

SYM-AM-17-060



# Proceedings of the Fourteenth Annual Acquisition Research Symposium

---

Wednesday Sessions  
Volume I

**Acquisition Research:  
Creating Synergy for Informed Change**

**April 26–27, 2017**

**Published March 31, 2017**

Approved for public release; distribution is unlimited.

Prepared for the Naval Postgraduate School, Monterey, CA 93943.



Acquisition Research Program  
Graduate School of Business & Public Policy  
Naval Postgraduate School

# Army Contracting Workforce Organizational Climate Assessment

**Rene G. Rendon**—is an Associate Professor at the Graduate School of Business and Public Policy, NPS, where he teaches defense acquisition and contract management courses. He also serves as the Academic Associate for the MBA specialization in contract management. Prior to joining the NPS faculty, he served for over 20 years as an acquisition contracting officer in the United States Air Force. His career included assignments as a contracting officer for the Peacekeeper ICBM, Maverick Missile, and the F-22 Raptor. He was also a contracting squadron commander and the director of contracting for the Space Based Infrared Satellite program and the Evolved Expendable Launch Vehicle rocket program. Rene has published in the *Journal of Public Procurement*, the *Journal of Contract Management*, the *Journal of Purchasing and Supply Management*, and the *International Journal of Procurement Management*. [rgrendon@nps.edu]

**Edward (Ned) H. Powley**—is an Associate Professor of Management in the Graduate School of Business and Public Policy at NPS. [ehpowley@nps.edu]

## Abstract

The DoD obligated approximately \$273.5 billion in contracts for major weapon systems, supplies, and services in fiscal year 2015. The DoD contracting workforce professionals are responsible for managing the millions of contract actions for the procurement of critical supplies and services, ranging from commercial-type supplies, professional and administrative services, highly complex information technology systems, and major defense weapon systems. The DoD's organizational climate is a significant contributor to the success of the contracting workforce. An analysis of an organization's climate and its various components can provide its leadership with a road map for developing a healthier climate, and thus improve performance.

The purpose of this study is to conduct an organizational climate assessment of the Army contracting workforce. Using a web-based survey, we assessed the Army contracting workforce on the various components of organizational climate. Based on the number of survey responses and response rate, we used quantitative data analysis methods to analyze the survey data and identify research findings. This research benefits the Army by establishing a baseline climate of the Army's contracting workforce. It also identifies the dimensions that need to be addressed in order to improve the Army's contracting organizational climate. These research findings can then guide the DoD, as well as the federal government contracting community, in developing a road map for improving its contracting organizational climate.

## Research Approach

In coordination with the Army Deputy Assistant Secretary (Procurement), we developed the survey instrument and deployed the survey to the Army contracting workforce. We developed the survey on the NPS Lime Survey system and provide the survey link to the Army Deputy Assistant Secretary (Procurement) for deployment throughout the Army contracting workforce.

Based on the number of survey responses and response rate, we used appropriate quantitative data analysis methods to analyze the survey data and identify research findings.

This study will provide a baseline measurement of the Army's contracting organizational climate and address the following research questions:

1. What is the baseline climate of the Army's contracting workforce in relation to the following dimensions: work relationships, employee recognition,



employee commitment, supervision, leadership, job satisfaction, organizational commitment, employee characteristics, and job stress.

2. Is a change in the Army's contracting organizational climate necessary?
3. What dimensions need to be addressed in order to improve the Army's contracting organizational climate?

### **Benefits of Research**

This research will benefit the Army by establishing a baseline climate of the Army's contracting workforce in relation to the following dimensions: work relationships, employee recognition, employee commitment, supervision, leadership, job satisfaction, organizational commitment, employee characteristics, and job stress. It will also identify the dimensions that need to be addressed in order to improve the Army's contracting workforce climate. These research findings can then guide the DoD, as well as the federal government contracting community, in developing a road map for increasing its contracting workforce climate.

### **Organizational Climate**

As noted above, we examined a number of dimensions that, as a whole, are indicative of organizational climate and culture and have been used in similar settings (Gerbich, 2017; Doelling, 2005). Table 1 outlines the key dimensions captured in this study, a brief description of the construct, and sample scale items (see also McKeithen, 2016).



