

MENTORING OF THE ACQUISITION WORKFORCE AT ABERDEEN PROVING GROUND, MARYLAND

RESEARCH REPORT 10-004



April 2010

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Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE APR 2010		2. REPORT TYPE		3. DATES COVERED 00-00-2010 to 00-00-2010	
4. TITLE AND SUBTITLE Mentoring Of The Acquisition Workforce At Aberdeen Proving Ground, Maryland				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Senior Service College Fellowship,Aberdeen Proving Ground,MD,21010				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 60	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

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ABSTRACT

The value of employee mentoring is well known within business, academia, and government. It provides a valuable element to the development of employees for leadership and other senior positions. There is significant literature that addresses specifically the benefits of mentorship and the best way to administer mentoring as part of a career developmental program. This project uses existing research and applies that research to a specific situation and place within the Army Acquisition Workforce: Aberdeen Proving Ground, Maryland.

Aberdeen Proving Ground, or APG, has a diverse group of organizational tenants that employ acquisition workforce personnel. Tenants include elements of U.S. Army Test and Evaluation Command (Aberdeen Test Center, Development Test Command Headquarters, Army Evaluation Center); Research, Development and Engineering Command Headquarters; Program Executive Office (PEO) Integration; elements of Joint Program Executive Office Nuclear, Biological and Chemical; Chemical Materiel Agency; Edgewood Chemical Biological Command (ECBC); and various contracting organizations. Additionally, acquisition organizations associated with Program Executive Office Intelligence Warfare; Program Executive Office Command, Control, Communications–Tactical; Communications Research, Development and Engineering Command from Fort Monmouth, New Jersey, are in the process of moving to Aberdeen Proving Ground as a result of the Base Realignment and Closure (BRAC) process. Aberdeen Proving Ground will be a key Army acquisition installation when BRAC moves are completed.

Two principal questions are investigated: (1) Is there a basis for support for a career mentoring program at Aberdeen Proving Ground among senior leadership? and (2) What scope, mentor training, and key characteristics are needed in an Aberdeen Proving Ground career mentoring program for improving acquisition and leadership training, education, experience, and succession planning?

Adding to the body of knowledge concerning career mentoring, this report provides analysis of interviews and surveys of professionals and executives in the field of Army acquisition regarding mentoring program needs for Aberdeen Proving Ground. The recommendations in this report could also apply to other similar installations with large acquisition workforce populations.

CHAPTER 1

INTRODUCTION

Background

Mentoring is considered a key element in employee development. Mentoring has been prevalent in all areas of employment, whether it is in the private sector, public sector, academia, or business. There is significant evidence that mentoring provides an element to employee development that differs greatly from other more formal elements such as training, education, and on-the-job experience. Training programs are developed specifically to enhance specific technical, administrative, or procedural understanding for a specific line of business. Education, such as undergraduate or graduate degrees, provide prescribed coursework to provide more general knowledge in specific areas of studies and provides an academic, skill-based, foundation for employment and employee advancement. Experience is gained on-the-job and involves practice of skills and knowledge gained from training and education. Experience frequently aids development by learning from successes and mistakes in executing a task or mission. Employee development is frequently categorized in these three elements alone. The effect of these elements are easy to quantify when looking to hire or promote an employee and likewise relatively easy to develop programs for employee development. They can easily be documented in an application or resume. Mentoring as an element of employee development is much more difficult to quantify and measure its effectiveness. It involves psychological components between a mentor and a protégé and therefore, more difficult to quantify, prescribe executing guidelines, and determine its worth to an organization.

This research looks to add to the large body of knowledge that exists on mentoring by studying it among the organizations at Aberdeen Proving Ground, Maryland, which is a key and

growing hub for U.S. Army weapons systems acquisition, a subset of the Defense Acquisition System.

Most have an idea what a mentor is. Many definitions are found in existing literature. “A mentor is generally defined as a higher-ranking, influential individual in your work environment who has advanced experience and knowledge and is committed to providing upward mobility and support” in one’s career (Eby, Butts, Lockwood & Simon, 2004). This, as well as other similar descriptions of a mentor, will be used for this study.

Defense Systems Acquisition

The organizations at Aberdeen Proving Ground included in this study exist to develop and procure systems required for the U.S. Army and the Department of Defense. Department of Defense Directive 5000.01 (2003), The Defense Acquisition System, defines the system as:

The Defense Acquisition System exists to manage the nation’s investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces. The investment strategy of the Department of Defense shall be postured to support not only today’s force, but also the next force, and future forces beyond that. The primary objective of Defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price.

It takes a wide variety of professionals to lead, manage, direct and execute the Defense Acquisition System. Trained professionals in areas of design, engineering, test and evaluation, accounting, logistics, program management, researchers, quality assurance, and production are needed wherever acquisition organizations exist. Aberdeen Proving Ground represents an important hub of Army acquisition professionals in the U.S. Army.

Aberdeen Proving Ground

Aberdeen Proving Ground, or APG, is an U.S. Army installation located in Northeast Maryland and is the home of multiple Army Acquisition tenant organizations. According to the Garrison Aberdeen Proving Ground (2010) website, more than 7,500 civilian employees work on the installation, many of whom are acquisition workforce employees. The Army and defense acquisition tenants include those listed in Table 1.

- | | |
|---|--|
| • U.S. Army Chemical Materials Agency (CMA) | • US Army Communications and Electronics Command (CECOM) |
| • U.S. Army Assembled Chemical Weapons Alternatives (ACWA) | • US Army Communications Electronics Research, Development and Engineering Center (CERDEC) |
| • US Army RDECOM Managerial Accounting Division | • Program Executive Office Command, Control, Communications Tactical (PEO C3T) |
| • US Army Research, Development and Engineering Command Contracting Center (RDECOM CC) | • Program Executive Office Intelligence, Electronic Warfare and Sensors (PEO IEW&S) |
| • Aberdeen Contracting Division | • US Army Development Test Command (DTC) |
| • Edgewood Contracting Division | • US Aberdeen Test Center (ATC) |
| • Aberdeen Installation Contracting Division | • US Army Evaluation Center (AEC) |
| • US Army Armament Research, Development & Engineering Center Firing Tables & Ballistics Team (ARDEC FTB) | • Headquarters US Army Test and Evaluation Command |
| • US Army Communications Electronics Research, Development and Engineering Center (CERDEC) | • Headquarters US Army Research, Development and Engineering Command (RDECOM) |
| • US Army Edgewood Chemical Biological Center (ECBC) | • Program Executive Office Integration |
| • US Army Materiel Systems Analysis Activity (AMSAA) | |

Table 1. Army and Defense Organizations at Aberdeen Proving Ground, Maryland

The numbers and diversity of acquisition organizations make Aberdeen Proving Ground an excellent place to study employee development practices. The acquisition workforce at Aberdeen Proving Ground continues to grow with the additional employees resulting from the execution of the Defense Base Realignment and Closure Commission 2005 recommendations.

Base Realignment and Closure

Base Realignment and Closure is the congressionally authorized process utilized by Department of Defense to restructure and/or close various defense installations throughout the country. Execution of the Base Realignment and Closure recommendations results in increase in

the defense/Army acquisition workforce at Aberdeen Proving Ground. According to the Base Realignment and Closure website, Aberdeen Proving Ground will gain over 5,000 additional civilian employees, many of which will be acquisition positions. The biggest influx of acquisition professionals to Aberdeen Proving Ground will come from the closure of Fort Monmouth in New Jersey, resulting in several organizations relocating at Aberdeen Proving Ground. Two other notable acquisition organizations that will move to Aberdeen Proving Ground are U.S. Army Test and Evaluation Command elements in Alexandria, Virginia, and the headquarters of the Joint Program Executive Office Chemical Biological Defense.

