted me to go into the military.

Q25: If course tutoring is made available on campus at no cost, I would attend regularly.

Modification: If course tutoring is made available to me while at AIT, I would attend regularly.

None of the modifications affected the scoring of the survey.

Responses to Q7: Please list three goals that you have for yourself right now; Q9: Please list three things that you are proud of having done; and Q29: Please list offices held and /or groups belonged to in high school or in your community were open ended and their means were used for scoring. When the student did not complete at least three responses as requested on question seven and nine, a zero was placed in that spot and the mean was rounded to the nearest whole number, and then recorded. Questions 12, 15, 17, 22 and 23 were written in a positive format and were scored exactly as the student responded. The remaining questions however, were written in a negative format which required the scoring to be completed in a reverse manner in order to give the value of 5 to the most positive responses.

Internal reliability analyses were calculated for the eight variables from the NCQ. Cronbach's alpha values were used to determine if all items that were designed to measure the same variable actually did measure that variable. George and Mallery (2006) indicated that the closer the Cronbach's alpha is to 1.0 the greater the internal consistency. The Cronbach's alpha for the NCQ eight variables were as follows: positive self-concept, .185; realistic self-appraisal, -.198; understands and deals with racism, .373; prefers long-range goals to short-term or immediate needs, .000; availability of strong support person, -.986; successful leadership experience, .107; demonstrated community service, .060 and knowledge acquired in a field, .058. The results of the internal reliability test were extremely low and according to George and Mallery, unacceptable. Previous studies by Woods and Sedlacek (1988), Ting and Sedlacek (2000) and Carter (2006) either emphasized only the test-retest and inter-rater

reliabilities or factor loading in combination with other instruments. This low internal reliability prompted the researcher to conduct a factor analysis to determine if higher Cronbach's alphas could be obtained.

Factor analysis, according to Pedhazur and Schmelkin (1991), is an analysis designed to identify factors which share variance with observed variables. The idea is to place similar variables into a category together. George and Mallery (2006) indicated that it is often used to "identify a small number of factors that may be used to represent relationships among sets of interrelated variables" (p. 246). Once this relationship has been identified, factor loading occurs and assigns a weight to each variable within a similar category or construct. This weight is typically between plus one and minus one. The researcher used Principal Component Analysis with the varimax orthogonal rotation to analyze the data. The eigenvalues (the proportion of variance explained by each factor) from the total variance explained chart and the factor loading from the rotated factor matrix were used to determine which variables were to be retained and reorganized. The results indicated that eleven factors should be retained. After rotation, the eleven factors accounted for the following percentages of variance: 10.20%, 8.47%, 6.70%, 6.53%, 5.90%, 5.86%, 5.25%, 5.18%, 5.11%, 4.50%, and 4.31% resulting in 68% of the total variance (see Table 2.4).



**Table 2.4. Modified NCQ Total Variance Explained**


---

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.753	10.196	10.196
2	2.286	8.466	18.662
3	1.808	6.696	25.358
4	1.765	6.535	31.893
5	1.592	5.898	37.791
6	1.583	5.863	43.654
7	1.417	5.247	48.901
8	1.399	5.183	54.084
9	1.379	5.108	59.192
10	1.214	4.498	63.690
11	1.162	4.306	67.995

---

Extraction Method: Principal Component Analysis





**Table 2.5. Continued**

NCQ Questions	Factors											
	1	2	3	4	5	6	7	8	9	10	11	
Mean of 28.1A, 28.2A, and 28.3A	.886											
15. There is no use in doing things for people, you only find that it doesn't pay off in the long run.								.547				
Mean of 28.1B, 28.2B, and 28.3B	.967											
Mean of 7.1B, and 7.2B			.906									
Mean of 28.1C, 28.2C, and 28.3C	.949											

All factors within the Rotated Factor Matrix consisted of both positive and negative loadings. The following were the questions with the highest positive loadings on the factors: Factor 1: the mean of 28.1A, 28.2A and 28.3A, the mean of 28.1B, 28.2B, and 28.3B, and the mean of 28.1C, 28.2C and 28.3C; Factor 2: 8 and 17; Factor 3: the mean of 7.1A, 7.2A and 7.3A, and the mean of 7.1B, 7.2B, and 7.3B; Factor 4: 13, 14 and 16; Factor 5: 24; Factor 6: 25 and 26; Factor 7: 18 and 19; Factor 8: the mean of 9.1, 9.2, and 9.3, 10 and 15; Factor 9: 11, 20, and 14; Factor 10: 12 and 22, and Factor 11: 22 and 6 (see Table 2.5). A follow up reliability analysis with all of the rotated factors revealed that 6 of the original factors: Factors 5 and 7-11 continued to have

unacceptable Cronbach's alpha values. The remaining five factors produced acceptable rating of .900, .0823, .575, .663 and .537. Another factor analysis was conducted with the remaining five factors which demonstrated eigenvalues of one or better. The percentages of variance for these factors were the following: 24.40%, 15.48%, 13.67%, 13.67%, and 12.68% and accounting for 79.89% of the total variance (see Table 2.6).

**Table 2.6. Total Variance Explained**

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.684	24.404	24.404
2	1.703	15.481	39.885
3	1.504	13.673	53.558
4	1.504	13.672	67.231
5	1.392	12.658	79.889

Extraction Method: Principal Component Analysis

All factors within the Rotated Factor Matrix consisted of both positive and negative loadings. The following were the questions with the highest positive loadings on the factors: Factor 1: the mean of 28.1A, 28.2A and 28.3A, the mean of 28.1B, 28.2B, and 28.3B, and the mean of 28.1C, 28.2C and 28.3C; Factor 2: the mean of 7.1B, 7.2B, and 7.3B, and the mean of 7.1A, 7.2A and 7.3A; Factor 3: 8 and 17; Factor 4: 13 and 16; and Factor 5: 25 and 26 (see Table 2.7). After rotation, Factor 1, similar to a category identified by Carter (2006) was labeled demonstrated *school and community*

*involvement*, which was slightly different from Sedlacek original variable of demonstrated community service. The remaining factors maintained the names originally described by Sedlacek: Factor 2, *prefers long-range goals to short-term or immediate needs*; Factor 3, *realistic self-appraisal*, Factor 4, *successful leadership experience* and Factor 5, *understands and deals with racism*.

### *MENAS*

Internal reliability analyses were also calculated for the variables from the MENAS. The Cronbach's alpha for the MENAS were as follows: battle buddy support, .832; stress, .771; motivation, .708; unit support, .715; expectations, .743; and family support, .634. The results, according to George and Mallery (2006), were acceptable for factor analysis to be conducted. The factor analysis was performed and again, the eigenvalues from the total variance explained chart and the factor loading from the rotated factor matrix were used to determine which variables were to be retained and reorganized. The results indicated that six factors should be retained. After rotation, the six factors accounted for the following percentages of variance: 13.46%, 11.88%, 9.87%, 8.79%, 6.76%, 6.41%, resulting in 57.18% of the total variance (see Table 2.8).

All factors within the Rotated Factor Matrix consisted of both positive and negative loadings. The following were the questions with the highest positive loadings on the factors: Factor 1: 34, 38, 36, 37, and 15; Factor 2: 14, 25, 17, 16, 43, 1, 22 and 10; Factor 3: 18, 19, 22, 10, 21, 20, and 11; Factor 4: 36, 44, 45, and 39; Factor 5: 27 and 26; and Factor 6: 32 and 31 (see Table 2.9).

**Table 2.7. Rotated Factor Matrix**

NCQ Questions	Factors				
	Involvement	Goals	Appraisal	Leadership	Racism
Mean of 28.1B, 28.2B, and 28.3B	.974				
Mean of 28.1C, 28.2C, and 28.3C	.957				
Mean of 28.1A, 28.2A, and 28.3A	.890				
Mean of 7.1B, and 7.2B		.919			
Mean of 7.1A, 7.2A, and 7.3 A		.917			
8. Likely reason for attrition?			.809		
17. I expect to have a harder time than most students in AIT.			.808		
13. I am sometimes looked up to by others.				.859	
16. In groups where I am comfortable, I am often looked to as leader.				.849	
26. I want a chance to prove myself academically.					.865
25. If course tutoring is made available to me, I would attend regularly.					.782

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

**Table 2.8. MENAS Total Variance Explained**

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Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.500	13.462	13.462
2	3.089	11.881	25.343
3	2.567	9.873	35.216
4	2.286	8.794	44.009
5	1.757	6.756	50.765
6	1.667	6.410	57.176

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Extraction Method: Principal Component Analysis



**Table 2.9. MENAS Rotated Factor Matrix**

MENAS Questions	Factors			
	Battle Buddy Support	Stress	Motivation	Unit Support Expectations Family Support
34. I can approach my battle buddy to talk to him/her about personal matters and/or problems in my life.	.831			
38. I perceive my relationship with my battle buddy to be "close."	.816			
35. My battle buddy helps me and is supportive of me in this course.	.810			
37. I often talk to my battle buddy about my personal or academic problems.	.741			
15. I have people to talk to about my problems and/or stress in my life.	.626			
36. There are other people, besides my battle buddy that I can turn to for help and support here.				.387
14. My stress level affects my academic performance.		.812		

**Table 2.9. Continued**

MENAS Questions	Factors					
	Battle Buddy Support	Stress	Motivation	Unit Support	Expectations	Family Support
25. My personal problems affect my academic performance.		.722				
17. I have trouble concentrating which affects my academic performance.		.674				
16. I am coping with and managing my stress well.		.596				
43. I am having a difficult time dealing with failure.		.569				
1. I attribute my problems with the course to:		.487				
18. I am very motivated to pass this course.				.728		
19. I am doing my best to pass the course.				.671		
22. I find this course so difficult that I have given up on trying to pass it.		.323		.622		
10. I have what it takes to be successful in the course.		.369		.573		

**Table 2.9. Continued**

MENAS Questions	Factors					
	Battle Buddy Support	Stress	Motivation	Unit Support	Expectations	Family Support
21. <i>I did</i> fail this course on purpose.			.545			
20. I have <i>considered</i> failing the course on purpose.			.480			
11. My grades and my academic performance are my responsibility.			.338			
44. I have bonded well with my unit.				.768		
45. I have a strong sense of belonging here.				.707		
39. My unit is supportive of me.				.626		
27. This MOS is very similar to what the recruiter described to me.					.868	
26. The 68W MOS is what I expected.					.821	
32. My family wants me to find a way out of this course and/or get out of the Army.						.791
31. My family or people who are close to me are supportive of me and my role as a combat medic.						.716

The factors were assigned the following labels: Factor 1, *battle buddy support*; Factor 2, *stress*; Factor 3, *motivation*; Factor 4, *unit support*; Factor 5, *expectations*; and Factor 6, *family support*.

### *Interview*

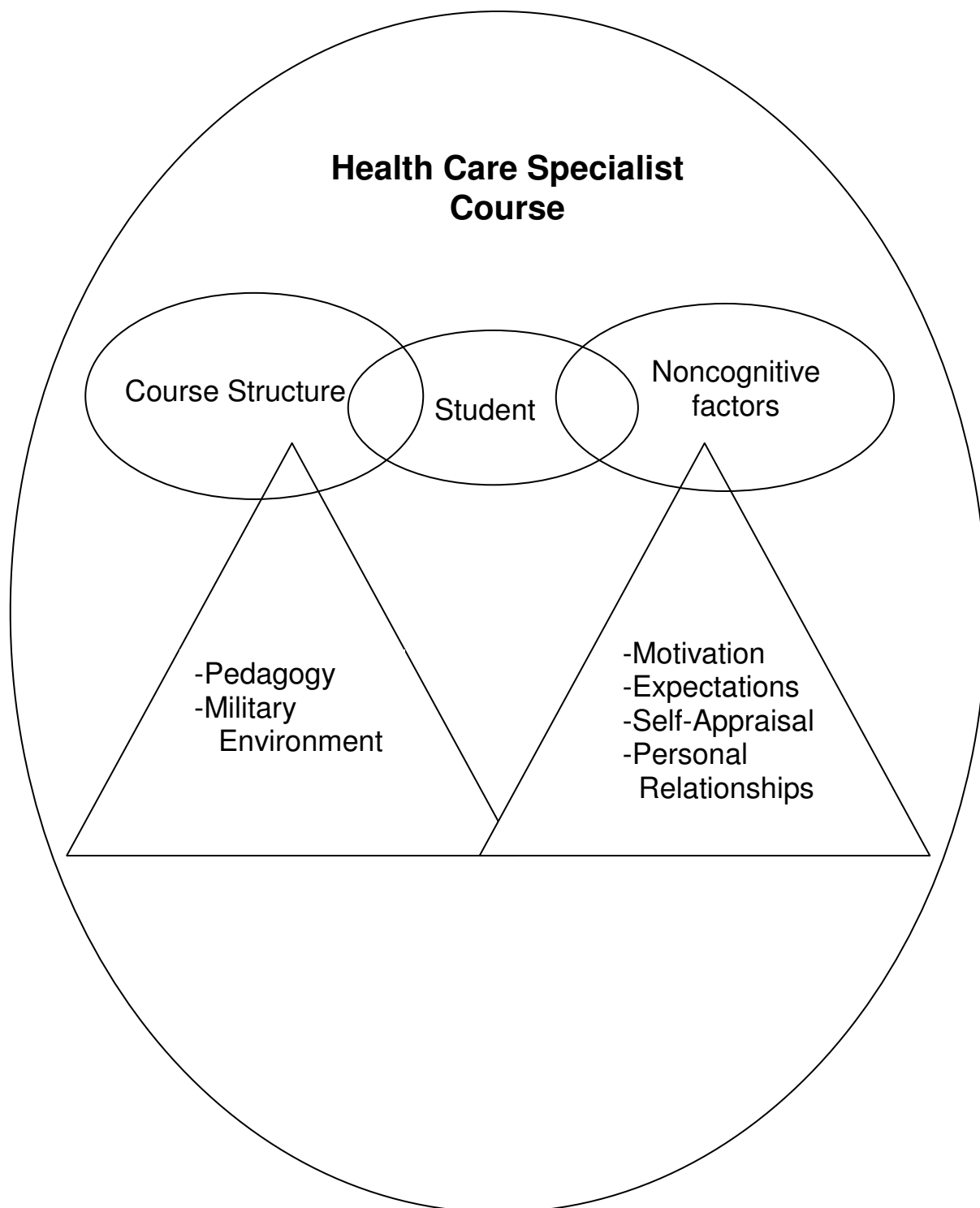
Qualitative analysis, using the inductive approach of the constant comparative method was performed to identify key ideas and recurring themes. The open-ended questions from the Modified NCQ, and the MENAS, as well as the results of the final interview, were used to establish categories which reflected the purpose of the study. This approach was used to continuously compare and categorize data as it was received. Merriam (1998) suggests that categories, which reflect the purpose of the study, often answer the research questions.

Merriam and Simpson (2000) recommend the use of four steps to establish a grounded theory when conducting constant comparative analysis. First, the researcher compares incidents, generate tentative categories and code each incident; second, integrate the categories and their properties; third, reduce categories into smaller categories, generate hypotheses, and check data for an overall fit until data saturation occurs; and fourth, establish a theory that reasonably and accurately represents the research subject. In other words, the constant comparative method challenges the researcher to continuously compare and analyze data in order to develop a grounded theory.

Following the guidance of Merriam and Simpson (2000), the researcher proceeded by recording data as it was received and placed it into categories which best

represented the topics revealed. After continuous recategorization and recoding, similar themes and hypotheses began to emerge. Data were organized in a meaningful manner to allow the researcher to get a global view and attempt to understand how various factors influenced attrition. As a final piece of the process, the researcher used direct quotes to further support the categories that were revealed. Merriam (1998) states, “When categories and their properties are reduced and refined and then linked together by tentative hypotheses, the analysis is moving toward the development of a theory to explain the data’s meaning” (p. 192). The constant comparative method contributed to allowing the researcher to generate a theory that was grounded in the data received from students who were unsuccessful at completing their assigned course within the first six months of training.

When initially categorizing the data, various topics and patterns emerged which reflected specific themes related to cognitive and noncognitive factors as well as environmental distracters. Thinking deeper about the emerging themes revealed that these factors/distracters are often intertwined in each student and it is difficult, if not impossible, to separate when discussing the overall performance. Further analysis resulted in categorization of the data into the following themes: *course structure* and *noncognitive factors*. These themes reflected how all factors/distracters worked together to accurately represent attrition in the military setting as well as help to establish a grounded theory (see Figure 2.2).



**FIG. 2.2.** Qualitative themes showing the interaction between the student, the course structure, and noncognitive factors.

### **CHAPTER III**

#### **COURSE STRUCTURE**

The Health Care Specialist course is extremely demanding. Course administrators expect students to enter the environment motivated and ready to tackle the demands involved in learning their future job. Students enter the environment with the anticipation that they will leave the course possessing the skills necessary to become an entry level Health Care Specialist and be able to function as a competent EMT-B. A successful interaction between the student and the environment will lead to graduating on time; however, a mismatch between the two will create conflict, thereby preventing adequate academic and social integration and possibly leading to attrition. Academic integration as described by Tinto's (1975) Theory of Student Persistence is the combination of grades and intellectual development which ultimately leads to goal commitment. Social integration is the combination of peer group and faculty interaction which ultimately leads to institutional commitment. Both integrations are important factors for persistence; however a deficit in either can influence retention.

As previously noted, attrition in the Health Care Specialist Course is a major problem for the Army. While in this course, students may face multiple unexpected challenges that will force them to evaluate their commitment to being successful in the program. In order to understand why attrition occurs, it is necessary to understand the experience of those students who are not successful. This chapter focuses on that group, students who failed an exam two times, and thus recycled to another company. In this study, the majority had done so during Phase 4 when privileges were the most

restrictive. These were the students who participated in face-to-face, audio recorded interviews with the researcher shortly after they were recycled and immediately following the administration of the MENAS. Twenty students in total were interviewed. There were 16 (80%) males and 4 (20%) females with a mean age of 21.85 (SD = 4.870). The ethnicity was as follows: Black, 1 (5%); White, 10 (50%); Asian, 2 (10%); Hispanic, 4 (20%); American Indian, 1 (5%); and Other, 2 (10%). Their highest level of education prior to entering training was: high school diploma, 9 (45%); some college with GED, 1 (5%), some college, 8 (40%); and college diploma, 2 (10%). A review of the MENAS surveys was completed prior to the interview and unclear responses were used to probe for noncognitive factors that may have influenced the student's academic performance.

The major challenges students faced stemmed from the pedagogical structure of the course and the environment in which it was situated. Pedagogical factors included the pace of the instruction, the teaching method, test review sessions, reteach, and study hall. Factors deriving from the military environment included the schedule, limitations of time (study and personal), and environmental distractions. The two sets of factors will be discussed in turn.

### **Pedagogy**

Pedagogy is defined as the study of teaching or a combination of daily teaching practices and assessment techniques used by teachers (Newman, 1995). Many scholars (Kember, Leung and Ma, 2007; Ramsden, 1987) argue that a student's learning is influenced by their perceptions of the teaching and learning environment. If actual



learning is taking place, students tend to value it and are more likely to be retained in the course (Tinto, 2002). This process involves effectively engaging students in the process of learning. Teachers who demonstrate the ability to do this have been called effective or exemplary teachers. Effective teachers as viewed by students, according to Feldman (1976), possess the following characteristics: concern and respect for students, knowledge of their particular subject matter, available and helpful, open to others opinion and encourages discussions, able to explain clearly, enthusiastic, able to stimulate interest, and organized and prepared. Maden (2003) argues however, that the most prominent characteristics for effective teachers are the following: demonstrates knowledge of the subject matter, effectively paces and manages their classrooms, and teaches with enthusiasm.

### *Pace*

The speed in which the course was taught was widely cited by the majority of the recycled students as a problem. Hall (2002) argues that the pace of instruction is influenced by the “task complexity or difficulty, relative newness of the task, and individual student differences” (p. 4). The author identifies three benefits for engaging students at a fast pace: greater information is shared, students are highly involved in the activity, and they tend to stay focused during instruction. Although a fast pace may create positive outcomes for some students, for other students it may contribute to them becoming overwhelmed.

The Health Care Specialist course is rigorous and demanding. It requires students to absorb new knowledge very quickly, as the course is taught using a strict time

schedule. Many recycled students stated that the pace of the course was faster than they expected and suggested that it negatively impacted their performance in the course.

When asked, “What are some problems that you have experienced in the course that may have affected your academic performance,” several students answered, “Just the material coming so fast...with the test right away and slides all day. Then they expect you to read”; “It’s like there is class work pounding, pounding, pounding and you never get a break.” A third student said:

Everything gets so backed up. We did ten chapters in two days and then we had to do the test. After the test, we took the final and I think that’s what really screwed me up; having everything crammed up into a week. I just got so much pushed at me at once.

Another student commented:

It is a lot of back-to-back...we had maybe three or four days to go over and review ten chapters before we had a test and there were days when we had a test on Wednesday and another on Friday and a test on Tuesday, so there was a lot to soak in.

Students commented about not only the pace of the course but also the impact that nonacademic tasks had on their performance. One student noted:

I was really overwhelmed with the speed that we were getting the information. That was week one and a lot of things were going on other than just the classes. We had all the other things like the Drill sergeants...and that was pretty stressful.

Finally, some students felt that the fast pace of the course was purposefully used to identify and remove the students who were not likely to pass the course. One student complained:

My head is still spinning. I guess the company that I am with just took Module 5, two days ago, had a weekend...and then took Module 6 and Module 7. Two days after that was the final. I sometimes feel like they are overflowed or something and they are trying to get rid of people or reclassify them or something.

Sometimes it just feels that way.

#### *Test Review*

Several students attributed their poor performance to the inability to review the test afterwards. Students indicated that this limited their potential to learn because it did not allow them to determine where they made an error in thinking. The review for them only made them aware of their grades but not what was learned. There are typically two versions of each test according to TRADOC Regulation 350-6 (2005) and the reason for the lack of review so that students do not pass test answers on to the next class. One student described the test review process as the following:

When we go to take our test, any questions we miss, we don't get that question back or find out why we missed it. We don't get a chance to review it at all. They just tell you your percentage and the most missed question and the least missed question. Other than that you don't get to look at the test.

Another student said:

They [instructors] don't have the test, so we just have to remember what we learned and what was on the test. We never find out what questions we missed or anything so what happens is when we were in the study hall and we went over everything and talked about the test and tried to remember the questions and tried to get the correct answers and we would take the test the next day and it was completely different...

This mode of reviewing the results of the tests is ineffective for students struggling to master the course content. The rationale for doing it in this fashion was never clear.

#### *Teaching Method*

The teaching method is typically referred to the way that a teacher chooses to deliver information to their students. Students reported that instructors ranged from very interactive to monotone. The majority of the instructors used a lecture approach with a slide show presentation, such as Power Point, at some point, along with handouts or books. Along with these teaching methods, the course has periodic practical exercises for the student to engage in to further aid in knowledge construction. Although some instructors in this course vary somewhat in their teaching methods, the majority of them share a single teaching perspective. Pratt (2005) refers to it as the transmission perspective. Using the transmission perspective, which is typically lecture format, Pratt (2002) notes, "learners are expected to learn the content in its authorized or legitimate forms, and teachers are expected to take learners systematically through a set of tasks that lead to mastery of the content" (p. 7). Due to the technical nature and structured time limitations of this course, instructors often do not have the complete freedom to use

their preferred choice of teaching method. Using this perspective ensures that all students receive the same information in primarily the same format. Although transmission is the most common teaching perspective he found, Pratt suggests that it does have its limitations. Teachers primarily using the transmission perspective tend to be more focused on the specific content being taught rather than on the learner.

The limitations discussed by Pratt (2002) regarding transmission perspective appeared to have influenced some recycled students in this study. One student responded:

The monotony of class was getting to people. A lot of people were having problems staying awake with “Death by Power Point”. Each instructor has his own style which brings a lot to it, but some instructors--their style is more boring than anything else.... There are some instructors that I really appreciate. The instructors that I had back at [X] company were enthusiastic about what they talked about and found different ways of relaying the material to us rather than exactly how it is said in the book.

A second student stated, “When we are in the classroom environment we don’t really get into hands-on study until ‘all skills’ time and the rest of the time we’re just reading out of a book.”

One student commented on the difficulty of having to adapt to a different teaching style and how it affected his performance:

The problem I had in my last class was one of our teachers got promoted and/or reassigned and so I was getting used to the teaching style and his partner had a different teaching style and so it just messed me up a little bit.

Several students were concerned about the level of detail being taught in the course. Several students stated, “As far as some of the classes that they teach, I know that they need a bit more explanation; I know that they have a time limit to teach but a bit more explanation would be good.” and “Some of the instructors...seemed like they expected us to know some of this stuff already.”

A third student added:

I think they should go more into detail about the chapters so we can try to be medics. They need to structure it a lot slower so we can learn a whole lot more about what ever is in the chapter.

Students also discussed the inconsistencies that occurred with teaching and how that seemed to affect performance. One student stated, “When a teacher comes in and tells you one thing and another one comes in and tells you something else, you don’t know which one to go with, you really don’t get it.” The teaching methods these students encountered were clearly problematic for them.

### *Learning Style*

Effective teachers understand that students will have different learning styles and can easily adapt their class content in order to allow all students to learn. The learning style is the way that a learner perceives, interacts with and responds to their learning environment (Felder and Brent, 2005). Instructors in this environment, as reported by

recycled students, also varied in how they approached different learning styles. Although the opportunity existed for instructors to vary their teaching styles to accommodate different learning styles, many recycled students commented that this did not occur enough for them to grasp the material in the manner that they learned best. Felder (1988) argues that when the instructor's teaching style and the student's learning style do not match, students tend to disengage from the material and this may contribute to future drop out.

Most recycled students were able to identify their preferred learning styles. Several indicated that they learned better with practical exercises. One student replied, "I learn better with hands-on better than just the book. Visual aids are awesome for me. That's how I learned to be a mechanic by just playing with the pieces." Another indicated, "The practical, hands-on stuff helps a lot. When we did the practicum with a lot of hands-on, we understood it a lot more." A third student said:

I was expecting more field training and more hands-on, doing things as you learn it... that's my biggest problem...when it comes to trying to learn everything through the book, and of course test taking, is not one of my things...

Others expressed their preference for group learning rather than studying alone. A student emphasized:

I do better as far as learning in class instead of trying to learn outside of class on my own...If I have a study group it would be easier in group learning instead of individual learning. On my own trying to read and understand, I don't quite comprehend as well as I could as part of a group trying to go over things.