**Table 1. Organizational Climate Dimensions**

Dimension	Description	Sample Items
Job Satisfaction	Employee's affective attachment to a job; involves both extrinsic and intrinsic features to job (Cook et al., 1981)	<ul style="list-style-type: none"> <li>Considering your skills and the effort you put into your work, how satisfied are you with your pay?</li> <li>How satisfied do you feel with your chance for getting ahead in this organization in the future?</li> </ul>
Supervisor-Related Commitment	Employee's commitment to supervisor (manager) and internalization of supervisor's values (Becker et al., 1996)	<ul style="list-style-type: none"> <li>When someone criticizes my supervisor, it feels like a personal insult.</li> <li>My supervisor's successes are my successes.</li> </ul>
Job Role Ambiguity	Provides employee clear set of responsibilities so managers are able to give appropriate guidance and hold individuals accountable (Fields, 2002)	<ul style="list-style-type: none"> <li>I know what is the best way (approach) to go about getting my work done.</li> <li>My job is such that I know when I should be doing a given work activity.</li> </ul>
Job Characteristics	Characteristics of jobs that increase internal motivation and for which an employee has some level of control (Fields, 2002; Wayne, Shore, & Liden, 1997)	<ul style="list-style-type: none"> <li>In the positions that I have held at my current work center, I have often been assigned projects that have enabled me to develop and strengthen new skills.</li> <li>Besides formal training and development opportunities, to what extent have your managers helped to develop your skills by providing you with challenging job assignments?</li> </ul>
Job Stress	Aspects of job affecting employees' stress levels and undesirable constraints and demands (Davey, Kinicki, & Scheck, 1995; Fields, 2002)	<ul style="list-style-type: none"> <li>My supervisor places demands on me that aren't placed on coworkers.</li> <li>Personal concerns have interfered with my job performance.</li> </ul>
Work-Family Conflict	Inter-role conflict between work and family that are mutually incompatible; demands from one increase conflict in the other (Thomas & Ganster, 1995)	<ul style="list-style-type: none"> <li>After work, I come home too tired to do some of the things I'd like to do.</li> <li>On the job, I have so much work that it takes away from my other interests.</li> </ul>
Commute Stress and Safety	Cognitive and affective assessment of stress incurred due to employee's commute to and from work (Kluger, 1998; Fields, 2002)	<ul style="list-style-type: none"> <li>I resent the hassles my commute causes me.</li> <li>My commute affects my productivity on the job in the following ways: It takes work time out of my day.</li> </ul>
Organizational Justice	Employees' perceptions of fairness of procedures, outcomes, and information sharing; and interactions in the workplace (Dulebohn & Ferris, 1999)	<ul style="list-style-type: none"> <li>The supervisor considered the important aspects of your work when rating you.</li> <li>The supervisor rated you on how well you did your job, not on his/her personal opinion of you.</li> </ul>
Job Fit	Employees' perceived ability to control and meet job demands (Xie, 1996)	<ul style="list-style-type: none"> <li>My job gives me a chance to do the things I feel I do best.</li> <li>I feel that my job and I are well matched.</li> </ul>
Workplace Values	Employees' perceptions about the level of importance an organization places on values such as quality, innovation, cooperation, and so forth (Van Dyne, Graham, & Dienesch, 1994)	<ul style="list-style-type: none"> <li>Individual employees recognized and rewarded for superior performance.</li> <li>Reputation for innovation surpasses Army contracting agencies.</li> <li>Procedures facilitate widespread participation in decision-making.</li> </ul>
High Quality Relationships	Employees' view of the quality of connections and relationships in the workplace (Carmeli & Gittell, 2009; Dutton, 2003). HQCs are highly correlated with job satisfaction, team learning, other measures of organizational effectiveness.	<ul style="list-style-type: none"> <li>Whenever anyone at work expresses an unpleasant feeling, she/he always does so in a constructive manner.</li> <li>We cope well with the pressures experienced at work.</li> <li>We are attentive to new opportunities that can make our system more efficient and effective.</li> <li>I feel that my co-workers and I try to develop meaningful relationships with one another.</li> <li>There is a sense of empathy among my co-workers and myself.</li> </ul>

## Methodology

We designed the survey to capture professionals' perceptions of climate, broadly speaking. The survey incorporates the dimensions outlined previously. We used a standard 7-point Likert scale where 1 = Strongly Disagree, 2 = Somewhat Disagree, 3 = Disagree, 4 = Neither Agree nor Disagree, 5 = Agree, 6 = Somewhat Agree, and 7 = Strongly Agree. There were a total of 136 items and four additional open-ended response questions at different points in the survey. These open-ended questions afforded respondents the opportunity to offer written comments and feedback for improvement on certain dimensions.



