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A RELATIONSHIP ASSESSMENT BETWEEN 2017 ORGANIZATIONAL CLIMATE SURVEYS AND 2017 WORKLOAD STATISTICS AT ACC-APG CONTRACTING CENTERS

December 2018

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A RELATIONSHIP ASSESSMENT BETWEEN 2017 ORGANIZATIONAL CLIMATE SURVEYS AND 2017 WORKLOAD STATISTICS AT ACC-APG CONTRACTING CENTERS

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

In 2017, Army Contracting Command – Aberdeen Proving Ground (ACC-APG) surveyed the organizational climate of its 12 contracting divisions and found areas in need of improvement. This research seeks to identify if ACC-APG leadership can improve organizational climate by altering workload levels. To do this, this research assessed whether a relationship exists between the Defense Equal Opportunity Management Institute (DEOMI) 2017 ACC-APG organizational climate survey results and ACC-APG's workload statistics at each of the 12 contracting divisions. This research determined that there are meaningful correlations between multiple organizational climate areas and workload statistics. However, ACC-APG leadership needs to conduct additional research to determine the correlation causes before they can make decisions based on this research to influence organizational climate.

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LIST OF ACRONYMS AND ABBREVIATIONS

blanket purchase agreement call
Army Contracting Command
Aberdeen Proving Ground
Army Contracting Command – Aberdeen Proving Ground
contract over the simplified acquisition threshold of \$150,000
Control Communications Computer Intelligence Surveillance and Reconnaissance
indefinite delivery contract
Defense Equal Opportunity Management Institute
Department of Defense
delivery order/task order
U.S. Office of Personnel Management
purchase order under the simplified acquisition threshold of \$150,000
Principle Assistant Responsible for Contracting
Research Triangle Park

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I. INTRODUCTION

In 2017, Army Contracting Command – Aberdeen Proving Ground (ACC-APG) surveyed the organizational climate of its 12 contracting divisions, and they found areas in need of improvement. As a result, ACC-APG leadership is interested in improving its organizational climate because a positive organizational climate lowers employee turnover, increases job performance, and increases overall operating results (Defense Equal Opportunity Management Institute [DEOMI], n.d.-b, n.d.-c, n.d.-d). This research seeks to provide ACC-APG leadership insight on how they can improve organizational climate. Specifically, this research identifies if ACC-APG leadership can improve organizational climate climate by altering workload levels.

Understanding the factors that influence organizational climate can help senior leaders better manage their organization. Research on organizational climate shows that organizational climate strongly relates to levels of job satisfaction, involvement, commitment, and motivation (Robbins & Judge, 2016, p. 269). As a management tactic, ACC-APG already analyzes yearly organizational climate, and they track workload statistics; however, they have never analyzed organizational climate and workload statistics to see if there is a correlation.

In 2017, APG-ACC leadership asked the Defense Equal Opportunity Management Institute (DEOMI) to conduct an organizational climate survey on all employees at ACC-APG, including its 12 contracting divisions. DEOMI, a Department of Defense office independent from ACC-APG, provides human relation education, training, research, and solutions to enhance force readiness (DEOMI, n.d.-e). DEOMI also conducts an organizational climate survey for commands that request it. Their organizational climate survey collects data in three main climate areas: Organizational Effectiveness, Equal Opportunity / Equal Employment Opportunity / Fair Treatment, and Sexual Assault Prevention and Response (DEOMI, n.d.-f). After DEOMI conducted the organizational climate survey in September 2017, they submitted the survey findings to ACC-APG. In addition to organizational climate information, APG-ACC also collects workload data on each of its 12 contracting divisions, and ACC-APG senior leaders use this information to make management decisions. ACC-APG collect a wide range of workload data such as number of personnel and contract output information, which includes the number of contracts or modifications each division executes.

ACC-APG currently analyzes the organizational climate survey results separate from its workload information. However, this research will assess whether a relationship exists between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions. The results of this research may provide insight to ACC-APG leadership on how to improve organizational climate.

A. ARMY CONTRACTING COMMAND – ABERDEEN PROVING GROUND

The subject of this research is ACC-APG's 12 contracting divisions. ACC-APG is located in northern Maryland on a U.S. Army facility called Aberdeen Proving Ground (APG). As a contracting center under the direction of Army Contracting Command (ACC), APG provides contracting support to a diverse customer base. According to ACC-APG's website (n.d.), they provide

comprehensive contracting, business advisory support and sustained expertise through six major competency areas: Research and Development; Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR); Cybersecurity; Test and Evaluation; Chemical and Biological Defense; and Medical Research. We offer access to state-of-the art technology and a wide gamut of products and services which provide our Soldiers with the best resources possible. Our contracting and procurement expertise also include installation and base operations, foreign military sales, grants, cooperative agreements, depot-level maintenance and other transactions. We take pride in our role as fiscal stewards by meeting customers' needs in the most effective, economical and timely manner. We provide our customers with access to innovative and agile solutions through our interface with industry and small business. (ACC-APG, n.d.)

ACC-APG manages 12 separate contracting divisions, seven of which are located on APG with the remaining five located throughout the United States. All 12 divisions, along with their geographic location, are listed in Table 1.

ACC-APG Division Name	Location
Division A	APG, MD
Division B	APG, MD
Division C	APG, MD
Division D	APG, MD
Division E	APG, MD
Tenant Division	APG, MD
Edgewood Division	APG, MD
Adelphi Division	Adelphi, MD
Belvoir Division	Fort Belvoir, VA
Huachuca Division	Fort Huachuca, AZ
Natick Division	Natick, MA
Research Triangle Park (RTP) Division	Research Triangle Park, NC

Table 1. ACC-APG Contracting Divisions. Adapted from ACC-APG (n.d.).

B. RESEARCH QUESTIONS

The purpose of this research is to assess whether a relationship exists between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions. This research aims to answer the following questions.

- 1. Can ACC-APG senior leaders improve organizational climate by altering workload levels?
- 2. Is there a correlation between organizational climate and the workload statistics at the 12 ACC-APG contracting divisions?

C. BENEFITS OF THE RESEARCH

A positive organizational climate significantly improves the effectiveness of an organization, and this research seeks to provide ACC-APG leadership insight on how they can improve organizational climate. Employees in a favorable organizational climate focus

on the organization's goals and mission, they display positive emotions, they are excited about their work, they bring a high level of energy to their work, and they commit to high quality performance standards (DEOMI, n.d.-a, n.d.-b, n.d.-c). The outcome of this research will inform ACC-APG senior leaders whether, and, if so, how, they can improve organizational climate by adjusting workload levels. Since senior leaders can influence organizational climate in the short term (Moran & Volkwein, 1992), this research may allow ACC-APG leadership to improve organizational climate immediately.

D. SCOPE AND LIMITATION OF THE RESEARCH

This research is limited to certain factor subgroups of DEOMI's 2017 ACC-APG organization climate survey, to survey responses from contracting professionals, and to ACC-APG's fiscal year 2017 (1 October 2016 through 30 September 2017) workload statistics.

