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**ASSESSING THE IMPACT OF THE WORK ENVIRONMENT ON TRAINING  
TRANSFER: AN INVESTIGATION OF THE AIR FORCE ACQUISITION  
MANAGEMENT COURSE**

THESIS

Anita C. Springs, MSgt, USAF

*AFIT/GIR/ENV/07-J4*

**DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY  
*AIR FORCE INSTITUTE OF TECHNOLOGY*  
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APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

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**AFIT/GIR/ENV/07-J4**

ASSESSING THE IMPACT OF THE WORK ENVIRONMENT ON TRAINING  
TRANSFER: AN INVESTIGATION OF THE AIR FORCE ACQUISITION  
MANAGEMENT COURSE

THESIS

Presented to the Faculty

Department of Systems and Engineering Management

Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the  
Degree of Master of Science in Information Resource Management

Anita C. Springs, BS, MS

MSgt, USAF

June 2007

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**Abstract**

This study aims to contribute to the body of knowledge as it pertains to our understanding of the relationship between work environment characteristics that influence training transfer. Specifically, this research will examine if training transfer is influenced by: top management support, supervisor support, peer support, organization learning culture, opportunity to perform, task difficulty, task constraints and acquisition category levels. The research is based on a 134 question survey completed by Air Force Acquisition Managers participating in the Air Force Fundamentals of Acquisition Management (AFFAM) course, and is designed to determine if knowledge, skills and attitudes learned in the instruction setting are being applied to the job. Data collected from the AFFAM students, 5 – 18 months after AFFAM course completion, is analyzed using the Statistical Package for the Social Sciences to conclude that all work environment characteristics studied are positively related to training transfer. Supervisor support is shown to have the most significant influence on training transfer.

## **Dedication**

*To my parents and my five children*

## **Acknowledgements**

First, I thank God who is the head of my life. I thank my children for their understanding and countless sacrifices. I thank my parents and siblings for their love, support, prayers and concern. I am especially grateful to all my friends and family who believed in me. I hope this will serve as the catalyst to inspire you to pursue your own dreams.

I also thank my thesis panel for their time, expertise and patience. I am confident that I would not have accomplished this goal without their guidance and support. I am equally grateful to the men and women stationed at Elmendorf AFB, AK, for their faith and tireless support. Lastly, I thank the many respondents who patiently completed these surveys and examinations to allow this effort to come to fruition.

I am richly blessed by this experience and am forever changed by the men and women of the IRM class of 07M. Thank you all.

Anita Camille Springs



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ASSESSING THE IMPACT OF THE WORK ENVIRONMENT ON TRAINING  
TRANSFER: AN INVESTIGATION OF THE AIR FORCE ACQUISITION  
MANAGEMENT COURSE

## **I. Introduction**

### **Overview**

Within the Department of Defense, the Acquisition workforce is charged with one of the most vital roles in our military. Defense procurement and acquisition continue to be key components to winning a war where changing missions and program requirements drive the need for speedy decisions, strategic procurements, flexibility and creativity in an effort to acquire the highest quality of weapons, equipment and services for the war fight (DPAP Missions). The importance of this workforce calls for effective training and training transfer. Knowledge, created and expanded through [formal and informal training] processes, can be a key to meeting challenges of the future and a valuable source to gain competitive advantage (Hult et al., 2003); yet it is most often taken for granted or is simply not transferred for the benefit of the organization.

The Air Force recognizes the need for a highly trained and motivated acquisition work force as a key element for meeting the current and future challenges of our military (CFETP). “The Air and Space Expeditionary Force (AEF) concept is dependent on

cutting edge war fighting capabilities and their sustainment for mission success. It is essential the Air force have a fully trained and qualified Acquisition Management corps to be able to lead and manage programs [in an effort ]to deliver war fighting systems that meet requirements, on time and on budget” (CFETP). The Acquisition workforce is committed to this goal of training and equipping personnel for their roles by making the initial Air Force Fundamentals of Acquisition Management (AFFAM) course a mandatory requirement.

## **Background**

Despite the value and importance of this demanding workforce, formal training outlining educational requirements and a specific “training roadmap” were mostly non-existent prior to 2005. In June 2005, Gordon England, then acting Deputy Secretary of Defense, directed a committee to conduct a sweeping, integrated assessment of the career field to consider “every aspect” of acquisition. This effort led to the 2006 Defense Acquisition Performance Assessment report (DAPA). The DAPA report outlines recommendations, to Mr. England, on methods the Department of Defense can use to improve acquisition processes for major programs. The DAPA report cited a lack of requisite knowledge, needed early on, to efficiently and effectively manage program risks (DAPA, 2006). The report further revealed that no single organization was accountable for acquisition career development, consistent training and experience requirements were non-existence even in key positions, and the current training and certification standards were not being enforced. It pointed out how numerous workforce cuts over a ten year

period were made without regard for how the cuts would impact the career field (DAPA, 2006). Recruitment, training and career building were all casualties of the workforce cuts. Government's acquisition personnel's experience levels and technical expertise decreased as a result of those cuts (DAPA, 2006). The continued loss of workforce expertise led to other acquisition problems, in high risk areas, as well. The committee members working on the report recommended the acquisition workforce should have consistent training, education, certification, and qualification standards (DAPA, 2006). Edward "Pete" Aldridge Jr., a highly ranked official at the Pentagon (Edward 'Pete' Aldridge, 2007), as the undersecretary of Defense for acquisition, technology and logistics, also saw a need to make overarching changes to the career field in an effort to regain credibility and to improve the effectiveness in the Acquisition and Logistics Processes. Based on the DAPA report, the deputy assistant secretary (Acquisition Integration) Assistant Secretary (Acquisition) published and distributed a policy letter outlining new requirements for the Acquisition career field. Part of changes included the development and implementation of the AFFAM Course along with a Career Field Education and Training Plan Implementation to enhance career development. Air Force Instruction 36-2201. vol. 2, paragraph 1.3.3. established the AFFAM course as the mandatory initial technical course for new accessions to the career field.

The Air Force Institute of Technology, (AFIT) Logistics Support (LS) conducts the AFFAM training. AFFAM "provides students with an overview of the entire weapon system acquisition process, from requirement... [to] sustainment" (School of Logistics Course Description). The three week course is mandated by SAF/AQ for all 61XX, 62XX, and 63XX lieutenants and cross trainees and is aimed at second lieutenants

through majors, and Palace Acquire 1101 series civilians who are new to weapon system acquisitions. The AFFAM course focuses on project management skills in order to enhance the capabilities of program managers by setting a strong foundation of formal training (SAF/AQX, 2005).

## **Problem Statement**

Training and its effective transfer are being lost on organizations across industries, although training expenditures and resources are steadily increasing. The DAPA summary indicated 87% of Acquisition personnel surveyed agreed insufficient training was a major problem (DAPA, 2006). It is not enough to mandate attendance in the AFFAM course in an effort to fix current training issues. It is necessary to ensure Acquisition managers are provided with the tools and skill sets needed to effectively and efficiently execute their jobs. It is therefore, imperative to know and understand what conditions will encourage AFFAM students to transfer their training back to the job. Research indicates several areas where transference of learning can be influenced. This research aims to examine what work environment characteristics will foster the effective transfer of training. Armed with this information organizations can better structure work environments to ensure greater success during the transfer process.