The survey was administered using NPS's Lime Survey tool. The structure of the survey comprised four sections, which included several scales based on the dimensions indicated: (1) job satisfaction, perceptions of supervisors, job role ambiguity, and job characteristics; (2) job stress—personal and work related stress, work-family conflict, and commute stress and safety; (3) organizational justice, job fit, workplace values, and high quality relationships; and (4) job-related demographics (certification levels, organization type, and so forth). Personally identifiable information was not collected from participants.

Approval for the survey was obtained through the Deputy Assistant Secretary of the Army (Procurement) and was launched by the Workforce Development Directorate Office of the Deputy Assistant Secretary of the Army (Procurement) office. Human subjects approval was secured at the Naval Postgraduate School.

Our population of interest was contracting professionals within the U.S. Army. The survey we developed was sent to approximately 10,000 military, civilian, and Army Corps of Engineers in 1102, 1105, 0800, and 51C job categories. Non-acquisition professionals—those that serve in assistive vice direct contracting roles—have been excluded from the study. That is, we included only those professionals with appropriate and valid authorization to obligate government funds. The survey was open for approximately two weeks. We obtained 1,455 responses; due to incomplete surveys, the final count was 998 surveys, for a 9.9% response rate.

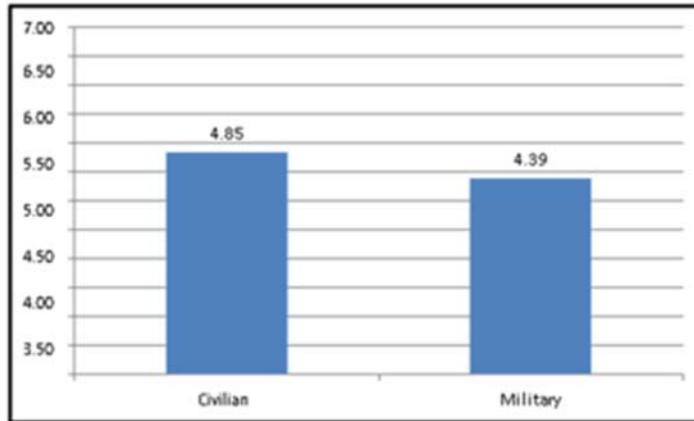
The majority of respondents were civilian contracting professionals (89%); 0.9 percent was military. Six percent held DAWIA Level 1 Certification; 27% were at DAWIA Level 2; and 55.5% were certified at DAWIA Level 3 (10% responded Other). In terms of the commands represented, most respondents were from the Army Contracting Command (ACC) (44%), 12% were from Army Materials Command (AMC), and 21% were from the Army Corps of Engineers. Finally, approximately 60% of respondents were non-warranted, while just fewer than 40% were warranted contracting officers.

## Results

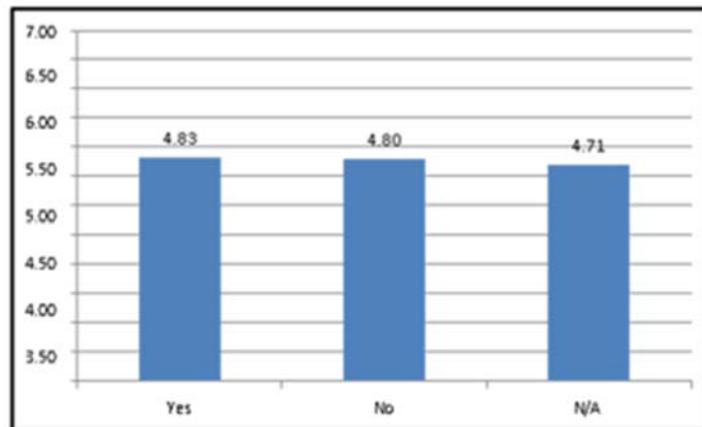
The following sections outline some of the topline results from the survey responses. We highlight job satisfaction, job role ambiguity, job stress, organizational justice, and quality of connections.

In terms of job satisfaction, contracting professionals report a moderate degree. There are no appreciable differences between the civilian and military samples (Figure 1), nor are there significant differences between the warranted and non-warranted contracting officers (Figure 2).