As requested by ACC-APG, DEOMI conducted a one-time optional online organizational climate survey in September 2017. ACC-APG forwarded DEOMI's online survey link to its 12 contracting divisions, which include roughly 800 employees. About 710 of those employees are contracting professionals (1102 job series), and the remaining 90 employees are non-contracting professionals. About 76.5% of the entire ACC-APG workforce, the 12 contracting divisions and ACC-APG's Principle Assistant Responsible for Contracting (PARC) office, completed the survey. The survey was voluntary; however, ACC-APG strongly encouraged employees to participate. DEOMI sent the survey results to ACC-APG, and ACC-APG sent them to me to analyze for this research.

According to DEOMI's website, the survey consisted of

56 questions/items to measure 21 climate factors: nine Organizational Effectiveness factors, using 31 questions/items, six EO/EEO/Fair Treatment factors, using 17 questions/items, six Sexual Assault Factors, using up to 8 questions/items, and an optional 10 locally developed and five short answer questions. (DEOMI, n.d.-f)

This research only focuses on the responses to four Organizational Effectiveness factor subgroups: organizational commitment, organizational performance, job satisfaction, and

engagement. I hypothesize that these four factor subgroups are the most likely organizational climate areas affected by workload.

While ACC-APG released the DEOMI organizational climate survey to all employees, this research only focuses on survey responses from contracting professionals. This research excludes survey results from ACC-APG's PARC office as they do not directly perform contracting workload functions, and instead it analyzes the survey results from the 12 contracting divisions. There are a few non-contracting professionals at the 12 contracting divisions that do not perform contracting workload activities; however, it is not possible to exclude their responses from the climate survey. As a result, this research considers any survey responses as a response from a contracting professional.

For the workload information, this research focuses on ACC-APG's fiscal year 2017 workload statistics. To calculate these statistics, I used an average number of personnel over the year at each contracting division. ACC-APG only tracks personnel numbers on a quarterly basis; therefore, I calculated the average number of personnel over the year to produce accurate workload statistics.

E. RESEARCH METHODOLOGY

The research methodology involved calculating the correlation between DEOMI's 2017 organizational climate survey results from 12 ACC-APG contracting divisions to workload statistics at the same 12 ACC-APG contracting divisions. This research specifically compared four Organizational Effectiveness factor subgroups within DEOMI's organizational climate survey to ACC-APG's workload statistics calculated by the researcher. The four Organizational Effectiveness factor subgroups are organizational effectiveness, organizational commitment, organizational performance, job satisfaction, and engagement.

For the workload statistics, I analyzed fiscal year 2017 ACC-APG workload data and calculated statistics that, as a contracting officer, I think accurately represent a contracting professional's workload. The workload statistics include simple actions per person, complex actions per person, post-award actions per person, new contract awards per person, and average obligations per person. The definitions for each of these calculations are located in Chapter II.

F. ORGANIZATION OF THE REPORT

This report consists of five chapters. The first chapter introduces the background, purpose, and benefits of this research. It also discusses the methodology used to assess the relationship between organizational climate and workload statistics.

The second chapter reviews prior research on organizational climate and discuss the four DEOMI organizational climate factor subgroups. It also outlines how each organizational climate factor subgroup affects an organization.

The third chapter identifies and displays the data, defines how I calculated the ACC-APG workload statistics, displays the calculated workload statistics, and, lastly, it displays the organizational climate survey data.

The fourth chapter analyzes whether a relationship exists between DEOMI's 2017 organizational climate survey results from 12 ACC-APG contracting divisions to workload statistics at the same 12 ACC-APG contracting divisions. To determine if a relationship exists, this chapter calculates the correlation between the organizational climate data and the calculated workload statistics. This chapter also details the implications for the findings and makes recommendations to ACC-APG leadership.

The fifth and final chapter provides a summary of the research, concludes the findings, and suggests areas for further research.

II. LITERATURE REVIEW

This chapter reviews prior research on organizational climate and discusses the four DEOMI organizational climate factor subgroups used for this research. This chapter also outlines how each organizational climate factor subgroup affects an organization.

A. ORGANIZATIONAL CLIMATE DEFINED

Before I discuss organizational climate, I need state what it is. Robbins and Judge (2018, p. 269) define organizational climate as the "shared perceptions organizational members have about their organization and work environment." These shared perceptions can change over relatively short periods, which is why organizations like ACC-APG survey organizational climate on a yearly basis. Managers have the ability to change organizational climate in the short-term by making minor changes within an organization. For example, changes in key staff or budget cuts can affect organizational climate rather quickly (Moran & Volkwein, 1992).

B. CLIMATE VERSUS CULTURE

This research focuses on organizational climate, which is sometimes confused with organizational culture. Climate and culture are related ideas, but they are also distinctly different (Moran & Volkwein, 1992). One of the major differences between climate and culture is how long they last. Climate can change relatively quickly, but culture evolves slowly and is very difficult to change (Moran & Volkwein, 1992).

Denison (1996, p. 624) states that climate "portrays organizational environments as being rooted in the organization's value system, but tends to present these social environments in relatively static terms, describing them in terms of a fixed (and broadly applicable) set of dimensions." Denison considers climate as relatively temporary, and he believes that it is limited to aspects of the social environment that organizational members consciously perceive.

In contrast to climate, Robbins and Judge (2018) define organizational culture as "a system of shared meaning held by members that distinguishes the organization from other organizations" (p. 266). They further state that "organizational culture shows how employees perceive the characteristics of the organization, not whether they like them-that is, it's a *descriptive* term" (p. 266).

C. ORGANIZATION CLIMATE FACTOR SUBGROUPS

This research focuses on four organizational climate factor subgroups of DEOMI's 2017 ACC-APG organizational climate survey: organizational commitment, organizational performance, job satisfaction, and engagement. DEOMI's 2017 ACC-APG organizational climate survey consisted of nine Organizational Effectiveness subgroups; however, this research only focuses on four of those nine subgroups. I hypothesize that these four factor subgroups are the most likely organizational climate areas affected by workload.

DEOMI develops survey questions under each climate factor subgroup based on extensive research by its survey development team (Dr. L. Crepeau, email to author, May 29, 2018). The survey development team

reviewed the relevant published research literature to characterize each factor's theoretical underpinnings, and/or identified candidate items from validated scales that we could use without violating copyright laws. These items were then answered by thousands of survey takers. We then statistically evaluated the items' loading on the respective factors they were designed to measure, and their reliability (i.e., Chronbach's Alpha). Those items that loaded strongly on the factor were kept, while those that failed to load adequately or that correlated with other items were eliminated. (Dr. L. Crepeau, email to author, May 29, 2018)

DEOMI defines each of the four factor subgroups (organizational commitment, organizational performance, job satisfaction, and engagement) on its website, and the definition for each is located in the following subsections.