## **Purpose Statement**

The central purpose of this research to determine what work environment characteristics will encourage the effective transfer of AFFAM course skills back to the



work environment. Specifically, this empirical research will determine if the work environment characteristics of top management, supervisor, and peer support, along with perceived transfer, organizational learning climate, opportunity to perform, task and task constraints, and acquisition category (ACAT) levels have any influence on the transfer of training. Armed with this information, organizations can better ensure environmental favorability to improve transfer for organizational benefit. Effective transfer of training is critical for AFFAM students, some of whom will lead major project management positions and be in charge of high value acquisitions. To ensure Air Force officers and civilian Acquisition Managers have the ability to carry their learning forward, it is necessary to determine those factors that enhance or impede transference. This research has implications to understand if the AFFAM course is meeting the needs of both the students and the Air Force Mission. This enables the military to better train and equips the acquisition workforce to meet the “challenges facing the Department of Defense Acquisition Community” (Defense Procurement Acquisition Policy-Strategic Plan). Further, organizations can not afford to lose personnel to attend ineffective training sessions and with prolonged absences from work if the training has little value to the organization. It is inappropriate to waste valuable man-hours and precious resources while the military continues to stretch its resources to the limits. As the Department of Defense engages in numerous AEF deployments, with resources evaporating, personnel being heavily tasked, and costs skyrocketing, organization leaders have a responsibility to provide valuable, useful training in the most efficient manner possible in order to ensure the job is done and consistently done right. Effective training is a critical tool to help with this process during “lean times” and it is the only way to maintain a state of ready,

highly qualified workers in this era of fast moving technological advancements and threats. The transfer of training persists as key to organizational life and sustainment.

## **Research Questions**

The goal of this research effort is to answer the questions: Which work environment characteristics will influence training transfer? Research question 2 is which work environment characters will influence training the most?

This study will help determine if Acquisition training needs are being met and help to justify the training dollars expended to train and equip Acquisition managers. Trainee survey data are used to capture this valuable insight into the AFFAM course.

## **Assumptions of the Study**

The training content and a training needs analysis for the AFFAM course has been previously accomplished (CFETP). The AFFAM course content is built from the analysis and therefore assumed valid. It can also be assumed that the course content has been carefully planned to match the needs assessment analysis conducted by the Department of Defense. The sample size, of 211 respondents, is substantial enough to assume respondents are representative of the total population of the Acquisition career field. This study also assumes respondents have provided answers that will be useful and pertain to areas that can be addressed in the scope of this thesis effort. Finally, the

assumption is made that the selected methodology is an appropriate approach to conduct adequate research and gain useful insight as it is based on several accepted research efforts from the past.

## **Limitations of the Study**

One limitation of this study is the fact that it relies solely on self-reports rather than consolidated inputs from additional sources such as: the respondents, supervisors, peers and subordinates, along with actual behavior as suggested by Facticeau et al. (1995).

Another limitation of the study is that it captures data from a single snapshot, rather than the more desirable approach to collect data, before, during and after training, in addition to 3-6 months after training.

## **Methodology**

The remainder of this paper focuses on the analysis of training transfer as it pertains to the respondents from the AFFAM course. Surveys have been empirically investigated to determine what work environment variables affect training transfer to determine if new acquisition managers are being adequately supported to use the knowledge gained in their introductory acquisition class. Statistical analysis will be used to look for relationships between work environment constituents and training transfer.

## II. Literature Review

### Background

The thrust to improve training and evaluation has roots in several key organizational areas. Funding, Return on Investment, and training incidents are all significant issues that may require changes in the way training is conducted and evaluated. Monetarily, interest in training transfer has increased due in part to the significant increases in training expenditures and budgets.

Most organizations reported healthy increases in their training budgets, with an average budget increase of 7 percent over last year. Today, companies are spending \$1,273 per learner on training, including staff salaries. These higher budgets have driven the growth of overall training industry expenditures. U.S. organizations spent a total of \$55.8 billion on training (including staff salaries) this year, with \$15.8 billion earmarked for external learning products and services. These numbers are up from last year's figures, which showed \$51.1 billion in total industry spending and \$13.5 billion in spending on products and services. (Industry Report, 2006)

The desire to achieve greater returns on education investments and to gain and maintain competitive advantage is indeed incentive for organizations to improve the methods used to evaluate how well trainees transfer their classroom training back to the organization (Warr, et al., 1999). With training costs in the billions for some organizations, it is no wonder organizations want the ability to associate training to lead to productivity.

Perhaps more significantly, training related incidents have raised concerns about how training is transferred. Problems with training range from noncompliance with established guidelines to a lack of training initiatives. "Dollars not Sense" is a comprehensive report on the assessment of federal contracting contracts under the current

administration, training shortfalls were cited as being responsible for millions of dollars worth of waste, fraud, and abuse (Dollars Not Sense, 2006). The GAO [Government Accountability Office] issued several reports since 2000, concluding that ‘inadequate guidance and poor training’ were partly to blame when personnel did not use sound techniques to obtain the best prices for the DOD. The GAO also reported that “military officials responsible for oversight of the [Logistics Civil Augmentation Program] LOGCAP contract ...knew nothing about LOGCAP before they deployed and had received no training regarding their roles and responsibilities...They “did not fully understand their contract management responsibilities,’ and “had little or no training on using contractors, including the LOGCAP contractor on the battlefield” (US Government Accountability Office, 2006). This report documented 118 federal contracts worth \$745.5 billion where significant waste, fraud, and abuse were linked to “homeland security, the war and reconstruction in Iraq, and Hurricane Katrina recovery” (Dollars Not Sense, 2006). Numerous instances of training shortfalls can be found in each of these areas. Training incidents quickly force organizations to become more aware of the need to associate training with the business strategy to develop plans to ensure training is being efficiently transferred to the organization.

## **Current Knowledge**

Current reviews of training literature along with common knowledge in the area of training transfer have significantly increased in the last ten years. Salas et al. (2001) describes it as “A veritable explosion in training research literature, highlighting significant developments in training methodology, evaluation and theory,” and

emphasizes the importance of tying training to the strategic direction of the organization (as cited by Shoobridge, 2002). Several researchers now agree that work environment support factors, transfer climate and learning culture all play vital roles in the training transfer process (Rouiller, Goldestein, 1993; Tracy, et al. 1995; Burke, Baldwin, 1999; Kupritz, 2002; Cromwell, Kolb, 2004; Egan et al., 2004; Hawley, Barnard, 2005; Hobbs, 2005).

Previous research by Noe, et al. (2005) defined transfer of training as “the ability of trainees to effectively and continually apply the “knowledge, skills, behaviors and cognitive strategies to their jobs” (Broad, Newstrom, 1992 as cited in Noe, 2005).

Alliger et al. define transfer as what takes place when behavior is retained and applied to the workplace.