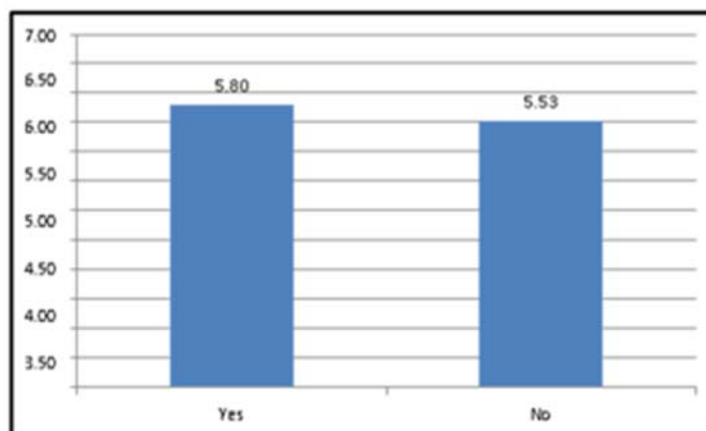


**Figure 1. Job Satisfaction by Civilian and Military**



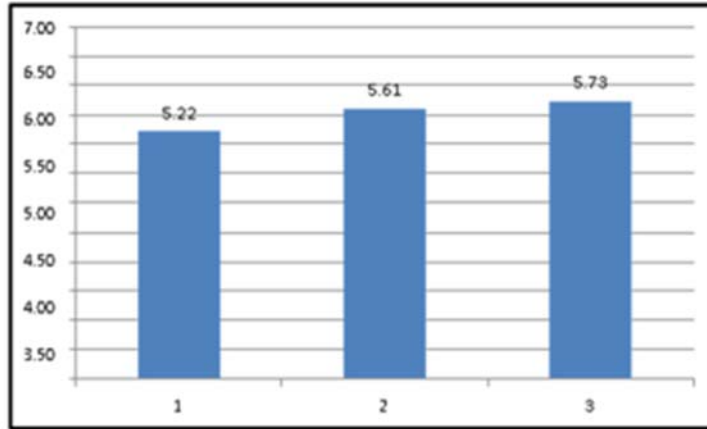
**Figure 2. Job Satisfaction by Warranted vs. Non-Warranted Contracting Officers**

We also looked at job role ambiguity. Higher ratings for these items suggest that contracting professionals are confident about their work and sense low degrees of ambiguity associated with their job roles (Figure 3). Uncertainty about job roles appears minimal, though higher DAWIA levels show less ambiguity than lower levels (Figure 4).



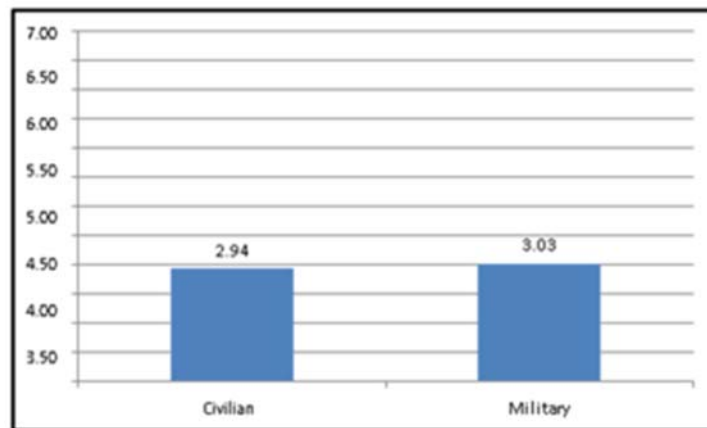
**Figure 3. Job Role Ambiguity by DAWIA Levels**