1. Organizational Commitment

I identified organizational commitment as an organizational climate area most likely affected by workload. DEOMI (n.d.-c) defines organizational commitment as an "emotional attachment to, identification with, and involvement of military members or employees to their units, characterized by a strong desire to maintain membership within the unit."

Employees can have a favorable or unfavorable perception on organizational commitment and either will produce a different organizational outcome. According to DEOMI's website (n.d.-c), a favorable indication means that current members recommend the workplace as a good place to work, and members focus on the organization's goals and mission. It also means, as DEOMI explains, that members talk about work in non-work settings, and employees exert considerable effort for the organization. Favorable indications in this area result in members voluntarily helping one another, feeling less job insecurity, feeling less role stress, and feeling like they are part of the organization (DEOMI, n.d.-c).

An unfavorable organizational commitment indication, the website continues, means that current members display low morale, appear less cohesive, put their personal goals before the organization's goals, and exhibit low levels of achievement. Unfavorable indications in this area reduce employee productivity, increase employee turnover, increase member tardiness, and decrease job satisfaction (DEOMI, n.d.-c).

2. Organizational Performance

I identified organizational performance as an organizational climate area most likely affected by workload. DEOMI (n.d.-d) defines organizational performance as "the perception that the organization operates well to accomplish goals and deliver high-quality output when pressured by demanding deadlines."

Employees can have a favorable or unfavorable perception on organizational performance and either perception will produce a different organizational outcome. According to DEOMI's website (DEOMI, n.d.-d), a favorable indication means that current members effectively communicate information, member knowledge increases, and members have a clear understanding of mission, vision, and intent. Favorable indications, as DEOMI explains, improve individual performance, overall operating results, member moral, and members demonstrate personal initiative to get the job done.

An unfavorable organizational performance perception, the website continues, indicates low leader competency levels, destructive cultures created by those leaders, increased member turnover, and poor communication among members. It also states that unfavorable indications in this area produce wide spread issues across all levels, increase employee defiance or misbehavior, decrease efficiencies, and increase costs. Lastly, unfavorable organizational performance perception also produce negative psychological effects on employees and creates confusion in completing tasks (DEOMI, n.d.-d).

3. Job Satisfaction

I identified job satisfaction as an organizational climate area most likely affected by workload. DEOMI defines job satisfaction as "refers to an attitude that reflects a positive or negative judgment of your current job" (DEOMI, n.d.-b).

Employees can have a favorable or unfavorable perception on job satisfaction and either will produce a different organizational outcome. According to DEOMI's website (DEOMI, n.d.-b), a favorable indication means that current members express high levels of fulfillment on the job, they display positive emotions and are happier, and they experience greater mental well-being. It also means, as DEOMI explains, that members express a willingness to help others at work and a willingness to go above and beyond. Favorable indications in this area result in low levels of turnover intentions, high levels of cooperation, increased job performance, and members forming supportive relationships (DEOMI, n.d.-b).

An unfavorable job satisfaction indication, the website continues, means that current members believe their life problems are the result of job-related issues and members display poor coping skills in response to work stress. It also states that members perceive a lack of fairness at work, the number of work complaints increases, and members express concern over the safety climate. Unfavorable indications in this area increase turnover intentions, absenteeism, and increase stress and physical health issues (DEOMI, n.d.-b).

4. Engagement

I identified engagement as an organizational climate area most likely affected by workload. DEOMI defines engagement as "refers to a persistent positive and fulfilling state of mind characterized by mental resilience, dedication, and immersion in the work role" (DEOMI, n.d.-a).

Employees can have a favorable or unfavorable perception on engagement and either will produce a different organizational outcome. According to DEOMI's website (DEOMI, n.d.-a), a favorable indication means members are excited about their work, they bring a high level of energy to their work, they exercise influence over events that impact them, and they commit to high quality performance standards. It also states that members pursue challenging work assignments, they express desire to devote time and energy to work, and they express a sense of significance, enthusiasm, and pride in their work. Favorable indications, the website continues, mean members experience positive health outcomes (lower levels of self-reported anxiety, depression, and stress), members take initiative in pursuing personal goals, and members are physically and cognitively present in their work roles. It also produces increased job satisfaction, increased organizational commitment, decreased turnover intentions, increased task performance, and members go above and beyond (DEOMI, n.d.-a).

An unfavorable engagement indication, the website continues, means that current members withdraw from work activities, they display disinterest in completing work duties, and they display a lack of enthusiasm at work. It also states that members display a lack of concentration on work tasks, they show signs of exhaustion, they retreat from challenges, and they express dissatisfaction with tasks. Unfavorable indications, as DEOMI explains, deteriorate job performance, increase member's time to complete goals, and members experience a lack of dedication to the goals. It also increases turnover intentions, increases levels of burnout, and decreases enthusiasm for the task at hand (DEOMI, n.d.-a).

D. SUMMARY

This chapter reviews prior research on organizational climate and discusses each organizational climate factor subgroup used for this research. This chapter also outlines how each organizational climate factor subgroup affects an organization. The next chapter discusses the data that this research analyzes.

III. DATA

This chapter identifies and displays the data that this research analyzes. This research focuses on DEOMI's 2017 ACC-APG organizational climate survey results and ACC-APG's 2017 workload statistics. This chapter defines how I calculated the ACC-APG workload statistics, it displays the organizational climate survey data, and it displays the calculated workload statistics.

A. DATA COLLECTION

To assess whether a relationship exists between organizational climate and workload statistics, it requires two separate sets of data. The first set of data is DEOMI's 2017 ACC-APG organizational climate survey responses, and the second set of data is ACC-APG's 2017 workload statistics. ACC-APG already possessed both of these data sets, and they sent them to me to analyze.

For the organizational climate results, this chapter displays DEOMI's 2017 ACC-APG organizational climate results for four climate factor subgroups: organizational commitment, organizational performance, job satisfaction, and engagement. I hypothesize that these four factor subgroups areas are the most likely organizational climate areas affected by workload. After DEOMI conducted the organizational climate survey, they sent the results to ACC-APG senior leadership who then sent the results to me for this research.

For the workload statistics, I analyzed fiscal year 2017 ACC-APG workload data and calculated statistics that, as a contracting officer, I think accurately represent a contracting professional's workload. ACC-APG does not calculate workload statistics; rather they collect various pieces of workload information on each division. I took the various pieces of information and calculated multiple workload statistics. The workload statistics include simple actions per person, complex actions per person, post-award actions per person, new contract awards per person, and average obligations per person. This chapter defines each of those workload statistics and displays the calculated results.