Research has also identified other environmental factors such as generalization, maintenance, and relapse prevention training to be significant predictors of training transfer. “Generalization refers’ to a trainees’ ability to apply learned capabilities (verbal knowledge, motor skills, etc.) to on-the-job work problems and situations that are similar but not completely identical to those problems and situations encountered in the learning environment (Baldwin and Ford, 1988). Maintenance refers to the process of continuing to use newly acquired capabilities over time” (Noe, 2005). Relapse prevention training was originally considered for use with addictive behavior conditions and now has applications in the area of training transfer. (Burke, Baldwin, 1999) Although, generalization, maintenance, and relapse prevention are not considered in this

study, they have varying degrees of influence on the successful transfer of such knowledge.

There is no shortage of researchers who support the belief that environmental conditions influence training transfer. Having a greater understanding of the influences on training transfer will improve the organization's ability to predict and positively influence trainee behavior. It will also help organizations understand how to modify their transfer climates in an effort to be more supportive and thereby gain more benefit from training expenditures (Burke & Baldwin, 1999). Against that backdrop, this research will help to illuminate some of the key influences on training transfer in the work environment. Specifically, the social support characteristics of: top management, supervisor, and peer support, along with organizational support characteristics to include: perceived transfer, learning climate, opportunity to perform, task, task constraints and ACAT Levels, will be discussed in more detail in the sections that follow.

## **Training Transfer**

Training transfer, as it applies in this research, is concerned with a trainee's ability to apply knowledge, skills and abilities learned in a formal course of instruction back to the workplace. Holton (2000) explained it as, "The effective application, generalizability and maintenance of new knowledge, skills, and abilities to the workforce, as a result of undertaking and educational strategy." Although training is widely used across numerous industries and applies to a plethora of subject areas, it is important to make a distinction in the two categories of training largely being offered. Traditional

training makes no use of any technology for delivery purposes and closely resembles the traditional classroom setting complete with instructor, textbooks, workbooks, pens and pencils etc (Training, 2006). It does, however, make allowances for the instructor or learner to use technology if desired. Technology-based training employs the use of technology for instruction, including delivery “Web-based training, computerized self-study (Including CD-ROMs, DVDs, or diskette), satellite or broadcast TV, and video-, audio-, or teleconferencing” (Training, 2006).

Currently industry standards still favor traditional training at a 62% utility rate (Training, 2006). However, technology based training continues to gain acceptance at 29% usage rates, and is increasingly used within the Department of Defense (Training, 2006). The emphasis on the rapidly growing field of training has caused Human Resource and Development departments and organizations to rethink how and if training expenditures are paying off.

Organizations are making it a priority to ensure value in exchange for dollars spent as it applies to training investments (Shoobridge, 2002). Molinino (2003) found that only 51% of training investment resulted in improved employee performance, and 41% resulted in increased organizational performance. That same study also found that only 62% of individuals studied, initially applied what they had learned back to the organization. Six months later, that figure dropped to 44%. Finally, a year later, only 34% of the individuals were still using the knowledge attained during their training on their jobs (Molinino, 2003). Even when researchers believed that only 10% of the knowledge and skills learned during training could be expected to be applied back to the organization, training expenditures continued to increase (Georgenson, 1982). Baldwin



and Ford (1998) also determined that training alone was insufficient to induce behavioral changes

## **Research Model**

The theoretical model used as the foundation for this research effort is a combination of theories and models depicted by Kirpatrick's training model (1976), Baldwin and Ford (1988), Goldstein and Rouillier (2002), Fecteau et al., (1995), and Colquitt, et al., (2000). Although the original Kirkpatrick model of training has four levels; reaction, learning, behavior, and results, this study is focused primarily on the behavior aspect. The Baldwin & Ford's (1988) model includes three key training inputs: training design, trainee characteristics, and work- environment factors. This research measures work place characteristics that influence the transfer of training and includes additional characteristics than those presented in Baldwin and Fords (1988) model. (See figure 1).

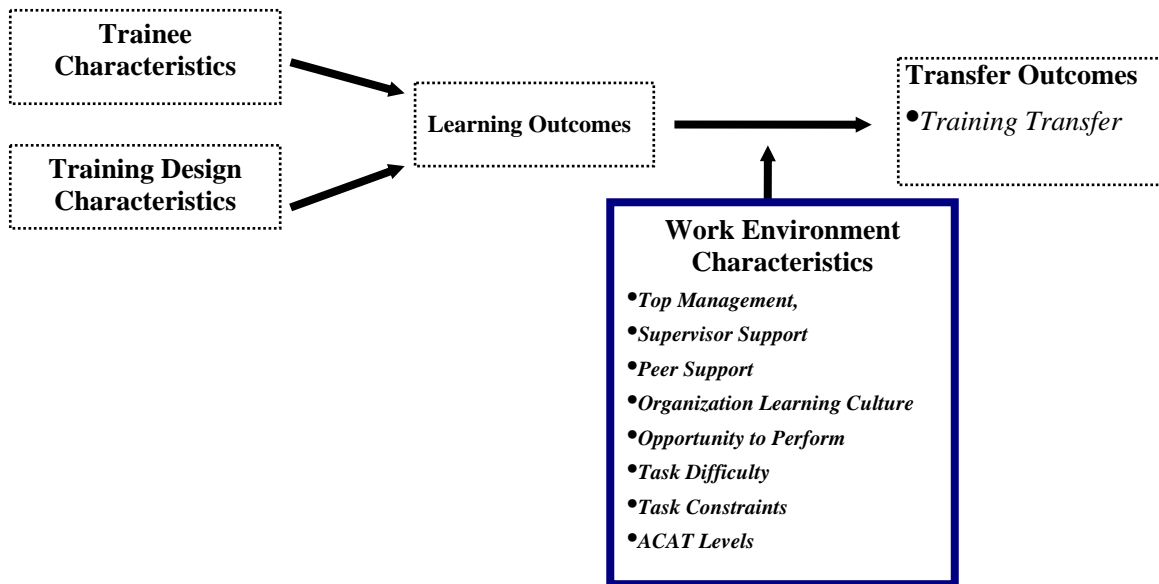


Figure 1: Constructs Included in this Research. Adapted from Baldwin & Ford (1988)

## Transfer Climate

Referencing definitions from several previous studies, transfer climate is a trainee's perception of work environment factors that either facilitate or hinder the process of transferring knowledge, skills, and attitudes (KSA's) to the organization (Broad and Newstrom, 1992, Goldstein, 1986, Baldwin and Ford (1988). Tracy et al. (1995) define transfer climate as the trainees' perception about aspects of the work environment that promote or hinder the use of training content on the job. Researchers Rouiller and Goldstein (1993) found that a supportive transfer climate was necessary if training transfer was to occur. Burke and Baldwin (1999) also reached the conclusion to that the work environment affects trainees' ability apply their new knowledge, skills, and attitudes back to their jobs. Increasingly, researchers agree that organization support for

the use of newly acquired KSA's will affect the trainee's ability and motivation to transfer training. (Huczynski, 1980; Rouiller, and Goldstein, 1993; Tracy et al., 1995; Tharenou, 2001). Mathieu et al. (1992) found that the transfer climate was significant to the transfer of training and could be considered either supportive or unsupportive. Because transfer climate includes work environment factors, it is important to establish a base line understanding of what is meant by work environment factors.