Employee development for Aberdeen Proving Ground may take on some special challenges due to the influx of employees from outside the areas. Additionally, many senior-level people may not choose to move. Mentoring, in particular, may play a bigger part in employee development as the Base Realignment and Closure changes progress.

Research Questions

The purpose of this research project is to add to the body of research on mentoring and to apply lessons to the unique situation at Aberdeen Proving Ground. Army acquisition process relies on a well-trained and ready workforce for the challenges of fielding effective, suitable, sustainable, and survivable weapons systems. It depends on the development of technical and leadership skills. Mentorship is a valuable element in many large organizations and has contributed to development and preparation of people, particularly for leadership positions. The following questions are at the core of this research:

- Is there a basis for support for a career mentoring program at Aberdeen Proving Ground among senior leadership?

- What key characteristics are needed in an Aberdeen Proving Ground career mentoring program for improving acquisition and leadership training, education, experience, and succession planning?

Research Hypothesis

There are indications that mentoring programs exist at Aberdeen Proving Ground and informal mentoring has happened over the years. This leads to the following hypothesis:

Current mentoring programs, if they exist, are tenant organization specific or are informal. The current mentoring situation is in need of improvement to meet challenges of current and future employee development at Aberdeen Proving Ground.

CHAPTER 2

LITERATURE REVIEW

Much research and study has gone into the topic of mentoring, mentoring programs, mentor-protégé relationships, and benefits of mentoring. Allen and Finkelstein (2003) generally define mentoring as a relationship between senior and junior employees in which the senior employee provides developmental functions (i.e., kinds of support) to junior employees. Elements of mentoring have been broken down primarily into career-related functions that focus on success and advancement and psychosocial functions the focus on enhancement of the professional role. Career-related functions included sponsorship, coaching, exposure and visibility, protection, and challenging assignments. Psychosocial functions include role modeling, acceptance and confirmation, counseling, and friendship (Allen, 2003).

A variety of sources were used to support this literature review. Utilized were scholarly journals, government publications, and statistics related to the Aberdeen Proving Ground acquisition workforce. A foundation is established initially with career requirements associated with acquisition workforce positions followed by statistics associated with compliance to those requirements. Discussion of specific mentorship research concludes this review.

As an element of a career-related mentorship function, proper coaching in meeting job-related requirements of the protégé would be expected. The Department of Defense and the U.S. Army have highly structured guidelines for developmental training in the acquisition specialty and leadership in general. The next few sections are concerned with these guidelines.

Defense Systems Acquisition Certification

Acquisition workforce career advancement depends on meeting requirements developed in accordance with the Defense Acquisition Workforce Improvement Act enacted in 1990. The act required that acquisition professionals be certified based on the position and level they hold. Career fields, certification levels, and standards were established. Career fields (Defense Acquisition University, 2010) are listed in Table 2.

Auditing	Program Management
Business – Cost Estimating	Production, Quality and Manufacturing
Contracting	Purchasing
Facilities Engineering	Systems Planning, Research, Development and Engineering –Systems Engineering
Industrial/Contract Property Management	Systems Planning, Research, Development and Engineering – Science and Technology Management
Information Technology	
Life Cycle Logistics	
Test and Evaluation	

Table 2. Acquisition Career Fields

Maintaining employment and advancing in an acquisition workforce is, in part, dependent on the meeting of certification standards for the level of the employee's position. Each career field has three career levels and associated requirements for training, education, and experience. An example of a career field requirements were extracted from the Defense Acquisition University website (2010) and are shown in Table 3.

Acquisition Training	Acquisition Training identified at level II must have been completed.
Functional Training	Advanced Test and Evaluation Functional Training identified at level II must have been completed.
Education	24 semester hours or equivalent in technical or scientific courses such as mathematics (e.g., calculus, probability, statistics), physical sciences (e.g., chemistry, biology, physics), psychology, operations research/systems analysis, engineering, computer sciences, and information technology Baccalaureate degree or higher (Any Field of Study)
Experience	Four years of test and evaluation experience

Table 3. Example Test and Evaluation Career Field Requirements Level 3

Certification data related to compliance with requirements was provided by the local Aberdeen Proving Ground Acquisition Support Center Office for acquisition workforce employees. The data indicates that, of the acquisition employees at Aberdeen Proving Ground, 42 percent of them are not certified for the positions that they hold. Similarly, those acquisition employees at Fort Monmouth, 43 percent of them are not certified in the career field of their position. This data includes acquisition workforce employees at all certification levels. Some explanation of the low compliance numbers could be due to lower level employees who are working on obtaining their certifications and will achieve the proper level soon. The higher-level employees would be expected to be better. When looking at Level III acquisition workforce employees, both Aberdeen Proving Ground and Fort Monmouth have 30 percent of these higher-level employees not certified in the position they hold.

Army Leadership Training

Acquisition career field certification provides a measure of necessary technical training for acquisition workforce employees. For those employees whose potential includes leadership positions, the Army has established the Civilian Education System to provide a framework for leadership development. Army Management Staff College administers the Civilian Education System for the Army. According to the Army Management College (2010) website, the Civilian Education System (CES) is “is a new progressive and sequential leader development program that provides enhanced leader development and education opportunities for Army civilians throughout their careers. CES provides the Army Civilian Corps self-development and institutional training (leader development) opportunities to develop leadership attributes through distance learning (DL) and resident training. CES includes the Action Officer Development Course (AODC), Supervisory Development Course (SDC), Management Development Course

(MDC), Foundation Course (FC), Basic Course (BC), Intermediate Course (IC), Advanced Course (AC) and Senior Service College (SSC).”

Acquisition workforce training and certification program and the Civilian Education System provide a structured foundation for development of civilian employees with the Army and Aberdeen Proving Ground. A knowledgeable employee can determine the basic training necessary to succeed. Is this foundation enough to realize potential of all employees? Certification statistics indicate that even a mandatory program does not ensure that everyone is going to take advantage. Kram (1985) notes that “excellent education is of little value if the surrounding culture does not encourage application and knowledge of skills.”

Modeling Mentorship

A review of mentoring research by Kammeyer-Mueller and Judge (2008) provides a structural model of the relationship between mentoring and outcomes. Their model is shown in Figure 1.

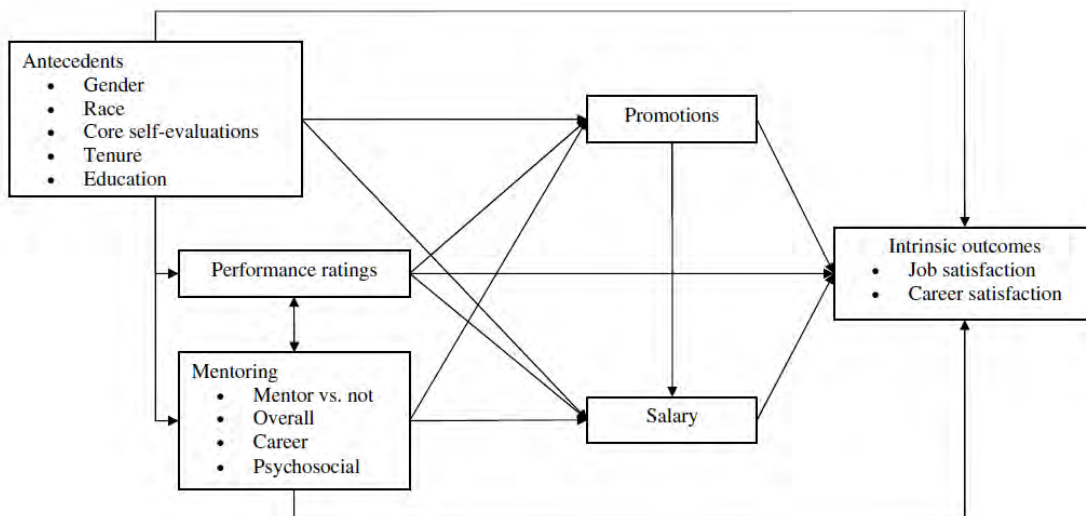


Fig. 1. Structural model of the relationship between mentoring and outcomes.