B. RESEARCH DEMOGRAPHICS

This research analyzes organizational climate responses and workload statistics on employees mostly in the government contracting career field. This research analyzes data from 12 ACC-APG contracting divisions, which consist of roughly 800 employees. About 710 of those employees are contracting professionals (1102 job series) and the remaining 90 employees are non-contracting professionals. The U.S. Office of Personnel Management (OPM) defines a position in the 1102 job series as

positions that manage, supervise, perform, or develop policies and procedures for professional work involving the procurement of supplies, services, construction, or research and development using formal advertising or negotiation procedures; the evaluation of contract price proposals; and the administration or termination and close out of contracts. The work requires knowledge of the legislation, regulations, and methods used in contracting; and knowledge of business and industry practices, sources of supply, cost factors, and requirements characteristics. (U.S. Office of Personnel Management, 2009, p. 84)

C. PERSON PERFORMING A CONTRACTING FUNCTION

Before I can calculate the average workload statistics per person performing a contracting function, I need to define who a person performing a contracting function is. This research defines a person performing a contracting function as someone that directly supports the mission of awarding/administering contracts. This does not include administrative, procurement analyst, SCEP/STEP/Pathways, or management personnel but it does include cost/price analysts, and branch chiefs. It also includes support contractors if they spend the majority of their time performing contracting functions.

To calculate the number of personnel performing a contracting function at each contracting site, I calculated the average of the number of personnel located at each contracting division throughout the year. To do this, I analyzed the number of people performing a contracting function at each ACC-APG contracting division at the end of each fiscal quarter and then calculated an average over the year. Even though there are limited personnel fluctuations throughout the year, using the quarterly personnel numbers allowed me to calculate a very accurate average number of yearly personnel.

D. WORKLOAD STATISTICS DEFINED

The following section defines each workload statistics: simple actions per person, complex actions per person, post-award actions per person, new contract awards per person, and average obligations per person.

1. Simple Actions per Person

This research defines simple actions per person as the average new "A" (blanket purchase agreement call), "P" (purchase order under the simplified acquisition threshold of \$150,000), grant, delivery order/task order (DO/TO), or modification action per person performing a contracting function. Each of these actions typically requires the least amount of effort when it comes to a contract action, which is why they are termed a "simple action" for the purposes of this research. An example of a simple action is buying an item that is commercially available from multiple sources and the total price is under \$150,000.

2. Complex Actions per Person

This research defines complex actions per person as the average new "C" (contract over the simplified acquisition threshold of \$150,000) or "D" (indefinite delivery contract) type contract action per person performing a contracting function. Both of these actions typically require more effort than a "simple" action, which is why they are termed a "complex action" for the purposes of this research. An example of a complex action is buying non-commercial services where each interested vendor proposes a different solution and the total contract price is over \$150,000. I consider these types of actions complex because they require a custom contracting solution, and they typically require multiple reviews prior to contact award.

3. Post-award Actions per Person

This research defines post-award actions per person as the average contract modification per person performing a contracting function. A contract modification is the only contract action that contracting personnel can execute after contract award, which is why it is termed a post-award action for the purposes of this research.

4. New Contract Awards per Person

This research defines new contract awards per person as the average new contract award per person performing a contracting function. This researcher defines a new contract award as any "P" (purchase order under the simplified acquisition threshold of \$150,000), "C" (contract over the simplified acquisition threshold of \$150,000), "D" (indefinite delivery contract) or grant type contact award. These types of actions are the most common types of new contract award actions that ACC-APG's contracting divisions execute. This statistic includes elements from the simple action statistic ("P" and grant) and the complex action statistic ("C" and "D").

5. Obligations per Person

This research defines obligations per person as the average contract obligations awarded per person performing a contracting function. A contract obligation is an action that legally binds the government to a future outlay from the treasury. An obligation happens when a contracting officer signs a contract, which results in a future payment for goods or services. Typically, the higher the contact obligation, the more complex the contract action is.

E. DEOMI'S ORGANIZATIONAL CLIMATE SURVEY DATA

This section discusses and displays the organizational climate survey data. DEOMI's organization climate survey asked questions in 21 different climate areas, however, this research only focuses on four Organizational Effectiveness factor subgroups: organizational commitment, organizational performance, job satisfaction, and engagement.

1. How to Interpret DEOMI's Survey Results

DEOMI displays ACC-APG's organization climate survey results as a percentage of favorable responses, and they provide a grading scale to interpret the results. DEOMI breaks down the percentage of favorable responses into four categories: Excellent (greater than 90%), Adequate (between 70% and 89%), Caution (between 50% and 69%), and Improvement Needed (below 50%) (DEOMI, 2017a). Table 2 displays DEOMI's survey grading scale.

Color Coding	Category	Criteria	General Interpretation
Green	Excellent	90% and above favorable responding	 Almost complete unit endorsement of scale Area of excellence and maintenance/stability actions recommended
Blue	Adequate	Between 70% and 89% favorable responding	 Majority of unit endorsed scale and reached recommended endorsement threshold (70%) Area not of concern but room for improvement
Yellow	Caution	Between 50% and 69% favorable responding	 Majority of unit endorsed scale but did not reach recommended endorsement threshold (70%) Area flagged for concern. Actions should be considered to boost endorsement
Red	Improvement Needed	Below 50% favorable responding	 Majority of unit did NOT endorse scale Area of great concern and corrective actions must be taken ASAP

Table 2. DEOMI's Survey Grading Scale. Source: DEOMI (2017a).

The next subsections display the percentage of favorable responses to each organizational climate factor subgroup. For visual consistency, I used the same color scheme displayed in Table 2 on Figures 1, 2, 3, and 4 in the next subsections.

2. Organizational Commitment

This research focuses on organizational commitment data from each of the 12 ACC-APG contracting divisions, and Figure 1 displays the percentage of favorable responses. DEOMI (n.d.-c) defines organizational commitment as "an emotional attachment to, identification with, and involvement of military members or employees to their units, characterized by a strong desire to maintain membership within the unit." DEOMI flagged five ACC-APG contracting divisions with organization commitment concerns, and they recommend that ACC-APG take action to boost endorsement. ACC-APG contracting divisions with an identified organizational commitment concern are highlighted in yellow.



Adapted from DEOMI (2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h, 2017i, 2017j, 2017k, 2017l).

Figure 1. 2017 ACC-APG Climate: Organizational Commitment.

3. Organizational Performance

This research focuses on organizational performance data from each of the 12 ACC-APG contracting divisions, and Figure 2 displays the percentage of favorable responses. DEOMI (n.d.-d) defines organizational performance as "the perception that the organization operates well to accomplish goals and deliver high-quality output when pressured by demanding deadlines." DEOMI flagged three ACC-APG contracting divisions with organization performance concerns, and they recommend that ACC-APG take action to boost endorsement. ACC-APG contracting divisions with an identified organizational performance concern are highlighted in yellow.



Adapted from DEOMI (2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h, 2017i, 2017j, 2017k, 2017l).

Figure 2. 2017 ACC-APG Climate: Organizational Performance.

4. Job Satisfaction

This research focuses on job satisfaction data from each of the 12 ACC-APG contracting divisions, and Figure 3 displays the percentage of favorable responses. DEOMI (n.d.-b) defines job satisfaction by saying it "refers to an attitude that reflects a positive or negative judgment of your current job." DEOMI flagged one ACC-APG contracting division with job satisfaction concerns, and they recommend that ACC-APG take action to boost endorsement. The sole ACC-APG contracting division identified with job satisfaction concerns is highlighted in yellow.