## **Work Environment Factors**

Research on the influence of work environment characteristics on training transfer has increased in the last decade. Hawley and Barnard (2005) studied Human Resource Development (HRD) professionals in the nuclear power industry and identified the critical roles that peers and supervisors play in the work environment. Kupritz (2002) found that office workers considered a supportive workplace as one of the top four factors that positively affected transfer. Ford, et al (1995) examined the work environment influence and found it to have a significant impact on the opportunity to perform. The work environment characteristics that were studied in this report are found in Table 1 below.

**Table 1. Constructs Included in this Research**

Construct	Literature Support
Top Management Support	Facteau et al. (1995), McCraine, (2005)
Supervisor Support	Facteau et al. (1995), Cromwell, Kolb (2004), Hawley, Barnard (2005) Hobbs,(2005) McCrain (2005)
Peer Support	Facteau et al. (1995), Cromwell, Kolb (2004), Hawley, Barnard (2005) Hobbs,(2005)
Perceived Transfer	Hobbs (2005), Switzer et al. (2005) Facteau et al. (1995) McCraine, 2005
Organizational Learning Culture	Marsick, Watkins (2003), Cromwell, Kolb (2004), Tracy, Tennenbaum, Kavanaugh (1995) Jerez-Gomez, P. et al., (2005)
Opportunity to Perform - breadth and depth(list of acquisition tasks)	Ford et al. (1992) Baldwin, Ford (1988), Rouiller, Goldstein (1993), Tracy, Tennenbaum, Kavanaugh (1995) Kupritz (2002)
Task Difficulty	Baldwin and Ford, (1988) Alvarez, (2004), Gist et al. (1990)
Task Constraints	Facteau et al. (1995), Hobbs, (2005) Peters and O'Connor, (1980), Ford et al. (1992)
ACAT Level of Program	Department of Defense, 2003

***Top Management Support***

Several studies link top management support as an influence on training transfer (McCraine, 2005, Smith et al., 1994). Smith et al. (1994) found that managers that publicly

reward transfer attempts could readily influence training transfer. (Smith et al., 1994, as cited in Burke & Baldwin, 1999)

*Hypothesis 1: Top management support will have a significant positive relationship to training transfer.*

### ***Supervisor Support***

Several researchers agree that supervisor support is a critical work environment factor (Baldwin, Ford, 1988; Quinones, et al., 1995; Richman-Hirsh, 2001; Russ-Eft, 2002; Cromwell & Kolb, 2004). Taylor, et al. (2002) found that transfer of trained occurred more often when supervisors were trained on the tasks they assigned and when they instituted rewards and sanction for training transfer behavior in the work environment. Hawley and Barnard (2005) found that the absence of supervisory support, could greatly reduce the ability or willingness to transfer training. Interestingly, when Ford et al. (1988) considered workplace factors that were significant to training, they examined the supervisor's attitude toward the trainee as a critical indicator of transfer ability, and not just at the supervisors' role in the organization itself. Earlier still research by Huczynski and Lewis (1980) found the supervisors style and attitude to be the most important factor influencing the trainee's intent to transfer training. Notably supervisor support can be considered in the context of verbal or non-verbal cues (Baldwin & Ford, 1988).

*Hypothesis 2: Supervisor support will have a significant positive relationship to training transfer.*

## ***Peer Support***

The extent to which peers support the use of learning on the job is peer support (Russ-Eft, 2002). Peer support along with supervisory support may have the two most significant influences on transferring training (Cromwell & Kolb, 2004; Holton, 1997; Facticeau et al., 1995). Peer support can be translated when working in teams, sharing knowledge, or simply offering feedback. Hawley and Barnard (2005) found that peer support played a critical role in the ability of peers to complete and transfer training. The use of teamwork is increasingly attracting attention to the subject of peer support as teambuilding activities are becoming more popular. Klink et al. (2001) suggests the relationship between peers may be even more influential than that of the supervisor-trainee relationship. Not only does peer support induce trainees' to transfer knowledge, but it also encourages managers who believe they have the support of their peers to report the positive transfer of training (Facticeau et al., 1995).

*Hypothesis 3: Peer support will have a significant positive relationship to training transfer.*

## ***Organizational Learning Climate***

A learning organization is defined as an organization having the capacity to integrate its people and structure toward a path of continuous innovation, learning and change (Egan et al., 2004). Tracy et al. (1995) define the learning culture as an organization whose members hold the shared belief and expectation that learning is an

integral part of everyday work like. It is vital for organizations to appreciate the relationship between learning culture and transfer of training. The results obtained by Egan, et al. (2004) revealed organization learning culture had significant influence with respect to training transfer and that it should continue to be considered when investigating organizational outcomes.

In the same vein, Jerez-Gomez, et al. (2005) report that established venues to transfer training for the benefit of the organization is key for learning to take place in learning organizations. It is not enough to simply train individuals, without having a way to capture that training for use enterprise wide. Additionally, Egan et al. (2004) found the organizational learning culture to be the most important factor bearing on efforts to apply new knowledge in the actual job setting. Based on the research we expect to find:

*Hypothesis 4: Organizational learning culture will have a significant positive relationship to training transfer.*

### ***Opportunity to Perform***

According to Ford et al. (1992) the opportunity for trainees to practice what has been learned ensures trainees will have a greater chance of retaining and applying their knowledge. Quinones et al. (1995) found supervisor attitudes and workgroup support directly related to the opportunity to perform. What they found in their study of graduates in an Air Force technical course lines up with Baldwin and Ford's (1988) research which suggests supervisors' perceptions or attitudes about the trainee influences whether they are given more or less opportunity to perform trained tasks. Ford et al.

(1992) contend that the supervisor's personal attitudes and perceptions of the trainee could directly affect the breadth and difficulty level of challenges provided to the trainee and the opportunities afforded them. They further suggest, the more favorable the relationship between the supervisor and the trainee, the more challenging the assigned tasks were likely to be along with a greater number of opportunities to perform them (Ford et al., 1992).

*Hypothesis 5: Opportunity to perform will have a significant positive relationship to training transfer.*

### ***Task Difficulty***

Alvarez, et al. (2004) stated task difficulty is a training manipulation that requires trainees to learn more difficult tasks than the task they will be required to perform in the actual work environment and it is related to training transfer. Ford et al. (1992) confirmed the importance of supervisors' roles in providing trainees with an opportunity to perform trained task stating that the supervisors attitudes and perceptions of the trainee would determine the level of difficulty the supervisors would allow the trainees to exercise.

*Hypothesis 6: Task difficulty will have a significant negative relationship to training transfer.*

### ***Task Constraints***



Facteau et al. (1995) define task constraints a component of the organization where the tools and equipment and pertinent resources support or hinder the trainees' ability to transfer training. Tracey et al. (1995) drew a connection between task constraints and pre-training motivation. Their research suggests the link between trainee behaviors and task constraints deserve further investigation. Ford et al. (1995) discusses constraints in the work environment that impact the ability to effectively transfer training. Peters and O'Connor (1980) defined task constraints through eight situational resource variables which are shown in Table 2 below.

