Chapter 17

THE WHAT, WHO, AND HOW OF PUBLIC PROCUREMENT: JOB FUNCTIONS PERFORMED AND MANAGED BY PROFESSIONALS

Joshua Steinfeld*

INTRODUCTION

Roman's article, *The Politics of Bounded Procurement: Purists, Brokers, and the Politics-Procurement Dichotomy* (2013), aptly applies the age-old paradox of public administration to the public procurement context, where politicization and neutrality are empirically studied (see also Roman, 2015). Indeed, the roles and responsibilities assumed by public procurement practitioners are still being developed in the body of knowledge, scholars are just beginning to look at the specific job tasks completed as part of the work (Prier, McCue, & Steinfeld, 2013). Whereas Roman (2013, 2015) notably examines elements of politicization in public procurement by defining "how" public procurement practitioners execute their roles and responsibilities, either *politically* or *neutral*, this manuscript addresses the matters of "who" and "what." Utilizing Prier, McCue, and Steinfeld's (2013) framework for conducting a job analysis in public procurement, this study attempts to identify job tasks performed and managed by public procurement practitioners. It is vitally important to identify what job tasks practitioners complete, and who completes these job tasks, to learn more about how job tasks are executed politically or neutral and to better understand which job tasks serve as bases for broader job functions in public procurement.

There are numerous functions served through public procurement that is largely dependent on the organization, job position, or context of the task at hand. Public procurement is a core administrative function that specifically deals with the purchasing and supplier functions within an organization. Functional areas include, but are not limited to, procurement policy, strategic planning and scheduling,

---

* Joshua M. Steinfeld, ABD, is Instructor, School of Public Service, Old Dominion University. His research interest includes public procurement, contracting, and investment management.

contract administration, negotiations, process and outcome evaluation, and various analytical procurement methods and techniques (Snider & Rendon, 2012, p. 329). Practitioners strive to reduce cost and maximize value to the organization or broader community through the products and services that are procured. Generally, purchasing agents and buyers consider price, quality, availability, reliability, and technical support when choosing suppliers and undertaking specific procurements.

Public procurement professionals engage dual responsibilities: 1) They ensure that operational agencies, departments, or units, comply with procurement regulations, and 2) There is direct involvement in procuring goods, services, and capital assets as authorized and funded (Thai, 2001, 29). Public procurement comprises strategic action-orientations that involve acquisition, contracting, buying, renting, leasing, purchasing, and commissioning (Thai, 2001, 42-43). The purpose of the procurement practitioner is to ensure that organizations' needs are met in terms of production and supply chain management so that operations can run smoothly and continuously without failure or interruption. Consequentially, procurement managers identify strategic areas of purchasing that may assist the organization's overall mission, vision, values, or objectives through the wise allocation of resources that link product and service offerings to end consumer specifications and demands.

As the profession of public procurement continues to develop, there is a desire to identify the job tasks that are managed by practitioners. There has been great debate among scholars regarding what constitutes professionalism in public procurement (Callender & Mathews, 2000; Thai, 2001; McCue & Gianakis, 2001; Prier & McCue, 2009; Prier, McCue, & Steinfeld, 2013; Steinfeld, McCue, & Prier, 2015), and whether practitioners should be neutral civil servants or adopt various kinds of political orientation (see '*purists*' and '*brokers*,' Roman, 2013). The question of professionalism includes not only the political question but also the extent to which public procurement is specialized enough to be considered an autonomous profession. Practitioner task specialization is fundamental to studying the attributes of professionalism and factors related to politicization. Parsons (1939) differentiates professionalism by technical specialty and empirical rigor, specifying that the unique characteristics of professionalism involve task-

specific knowledge and abilities related to a single specialization as well as professionals' consistent approach to task completion regardless of external factors being present.

A major challenge of identifying task specialization in public procurement is determining a theoretical framework that captures the scientific elements underlying task specialization. In public administration, the discipline for which the subfield of public procurement belongs, there has been longstanding discourse regarding the context and validity in examining task specialization. Public administration has been proclaimed to resemble business, science, and art, and each view of public administration has different implications for the meaning of task specialization and the nature of the knowledge, skills, and abilities (KSA's) that are being managed. Wilson (1887) likens professionalism in public administration to business, where managerial efficiency is the guiding criterion for government operations. On the other hand, professionalism in public administration can be viewed as pragmatic, highly interpretive, and epistemological, as if functioning more like a craft of inquiry than a means to an end (see Price, 1878; Keynes, 1904).