Mentoring, like other factors such as performance, past history, and circumstances, affect employment outcomes. Extrinsic outcomes such as promotions and salary are linked to

mentoring and other factors. Related, in part, through the extrinsic outcomes are outcomes that are qualitative, such as job and career satisfaction. (Kammeyer-Mueller & Jugde, 2008).

Mentoring should not be considered independent of other factors. For example, in some circumstances, high performance or employee productivity may be a result of mentoring or it could be that the visibility associated with a high performer generates the opportunity for mentorship for the high performing employee (Kammeyer-Mueller & Jugde, 2008). A perceived high performer may also be utilizing the power and resource of the mentor that would enhance the perception of high productivity (Kammeyer-Mueller & Jugde, 2008).

Most of the literature review for this effort focuses on major elements of this model. The relationships between mentoring and employee outcomes have been studied extensively.

Hunt and Michael (1983) present a staged approach to the mentor-protégé relationship. Their four-stage model consists of an initiation stage, a protégé stage, a breakup stage, and a lasting friendship stage. The initiation stage starts with the selection process and lasts for up to one year. The importance of the relationship is developed with roles becoming defined. During the protégé stage, the protégé moves more into a protégé role as opposed to being considered an apprentice. More responsibilities are given to the protégé, yet he is still protected by the relationship of the mentor (Hunt & Michael, 1983). The final stage is considered a breakup stage, which can be initiated because of a variety of reasons, positive and negative. The breakup can be due to a geographic move of one or the other, or promotion of the protégé to a peer position of the mentor. Acceptance of the protégé as a peer is important to the lasting friendship phase. In this phase, peer relationships take over and a friendship relationship can exist (Hunt & Michael, 1983).

Effects of Mentoring

Results of the review conducted by Kammeyer-Mueller and Judge (2008) demonstrate that mentoring has substantial effects on job and career satisfaction and is an important predictor of career outcomes.

Most studies on the topic show resulting positive career effects from mentoring. When comparing mentored and non-mentored employees, the extrinsic positive outcomes of higher salary and promotions were more likely associated with mentored rather than non-mentored employees (Allen, Eby, Poteet, Lentz, & Lima, 2004). Career satisfaction, career commitment, belief in the career advancement, job satisfaction, and greater intention to stay in the organization were all shown to be better in mentored employees versus non-mentored employees (Allen, Eby, Poteet, Lentz, & Lima, 2004).

Fagenson's (1989) study likewise revealed that those being mentored reported having "more satisfaction, career mobility/opportunity, recognition and higher promotion rate those non-mentored individuals." Both career and psychosocial functions contributed to a protégé's sense of competence, identity, and work roles. Protégés had more positive work experiences while feeling important and closer to the organization (Fagenson 1989).

A large number of studies look at the benefits that protégés realize in a mentoring relationship. Literature shows other benefits for the mentors as well as the organization.

Chao (2009), in a case study, determined that mentors themselves benefit from mentoring. Benefits include: "satisfaction for developing the next generation," learning from their protégés, enjoying respect given to them by their protégés, and even enhancement of their own careers.

Organizations gain a benefit from mentoring programs that not only include more productive employees but, according to Horvath, Wasko, and Bradley (2008), "mentoring

programs may be used as a recruitment tool. That is, individuals appear to be attracted to organizations that offer more effective mentoring programs.”

Formal versus Informal Mentoring

There has been much research in formal versus informal mentoring. Many organizations attempt to create formal programs in order to obtain the benefits that result from mentoring. Some of the research has shown the following.

Mentoring occurs in both formal and informal settings. Formal mentorship occurs as a result of an organization’s specific mentoring program. Chao (2009) finds that most mentoring relationships evolve from an informal relationship whereas the mentor and protégé “mutually engage one another in a relationship.” Organizations, when developing a formal mentorship program, frequently try to create a formal program with informal properties.

Chao (2009) looked at four dimensions of mentoring: intensity, visibility, focus, and duration. Formal mentorship programs were found to be more intense, focused more on employee development rather than personal development and kept to more specific durations. Visibility generated for the protégé was less in formal programs than informal mentoring relationships (Chao, 2009).

Other differences exist between formal and informal mentoring. Chao (1992) found protégés in informal mentorship situations received greater career-related support than in a formal program. However, psychosocial support was the same for both (Chao, 1992). Informal mentorship exhibited higher levels of organizational socialization, satisfaction, and salaries over formal (Chao, 1992).

Quality of Mentoring

Effectiveness of mentoring in a formal or informal mentor-protégé relationship can be affected by the quality of mentoring provided. Miller (2000) warns that mentoring is not a simplistic relationship. That is, mentoring quality is more of a continuum of quality rather than good or poor quality. Miller (2000) in his research described the continuum in three categories: highly satisfying, marginally satisfying, or dissatisfying. He found that highly satisfying mentoring relationships were significantly better than marginal or unsatisfying relationships toward the following outcomes: job satisfaction, career commitment, organizational-based self esteem, procedural justice, and lower intentions to quit. The positive attitudes that were associated with the presence of a mentor occurred primarily when the relationship was highly satisfying (Miller, 2000). Miller (2000) also found attitudes of those in dissatisfying or marginally satisfying situations were equivalent to those of non-mentored employees. Additionally, a dissatisfying mentorship may be worse than no mentoring at all (Miller, 2000).

The quality of mentorship can be negatively affected by a variety of relationship problems. Eby, McManus, Simon, and Russell (2000) categorized negative mentoring experience from the protégé's perspective into five types: Mismatch Within the Dyad, Distancing Behavior, Manipulative Behavior, Lack of Mentor Experience, and General Dysfunctionality. Mismatch Within the Dyad involves incompatibility due to values, work style, and personality. Distancing Behavior happens when the mentor neglects their protégé. Manipulative Behavior generally refers to the dictatorial behavior exhibited by the mentor toward the protégé. Wielding power, too little or too much delegating of work, mentor sabotage, taking credit for the protégé's work are all examples of manipulative behavior. Lack of Mentor Expertise includes either a lack of technical or interpersonal expertise on the part of the mentor. General Dysfunctionality is a catchall for situations like negative work attitude or personal problems on the part of the mentor.

Practical Applications

Eby, L., Butts, M., Lockwood, A., & Simon, S. (2004) study provides some practical rules for mentoring in organizations:

- Realistic expectations—Despite the positive potential, mentoring programs can lead to negative results.
- Mentoring is not for everyone—Organizations should not force individuals to become mentors.
- Mentors should be trained—Mentors should have the necessary skills. Understanding the mentor-protégé relationship is important, as is developing realistic expectations between the two.