Adapted from DEOMI (2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h, 2017i, 2017j, 2017k, 2017l).

Figure 3. 2017 ACC-APG Climate: Job Satisfaction.

5. Engagement

This research focuses on engagement data from each of the 12 ACC-APG contracting divisions, and Figure 4 displays the percentage of favorable responses. DEOMI (n.d.-a) defines engagement by saying it "refers to a persistent positive and fulfilling state of mind characterized by mental resilience, dedication, and immersion in the work role." DEOMI did not flag any ACC-APG contracting divisions with engagement concerns.



Adapted from DEOMI (2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h, 2017i, 2017j, 2017k, 2017l).

Figure 4. 2017 ACC-APG Climate: Engagement.

F. CALCULATED WORKLOAD STATISTICS

This section discusses and displays the calculated workload statistics. This research analyzed fiscal year 2017 workload data and calculated statistics that, as a contracting officer, I think accurately represent a contracting professional's workload. ACC-APG does not calculate workload statistics; rather they collect various pieces of information on each division. I took the various pieces of information and calculated workload statistics. The following sections display the calculated workload statistics for each of the 12 ACC-APG contracting divisions.

1. Simple Actions per Person

This research calculated the average simple actions per person across each of the 12 ACC-APG contracting divisions, and Figure 5 displays the results. I based these calculations on workload data provided by ACC-APG.



Simple actions per person are the average new "A" (blanket purchase agreement call), "P" (purchase order under the simplified acquisition threshold of \$150,000), grant, delivery order/task order (DO/TO), or modification action per person performing a contracting function. Adapted from APG-ACC, unpublished data.

Figure 5. 2017 ACC-APG Simple Actions per Person.

2. Complex Actions per Person

This research calculated the average complex actions per person across each of the 12 ACC-APG contracting divisions, and Figure 6 displays the results. I based these calculations on workload data provided by ACC-APG.



Complex actions per person are the average new "C" (contract over the simplified acquisition threshold of \$150,000) or "D" (indefinite delivery contract) type contract action per person performing a contracting function. Adapted from APG-ACC, unpublished data.

Figure 6. 2017 ACC-APG Complex Actions per Person.

3. Post-award Actions per Person

This research calculated the average post-award actions per person across each of the 12 ACC-APG contracting divisions, and Figure 7 displays the results. I based these calculations on workload data provided by ACC-APG.



Post-award actions per person are the average contract modifications per person performing a contracting function

Figure 7. 2017 ACC-APG Post-award Actions per Person.

4. New Contract Awards per Person

This research calculated the average new contract awards per person per person across each of the 12 ACC-APG contracting divisions, and Figure 8 displays the results. I based these calculations on workload data provided by ACC-APG.



New contract awards per person are the average new contract awards per person performing a contacting function.

Figure 8. 2017 ACC-APG New Contract Awards per Person.

5. Obligations per Person

This research calculated the average obligations per person across each of the 12 ACC-APG contracting divisions, and Figure 9 displays the results. I based these calculations on workload data provided by ACC-APG.



Obligations per person are the average contract obligations awarded per person performing a contracting function.

Figure 9. 2017 ACC-APG Obligations per Person.

G. SUMMARY

This chapter identifies the data associated with this research. It also identifies the research demographics, defines the workload statistics, displays the organizational climate survey data, and displays the calculated workload statistics. The next chapter will assess whether a relationship exists between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions.

IV. ANALYSIS

This chapter analyzes the data in Chapter III to assess whether a relationship exists between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions. To determine if a relationship exists, this chapter calculates the correlation between the organizational climate data and the calculated workload statistics.

A. CORRELATION DEFINED

This research uses the Pearson correlation coefficient to assess the relationship between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions. The Pearson correlation coefficient "measures the strength of linear association between two variables" (Sedgwick, 2012, p. 1). Correlations range between +1 and -1, where +1 represents a perfect positive correlation, 0 represents no correlation, and -1 represents a perfect negative correlation (Sedgwick, 2012). A positive correlation occurs when both data sets move in the same direction, and a negative correlation occurs when both data sets move in opposite directions (Sedgwick, 2012). For example, if there is a negative correlation between post-award actions per person and job satisfaction, then that means when the number of post-award actions per person increases the job satisfaction decreases.

1. Strength of a Correlation Relationship

To determine the strength or meaningfulness of a correlation, this research relies on Cohen's well-known correlation interpretation. Cohen's interpretation assigned small, medium, or large labels to correlations depending on the strength of association between two variables (Cohen, 1988). He determined that a correlation coefficient of .10 represents a small association, a .30 correlation represents a medium association, and a .50 correlation represents a large association, as seen in Table 3 (Cohen, 1988).

Correlation	Association Strength
.10	Small
.30	Medium
.50	Large

Table 3. Cohen's Correlation Interpretation. Adapted from Cohen (1988).

B. CORRELATION BETWEEN DEOMI'S ORGANIZATIONAL CLIMATE SURVEY RESULTS AND ACC-APG'S WORKLOAD STATISTICS

This research calculated the correlation between DEOMI's 2017 organizational climate survey results and workload statistics at the 12 ACC-APG contracting divisions, and Table 4 displays the results. I chose to highlight any correlation on Table 4 greater than +-.25 because it is close to Cohen's medium level of association; therefore, I believe it is a meaningful correlation. As a result, I am defining correlations between +-.25 and +-.29 as correlations with a close to medium level of association, which I highlighted in light blue. Correlations greater than +-.30 demonstrate a medium level of association, and I highlighted those in blue.

Table 4. Correlation between DEOMI's 2017 ACC-APG Organizational Climate Survey Results and ACC-APG's 2017 Workload Statistics.

	Organizational Climate			
Workload Statistics	Organizational Commitment	Organizational Performance	Job Satisfaction	Engagement
Simple Actions/Person	0.18	0.10	-0.04	0.12
Complex Actions/Person	-0.13	-0.01	-0.36	0.10
Post-award Actions/Person	0.03	0.04	-0.25	0.10
New Contract Awards/Person	0.29	0.28	0.24	0.25
Obligations/Person	0.01	0.19	-0.46	0.26

C. ANALYSIS OF THE CORRELATIONS

The following subsections group Table 4's results and interpret the correlations. The correlations fall into three groups: (1) small level of association, (2) close to medium level of association, and (3) medium level of association.