**Table 2 Situational Resource Variables (Peters & O'Connor, 1980)**

<b>Task Constraints</b>
Budgetary Support
Job-Related Information
Materials and Supplies
Required Services and Help from Others
Task Preparation
Tools and Equipment
Time and Availability
Work Environment

Current research by Hobbs (2005) also shows the relationship between task constraints and perceived training transfer as being fully supported.

*Hypothesis 7: Task constraints will have a significant negative relationship to training transfer.*

### ***ACAT Levels***

Program level. Acquisition employees may be assigned to one of several types of programs, if they are employed in an acquisition job. The three major categories of programs are defined below. They indicate a varying degree of size of the program, by dollar amount and whether it is critical enough to warrant special interest by the milestone decision authority.

ACAT I programs have a dollar value estimated by the USD (AT&L) to require an eventual total expenditure for research, development, test and evaluation (RDT&E) of more than \$365 million in fiscal year (FY) 2000 constant dollars or, for procurement, of more than \$2.190 billion in FY 2000 constant dollars; or, the Milestone Decision Authority (MDA) designation as special interest. (DoD, 2003)

ACAT II programs do not meet the criteria for ACAT I. Dollar value is estimated by the DoD Component Head to require an eventual total expenditure for RDT&E of more than \$140 million in FY 2000 constant dollars, or for procurement of more than \$660 million in FY 2000 constant dollars (10 USC 2302d, reference (o)); or MDA designation as special interest. (DoD, 2003)

ACAT III programs do not meet the criteria for ACAT II. These programs are generally smaller in dollar value, fewer personnel and resources assigned, and shorter timelines to execute. (DoD, 2003)

*Acquisition Manager.* “An Individual tasked with managing cost, schedule, and performance of contracted products or services; oftentimes used interchangeably with the title Program Manager and Project Manager.” (CFETP, pg.2)

*Hypothesis 8: Employees in ACAT I programs will experience greater training transfer than employees in other ACAT level programs.*

### **III. Methodology**

This study was conducted as a follow on to the earlier efforts of Capt Christopher J. Ward (2006). His goal was to determine the individual characteristics and the training design influences on training transfer using the students from the Air Force Fundamentals of Acquisition Management Course. This research further investigates the work environment influences using additional AFFAM course students, representative of typical Acquisition Managers in the field. The aim is to deepen our understanding of the many factors and influences impacting the typical AFFAM students ability to transfer what they have learned in the classroom back to the workplace environment.

#### **Subject Selection and Description**

The respondents for this study were officer and civilian students enrolled in the AFFAM class over a two year period. Students who were enrolled from March 2006 through September 2006, in seven separate classes, were all included in the set of possible respondents. A total of 535 surveys were sent out with 211 responding for a 39% response rate. Three surveys were returned undeliverable. Students were contacted via e-mail and postal service for administration of surveys. The names of the respondents were supplied by AFFAM rosters along with the employee's contact information.

#### **Instrumentation**

This survey instrument used for this research consisting of 134 questions aimed at identifying the dependent variable of perceived training transfer and the independent variables of supervisor, peer and top management support, opportunity to perform, organizational support, task constraints, and organizational learning culture. An introductory e-mail was sent prior to mailing the surveys. In it, respondents were reminded of the need for their feedback on the survey to complete the research and respondents were asked to verify their mailing addresses. Surveys were then mailed in two waves on the 5<sup>th</sup> and 10<sup>th</sup> of Mar 2007.

Codes were used to encourage the survey response rate and to provide an atmosphere of anonymity. Survey respondents were asked to create a unique survey code consisting of the first two letters of their mothers name, the first two letters of their fathers name and four numerical characters to represent their birth month and year. Respondent's names were used initially to track their course progression through test scores. Confidentiality was therefore maintained through the use of separating survey responses from their identifying information.

#### Measures

Measures of the work environment used in this study are predominantly taken from past research (Facteau et al, 1995). They included the following:

**Perceived Training Transfer.** This was a nine-item measure, shown below. Facteau et al, 1995 found a Cronback's alpha = .87.

1. I am able to transfer the skills learned in the AFFAM course back to my actual job.

2. Supervisors, peers or subordinates have told me that my job behavior has improved following the AFFAM course.
3. I have changed my job behavior in order to be consistent with material taught in the AFFAM course.
4. My actual job performance has improved due to the skills that I learned in the AFFAM course.
5. The productivity of my subordinates has improved due to the skills that I learned in the AFFAM course.
6. Absenteeism in my work group has decreased due to the skills that I developed in the AFFAM course.
7. Turnover in my work group has decreased due to the skills that I developed in the AFFAM course.
8. Morale in my work group is higher due to the skills that I developed in the AFFAM course.
9. My peers are more committed to the mission of my organization as a result of the skills that I developed in the AFFAM course.

**Supervisor Support.** This was a 10 item, seven-point Likert-type scale from strongly disagree (1) to strongly agree (7) shown below. Facticeau et al., 1995 found a Cronbach's alpha = .91.

1. My supervisor helps me when I ask him/her for advice about how to use skills taught in training.

2. My supervisor is tolerant of changes that I initiate as a result of skills I learned in training.
3. My supervisor offers me opportunities to use new skills I learned in training.
4. My supervisor gives me constructive feedback when I try out new skills or behaviors learned in training.
5. My supervisor rewards me for using new skills on the job that I learned in training.
6. My supervisor believes that training is important and s/he attends relevant courses.
7. My supervisor actively practices those skills taught in AFFAM training courses.
8. Before I attend training, my supervisor meets with me to set goals for my performance after training.
9. After completing training, My supervisor meets with me to discuss how I can use my new training skills.
10. If a last minute departmental crisis arose, my supervisor would still allow me to attend training as scheduled.

**Peer Support.** This was measured with a 4 item scale taken from Facticeau et al., 1995.

1. My peers encourage my efforts to incorporate new procedures that I have learned in training.
2. My peers reward me for using new skills taught in training.
3. My peers attend training and try to use new skills in their jobs.
4. My peers believe in the importance of training.

**Task Difficulty.** This scale measures the degree of difficulty and opportunity to work on tasks, as suggested by Baldwin and Ford (1988). It was measured on a seven-point Likert-type scale from strongly disagree (1) to strongly agree (7).

1. I am allowed to work on critical equipment repairs.
2. I enjoy working on challenging tasks.
3. I am allowed to work on difficult problems with others.
4. I spend more time watching others demonstrate tasks than actually working on the tasks myself.
5. I am only allowed to work on the easiest problems.
6. I am given chances to learn new tasks.

**Task Constraints.** This was measured with 9 items on a seven-point Likert-type scale from strongly disagree (1) to strongly agree (7). It was taken from Facticeau et al., 1995, who found a Cronbach's alpha = .90.