Since mentoring is not for everyone, consideration can be given that alternatives to mentoring exist. Allen and Finkelstein (2003) found that both men and women equally use alternative sources. They suggest that alternate sources to mentoring include family members, supervisors, peers/coworkers, subordinates, and friends from outside work. These outside sources can provide career developmental functions, primarily psychosocial, that are also obtained through mentoring. Career-related functions can be obtained through education and training programs, membership in professional organizations, and self instruction. Using Allen and Finkelstein (2003) concepts, defense acquisition training and the Civilian Education System could provide a reasonable alternative to mentoring.

The contracting career program within the Department of the Army has a published mentor guide. Contracting is a career field within the Defense Acquisition Workforce and seemed applicable for this literature review. The guide is for use for the contracting professionals FAST TRACK program. The FAST TRACK Program is a two-year, paid, intermittent

employment program designed exclusively to develop future contracting and acquisition leaders. According to the Acquisition Support Center (2004), “the FAST TRACK mentor program links an experienced person (mentor) with a student in the FAST TRACK program to provide a meaningful experience in an Army acquisition organization, and help foster the career development and professional growth of a student.” The guide provides elements of early literature discussions applicable to a mentor-student employee mentorship. Elements of the guide include requirement for developing goals and planning for feedback, experience in a multi-functional background, opening doors of opportunity, and establishing networks (Acquisition Support Center, 2004). The guide also provides mentors information of potential obstacles to success: mentoring may not always match needs, insufficient time, poor attitude, inability to demonstrate quick payoffs for protégés, unmet expectations about career alternatives with the organization, personal inability to follow through on career plans, and competition among protégés for scarce opportunities. The guide provides tips to the mentor including sticking to schedules, knowing the protégé’s background, promoting the protégé, and follow up.

This literature review only provides a small set of studies, reviews, articles covering the mentoring. The interest in mentoring among researcher alone demonstrates that the mentor-protégé relationship is an important one for organizations, business, and academics. Consistent is that mentoring provides value to the career and employee development and can significantly contribute to advancement of the protégé in both technical and leadership positions.

CHAPTER 3

METHODOLOGY

This study utilizes a descriptive research methodology. Data was collected in order to test the hypothesis utilizing qualitative methods: Current mentoring programs, if they exist, are tenant organization specific or are informal. The current mentoring situation is in need of improvement to meet challenges of current and future employee development at Aberdeen Proving Ground. Data collection was accomplished through a survey and interviews of senior leadership at Aberdeen Proving Ground. The survey represents a quantitative element of the study and interviews represent a qualitative element. Of interest to this study is the percentage of the senior leadership that actually feels they benefitted from a mentoring relationship and how many are actively mentoring individuals presently.

Research Perspective

The research perspective of this study is from that of senior leadership viewpoint. The project attempts to understand the climate for mentorship activities at Aberdeen Proving Ground through the views and experiences of senior civilian leadership within a specific element of the Army acquisition community that exists today at Aberdeen Proving Ground. Perspectives across Aberdeen Proving Ground would be expected to be diverse as are the different organizations that exist at Aberdeen Proving Ground. The views and experience of the leadership at Aberdeen Proving Ground would be expected to be differentiated not only by their personal experience but also by the commodities that are being developed by their respective organization, the defense communities they serve, and mission of the organization they lead or have led in the past. The acquisition workforce population would be expected to be similar to the acquisition personnel across the Army. Current Army officers were not considered for this study. Even though they represent significant leadership at Aberdeen Proving Ground and in the acquisition workforce,

the military structure associated with their development could influence data when specifically discussing civilian personnel. On the other hand, there may be experience within the civilian leadership derived from prior military service or from working closely with Army officers.

Research Design

The methods chosen for this project include surveys and interviews. The combination of the two methods are deemed best to get some specific, quantitative data from leaders at Aberdeen Proving Ground, while interviews of a sample of senior civilian leaders allows for probing of the basic survey questions and yield qualitative data that would be of use to answer the basic research question while addressing the research hypothesis. Data from survey alone would yield incomplete data that would not be sufficient to apply to the research projects questions:

- Is there a basis for support for a career mentoring program at Aberdeen Proving Ground among senior leadership?
- What key characteristics are needed in an Aberdeen Proving Ground career mentoring program for improving acquisition and leadership training, education, experience, and succession planning?

Participants, Population, and Sample

The target population for participants in the survey is senior civilian leadership at Aberdeen Proving Ground and the next level of key leadership. A key leadership roster for Aberdeen Proving Ground contains the name of 18 Senior Executive Service employees at Aberdeen Proving Ground. The Senior Executive Service is a corps of men and women who administer public programs at the top levels of the federal government. Positions are primarily managerial and supervisory. Senior executives occupy top leadership positions for Aberdeen

Proving Ground acquisition and non-acquisition related organizations. From here, the survey was expanded to the next tier, GS-15 level, from the same key leadership roster. A GS-15 level is a top-level leader/manager within the federal government, one level below the Senior Executive Service. Included on the key leadership roster are an additional 12 second-tier leaders at Aberdeen Proving Ground that were sent surveys.

The target population for interviews was the Senior Executive Service level only. Five senior leaders were interviewed to obtain additional insight into mentorship. Interviews were designed to supplement survey data with particular experience as both mentor and protégé and the relative value these leaders put on this relationship.

Research Instruments

As stated, two instruments were utilized: a survey and interviews of those in leadership positions at Aberdeen Proving Ground. Neither the survey nor interviews have been utilized in previous studies. Validity of the survey was determined by a peer review by four members of the Senior Service College Fellowship at Aberdeen Proving Ground. The Senior Service College Fellowship is a training program for acquisition professional being prepared for higher-level leadership positions with the acquisition workforce. Surveys were administered by paper and utilized Aberdeen Proving Ground mail for delivery to and from those being surveyed. This method is the best way to assure delivery and keep respondents anonymous. All interviews, except one, were conducted face-to-face at a location of the interviewee's choice. Interviews were conducted in the senior leader's office except one, which was by telephone.

The survey addressed the recipient's personal experience with mentoring as both a mentor and protégé. The personal experience portion of the survey attempted to determine the relationship between personal experience and views of mentorship. Additionally, the survey targeted specific views of the recipients in regard to mentoring acquisition personnel. Included in

this are views of informal versus formal mentor programs, roadblocks to effective mentorship, and value of current employee development programs. The survey instrument is shown in Appendix A.

Interviews of senior leaders at Aberdeen Proving Ground investigated several areas of mentorship in a discussion format between the interviewer and the senior leader. Topics, in order of importance, are listed as follows.

- Personal mentorship experience as a protégé. Role of mentorship in career success was discussed along with form that mentorship took. The interview explored what elements of the mentor relationship were keys to career advancement. If the leader did not have a mentor, the interview addressed factors attributing to success without mentorship. Negative experiences were explored, if appropriate.
- Personal mentorship experience as a mentor. Number and quality of mentoring relationship that the interviewee has as a mentor was explored. If no active mentorships were ongoing, reasons for the lack of mentoring was discussed. The key elements of mentorship relationship were discussed with the leaders.
- Opinions regarding informal versus formal mentoring. The leaders support for a formal mentorship program was explored.
- Key aspects of successful (or unsuccessful) mentorship. Views of positive and negative aspects of mentoring were solicited.
- Challenges for Aberdeen Proving Ground in employee development. Whether mentorship should play a key role in meeting employee development considering the common acquisition mission of many of the organizations at Aberdeen Proving Ground and the changes resulting from Base Realignment and Closure was explored. Opinions concerning cross-organizational activities and rationale of the interviewee were explored.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Survey Results and Analysis

Survey Demographics

Survey was distributed by mail to 32 Aberdeen Proving Ground-based Senior Executive Service and GS-15 level employees listed on the key senior leaders roster. Eighteen completed surveys were returned. Fifteen (83 percent) of the 18 responses were from leaders who were members in the Defense Acquisition Workforce. As anticipated, all who responded had more than 15 years experience in the federal workforce. Some included military service time in the total experience. Of those Defense Acquisition Workforce employees who responded, they averaged nearly 15 years in defense acquisition. Experience in defense acquisition ranged from zero (non-acquisition workforce employees) to a maximum of 25 years. Eleven respondents were Senior Executive Service-level employees while the remainder responded that they were a GS-15-level equivalent employee. The demographic results indicate that the distribution was effective in getting respondents who were successful in their federal career, had significant experience, and were familiar with defense acquisition. This population would be expected to be in a position where they may have benefitted from a mentoring relationship and would be in a position where they would have the basic qualifications, occupy a senior position, and have requisite experience to be a mentor to lower-level employees.