**Figure 4. Job Role Ambiguity by DAWIA Levels**

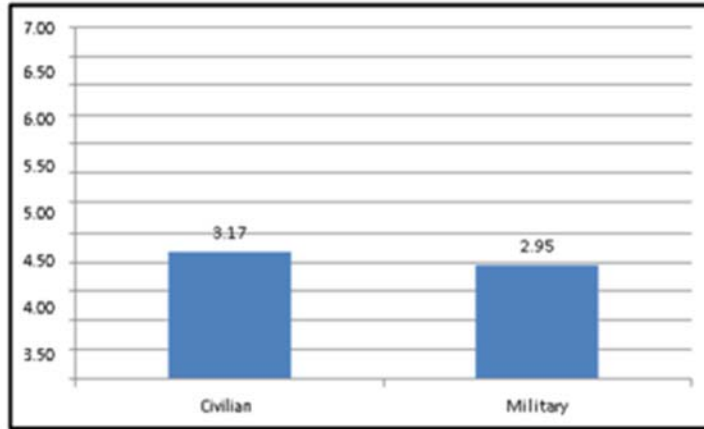
Job stress scores were low, suggesting low levels of stress associated with day-to-day work (Figure 5). Other factors associated with stress are work-life conflicts and commute stress and strain. The responses to these scales offer a similar picture, though work-life conflict was highest.



**Figure 5. Job Stress by Civilian vs. Military**

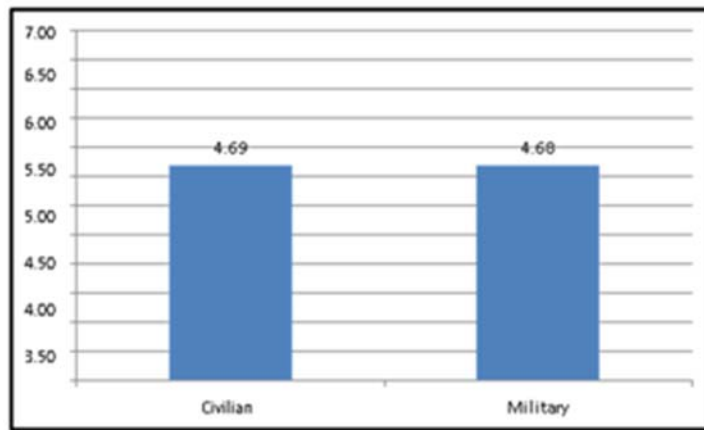
Organizational justice measures the perceptions of fairness about job processes such as performance evaluation. Respondents report lower degrees of organizational justice, suggesting a need to focus on better performance evaluation processes (Figure 6). As reported by McKeithen (2016), we find a negative correlation between organizational justice and job satisfaction. This “suggests that when organizations foster environments where employees are evaluated based on their own merits, and employees believe supervisors are using accurate information when conducting performance appraisals, job stress is low. Conversely, when employees perceive that supervisors are not fully gathering accurate assessment information when conducting evaluations and/or appraisals, an employee’s level of job- related stress is high” (McKeithen, 2016, p. 101).





**Figure 6. Organizational Justice by Civilian and Military**

We also examined the quality of connections. Contracting professionals report that they have moderately high quality of connections (Figure 7). In addition, we include a table that reports all categories and average scores by command (Figure 8).



**Figure 7. High Quality Connections by Civilian and Military**

Command	Job Satisfaction	Super-visor Commitment	Job Characteristics	Job Role Ambiguity	Job Strain	Work-Family Conflict	Commute Stressors Combined	Organizational Justice	Job Fit	Work-place Values	HQC Capacity	HQC Experience
ACC	4.90	4.22	4.70	5.58	2.86	3.42	2.65	3.19	3.66	4.54	4.74	5.30
AMC	4.39	3.89	3.86	5.67	3.15	2.75	2.82	3.00	3.57	3.73	3.79	4.38
ECC	4.32	4.33	4.27	5.76	3.10	3.56	2.54	3.08	3.68	4.38	4.78	5.23
Medical Command	5.16	4.44	5.00	5.92	2.87	3.10	2.81	3.18	3.90	4.45	4.71	5.33
MICC	4.56	4.25	4.63	5.66	3.04	3.60	2.63	3.14	3.70	4.38	4.66	5.16
National Guard Bureau	4.57	4.47	5.00	5.55	3.05	4.17	2.56	3.06	3.77	4.42	5.07	5.53
US Army Corps of Engineers	4.97	4.34	4.75	5.70	2.99	3.59	2.54	3.18	3.81	4.45	4.60	5.19
Other	4.67	4.16	4.32	5.45	2.95	3.44	2.67	3.08	3.63	4.12	4.39	5.00
No response	5.20	4.35	4.90	5.86	2.21	2.03	2.81	2.67	3.84	4.42	5.03	5.26
Dimension Average	4.81	4.27	4.68	5.63	2.94	3.51	2.62	3.15	3.71	4.44	4.69	5.24

**Figure 8. Scores by Command**





## Recommendations

While there are not significant low ratings on the dimensions we captured, our analysis is limited given a sole data time point. That said, there are several possible opportunities.