Recycled students appeared to prefer more group interaction and a more hands-on approach overall to facilitate their learning rather than passively listening to lectures or reading individually. They identified the mismatch of learning styles and teaching styles as one factor which influenced their performance. Felder (1988) argued:

A class in which students are always passive is a class in which neither the active experimenter nor the reflective observer can learn effectively (p. 678).

### *Reteach*

Reteach is required to be conducted with all students who fail a test. Reteach is designed to retrain students and provide them the opportunity to become reacquainted with the material from the last failed module. This is done in an effort to clarify any misunderstandings and increase the student's learning of unclear concepts. Reteach training is typically conducted the evening prior to the retest, usually on the same day as the original test. After reteach has been completed, students are retested, typically the following morning during PT time, so as not to interrupt regularly scheduled classes.

Recycled students discussed the reteach process and the impact that it had on their performance. When asking student about the effectiveness of reteach, one student responded:

When we were in the class that night, none of that was on the test the next day. It was just completely different. So I guess what we should have done in that class is not go over what was on the last test, but go over a little of everything in general. Then we would have learned something, maybe, that would have been on the test the next day.



Other students discussed the process of reteach and indicated that, “You can [ask questions], but they tell you what you have to study and all that.” For these students the reteaching of the material did not increase their learning.

### *Study Hall*

Study hall in this environment was a time set aside for students, two to three times per week, to study with the assistance of an assigned instructor. The length of the study hall sessions varied between one and one and a half hours. Instructors were assigned to conduct study hall sessions on a rotating basis. Students with course point averages of less than 80% were required to attend these sessions; other students were welcome to attend the session on a space available basis only. Students indicated that instructors varied in how they conducted the session and some were more interactive than others. One student described the study hall process as:

If you have recycled or you haven't quite passed your MOD test it [study hall] is mandatory or if your grade point average is below 80% it is mandatory, and after it is filled up there are no more seats for volunteers.

Another student added:

The study hall really depends upon your instructor/teacher. Some of them will go over things that you have already heard that day. Or they will focus on what their class is struggling in and sometimes it doesn't help.

Several students appeared to be unsatisfied with the amount of time allowed for study hall. One student stated:

In study hall...it takes a while for everything to get organized, so that hour and a half that is allotted is not really the hour in a half that you get. It is more like 45 minutes or an hour. After everyone gets settled down, take their seats, stop talking, roll is called, the teacher gets the right Power Point presentation slides to show, and everyone gets their books out, I have yet to see an hour and a half, maybe an hour.

Students indicated that study hall should be offered more often. One student stated, "If they had study hall offered every night that would be better." Another student agreed, indicating:

I wish it was more like when I failed my one class and I had to go to reteach afterwards. If there was that everyday after class or a couple of days of the week after class, that would be super. I think I would understand more and comprehend more if we had that as an option to go to, I would be there.

On the other hand, other students expressed the opposite feeling toward study hall. They noted that study hall was not effective for them because the sessions covered the most basic material.

It actually is a time waster. I would rather be studying on my own because in study hall, what they would do the day before we had the test, they would have a test review where you choose A, B, C, D or E and they would go over the answers. Sometimes you would get people rattling off in the class and that would be 10 minutes gone in the class. I could be studying on my own with that...I prefer to study on my own. When we first did it [study hall], there were people

who were loud and we would complain that people were being too loud, so there were a lot of distractions.

Another student said:

I have been going to study hall. I don't find that it is beneficial at all. They set up the study hall in the form of the way they do classes, and it's structured a lot. I don't think that it is very helpful for people because they usually go over the material that people should already know...I would rather have, like the other day we had a quiet study time for people who have higher GPAs, where we just sat their quietly and studied on our own and I think that helped me out more, rather than having a structured instruction.

One student said, "I didn't think it was as helpful because we would just review slides that we had already gone over in class."

Students commented on study hall adequately covering the material enough to prepare them for tests. One student stated:

If you went to it [study hall] they would go through the basics of everything you already know, and its stuff that you don't know that you need to study. I knew a lot of the stuff already, and stuff that was harder to grasp; study hall didn't seem to go over it because they are just trying to reteach the whole module in an hour and a half.

Another student responded:

Sometimes you don't know what questions to ask, until you get the test. We would go over...very simple basic things, versus where I am most weak at.

Maybe it would have been a little more helpful to cover what I'm not grasping.

A final student indicated:

Some of them [instructors] would ask us questions and then we would answer them. He had a list of questions. Some of them were just talking about the same stuff you heard in class all day. Then you are tired because they are not telling you anything you haven't heard.

The study hall in this course was not responding to the needs of these students who were struggling.

### **Military Environment**

The military environment is demanding and requires students to function as both student and soldier. Students reported that three aspects of the military environment were especially difficult for them: the strict schedule, the shortage of time, and contextual distractions.

#### *Schedule*

The schedule is very structured, as there are multiple tasks to complete during the day, with little room for deviation. Time slots are designated for both academic and nonacademic events. Drill Sergeants are responsible for ensuring that the schedule is closely followed as most tasks are scheduled, even time for sleep. Other tasks such as Drill Sergeant Time and miscellaneous formations, formal meeting times to disseminate information, are also conducted before the students move from one location to another;

these take additional time that is not represented on the training schedule (see Appendix F). This occurs consistently for the first four weeks. After students transition into Phases V and higher, time in the evenings and on weekends is less structured which allows for greater personal freedom until the final week when they participate in field training exercises.

Students discussed their experiences while in the military environment and emphasized how the schedule impacted upon their time and how they perceived it to subsequently influence their performance. When asking students to discuss the training schedule, one student described it in the following manner:

Well here there are a lot more responsibilities like Drill Sergeant Time; you have formation time. You don't get to eat when you want because you are on their [Drill Sergeant] schedule and not yours, so studying is hard.

Some students indicated that the training schedule did not allow them enough time to study, even on weekends. Although the schedule is typically open after dinner except for reteach or study hall, students revealed that other tasks were often conducted during that time. One student responded:

On the weekends, the Drill Sergeants want you to do a lot of stuff. Maybe there is a time set aside where they say that you are going to study on Saturdays. Maybe half a day you study and the other time you have for personal time. But if you have a Saturday or Sunday where you have pretty much all day, when you can study, they want you to do all this stuff and finally you get an hour or two at night.

### *Study Time*

Managing available study time is vital for the success of students in this course. Due to the nature of the environment and the inflexible schedule, many of the students stated that they became overwhelmed and found that they had to choose how they would best manage their time. Some students reported that they would perform better if they had more time to study and to process the information, before being expected to take a test. One student said:

Everyone is wide open about the fact that this is straight from the fire hose. It's out there in the open. Yes, it's not easy, but maybe a little bit more time to soak it in at the very beginning; a little more time to adjust.

Another student commented about how the schedule impacted upon study time, especially during Phase 4. One student said, "I didn't feel like I had adequate time to read the material." A second student noted:

We didn't have a whole lot of time to study. A couple times of week we would get maybe an hour or two, but it was pretty intense at the beginning...I think the preferable thing would be to have a little bit more time...to soak that stuff in because it's a pretty big thing when you first get here.

One student provided an example of how other events contributed to why there was not enough time to study.

In [X] Company they gave a lot of counseling statements, which is usually a 500 – 1000 word essay. You have to stay up instead of studying for your test--you have to stay up to write the essay.

Other students felt that they needed extra time with the instructor in order to grasp the material. One student stated:

More time with the instructor to study. The time would definitely have to be monitored....I am sure that if they opened up something like, where if the teacher said come here on Saturday, that would make a difference right there.

One student explained how the lack of sleep influenced performance by saying, “We only get a certain amount of hours of sleep and I am like reading it [the book] and falling asleep, and I don’t know how long I was studying for”.

The lack of real study time was a huge issue for these students.

#### *Personal Time*

Personal time is defined as free time for the student to conduct personal hygiene, make phone calls, prepare for the next day, etc. TRADOC Regulation 350-6 (2005) requires that students are given at least one hour of preparation time each day to take care of personal needs. One student described the difficulty of having limited personal time. He stated, “We’d only have an hour and a half of personal time. It was hard to manage an hour and a half to shower, shave, and get the study time in.” Another student emphasized how he managed his limited amount of time.

I figured once I got here that I wasn’t going to have any free time as it was and any little free time that I got, I wanted to call back home, so I was like I didn’t want to give up any extra time that I got...In [X] Company, when we first got there, we weren’t hardly getting any time...Like I said whenever I got my personal time, I wanted to call home.

Finally one student described the environment by stating, “You are always surrounded by everyone and you never get that break to go on your own.” Time is always a limited resource, but for these students the limits were especially severe and it had a detrimental effect on their learning.

### *Distractions*

Some soldiers pointed out that they felt that the distractions in the barracks contributed to their lower academic performance. Although these students participated in reteach, study hall or both, they still felt that the barracks distracters contributed to their poor performance. When asking student to explain some of the distracters, one student responded, “My surroundings [barracks] do not allow me to study”. A second student noted:

There have been some problems in the bay like people getting into fights, screaming at each other and different things...it’s just like silly things that have been going on that have been distracting me.

A third student stated:

The first week after living in a new bay is kind of hard, but after that everybody adjusts...like in [X] Company the first day, two girls were yelling at each other and the next week they were the best of friends.

Another student summed it up by saying,

It’s hard trying to study up in the bays...it’s so hard to try to find somewhere where you are allowed to go study...once we phase, when we have all-day



passes, then I can go to Starbucks to study or Barnes and Nobles, wherever I can just sit and study and enjoy it, where it is more peaceful to study.

All these factors within the military environment—the strict schedule, the limits on personal and study time, and situational distractions—worked together to make it difficult for these students to learn the course material and pass the tests. In conjunction with the pedagogical issues, these factors contributed to these students' academic failure.

### **Discussion**

Recycled students in this study identified multiple challenges within the course structure, and they believed these contributed to their poor performance in the course. Factors surrounding both pedagogy and the military environment had a negative influence on the students' performance. The pedagogical challenges included the pace of instruction, test review procedures, learning and teaching styles, and the administration of reteach and study hall procedures. The challenges created by the military environment related to the demanding schedule, limited time to complete required tasks, and situational distractions.

Although research indicates that most students perform best when they are challenged with a brisk pace of instruction, others may find the pace to be overwhelming, causing them to become inattentive or to disengage from learning because they find it difficult to keep up. Students in this study indicated that the pace of the course, especially during Phase 4 (first four weeks) was extremely stressful and they found it difficult to absorb enough information to be successful on the tests. Others

believed that the pace of instruction together with having other nonacademic responsibilities contributed to their poor performance.

The inability for students to receive their test back to review the questions created added stress for some students. Because they did not know the specific questions that they missed, they were unable to understand where their educational disconnect occurred or to learn from the process.

Instructors used various teaching methods, but students indicated that they were not geared toward different learning styles. As a result students often found the classes to be tedious and they lost interest in the material. Their disinterest made it difficult for them to comprehend the material sufficiently to be successful on the tests. Students said that they valued enthusiastic teachers who were able to explain concepts clearly. Students expressed their preference for more hands-on and group learning rather than reading and individual studying. They also indicated that some instructors had difficulty explaining the course material in enough detail for them to learn. Clearly there are some pedagogical issues that need to be addressed here.

The instructors' approach to conducting reteach and study hall sessions presented challenges for these students. They commented that the structure of these sessions was not conducive to learning the material required for passing the test. They indicated that although questions were allowed to be asked, the instructor conducted a brief review of previous classes and either did not review the concepts that students felt they needed or did not cover the presented material in enough detail for them to grasp it. This reduced, in their opinion, their ability to pass the tests. Some students valued study hall and

emphasized that the sessions were not offered frequently enough and the duration was inadequate to allow for a deeper review of the material. On the other hand, other students commented that study hall was ineffective in helping them learn and preferred to have a quiet place to study instead of the structured, supervised environment.

The military environment created additional challenges for students with the training schedule, barracks distracters, and limits on study and personal time. Because of the strict time schedule, students felt especially stressed at the beginning of the course. These students expressed their frustration when scheduled study and personal time was taken away by Drill Sergeants to perform miscellaneous nonacademic tasks, even on weekends. Students reported that they were sometimes given essays to write as a disciplinary measure and that these were due the next day. When confronted with this situation, they sacrificed their study and/or personal time to complete the assignment rather than face additional punishment. Students also expressed the need for a dedicated daily study time and study area to help them absorb the information required to pass the course. Having a study area would decrease the need to study in the barracks thereby reduce the influence of barracks distractions.

### **Conclusion**

Creating an environment that is conducive to learning is vital for student success. Student feedback on the overall course structure should be used by course administrators to improve the quality of the learning experience. First, a different pedagogical approach may be warranted to enhance student learning and reduce attrition. Providing regular faculty development on adult learning theory and on effective teaching strategies

would be useful. It does not appear that faculty is currently offered opportunities for improving their teaching. Cross (1991) discussed five assumptions about teaching: good teaching does make a difference in student learning; teachers differ in what they are trying to accomplish and it is largely based on their academic discipline; effective teachers understand the process of learning and are able to determine what needs to be taught; good teaching is observable, especially by students; and improvement is always needed. Good pedagogy also needs to be supported by changes in the learning environment. A second recommendation would be to create a supervised, but quiet, student study area. This area should be readily accessible daily during available study times; this would alleviate the distractions that occur when students try to study in the bay areas. Finally, while changing the intensity of the training schedule within the military environment may not be an option, limiting unnecessary distractions would improve the overall use of designated student study and personal time and ultimately reduce attrition.

Although all of these students were recommended for recycle, they were able to provide valuable insight on the course structure. Their perception of how the course structure negatively impacted their performance should help administrators view these influences through a different lens. When students are engaged in learning and receive the academic support they need, they tend to be more committed to graduating. As Tinto (1993) notes, when a positive interaction between student learning and the environment occur, students will more likely to be successful in the course. Given the high cost of attrition to the military, in terms of lost resources and reduced numbers of trained

personnel, it makes sense that administrators of the Health Care Specialist Course give careful consideration to these recommended changes in course structure and setting. There are many factors that contribute to student attrition but these are the only ones over which they have direct control. It is imperative that administrators take action where they can.

## **CHAPTER IV**

### **MOTIVATION, EXPECTATIONS, AND SELF-APPRAISAL**

When new students have unrealistic expectations of their academic program, they experience significant stress which can greatly influence their motivation level to continue the course. Students entering the Army's Health Care Specialist Course not only must adapt to a different military environment as compared to basic training, but they must also adapt to the learning environment which they are entering. The Army's Health Care Specialist course produces soldiers who are highly trained. The redesign of the course in 2001 increased the scope of practice for medics within the Army. Health Care Specialists are now trained in advanced procedures, making them more capable than previous basic medical personnel. Not only are they "combat medics" but they also are EMT-B trained personnel who can use these skills to treat soldiers in the battlefield or to work in military hospitals. The course is divided into two phases: six weeks of EMT-B and ten weeks of combat medical training.

Health Care Specialist students typically enter the program knowing their strengths and weakness academically, and they have high expectations, both realistic and unrealistic. Recognizing and accepting these strengths and weakness is defined by Sedlacek (2004) as self-appraisal. Bean's (1980) Model of Student Departure serves as a theoretical framework for this study. He stressed the importance of the student's satisfaction with their academic environment. Bean believed that a match between the student's expectations and their actual experiences will likely predict persistent students. In agreement, Levitz, Noel and Richter (1999) indicate, "Expectations are critical; they

serve as the point from which students make qualitative judgments about an institution” (p.48).

Students typically research the job and the course by computer or by speaking with peers, recruiters, and/or Drill Sergeants to attempt to get an accurate description of the course. Others don't take this extra step; they possess only the information provided by the recruiter and may not know what to expect when they enter the environment. Often recruiters interacting with the students provide incomplete or inaccurate information. Many recruiters are not medical specialists, have few experiences observing Health Care Specialists in their jobs, and do not understand the complexities of learning in the medical environment. Some recruiters continue to pass on the myth that being a medical specialist is a “laid back” job and thereby giving the student the perception that training will not be challenging. Lowe and Cook (2003) note, “The roots of many unrealistic expectations lie in the inappropriate preparation students receive before coming to the university. There needs to be better communication between students and faculty on expectations” (p. 75). In this case, the recruiter may appear to be the best source of information. A student's expectations may be based on many factors. Some may be realistically based on facts while others may be unrealistically based on myths or stereotypes. Often recruits believe the environment will be similar to that of a college (housing, unstructured study time, less interruptions, etc.) and the course will be easier than college classes; once they get into the course they discover these assumptions were wrong.

Students typically select this military occupational specialty (MOS) because they want a medical career; however, others have no real interest in the job, but selected it either to please family members and significant others or because they thought it would be a faster way than attending college to acquire the skills necessary to get a well-paying job. Further complications ensue if their recruiter told them that that they might be able to change their MOS once they got to basic training. The terms of the military contract can rarely be changed prior to completion of the training and in rare cases, when changes were made it was due to the student being unable to complete their training. When this does happen the student is usually reclassified into another MOS. The student could be offered jobs that are less prestigious and require lower aptitude scores than that of a Health Care Specialist, or the student could simply be reassigned by the Army.

It is not uncommon for students to make mistakes about the nature of the job itself. Sometimes the assumption is made that a Health Care Specialist is the same as a Medical Assistant in the civilian sector, that is, someone who works in a hospital setting. When students develop their expectations based on incomplete or inaccurate information, they begin the course only to discover that their expectations and the institutions expectations are incompatible. This typically causes a great deal of stress for the student. Many students are able to adapt to the course and the environment and successfully complete the training, whereas other students emotionally withdraw and are unable to fully engage in the course. When this happens they are recycled, which means that the student is sent to a company that is at an earlier point in the curriculum; this gives them another opportunity to be successful in the course. Rowser (1997) indicated



that students are more likely to leave the academic environment if they become frustrated and perceive themselves as failures because they were unable to meet the expectations of the institution. The situation is similar in a military setting.

Faculties at institutions also have expectations of incoming students, and this environment is no exception. The Health Care Specialist course faculty expect: students who are fully capable of completing the course; are motivated to be successful; are responsible for their actions; and are self directed in their learning (Rice, Woods & Bundy, 2004). Tinto (2002) suggested that students perform better when they are in an environment that has high expectations for their learning. He also suggested that students identify and respond to institutional expectations based on how well these expectations coincide with their own. As a result, institutional expectations will not influence all students in the same way.

All students begin programs with particular expectations, motivations, and self-appraisal. The same is true for students in the military, but their context is significantly different from that of a college. In order to understand how these factors impacted students in a military academic environment, this study focuses on a group of students enrolled in a Health Care Specialist course.

## **Method**

### *Participants*

The participants in this study were men and women incoming students to a military basic level job training course in Texas. All participants were within their first six months of military training. The mean age for the participants was 22 years old

(SD=4.73) and the ethnicity was as follows: Blacks (7%); Whites (74%); Asian (4%); Hispanic (10%); American Indian (.7%); Other (3%); and No response (.5%). A total of 20 of the participants were interviewed by the researcher for the qualitative portion of the study because of the saturation effect of the received data. The participants were recruited from the Health Care Specialist Course who reported to class on October 16, 2006 (Class 01-07) and December 4, 2006 (Class 03-07). The course is conducted over a 16 week period with the capacity to accommodate approximately 500 students per company. The mission of the course is to provide the Army with Health Care Specialists who would provide basic emergency medical care to the Army. A sample of 288 students participated in this mixed method research study.

#### *Quantitative Measures*

The Noncognitive Questionnaire developed by Tracey and Sedlacek (1984) was designed to measure eight noncognitive factors: positive self-concept, realistic self-appraisal, understand and deals with racism, prefers long-range goals to short-term needs, availability of strong support person, successful leadership experience, demonstrated community service and knowledge acquired in a field, which may impact student academic performance and ability (Sedlacek, 2004). After a factor analysis was conducted by the researcher, new factors were used: school and community involvement, prefers long-rang goals, realistic self-appraisal, successful leadership experience and understands and deals with racism. This paper will discuss the self-appraisal factor.

The MENAS was designed to explore noncognitive factors which may have influenced the student's academic performance in this course. No previous published research studies have been conducted on the validity and reliability of the MENAS, therefore this study provides some insight on its ability to be used in future studies. The factors identified through exploratory factor analysis using Principal Component Analysis and varimax rotation were labeled as: perceived battle buddy support, perceived stress, motivation to complete the course, perceived unit support, expectations of course, and perceived family support. The internal consistency of the MENAS ranged from .63 to .83. This paper will only discuss the various levels of perceived support: battle buddy, family, and unit support.

Students responded to 46 items using a Likert scale which ranged from either 1 to 5 (strongly agree, agree, neutral, disagree or strongly disagree) or 1 to 2 (yes or no). Multiple questions were written negatively to deal with the student's tendency to answer positively regardless of the content and all items were listed in random order. Students were asked to answer the questions honestly and base their responses on the way they have felt since coming to the medical course.

#### *Qualitative Measures*

Individual interviews were conducted with only the recycled participants, using semi-structured, open-ended questions, as they were the focus of the study. All interviews were audio-taped and verbatim transcripts were prepared. Interviews can be used by researchers to observe the emotional impact of specific questions. Participant's nonverbal responses may indicate more of what they mean than the actual words they

say (Merriam and Simpson, 2000). All interviews were conducted with the recycled students immediately following their completion of the MENAS and lasted approximately 20 minutes. Prior to the interview session the researcher reviewed the MENAS responses and used those responses to probe for noncognitive factors that may have influenced their academic performance.

## **Results**

### *Quantitative Analysis*

The ratings for each of the passing and recycled student items were subjected to an independent-sample t-test with the alpha level set at .05 to identify those items that distinguish between passing and recycled students. The independent-samples t-test is appropriate whenever two means drawn from independent samples are to be compared (SPSS 12.0). The results from the t-test revealed that there was a significant difference between the two groups in motivation and self-appraisal, however no significant differences were observed in expectations. Although there was no significant difference in expectations between the two groups, 45% of the students indicated that they disagreed or strongly disagreed with the item, “The 68W MOS is what I expected.” Among the responses to this question, 23% of the students answered neutral, therefore only 31% of the students indicated that agree or strongly agreed with this item. Forty-seven percent of the students disagreed or strongly disagreed with the item, “This MOS is similar to what the recruiter described to me.” Among the responses to this question, 26% of the students answered neutral, therefore, only 26% of the students indicated that they agree or strongly agreed with this item. The reasons for the large number of neutral

responses is unknown, however these responses indicated that the expectations of both groups appeared to be unmet. The motivation, self-appraisal and expectation means, standard deviations, t values and significance levels for differences of the two groups are presented in Tables 4.1- 4.3.

**Table 4.1. Motivation Items, Means, Standard Deviations, t Values and Significance Levels**

MENAS Questions Motivation	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
18. I am very motivated to pass this course.	4.35	.899	3.69	1.158	3.513	.001*
22. I find this course so difficult that I have given up on trying to pass it.	4.73	.595	3.93	1.314	3.874	.000*
10. I have what it takes to be successful in the course.	4.51	.710	3.98	.950	3.495	.001*
21. <i>I did</i> fail this course on purpose.	4.85	.628	4.17	1.378	3.175	.003*
20. I have <i>considered</i> failing the course on purpose.	3.94	1.407	3.26	1.563	2.852	.011*

\* $p \leq 0.05$

**Table 4.2. Self-Appraisal Items, Means, Standard Deviations, t Values and Significance Levels**

MENAS Questions Self-Appraisal	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
8. Likely reason for attrition?	3.19	.984	2.78	.982	3.376	.001*
17. I expect to have a harder time than most students in AIT.	3.78	1.077	3.06	1.251	4.778	.000*

\* $p \leq 0.05$

**Table 4.3. Expectation Items, Means, Standard Deviations, t Values and Significance Levels**

MENAS Questions Expectation	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
27. This MOS is very similar to what the recruiter described to me.	2.81	1.244	2.48	1.194	1.630	.104
26. The 68W MOS is what I expected.	2.60	1.289	2.48	1.234	.586	.558

\* $p \leq 0.05$

### *Qualitative Analyses*

Qualitative data complemented the quantitative data well when observing student motivation and self-appraisal. Although the groups did not differ significantly in level of expectations, the qualitative data did add clarity as to how it initially influenced their ability to negotiate the course. All of the following data were received from the interviews of recycled students in the course.

#### *Motivation*

Sedlacek (1991) and Grayson and Grayson (2003) show that motivation to perform well is the best predictor for persistence. The motivation variable in this study included: giving up on passing the course; indicating not having the skills to pass the course; and failed the course on purpose. The quantitative results under this variable revealed that students who indicated that they had given up on trying to pass the course, and who failed the course on purpose were more likely to be recycled to another unit. Thomas (2002) posits that students are more motivated if they perceived that they were valued in the environment. Motivation was divided into three sections during qualitative analysis: motivation to enter the Army, motivation to continue the course, and the impact of motivation on interest in the course.

When asking recycled students about their motivation to enter the Army, they provided various answers such as: improve finances, get a steady job, money for college, begin a new career, get into the medical field, obtain medical benefits for family, and boredom with current lifestyle. Students had various motivations to want to remain in the course. When asked to discuss those motivations, one student responded:

I just start thinking a lot about all of the people who thought I couldn't make it really frustrates me because I didn't want to go out like that. I really wanted to prove those people wrong, that I could do it, and that stresses me out. That also keeps me motivated.

A second student replied:

I don't know why I didn't try harder. I guess it just finally hit me right before I failed. This is your job, you are getting paid to do this, you need to start buckling down, this isn't school anymore. This is how you are going to be making your living.

Another student responded:

My mom and grandmother pushed me and encouraged me. They didn't want to see me [drop out] since I withdrew out of college twice and they don't want to see me try to give up when it gets hard, so they pushed me and pretty much motivated me to stay here. They affected me in a positive way.

On the other hand, some students lost all motivation to continue with the course or were disinterested. One student responded, "I sit down in class, I mean I stay awake, but for me to focus, I am already not interested it so I wouldn't really focus on it." A second student responded:

I was told that I was going to be a nurse and when I got here I was told I was going to be an EMT. When I got here and found this out, things went down hill from there for me. I lost the motivation to be here after that.

Another student responded:



I was like,” Do I really want to do it?””, but it is better than being a cook or mechanic. So I did it. When I got up to basic I went up to talk to the liaison there and I was trying to get him to help me [change jobs] and he was like we can’t do it, you might have a better chance talking with your Drill Sergeants there. But once I got here that didn’t work at all. So I kind of knew in my head right away that I really didn’t want to do it coming into it.