Survey: Personal Experience with Mentorship

The survey was designed to solicit information regarding the respondents' personal experience, with mentorship from both protégé and mentor perspective. Data was analyzed to determine if the respondent considered mentorship important in his or her personal development.

Fourteen (78 percent) of the respondents reported that they had a mentor at some point in their career. All of the 14 reported that at least one of their mentor relationships was an informal relationship, which was not assigned as part of a formal program. Data related to career stage and mentorship was collected. Four levels were identified: Intern, GS-09 to 12, GS-13 to 14, and GS-15 to SES. The codes refer to career progression within the Federal General Schedule, or GS-scale. The highest level on the GS-scale is 15. Senior Executive Service is the highest level with the civil service. Frequency of responses at each level is shown in Table 4.

	Intern	GS09-12	GS13-14	GS15-SES
Number	4/14	9/14	11/14	9/14
Percentage	29%	64%	79%	64%

Table 4. Mentor Relationship by Career Phase

It is surprising that the intern phase was not one of the higher frequencies, as it could be expected to be a phase where a formal mentor would be assigned. Data may indicate that intern programs generally do not require or are ineffective in establishing a mentor relationship for interns. Mentorship peaks at the GS-13 to 14 level, indicating a possible optimum time for forming the mentor-protégé relationship for those eventually making it to the senior leader level.

Thirteen (72 percent) of the 18 respondents reported that they are currently acting in a mentor role. All but one of those who reported that they were now mentors had mentors sometime during their career. None of those who did not have mentors during their career were now mentors. It appears nearly certain that a senior leader today who had a mentor during his career sees an importance of that relationship and acts in the mentor capacity today.

For those reporting that they are currently serving as a mentor, the number being mentored varies widely. Two respondents reported that they are mentoring one person each

while two respondents indicated over 20 people being mentored. The mode for the numbers of reported is four people per mentor. The wide variety provides indication that the quality, or personal attention, being given varies as well. Additional study into quality of mentorship would be interesting and should be aimed at determining whether the psychosocial or the career advising received more attention for mentors serving a large number of protégés.

Eleven out of 16 (two surveys did not have this part completed) indicated that the organization of the respondent did not have a formal mentoring program. The survey was not specific as to the definition of organization, so a direct correlation between organizations found in Table 1 cannot be made. It does indicate that a majority (61 percent) of the senior leaders responding do not have an organizational-based mentoring program for their use.

Survey: Views of Mentoring

Eight statements were presented for respondents to indicate agreement or disagreement. One of five levels could be chosen: Strongly Agree, Agree, Neutral, Disagree, or Strongly Disagree. Table 5 shows the responses as it relates to effective of formal mentoring programs versus informal programs.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2/18	5/18	9/18	2/18	0/18
11%	28%	50%	11%	0

Table 5. Formal mentoring programs are more effective than informal mentoring.

More respondents were neutral to this statement than those that agreed or disagreed. More agreed (39 percent) that formal mentoring programs are more effective than those who

disagreed (11 percent). This indicates that there is some comfort in formal programs, but overall, there is little preference by the respondents.

With the large number of tenant organizations available at Aberdeen Proving Ground, opportunities could be available for outside mentorship, i.e., mentors and protégés in different organizations. There could be benefits derived from a mentor outside the organization and not in the supervisory chain of the protégé. The next statement and the responses, Table 6, provide some insight into leaders in these organizations opinions on cross-organizational mentoring.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2/18	6/18	5/18	4/18	1/18
11%	33%	28%	22%	6%

Table 6. Having a mentor within the organization is more effective than having a mentor outside the organization.

More respondents feel that having a mentor outside his or her organization is more effective, 44 percent versus 28 percent respectively. The large numbers of neutral responses indicate that the mentor's organization in relation to the protégé should not be considered important to the mentor relationship.

The responses to the next question indicate an overall support for a mentorship program that spans the tenant organizations on the installation. Table 7 shows that such an installation-wide program would receive support, 83 percent agree, for such a program.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
7/18	8/18	2/18	1/18	0/18

39%	44%	11%	6%	0%
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Table 7. I would support an installation-wide mentorship program.

Analysis of the responses to the three statements shown in Tables 5, 6, and 7 reveal that a formal, installation-wide program for mentorship would get support from senior leadership at Aberdeen Proving Ground. The overwhelming support indicated by the positive responses to the installation-wide mentorship proposals should be tempered by the number of uncertain responses provided from belief in the effectiveness of formal programs and cross-organizational mentorship programs.

The literature review identified two structured guidelines for employee development for Army civilians: the Civilian Education Systems and the Defense Acquisition Certification Program. Two areas of interest contained within the survey addressed attitudes by senior leaders for these guidelines.

Table 8 provides feedback from senior leaders on the Civilian Education System.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
3/18	14/18	1/18	0/18	0/18
17%	78%	6%	0%	0%

Table 8. I recommend employees follow the Civilian Education System guidelines for leadership training.

Respondents overwhelmingly agreed (94 percent) that they recommend these guidelines for civilian employees who seek leadership training. The literature review addressed some alternatives to mentoring. Although these training guidelines would be applicable for those in

mentoring relationships as well as those not being mentored, they are well supported by senior leadership and would be suitable as an alternative source for non-mentored employees.

Table 9 provides feedback from senior leaders on the Defense Acquisition University certification program.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4/15	11/15	0/15	0/15	0/15
27%	73%	0%	0%	0%
Note: Responses from those who were not Defense Acquisition Workforce employees were not counted.				

Table 9. The Defense Acquisition University certification courses are keys to employee development.

All of the Army acquisition workforce respondents either agree or strongly agree with the importance of the certification courses required as part of the Defense Acquisition Workforce. Three respondents, who were not defense acquisition employees, were neutral on the certification courses. Even more so than with the Civilian Education System guidelines, widespread support for the defense acquisition certification program exists within the community. Based on these results and certification requirements, the certification program should be considered for those being mentored or not. Additional investigation into the reasons for low certification rates appears to be warranted.

The literature review identified research that showed elements those results in poor quality mentoring. The survey addressed one specific element that could result in lower quality mentoring: time available to the senior leader for mentoring. Table 10 shows responses that indicate whether available time affects the ability to mentor.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1/18	2/18	1/18	6/18	8/18
6%	11%	6%	33%	44%

Table 10. Workload does not allow me to take the time necessary to effectively mentor someone.

Over three quarters of the respondents disagreed that his or her workload interfered with effective mentoring on their part. This appears to further indicate a willingness to provide mentorship by senior leadership at Aberdeen Proving Ground despite pressures associated with day-to-day workload.