1. Unclear task assignments or instructions.
2. Lack of necessary tools, equipment, mechanical devices and/or material aids.
3. Inability to obtain the raw materials, parts, or supplies.
4. Insufficient personnel.
5. Uncooperative coworkers and/or poor relationships between people in different departments/divisions.
6. Insufficient time to produce the quality or quantity of work required.
7. Poor environmental conditions(e.g., cold, hot, noisy, frequent interruptions)
8. Uncooperative supervisor or productivity pressures from your supervisor.

9. Inabilities of subordinates or coworkers to take on additional work or responsibilities.

**Opportunity to Perform.** This was measured in two ways – breath of experience and activity level. Breath of experience is a percentage of the 74 acquisition tasks that respondents marked at 1 through 6 on the scale (1 = almost never, to 6 = almost always). Activity level was measured as the mean of the tasks that they marked as 1 through 6. ACAT level. This was measured as a categorical variable on the survey, to correspond to which level of program they were assigned. Three dummy variables were created.

## **Data Analysis**

The primary means of analysis performed in this study was regression. The Statistical Program for Social Sciences, version 15.0, (SPSS, 2002) was used to analyze the data.



## IV. Data Analysis and Results

Data fidelity and variable relationships were initially checked using descriptive statistics and correlations, which are reported in table x. Most of the independent variables were significantly positively correlated with the dependent variable, perceived training transfer. The support variables of supervisor support and peer support had the highest correlations ( $r = .424$  and  $.350$  respectively), followed by breath of tasks performed ( $r = .317$ ), average activity level ( $r = .258$ ), task constraints ( $r = .225$ ), top management support ( $.204$ ), and task difficulty ( $.200$ ). Organizational learning culture was not significantly correlated with training transfer. Many of the independent variables were significantly correlated with each other, which led to some problems when the regression analysis was conducted. Notable among these were the support variables and organizational learning culture. In addition, average activity level and breath of tasks performed were nearly perfectly correlated ( $r = .861$ ).

The correlation analysis resulted in support for hypotheses one through three, that the support variables would have a significant, positive relationship with perceived training transfer. It did not support hypothesis four (organization learning culture significantly, positively related to perceived training transfer)

Variable Name	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11
1. Perceived Training Transfer	2.92 (.62)	(.89)										
2. Top Mgmt Supt	4.80 (.94)	.204	(.74)									
3. Supervisor Support	4.36 (.96)	.424	.573	(.87)								
4. Peer Supt	4.23 (.91)	.350	.433	.553	(.66)							
5. Org Learning Culture	4.10 (.95)	.124	.630	.476	.397	(.85)						
6. Task Constraints	2.07 (.76)	.225	-.216	-.218	-.123	-.314	(.74)					
7. Task Difficulty	5.16 (1.08)	.200	.380	.341	.252	.322	-.102	(.83)				
8. Activity Level	1.37 (.79)	.258	.187	.204	.170	.127	.138	.264				
9. Breath	19.5 (15.9)	.317	.192	.200	.152	.101	.220	.251	.861			
10. ACAT I	.24 (.43)	.130	.083	.092	-.001	.111	-.008	.060	.204	.141		
11. Time gap (months)	7.5 (2.5)	.093	-.113	.027	-.095	-.003	.021	.133	.065	.044	-.062	

Figure 2: Descriptive Statistics for variables measured. (N ranged from 185 - 207)

(reliabilities are on the diagonals) Correlations > .138 significant at  $p < .05$ ; Correlations > .200 are significant at  $p < .01$ ; those above .204 are significant at  $p < .001$ .

### Regression results

A multiple regression on perceived training transfer was done to determine which of the work environment factors had the greatest impact on training transfer. Findings are reported in table 3.

**Table 3: Regression results for perceived training transfer variables in work environment.**

Indep.Variable	beta value	standard error	t-value
Time since training (months)	.027	.017	1.56
Top management supt	-.041	.057	-.715
Supervisor Support	.253	.057	4.46***
Peer Support	.128	.053	2.40*
Task Constraints	.248	.053	4.69***
Task difficulty	.019	.041	.465
Activity Level	.070	.052	1.36
F-value	11.7***		
Adj R-squared	.30		

*Hypothesis 1: Top management support will have a significant positive relationship to training transfer.*

***Result: Supported by correlation analysis, but not by regression possibly due to multicollinearity***

*Hypothesis 2: Supervisor support will have a significant positive relationship to training transfer.*

***Result: Strongest predictor of Perceived Training Transfer***

*Hypothesis 3: Peer support will have a significant positive relationship to training transfer.*

***Result: Supported, strong predictor of Perceived Training Transfer***

*Hypothesis 4: Organizational learning culture will have a significant positive relationship to training transfer*

***Result: Unsupported by correlation, Problem with multicollinearity prevents regression analysis***

*Hypothesis 5: Opportunity to perform will have a significant positive relationship to training transfer.*

***Result: significant predictor, activity level unsupported***

*Hypothesis 6: Task difficulty will have a significant negative relationship to training transfer.*

***Result: supported by correlation, not regression***

*Hypothesis 7: Task constraints will have a significant negative relationship to training transfer.*

***Result: Unsupported***

A comparison of the mean values for perceived training transfer across ACAT levels (I, II, III and don't know) shows employees in ACAT I programs reported a mean of 3.06, which was greater than employees who did not know the ACAT level of their program (2.89), and employees in ACAT II programs (3.04), but was less than the training transfer reported by employees in ACAT III programs (3.18). A one way ANOVA analysis of differences of means across ACAT levels returned an F value of 1.713, which was not significant. Therefore, we fail to reject the null hypothesis that employees in ACAT I programs will experience greater training transfer than employees in jobs at other ACAT levels.

*Hypothesis 8: Employees in ACAT I programs will experience less training transfer than employees in other ACAT level programs.*

***Result: Unsupported***

## V. Discussion

This study tested a multiple regression model focused on the work environment characteristics that influence training transfer. Overall, all of the variables measured showed positive relationships with training transfer. This supports the majority of my hypotheses except hypothesis numbers 6 and 7. The overall r-squared of the regression model is .30 which indicates 30% of the variance in training transfer is explained by this model. Overall, the F-value of 11.7, ( $p < .001$ ) indicates that when grouped together, the work environment measures are significantly able to predict a positive training transfer outcome. A more detailed explanation of the results is provided below.

*Social Support Measures:* Consistent with past theoretical work on social support variables in the work environment, as it pertains to training transfer, all three work environment measures show positive correlation with transfer. However, top management support shows a negative value in the regression table (see table 3), although despite having a significant positive correlation with training transfer. This indicates that AFFAM students who felt they had the support of their supervisors and peers perceived a greater ability to transfer training learned from the AFFAM course.

It is a surprise to find that the relationship between top management and training transfer is negative on the regression model. However, because the social support variables in this research are so closely intercorrelated, it is likely that some of the variables are suppressing the effects of others which cause a problem called multicollinearity. Multicollinearity is defines as the case “where at least one of the

predictor variables is practically completely redundant with other predictors” (Multiple Regression). The condition of multicollinearity appeared and is discussed in Facticeau et al. (1995) where they recommend “attempts to better understand the manner in which social support variables operate in combination with other types of support [to avoid the occurrence of suppressor and multicollinearity]”.