A final student commented that his inability to adjust to the environment resulted in a lack of motivation to complete the course. The student responded:

After basic training...I’ve been thinking a lot and I think I know what the problem is. I am realizing that I think I honestly made a mistake coming here. I had a loving family at home, my grandmother offered to pay for full college tuition; I could have gone to college for free. I had everything at home that I could want. I had my friends at home, my family at home and this is the first time I have ever left home. I have just been having way too much trouble with the change and this is the biggest change I have had and it’s driving me crazy....The course itself is a good course and it is good for the people who are motivated to be here, but I have just lost the motivation. I’d rather be home going to college, doing something that I really want to do. I just don’t know what to do, I just feel trapped here.

### *Expectations*

Helland, Stallings, and Braxton (2002) suggest that students are more likely to remain in school if their expectations are met. In agreement with this, a student replied,

“I think that I will have a harder time because this it is not what I expected”. A student whose expectations were not met and who originally wanted a different MOS replied:

I guess I didn't expect it to be like basic. I thought I was going to get here and it was going to be a little bit better. I thought, at least I was told, that we were going to have three or four man rooms. PT [physical training] wise, I thought we were going to get to do a little bit more...go out by ourselves and run. Once I got here it was like boom, basic all over again from the start...so right there I was like no, this isn't going to work. Then I would sit down in class...I am already not interested in it, so I wouldn't really focus on it... this isn't for me.

Some students did not initially choose to be medics and would have preferred a different MOS than the one for which they were qualified. One student responded by saying, “I really wanted to join the infantry....The recruiters talked me out of it... I didn't have a high school diploma...I had to take another test at MEPS and that twisted the jobs up and I had to switch jobs.” Students indicated that along with wanting a different MOS, and due to their own personal time limitations they felt pressured to select the Health Care Specialist course. Several students also indicated that family members encouraged them to select the Health Care Specialist course, although they personally were not interested. One student said:

I want to change my MOS...My fiancé was like you should try medical. I have no health care experience, so I didn't really want to do that...so he [the recruiter] said you are going to be a health care specialist...a combat medic. So right away I was like, do I really want to do it? But it's better than being a cook or

mechanic. So I did it. When I got up to basic I went up to talk to the liaison there and I was trying to get him to help me [change my MOS] and he was like, we can't do it, you might have a better chance talking with your Drill Sergeant here [at AIT]. But once I got here, that didn't work at all. So I kind of a knew in my head, right away that I really didn't want to do it, coming into it.

Students who had previously experienced academic problems in high school or college indicated that they also expected to have difficulty in this environment. One student emphasized:

From the start, even when I was going to college, I didn't even want to go to college...Once I came here and found out that we were going to be in the classroom and it was going to be all of this medical stuff I was like, ah man...I knew this was going to be a struggle for me because I was not looking forward to getting back into the classroom. Coming back into the classroom, already not wanting to do it, then finding out that it was all classroom, I was like (shoulder shrug).

Another said:

I just didn't do well in [high school]. I have been to two different colleges and as far as my classes are concerned, when I try to learn everything at a fast pace, it is really hard for me to grasp and comprehend...but just having to go so fast and taking in so much information and then whatever we have going on outside of the classroom...it's hard to try to comprehend everything.

Finally, the expectations that students developed based on information received from their recruiters were mixed. Some of the students, in response to “What were your expectations of this course?” included the following: “He [the recruiter] didn’t tell me about any tests”; “My recruiter didn’t say much about it, he just said it is fast paced, at times it can be a little challenging and you are just going to have to tough it out when you are going through it.”

Student indicated that they did not expect it to be as restrictive as basic training. When comparing it to basic training one student stated:

I expected AIT to be easier compared to basic training. So far I would consider basic way easier than this. It is just not what I expected. I didn’t expect a slow pace, because of course...but I just thought it would be more relaxed.

Some students did not know exactly what to expect. One student responded:

I have never been familiar with the medical field so I really didn’t know what to expect, but I was watching a couple of TV shows and it looked pretty simple. It was like taking care of people, taking blood pressure, so it looked pretty simple to me and when I got over here and they got really into it, it wasn’t what I really expected.

Several of the students indicated that they did not fully understand that the course included being trained as a combat medic or that they might be deployed to assist during the wartime mission. One student indicated, “I only heard the EMT part and not the Whisky [combat medic] part.” Another replied, “I have Mike 6 on my contract, which is

a hospital nurse, LPN, so I thought that there was a lot less chance of being deployed as compared to a regular 91W.” A final student stated:

It was described to me as a health care specialist. I was told that I would probably get stuck in a clinic or something like that, doing clinicals and watching after the guys coming back from Iraq. I didn't really know that it was a field combat medic. They [recruiters] were just saying medical specialist and not combat field medic...it was the way they portrayed it...

On the other hand, some students expected the combat medic portion of the class and not the EMT portion. They expected the course to have fewer classroom sessions. One student stated:

I thought most of it was going to be out in the field training ...we were going to do hands-on class. To me, I could probably get through that, but I got here and you had to sit in the classroom and it was going so fast I was like (shoulders shrug)...

The largest category of expectations developed by students was focused around the academic environment and living conditions. Students described some of their expectations as the following: “My recruiter explained this MOS a little bit. The barrack situation was a shock to me. We had better barracks in basic training...I was expecting a little more privacy... than in basic training”;

I had heard that the barracks had been redone and the duty day was from nine to five, of course you did your PT [physical training] before that, and then go to class...then you have a bunch of free time to do studying and all of that.

A second student replied:

They [recruiter] told me differently. I was told that you had a lot of time to study and it was a little environment with two people per room and you had a little place where you could study. I didn't expect this when I got over here with like eighty people per bay.

A final student indicated:

My recruiter told me that it wasn't going to be like basic training. I thought I was going to get here and it was going to be a little bit better...but once I got here it was like boom, basic all over again from the start and I was like whoa, this isn't for me. So right there I was like no, this isn't going to work. Then I sat down in class, I mean I would stay awake, but for me to focus, I am already not interested in it, so I wouldn't really focus on it.

Although most of the students indicated that they were not given an accurate description of the course, some students revealed that they did know what to expect because they talked to peers who were already in the military. One student said:

At first [the recruiter] told me it would be more like a hospital setting and it wasn't a combat medic to begin with, it was a health care specialist. But with me having a roommate and a couple of friends already in the military they told me, 'Boy, you had better look into what they could cross train you into as far as a field medic,' and I did. I asked my recruiter about it and he let me know. Low and behold when I got here they changed the MOS to a combat medic, so it wasn't anything new to me.

One final response which focused on environmental expectations included the following:

It's worse than basic...I guess I figured we went through basic and should have learned some discipline and we would come here and be a little more laid back or at least not have the tension here. I got here and the shock...this is like so much. Then going to class, I thought it would be more like going to college class and it's not. I was like, oh no, but I can adjust to this. I was expecting more field training and more hands-on, doing things as you learn it...As far as knowing it was going to be hard and knowing that there was going to be a lot...I knew that.

Students developed expectations when in each of these circumstances and each chose to negotiate the environment utilizing the skills that they had available.

#### *Realistic Self-Appraisal*

Sedlacek (2004) indicated that students who have a realistic self-appraisal tend to do better in school when compared to those who do not possess this skill and that it is a predictor of success for traditional students. Realistic self-appraisal is defined by Sedlacek as recognizing and accepting strengths and deficiencies, especially academic and working at self development. Zajacova, Lynch, and Espenshade (2005) found that academic self-efficacy consistently predicts persistence and college success. The student's ability to deal with failure was also observed when discussing self-appraisal.

When recycled students participated in the MENAS they elaborated on their response to the original statement, "I expect to have a harder time than most students in AIT" by answering: "Probably because of how I used to be in school, my study habits"; "It is not what I expected. This course is too fast for me"; "I guess my problem with it in

the beginning was my confidence level in myself” and “I knew this was going to be a struggle for me because I was not looking forward to getting back into the classroom”.

Other students responded:

I had this class about three times, when we were in reception. They taught the first six chapters and they taught it in a regular class and gave the test. Then they gave a reteach and I still didn't get it. In class I know the answers and all that, but when it comes to test taking...I am not very good at it. My reading comprehension and how they word everything...I know when the tests get worse and when you get to National Registry, it gets even worse than the other tests. That's where I don't have the confidence.

These responses revealed that these students entered the training with low confidence regarding their abilities to be successful and may or may not have intentionally sabotaged their efforts.

When students were asked to discuss their experiences with failure in the course one student responded:

When I recycled, it was the first time I failed anything that I tried. It's kind of hard. A little bit of depression kicked in and my battle buddies in [X] Company motivated me to continue on to try to pass. I don't like to fail.

A second student stated:

It was really frustrating. I went as far as trying to explain my situation to the main person in charge...I really tried to stay in my company and continue on and get another chance at the test...I was really really frustrated with the fact that I



didn't get that extra shot. Yes, sometimes I do get a little frustrated a bit with failing the course because I know I can do this.

One student discussed their response to treatment they received after failing:

Sometimes if you fail something, you're really put down until you're discouraged...sometimes in this environment it's harder because you are under a lot of peer pressure when you fail. Sometimes it just gets you down. It gets you in a downward cycle.

Because of the stress associated with being aware of their personal abilities and then failing to succeed initially in the course, some recycled students indicated that they found it difficult to find the motivation to continue.

### **Discussion**

An examination of the quantitative results of this study showed that there was a difference between the two groups in student motivation and self-concept, yet no difference in expectations. The results, however, also revealed that a larger percentage of the group felt that their expectations were unmet in both areas. The two groups of students in this study also did not differ significantly in terms of receiving their first choice and attrition. This means that regardless of whether the student personally desired the MOS or not, it did not influence whether they would be recycled from the course.

Results of the qualitative data indicated that students who entered the course whose expectations were not consistent with that of the institution and who were not motivated had to determine immediately how they were going to cope. As a result, some students were able to cope with the academic environment whereas others were not.

A number of students expected that they would not perform well in this academic environment because of previous classroom experiences in high school or college. These prior experiences may have negatively influenced some students, causing them to enter the environment underestimating their skills. Once students were recycled, some viewed themselves as failures and found it difficult to regain the motivation required to complete the course successfully, whereas others were able to overcome the obstacles and proceed to do well in the course. When all things are equal, the specific variable which predicts why some students who have low levels of motivation, expectation and self-concept continue to be successful in school, while others are not, is not clearly understood.

Although possessing unrealistic expectations did not statistically predict attrition in this study, the results of the qualitative data revealed that it did influence how students initially negotiated the academic environment. Effectively coping with the mismatch of their expectations typically resulted in successful completion of the course, whereas the opposite meant being recycled from the course.

## **CHAPTER V**

### **PERSONAL RELATIONSHIPS**

Research conducted by Beil, Reisen, Zea & Caplan (1999) tested whether academic and social integration and commitment predicted retention for university students. Their results were consistent with that of Tinto's (1993) model which indicated that high levels of student integration into the academic and social community lead to greater institutional commitment which subsequently leads to student retention. Their research was consistent with other studies conducted by Berger & Milem, (1999), Braxton, Milem and Sullivan (2000), Elkins, Braxton and James (2000) and Pascarella and Terenzini (1980) which address social and academic integration. They however, primarily addressed the impact of integration within the college or university environment. The current study diverges from this path and proceeds to investigate how social integration contributes to attrition in a military academic environment. Specifically, it will address the influence of perceived battle buddy support, family support, and unit support during the first six months of the student's training. Recognizing the level of social integration experienced by these students is an important component to understanding their retention patterns.

Previous research studies have not addressed the peculiarities of military training and the value of the support system. The Health Care Specialist Course is vital to the Army and the Army Medical Department (AMEDD). It trains all Health Care Specialist in the Active Army, Army Reserves and Army National Guard, as well as some international students. The mission of the course is to train competent Health Care

Specialists in basic emergency medical and routine patient care to treat injured soldiers on the battle field or in military treatment facilities. Retention in the course is vital to ensure adequate levels of medical support to forward units. High rates of attrition not only limit the number of competently trained Health Care Specialists that can be pushed forward, but also waste valuable resources.

### **Influence of Relationships**

Although the military training environment can most often be compared to that of the community college in terms of technical academic training, it is more closely compared to the college/university setting in terms of social interaction. Hoffman, Richmond, Morrow and Salomone (2002) describe the college/university setting as a learning community. Students in a learning community are frequently engaged in campus activities, take the same courses, and study the same materials. Students in this learning community also spend large amounts of time together and are more likely to create lasting relationships which often extend beyond the classroom into social arenas. Astin (1999) indicated that living in a campus environment significantly enhanced retention because the students were better able to become involved in campus activities. A student interacting with other individuals on campus as a way to become a member of that environment is termed social integration (Tinto, 1975).

#### *Battle Buddy System*

The military learning community is very similar to the learning community discussed by Hoffman et al. (2002). Many of the students in the Health Care Specialist course attended basic training together and some had already a lasting relationship with

each other. Students who attend the same course rotation are typically placed in the same company/unit. Members of the same company sleep, eat, train, and study together. This closeness allows students to develop deep support systems with each other.

Fass and Tubman (2002) conducted a study which focused on determining if peer and family attachment predicted academic success. They found that students who had a strong attachment to parents and peers demonstrated a higher level of self-esteem and sense of self. Peers provide each other support and provide feedback in various ways. When students are accepted into peer groups they feel a sense of belonging and tend to be more persistent in school. Astin (1984) and Bean (1980, 1983) identified peer support as an important aspect of retention. They argue that rather than faculty influence, it is peer relationships and the participation in peer groups that have a greater influence on student's overall attitudes towards school. Ultimately, these relationships shape the student's social environments.

The Army recognizes the importance of peer support. It has created the battle buddy system which is designed to assist soldiers in developing responsibility, initiative, and dependability (TRADOC Regulation 350-6, 2005). Leaders introduce the battle buddy concept at the beginning of the training cycle. During this time soldiers are placed in two-person teams with emphasis on: providing the soldier an immediate peer support system; encouraging teamwork through peer relationships; and ensuring peers are accounted for and safe during training to decrease the potential for serious incidents, such as sexual harassment, misconduct, or attempted suicide. This system is continued throughout training until soldiers are sent to their permanent duty stations. One of the

policies of the system is that team changes should be minimized. The significance of the battle buddy system has not only become a successful program for the Army but also has become valuable to the students. The supervisory chain of command has the benefit of having an early alert system which notifies them of potential problems, while the soldiers have another source of support that is available to them. Nora (1987) found that encouragement from others greatly influenced the student's social integration which positively impacted retention.

If students fail a test and are recycled to another company, they are immediately transferred to a follow-on unit to be given an additional opportunity to successfully complete the course. When this occurs, however, they lose their original battle buddy because they must physically relocate to another barracks where they are assigned to another battle buddy or added to another already established battle buddy team. Changing battle buddies during one of the most stressful period in the soldiers training can negatively affect the student's performance and overall motivation to continue and complete the course.

#### *Family Support Issues*

Family support is typically the first source of support that most students receive outside of peer relationships. Holahan, Valentiner and Moos (1994) indicate that a high level of parental support is associated with better psychological adjustment for students. Finn and Rock (1997) emphasized that positive parental support promotes higher grade point averages, general academic attainment, cognitive engagement, and academic persistence among students. In contrast, low levels of attachment to parents have been

identified as a potential risk factor for poor academic performance. Poor parent-child communication or relationships (Finn, 1989) and low educational expectations or encouragement of children (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987) have been identified as placing students at risk for poor academic outcomes.

The availability of a strong support person, whether from family, friends, peers or academic faculty, has been determined to be a predictor of college student retention (Astin, 1999). Sedlacek (2004) notes that having a strong support person has also been shown to be a “significant correlate of grades, retention and graduation for African Americans, women, athletes of all races, and students in special support programs” (p. 46). Tinto (1993) indicated that students often need to break away from family and friends back home when coming to college to assist with their institutional integration. Guiffrida (2005), however, conducted a study which focused on African American undergraduate students to uncover patterns in their perception of family relationships. This study challenged Tinto’s stated assumption. He notes that African American students with a strong family support tend to persist in school; however, he recognized that the support received from their family and friends from home could be both positive and negative in terms of helping them integrate into the academic environment. If the student viewed their relationship with family and friends from home as encouraging and not as a dependent relationship, they tended to do better in school.

Carney-Crompton and Tan (2002) conducted a study which showed that nontraditional students (learners over the age of 25) had more stress and fewer sources of support, yet performed at a higher academic level than did traditional students. They

also observed that traditional students tended to be more reliant upon family support (parents, grandparents) which nontraditional students relied more on their spouse and/or non-family sources.

#### *Unit Support/Institutional Integration*

The perceived support provided by the institution is necessary for institutional integration. Hoffman, Richmond, Morrow and Salomone (2002) conducted a study in which they were developing, testing, and refining a “sense of belonging” instrument. They were interested in studying persistence and retention characteristics of incoming university freshmen and the impact of “sense of belonging.” They found that the greater “sense of belonging” that students had to the institution, the greater their commitment to finishing their education. The authors argued that a “sense of belonging” is directly linked to social support, which they defined as having developed sufficient social networks, and is the opposite of loneliness, which they defined as failure to connect with others. They also found that a learning community contributes to creating a feeling of being cared about, which had a positive impact on the student’s performance in the environment. Students in this study also reported having higher levels of peer and faculty support, as well as experiencing lower levels of isolation.

Two theoretical models help us understand why students persist in college or dropout. Tinto’s (1975) Model of Student Persistence showed the importance of social and academic integration and commitment to remain in college. His theoretical approach is rooted in Durkheim’s (1961) Theory of Suicide which posits that suicide occurs when there is a lack of societal integration. Tinto used this analogy to emphasize that attrition



occurs when there is a lack of academic and social integration. He emphasized the necessity of these two factors to establish adequate levels of goal and institutional commitment and argues that a deficiency in either factor may potentially lead to attrition. Academic integration as defined by Tinto consists of grade performance and intellectual development. High levels of these factors influence students to develop a commitment to finish school. Social integration consists of peer group and faculty relationships. High levels of these factors influence the students' institutional commitment which influences their decision to remain in school. Tinto emphasizes that these commitments are influenced by the student's family background, individual characteristics, and past educational experiences. Tinto (2002) underlined four conditions that if met contribute to student retention: first, the consistency of the student's expectations in comparison to the institution's expectations; second, the academic support (study groups, tutoring, etc.) and social support (mentoring, counseling, peers, family, etc.) received; third, the overall involvement in the institutional environment (academic and social integration); and fourth, that actual learning is taking place. Tinto (1975) states, "Given individual characteristics, prior experiences and commitments, the model argues that it is the individual's integration into the academic and social systems of the college that most directly relates to his [or her] continuance in that college" (p. 96). This study primarily addressed the second and third conditions that were emphasized by Tinto.

The second model is offered by Bean (1980). His model of Student Departure stresses the importance of the student's satisfaction with their institutional commitment.

He suggested that expectations + actual experience= either retention or attrition. His model is based on theories of student socialization. Bean argued that the student's level of institutional commitment greatly influences their decision to remain or leave the academic environment. He constructed a conceptual model of dropout syndrome which included factors related to academics (academic performance, academic integration), social-psychological concerns (goals, social life, alienation), and environment (finances, peers, opportunity to transfer). He contends that these three factors are expected to influence socialization factors which include: college grades, institutional fit, and institutional commitment. Of the three socialization factors, Bean believes that institutional commitment is the most important since it directly affects drop-out syndrome.

## **Method**

### *Participants*

The participants in this study were men and women incoming students to a military basic level job training course in Texas. All participants were within their first six months of military training. The mean age for the participants was 22 years old (SD=4.73) and the ethnicity was as follows: Blacks (7%); Whites (74%); Asian (4%); Hispanic (10%); American Indian (.7%); and Other (3%). A total of 20 of the participants were interviewed by the researcher for the qualitative portion of the study. The participants were recruited from class cycles 01-07 and 03-07 of the Health Care Specialist Course. The course is conducted over a 16 week period with the capacity to accommodate approximately 500 students per company. The mission of the course is to

provide the Army with Health Care Specialists who would provide basic emergency medical care to the Army. A sample of 288 students participated in the mixed method research study.

### *Quantitative Measures*

The MENAS was designed to explore noncognitive factors which may have influenced the student's academic performance in this course. No previous published research studies have been conducted on the validity and reliability of the MENAS, therefore this study will provide some insight on its ability to be used in future studies. The factors identified through exploratory factor analysis using Principal Component Analysis and varimax rotation were labeled as: perceived battle buddy support, perceived stress, motivation to complete the course, perceived unit support, expectations of course, and perceived family support. The internal consistency of the MENAS ranged from .63 to .83. This paper will also only discuss the various levels of perceived support: battle buddy, family, and unit support.

Students responded to 46 items using a Likert scale which ranged from either 1 to 5 (strongly agree, agree, neutral, disagree or strongly disagree) or 1 to 2 (yes or no). Multiple questions were written negatively to deal with the student's tendency to answer positively regardless of the content and all items were listed in random order. Students were asked to answer the questions honestly and base their responses on the way they have felt since coming to the medical course.

### *Qualitative Measures*

Individual interviews were conducted with only recycled participants using semi-structured, open-ended questions. All interviewed were audio-taped and transcribed. Interviews enable the researcher to observe the emotional impact of specific questions. Participant's nonverbal responses may indicate more of what they mean than the actual words they say (Merriam and Simpson, 2000). All interviews were conducted with the recycled students immediately following their completion of the MENAS and lasted approximately 20 minutes. Prior to the interview session the researcher reviewed the MENAS responses and used those responses to probe for noncognitive factors that may have influenced their academic performance.

## **Results**

### *Quantitative Analyses*

The ratings for each of the passing and recycled student items were subjected to an independent-sample t-test with the alpha level set at .05 to identify those items that distinguish between passing and recycled students. The results from the t-test reflected a statistically significant difference between the passing students and the recycled students in perceived battle buddy support and unit support. The battle buddy support item stated, "I can approach my battle buddy to talk to him/her about personal matters and/or problems in my life" and received a significance value of .011 with a mean of 3.80 for passing students and 3.29 for recycled students. The unit support item stated, "There are other people, besides my battle buddy, that I can turn to for help and support here" and received a significance value of .050 with a mean of 1.69 for passing students and 1.52

for recycled students. The results from the t-test, however, did not find a statistical difference between the two groups of students in their level of perceived family support. The perceived battle buddy support, family support, and unit support mean and standard deviations for the two groups, t values and significance levels for differences between the mean are presented in Tables 5.1-5.3.

**Table 5.1. Battle Buddy Support Items, Means, Standard Deviations, t Values, and Significance Levels**

MENAS Questions Battle Buddy Support	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
34. I can approach my battle buddy to talk to him/her about personal matters and/or problems in my life.	3.80	1.240	3.29	1.111	2.544	.011*
38. I perceive my relationship with my battle buddy to be "close."	3.83	1.107	3.55	1.173	1.533	.126
35. My battle buddy helps me and is supportive of me in this course.	4.04	.974	3.81	.943	1.956	.147
37. I often talk to my battle buddy about my personal or academic problems.	1.59	.501	1.64	.485	-.641	.522
15. I have people to talk to about my problems and/or stress in my life.	3.60	1.193	3.24	1.226	1.817	.070

\* $p \leq 0.05$

**Table 5.2. Family Support Items, Means, Standard Deviations, t Values, and Significance Levels**

MENAS Questions Family Support	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
32. My family wants me to find a way out of this course and/or get out of the Army.	4.19	1.124	3.98	1.137	1.122	.263
31. My family or people who are close to me are supportive of me and my role as a combat medic.	4.22	1.038	3.95	1.058	1.537	.125

\* $p \leq 0.05$

**Table 5.3. Unit Support Items, Means, Standard Deviations, t Values, and Significance Levels**

MENAS Questions Unit Support	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
36. There are other people, besides my battle buddy that I can turn to for help and support here.	1.69	.497	1.52	.594	1.956	.050*
44. I have bonded well with my unit.	3.50	1.120	3.19	1.174	1.665	.097
45. I have a strong sense of belonging here.	3.33	1.132	3.05	1.268	1.443	.150
39. My unit is supportive of me.	3.30	1.180	3.50	.994	-1.054	.293

\* $p \leq 0.05$

### *Qualitative Analysis*

The purpose of the qualitative research was to explore how noncognitive factors work together to contribute to attrition in a military academic environment. The theme of personal relationships emerged as important in preventing attrition. The characteristics of the student's personal relationships with their battle buddy, their family, and the institution shed some light onto how valuable these relationships were to the student's success in an academic program.

Following the guidance of Merriam and Simpson (2000), the researcher proceeded by recording data as it was received and placing it into categories which best represented the topics revealed. After continuous recategorization and recoding, similar themes and hypotheses began to emerge. Data were organized in a meaningful manner to allow the researcher to get a global view and attempt to understand how various factors influenced attrition. Merriam (1998) states, "When categories and their properties are reduced and refined and then linked together by tentative hypotheses, the analysis is moving toward the development of a theory to explain the data's meaning" (p. 192). The constant comparative method contributed to allowing the researcher to generate a theory that was grounded in the data received from students who were unsuccessful at completing their assigned course within the first six months of training.

### *Unit Support*

The only statistically significant difference between passing and recycled students in this study was the level of perceived unit support. The theme of personal relationships that emerged from the qualitative analysis supported this finding. Sedlacek

(2004) emphasized the importance of faculty support and its impact upon student retention. A study conducted by Sheldon (2003) indicated that students who perceived an adequate level of faculty support were more likely to persist in a nursing program. Tinto (2000) also found that students tended to persist if they were provided with academic, personal, and social support. Recycled students identified that once they recycled to another company they perceived the new unit as unsupportive. When asked if they felt supported by their new unit, one student replied, "I felt very stressed. I felt alienated; I didn't know anyone in the class. I just sat in the corner." Another responded:

I have not bonded nearly as well with this unit as I had with [X] Company. I mean I don't really feel the connection that I had with the people in [X] Company. I mean I felt connected to the Drill Sergeant, I felt connected to every member of my platoon. I knew practically every one in my platoon and people all over the company who were good friends, not as acquaintances but actually as good friends that I would go hang out with at the River Walk or something like that. They were a lot closer to me than anyone here in [X] Company. I don't know anyone here.

Several students indicated that they were immediately treated differently and negatively labeled when assigned to the new unit. They responded: "We were known as the Echo guys and we were going to be trouble". Another responded,

It's hard with my new Drill Sergeant. The first day we were here he told us, "I don't like kids from [X] Company, they have always been trouble and I don't



like them...when they assign them to my platoon it screws everything up,” so I am like “Great!”