1. *Job Stress*: Contracting professionals report low levels of job stress, but when taking commute stress into account, stress was more pronounced. One option may be to “consider incorporating more opportunities for employees to telework from home when appropriate” (McKeithen, 2016, p. 103). Open-ended responses indicated a desire for increased use of telework (McKeithen, 2016).
2. *Organizational Justice*: Contracting professionals report lower degrees of organizational justice, particularly when asked about performance management practices. One option might include examining reward structures and procedures for evaluation purposes.
3. *Quality of Connections*: Contracting professionals indicate they have a moderate degree of positive connections with work colleagues. Developing high quality connections may indeed have a positive effect on job satisfaction (Dutton, 2003), but also may be highly related to building resilience among unit members (Challburg & Brown, 2016).

## Future Research

The most recent survey to our knowledge was in 2005 (Doelling, 2005), nearly 12 years ago. The time lag between the initial work and this current work is too great to make meaningful comparisons. Additional analyses for making population estimates based on the sample current sample would provide a stronger argument for the findings. Moreover, longitudinal research will invariably yield comparative data and thereby generate potential insights about the direction the contracting field. We recommend ongoing assessment of the contracting profession. Future assessments may be benchmarked against past assessments and provide a dashboard to evaluate the contracting workforce.

## References

- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, 39(2), 464–482.
- Chalburg, M., & Brown, C. C. (2016). *Resilience among naval recruits: A quantitative and qualitative analysis of interventions at Recruit Training Command and implications on fleet readiness* (Master’s thesis). Monterey, CA: Naval Postgraduate School.
- Cook, J. D., Hepworth, S. J., & Wall, T. D. (1981). *The experience of work: A compendium of 249 measures and their use*.
- Davey, J. A., Kinicki, A. J., & Scheck, C. L. (1997). A test of job security’s direct and mediated effects on withdrawal cognitions. *Journal of Organizational Behavior*, 323–349.
- Dickenson, M. W., Smith, D. B., Grojean, M. W., & Ehrhart, M. (2001). An organizational climate regarding ethics: The outcome of leader values and the practices that reflect them. *The Leadership Quarterly* (12), 197–217.
- Doelling, M. C. (2005). *A work environment climate assessment of an Army acquisition center* (Master’s Joint Applied Project). Monterey, CA: Naval Postgraduate School.



- Dulebohn, J. H., & Ferris, G. R. (1999). The role of influence tactics in perceptions of performance evaluations' fairness. *Academy of Management Journal*, 42(3), 288–303.
- Dutton, J. E. (2003). *Energize your workplace*. San Francisco, CA: Berrett-Koehler.
- Fields, D. L. (2002). *Taking the measure of work: A guide to validated organizational research and diagnosis*. Thousand Oaks, CA: SAGE.
- Gerbich, L. M. (2017). *An organizational climate assessment of the Navy contracting workforce* (Master's thesis). Monterey, CA: Naval Postgraduate School, Monterey, CA.
- GAO. (2017). *High-risk series: Progress on many high-risk areas, while substantial efforts needed on others*. Washington, DC: Author. Retrieved from <http://www.gao.gov>
- Kluger, A. N. (1998). Commute variability and strain. *Journal of Organizational Behavior*, 19, 147–165
- McKeithen, M. L. (2016). *Organizational climate assessment of the Army contracting workforce* (MBA professional report). Monterey, CA: Naval Postgraduate School.
- Moran, E. T., & Volkwein, J. F. (1992). The cultural approach to the formation of organizational climate. *Human Relations*, 45(1), 19–47.
- Thomas, L. T., & Ganster, D. C. (1995). Impact of family-supportive work variables on work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80(1), 6.
- Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. *Academy of Management Journal*, 37(4), 765–802.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82–111.
- Xie, J. L. (1996). Karasek's model in the People's Republic of China: Effects of job demands, control, and individual differences. *Academy of Management Journal*, 39(6), 1594–1619.





Acquisition Research Program  
Graduate School of Business & Public Policy  
Naval Postgraduate School  
555 Dyer Road, Ingersoll Hall  
Monterey, CA 93943

[www.acquisitionresearch.net](http://www.acquisitionresearch.net)