The last of the survey statements pertain to mentorship training. The Eby, L., Butts, M., Lockwood, A., & Simon, S. (2004) report provides information regarding the importance of training for mentors. Since a large number of respondents are presently serving as mentors, investigation of training of mentors at Aberdeen Proving Ground is important.

The first statement addresses whether adequate training has been received by the respondents. Table 11 provides the results.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2/14	6/14	4/14	2/14	0/14
11%	43%	29%	14%	0%
Note: Responses from those who were not current mentors were not included.				

Table 11. I have received adequate training in mentoring personnel.

Slightly more than half of the respondents who were current mentors agreed with the statement that their mentor training was adequate. Two (14 percent) disagreed and four (29 percent) were neutral. The fact that 43 percent of the respondents could not agree with the statement may indicate that training quality or availability could be improved.

The second statement on mentor training solicits opinion regarding the importance of training for mentors. Table 12 provides results of the survey in this area.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2/18	9/18	4/18	3/18	0/18
11%	50%	22%	17%	0%

Table 12. Mentor training is essential for mentors to be effective.

The majority (61 percent) of the respondents agreed that mentor training was essential for those mentoring civilian employees. An interesting note is that three respondents who reported that they were currently mentors disagreed with the training statement. It could indicate that some senior leaders believe that training is not necessary. Previous studies have shown that no training could lead to lower quality mentoring.

Interview Results and Analysis

Interview Demographics

Five interviews were conducted with members of the Senior Executive Service located at Aberdeen Proving Ground occupying leadership roles within the defense acquisition community. Interviewing senior executives provide two perspectives from which to investigate. Firstly, what effect mentoring had in their careers could be discussed considering their high-level career status. Secondly, since they occupy leadership positions, how mentoring was being utilized in their organizations and how they personally mentored could be investigated.

Senior Executive #1

This senior executive had three significant mentors in his career. Each of the mentors was informally initiated. He considered his first mentor most productive. Techniques used by this mentor included: providing him tasks that were above his skill level at the time, providing a broader perspective, and generally helping to build confidence. When asked about any personal negative experience with a mentor-protégé relationship, he reported that he did not have any.

He reported that he currently mentored three employees. One of the protégés worked directly for him while the others did not. The relationships were established informally, with a combination of initiation by the protégé and initiation by him as a mentor. He mentioned that he is open to all for career advisement.

His views on mentoring are similar to the views of those that mentored him. Getting protégés exposure through challenging assignments and temporary positions and providing meaningful feedback are important to their development. Responsibility put on employees early in their career can be effective. Pushing and stretching the protégés abilities, without the protégé knowing it is happening, is best. He considered informal mentoring relationships significantly more effective than formal ones, but did recognize the place for formal programs. Forcing

mentor-protégé relationships can create negative results primarily because the energy will not be there that makes the relationship work. He felt that the mentoring relationship is best when the mentor establishes the relationship. Many times, the employee will seek such a relationship when he or she becomes stagnant in the position they have been in for a while.

Formal programs help to supplement and provide alternatives to mentoring relationships. He noted several programs that exist within subordinate commands that provide opportunities with similar benefits as an informal mentor. One such program that exists at a subordinate command was a limited mentoring program, named Flash Mentoring, which matched employees with more than eight years of experience with employees with one to seven years on the job. The match results in a one-time meeting to share career experiences unless the participants wish to continue the relationship. Also specifically mentioned was the Aberdeen Proving Ground Senior Leadership Cohort Program. The Cohort Program is designed as a year-long cross-installation leadership development program for GS-15-level employees. This senior executive mentioned some other training programs that he thought were worthwhile: Harvard University Senior Executive Fellows and programs associated with the Federal Executive Institute. The Federal Executive Institute was suggested because it was not Department of Defense specific. This senior executive felt that the Army's Civilian Education System has the right principles for developing potential leaders.

Senior Executive #2

This senior executive reported having one mentor during his career. This mentor was influential early in his career, where he advanced rapidly to a mid-level management position. His mentor gave him challenging assignments, empowered him to execute the assignments, provided encouragement and the opportunities to excel. Although not a formally established

mentor-protégé relationship, he was under the direct supervision of this mentor. The mentor-protégé match was established through the direct working relationship.

He indicated that he is presently mentoring three protégés. All of which are informal; no written rules are associated with the relationship. One sought him out while the other two were picked out by him as he felt that they had leadership potential.

His view of traits of a good mentor-protégé relationship is one where high expectations are established by the mentor and feedback on execution is provided honestly to the protégé. The career is the employee's to manage and is not established through just accomplishing items on a check list. Formal mentoring is not as effective as an informally established relationship. He mentioned that he thought that either member of the mentor-protégé relationship should be able to opt out in the event it was not working.

Cross organizational mentoring is not necessarily more effective. There may be advantages to being mentored by your direct supervisor. Four subordinates to his mentor went on to also become senior executives; however, alternatives or supplements to mentoring such as the Aberdeen Proving Ground Cohort Program are a great opportunity for exposure across the installation. He suggested that the Defense Acquisition University certification program was valuable and that employees should seek other certifications than the one that they are required to obtain.

Senior Executive #3

This senior executive reported to have several mentors throughout his career but one was most influential. The one that was most influential was an informally based mentor. His mentor provided advice before he made mistakes, provided challenging assignments, and provided an intellectual basis to decision making. His mentor was someone who was advancing quickly within the organization and provided momentum to his career as well.

He prefers informal mentoring that provides psychosocial support to the protégé. Outside mentors can provide sound advice while not being burdened with the supervisor-employee relationship.

He reported that he was mentoring approximately 20 employees to whom he regularly provides career advice. He estimated one hour per day was spent with related activities. He felt the time was well spent. Providing psychosocial support in the form of teaching the importance of the Army and organizational mission was an emphasis for him.

He encourages informal mentoring within his organization. Formal mentoring strategies are not as effective as informal ones. However, formal developmental programs are not without merit. He acknowledged the difficulty with mentoring entry-level personnel due to age-related differences. To compensate, he has established a peer-based program within his organization to provide some psychosocial support to employees at the lower levels. The program provides an encouragement to own age peer-to-peer support relationships.

He considers compliance-based programs useful within an organization. Civilian Education System and defense acquisition certification are encouraged as a baseline, along with developmental assignments and broad-based assignments. The broadness of an organization's mission can provide a higher quality of experience development. He felt his organization was an excellent source of varied experience. Other organizations may be too focused in their mission, resulting in less-full developmental experiences for its employees.

Senior Executive #4

This senior executive had three mentors during his career, although none were part of a formal program. Although pursuing a military career, his most significant mentor came from the civilian sector of the Army. While an Army captain, he was mentored by a senior civilian who provided a foundation for him at a time when he felt he was not being utilized to the fullest. His

mentor provided him with engaging special projects where he was challenged with tasks that were higher in complexity than his current position. Through this relationship, he gained a higher level of experience than he would have gained otherwise. This civilian-military mentoring relationship continued after his time working directly with the civilian mentor. His civilian mentor provided help in choosing other assignments as he progressed in his military career. There was no official Army mentoring program for him during his career, but he did benefit from one officer mentor. The relationship started when working on the same project, when communication between the two was every day. His Army mentor helped in promoting his career with other higher Army officers, discussed future assignments, and helped him to get his desired assignments.

According to this senior executive, positive influences on protégés include providing new and varied perspectives, molding the protégé's thought process, and providing opportunities to learn and get insight. He believes that senior executives should commit to mentoring three to five people. Although not in favor of a strict formal program, a process should be established in organizations that would specify training, communication, how to choose, expectations of the protégés, and provide designated positions for protégés. Commitment to mentoring is essential for success of the mentoring relationship.