The latter student indicated that they immediately felt discouraged and slighted just because they came from a different company. Another student discussed how they were treated after being recycled. “I guess it is more of just people hazing me, [saying] ‘I can’t believe you double tapped’ [failed a test twice]. Sometimes it hits me.” A different student expressed the following:

I personally don’t see any reason to burden other people with your problems. If someone is getting paid for it that fine but ...I have seen the chaplain on stage, but I don’t know if I would talk to him about my problems.

#### *Battle Buddy Support*

The majority of the responses from both groups indicated that they were close to their battle buddy and that they could talk to that person when they had problems. These relationships were more likely to help them deal with the demands of the course. Students indicated that they valued the battle buddy relationship that they have developed, many since basic training. The personal bonds that they established aided in their ability to progress through the training period. These personal relationships allowed them to perform activities, such as study together as a team, participate in activities, or provide emotional support. For recycled students, having a close relationship with their battle buddy provided that immediate support they needed to get refocused in order to continue with the course.

Recycled students, however, indicated that their support system was severely damaged when they recycled to another company. Recycling forced them to leave their battle buddy in their original unit and to be assigned another battle buddy at their new unit. Often these new relationships didn't work well. One recycled student stated, "There were also problems especially when you have been with people for a couple of months in reception and basic and then leaving is harder than most people would probably think." Several other students responded:

The issue that I am having with that [recycling] is that I know a lot of people over there and have had a lot of heart-to-heart discussions with people over there and they are more like family to me and I just did not want to leave there... That is one of the major stressors that I am having right now;

Being over here we don't really have any battle buddies. I mean there are some people that I would go talk to that still live over there [X Company]. I just got moved over here last night and my previous battle buddy still lives over there.

A final student indicated:

It's a new company for me and a lot of people that I went to basic with, all of them are in...[X] Company. A lot of them were really close friends, and in the new company I barely even know anybody.

Some students stated that they have lasting battle buddy relationship and value their support. One student stated:

My friends help me out a lot. I have four friends here. We have been together since reception at basic, so we have all been helping each other out a lot. We are all so close. We have spent the last 4 months together.

Another stated:

I don't want to leave my battle buddies, the guys I went to basic with. These are the guys that I actually trust, more than the guys back home. These are the guys I'm willing to take a bullet for. I just don't want to leave and that's pretty much it.

On the other hand, some students did not feel comfortable talking to their battle buddy about their personal problems. One student said:

I feel awkward going up to [my battle buddy] to talk to them about my problems, especially if they have their own problems. If you are observant you can actually see the problems that others are having. It's like, why burden someone else down with your problems? I mean I have listened to others and let them vent and everything because it makes them feel a little bit better. As for me, I am just like a duck and I let it roll off my feathers. I mean it just helps them out with being able to let it go, so why bother them with your issues because you don't know how they are going to handle it.

### *Family Support*

When focusing on the level of perceived family support, students indicated that the support they received was adequate from the people they felt were the closest to them. When asked if their family was supportive of them and their role in the military

one respondent answered, “Actually, my mom supports me 100% in what I do regardless of what it is, but it doesn’t necessarily mean that she is happy with it”. Another student responded, “My wife was totally for me going into the military. She wanted to just get the family stabled out. My mom and dad were not too thrilled about it.” On the other hand, a few students indicated that although they now have family support, this was not true with the initial decision to join the military. One student replied:

When I called my dad from MEPS [Military Entrance Processing Station], he wouldn’t talk to me for two months afterwards. My cousins, my uncles, and my aunts said we don’t believe you should join the Army because of the whole war in Iraq. They would watch the news and see how many people died per month and they would say you can’t go to the Army. After a while they learned that I would be okay and they said they really supported me.

A second student answered:

My sister is [supportive]...my dad, sometimes he is. There are some people who are like, you should have stayed home. Some of my friends are like, what are you doing and I tell them the course that I am taking is to be an EMT, and they are like well, you could have done that at home.

Another student responded this family support continues to be inadequate:

I haven’t really been too successful at school, so I have burned some bridges in my family regarding that. It was my fault, so my family is not too supportive. They would rather see me do something else and stick with it and retire and I am not ready to do that, so I guess that’s where we disagree.

Finally, some students acknowledged that they have family support, however their family does not understand the system or can not help them when they have problems.

One student stated:

I feel that I have someone that I can talk to, but I don't feel that they can help me. Maybe I can get some emotional help. I have my sister and my mom that I can talk to and I have grandparents who are old, but they are sickly.

Another student answered:

I don't really have anyone I can talk to about my personal problems. I don't really like to open up....My mom didn't even graduate high school and my gramps, she didn't graduate high school. My uncle is a tanker so he doesn't know about this so. I don't think they would understand.

Most of the recycled students indicated that they had adequate family support.

### **Discussion**

Quantitatively, the differences found in this study between passing students and recycled students suggest that recycled students perceived that their battle buddy support and their unit support was insufficient after they recycled. The t-test failed to reveal any statistically significant difference observed between the two groups with respect to perceived family support. The students in this environment, although they may have indicated that they had adequate family, needed to know that there was someone local, in their new unit, that they could turn to for support to address their feeling of being "slighted" or being viewed as "trouble makers" when they entered the new unit. Possessing a "sense of belonging" to the unit, as Hoffman, Richmond, Morrow and

Salomone (2002) note, contributes to creating a feeling of being cared about and feeling less isolated, which greatly impacts upon their performance in the environment.

The qualitative data not only complemented the quantitative data, but also contributed greatly to further understanding how relationships interact to influence attrition. Previous studies (Astin, 1999; Finn and Rock, 1997; Guiffrida, 2005; Sedlacek 2004 & Tinto, 1993) indicated that a high level of family support contributed to retention. Students in this study reported that they received various levels of family support for their decision to enter the military. They indicated that although they received good family support, they also understood that many of their family members could not personally relate to their experiences in the military environment because of their lack of military experience. This indication reemphasized the need to have a good level of unit support from those who are familiar with the environment i.e., Chaplain, instructors and/or Drill Sergeants. Both groups indicated they had some problems with family members who were not supportive, however, they all indicated that the support they received from the people they felt were closest to them was adequate. This perceived family support provided the extra encouragement the student needed to remain motivated to continue with the course.

Similar results were also true for both groups regarding battle buddy support. The value of having a battle buddy in this environment greatly improved the student's perception of institutional integration. The majority of the responses from both groups indicated that they were close to their battle buddy and that they could talk to them when they had problems, and that this relationship enabled them to handle the demands of the

course more effectively. Recycling students, however, indicated that they lost this valuable support system. No longer did they have someone close to confide in; instead they were required to attempt to recreate this bond with a new student. Many recycling students indicated that starting this process over again and being thought of as an outsider was too overwhelming, and they would rather not create a deep bond with their new peers. Although changing units for recycling students may not be avoided, providing the additional unit support may be necessary in order to give students the necessary motivation to complete the course with their new company successfully.

### **Conclusion**

In conclusion, the findings in this study support the published literature in regards to the value of various relationships and academic and institutional integration. The relationships discussed in this study, although termed differently, are not particularly unique to this academic environment. The possession of adequate levels of battle buddy, family, and unit support appears to be essential for most students in this environment in order to be academically successful. Although the course administrators do not have an influence on the level of family support that students receive, they do have the ability to influence battle buddy and unit support. Being aware of the value of these relationships gives the course administrators the opportunity to create an environment that cultivates support, identify when these relationships are deficient, and provide ways to address these deficiencies.

## CHAPTER VI

### SUMMARY AND DISCUSSION

The purpose of this explanatory mixed methods research study was to understand how noncognitive factors contributed to attrition in the Health Care Specialist course. Three instruments were used to analyze data: Modified Noncognitive Questionnaire (NCQ), the MENAS and a face-to-face audio recorded interview. The Modified NCQ was designed to measure noncognitive factors which impacted student academic performance and ability and was conducted prior to the beginning of the course. The MENAS was designed to further explore noncognitive factors which may have impacted upon their academic performance after they started the course. Interviews were designed to allow the recycled students the opportunity to further elaborate on their perceptions of how noncognitive variables impacted their performance in the course and they were conducted after the student was recycled to another unit to be given another opportunity to complete the course. After factor analysis and reliability testing was conducted on both the Modified Noncognitive Questionnaire (NCQ) and the MENAS, the researcher identified a total of 11 noncognitive variables to be further analyzed. Two cognitive variables from the Armed Services Vocational Aptitude Battery (ASVAB) and data used from face-to-face audio recorded interviews were also further analyzed. The noncognitive variables included in this study were: school and community involvement, preference for long-term goals, realistic self-appraisal, leadership experience, ability to handle racism, perceived battle buddy support, ability to handle stress, motivation, perceived unit support, expectations, and perceived family support. The cognitive



variables were: skilled technical (ST) and general technical (GT) scores. The themes from the qualitative data collected from the interviews were: environmental structure, personal relationships and student expectations. This chapter presents a description of the sample, a review of the findings, discussion of the findings and limitations, as well as implications and recommendations.

### **Findings**

In this study, passing students were defined as those who were able to successfully complete the training course with their original unit, whereas, recycled students were defined as those who were unable to successfully complete the course with their original unit and were recycled/transferred into another unit in order to be provided an additional opportunity for success. For this study 352 (81%) students were defined as passing and 82 (19%) were identified as recycled students. Table 6.1 provides a summary of the means and standard deviations for the five independent variables (school/community involvement, preference for long-term goals, realistic self-appraisal, leadership experience and successfully handles the system-racism), with a dependent variable of attrition, for both groups, utilizing the Modified NCQ. Table 6.2 provides a summary of the means and standard deviations for the six independent variables (perceived battle buddy support, stress, motivation, perceived unit support, expectations and perceived family support), with the dependent variable of attrition, for both groups, utilizing the MENAS.

**Table 6.1. Modified NCQ Descriptive Statistics**

Modified NCQ	Passing (N = 352)		Recycled (N = 82)	
	M	SD	M	SD
School/community involvement	3.52	2.39	3.31	2.74
Goals	4.66	1.44	4.25	1.23
Realistic self-appraisal	6.97	2.06	5.84	2.23
Leadership	4.84	1.80	5.16	1.87
Racism	3.94	1.86	3.74	1.64

**Table 6.2. MENAS Descriptive Statistics**

MENAS	Passing (N = 246)		Recycled (N = 42)	
	M	SD	M	SD
Battle Buddy Support	16.62	5.05	13.24	4.59
Stress	28.43	8.46	26.77	6.51
Motivation	30.37	5.59	26.77	8.00
Unit Support	10.13	3.43	9.74	3.44
Expectations	5.41	2.53	4.96	2.43
Family Support	8.41	2.16	7.93	2.20

An independent-samples t-test with an alpha level set at .05 was conducted to compare the two group's (passing and recycled) means when analyzing both surveys. George and Mallery (2006) indicated that the t-test is the most commonly used method to evaluate the differences in means between two groups. This analysis was also important to compare group differences with the understanding that there was no chance of overlap within the group memberships.

The results from the t-test reflected a statistically significant difference between the passing students and the recycled students in several areas within the Modified NCQ and the MENAS. Items from the Modified NCQ which were labeled preference for long-term goals, realistic self-appraisal and successfully handles racism, showed a statistically significant difference between the two groups. Table 6.3 provides a summary of the means, standard deviations, t Values, and significance levels for the Modified NCQ. Items from the MENAS which were labeled perceived unit support, able to cope with stress and motivation to continue the course, showed a statistically significant difference between the two groups. Table 6.4 provides a summary of the means, standard deviations, t Values, and significance levels for the MENAS.

**Table 6.3. Modified NCQ Items, Means, Standard Deviations, t Values, and Significance Levels**

Modified NCQ Questions	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
<i>Long-term goals</i>						
Mean of 7.1B, and 7.2B.	2.27	.558	2.10	.580	2.441	.038*
Mean of 7.1A, 7.2A, and 7.3	2.39	.578	2.15	.650	3.303	.305
<i>Realistic self-appraisal</i>						
8. Likely reason for attrition.	3.19	.984	2.78	.982	3.376	.578
17. I expect to have a harder time than most students in AIT.	3.78	1.077	3.06	1.251	4.778	.023*
<i>Successfully handles racism</i>						
26. I want a chance to prove myself academically.	2.30	1.086	2.00	.889	2.618	.004*
25. If course tutoring is made available to me, I would attend regularly.	1.64	.772	1.74	.750	-1.141	.321

\* $p \leq 0.05$

**Table 6.4. MENAS Items, Means, Standard Deviations, t Values, and Significance Levels**

MENAS Questions	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
<i>Perceived unit support</i>						
36. There are other people, besides my battle buddy that I can turn to for help and support here.	1.69	.497	1.52	.594	1.956	.050*
44. I have bonded well with my unit.	3.50	1.120	3.19	1.174	1.665	.097
45. I have a strong sense of belonging here.	3.33	1.132	3.05	1.268	1.443	.150
39. My unit is supportive of me.	3.30	1.180	3.50	.994	-1.054	.293
<i>Stress</i>						
14. My stress level affects my academic performance.	2.60	1.097	2.48	1.131	.682	.848
25. My personal problems affect my academic performance.	2.91	1.202	2.52	1.065	1.958	.224
17. I have trouble concentrating which affects my academic performance.	3.18	1.04	2.83	.986	2.029	.363
16. I am coping with and managing my stress well.	3.67	1.007	3.31	1.047	2.136	.689
43. I am having a difficult time dealing with failure.	3.19	1.387	2.33	1.141	4.334	.009*
1. I attribute my problems with the course to:	3.64	1.421	2.67	1.141	4.908	.000*

**Table 6.4. Continued**

MENAS Questions	Passing		Recycled		<i>t</i>	Sig.
	M	SD	M	SD		
<i>Motivation</i>						
18. I am very motivated to pass this course.	4.35	.899	3.69	1.158	3.513	.001*
19. I am doing my best to pass the course.	4.26	.781	4.17	.935	.696	.164
22. I find this course so difficult that I have given up on trying to pass it.	4.73	.595	3.93	1.314	3.874	.000*
10. I have what it takes to be successful in the course.	4.51	.710	3.98	.950	3.495	.001*
21. <i>I did</i> fail this course on purpose.	4.85	.628	4.17	1.378	3.175	.003*
20. I have <i>considered</i> failing the course on purpose.	3.94	1.407	3.26	1.563	2.852	.005*
11. My grades and my academic performance are my responsibility.	3.73	.574	3.57	.703	1.364	.179

\* $p \leq 0.05$

### Research question 1

What noncognitive factors explain attrition among Health Care Specialists students during AIT?

A forward logistic regression analysis was conducted to determine how well the five noncognitive variables from the Modified NCQ predicted attrition of students within their first six months of training. Logistic regression is a method used for determining the relationship between predictor variables and a dichotomously coded dependent variable (George and Mallery 2006). The predictor variables were school/community involvement, preference for long-term goals, realistic self-appraisal, leadership experience and successfully handling the system (racism). The dependent variable was attrition. Results of the logistic regression analysis indicated that two variables were predictive: realistic self-appraisal and preference of long-term goals (See Table 6.5). These variables revealed a negative correlation to attrition, indicating that the lower the realistic self-appraisal score and the lower the preference to long-term goals score, the more likely the student would be recycled to another unit. This model, using the two variables, correctly predicted attrition in the data 81.6% of the time (See Table 6.6).

**Table 6.5. Modified NCQ Logistic Regression Variables in the Equation**

Modified NCQ	B	S.E.	Wald	Sig.	Exp(B)
Long-term goals	-.540	.215	6.331	.012*	.583
Self-Appraisal	-.478	.107	20.062	.000*	.620
Constant	1.412	.573	6.069	.014*	4.105

\* $p \leq 0.05$

**Table 6.6. Modified NCQ Logistic Regression**

	Observed		Predicted		Percentage Correct
	Attrition	Pass	Attrition	Fail	
Step 2	Attrition	Pass	351	1	99.7
		Fail	79	3	3.7
	Overall Percentage				81.6

Again, a forward logistic regression analysis was conducted to determine how well the six noncognitive variables from the MENAS predicted attrition of students within their first six months of training. The predictor variables were: perceived battle buddy support, able to cope with stress, motivation to continue the course, perceived unit support, compatible expectations of the course and perceived family support. The dependent variable was attrition. Results of the regression analysis indicated that four variables were predictive: perceived battle buddy support, perceived unit support, able to cope with stress, and motivation to continue the course (See Table 6.7). These variables



revealed that students: who did not perceive that their battle buddy support was adequate; who did not perceive their unit support was adequate; who demonstrated a high level of perceived stress (high level of stress, indicated difficulty dealing with failure, attributed both academic and nonacademic problems to stress); and who lacked the motivation to complete the course (given up on the course, intentionally failed course, low self confidence) were found to be more likely to recycle to another unit. This model, using the four variables, correctly predicted attrition in the data 91.3% of the time (See Table 6.8).

**Table 6.7. MENAS Logistic Regression Variables in the Equation**

MENAS	B	S.E.	Wald	Sig.	Exp(B)
<b>Battle Buddy Support</b>					
bbsupport3	1.369	.536	6.513	.011*	3.932
support	-.506	.214	5.575	.018*	.603
<b>Unit Support</b>					
support 2	-1.107	.470	5.545	.019*	.331
unit support	.690	.224	9.464	.002*	1.993
<b>Stress</b>					
stress	.594	.210	7.967	.005*	1.811
failure	-.585	.186	9.926	.002*	.557
self-appraisal	-.411	.152	7.352	.007*	.663
given up	-.785	.268	8.566	.003*	.456
self concept	-.552	.270	4.173	.041*	.576
<b>Motivation</b>					
did fail	-.528	.201	6.941	.008*	.589
Constant	6.720	1.614	17.337	.000*	828.949

\* $p \leq 0.05$

**Table 6.8. MENAS Logistic Regression**

		Observed	Predicted		
			Attrition		Percentage Correct
Step 10	Attrition	Pass	243	3	98.8
		Fail	22	20	47.6
	Overall Percentage				

### Research question 2

How do noncognitive factors, when combined with cognitive test scores, serve as a predictor of academic success in the military setting?

A forward logistic regression analysis was conducted to determine how well the two cognitive variables predicted attrition of students within their first six months of training. The predictor variables were skilled technical knowledge (ST) and general technical knowledge (GT). The dependent variable was attrition. Results of the regression analysis indicated that one variable was predictive: ST score (See Table 6.9). This variable revealed that the lower the student's ST score, the more likely they were to be recycled into another unit to complete training. This model, using the ST variable, correctly predicted attrition in the data 81.1% of the time (See Table 6.10).

**Table 6.9. Cognitive Variables in the Equation**

Cognitive Score	B	S.E.	Wald	Sig.	Exp(B)
ST Score	-.053	.017	9.523	.002*	.948
Constant	4.743	1.997	5.641	.018*	114.781

\* $p \leq 0.05$

**Table 6.10. Cognitive Logistic Regression**

	Observed		Predicted		Percentage Correct
	Attrition	Pass	Attrition	Pass	
Step 1	Attrition	Pass	352	0	100.0
		Fail	82	0	.0
	Overall Percentage				81.1

The statistically significant cognitive findings in addition to the noncognitive findings, as discussed above, combined to produce a more effective model for predicting attrition in this setting. The following seven variables were found to statistically predict attrition in this study: low ST scores, unrealistic self-appraisal, preference for short-term goals, low perception of battle buddy support, low perception of unit support, a high level of perceived stress, and a low level of motivation to complete the course.

### Research question 3

How do these noncognitive factors work together to result in drop out?

The results of the qualitative data were broken down into two primary themes: course structure and noncognitive factors. These themes incorporated both cognitive and noncognitive variables because both were often intertwined in each student and were difficult, if not impossible to separate when analyzing. First, the course structure theme included aspects related to the pace of instruction, the process of test review, learning and teaching styles and the administration of reteach and study hall. Second, the noncognitive factors theme related to motivation, expectations, self-appraisal, stress management, and family, unit and battle buddy support. The following paragraphs will review how the previously discussed quantitative results and the qualitative results complimented each other to provide for a deeper understanding of the variables that influence attrition.

As covered in the quantitative analyses section of this chapter, the following variables were found to statistically predict attrition in this study: low ST scores, unrealistic self-appraisal, preference for short-term goals, low perception of battle buddy support, low perception of unit support, a high level of perceived stress, and a lack of motivation to complete the course.

#### *Cognitive Ability*

Having a lower ST score was statistically predictive for attrition in this study. The quantitative results indicated that the lower the score on the ST subsection of the

ASVAB the more likely they were to be recycled to another unit. The mean for ST scores of recycled students was 114.49 (SD=5.587) and passing students was 117.48 (SD=8.178). The mean for GT scores of recycled students was 114.63 (SD=5.081) and passing students was 117.23 (SD= 7.389). The mean ST score for all students in this study was 116.92 (SD=7.838) and their mean GT score was 116.74 (SD=7.080). All of the scores were obtained from the student's personnel files and no qualitative questions were asked of the students regarding the results of these scores.

### *Self-Appraisal*

Having unrealistic appraisal of self was statistically predictive of attrition. Self-appraisal was previously discussed in Chapter IV, however this section provides a brief summary of the student findings. Sedlacek (2004) describes self-appraisal as the student's ability to recognize and accept strengths and weakness, while simultaneously working to improve those deficits, especially with academics. Students in this study who indicated that they expected to have a harder time than most students in AIT were more likely to be recycled. It was also observed that students who entered the environment with a low level of self-appraisal had a more difficult time adjusting to the academic and military environment.

### *Preference for Long-term Goals*

Possessing a preference for long-term goals was statistically predictive of attrition. Students who indicated that they preferred short-term goals over long-term goals were more likely to be recycled in this study. Passing students tended to specify goals that were geared toward the future, typically directly related to education, and

could be completed after they finished their job training. Recycled students, on the other hand, tended to identify goals that were immediate, vague and unclear, typically short-term, and could be completed while they were in their current job training. Hull-Blanks, Kurpius, Befort, Sollenberger, and Nicpon (2005) reported that students who identified academic goals were more likely to remain in school when compared to students with unknown goals. Academic goals, they indicated, tended to be long-term and geared toward a specific outcome. These goals also appeared to motivate students to follow through with their academic decisions as well as provide them with the persistence necessary to face daily challenges. Researchers have historically shown that the ability to set long-term academic goals is a predictor for success in college for traditional students (Fore, 1998; Hull-Blanks, Kurpius, Befort, Sollenberger, Nicpon & Huser, 2005; Sedlacek, 2004; Ting, 1997; Tinto, 1993). Sedlacek argues however, that nontraditional students may have a more difficult time completing this task due their lack of exposure to adequate role models or the lack of consistent reinforcement within their cultural backgrounds.

#### *Battle Buddy Support*

Having a low perception of battle buddy support was statistically predictive for attrition in this study. The quantitative results indicated that students who did not have a good battle buddy support system were more likely to recycle to another unit. In this study the qualitative results supported the quantitative results. The quantitative results also revealed that students who indicated talking to their battle buddy about their problems were more likely to recycle. The reason for this relationship is unclear, but

qualitative data suggest that it may be that students who responded in that manner talk to their battle buddies but do not discuss specific personal problems because they do not perceive that their buddy can help or are able to provide them with the necessary support to change their situation.

### *Unit Support*

The quantitative results revealed that the perception of an adequate level of unit support was predictive for attrition in this study. Students who responded that their unit was supportive were more likely to be recycled to another unit. The reason for this relationship is unknown. Students who responded may have perceived an adequate level of unit support from their current unit however may have already been transitioning into another unit due to being recycled. Again, the qualitative results provided a deeper understanding of the student's perception of unit support. Although more students who were ultimately recycled indicated that their current unit was supportive of them, the students who were passing indicated less often that they received the same support. This also may be due to the fact that recycled students were provided with one-on-one counseling sessions after they have been selected to recycle whereas passing students seldom received any one-on-one counseling.

The majority of the students, from both groups, commented that too much information was presented in a short amount of time, and along with other military duties, they indicated that there was little time to study, at least until their privileges were increased. Also, while students with grade point averages below 80 were required to participate in study hall, passing students indicated that there was no quiet place for

them to study. They indicated that they wanted to increase their knowledge base to compete for honor graduate or just to feel better about themselves.

Again, some passing students emphasized their low perception of unit support because they felt that the attention was geared more toward students who were performing below average than students who were passing and wanting to excel.

### *Perceived Stress*

Having a perception of a high level of stress is a predictor of attrition in this study. Because of the nature of this course, a certain level of stress has intentionally been built into its structure. The quantitative results under this variable also revealed that the more difficulty a student had when dealing with failure, the more likely they were to be recycled to another unit. Bean and Metzner (1985) emphasized that possessing a high level of stress contributed to attrition. They also indicated that this is typically true when related to all types of stress (family, academic, financial, etc.). Pritchard and Wilson (2003) observed in their study that students with a high level of stress were more likely to have a lower GPA, which in the military environment would result in being recycled to another unit. Also, they noted that the students in their study who intended to stay in the academic environment typically demonstrated positive coping strategies. The variables in that study included: having a high level of stress, personal problems, and trouble concentrating which affected their academic performance; possessing poor coping and stress management skills; difficulty dealing with failure; and experiencing both academic and nonacademic problems. Studies have shown that students who have



had opportunities to develop skills addressing stress prior to a stressful situation do better when placed in another situation which requires those same skills.

### *Motivation*

The quantitative results revealed that a lack of motivation was predictive for attrition in this study. Motivation and expectation was observed to influence each other when talking to recycled students. For this study, motivation was divided into three categories: motivation to enter the Army, motivation to continue the course, and the impact of motivation on disinterest in the course. Most students expressed that their motivation to continue with the course was based on positive feedback received from family and friends; however, their motivation for not wanting to continue the course was primarily based on unmet expectations. Other students expressed a lack of interest in the course, but noted that it would provide them with the skills to take care of their families. Many of these students began the course knowing that they were not interested and found it difficult to remain motivated enough to complete the course.

### **Discussion of Findings**

The purpose of this explanatory mixed methods study was to understand how noncognitive factors contribute to attrition in the Health Care Specialist Program. This section will discuss the major findings and how they related to attrition. The participants in this study were purposefully selected because they represented the typical student completing job training and only students in the course can identify specific factors and provide the information necessary to increase the awareness of their challenges. These students were from diverse backgrounds with varying levels of support, motivation,

confidence, stressors and academic abilities, yet they shared a common bond of becoming a future “soldier medic.” Their job while in this environment was to develop the skills necessary to be competent in their field. How they learned to negotiate the environment while in this course set the stage for how they would continue to negotiate situations. Their experiences ultimately will impact how they view the military, whether positively or negatively. Some will have found this environment to be an enjoyable experience where many friends were made whereas, unfortunately, others will only remember the struggles and hardships they endured.