1. Small Level of Association

a. Obligations per Person and Organizational Commitment

This research found a correlation of .01 between obligations per person and organizational commitment. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

b. Complex Actions per Person and Organizational Performance

This research found a correlation of -.01 between complex actions per person and organizational performance. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

c. Post-award Actions per Person and Organizational Commitment

This research found a correlation of .03 between post-award actions per person and organizational commitment. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

d. Post-award Actions per Person and Organizational Performance

This research found a correlation of .04 between post-award actions per person and organizational performance. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

e. Simple Actions per Person and Job Satisfaction

This research found a correlation of -.04 between simple actions per person and job satisfaction. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

f. Simple Actions per Person and Organizational Performance

This research found a correlation of .10 between simple actions per person and organizational performance. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

g. Complex Actions per Person and Engagement

This research found a correlation of .10 between complex actions per person and engagement. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

h. Post-award Actions per Person and Engagement

This research found a correlation of .10 between post-award actions per person and engagement. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

i. Simple Actions per Person and Engagement

This research found a correlation of .12 between simple actions per person and engagement. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

j. Complex Actions per Person and Organizational Commitment

This research found a correlation of -.13 between complex actions per person and organizational commitment. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

k. Simple Actions per Person and Organizational Commitment

This research found a correlation of .18 between simple actions per person and organizational commitment. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

I. Obligations per Person and Organizational Performance

This research found a correlation of .19 between obligations per person and organizational performance. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

m. New Contract Awards per Person and Job Satisfaction

This research found a correlation of .24 between new contract awards per person and job satisfaction. This represents a small association between these two data sets. Since this research is only concerned with correlations greater than +-.25, I do not consider the relationship between these two data sets meaningful.

2. Close to Medium Level of Association

a. Post-award Actions per Person and Job Satisfaction

This research found a correlation of -.25 between post-award actions per person and job satisfaction. This represents a close to medium association, and I consider this a meaningful correlation. The data shows that when the number of post-award actions per person is higher the job satisfaction level is lower. This does not prove that an increase in post-award actions per person decreases job satisfaction; rather it only demonstrates that there is a linear relationship between the two data sets.

b. New Contract Awards per Person and Engagement

This research found a correlation of .25 between new contract awards per person and engagement. This represents a close to medium association, and I consider this a meaningful correlation. The data shows that when the number of new contract awards per person is higher the engagement is higher. This does not prove that an increase in new contract awards per person increases engagement; rather it only demonstrates that there is a linear relationship between the two data sets.

c. Obligations per Person and Engagement

This research found a correlation of .26 between obligations per person and engagement. This represents a close to medium association, and I consider this a meaningful correlation. The data shows that when the number of obligations per person is higher the engagement is higher. This does not prove that an increase in obligations per person increases engagement; rather it only demonstrates that there is a linear relationship between the two data sets.

d. New Contract Awards per Person and Organizational Performance

This research found a correlation of .28 between new contract awards per person and organizational performance. This represents a close to medium association, and I consider this a meaningful correlation. The data shows that when the number of new contract awards per person is higher the organizational performance is higher. This does not prove that an increase in new contract awards per person increases organizational performance; rather it only demonstrates that there is a linear relationship between the two data sets.

e. New Contract Awards per Person and Organizational Commitment

This research found a correlation of .29 between new contract awards per person and organizational commitment. This represents a close to medium association, and I consider this a meaningful correlation. The data shows that when the number of new contract awards per person is higher the organizational commitment is higher. This does not prove that an increase in new contract awards per person increases organizational commitment; rather it only demonstrates that there is a linear relationship between the two data sets.

3. Medium Level of Association

a. Complex Actions per Person and Job Satisfaction

This research found a correlation of -.36 between complex actions per person and job satisfaction. This represents a medium association, and I consider this a meaningful correlation. The data shows that when the number of complex actions per person is higher

the job satisfaction level is lower. This does not prove that an increase in complex actions per person decreases job satisfaction; rather it only demonstrates that there is a linear relationship between the two data sets.

b. Obligations per Person and Job Satisfaction

This research found a correlation of -.46 between obligations per person and job satisfaction. This represents a medium association, and I consider this a meaningful correlation. The data shows that when the number of obligations per person is higher the job satisfaction level is lower. This does not prove that an increase in obligations per person decreases job satisfaction; rather it only demonstrates that there is a linear relationship between the two data sets.

D. IMPLICATIONS OF FINDINGS

As a contracting officer and employee of ACC-APG, I believe there are explainable reasons for the correlation findings. This research found seven meaningful correlations, four of which have positive correlations and three have negative correlations. A positive correlation occurs when both data sets move in the same direction and a negative correlation occurs when the data sets move in opposite directions. The following subsections discuss the implications for the positive and negative correlations.

1. Findings with Positive Correlations

This research found four workload statistics with a positive correlation to an organizational climate area:

- new contract awards per person and engagement
- obligations per person and engagement
- new contract awards per person and organizational performance
- new contract awards per person and organizational commitment

This research found that when each of these workload statistics increased, the corresponding organizational climate area increased. This does not prove that an increase

in these workload statistics increases the corresponding organizational climate area; rather it only demonstrates that there is a linear relationship between the two data sets.

Perhaps these findings indicate that ACC-APG employees perceive value in working on new contract awards or obligating funds. This might be because ACC-APG leadership recognizes new contract awards or the act of obligating funds as a big achievement and routinely praises employees for those types of actions. Therefore, when management assigns an employee a workload consisting of new contracts or obligations, perhaps the employee becomes more engaged (engagement), thinks the organization is performing better (organizational performance), and becomes more committed to the organization (organizational commitment).

Additional research is required to determine if positive employee perceptions of new contract awards or obligations is the cause for the increased engagement, organizational performance, and organizational commitment. If ACC-APG leadership wants to find out more about this, I recommend that they add questions to next year's organizational climate survey to ask employees what types of contracting actions they feel are most important to ACC-APG.

2. Findings with Negative Correlations

This research found three workload statistics with a negative correlation to an organizational climate area:

- post-award actions per person and job satisfaction
- complex actions per person and job satisfaction
- obligations per person and job satisfaction

This research found that when each of these workload statistics increased, job satisfaction decreased. This does not prove that an increase in these workload statistics decreases job satisfaction; rather it only demonstrates that there is a linear relationship between the two data sets.

Feasibly there might be two different reasons for these findings. First, perhaps a negative correlation between post-award actions per person and job satisfaction indicates that ACC-APG employees do not perceive value in completing post-award actions. This might be because ACC-APG leadership seldom recognizes this type of action as important. Therefore, maybe the more post-award actions management assigns to an employee, the less fair they find their workload, resulting in lower job satisfaction. Additional research is required to determine if a negative perception of post-award actions reduces job satisfaction. If ACC-APG leadership wants to find out more about this, I recommend that they add questions to next year's organizational climate survey to ask employees what types of contracting actions they feel are most important to ACC-APG.

Secondly, perhaps a negative correlation between complex actions per person or obligations per person and job satisfaction indicates that ACC-APG employees have concerns completing complex contracting actions or high obligation contract actions. These two findings had the strongest correlations and they were the most interesting findings because I assumed the opposite would be true. Perhaps the negative correlation exists because complex or high obligation contract actions are stressful due to the cumbersome regulatory process or because ACC-APG has not properly trained employees on these types of actions. Therefore, when management assigns a complex or high obligation contract action to an employee, it may increase their stress level and result in lower job satisfaction. Additional research is required to determine if stress with a complex or high obligation contract action causes lower job satisfaction. If ACC-APG leadership wants to find out more about this, I recommend that they add questions to next year's organizational climate survey to ask employees what concerns they have about complex or high obligation contract actions.