The results of this research suggest if organizations want to better insure transference of new knowledge and skills, emphasis should be placed on social support. Specifically, supervisors play a vital role in the training transfer process and will be well served by establishing methods of supervision that encourage transference.

*Organization Learning Culture:* Organization learning culture produced a negative T value although it was positively correlated. Again the assumption here is that it is too closely correlated with social support conditions to be measured independently. In order to compensate for this problem of overlap between the variables, subtracting the mean from each variable to center it was the next logical step. This action brought the means to almost zero and the standard deviations to almost 1, however, the correlations were still out of limits. Additional efforts were made to control for multicollinearity, but they only masked the problem thus compromising my ability to truly determine its effects. In the end, the changed model showed supervisor support continued to be the most influential variable on training transfer in this research.

*Opportunity to Perform.* The positive relationship between task difficulty and task constraints to training transfer is unexpected. I believed task level would have a negative relationship which would indicate that respondents frequently did not encounter situations in their organizations where the difficulty of tasks was problematic, or

necessary tools and equipment were not readily available. Respondents did in fact answer the survey questions in the general direction to support a negative relationship. However, the model reflected a positive relationship. Even though the relationship was supported by correlation, it was not supported on the regression table. Measure error could account for this anomaly.

In addition to the measured result, student comments proved interesting on the subject of opportunity to perform. Of the 211 surveys mailed asking for open comments, forty of the respondent chose to comment on opportunity to perform. Of that number, all but three reported negative experiences with the opportunity to transfer AFFAM course skills back to the work place. Table 4 illustrates condensed examples of comments received. A complete list of comments pertaining to opportunity to perform can be found in Appendix A.

The comments listed in Table 4 indicate 20% of the respondents lack the regular and frequent opportunities to perform the tasks for which they were trained. This is consistent with Ford et al. (1992) findings that trainees receive differential opportunities to perform trained tasks. These comments may be an indication that further review of the AFFAM course is necessary to ensure the course instruction is properly aligned with individuals' needs and expectations. Ford et al. (1992) explains that environments with high paced work demands, may not lend themselves to training transfer as well as other jobs, due in part to the unavailability of more experienced co-workers to assist trainees. This may explain several of the comments related to high paced work environments where transfer of training has not fared well.



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**Table 4 AFFAM Student comments on Opportunity to perform**

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AFFAM is way too broad and is done way too early. It was very difficult to understand why **I was learning about 99% of stuff I had no idea about and won't work with for at least 4 years.** If I were to go now I would have some clue about what I was learning

I think the class was decent, **but I really haven't been able to apply it much...**I really would like some type of reference / text book that I can refer to because I have forgotten a lot of the class material. I didn't have a job before I went to AFFAM

It seemed like the course was tailored primarily for training program managers. **It was helpful to me because it gave me a better awareness for what is going on in the acquisition field, but much of the material is not particularly useful in helping me perform my job**

It seems that most of what was taught in FAM -103 was aimed toward project managers this far at the A-10 SPO, as an engineer, **I have not had much of an opportunity to use what was taught.**

**\*Greatly helped with my job duties.** Very informational class. Very beneficial.

The class focused on program management. It should cover more areas of the acquisition career field. I do not work in most of the areas discussed. **Much does not directly apply to me.**

As a 2LT in the 62 career field - **I do not notice using any of the information I learned at AFFAM.** I'm currently stationed at a ALC and all of my job skills, that I have noticed so far, are learned on the job. Is there a better way to spend AF money?

**\*I gained good information and experience from attending the class. My supervisor is working to get me involved in more projects so I can apply what I learned more often.**

As a junior 62, **I have not gotten many chances to apply what I have learned.** The course served more as a foundation for basic understanding of acquisitions and how the process works.

**\*I think class is sufficient for SPO work. Introduced many subjects that I now work with on a regular basis.**

My job is not a typical 61S job. We evaluate operational fighter/bomber units of their air - to - ground capabilities; 86FWS (A/G WSEP). **We don't work acquisitions or contract issues but I'm sure my FAM training will come in more handy in future jobs.**

AFFAM should have more material directed at 615X and 62EX personnel. **Most of the material taught in AFFAM does not directly help me in these early stages as a 62EX.**

Most of what was taught **was irrelevant to performing my current job,** providing mission assurance for space lift. I think the course would have been more helpful if I had taken it prior to PCS'ing to something acquisition related.

**Acquisition strategy / process has very little to do with my current job.** I deal with it only peripherally and give engineering support.

I Currently work with a Maintenance Wing as a Facility Engineer. We do the work of a program manager and systems engineer but on a smaller scale. **We do not use most of the acquisition tools or processes common in the acquisition community.**

I am the PM for ITSP. **I apply much of what I have learned to my job.**

**I haven't had it an opportunity to work on any of these types of topics yet but expect to in a year.** This survey seems better suited for a 1st. lieutenant

I have spent more time filling out surveys for this class then using anything taught in it. It is nice to have an idea about how projects progress **but none of it applies to me in my daily job.** I'm an engineer, not a Program Manager.

As an engineer (62E) **I haven't needed to use a lot of the topics taught during the PM section.** I wonder whether it is necessary for 62E's to attend that section.

I enjoyed the professors, information, exercises, etc. **However, I don't have the opportunity to use ACQ.** Stuff learned in FAM 103. in my current position. I work more in the I.T. arena with development & research. I hope these results help with your survey.

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## **Implications for Future Research**

The problems with multicollinearity suggests future research efforts in this area might be better served by refining the survey instrument to better measure organizational culture and to measure different work environment variables to prevent multicollinearity from occurring.

Value would be added to this research by examining pre-training and post-training variables rather than solely focusing on one or the other across time. A longitudinal study would yield more useful information rather than the “snap shot” used in this research. This approach is also suggested by Cheng and Ho (2001).