There is a vast amount of literature that discusses the impact of noncognitive factors on student retention in the civilian sector; however, few published studies that have explored noncognitive factors in the military setting. Of these military studies, none have focused specifically on how noncognitive factors impact upon attrition rates for recruits completing AIT during their first six months of military service. Generalizations from other studies which address students participating at the community college or university level may not always apply to this population. The high stress environment in which the students in this study are expected to perform is quite different from the typical classroom where there is an abundance of time to study, a great deal of personal time, and a wealth of resources available to address student’s needs on demand.

This study adds to the body of knowledge by specifically focusing on the experiences and challenges presented by students participating in the Health Care Specialist course. The significance of this study is threefold. First, it provides a method

with which to identify noncognitive factors that influence attrition. Second, it increases the understanding of how noncognitive factors work together to result in attrition, an understanding which will provide the necessary information for administrators to establish retention programs for students who are currently in the system. Finally, combining noncognitive and cognitive predictive factors enables administrators to first, identify students who are likely to be at risk for recycle and second, to utilize various approaches to assist at-risk students and help them perform at their peak level, resulting in a better overall quality of graduates.

The theoretical framework taken by the researcher for this study was a combined lens of Tinto's (1975) Model of Student Persistence, Bean's (1980) Model of Student Departure, and Astin's (1984) Theory of Involvement. Tinto (1975) and Pascarella and Terenzini (1980) emphasizes that the greater the student's social and academic integration into an institution, the greater the institutional commitment. Bean (1980) argues that the more satisfied the student is within the institution, the greater the institutional commitment; and Astin (1984) asserts that students with high levels of institutional involvement are more likely to demonstrate increased institutional commitment. These models are consistent in regards to the importance of the student's institutional commitment (fit) and the positive influence of peer groups on retention.

The following quantitative variables were found to statistically predict attrition in this study: low ST scores, unrealistic self-appraisal, preference for short-term goals, low perception of battle buddy support, low perception of unit support, a high level of perceived stress, and a lack of motivation to complete the course. The results to the

qualitative data proved to provide a deeper understanding of how noncognitive factors worked together to influence attrition.

Having a low ST score was a predictor for attrition in this study. The lower the ST score the more likely the student was to be recycled to another unit. The ST score, taken from the ASVAB, is a composite aptitude score which consists the following combined subtests: general science, word knowledge, paragraph comprehension, mathematic knowledge and mechanical comprehension. These subtests have been deemed valid predictors and are used to screen and determine the job(s) a soldier will be most successful in. A study conducted by Jimerson, Ferguson, Whipple and Anderson (2002) showed that students with high ASVAB scores were more likely to remain in school, as was true in this study.

Battle buddy support has been recognized by the Army as a support system that is a valuable resource for not only the Army but also for the student. According to TRADOC Regulation 350-6 (2005), the battle buddy system was designed to assist soldiers in developing responsibility, initiative, and dependability. Beginning during basic training, it provides students the opportunity to develop deep relationships with peers who are experiencing the same or similar stressors so that a sense of immediate support is readily available when needed. During this study it was observed that many students may not receive the necessary family support while in this environment. This may be because many of their family members or close friends may not understand how the military system works, and this factor may contribute to attrition. Because of this potential lack of family support, the Army battle buddy system provides a substitute, in

terms of an immediate support system for the student, if they are able to make a trusting bond with a peer.

The perception of unit support for students in this study proved to have a significant influence. Students, especially those who were recycled to another unit tended to agree that they did not feel support from their new unit. Rather many indicated that they were immediately treated differently and negatively labeled, which impacted their bonding with the new unit. Of the three observed support systems, at least battle buddy support and unit support can be addressed at the local level. Studies indicate that once students perceive that they are cared about and are valued in the environment their confidence increases and they are more likely to remain in the academic arena.

The results indicated that a high level of stress was a predictor of attrition. This is true especially when the student does not possess the skills necessary to cope effectively with the situation. This academic course is the third largest military occupational specialty training program in the Army. It is a rigorous and demanding course designed to challenge students while in a high stress environment. This course not only incorporates the academic aspects of learning the skills necessary to become a Health Care Specialist, but also is a continuation of the transformation process required to become a soldier. This high stress environment overall challenges the student to be confident in their skills as a student and as a soldier. Students may enter the environment with preexisting personal stressors and must also cope effectively with additional military stressors in order to perform their best in the course. Research shows, as previously discussed, that students who have had prior experiences coping with stressors

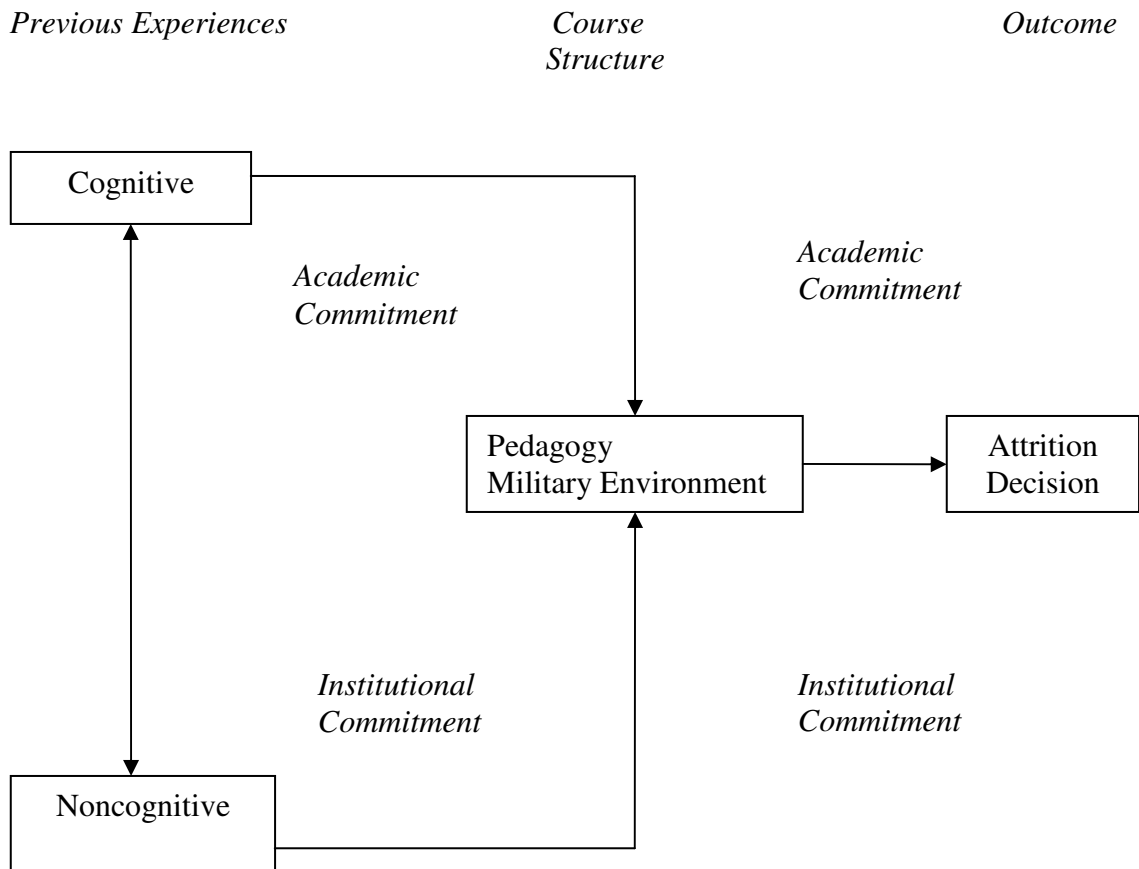
tend to be more successful addressing issues as they arise, when compared to those students who have not had those opportunities. Effective coping skills are essential for students to remain focused and not become overwhelmed in this high stress environment. The student's inability to appropriately manage these stressors will contribute to attrition from the course. Students come to the environment with varying levels of confidence, and those who demonstrate the ability to effectively handle stress and are able to cope with new personal and academic demands tend to perform better in this course.

The lack of motivation was identified as a predictor of attrition in this study and was consistent with research. Gorman and Thomas (1991) identified motivation as a powerful factor involved in learning. Students enter the environment with preconceived expectations of both the course and the environment and if these expectations were not consistent with their previous notions, motivation tended to diminish. Tinto (1975) explored how expectations impact upon attrition. He argued that students whose expectations were consistent with that of the institution tended to be more committed to the institution and do better in school. He defined this relationship as an "institutional fit." To perform at their potential, students must come into the environment with a high level of motivation and it was manifested in several ways. Although many students may have come to the course motivated, it may have been altered when their expectations were not met. Many of the recycled students indicated that their motivation decreased immediately upon identifying that their prior expectations were not consistent with reality upon arrival. Because of these unmet expectations, some students tended to

withdraw and fail the course on purpose in order to be moved to another job specialty or out of the military altogether. Motivation in this study also involved how well the student was able to identify their strengths and weaknesses as well as their overall confidence in their abilities. Possessing motivation and maintaining it throughout the course was essential for success in students participating in this study. Students who were confident in their skills, able to adapt to the environment despite their prior expectations, and who took academic responsibility for their performance tended to remain in the course until graduation.

A combination of the above factors worked together to explain attrition among Health Care Specialists. An attrition model, similar to Tinto's (1975) model, is used to describe a student's attrition from the course. Tinto's model describes the student's departure decision as based on the strength of the relationship between the student's academic (academic abilities and grades) and institutional commitment. He indicates that it is a combination of this commitment which influences their decision to depart the academic environment. The Health Care Specialist model (See Figure 6.1) also describes the importance of the interaction of the student's academic and institutional commitment. In this model, the student enters the environment with cognitive and noncognitive attributes based on their prior experiences. They develop academic goals (academic abilities and grades) and institutional (peer-group and faculty interactions) commitment prior (before entering the military and in basic training) to engaging in the course. Once they interact with the course structure, they reevaluate their academic goals and institutional commitment. If this reevaluation results in adequate levels of

commitment, then the student is likely to remain in the environment, whereas if the opposite is true, the student is likely to recycle.



**FIG. 6.1.** Health Care Specialist Attrition Model demonstrating student's negotiation of the course utilizing both cognitive and noncognitive factors which influences their attrition decision.



Overall, the quantitative and qualitative results were complementary. The results provided a deeper understanding of the noncognitive factors that influence attrition, helped to explain how these factors worked together to influence attrition, and identified predictive factors influencing attrition in students attending this course.

### **Implications and Recommendations**

This study was conducted to provide recommendations for the course administrators to effectively identify factors that influence attrition. Students matriculating through the course provided insightful information that was meant to address some inconsistencies currently existing in the program. Based on the results of this study various implications and recommendations for change were apparent.

First, changing the method in which students are educated about the job requirements of becoming a Health Care Specialist is needed. This education begins during the recruiting process. There exists a need for Army recruiters to provide a more thorough and realistic discussion of job requirements prior to the student committing to the MOS. Because not all recruiters are proficient in the duties and responsibilities of becoming a Health Care Specialist, providing consistent updated information on course expectations should be initiated by the Army Medical Department and communicated to the recruiting personnel through the use of various media, such as with videos or brochures. Seidman (1989) indicated that the process of decreasing attrition and increasing retention begins with the admission process. He emphasized that in order to increase retention, institutional information presented to the student must reflect realistic expectations of the academic setting in order to ensure that the student makes an

informed choice and that the academic setting represents a good “fit” for the student. The expectations for the course and environment should again be addressed once the student arrives in the academic environment in order to ensure that expectations are fully understood and maximize the opportunity to establish a fit for the student with the occupation.

The level of motivation that students possessed upon entering the course was also a major predictor for attrition. Because of the high stress military environment, students were expected to participate in both soldier and student activities. The student’s prior expectations regarding these activities greatly influenced their level of motivation to complete the course successfully. The majority of students expressed some disappointment with the realities of the course and/or environment. Some had been assigned the MOS with little explanation of the requirements of the job or what to expect of the physical environment. Many of the recycled students commented that due to the environmental conditions or their perception of low unit support they became unmotivated to continue the course. Some students were able to work through their disappointments whereas others allowed the disappointment to overwhelm them and result in an emotional withdrawal from the course. The staff has little control over how the students initially handle reality, however, they must ensure that the environment is conducive for student learning and facilitates students working at their highest potential.

Second, a thorough examination of the structure and effectiveness of the reteach and study hall process is needed. The results of this study suggest that the current reteach and study hall sessions are not sufficiently contributing to the recycled student’s

learning. These students especially emphasized a mismatch between the teaching style of the instructor and their learning style. Also, providing a supervised quiet area in which students can study will limit the distractions of attempting to study while in the barracks.

Third, consistently ensuring that instructors and Drill Sergeant's receive routine faculty development is vital for the success of the program. Being aware of pedagogical changes and recognizing the importance of different learning styles will help instructors to become more engaging while teaching and facilitate effective student learning.

Fourth, recognizing that students possess different learning styles is important. Getting an assessment of the variety of learning styles may be necessary prior to the beginning of class to ensure that teaching is geared toward addressing student learning differences. Understanding and addressing these differences will ensure that all students have an opportunity to learn. The results from this study also suggested that increasing the ratio of hands-on tasks as compared to didactic instruction would be beneficial to all students.

Fifth, the perception of unit support was a major factor for both groups of students in this study. Unit support can be immediately addressed by unit personnel. Providing an increased level of unit support to incoming recycled students appeared to make a difference in their performance. Results showed that recycled students perceived that they received more support by their current unit than passing students. They indicated that this perceived unit support was provided by the original unit and not the new unit. Recycled students generally perceived their new units to be unsupportive because they were immediately treated differently and/or negatively labeled by faculty

and peers. A study conducted by Hoffman, Richmond, Morrow and Salomone (2002) identified that the greater the student's "sense of belonging" to the institution, the greater their commitment, resulting in institutional integration and retention. This "sense of belonging" equated to the student feeling that the faculty cared about their progress in the course and their overall well-being. Further, Hoffman, and her colleagues found that students who reported a higher level of perceived peer and faculty support experienced lower levels of perceived isolation. Although the environment is highly stressful, all students indicated that they felt more cared about when they received routine feedback from the staff about their performance. Students who recycled were provided with additional personal counseling along with required routine counseling sessions. Passing students, however, indicated that they rarely received any counseling other than what was required. Many of these passing students commented that they felt somewhat slighted because most of the attention went to the "trouble makers" instead of on those who were performing at their peak. Several passing students indicated their intention of competing for honor graduate and commented that they could benefit from routine counseling (formal or informal) and/or frequent encouragement from the staff. The implication for practice is that providing routine unit counseling, whether formal or informal, would positively influence the student's perception that their well-being is important to the unit and that the unit cares about them.

In addition to the routine counseling conducted by the staff, the addition of an ombudsperson is recommended to provide support and counsel for students to learn to succeed in the military system. Preferably the ombudsperson would be an educator who

understands pedagogical concepts. Their presence would allow the student to promptly address areas of immediate concern, while remaining in the training area. Although these services are currently provided in the local medical treatment facilities, having someone in the battalion's immediate area would decrease the amount of class time missed by the student while attending an appointment. In addition to the above, it is recommended that this ombudsperson conducts assessments with all entering students prior to the beginning of the course. This would be used as an attempt to create an early warning system to identify at-risk students as well as provide intermittent classes that address common student issues, with the goal of enhancing student success. Overall, the implication of these results is that units should strive to be supportive to all students, regardless of whether the student has recycled into the unit or are original members of the unit. The student's perception of the level of support is what really mattered in this study.

In order for any recommendations to be successful, staff and the students must work together. Grayson and Grayson (2003) suggested that the leadership must be totally invested in all initiated programs if they are to be successful. Sedlacek (2004) reported that some staff detach themselves from attrition or student issues and attribute all student-related issues to the students themselves. Students, however, commented that the staff made an impact on their motivation and perceived unit support, whether positive or negative. In this study, students commented that some instructor's teaching style did not accommodate different learning styles; therefore they struggled with learning and may not have done so in a manner that was easiest for them. Many students commented that they learned better while participating in a hands-on practicum and using multiple visual

aids rather than merely reading from a book or reading from the PowerPoint presentation. Others commented that they learn better with group discussion instead of the typical lecture presentation. Ensuring that administrators and instructors receive this type of student feedback is relevant to the unit. It increases their awareness of inconsistencies in student learning and provides them with further options to explore when attempting to improved student learning.

Sedlacek (2004) discussed three groups of faculty and how they can be approached to make changes. First, faculty who are committed to doing something to improve the situation will need incentives to get them geared toward making changes. Second, faculty who are fair-minded and committed, although busy, may need more convincing to take serious action. He indicated that this is usually the largest group. Finally, faculty who oppose any changes to the current structure and adamant about their views are typically resistant to change. Fortunately, although the varying groups of faculty may exist, even within the military structure, full support by the leadership will typically get faculty motivated to make changes.

### **Conclusions**

The purpose of this study was to understand how noncognitive factors contribute to attrition in the Health Care Specialist Program. The noncognitive factors which influence attrition, how these noncognitive factors work together to influence attrition and the predictive cognitive and noncognitive factors were reviewed. The use of explanatory mixed methods research provided the analysis of both quantitative and qualitative data in which the results of one method was used to complement the other.

The results of the logistic regression analysis identified six noncognitive variables and one cognitive predictive variable which influenced attrition. The practical implications for the findings of this study may increase course administrator's awareness of the student's perception of how various noncognitive factors impact attrition.

This course required the student to possess a high level of personal confidence in order to be successful. It is a demanding course designed to challenge the student to perform their best under a highly stressful conditions, much like the environment that they may soon encounter. Confidence in knowing the medical material is not immediately expected, however entering the environment with a high level of confidence in personal and academic skills is a valuable asset. Students are expected to be optimistic about their personal capabilities and focus on personal strengths required for successful completion of the course. Students who have a realistic self-appraisal, prefer long-term goals, perceive an adequate level of support (battle buddy, family, and/or unit), possess a high level of motivation, are able to effectively manage stress and have confidence in themselves will more likely be successful in this course. On the other hand, if any component is lacking, the student may be at a higher risk for attrition in this environment.

Future research into the impact of noncognitive variables on attrition within the military environment should be conducted in other military training programs in different locations to determine if results are consistent. Other areas of future research include: studies investigating the retention of medics who enter the military already possessing a medical background; studying the experiences of passing students and their

persistence; and studying the experience of the instructor in this course would be beneficial by adding information to what is already known about these populations. Finally, studies to investigate the predictability of other noncognitive variables in the military population would be invaluable as it could potentially add to the creation of a screening tool to be used at the Military Entrance Processing Station to assist with determining admission standards for military service.



## REFERENCES

- Army Regulation 635-200. (2005). *Active Duty Enlisted Administrative Separations*. Retrieved May 7, 2007, from <http://www.sdmcp.org/Regs/armyenlistedseps.pdf>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education [Electronic version]. *Journal of College Student Personnel*, 25, 297-308.
- Astin, A. W. (1999). Student involvement: A developmental theory [Electronic version]. *Journal of College Development*, 40(5), 518-529.
- Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. [Electronic version]. *Research in Higher Education*, 12(2), 155-187.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition [Electronic version]. *Review of Educational Research*, 55(4), 485-540.
- Beil, C., Reisen, C. A., Zea, M. C. & Caplan, R. C. (1999). A longitudinal study of the effects of academic and social integration and commitment on retention [Electronic version]. *National Association of Student Personnel Administration Journal*, 37(1), 376-385.
- Berger, J. B. & Milem, J. F. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence [Electronic version]. *Research in Higher Education*, 40(6), 641-664.

- Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto's theory [Electronic version]. *The Journal of Higher Education*, 71(5), 569-590.
- Carney-Crompton, S., & Tan, J. (2002). Support systems, psychological functioning and academic performance of nontraditional female students [Electronic version]. *Adult Education Quarterly*, 52(2), 140-154.
- Carter, L. R. (2006). Noncognitive predictors of academic success and persistence for Hispanic American/First year college students at select community colleges in West Texas. Unpublished doctoral dissertation, Texas Tech University, Lubbock.
- Center for Personnel Policy Analysis. (2000). *Recent Projects*. Alexandria, VA: Human Resources Research Organization. Retrieved February 6, 2005, from: <http://www.humrro.org/corpsite/html/programs&personnel/ceppprojects.html>
- Creswell, J. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- Creswell, J. & Plano Clark, V. L. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.
- Cross, K. P. (1991, June). *On college teaching*. Paper presented at the Annual Convention of the American Society for Engineering Education, New Orleans, LA.
- Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance [Electronic version]. *Child Development*, 58(5), 124-1257.

- Elkins, S. A., Braxton, J. M., & James, G. W. (2000). Tinto's separation stage and its influence on first-semester college student persistence [Electronic version]. *Research in Higher Education, 41*(2), 251-268.
- Fass, M. E., & Tubman, J. G. (2002). The influence of parental and peer attachment on college students' academic achievement [Electronic version]. *Psychology in the Schools, 39*(5), 561-573.
- Felder, R. M. & Brent, R. (2005). Understanding student differences [Electronic version]. *Journal of Engineering Education, 94*(1), 57-72.
- Feldman, K. (1976). The superior college teacher from students view [Abstract] [Electronic version]. *Research in Higher Education, 5*(3), 243-288.
- Finn, J. D. (1989) Withdrawal from school [Electronic version]. *Review of Educational Research, 59*, 117-142.
- Finn, J. D., & Rock, (1997). Academic success among students at risk for school failure [Electronic version]. *Journal of Applied Psychology, 82*(2), 221-234.
- Fort Jackson, SC. (2007). Overview: Basic combat training. *U.S. Army*. Retrieved May 8, 2007, from [http://www.jackson.army.mil/BCT/what\\_to\\_expect.htm#day](http://www.jackson.army.mil/BCT/what_to_expect.htm#day)
- George, D., & Mallery, P. (2006). *SPSS for Windows Step by Step: A Simple Guide and Reference* (6<sup>th</sup> ed.). Boston: Pearson Education, Inc.
- Gorman, L., & Thomas, G. (1991). Enlistment motivations of army reservist: Money, self-improvement, or patriotism [Electronic version]. *Armed Forces & Society, 17*(4), 589-599.

- Grayson, J. P., & Grayson, K. (2003). *Research on Retention and Attrition* (Millennium Research Series, pp. 1-56) [Electronic version]. Montreal, Canada: Canada Millennium Scholarship Foundation.
- Guiffrida, D. (2005). To break away or strengthen ties to home: A complex issues for African American college students attending a predominantly white institution [Electronic version]. *Equity & Excellence in Education*, 38, 49-60.
- Hall, T. (2002). *Explicit Instruction*. Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved May 12, 2007 from [http://www.cast.org/publications/ncac/ncac\\_explicit.html](http://www.cast.org/publications/ncac/ncac_explicit.html)
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention: Four year public institutions* (pp. 1-25). Iowa City, Iowa: ACT, Inc.
- Hastings, P. R. & Maness, D. L. (2007). *Student Evaluation Plan 300-68W10 Health Care Specialist Course*. Ft. Sam Houston, TX: U.S. Army Medical Department Center and School.
- Helland, P. A., Stallings, H. J., & Braxton, J. M. (2002). The fulfillment of expectations for college and student departure decisions [Electronic version]. *Journal of College Student Retention: Research, Theory and Practice*, 3(4), 381-396.
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating “sense of belonging” in first-year college students [Electronic version]. *Journal of College Student Retention*, 4(3), 227-256.

- Holahan, C. J., Valentiner, D. P., & Moos, R. H. (1994). Parental support and psychological adjustment during the transition to young adulthood in a college sample [Electronic version]. *Journal of Family Psychology*, 8(2), 215-223.
- Hull-Blanks, E., Kurpius, S. E. R., Befort, C., Sollenbergen, S., Nicpon, M., & Huser, L. (2005). Career goals, and retention-related factors among college freshmen [Electronic version]. *Journal of Career Development*, 32(1), 16-30.
- Jimerson, S. R., Ferguson, D., Whipple, A. D., & Anderson, G. E. (2002). Exploring the association between grade retention and dropout: A longitudinal study examining socio-emotional, behavioral and achievement characteristics of retained students [Electronic version]. *The California School Psychologist*, 7, 51-62.
- Kember, E., Leung, D. Y. P., & Ma, R. S. F. (2007). Characterizing learning environments capable of nurturing generic capabilities in higher education [Electronic version]. *Research in Higher Education*, 48(5), 609-632.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities [Electronic version]. *Educational Psychology Measurements*, 30(2), 607-610.
- Levitz, R. S., Noel, L., & Richter, B. J. (1999). Strategic moves for retention success. In *New Directions for Higher Education*. No. 108. (pp. 31-49). San Francisco, CA: Jossey-Bass.
- Lowe, H. & Cook, A. (2003). Mind the gap: Are students prepared for higher education [Electronic version]. *Journal of Further and Higher Education*, 27(1), 53-76.

- Madsen, K. (2003). The effects of accuracy in instruction, teacher delivery and student attentiveness on musicians' evaluation of teacher effectiveness [Electronic version]. *Journal of Research in Music Education*, 51(38-50).
- Maxwell, W. E. (2000). Student peer relations at a community college [Electronic version]. *Community College Journal of Research & Practice*, 24(3), 207-217.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B., & Simpson, E. L. (2000). *A Guide to Research for Educators and Trainers of Adults* (2<sup>nd</sup> ed., Updated). Malabar, FL: Krieger Publishing Company.
- Miville, M. L., & Sedlacek, W. E. (1991). Profiles of potential persisters and nonpersister university students [Electronic version]. *The College Student Affairs Journal*, 11(1), 45-53.
- Napoli, A. R., & Wortman, P. M. (1998). Psychosocial factors related to retention and early departure of two-year community college students [Electronic version]. *Research in Higher Education*, 39(4), 419-455.
- Nora, A. (1987). Determinants of retention among Chicano college students: A structural model [Electronic version]. *Research in Higher Education*, 34(2), 243-263.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model [Electronic version]. *The Journal of Higher Education*, 51(1), 60-75.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis: An Integrated Approach*. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Personnel Procurement. (2005). Armed services military personnel accession testing program, Washington, D. C., October 2005 (AR 601-222). Department of the Army, Navy, Air Force, U. S. Marine Corps, Coast Guard: Author.
- Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success [Electronic version]. *Journal of College Student Development*, 44(1), 18-28.
- Ramsden, P. (1987). Improving teaching and learning in higher education: The case for a relational perspective [Electronic version]. *Studies in Higher Education*, 12(3), 275-286.
- Rice, V. J., Woods, Y., and Bundy, M. (2004). [Focus group surveys among academic instructors, Drill Sergeants and commanders regarding 91W-Health Care Specialist Advanced Individual Training]. Unpublished raw data.
- Rocco, T. S., Bliss, L. A., Gallagher, S., & Perez-Prado, A. (2003). Taking the next step: Mixed methods research in organizational systems [Electronic version]. *Information Technology, Learning, and Performance Journal*, 21 (1), 19-29.
- Rowser, J. F. (1997). Do African American students' perceptions of their needs have implications for retention [Electronic version]. *Journal of Black Studies*, 27(5), 53-76.
- Sedlacek, W. E. (1991). Using noncognitive variables in advising nontraditional students [Electronic version]. *National Academic Advising Association Journal*, 11(1), 75-82.