E. RECOMMENDATIONS

After completing this research, I have two recommendations for ACC-APG leadership.

1. Identify Employee Workload Perceptions

I recommend that ACC-APG leadership add questions to next year's organizational climate survey to understand the workforce's workload perceptions better. I recommend that they ask the workforce what types of contracting actions they feel are most important to ACC-APG. The answers to these questions may allow ACC-APG leadership to make decisions based on research to improve organizational climate.

Since organizational climate is based on "shared perceptions organizational members have about their organization and work environment" (Robbins & Judge, 2018, p. 269), it is my opinion that the workforce's perception of certain workload actions affects organizational climate rather than the number of workload actions an employee completes. For example, this research found a negative correlation with the number of post-award actions per person and job satisfaction. This might be because ACC-APG leadership seldom recognizes this type of action as important and, as a result, employees may have a negative perception of working on these actions. If ACC-APG leadership discovers that employees have negative perceptions about post-award actions, then they may want to publically recognize employees that execute important post-award actions. This might reemphasize the importance of these types of actions and improve the workforces' perception, which may improve organizational climate.

2. Identify Employee Concerns about Complex or High-Obligation Contract Actions

I recommend that ACC-APG leadership add questions to next year's organizational climate survey to understand the workforce's workload concerns better. I recommend that they ask employees what concerns they have about complex or high obligation contract actions. The answers to these questions may allow ACC-APG leadership to make decisions based on research to improve organizational climate. For example, if ACC-APG leadership identifies the workforce's concerns about complex or high obligation contract actions, then they can make informed management decisions to improve job satisfaction at contracting divisions with concerning job satisfaction ratings, like Division A. In 2017, Division A ranked second in complex actions per person and third for obligations per person among

all ACC-APG contracting divisions. DEOMI also flagged Division A as the only ACC-APG contracting division with a concerning job satisfaction rating. This research found a negative correlation between complex actions per person or obligations per person and job satisfaction. Therefore, if ACC-APG leadership can alleviate Division A's concerns with complex or high obligation contract actions, then they might be able to improve Division A's job satisfaction rating.

F. SUMMARY

This chapter analyzes the data in Chapter III and found a relationship between DEOMI's 2017 organization climate survey results and the workload statistics at the 12 ACC-APG contracting divisions. To determine whether a relationship exists, this chapter calculated the correlation between the organizational climate survey data and the ACC-APG workload statistics. After analyzing the correlation data, this research found five data sets that have a close to medium level of correlation and two data sets that have a medium level of correlation. The following five data sets have a close to medium level of correlation: (1) post-award actions per person and job satisfaction, (2) new contract awards per person and engagement, (3) obligations per person and engagement, (4) new contract awards per person and organizational performance, and (5) new contract awards per person and organizational commitment. The following two data sets have a medium level of correlation: (1) complex actions per person and job satisfaction and (2) obligations per person and job satisfaction. A close to medium or medium level of association does not prove that changes in one of these data sets causes a change in the other data set. It only demonstrates that there is a linear relationship between the two data sets. Additional research is required to determine the cause of the relationship.

This chapter also discussed the implications of the findings and outlined recommendations to ACC-APG leadership. In the next and final chapter, I conclude the findings and outline areas of further research.

V. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH

A. SUMMARY

In 2017, Army Contracting Command – Aberdeen Proving Ground (ACC-APG) surveyed the organizational climate of its 12 contracting divisions, and they found areas in need of improvement. As a result, ACC-APG leadership is interested in improving its organizational climate because a positive organizational climate lowers employee turnover, increases job performance, and increases overall operating results (Defense Equal Opportunity Management Institute [DEOMI], n.d.-b, n.d.-c, n.d.-d). This research seeks to provide ACC-APG leadership insight on how they can improve organizational climate. Specifically, this research identifies if ACC-APG leadership can improve organizational climate climate by altering workload levels.

Understanding the factors that influence organizational climate can help senior leaders better manage their organization. Research on organizational climate shows that organizational climate strongly relates to levels of job satisfaction, involvement, commitment, and motivation. (Robbins & Judge, 2016, p. 269). As a management tactic, ACC-APG already analyzes its yearly organizational climate, and they track workload statistics; however, they have never analyzed organizational climate and workload statistics to see if there is a correlation.

The purpose of this research is to assess whether a relationship exists between DEOMI's 2017 organization climate survey results and workload statistics at the 12 ACC-APG contracting divisions. To evaluate if a relationship exists, this research compares DEOMI's 2017 organizational climate survey results from 12 ACC-APG contracting divisions to workload statistics at the same 12 ACC-APG contracting divisions. This research specifically compares four Organizational Effectiveness factor subgroups within the DEOMI organizational climate survey to ACC-APG's workload statistics. The four Organizational Effectiveness factor subgroups are:

• organizational commitment

- organizational performance
- job satisfaction
- engagement

I compared these organizational climate areas to ACC-APG's workload statistics. To calculate the statistics, I analyzed fiscal year 2017 workload data and calculated statistics that, as a contracting officer, I think accurately represent a contracting professional's workload. The workload statistics include:

- simple actions per person
- complex actions per person
- post-award actions per person
- new contract awards per person
- average obligation per person

To determine if a relationship exists, I calculated the statistical correlation between DEOMI's 2017 organizational climate survey results to ACC-APG's workload statistics.

B. CONCLUSION

After analyzing the correlation data, I found seven meaningful correlations, five of which have a close to medium level of correlation and two have a medium level of correlation. The following five data sets have a close to medium level of correlation:

- post-award actions per person and job satisfaction
- new contract awards per person and engagement
- obligations per person and engagement
- new contract awards per person and organizational performance
- new contract awards per person and organizational commitment

The following two data sets have a medium level of correlation:

- complex actions per person and job satisfaction
- obligations per person and job satisfaction

A close to medium or medium level of correlation does not prove that changes in one of these data sets causes a change in the other data set. It only demonstrates that there is a linear relationship between the two data sets. Additional research is required to determine the cause of the correlation.

This research sought to answer two research questions and the answers to those questions are as follows:

 Can ACC-APG senior leaders improve organizational climate by altering workload statistics?

This research found a meaningful relationship between seven organizational climate and workload statistics; however, it did not conclude that changes in one data set causes changes in the other. ACC-APG leadership needs to conduct additional research to determine the cause of the correlation.

2. Is there a correlation between organizational climate and workload statistics at the 12 ACC-APG contracting divisions?