He participates informally in mentoring at this time. He currently mentors three to five employees. None are formal relationships, and he chose the individuals to mentor.

He supports the Aberdeen Proving Ground Cohort Program. It provides an opportunity to break down organizational stovepipes and to promote diversity in future leaders. He sees the program as a basis for future expansion that will enhance the cross-organizational diversity for the long term at Aberdeen Proving Ground.

Senior Executive #5

This senior executive differed from the other four in that he did not have a mentor during his career. Much of his career was in the military, and he did not receive mentorship during that period. Despite this, he actively advocates mentorship within his organization. He has institutionalized mentorship within his organization of 1,200 civilian employees.

He established a team to help implement mentorship within his organization. The program established encourages voluntary participation in a loosely structured mentorship program. Implementation of the plan included informing the workforce, seeking voluntary participants, assist in pairing mentors and protégés, conduct periodic reviews, and maintain lists. Guidelines are provided, to include a sample mentorship agreement, but mentoring relationships are allowed to develop independently.

This executive currently mentors two individuals at the GS-13/GS-14 level. One is within his organization while the other is not. In both case, the protégés chose him a mentor. He generally meets with them once per month.

His views on mentorship include the importance of an informal relationship, as it will not work for all. It is important for succession planning. Potential aspects that can have a negative impact on the mentoring relationship include a collegial relationship, promotions perceived as due to the mentor, and differences in the mentor and protégé's styles. It is important that the mentor manages the expectations of the protégé. He utilizes a Department of Army Pamphlet on Mentoring for Civilian Members of the Force, Pamphlet 690-46, as a guide for mentoring and requires training for mentors.

He acknowledged the value of the Aberdeen Proving Ground Cohort Program and the Civilian Education System. He stated that the Defense Acquisition University certification program was an absolute requirement that all employees within his organization must comply.

Summary of Senior Leader Views

There were more similarities than differences in attitudes toward mentorship among the senior executives interviewed. The following is a summary of results of the interviews:

- All are advocates of mentoring relationships within their organization.
- All personally participate in mentoring relationships.
- An informal mentoring relationship is preferred by most. One senior executive established a formal program that encouraged informal development of the mentoring relationships.
- There is value from cross-organizational mentorship, but mentoring within the organization may have additional benefits.
- Most see providing challenging assignments by the mentor important to protégé development.
- Four of five executives benefitted from a mentor during their career. All understand the benefits from mentorship.
- Mentor training is important for those becoming a mentor.
- The Aberdeen Proving Ground Cohort Program, the Civilian Education System, and the Defense Acquisition University certification program are important to employee development.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Previous studies on mentorship have shown that it is an element of employee development that can have a significant effect on career success. Previous studies have shown that there are positive effects of mentoring beyond career success, including general job satisfaction and loyalty. In addition to benefits for the protégés, mentors capabilities are enhanced, and programs can bring positive new employee recruitment effects.

This study has shown that mentorship has contributed to the success of many leaders within the defense acquisition community at Aberdeen Proving Ground as well. Even for those where mentorship was not a factor in their careers, there appears to be support for mentorship as an element of career development for employees within their leadership purview.

The purpose of this research project was to add to the body of research on mentoring and to apply lessons to the unique situation at Aberdeen Proving Ground. With the increase in defense acquisition organizations associated with the Base Realignment and Closure, Aberdeen Proving Ground is a growing and an important hub of defense acquisition activities. Impact on the nation's defense by activities centered at Aberdeen Proving Ground will be great well into the future. The Army acquisition process relies on a well-trained and ready workforce for the challenges of fielding effective, suitable, sustainable, and survivable weapons systems. It depends on the development of technical and leadership skills. Mentorship is a valuable element in many large organizations and has contributed to development and preparation of people, particularly for leadership positions. The senior civilian leadership at Aberdeen Proving Ground that participated in this study, through completion of a survey or submitting to interviews,

provided an indication as to the place mentorship should hold within the acquisition community at Aberdeen Proving Ground.

The following questions were addressed as part of this study:

- Is there a basis for support for a career mentoring program at Aberdeen Proving Ground among senior leadership?
- What key characteristics are needed in an Aberdeen Proving Ground Career mentoring program for improving acquisition and leadership training, education, experience, and succession planning?

To the first question, data indicates that there is a firm basis of support for career mentoring program among senior leadership. More than 80 percent of those responding to the study survey would support an installation-wide program. Nearly 40 percent strongly agreed that they would support an installation-wide effort. For most of the leaders, mentoring employees is already an activity in which they participate. Over 70 percent of the Aberdeen Proving Ground leaders responding to the mentorship survey are currently participating in multiple mentoring relationships. A more structured cross-organizational mentorship approach should be considered to enhance the career development activities at Aberdeen Proving Ground.

Just what form the career mentoring program would take is a more difficult question to answer. As learned from this and other studies, mentorship involves a psychosocial component that is hard to structure. Key characteristics that should be considered for any mentoring activity are as follows:

- Encourage mentoring. Find opportunities to encourage mentoring while not formally requiring participation. Mentoring should not be forced on either a potential mentor or protégé. The relationship requires willing participation and commitment. Leverage

programs that already exist to encourage mentoring throughout Aberdeen Proving Ground. Integrate mentoring opportunities within existing programs.

- Provide challenging work assignments. The protégé should be given challenging assignments where visibility by other leaders is achieved.
- Allow for varying levels of career support, including mentorship. Understand that all employees cannot receive the same level of mentorship. Alternatives should be available for all employees. Emphasize the training and certification guidelines that currently exist such as the Civilian Education System and defense acquisition certification program.
- Have training available for mentors and protégés. Provide opportunities for training of potential mentors as well as potential protégés. Both parties need to recognize when the relationship is not effective.

This study has partially confirmed the study hypotheses: Current mentoring programs, if they exist, are tenant organization specific or are informal. The current mentoring situation is in need of improvement to meet challenges of current and future employee development at Aberdeen Proving Ground. Programs do exist within some of the organizations at Aberdeen Proving Ground and informal mentorship is common. Whether individual programs or individual mentoring relationships are in need of improvement would require additional study. This study has provided enough insight to provide recommendations incorporating the key characteristics above.

Recommendations

There was no data that indicated that an installation-wide mentorship program would be superior to ones executed at individual organization level, whether informally or formally based. Survey results show that there would be support for such a program. The recommendations here,

for the most part, would apply to an installation-wide program, an organizational-based program, or simply an individual mentorship relationship.

Mentorship must be encouraged but not forced upon individuals. Encouragement can take various forms. Organizations establishing formal programs should understand that requiring potential protégés seek out mentors or potential mentors being required to participate can result in poorly established relationships. As Miller (2000) pointed out, a dissatisfying relationship may be worse than no mentoring at all. Providing opportunities for those who may become excellent mentors to develop mentoring relationships should be pursued. For example, the Aberdeen Proving Ground Cohort Program, being composed of experienced personnel and receiving support of the Aberdeen Proving Ground senior executives, could be leverage to recruit those interested in serving as mentors. Utilizing the Cohort Program would also provide a cross-organizational flavor to the mentorship activities at Aberdeen Proving Ground.