- Sedlacek, W. E. (2004). *Beyond the Big Test. Noncognitive Assessment in Higher Education*. San Francisco, CA: Jossey-Bass.
- Seidman, A. (1989). Recruitment begins with retention: Retention begins with recruitment. *Colleague*. Bedford, NH: Center for the Study of College Student Retention. Retrieved March 29, 2007, from [http://www.cscsr.org/article\\_recruitment\\_begins.htm](http://www.cscsr.org/article_recruitment_begins.htm)
- Sheldon, E. N. (2003). Faculty support and student retention [Electronic version]. *Journal of Nursing Education, 42*(2), 68-76.
- Stetto, J. E., Gackstetter, G. D., Cruess, D. F., and Hooper, T. I. (2004). Variables associated with attrition from Uniformed Services University of the Health Sciences Medical School [Electronic version]. *Military Medicine, 169*(2), 102-107.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of Mixed Methods in Social and Behavioral Research*. Thousands Oaks, CA: Sage Publications.
- Thomas, L. (2002) Student retention in higher education: The role of institutional habitus [Electronic version] *Journal of Education Policy, 17*(4), 423-442.
- Ting, S. R., & Sedlacek, W. E. (2000). *Validity of the Noncognitive Questionnaire-Revised 2 in Predicting the Academic Success of University Freshmen*. Counseling Center Research Report no. 1-00. College Park: University of Maryland.
- Tinto, V. (1975). Dropouts from higher education: A theoretical synthesis of recent research [Electronic version]. *Review of Educational Research, 45*(1), 89-125.



- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*. (2<sup>nd</sup> ed.) Chicago: University of Chicago Press.
- Tinto, V. (2000, April). *Taking student retention seriously. Rethinking the first year of college*. Paper presented at the Annual meeting of the American Association of Collegiate Registrars and Admissions Officers, Minneapolis, MN.
- Tinto, V. (2002, June). *Promoting student retention: Lessons learned from the United States*. Paper presented at the 11<sup>th</sup> Annual Conference of the European Access Network, Prato, Italy.
- Tracey, T. J., & Sedlacek, W. E. (1984). Noncognitive variables in predicting academic success by race [Electronic version]. *Measurement and Evaluation in Guidance, 16*, 171-178.
- Training and Doctrine Command Regulation 350-6. (2005). *Training: Enlisted Initial Entry Training (IET) Policies and Administration*. Monroe, VA: Department of the Army. Retrieved May 7, 2007, from <http://www.tradoc.army.mil/tpubs/regs/r350-6.htm>
- U.S. Army Medical Department (2007). The Army's 91W health care specialist. *Army Medicine*. Retrieved May 7, 2007, from <http://www.armymedicine.army.mil/about/tl/facts91w.htm>
- U.S. Army Medical Department Center and School. (2007). Mission statement. *Army Medical Department*. Retrieved May 7, 2007, from <http://www.cs.amedd.army.mil/68w/news/mission.htm>

U.S. Code, Title 10. (2005). Uniform Code of Military Justice. Retrieved May 11, 2007, from <http://uscode.house.gov/download/pls/10C47.txt>

Woods, P. A., & Sedlacek, W. E. (1998). *Construct and Congruent Validity of the Noncognitive Questionnaire (NCQ)*. Counseling Center Research Report no. 6-88. College Park: University of Maryland. Retrieved November 15, 2006, from <http://williamsedlacek.info/publications/articles/construct688.html>

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress and academic success in college [Electronic version]. *Research in Higher Education*, 46(6), 677-706.

## APPENDIX A

### Cover Letter/Consent Form

Dear Student,

I am conducting research that will attempt to identify the key factors that effect academic drop-out during the 68W AIT course other than information received by standardized testing (ASVAB). I am asking for your participating in this research because you are currently enrolled in a class that has historically had a moderately high drop-out rate. You are being asked to participate in a 28-item questionnaire today, followed by a 46-item questionnaire and a short interview at a later date. The questionnaires will focus on *your* academic performance, personal characteristics, and general background, while the interview is designed to provide you with an opportunity to elaborate on your responses to the questionnaire. The total time required for your participation in this study is 1 hour and 30 minutes and you will not have to answer any questions that make you uncomfortable. The final interview will be conducted in an isolated room without input from your chain of command, creating an environment conducive for discussing relevant issues which impact learning. The final interview session will be audio-recorded. Research records and the recorded audiotape will be stored securely and only the researcher and her dissertation chairperson will have access to them.

I will compare your ST, GT and AIT scores to the responses that you make on the questionnaire and during the interview.

There are no personal benefits or monetary compensation from participating in this study except for the satisfaction of knowing that you are contributing information that may be beneficial in helping researchers to determine factors which impact academic performance.

There are no anticipated risks to you as a participant in this research study. You are free to withdraw your consent to participate and may discontinue your participation in the interview at any time without consequence.

If you have any questions about this research protocol, please contact me at 210-378-6390 or my local faculty supervisor, Dr. Rebecca Hooper, at 916-4108. Questions or concerns about your rights as a research participant may be directed to the Director of Clinical Investigation, Brooke Army Medical Center, 3851 Roger Brooke Drive, Ft. Sam Houston, TX 78234; 210 916- 3511.

Please print your name and the last 4 digits of your social security number on the next page and return it to the researcher or civilian ombudsman along with the completed attached questionnaire. Please tear off this page as it provides you with a description of

the study. By signing the next page, you give me permission to report your responses confidentially.

Yvette Woods  
MAJ, SP  
US Army

I have read the procedure described above for the research study entitled: The Relationship of Noncognitive Factors and their Contribution to Attrition in a Health Care Specialist Program at Ft. Sam Houston, TX. I voluntarily agree to participate in the questionnaires and interview and I have received a copy of this description.

---

Printed name of volunteer

---

Last 4 SSN

---

Number on questionnaire

**APPENDIX B****Instruments****MODIFIED NONCOGNITIVE QUESTIONNAIRE (NCQ)\***

232<sup>nd</sup> Medical Battalion is trying to improve its retention procedures by studying additional information about students. Results will be reported to the researcher only and no individuals will be identified. Please fill in the blank or circle the appropriate answers as they relate to you.

1. Your sex is:
  1. Male
  2. Female
  
2. Your age is: \_\_\_\_\_years
  
3. Your father's occupation: \_\_\_\_\_
  
4. Your mother's occupation: \_\_\_\_\_
  
5. Your race is:
  1. Black (African-American)
  2. White (not of Hispanic origin)
  3. Asian (Pacific Islander)
  4. Hispanic (Latin American)
  5. American Indian (Alaskan native)
  6. Other: \_\_\_\_\_
  
6. How much education do you expect to get during your lifetime?
  1. Military training only
  2. College, but less than a bachelor's degree
  3. B.A. or equivalent
  4. 1 or 2 years of graduate or professional study (Master's degree)
  5. Doctoral degree such as M.D., Ph.D., etc.

7. Please list three goals that you have for yourself right now:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

8. Approximately 20% of trainees typically leave before completing 91W AIT. If this should happen to you, what would be the most likely cause?

1. Absolutely certain that I will complete 91W AIT

2. To change my MOS

3. To accept a civilian job

4. Marriage or family distractions

5. Disinterested in study

6. Lack of academic ability

7. Insufficient reading or study skills

8. Other: Explain:

\_\_\_\_\_

\_\_\_\_\_

9. Please list three things that you are proud of having done:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

Please indicate the extent to which you agree or disagree with each of the following items. Respond to the statements below with your feelings at present or with your expectations of how things will be. Write in your answer to the left of each item.

1 = Strongly Agree

2 = Agree

3 = Neutral

4 = Disagree

5 = Strongly Disagree

- \_\_\_\_\_ 10. The military should use its influence to improve social conditions.
- \_\_\_\_\_ 11. It should not be very hard to get a B (3.0) average in AIT.
- \_\_\_\_\_ 12. I get easily discouraged when I try to do something and it doesn't work.
- \_\_\_\_\_ 13. I am sometimes looked up to by others.
- \_\_\_\_\_ 14. If I run into problems concerning school, I have someone who would listen to me and help me.
- \_\_\_\_\_ 15. There is no use in doing things for people, you only find that it doesn't pay off in the long run.
- \_\_\_\_\_ 16. In groups where I am comfortable, I am often looked to as leader.
- \_\_\_\_\_ 17. I expect to have a harder time than most students in AIT.
- \_\_\_\_\_ 18. Once I start something, I finish it.
- \_\_\_\_\_ 19. When I believe strongly in something, I act on it.
- \_\_\_\_\_ 20. I am as skilled academically as the average student at AIT.
- \_\_\_\_\_ 21. I expect I will encounter racism during AIT.
- \_\_\_\_\_ 22. People can pretty easily change me even though I thought my mind was already made up on the subject.
- \_\_\_\_\_ 23. My friends and relatives didn't feel I should come into the military.
- \_\_\_\_\_ 24. My family has always wanted me to go into the military.

\_\_\_\_\_ 25. If course tutoring is made available to me while at AIT, I would attend regularly.

\_\_\_\_\_ 26. I want a chance to prove myself academically.

\_\_\_\_\_ 27. My high school grades don't really reflect what I can do.

28. Please list offices held and/or groups belonged to in high school or in your community.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

\*Adapted from the Noncognitive Questionnaire (NCQ) in Tracey, T. J., & Sedlacek, W. E. (1984). Noncognitive variables in predicting academic success by race. *Measurement and Evaluation in Guidance*, 16, 171-178.



### Scoring Key: Modified NCQ

Questionnaire Item	Variable Name (Number)
6	Use to score for Self-Concept (I) Option 1 and 2 = 1; 3 = 2; 4 = 3; 5 = 4; No response = 2
7	<p>A. Options for Long Range Goals (IV) Each goal is coded according to this scheme:</p> <p>1 = a vague and/or immediate, short-term goal (for example, "to meet people," "to get a good schedule," "to gain self confidence")</p> <p>2 = a specific goal with a stated future orientation which could be accomplished during undergraduate study (for example, "to join a sorority so I can meet more people," "to get a good schedule so I can get good grades in the fall," "to run for a student government office")</p> <p>3 = a specific goal with a stated future orientation which would occur after undergraduate study (for example, "to get a good schedule so I can get the classes I need for graduate school;" "to become president of a Fortune 500 company")</p> <p>B. Options for Knowledge Acquired in a Field (VIII) Each goal is coded according to this scheme:</p> <p>1 = not at all academically or school related; vague or unclear (for example, "to get married," "to do better," "to become a better person")</p> <p>2 = school related, but not necessarily or primarily educationally oriented (for example, "to join a fraternity," "to become student body president")</p> <p>3 = directly related to education (for example, "to get a 3.5 GPA," "to get to know my teachers")</p>

Find the mean for each dimension (for example, long-range goals) and round to the nearest whole number.

Questionnaire Item	Variable Name (Number)
8	Use to score for Self-Concept (I) and Self-Appraisal (II) Option 1 = 4; 2 through 9 = 2; No response = 2
9	Use to score for Self Concept (I) Each accomplishment is coded according to this scheme:  1 = at least 75% of applicants to your school could have accomplished it (for example, "graduated from high school," "held a part-time summer job")  2 = at least 50% of applicants to your school could have accomplished it (for example, played on an intramural sports team," "was a member of a school club")  3 = only top 25% of applicants to your school could have accomplished it (for example, "won an academic award," "was captain of football team")  Find the mean code for this dimension and round to the nearest whole number.

For items 10 through 28, positive (+) items are scored as is. Negative (-) items are reversed, so that 1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1. A shortcut is to subtract all negative item responses from 6.

Questionnaire Items	Direction	Variable Name (Number)
10	-	Use to score for Racism (III)
11	-	Use to score for Realistic Self-Appraisal (II)
12	+	Use to score for Long-Range Goals (IV)
13	-	Use to score for Leadership (VI)
14	-	Use to score for Availability of Strong Support (V)
15	+	Use to score for Community Service (VII)
16	-	Use to score for Leadership (VI)

Questionnaire Items	Direction	Variable Name (Number)
17	+	Use to score for Racism (III)
18	-	Use to score for Long-Range Goals (IV)
19	-	Use to score for Positive Self-Concept (I)
20	-	Use to score for Realistic Self-Appraisal (II)
21	-	Use to score for Racism (III)
22	+	Use to score for Positive Self Concept (I)
23	+	Use to score for Availability of Strong Support (V)
24	-	Use to score for Availability of Strong Support (V)
25	-	Use to score for Racism (III)
26	-	Use to score for Racism (III)
27	-	Use to score for Positive Self Concept (I)
28	-	Use to score for Leadership (VI), Community Service (VII) and Knowledge Acquired in a Field (VIII). Each organization is given a code for A, B, and C below. Find the mean for each dimension (for example, Leadership) and round to the nearest whole number.

A. Leadership (VI)

1 = ambiguous group or no clear reference to activity performed (for example, "helped in school")

2 = indicates membership but no formal or implied leadership role; it has to be clear that it's a functioning group and, unless the criteria are met for a score of "3" as described below, all groups should be coded as "2" even if you, as the rater, are not familiar with the group (for example, "Fashionettes," "was part of a group that worked on community service projects through my church")

3 = leadership was required to fulfill role in group (for example, officer or implied initiator, organizer, or founder) or entrance into the group was dependent upon prior leadership (for example, "organized a tutoring group for underprivileged children in my community," "student council")

B. Community Service Relatedness (VII)

1 = no community service performed by group, or vague or unclear in relation to community service (for example, "basketball team").

2 = some community service involved but it is not the primary purpose of the group (for example, "Scouts")

3 = group's main purpose is community service (for example, "Big Brothers/Big Sisters")

C. Knowledge Acquired in a Field (VIII) same coding criteria as used for item 7B

## (NCQ) WORKSHEET FOR SCORING

## 1. POSITIVE SELF-CONCEPT OR CONFIDENCE

item 6\* + item 8\* + item 9\* + (6 – item 19) + item 22 + (6 – item 27)

## 2. REALISTIC SELF-APPRAISAL

item 8\* + (6 – item 11) + (6 – item 20)

## 3. UNDERSTANDS and DEALS with RACISM

(6 – item 10) + item 17 + (6 – item 21) + (6 – item 25) + (6 – item 26)

## 4. PREFERS LONG-RANGE GOALS to SHORT-TERM or IMMEDIATE NEEDS

item 7A\* + item 12 + (6 – item 18)

## 5. AVAILABILITY of a STRONG SUPPORT PERSON

(6 – item 14) + item 23 + (6 – item 24)

## 6. SUCCESSFUL LEADERSHIP EXPERIENCE

(6 - item 13) + (6 – item 16) + item 28A\*

## 7. DEMONSTRATED COMMUNITY SERVICE

item 15 + item 28B\*

## 8. KNOWLEDGE ACQUIRED in a FIELD

item 7B\* + item 28C\*

\*Recoded item.

Sedlacek, W. E. (2004). *Beyond the big test. Noncognitive assessment in higher education*. San Francisco, CA: Jossey-Bass.

## Survey 2 with Scoring

**Military Environment Noncognitive  
Adjustment Scale  
(MENAS)\*/Volunteer Survey**

The information requested is essential for improving this course. Please answer these questions honestly and base your responses on the way you have felt since you came to AIT.

*Definitions -- For the purposes of this survey: (1) "family" refers to the individuals such as your mom, dad, brother, sister, wife, husband and children. "Family" may also include people not mentioned in the definition but who you consider to be your family. "Battle buddy" refers to an individual who is currently with you or were assigned to you at the beginning of your participation in this study (i.e. Battle buddy or designated friend).*

Code Number    \_    \_    \_    \_

1. I attribute my problems with the course to:

- (5)  n/a. I am not having problems
- (4)  Academic Reasons
- (3)  Non-Academic Reasons
- (2)  Both
- (1)  Other

2. The highest level of education I have completed is:

- (1)  High School Diploma
  - (2)  Some high school education with a GED
  - (3)  GED
  - (4)  Some College education
  - (5)  College Diploma, if yes, what type?
-

3. My current academic grade status in the 68W MOS is:

- (4)  90-100
- (3)  80-89
- (2)  70-79
- (1)  Below 70

4. My GPA in high school was:

- (4)  3.5-4.0 (Mostly A's)
- (3)  3.0-3.5 (A's and B's)
- (2)  2.5-3.0 (B's and C's)
- (1)  2.0-2.5 (C's and D's)

5. I have been recycled from this course.

- (1)  Yes
- (2)  No

5a. If yes, how many times? \_\_\_\_\_

6. In the year prior to my enrollment, I had \_\_\_\_\_ (choose number) of job(s).

- (5)  0
- (4)  1
- (3)  2
- (2)  3
- (1)  4 +

7. I have previous training in health care.

- (2)  Yes
- (1)  No

If yes, what type of previous training? \_\_\_\_\_

8. This is my first time away from home.

- (1)  Yes
- (2)  No

9. Some problems I experienced in the course that may have affected my academic performance were:

---

---

10. I have what it takes to be successful in the course.

Strongly Agree (5) <input type="checkbox"/>	Agree (4) <input type="checkbox"/>	Neutral (3) <input type="checkbox"/>	Disagree (2) <input type="checkbox"/>	Strongly Disagree (1) <input type="checkbox"/>
---	---------------------------------------	---	--	--

11. My grades and my academic performance are my responsibility

Always (4) <input type="checkbox"/>	Often (3) <input type="checkbox"/>	Sometimes (2) <input type="checkbox"/>	Seldom (1) <input type="checkbox"/>	Never (0) <input type="checkbox"/>
--	---------------------------------------	---	--	---------------------------------------

12. I have trouble staying awake in class.

Always (1) <input type="checkbox"/>	Often (2) <input type="checkbox"/>	Sometimes (3) <input type="checkbox"/>	Seldom (4) <input type="checkbox"/>	Never (5) <input type="checkbox"/>
--	---------------------------------------	---	--	---------------------------------------

13. I manage my time well.

Always (4) <input type="checkbox"/>	Often (3) <input type="checkbox"/>	Sometimes (2) <input type="checkbox"/>	Seldom (1) <input type="checkbox"/>	Never (0) <input type="checkbox"/>
--	---------------------------------------	---	--	---------------------------------------

14. My stress level affects my academic performance.

Always (1) <input type="checkbox"/>	Often (2) <input type="checkbox"/>	Sometimes (3) <input type="checkbox"/>	Seldom (4) <input type="checkbox"/>	Never (5) <input type="checkbox"/>
--	---------------------------------------	---	--	---------------------------------------

15. I have people to talk to about my problems and/or stress in my life.

Strongly Agree (5) <input type="checkbox"/>	Agree (4) <input type="checkbox"/>	Neutral (3) <input type="checkbox"/>	Disagree (2) <input type="checkbox"/>	Strongly Disagree (1) <input type="checkbox"/>
---	---------------------------------------	---	--	--

16. I am coping with and managing my stress well.

Strongly Agree (5) <input type="checkbox"/>	Agree (4) <input type="checkbox"/>	Neutral (3) <input type="checkbox"/>	Disagree (2) <input type="checkbox"/>	Strongly Disagree (1) <input type="checkbox"/>
---	---------------------------------------	---	--	--

17. I have trouble concentrating which affects my academic performance.

Always (1) <input type="checkbox"/>	Often (2) <input type="checkbox"/>	Sometimes (3) <input type="checkbox"/>	Seldom (4) <input type="checkbox"/>	Never (5) <input type="checkbox"/>
--	---------------------------------------	---	--	---------------------------------------

18. I am very motivated to pass this course.

Strongly Agree (5) <input type="checkbox"/>	Agree (4) <input type="checkbox"/>	Neutral (3) <input type="checkbox"/>	Disagree (2) <input type="checkbox"/>	Strongly Disagree (1) <input type="checkbox"/>
---	---------------------------------------	---	--	--



19. I am doing my best to pass the course.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

20. I have *considered* failing the course on purpose.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

21. *I did* fail this course on purpose.

Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

22. I find this course so difficult that I have given up on trying to pass it.

Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

23. The following reason(s) were my motivation to join the army (choose all that apply):

- |  |  |
|--|--|
| (1) <input type="checkbox"/> College Funds | (4) <input type="checkbox"/> Parents               |
| (2) <input type="checkbox"/> Employment    | (5) <input type="checkbox"/> Poor home life        |
| (3) <input type="checkbox"/> Job Training  | (6) <input type="checkbox"/> To serve your country |
|  | (7) <input type="checkbox"/> Other: _____          |

24. The 68W MOS was my first choice for training.

(2)  Yes      (1)  No

Why? \_\_\_\_\_

25. My personal problems affect my academic performance.

Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

26. The 68W MOS is what I expected.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

27. This MOS is very similar to what the recruiter described to me.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

28. The 68W MOS is different than what I expected because:

---

29. I was not aware when I signed up that I might be deployed into combat as a combat medic.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

30. The people I consider my family or people closest to me include the following:  
(check all that apply)

- My spouse
- My children
- My parents
- My friends
- Other \_\_\_\_\_

31. My family or people who are close to me are supportive of me and my role as a combat medic.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

32. My family wants me to find a way out of this course and/or get out of the Army.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

33. The wishes of my family affect my academic performance.

(1)  Yes      (2)  No

34. I can approach my battle buddy to talk to him/her about personal matters and/or problems in my life.

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

35. My battle buddy helps me and is supportive of me in this course.

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

36. There are other people, besides my battle buddy that I can turn to for help and support here.

(2)  Yes      (1)  No

37. I often talk to my battle buddy about my personal or academic problems.

(2)  Yes      (1)  No

38. I perceive my relationship with my battle buddy to be “close.”

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

39. My unit is supportive of me.

Always	Often	Sometimes	Seldom	Never
(5) <input type="checkbox"/>	(4) <input type="checkbox"/>	(3) <input type="checkbox"/>	(2) <input type="checkbox"/>	(1) <input type="checkbox"/>

40. There is not enough tutoring or mentoring available during this course.

Strongly				Strongly
Agree	Agree	Neutral	Disagree	Disagree
(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>	(4) <input type="checkbox"/>	(5) <input type="checkbox"/>

41. I have a spouse or dependent family member here with me.

(1)  Yes      (2)  No

If yes, please list relationships (wife, children etc.)

---

42. The presence of my spouse or dependent family member here with me:

- (2)  Helps my academic performance  
 (1)  Hinders my academic performance  
 (0)  Does not affect me  
 (0)  N/A

43. I am having a difficult time dealing with failure.

- |                              |                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Always                       | Often                        | Sometimes                    | Seldom                       | Never                        |
| (1) <input type="checkbox"/> | (2) <input type="checkbox"/> | (3) <input type="checkbox"/> | (4) <input type="checkbox"/> | (5) <input type="checkbox"/> |

44. I have bonded well with my unit.

- |                              |                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Strongly                     |                              |                              |                              | Strongly                     |
| Agree                        | Agree                        | Neutral                      | Disagree                     | Disagree                     |
| (5) <input type="checkbox"/> | (4) <input type="checkbox"/> | (3) <input type="checkbox"/> | (2) <input type="checkbox"/> | (1) <input type="checkbox"/> |

45. I have a strong sense of belonging here.

- |                              |                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Always                       | Often                        | Sometimes                    | Seldom                       | Never                        |
| (5) <input type="checkbox"/> | (4) <input type="checkbox"/> | (3) <input type="checkbox"/> | (2) <input type="checkbox"/> | (1) <input type="checkbox"/> |

46. I have failed out of the 68W MOS course?

- (1)  Yes                      (2)  No

\*Adapted from Rice, Woods and Bundy (2004). Personal Factors Related to Student Performance and Retention Among 91W Health Care Specialist at Ft. Sam Houston, TX

## Interview

Each volunteer will be interviewed by the PI after they fill out the questionnaire. This is to give the volunteer the opportunity to elaborate, as well as to enable the researcher to make certain they fully understand the issues the volunteer feels helped or hindered their ability to do well in the 91W AIT program.

Four main areas will be covered during the interview: asking for elaboration on questions from the questionnaire; first, the PI will ask for elaboration on any question that falls on either extreme of the spectrum of the Likert Scale and/or each open-ended question on the questionnaire for clarification.; second, ask the volunteer to tell the PI, in their own words, what the main issues were that hindered and that helped their performance; third, ask the volunteer if there were any particular areas of concern (motivation, expectations of training, etc.); and finally, ask if there was any particular mechanism (study hall, counseling, exam review, etc.) that they thought facilitated their success or failure in AIT. In addition to the above areas the volunteer will also be asked if they have any additional information they would like to offer to the PI that may help them fully understand the issues that may influence academic performance during 91W training.

### Examples of questions:

1. Could you please tell me more about your answer on number \_\_\_\_\_?
2. Could you explain why you strongly agree (or strongly disagree) with \_\_\_\_\_ on number \_\_\_\_\_?
3. Could you explain if there were any particular personal areas of concern (motivation, expectations of training, etc.) that you felt either helped you or hindered your performance?
4. What, if any academic assistance (study hall, counseling, exam review, etc.), did you find helpful in this experience. Please describe how it was beneficial to your success or hindered your success?

## APPENDIX C

### HIPAA Form

**BROOKE ARMY MEDICAL CENTER/WILFORD HALL MEDICAL CENTER  
AUTHORIZATION TO USE AND DISCLOSE PROTECTED HEALTH  
INFORMATION FOR RESEARCH  
(APHI Template Version 3, February 04)**

You are being asked for permission to use or disclose your protected health information for research purposes in the research study entitled The Relationship of Non-Cognitive Variables and Their Contribution to Attrition Among Health Care Specialists at Fort Sam Houston, Texas.