## Appendix A: Student Opportunity to Perform Comments

AFFAM is way too broad and is done way too early. It was very difficult to understand why <b>I was learning about 99% of stuff I had no idea about and won't work with for at least 4 years.</b> If I were to go now I would have some clue about what I was learning
AFFAM would have been better for me had I taken it later in my career. I am a 61S and very seldom hear anything but the technical details of a program.
My responses as a 61A (Scientist) reflect the fact that <b>I am not involved in the acquisition process</b> , more scientific development and sustainment issues involving pipelines and supply chain management.
This class <b>barely mentioned space activities / acquisition which is what I work in.</b>
I think the class was decent, <b>but I really haven't been able to apply it much...</b> I really would like some type of reference / text book that I can refer to because I have forgotten a lot of the class material. I didn't have a job before I went to AFFAM
It seemed like the course was tailored primarily for training program managers. <b>It was helpful to me because it gave me a better awareness for what is going on in the acquisition field, but much of the material is not particularly useful in helping me perform my job</b>
I am in ops so <b>I really don't use much of the thing I learned in the class.</b>
It seems that most of what was taught in FAM -103 was aimed toward project managers this far at the A-10 SPO, as an engineer, <b>I have not had much of an opportunity to use what was taught.</b>
I had a lot of fun and I'm glad I went <b>but I haven't used hardly any of the course material.</b> This AFFAM class may be valuable for Program Managers but is not relevant for junior engineers.
<b>*Greatly helped with my job duties.</b> Very informational class. Very beneficial.
The class focused on program management. It should cover more areas of the acquisition career field. I do not work in most of the areas discussed. <b>Much does not directly apply to me.</b>
<b>I don't work with any \$\$\$ or contracts, so last two weeks of class were pretty useless (to this point). However, week of class related to project management has been helpful.</b> I try to use basic principles taught in that topic on a regular basis at work.
I am in an engineering position under ACC, <b>Which doesn't allow for much project management experience (or at least not at this point).</b>
As a 2LT in the 62 career field - <b>I do not notice using any of the information I learned at AFFAM.</b> I'm currently stationed at a ALC and all of my job skills, that I have noticed so far, are learned on the job. Is there a better way to spend AF money?
<b>I don't work in an acquisition job or use engineering in my job.</b> My work involves some project management, so those skills are useful, but the acquisition process I don't use at all.
<b>*I gained good information and experience from attending the class. My supervisor is working to get me involved in more projects so I can apply what I learned more often.</b>
I work in Failure Analysis with efforts to support aging aircraft systems. The short turn around times needed to support mishap investigations etc. <b>do not lend themselves to applying much from FAM103</b>
As a junior 62, <b>I have not gotten many chances to apply what I have learned.</b> The course served more as a foundation for basic understanding of acquisitions and how the process works.
<b>*I think class is sufficient for SPO work. Introduced many subjects that I now work with on a regular basis.</b>
My job is not a typical 61S job. We evaluate operational fighter/bomber units of their air - to - ground capabilities; 86FWS (A/G WSEP). <b>We don't work acquisitions or contract issues but I'm sure my FAM training will come in more handy in future jobs.</b>

AFFAM should have more material directed at 615X and 62EX personnel. <b>Most of the material taught in AFFAM does not directly help me in these early stages as a 62EX.</b>
I work at Missile Defense Agency ... <b>we do not use DoD 5000.</b>
Most of what was taught <b>was irrelevant to performing my current job</b> , providing mission assurance for space lift. I think the course would have been more helpful if I had taken it prior to PCS'ing to something acquisition related.
<b>Acquisition strategy / process has very little to do with my current job.</b> I deal with it only peripherally and give engineering support.
I Currently work with a Maintenance Wing as a Facility Engineer. We do the work of a program manager and systems engineer but on a smaller scale. <b>We do not use most of the acquisition tools or processes common in the acquisition community.</b>
In all the FAM is a good overview of the Acquisition process. <b>The processes talked about are usually done on a much smaller scale for someone in our pay grade.</b> Typically the projects I work on are less than a million dollars and require faster turn around
<b>Nothing from AFFAM has really applied to me yet.</b> I am a 6151A - Analyst and nothing is ever addressed in acquisitions Training about what an analyst does.
Don't feel I'm being properly trained acquisitions. <b>I have had no chance to have an mentor and/or be involved in many of the actions and processes involved with the program .</b> There is no one to guide my development or provide opportunity for me to learn a
I am the PM for ITSP. <b>I apply much of what I have learned to my job.</b>
<b>I haven't had it an opportunity to work on any of these types of topics yet but expect to in a year.</b> This survey seems better suited for a 1st. lieutenant
I'm in space acquisition , so it is a bit different.
I work in AFRL (above) and I manage several research projects for my branch. It's a lot different than the stuff we learned about in FAM but <b>I hope to use the things I learned about in the future outside of AFRL.</b>
I have spent more time filling out surveys for this class then using anything taught in it. It is nice to have an idea about how projects progress <b>but none of it applies to me in my daily job.</b> I'm an engineer, not a Program Manager.
AFFAM class was great for management type applications - <b>unfortunately, I don't do any of that at work.</b> We are an operational squadron; we don't require anything; We just run Ops day in and day out. (Message continues on source document)
As an engineer (62E) <b>I haven't needed to use a lot of the topics taught during the PM section.</b> I wonder whether it is necessary for 62E's to attend that section.
FAM was a good class. <b>I have not yet worked in a SPO.</b>
I believe the FAM class may be appropriate for introductory Program Managers, but not for engineers. As a 62F I got very little out of the class. As engineers progress into Program Managers then the class should be taken. The class does not apply to my job whatsoever
I enjoyed the professors, information, exercises, etc. <b>However, I don't have the opportunity to use ACQ.</b> Stuff learned in FAM 103. in my current position. I work more in the I.T. arena with development & research. I hope these results help with your survey.
Unfortunately my location was involved in UCL compliance efforts after I returned from AFFAM . I have had very little interaction with any sort of program management. However the timeline is now ending for VCI and I am beginning to start working on program management. I am looking forward to very soon being able to use what I learned at AFFAM in what I am beginning to do. My situation was unique in that <b>I was involved in additional duties and was not able. exclusively. To apply my AFFAM training as well as I would liked.</b> I found AFFAM Very useful and applicable. Please do not take my responses as not getting anything from the course but rather as a lack of opportunities to apply them. If you wish to re-poll me in 3 months time I think you will find a much better responses than those given here. Thank you for the help and education.

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## **Vita**

Master Sergeant Anita C. Springs was born in Detroit, Michigan and graduated from Cass Technical High School in 1986. In October 1988, she enlisted in the United States Air Force in what is now called the Aviation Resource Management Career Field. Over the next several years she went on to amass: an Associate Degree in Airport Management from the Community College of the Air Force in 1996, a Baccalaureate Degree in Human Resources and Development from Park College in 1999 and A Masters of Science Degree in Human Resource and Development from LaVerne University in 2004.

Despite the rigorous demands of single-handedly raising 5 young children and serving as an active duty Air Force member, MSgt Springs relocated to Wright-Patterson Air Force Base, Ohio in August 2005. There she entered the Information Resource Management Program in the Graduate School of Engineering and Management, at the Air Force Institute of Technology. Upon graduation, she will utilize her newly acquired skills at the 754<sup>th</sup> Electronics Systems Group Squadron at Maxwell-Gunter Air Force Base, Alabama.

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<b>14. ABSTRACT</b>  This study aims to contribute to the body of knowledge as it pertains to our understanding of the relationship between work environment characteristics that influence training transfer. Specifically, this research will examine if training transfer is influenced by: top management support, supervisor support, peer support, organization learning culture, opportunity to perform, task difficulty, task constraints and acquisition category levels. The research is based on a 134 question survey completed by Air Force Acquisition Managers participating in the Air Force Fundamentals of Acquisition Management (AFFAM) course, and is designed to determine if knowledge, skills and attitudes learned in the instruction setting are being applied to the job. Data collected from the AFFAM students, 5 - 18 months after AFFAM course completion, is analyzed using the Statistical Package for the Social Sciences to conclude that all work environment characteristics studied are positively related to training transfer. Supervisor support is shown to have the most significant influence on training transfer.						
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