Mentorship is enhanced when mentors are in a position to provide meaningful assignments to the protégé for maximum benefit to the protégé. Several of those leaders interviewed had mentors who were in their direct supervisory chain and benefitted for the types and challenges of higher-level assignments. These mentors are the best position to provide challenging assignments where visibility of other senior leaders is possible. Mentors outside the protégé's supervisory chain will likely have difficulty in accomplishing this. Cross-organizational mentorship has other positive aspects, but to impact assignments, the outside mentor would be limited.

Not all employees will be able to get the same level of mentorship. The close mentor-protégé relationship will be necessarily limited by the number of suitable experienced mentors available and those potential protégés with leadership potential. Any employee development program should include the ability for obtaining career guidance based on known, published

standards and guidelines, as well as from senior management. Access to the Defense Acquisition University certification training should be available to all so that the employee is current in acquisition-related policies, techniques, and disciplines. The Civilian Education System should be available to all who aspire to be leaders within the acquisition community. All senior leaders should be available to provide career guidance consistent with these standards and supplement with tailored career recommendations. Allen and Finkelstein (2003) include peers/coworkers as an alternative source of psychosocial benefits attributed to mentorship. As seen in this study, several peer-related processes have been established by Aberdeen Proving Ground organizations. These types of peer-related processes can enhance more employees' career advancement potential and job satisfaction and can be established in an organizational or cross-organizational context.

Mentoring can be complex and difficult to conduct effectively. Training is essential for those considering mentoring. Eby, McManus, Simon, and Russell (2000) categorized several negative mentoring experiences. Negative or even marginal satisfying relationship can negate the positive effect of mentoring (Miller, 2000). Effectiveness of mentoring can be enhanced by training the mentor to avoid common pitfalls. The Army e-Learning catalog (2009) has several available courses in mentoring available. The Cohort Program, if to be used to recruit potential mentors, should include a module of mentor training.

Mentorship should be an integral part of an organization's employee career development program. At a minimum, it should be part of a senior executive's responsibilities to mentor three to four employees. Ideally, it should be ingrained in the culture of that organization in order to develop the best future leadership. This study has shown that support from the senior executives for mentorship is sound, both personally and, in some cases, organizationally at Aberdeen Proving Ground. Taking a broader perspective, there is an opportunity to expand the mentorship

culture across Aberdeen Proving Ground and to take advantage of the broad experiences within defense acquisition that will be available following the Base Realignment and Closure.

Limitations

There are some areas touched on during this study that are worth additional and more in-depth study or review.

Several mentorship programs were introduced during this study. These programs were not investigated in depth to determine the effectiveness of the approach or technique. It would be interesting to interview subjects that participated in the program to gauge the impact these programs were having on their career. Research has shown that formal programs can be less effective than informal programs. Most of the programs discussed had informal characteristics, particularly when related to their voluntary nature, but how that impacted the success of the program was not investigated here.

Another area of concern was related to the defense acquisition certification program. Data relating to certification compliance showed what appeared to be low compliance percentages, approximately 30-40 percent not certified, does not match with the overwhelming support from senior leaders for the certification program. Determining why there is a discrepancy here would be worthwhile.

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APPENDIX A

SURVEY INSTRUMENT

Mentorship Survey

Cover Letter

APG Senior Leader/Manager:

The attached survey is being administered as part of a strategic research project as required by the Defense Acquisition University Senior Service College Fellowship in which I am participating. The purpose of this research project is to add to the body of research on mentoring and to apply lessons to the unique situation at Aberdeen Proving Ground. Your input as a senior leader at APG is desired on the short attached survey instrument.

For the purpose of this study, a mentor is generally defined as a higher-ranking, influential individual who has advanced experience and knowledge and is committed to providing upward mobility and support in ones career.

Request you complete the survey and return it by APG mail using the attached return address label. The survey can also be faxed to XXX.XXX.XXXX.

Survey Content

(Legend. SA = Strongly agree, A = Agree, N = Neutral or Not Applicable, DA = Disagree, SDA = Strongly Disagree)

Part 1. Personal Background

a. I am (or have been) a member of an Army Acquisition Workforce.	Yes	No
b. Length of federal service (include military)	Less than 15 years.	More than 15 years.
c. Number of years in a Defense Acquisition Position (enter number of years) = _____.		
d. Current level of your position.	SES	GS-15 or equivalent

Part 2. Personal Experience with Mentorship

I have had one or more mentors during my career.					Yes	No
a. If you had a mentor(s), what stage of your career did you have the mentor? (circle all that apply)	Intern Program	GS-09 to GS-12 or equivalent	GS-13/ GS-14 or equivalent	GS-15/SES		
b. Were any of your mentors informal (i.e., not assigned or part of a formal program)?	Yes			No		
c. Having a mentor was a significant factor in my career advancement.	SA	A	N	DA	SDA	
d. I am currently mentoring one or more lower level employees.	Yes			No		
e. Number of employees you are mentoring. Enter number: _____						
f. My organization has a formal mentoring program.	Yes			No		

Part 3. Mentoring Personnel

a. Formal mentoring programs are more effective than informal mentoring.	SA	A	N	DA	SDA
b. Having a mentor within an organization is more effective than having a mentor outside the organization.	SA	A	N	DA	SDA
c. I would support an installation-wide mentorship program.	SA	A	N	DA	SDA
d. I recommend employees follow the Civilian Education System guidelines for leadership training.	SA	A	N	DA	SDA
e. The Defense Acquisition University certification courses are keys to employee development.	SA	A	N	DA	SDA
f. Workload does not allow me to take the time necessary to effectively mentor someone.	SA	A	N	DA	SDA
g. I have received adequate training in mentoring personnel.	SA	A	N	DA	SDA
h. Mentor training is essential for mentors to be effective.	SA	A	N	DA	SDA

APPENDIX B

SAMPLE INTERVIEW QUESTIONS

The following are representative of the questions asked during the senior executive interviews.

The interviews were not structured so that all questions were asked of all those interviewed.

Mentoring Interview Questions

- Personal mentorship experience as a protégé.
 - Did you/do you have someone you would refer to as a mentor? (Yes)
 - What elements of that relationship were key to your career advancement?
 - Any negative experience with your mentoring relationships?
 - Did you/do you have someone you would refer to as a mentor? (No)
 - Why not?
 - What elements of your career to attribute to your career advancement?
 - Did you have any negative experiences with would-be mentors?
- Personal mentorship experience as a mentor.
 - Are you currently a mentor to someone? Number? (Yes)
 - How would you describe the quality of the relationship?
 - Scale: On paper through close personal relationship.
 - How often to you converse? Get together?
 - Does he or she work directly for you?
 - Why does the mentoring relationship work or is struggling?
 - Have you had mentor training?
 - Are you currently a mentor to someone? Number? (No)
 - Why not?
- Opinions regarding informal versus formal mentoring.

- o Does your organization have a formal program that involves mentoring?
 - o What is your opinion regarding formal mentoring versus informal mentoring?
 - o Would you support for a formal APG mentorship program? Why?
- Key aspects of successful (or unsuccessful) mentorship.
 - o In your opinion, what are some views of positive aspects of mentoring?
 - o In your opinion, what are some views of negative aspects of mentoring?
 - o Is training a key aspect of successful mentorship?
- Challenges for APG in employee development.
 - o Should mentoring play a key role in meeting employee development considering the common acquisition mission of many of the organizations at APG and the changes resulting from BRAC?
 - o Would cross-organizational mentorship be worthwhile? How do you feel about the value of an APG-wide mentorship program?
 - o What is your opinion of the Civilian Education System guidelines for leader training?
 - o What is your opinion of acquisition certification training? Essential for development?
 - o If someone followed these guidelines, what else would be needed for a future leader?