The Health Insurance Portability & Accountability Act of 1996, Public Law 104-109 (also known as HIPAA), establishes privacy standards to protect your health information. This law requires the researchers to obtain your authorization (by signing this form) before they use or disclose your protected health information for research purposes in the study listed above.

**Your protected health information that may be used and disclosed in this study includes:**

- *Demographic Information for example age, sex, race, etc.*

**Your protected health information will be used for:**

- *exploration of and understanding the impact of variables such as determination, motivation, self-development, goal setting ability, support system, leadership experience and community involvement as pertains to successful completion of AIT.*

The disclosure of your protected health information is necessary in order to be able to conduct the research project described. Records of your participation in this study may only be disclosed in accordance with state and federal law, including the Privacy Act (5 U.S.C. 552a) and the Health Insurance Portability and Accountability Act of 1996 and its implementing regulations (45 CFR 160 & 164). Note: Protected health information of military service members may be used or disclosed for activities deemed necessary by appropriate military command authorities to ensure the proper execution of the military mission.

By signing this authorization, you give your permission for information gained from your participation in this study to be published in medical literature, discussed for

educational purposes, and used generally to further medical science. You will not be personally identified; all information will be presented as anonymous data.

**The Principal Investigator may use and share your health information with:**

- The BAMC/WHMC Institutional Review Board
- State and Federal Government representatives, when required by law
- **BAMC, WHMC or Department of Defense representatives**
- Texas A&M University, Department of Educational Administration and Human Resource Development

The researchers and those listed above agree to protect your health information by using and disclosing it only as permitted by you in this Authorization and as directed by state and federal law.

You need to be aware that some parties receiving your protected health information may not have the same obligations to protect your protected health information and may re-disclose your protected health information to parties not named here. If your protected health information is re-disclosed, it may no longer be protected by state or federal privacy laws.

**You do not have to sign this Authorization. If you decide not to sign the Authorization:**

- It will not affect your treatment, payment or enrollment in any health plans or affect your eligibility for benefits.
- You may not be allowed to participate in the research study.

**After signing the Authorization, you can change your mind and:**

- Notify the researcher that you have withdrawn your permission to disclose or use your protected health information (revoke the Authorization).
- If you revoke the Authorization, you will send a written letter to Yvette Woods, MAJ SP, Occupational Therapy Section, Brooke Army Medical Center, 3851 Roger Brooke Drive, Ft. Sam Houston, TX 78234 to inform him/her of your decision.
- If you revoke this Authorization, researchers may only use and disclose the protected health information already collected for this research study.
- If you revoke this Authorization your protected health information may still be used and disclosed should you have an adverse event (a bad effect).
- If you withdraw the Authorization, you may not be allowed to continue to participate in the study.

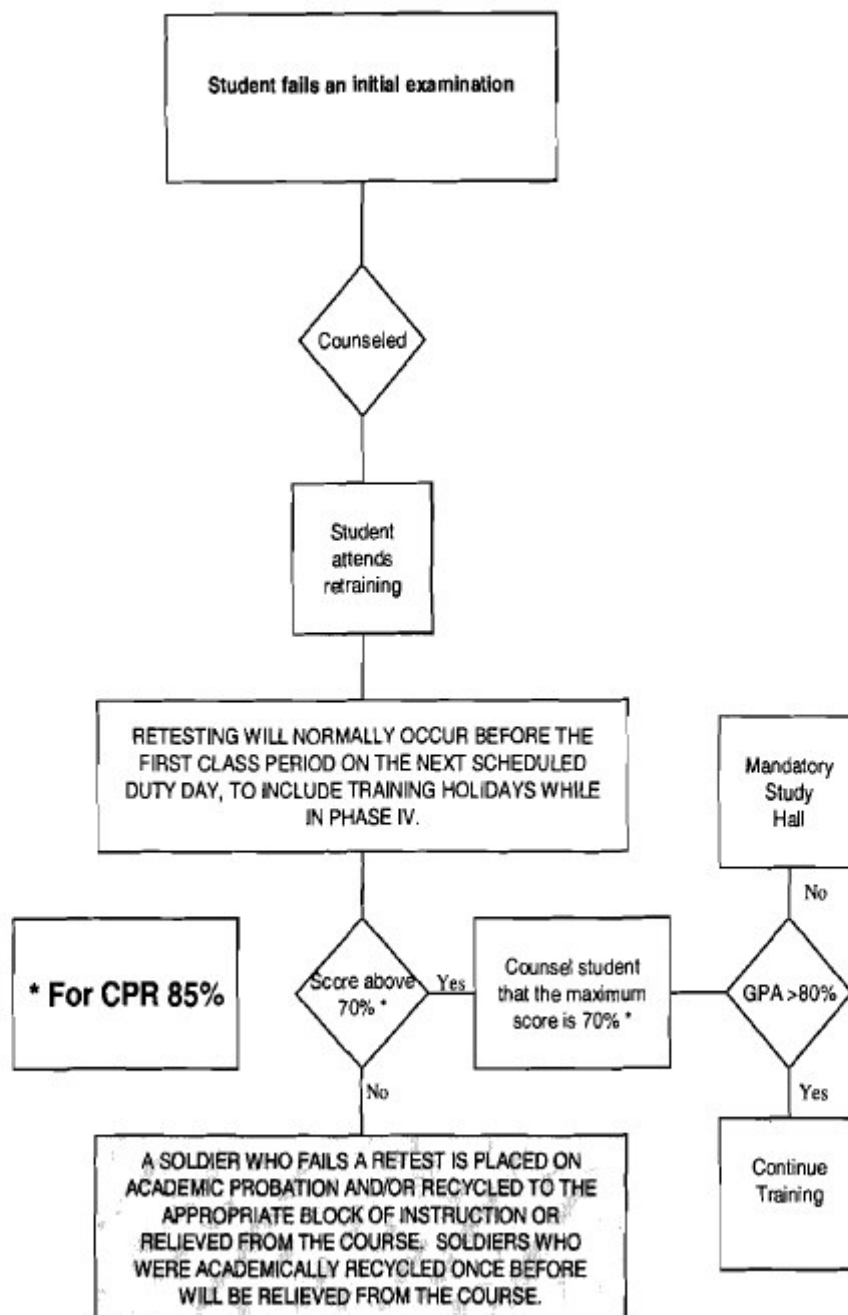




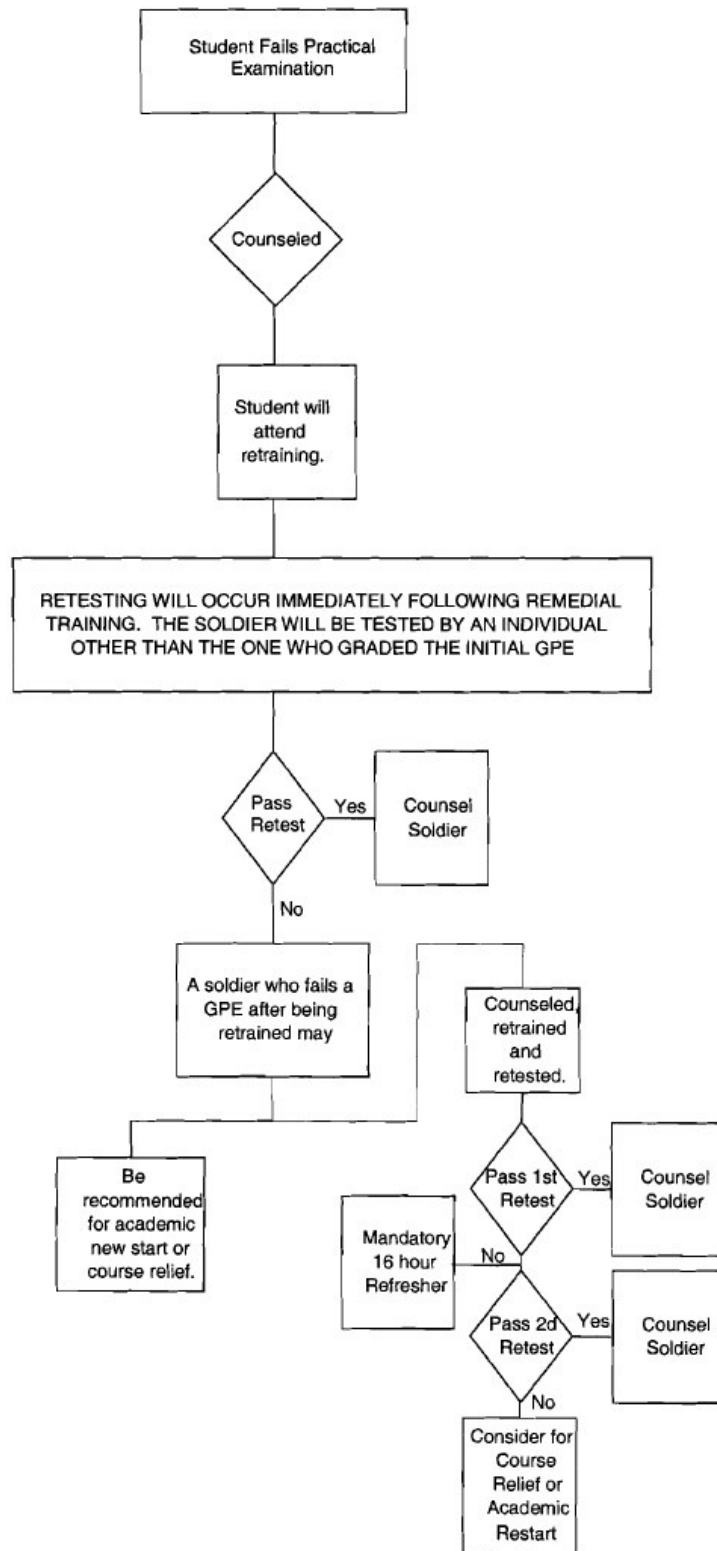
## APPENDIX D

## Retrain/Retest Flowcharts

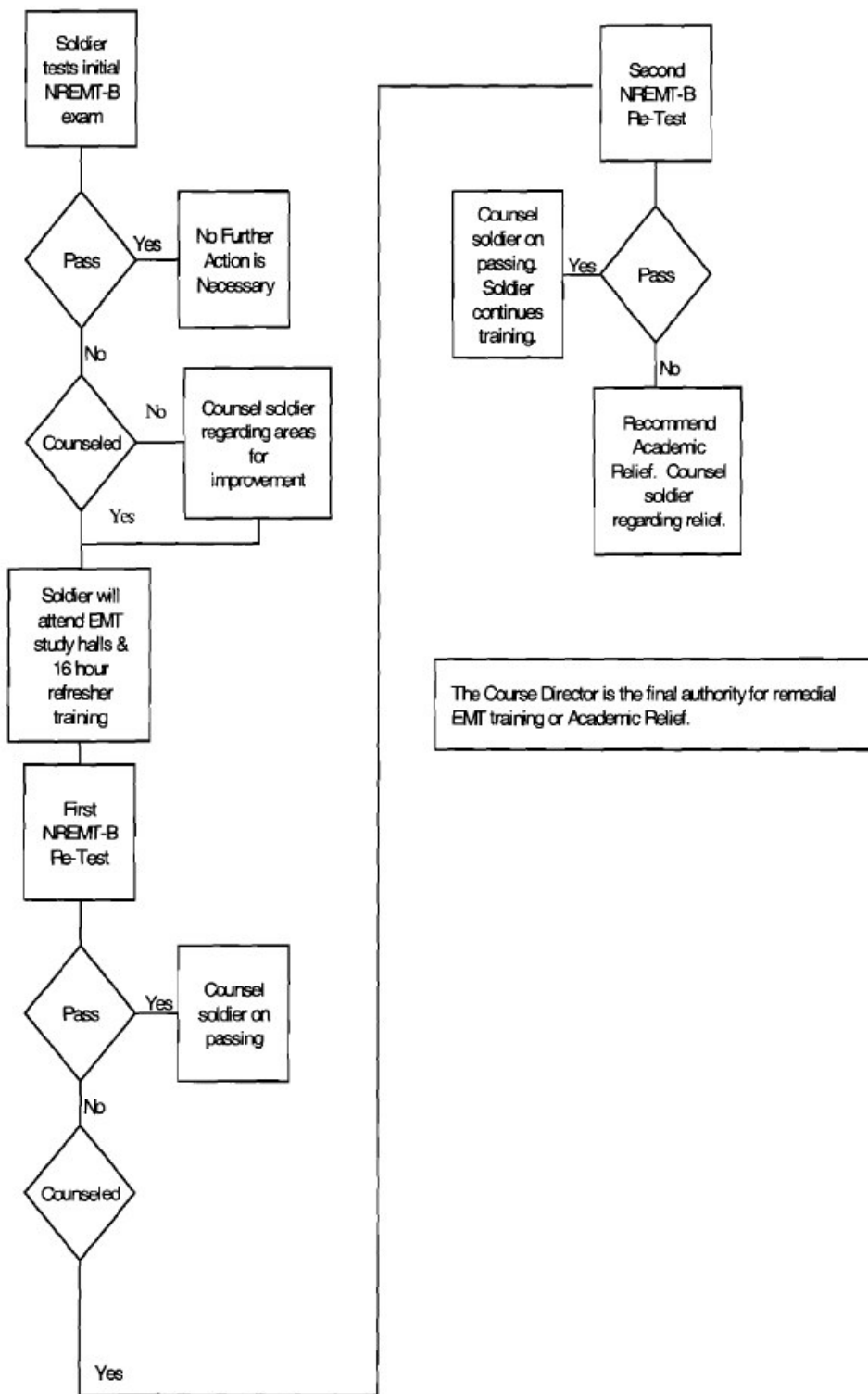
## WRITTEN OR CBT EXAMINATION RETRAINING AND RETESTING



**PRACTICAL EXERCISE RETRAINING AND RETESTING**



### NREMT-B WRITTEN OR CBT EXAMINATION RETRAINING AND RETESTING



## APPENDIX E

		EXAMINATIONS	
Lesson Plan		CBT or Written Exam	GPE
C191W025	CPR	X	X
C191W207	Module 1 (EMT-B)	X	
C191W209	Module 2 (EMT-B)	X	
C191W211	Module 3 (EMT-B)	X	
C191W214	Module 4 (EMT-B)	X	
C191W216	Module 5 (EMT-B)	X	
C191W218	Modules 6 and 7 (EMT-B)	X	
C191W221	DCMT EMT Final	X	
C191W220	NREMT-B Practical and Certification Exam	X	X
C191W055	Initiate and Manage an IV Infusion		X
C191W003	Place a Tourniquet		X
C191W014	Place an Occlusive Dressing		X
C191W014	Needle Chest Decompression		X
C191W029	Invasive Procedures/Core Skills	X	
C191W031	Combat Trauma Treatment/Evacuation	X	
C191W001	Assessment and Management of the Trauma Patient		X
C191W074	Force Health Protection	X	
C191W124	Limited Primary Care/CBRNE	X	
C191W130	Clinical Rotation- Documentation		X
C191W130	Clinical Rotation- Venipuncture		X
C191W130	Clinical Rotation- Vital Signs		X
C191W130	Clinical Rotation- Patient Assessment		X
C191W126	STX- Combat Trauma Lane		X
C191W127	STX- Battalion Aid Station		X
C191W115	STX- MOUT Site		X
C191W114	STX- Dismounted Patrol		X
C191W225	FTX- Combat Trauma Lane		X
C191W121	FTX- Battalion Aid Station		X
C191W122	FTX- MOUT Site		X
C191W120	FTX- Dismounted Patrol		X



**X COMPANY,  
232D MEDICAL BATTALION, CENTER AND SCHOOL  
CLASS 00-00**

Week 2 Hours	MONDAY 23 October 2006		TUESDAY 24 October 2006		WEDNESDAY 25 October 2006		THURSDAY 26 October 2006		FRIDAY 27 October 2006	
	Day 6	Cycle 8	Day 7	Cycle 9	Day 8	Cycle 10	Day 9	Cycle 11	Day 10	Cycle 12
0515 - 0630	Personal Hygiene		RETEST		Personal Hygiene		Personal Hygiene		RETEST	
0700-0750	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0750-0830	Value Trng. Duty		Value Trng. Duty		Value Trng. Duty		Value Trng. Duty		Value Trng. Duty	
0830 - 0920	CPR Exam	C191W025	Human Body- Ch 4	2/3	Vitals & SAMPLE -Ch5 (PE)	2/4	Module 1 Exam	C191W207	Airway Management (PE)	Ch7 7/8
0930 - 1020	CPR PostExam Critique	C191W025	Human Body- Ch 4	3/3	Vitals & SAMPLE-Ch 5 (PE)	3/4	Mod 1 PostExam Critique	C191W207	Airway Management (PE)	Ch7 8/8
1030 - 1120	Intro to Emer Medical Care-Ch1	C191W025	Lifting and Moving Pt-Ch6	1/3	Vitals & SAMPLE-Ch 5 (PE)	4/4	Airway Management (PE)	C191W207	Communication/ Documentation	1/3
1130 - 1220	Well-Being of the EMT-Ch 2	C191W156	Lifting and Moving Pt-Ch6	2/3	Airway Management (LE)/Ch7	1/4	Airway Management (PE)	C191W161	Communication/ Documentation	2/3
1230-1320	Lunch	C191W157	Lunch		Lunch		Lunch		Lunch	
1330 - 1420	Well-Being of the EMT-Ch 2	C191W157	Lifting and Moving Pt-Ch6	3/3	Airway Management (LE)	2/4	Airway Management (PE)	C191W161	Communication/ Documentation	3/3
1430 - 1520	Med/Legal Issues-Ch 3	C191W157	Vitals & SAMPLE -Ch5	1/2	Airway Management (LE)	3/4	Airway Management (PE)	C191W161	Parent Assessment (LE)	Chp 8
1530 - 1620	Med/Legal Issues-Ch 3	C191W158	Vitals & SAMPLE -Ch5	2/2	Airway Management (LE)/Ch7	4/4	Airway Management (PE)	C191W161	Module 2 PreExam Review	
1630 - 1720	Human Body- Ch 4	C191W158	Vitals & SAMPLE -Ch5 (PE)	1/4	Module 1 Pre Exam Review		Airway Management (PE)	C191W161	E/O POSH	
1800-1850	Dinner	C191W159	Dinner		Dinner		Dinner		Dinner	
1900-2200	Reteach		Reteach		Reteach		Reteach		Reteach	
0730-0830	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0830-0920	Museum/ Clothing Sales		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
0930-1020	Museum/ Clothing Sales		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1030-1120	Museum/ Clothing Sales		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1200-1300	Lunch		Lunch		Lunch		Lunch		Lunch	
1300-1350	Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales	
1400-1450	Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales	
1500-1550	Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales	
1600-1650	Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales		Museum/ Clothing Sales	
1730-1830	Dinner		Dinner		Dinner		Dinner		Dinner	
1830-2130										

Location: Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 3 Hours	MONDAY 30 October 2006	TUESDAY 31 October 2006	WEDNESDAY 1 November 2006	THURSDAY 2 November 2006	FRIDAY 3 November 2006
0515 - 0630	Day 11	Day 12	Day 13	Day 14	Day 15
0630 - 0700	Cycle 15	Cycle 16	Cycle 17	Cycle 18	Cycle 19
0700-0750	RETEST	RETEST	RETEST	RETEST	RETEST
0750-0830	Personal Hygiene Breakfast Value Trng. Respect Module 2 Exam	Personal Hygiene Breakfast Value Trng. Respect Patient Assessment (LE) Chp 8	Personal Hygiene Breakfast Value Trng. Respect Patient Assessment Lab # 3 (PE)	Personal Hygiene Breakfast Value Trng. Respect Written Exam Module 3	Personal Hygiene Breakfast Value Trng. Skillless Service CV Emergencies Ch12
0830 - 0920	C191W209	C191W209	L.P.C191W165	L.P.C191W211	L.P.C191W173
0930 - 1020	Module 2 PostExam Critique	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 4 (PE)	Mod 3 PostExam Critique	CV Emergencies Ch12
1030 - 1120	Patient Assessment (LE) Chp 8	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 4 (PE)	Resp Emergencies Ch 11	CV Emergencies Ch12
1130 - 1220	Patient Assessment (LE) Chp 8	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 5 (PE)	Resp Emergencies Ch 11	Diabetic Emergencies Ch 15
1230-1320	Lunch	Lunch	Lunch	Lunch	Lunch
1330 - 1420	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 1 (PE)	Patient Assessment Lab # 5 (PE)	CV Emergencies Chp12	Diabetic Emergencies Ch 15
1430 - 1520	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 2 (PE)	General Pharmacology Ch 10	CV Emergencies Ch12	Neurologic Em Ch 13
1530 - 1620	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 2 (PE)	Resp Emergencies Ch 11	CV Emergencies Ch12	Neurologic Em Ch 13
1630 - 1720	Patient Assessment (LE) Chp 8	Patient Assessment Lab # 3 (PE)	Mod 3 PreExam Review	CV Emergencies Ch12	Acute Abdomen Chp 14
1800-1850	Dinner	Dinner	Dinner	Dinner	Dinner
1900-2200	Retch	Retch	Retch	Retch	Retch
Week 3 Hours	SATURDAY 4 November 2006	SUNDAY 5 November 2006			
0730-0830	Day 11	Day 12			
0830-0920	Cycle 20	Cycle 21			
0930-1020	Breakfast	Breakfast			
1030-1120	CTT	Spiritual Fitness			
1200-1300	Lunch	Spiritual Fitness			
1300-1350	On-post pass	Lunch			
1400-1450	On-post pass				
1500-1550	On-post pass				
1600-1650					
1730-1830	Dinner	Dinner			
1830-2130					

Location: Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 4 Hours	MONDAY 6 November 2006		TUESDAY 7 November 2006		WEDNESDAY 8 November 2006		THURSDAY 9 November 2006		FRIDAY 10 November 2006	
	Day 16	Cycle 22	Day 17	Cycle 23	Day 18	Cycle 24	Day 19	Cycle 25	Day	Cycle 26
0615 - 0630			<b>RETEST</b>							
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>	
0750-0830	Value Trng. Selfless Service		Value Trng. Selfless Service		Value Trng. Selfless Service		Value Trng. Selfless Service		Value Trng. Selfless Service	
0830 - 0920	Allergic Reactions/Enven Ch 16 1/2	L.P.C191W175	Cardiac Scenarios (Clinical)	L.P.C191W173	Respiratory Scenarios (Clinical)	L.P.C191W172	Written Exam Module 4	L.P.C191W214	Value Trng. Personal Courage	
0930 - 1020	Allergic Reactions/Enven Chp 16 2/2	L.P.C191W175	Cardiac Scenarios (Clinical)	L.P.C191W173	Kinemematics of Trauma Ch. 22 1/2	Post - Exam Critique Mod 4	Post - Exam Critique Mod 4	L.P.C191W214		
1030 - 1120	Substance Abuse/OD Ch 17 1/2	L.P.C191W176	Cardiac Scenarios (Clinical)	L.P.C191W173	Kinemematics of Trauma Ch. 22 2/2	Bleeding Chp 22	Bleeding Chp 22	L.P.C191W179		
1130 - 1220	Substance Abuse/ OD Chp 17 2/2	L.P.C191W176	Cardiac Scenarios (Clinical)	L.P.C191W173	<b>Mod 4 PreExam Review</b>	Bleeding Chp 22	Bleeding Chp 22	L.P.C191W179		
1230-1320	<b>Lunch</b>	L.P.C191W176	<b>Lunch</b>	L.P.C191W173	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	L.P.C191W179	<b>Lunch</b>	
1330 - 1420	Env Emergencies Ch 18 1/2	L.P.C191W177	Cardiac Scenarios (Clinical)	L.P.C191W173	<b>Warrior Ethos Training</b>	Shock Chp 23	Shock Chp 23	L.P.C191W202		
1430 - 1520	Env Emergencies Ch 18 2/2	L.P.C191W177	Cardiac Scenarios (Clinical)	L.P.C191W173	<b>Warrior Ethos Training</b>	Shock Chp 23	Shock Chp 23	L.P.C191W202		
1530 - 1620	Beh Em Ch 19 1/2	L.P.C191W178	Cardiac Scenarios (Clinical)	L.P.C191W173	<b>Warrior Ethos Training</b>	Soft Tissue Injuries Chp 24 1/2	Soft Tissue Injuries Chp 24	L.P.C191W202		
1630 - 1720	Beh Em Ch 19 2/2	L.P.C191W178	Respiratory Scenarios (Clinical)	L.P.C191W175	<b>AWOL Apprehension Class</b>	Soft Tissue Injuries Ch 24 2/2	Soft Tissue Injuries Ch 24	L.P.C191W180		
1800-1850	<b>Dinner</b>	L.P.C191W178	<b>Dinner</b>	L.P.C191W178	<b>Dinner</b>	<b>Dinner</b>	<b>Dinner</b>	L.P.C191W180	<b>Dinner</b>	
1900-2200							<b>Reteach</b>	L.P.C191W214		
<b>Week 4 Hours</b>	<b>SATURDAY 11 November 2006</b>		<b>SUNDAY 12 November 2006</b>							
0730-0830		<b>Cycle 27</b>		<b>Cycle 28</b>						
0830-0920	<b>Breakfast</b>		<b>Breakfast</b>							
0930-1020	Spiritual Fitness		Spiritual Fitness							
1030-1120	Spiritual Fitness		Spiritual Fitness							
1200-1300	<b>Lunch</b>		<b>Lunch</b>							
1300-1350										
1400-1450										
1500-1550										
1600-1650										
1750-1830	<b>Dinner</b>		<b>Dinner</b>							
1830-2130										

Location: Company Area & Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)