Yes, this research found seven meaningful correlations between DEOMI's 2017 organizational climate survey results from 12 ACC-APG contracting divisions to workload statistics at the same 12 ACC-APG contracting divisions. Even though this research found meaningful correlations, it does not prove that changes in one of these data sets causes a change in the other data set. It only demonstrates that there is a linear relationship between the two data sets. ACC-APG leadership needs to conduct additional research to determine the cause of the correlation.

C. AREAS FOR FURTHER RESEARCH

While conducting this research, I identified three areas for further research. The first two areas provide ACC-APG information so they can implement this research's recommendations. The last area for further research seeks to conduct this same research on similar Department of Defense (DoD) contracting organizations to see if these findings are consistent with other organizations.

1. Identify Employee Workload Perceptions

Before ACC-APG leadership can implement this research's recommendations, ACC-APG leadership needs to identify its employee's workload perceptions. This research found a positive correlation between new contract awards per person or obligations per person and engagement, organizational performance, and organizational commitment. This research also found a negative correlation between post-award actions per person and job satisfaction. This research did not prove the cause of the correlations; however, perhaps the cause of the correlations is due to employee perceptions of specific workload actions. Therefore, additional research is required to determine if positive or negative employee perceptions of specific workload actions are the cause for the increase or decrease in the correlated organizational climate areas. If ACC-APG leadership wants to find out more about this, I recommend that they conduct additional research by adding questions to next year's organizational climate survey to ask employees what types of contracting actions they feel are most important to ACC-APG.

2. Identify Employee Concerns about Complex or High-Obligation Contract Actions

Before ACC-APG leadership can implement this research's recommendations, ACC-APG leadership needs to identify employee's concerns are about complex or high obligation contract actions. This research found a negative correlation between complex actions per person or obligations per person and job satisfaction. This research did not prove the cause of the correlations; however, perhaps the cause of the correlations is due to increased stress associated with a complex or high obligation action. Therefore, additional research is required to determine if stress with a complex or high obligation contract action is the cause for the reduced job satisfaction. If ACC-APG leadership wants to find out more about this, I recommend that they conduct additional research by adding questions to next year's organizational climate survey to ask employees what concerns they have about complex or high obligation contract actions.

3. Conduct the Same Research on Other DoD Contracting Organizations

If other DoD contracting organizations conduct the same research and they find consistent results, then it will strengthen the findings in this research. This research was limited to the 12 ACC-APG contracting divisions but there are other contracting organizations within the DoD and those organizations can conduct the same analysis.

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LIST OF REFERENCES

- ACC-APG. (n.d.). Contracting centers. Retrieved June 18, 2018, from <u>http://acc.army.mil/contractingcenters/acc-apg/</u>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: L. Erlbaum Associates.
- Denison, D.R. (1996). What is the difference between organizational culture and organizational climate? A native's point of view on a decade or paradigm wars. *Academy of Management Review, 21*(3), 619-654.
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-a). DEOCS fact sheet on engagement [Fact sheet]. Retrieved from <u>https://www.deocs.net/public/A2S-</u> <u>4 1/OE-Engagement/documents/DEOCS%20Fact%20Sheet%20Engagement.pdf</u>
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-b). DEOCS fact sheet on job satisfaction [Fact sheet]. Retrieved from <u>https://www.deocs.net/public/</u> <u>A2S-4_1/OE-Job-Satisfaction/documents/DEOCS%20Fact%20Sheet%20Jo</u> <u>b%20Satisfaction.pdf</u>
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-c). DEOCS fact sheet on organizational commitment [Fact sheet]. Retrieved from <u>https://www.deocs.</u> <u>net/public/A2S-4_1/OE-Org-Commitment/documents/DEOCS%20Fact%20</u> Sheet%20Organizational%20Commitment.pdf
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-d). DEOCS fact sheet on organizational performance [Fact sheet]. Retrieved from <u>https://www.deocs.</u> <u>net/public/A2S-4_1/OE-Org-Performance/documents/DEOCS%20Fact%20</u> <u>Sheet%20Organizational%20Performance.pdf</u>
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-e). Strategic plan. Retrieved June 18, 2018, from <u>https://www.deomi.org/about/strategic-plan.cfm</u>
- Defense Equal Opportunity Management Institute (DEOMI). (n.d.-f). Talking paper. Retrieved June 18, 2018, from <u>https://www.deocs.net/DocDownloads/Talking-Paper-on-DEOCS-4_1-RMY.pdf</u>
- Defense Equal Opportunity Management Institute (DEOMI). (2017a). *DEOMI* organizational climate survey (DEOCS) report - Adelphi (Admin Number 1707447-9). Patrick AFB, FL: Defense Equal Opportunity Management Institute.

- Defense Equal Opportunity Management Institute (DEOMI). (2017b). *DEOMI* organizational climate survey (DEOCS) report - Belvoir (Admin Number 1707447-11). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017c). *DEOMI* Organizational climate survey (DEOCS) report – Division A (Admin Number 1707447-1). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017d). *DEOMI* organizational climate survey (DEOCS) report – Division B (Admin Number 1707447-4). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017e). *DEOMI* organizational climate survey (DEOCS) report – Division C (Admin Number 1707447-3). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017f). *DEOMI* organizational climate survey (DEOCS) report – Division D (Admin Number 1707447-2). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017g). *DEOMI* organizational climate survey (DEOCS) report – Division E (Admin Number 1707447-5). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017h). DEOMI organizational climate survey (DEOCS) report – Edgewood Division (Admin Number 1707447-6). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017i). *DEOMI* organizational climate survey (DEOCS) report - Huachuca (Admin Number 1707447-12). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017j). *DEOMI* organizational climate survey (DEOCS) report - Natick (Admin Number 1707447-8). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (2017k). *DEOMI* organizational climate survey (DEOCS) report - RTP (Admin Number 1707447-10). Patrick AFB, FL: Defense Equal Opportunity Management Institute.
- Defense Equal Opportunity Management Institute (DEOMI). (20171). DEOMI organizational climate survey (DEOCS) report – Tenant Division (Admin Number 1707447-7). Patrick AFB, FL: Defense Equal Opportunity Management Institute.

- Moran, T.E. & Volkwein, F.J. (1992). The cultural approach to the formation of organizational climate. *Human Relations*, 45(1), 19. Retrieved from http://libproxy.nps.edu/login?url=https://search-proquest-com.libproxy.nps.edu/docview/231417405?accountid=12702
- Robbins, S.P. & Judge, T.A. (2016). *Essentials of organizational behavior* (14th ed.). Boston, MA: Pearson Education.
- Sedgwick, P. (2012). Pearson's correlation coefficient. *BMJ* : *British Medical Journal* (*Online*), 345. <u>http://dx.doi.org.libproxy.nps.edu/10.1136/bmj.e4483</u>
- U.S. Office of Personnel Management. (2009). *Handbook of occupational groups and families*. Retrieved from <u>https://www.opm.gov/policy-data-oversight/</u> <u>classification-qualifications/classifying-general-schedule-positions/</u> <u>occupationalhandbook.pdf</u>

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