**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 5 Hours	MONDAY 13 November 2006		TUESDAY 14 November 2006		WEDNESDAY 15 November 2006		THURSDAY 16 November 2006		FRIDAY 17 November 2006	
	Day 20	Cycle 29	Day 21	Cycle 30	Day 22	Cycle 31	Day 23	Cycle 32	Day 24	Cycle 33
0515 - 0630	<b>RETEST</b>									
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0730	<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>	
0730-0830	Value Trng. Personal Courage		Value Trng. Honor		Value Trng. Honor		Value Trng. Honor		Value Trng. Honor	
0830 - 0920	<b>TRAINING HOLIDAY</b>		Eye Injuries Ch 25	1/1	Bleeding Control & Shock Mgmt (PE)		Face & Throat Injuries (PE)		<b>Written Exam Mod 5</b>	
0930 - 1020			Chest Injuries	1/1	Bleeding Control & Shock Mgmt (PE)		Face & Throat Injuries (PE)		<b>Mod 5 Post-Exam Critique</b>	
1030 - 1120			Abdomen & Genital Injuries	1/1	Bleeding Control & Shock Mgmt (PE)		Face & Throat Injuries (PE)		OB / GYN Emergencies	
1130 - 1220			Musculoskeletal Care Chp 29	1/2	Bleeding Control & Shock Mgmt (PE)		Face & Throat Injuries (PE)		OB / GYN Emergencies	
1230-1320	<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>	
1330 - 1420			Musculoskeletal Care Chp 29	2/2	Bleeding Control & Shock Mgmt (PE)		Musculoskeletal Care (PE)		OB / GYN Emergencies	
1430 - 1520			Head & Spine Injuries Chp30	1/3	Bleeding Control & Shock Mgmt (PE)		Musculoskeletal Care (PE)		OB / GYN Emergencies	
1530 - 1620			Head & Spine Injuries Chp30	2/3	Bleeding Control & Shock Mgmt (PE)		Musculoskeletal Care (PE)		Geriatric Assessment	1/2
1630 - 1720			Head & Spine Injuries Ch30	3/3	Face & Throat Injuries Chp 26	1/1	<b>Pre - Exam Review Mod 5</b>		Geriatric Assessment	2/2
1800-1850	<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>	
1900-2200										
<b>SATURDAY</b> 18 November 2006										
0730-0930	<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>	
0930-1020	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1030-1120	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1130-1150	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1200-1400	<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>	
1400-1450										
1500-1550										
1600-1650										
1700-1750										
1750-1920	<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>		<b>Dinner</b>	
1930-2130									<b>Research</b>	

Location: Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 6 Hours	MONDAY 20 November 2006		TUESDAY 21 November 2006		WEDNESDAY 22 November 2006		THURSDAY 23 November 2006		FRIDAY 24 November 2006	
	Day 25	Cycle 36	Day 26	Cycle 37	Day 27	Cycle 38	Day 28	Cycle 39	Day 29	Cycle 40
0515 - 0630	<b>RETEST</b>		<b>DAFPT # 2</b>		<b>2nd Combatives</b>		<b>THANKSGIVING DAY</b>		<b>TRAINING HOLIDAY</b>	
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>		<b>Breakfast</b>	
0750-0830	Value Trng. Integrity		Value Trng. Integrity		Value Trng. Integrity		Value Trng. Integrity		Value Trng. Integrity	
	Pediatric Assessment	1/2	OB / GYN Scenarios	(PE)	All Skills Prep		All Skills Prep		All Skills Prep	
0830 - 0920	Pediatric Assessment	LP C191W185	OB / GYN Scenarios	LP C191W184	All Skills Prep	LP C191W219	All Skills Prep	LP C191W219	All Skills Prep	
0930 - 1020		2/2		(PE)						
1030 - 1120	Peds Airway/Med Em Ch 32	LP C191W185	Pediatric Airway / Medical Emergencies (PE)	LP C191W184	All Skills Prep	LP C191W219	All Skills Prep	LP C191W219	All Skills Prep	
		1/2								
1130 - 1220	Peds Airway/Med Em Ch 32	LP C191W186	Pediatric Airway / Medical Emergencies (PE)	LP C191W186	All Skills Prep	LP C191W219	All Skills Prep	LP C191W219	All Skills Prep	
		2/2								
1230-1320	<b>Lunch</b>	LP C191W186	<b>Lunch</b>	LP C191W186	<b>Lunch</b>	LP C191W186	<b>Lunch</b>	LP C191W186	<b>Lunch</b>	
1330 - 1420	Peds Trauma	1/1	Pediatric Airway / Medical Emergencies (PE)	LP C191W186	All Skills Prep	LP C191W219	All Skills Prep	LP C191W219	All Skills Prep	
				1/1						
1430 - 1520	Gaming Access	LP C191W166	Pediatric Trauma (PE)	LP C191W166	All Skills Prep	LP C191W219	All Skills Prep	LP C191W219	All Skills Prep	
1530 - 1620	Ambulance Operations	LP C191W188	Response to Terrorism/WMD	LP C191W166	Pre-Exam Review Module 6 & 7	LP C191W218	Pre-Exam Review Module 6 & 7	LP C191W218	Pre-Exam Review Module 6 & 7	
1630 - 1720	Special Operations	LP C191W187	Response to Terrorism/WMD	LP C191W169	Pre-Exam Review Module 6 & 7	LP C191W218	Pre-Exam Review Module 6 & 7	LP C191W218	Pre-Exam Review Module 6 & 7	
1800- 1850	<b>Dinner</b>	LP C191W189	<b>Dinner</b>	LP C191W169	<b>Dinner</b>	LP C191W218	<b>Dinner</b>	LP C191W218	<b>Dinner</b>	
1900-2200										

Week 6 Hours	SATURDAY 25 November 2006		SUNDAY 26 November 2006	
	Day 30	Cycle 41	Day 31	Cycle 42
0730-0930	<b>Breakfast</b>		<b>Breakfast</b>	
0930-1020	Combat Meds Run		Spiritual Fitness	
1030-1120			Spiritual Fitness	
1130-1150			Spiritual Fitness	
1200-1400	<b>Lunch</b>		<b>Lunch</b>	
1400-1430				
1500-1550				
1600-1650				
1700-1720				
1730-1930	<b>Dinner</b>		<b>Dinner</b>	
1930-2130				

Location: Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 7 Hours	MONDAY 27 November 2006		TUESDAY 28 November 2006		WEDNESDAY 29 November 2006		THURSDAY 30 November 2006		FRIDAY 1 December 2006	
	Day/28	Cycle/43	Day/29	Cycle/44	Day/30	Cycle/45	Day/31	Cycle/46	Day/32	Cycle/47
0515 - 0630	Personal Hygiene		RETEST		Personal Hygiene		RETEST/3rd Combatives		Personal Hygiene	
0630 - 0700	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0700-0750	Value Trng. Personal Courage		Value Trng. Personal Courage		Value Trng. Personal Courage		Value Trng. Personal Courage		Value Trng. Personal Courage	
0750-0830	Written Exam Module 6 & 7		All Skills Prep		DCMT Final Written Exam		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
0830 - 0920		L.P. C191W218		L.P. C191W219		L.P. C191W221		L.P. C191W220		L.P. C191W220
0930 - 1020	Written Exam Module 6 & 7		All Skills Prep		DCMT Final Written Exam		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W218		L.P. C191W219		L.P. C191W221		L.P. C191W220		L.P. C191W220
1030 - 1120	Post- Exam Review Module 6 & 7		All Skills Prep		DCMT Final Written Exam		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W218		L.P. C191W219		L.P. C191W221		L.P. C191W220		L.P. C191W220
1130 - 1220	Post- Exam Review Module 6 & 7		All Skills Prep		Final Exam Critique		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W218		L.P. C191W219		L.P. C191W221		L.P. C191W220		L.P. C191W220
1230-1320	Lunch		Lunch		Lunch		Lunch		Lunch	
	All Skills Prep		All Skills Prep		NREMT Paperwork		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
1330 - 1420		L.P. C191W219		L.P. C191W219		L.P. C191W219		L.P. C191W220		L.P. C191W220
1430 - 1520	All Skills Prep		Module Review (LE)		All Skills Prep		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W219		L.P. C191W109		L.P. C191W219		L.P. C191W220		L.P. C191W220
1530 - 1620	All Skills Prep		Module Review (LE)		All Skills Prep		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W219		L.P. C191W109		L.P. C191W219		L.P. C191W220		L.P. C191W220
1630 - 1720	All Skills Prep		Module Review (LE)		All Skills Prep		(GPE) NREMT Skills Exam		(GPE) NREMT Skills Exam	
		L.P. C191W219		L.P. C191W109		L.P. C191W219		L.P. C191W220		L.P. C191W220
1800-1850	Dinner		Dinner		Dinner		Dinner		Dinner	
	Reteach				Reteach					
1900-2200		L.P. C191W218		L.P. C191W218		L.P. C191W221		L.P. C191W220		L.P. C191W220
<b>SATURDAY</b> 2 December 2006										
<b>SUNDAY</b> 3 December 2006										
0730-0830	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0930-1020	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1030-1120	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1130-1150	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1200-1400	Lunch		Lunch		Lunch		Lunch		Lunch	
1400-1450										
1500-1550										
1600-1650										
1700-1720										
1730-1930	Dinner		Dinner		Dinner		Dinner		Dinner	
1930-2130										

Location: Bldg 1375 Rms: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 8 Hours	MONDAY 4 December 2006		TUESDAY 5 December 2006		WEDNESDAY 6 December 2006		THURSDAY 7 December 2006		FRIDAY 8 December 2006	
	Day	Cycle	Day	Cycle	Day	Cycle	Day	Cycle	Day	Cycle
0515 - 0630										
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0750-0830	Value Trng. Loyalty		Value Trng. Loyalty		Value Trng. Loyalty		Value Trng. Loyalty		Value Trng. Loyalty	
0830 - 0920	Module Review (LE)		NREMT Written Exam 1-50 questions		Sickcall and Med Documentation		Sickcall and Med Documentation (PE)		SKIN DISEASES	
		L.P. C191W220	NREMT Written Exam 1-50 questions	National Registry	L.P. C191W053	L.P. C191W053	L.P. C191W053	L.P. C191W053	L.P. C191W043	
0930 - 1020	Module Review (LE)		NREMT Written Exam 1-50 questions	National Registry	L.P. C191W053	L.P. C191W053	L.P. C191W194	L.P. C191W194	SKIN DISEASES	
1030 - 1120	Module Review (LE)		NREMT Written Exam 1-50 questions	National Registry	L.P. C191W053	L.P. C191W053	Pharmacology/Medication Admin	Pharmacology/Medication Admin	SKIN DISEASES	
1130 - 1220	Module Review (LE)		MicroSim Prep		Sickcall and Med Documentation	L.P. C191W053	Pharmacology/Medication Admin	Pharmacology/Medication Admin	SKIN DISEASES	
1230-1320	Lunch		Lunch		Sickcall and Med Documentation (PE)	L.P. C191W053	Lunch	Lunch	FEENT DISORDERS	
1330 - 1420	Module Review (LE)		MicroSim Prep		Sickcall and Med Documentation (PE)	L.P. C191W053	Immunizations/Chemoprophylaxis	Immunizations/Chemoprophylaxis	FEENT DISORDERS	
1430 - 1520	Module Review (LE)		MicroSim Prep		Sickcall and Med Documentation (PE)	L.P. C191W053	L.P. C191W048	L.P. C191W048	FEENT DISORDERS (PE)	
1530 - 1620	Module Review (LE)		MicroSim Prep		Sickcall and Med Documentation (PE)	L.P. C191W053	Immunizations/Chemoprophylaxis	Immunizations/Chemoprophylaxis	FEENT DISORDERS (PE)	
1630 - 1720	10% Commanders Survey		MicroSim Prep		Sickcall and Med Documentation (PE)	L.P. C191W053	Basic Wound Care	Basic Wound Care	FEENT DISORDERS (PE)	
1800-1850	Dinner		Dinner		Sickcall and Med Documentation (PE)	L.P. C191W053	Basic Wound Care	Basic Wound Care	FEENT DISORDERS (PE)	
1900-2200					Dinner	L.P. C191W053	Dinner	Dinner	Dinner	
										NREMT RESULTS STUDY HALL
Week 8 Hours	SATURDAY 9 December 2006		SUNDAY 10 December 2006							
0710-0930										
0930-1020	Breakfast		Breakfast							
1030-1120	Spiritual Fitness		Spiritual Fitness							
1130-1150	Spiritual Fitness		Spiritual Fitness							
1200-1400	Lunch		Lunch							
1400-1450	NREMT STUDY HALL		NREMT STUDY HALL							
1500-1550										
1600-1650										
1700-1720	Dinner		Dinner							
1730-1930										
1930-2130										

Location: Bldg 1375 Rm: 328, 340, 341, 350, 351, 362, 363

UNIFORM: BDUs (unless otherwise indicated)



**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 10 Hours	MONDAY 18 December 2006		TUESDAY 19 December 2006		WEDNESDAY 20 December 2006		THURSDAY 21 December 2006		FRIDAY 22 December 2006	
	Day 43	Cycle 64	Day	Cycle 65	Day	Cycle 66	Day	Cycle 67	Day	Cycle 68
0615 - 0630	RETEST									
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0750-0830	Value Trng. Respect		Value Trng. Respect		Value Trng. Respect		Value Trng. Respect		Value Trng. Respect	
0830 - 0920	W-Training Team Orientation		EXODUS PREP		EXODUS PREP		EXODUS PREP		EXODUS	
		C191W162								
0930 - 1020	Combar. Aulbag		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		C191W081								
1030 - 1120	Int. Humanitarian Law and Geneva Conv.		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W223								
1130 - 1220	Int. Humanitarian Law and Geneva Conv.		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W223								
1230-1320	Lunch		Lunch		Lunch		Lunch		Lunch	
1330 - 1420	Introduction to Medical Threat		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W011								
1430 - 1520	Introduction to Medical Threat		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W011								
1530 - 1620	Waste Disposal in the Field		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W016								
1630 - 1720	Heat Weather Injuries		EXODUS PREP		EXODUS PREP		EXODUS PREP			
		L.P. C191W056								
1800-1850	Dinner		Dinner		Dinner		Dinner		Dinner	
1900-2200										
Week 10 Hours	SATURDAY 23 December 2006		SUNDAY 24 December 2006							
		Cycle 69		Cycle 70						
0730-0930	Breakfast		Breakfast							
			Spiritual Fitness							
1030-1120			Spiritual Fitness							
1130-1150			Spiritual Fitness							
1200-1400	Lunch		Lunch							
1400-1450										
1500-1550										
1600-1650										
1700-1720										
1730-1930	Dinner		Dinner							
1930-2130										

Location: Bldg 1374 Rms: 227, 228, 240, 241, 363 Bldg 1375 Rms: 262, 263 & Company Area  
Location: COMPANY AREA

UNIFORM: BDUs (unless otherwise indicated)







**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 13 Hours	MONDAY 8 January 2007	TUESDAY 9 January 2007	WEDNESDAY 10 January 2007	THURSDAY 11 January 2007	FRIDAY 12 January 2007
0515 - 0630	Day 146 <b>RETEST</b>	Day 147 <b>DAFFT # 3</b>	Day 148 <b>1st Road March</b>	Day 149 <b>5th Combatives</b>	Day 150 <b>RETEST</b>
0630 - 0700	Personal Hygiene	Personal Hygiene	Personal Hygiene	Personal Hygiene	Personal Hygiene
0700-0750	<b>Breakfast</b>	<b>Breakfast</b>	<b>Breakfast</b>	<b>Breakfast</b>	<b>Breakfast</b>
0830-0920	Value Trng. Integrity Basic Math & Calculate an IV Flow Rate	Value Trng. Integrity Tactical Combat Casualty Care	Value Trng. Integrity Invasive Core Skills Round Robin	Value Trng. Integrity Written Exam - Invasive Procedure/ Core Skills	Value Trng. Integrity <b>Cougar War Day</b>
0930 - 1020	LP C191W056 Initiate & Manage Intravenous Infusion	LP C191W144 Tactical Combat Casualty Care	LP C191W029 Invasive Core Skills Round Robin	LP C191W029 Post Exam Review - Invasive Procedure/Core Skills	LP C191W029
1030 - 1120	LP C191W055 Initiate & Manage Intravenous Infusion	LP C191W144 Tactical Combat Casualty Care	LP C191W029 Invasive Core Skills Round Robin	LP C191W029 Introduction to Ballistics	LP C191W029
1130 - 1220	LP C191W055 Initiate & Manage Intravenous Infusion	LP C191W144 Control Bleeding and Hypovolemic Shock	LP C191W029 Invasive Core Skills Round Robin	LP C191W015 Assess & Initial Manage of the Trauma Pt	LP C191W015
1230-1320	LP C191W055 <b>Lunch</b>	LP C191W003 <b>Lunch</b>	LP C191W003 <b>Lunch</b>	LP C191W001 <b>Lunch</b>	LP C191W001 <b>Lunch</b>
1330 - 1420	Airway Management	Control Bleeding and Hypovolemic Shock	Invasive Core Skills Round Robin	Assess & Initial Manage of the Trauma Pt	Assess & Initial Manage of the Trauma Pt
1430 - 1520	Airway Management	Treat for Shock	Invasive Core Skills Round Robin	Battlefield Medications	Battlefield Medications
1530 - 1620	Airway Management (PE)	Treat for Shock	Invasive Core Skills Round Robin	Head Injuries	Head Injuries
1630 - 1720	Airway Management (PE)	Obtain and Label Blood Specimen	LP C191W004 Review - Invasive Procedure/Core Skills	LP C191W007 Ocular Injuries	LP C191W007 Ocular Injuries
1800-1850	<b>Dinner</b>	<b>Dinner</b>	LP C191W065 <b>Dinner</b>	LP C191W006 <b>Dinner</b>	LP C191W006 <b>Dinner</b>
1900-2200				<b>RETEACH</b>	<b>Dinner</b>
					LP C191W029
<b>Week 13 Hours</b>	<b>SATURDAY 13 January 2007</b>	<b>SUNDAY 14 January 2007</b>			
0730-0930	Cycle 85 <b>Breakfast</b>	Cycle 86 <b>Breakfast</b>	Cycle 87 <b>Breakfast</b>	Cycle 88 <b>Breakfast</b>	Cycle 89 <b>Breakfast</b>
0930-1020	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness
1030-1120	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness	Spiritual Fitness
1130-1150	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>	<b>Lunch</b>
1200-1400					
1400-1450					
1500-1550					
1600-1650					
1700-1720					
1730-1930	<b>Dinner</b>	<b>Dinner</b>	<b>Dinner</b>	<b>Dinner</b>	<b>Dinner</b>
1930-2130					

**Location: Company Area & Bldg 1374 Rms: 327, 328, 340, 341, 350, 351, 362 & ST 6 Trng Area  
Location: STX Site**

**UNIFORM: BDUs (unless otherwise indicated)**



**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 15 Hours	MONDAY 22 January 2007		TUESDAY 23 January 2007		WEDNESDAY 24 January 2007		THURSDAY 25 January 2007		FRIDAY 26 January 2007	
	Day/55	Cycle/99	Day/56	Cycle/100	Day/57	Cycle/101	Day/58	Cycle/102	Day/59	Cycle/103
0615 - 0630					<b>RAPF</b>					
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0750-0830	Value Trng. Loyalty		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #1 Bleeding & IV (PE)	
0830 - 0920	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
0930 - 1020	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1030 - 1120	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1130 - 1220	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1230-1320	Lunch		Lunch		Lunch		Lunch		Lunch	
1330 - 1420	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1430 - 1520	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1530 - 1620	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1630 - 1720	COMBAT TRAUMA ROUND ROBIN TRAINING (PE)		Trauma Clinic #1 Bleeding & IV (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)		Trauma Clinic #2 Surgical Ctr/ 2 Pt lanes (PE)	
1800-1850	Dinner		Dinner		Dinner		Dinner		Dinner	
1900-2200										

Week 15 Hours	SATURDAY 27 January 2007		SUNDAY 28 January 2007	
	Day/55	Cycle/104	Day/56	Cycle/105
0630-0730				
0730-0830	Breakfast		Breakfast	
0930-1020			Spiritual Fitness	
1030-1120			Spiritual Fitness	
1130-1150			Spiritual Fitness	
1200-1400	Lunch		Lunch	
1400-1450				
1500-1550				
1600-1650				
1700-1720	Dinner		Dinner	
1730-1930				

Location: WHISKEY TRNG AREA

UNIFORM: BDUs (unless otherwise indicated)

**X COMPANY,  
232D MEDICAL BATTALION, CENTER AND SCHOOL  
CLASS 00-00**

Week 16 Hours	MONDAY 29 January 2007		TUESDAY 30 January 2007		WEDNESDAY 31 January 2007		THURSDAY 1 February 2007		FRIDAY 2 February 2007	
	Day 106	Cycle 106	Day 107	Cycle 107	Day 108	Cycle 108	Day 109	Cycle 109	Day 110	Cycle 110
0515 - 0630										
0630 - 0700	Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene		Personal Hygiene	
0700-0750	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0750-0830	Value Trng. Duty		Value Trng. Loyalty		Value Trng. Duty		Value Trng. Duty		Value Trng. Duty	
0830 - 0920	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
0930 - 1020	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1030 - 1120	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1130 - 1220	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1230-1320	Lunch		Lunch		Lunch		Lunch		Lunch	
1330 - 1420	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1430 - 1520	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1530 - 1620	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1630 - 1720	COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003		COMBAT TRAUMA LANES TRAINING (GPE) LP C191W001/002/003	
1800-1850	Dinner		Dinner		Dinner		Dinner		Dinner	
1900-2000										
0730-0930										
0930-1020	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
1030-1120	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1130-1150	Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness		Spiritual Fitness	
1200-1400	Lunch		Lunch		Lunch		Lunch		Lunch	
1400-1450										
1500-1550										
1600-1650										
1700-1750										
1730-1930	Dinner		Dinner		Dinner		Dinner		Dinner	
1930-2130										

Location: WHISKEY & STX TRNG AREA

UNIFORM: BDUs (unless otherwise indicated)



**X COMPANY,  
232D MEDICAL BATTALION, CENTER AND SCHOOL  
CLASS 00-00**

Week 17 Hours	MONDAY 17 February 2007		TUESDAY 14 February 2007		WEDNESDAY 14 February 2007		THURSDAY 15 February 2007		FRIDAY 16 February 2007	
	Day/70	Cycle/20	Day/71	Cycle/21	Day/72	Cycle/22	Day/73	Cycle/23	Day/74	Cycle/24
0515 - 0630	Personal Hygiene		Personal Hygiene							
0630 - 0700	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0700-0750	Value Trng. Duty		Value Trng. Duty		Value Trng. Respect		Value Trng. Respect		Value Trng. Respect	
0750-0830	Scenario Training / Clinical Rotation	Clinical LPs C191W130	Scenario Training / Clinical Rotation	Clinical LPs C191W130	FTX PREP		FTX PREP		FTX PREP	
0830 - 0920	STX LPs C191W114,115,126,127,224		STX LPs C191W114,115,126,127,224		FTX PREP		FTX PREP		FTX PREP	
0930 - 1020	Scenario Training / Clinical Rotation	Clinical LPs C191W130	Scenario Training / Clinical Rotation	Clinical LPs C191W130	FTX PREP		FTX PREP		FTX PREP	
1030 - 1120	STX LPs C191W114,115,126,127,224		STX LPs C191W114,115,126,127,224		FTX PREP		FTX PREP		FTX PREP	
1130 - 1220	Scenario Training / Clinical Rotation	Clinical LPs C191W130	Scenario Training / Clinical Rotation	Clinical LPs C191W130	FTX PREP		FTX PREP		FTX PREP	
1230-1320	Lunch		Lunch		Lunch		Lunch		Lunch	
1330 - 1420	Scenario Training / Clinical Rotation	Clinical LPs C191W130	Scenario Training / Clinical Rotation	Clinical LPs C191W130	FTX PREP		FTX PREP		FTX PREP	
1430 - 1520	STX LPs C191W114,115,126,127,224		STX LPs C191W114,115,126,127,224		FTX PREP		FTX PREP		FTX PREP	
1530 - 1620	Scenario Training / Clinical Rotation	Clinical LPs C191W130	Scenario Training / Clinical Rotation	Clinical LPs C191W130	FTX PREP		FTX PREP		FTX PREP	
1630 - 1720	STX LPs C191W114,115,126,127,224		STX LPs C191W114,115,126,127,224		FTX PREP		FTX PREP		FTX PREP	
1800-1850	Dinner		Dinner		Dinner		Dinner		Dinner	
1900-2200										
<b>SATURDAY 17 February 2007</b>										
0730-0930	Breakfast		Breakfast		Breakfast		Breakfast		Breakfast	
0930-1020	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1030-1120	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1130-1150	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1200-1400	Lunch		Lunch		Lunch		Lunch		Lunch	
1400-1450	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1500-1550	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1600-1650	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1700-1720	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225	FTX	C191E120/21/122225
1750-1930	Dinner		Dinner		Dinner		Dinner		Dinner	
1930-2130										

Location: STX TRNG AREA & SMIS

UNIFORM: BDUs (unless otherwise indicated)



**X COMPANY,  
CLASS 00-00  
232D MEDICAL BATTALION, CENTER AND SCHOOL**

Week 17 Hours	MONDAY 26 February 2007		TUESDAY 27 February 2007		WEDNESDAY 28 February 2007		THURSDAY 1 March 2007		FRIDAY 2 March 2007	
	Day 80	Cycle 134	Day 81	Cycle 135	Day	Cycle	Day	Cycle	Day	Cycle
0515 - 0630			Personal Hygiene							
0630 - 0700			Breakfast		Breakfast		Breakfast		Breakfast	
0700-0750			Value Time Duty		Value Time, Respect		Value Time, Respect		Value Time, Respect	
0750-0830			CIF Turn-In		Graduation (0900)					
0830 - 0920										
0930 - 1020			CIF Turn-In		Graduation (0900)					
1030 - 1120			CIF Turn-In		Graduation (0900)					
1130 - 1220			CIF Turn-In		Graduation (0900)					
1230-1320			Lunch		Lunch		Lunch		Lunch	
1330 - 1420			GRADUATION PRACTICE		(1330) Cadre Serving Station					
1430 - 1520			GRADUATION PRACTICE		BN CDR / Course Dir					
1530 - 1620			GRADUATION PRACTICE							
1630 - 1720			GRADUATION PRACTICE							
1800-1850			Dinner		Dinner		Dinner		Dinner	
1900-2200			Graduation Dinner (1800)							
<b>SATURDAY</b>										
0730-0930			Breakfast		Breakfast		Breakfast		Breakfast	
0930-1020					Spiritual/Francis		Spiritual/Francis		Spiritual/Francis	
1030-1120					Spiritual/Francis		Spiritual/Francis		Spiritual/Francis	
1130-1159					Spiritual/Francis		Spiritual/Francis		Spiritual/Francis	
1200-1400			Lunch		Lunch		Lunch		Lunch	
1400-1450										
1500-1550										
1600-1650										
1700-1720										
1730-1930			Dinner		Dinner		Dinner		Dinner	
1930-2130										

Location: Company Area

UNIFORM: BDUs (unless otherwise indicated)



## VITA

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