The rational approach to public administration applies measurement criteria and insinuates professionalism to resemble a politically neutral bureaucracy. Early public administration scholars had faith in the power of reason to order human affairs and its role in achieving progress (Spicer, 1995, 26). These scholars were greatly influenced by doctrines such as utilitarianism, legal realism, positivism, and pragmatism (Spicer, 1995, 27). According to this technical rationality, the division of work affects both the efficiency that a given set of tasks is carried out with, and upon the nature of the goals that are achieved (Simon, Thompson, & Smithburg, 1950/1991, 135-136). Simon, Thompson, and Smithburg also delineates skills from tasks in describing skills as the ability to demonstrate a stable characteristic of good performance that is acquired through considerable time and effort, in completion of tasks (pp. 138-139). This mechanistic view of the skills in the profession of public administration has been confronted with a postmodern view of the relationship between knowledge and skills, largely emanating from the challenges offered by public choice theory (see Buchanan & Tullock, 1957; Downs, 1963; Olson, 1965; Reisman, 1990).

Before offering the sociological or political perspective, the actual tasks of practitioners need to be identified; what it is that public procurement professionals actually do, and who it is that completes these job tasks. Subsequently, how the public procurement practitioner displays professionalism through political or neutral orientation can be further examined. This job analysis computes data from the 2012 Universal Public Procurement Certification Council (UPPCC) survey to identify the job tasks that practitioners perform and manage, and their respective job descriptions. A discussion of how practitioners complete their jobs follows the sensitivity analysis as a means for spurring future research based on these empirical findings.

LITERATURE REVIEW

Developing Occupations

The term profession describes an occupation that has a high level of professionalism (Andersen & Pederson, 2012). Professionalism is thus ultimately "a continuous occupational variable" since some occupations have achieved higher levels of professionalism than others (Andersen & Pederson, 2012). Each occupation has its own unique history and possesses a pattern of structural and ideological features (Levi-Strauss, 1966). "Two major considerations impel an individual to choose his/her occupation: the income it may bring and the social status with which it is traditionally associated. With the first, the individuals may sustain their lives. Because of the second, society evolves a scale of values which are identified with the folkways and mores and which find expression in the social hierarchy of occupations" (Chen, 1947). An individual's desired values and expression, and those associated with the occupation of choice, are reflective of self-image. A person's self-image is defined as a set of attitudes, beliefs, and opinions held by a person of himself or herself (Faunce, 1968). In turn, a person's self-image is dependent upon the support, encouragement, recognition, and acceptance of those whom that actor shares a relationship (Salaman, 1974). Typically, we build relationships with the people we work with; the people who share our daily experiences and can relate to our interests, endeavors, and sacrifices.

Accordingly, Freidson (1970) states an occupation exists when workers perform the same activities and devise common methods that are used by new recruits (p. 71). In this manner, established practices become affiliated with specific job tasks inherent to a particular occupation. Hughes (1958) observes that new occupations recruit from existing occupations leading to issues regarding formalized training for the new occupation that eventuates into a more formal credentialing system placing clearer boundaries and ways to create barriers to entry into the occupation (pp. 134-135) (See also, for barriers to entry: Kline, 1989; Christensen, 1994).

New occupations develop when workers are needed by employers to do tasks that have not been done before or when needed tasks are sufficiently different from what exists and it becomes the primary job of enough workers (Crosby, 2002). Economic expansion, population growth, technological innovation, intellectual advancement, and changes in trends could all have the effect of creating new tasks. Yet, it is particularly important for the development of an occupation that individuals from different backgrounds perform similar services (Blum Roman, & Tootle, 1988).

The process dictating the way role bundles are made up and organized, the power exercised by those occupying roles, and how power is utilized are thus critical for better understanding the division of occupations (Freidson, 1985). The grouping together of role bundles, vis-à-vis declaration of the occupied roles as "occupations," largely determines how workers are viewed in the labor force and by social networks. To begin with, the conceptions and identities that persons form of themselves are based upon their vocations, the role they seek to play in communities and social groups, and the recognition and status which society accords to actors in these roles (Park, 1931). And, people's identities are not the result of any one single role because society understands people as multiple-role-performers rather than as a person with a particular role (Goffman, 1969). Especially in public procurement and administration, an interdisciplinary field consisting of several subfields ranging from budgeting/finance to political science to organizational management, the concept of professionalism applies to practitioners who assume a multitude of roles and responsibilities.

Examining Public Sector Professionalism

For the past century, public administration has undergone a search for a core body of theory and knowledge to determine whether elements of professionalism exist in the field that would constitute evidence of a profession (Pugh, 1985). The Pendleton Act of 1883 is one early case in point, which provided a legal arrangement for professionalism in the public sector by the implementation of competitive exams, elimination of mandatory campaign contributions, and political neutrality (Theriault, 2003). Despite the Pendleton Act's accomplishment in achieving civil service reform by striving to rid the public administration of patronage, many challenged the Act's intent to establish meritocracy rather than providing party professionals with another weapon for party power (Skowronek, 1982).

It has been argued that accepted administrative principles commonly utilized to achieve efficiency such as specialization, unity of command, span of control, and organization by purpose, process, clientele, or place, cannot be validated (Simon, 1946, p. 53). However, from a conceptual standpoint, especially one that would apply to the policy context of the public sector, there are arguments suggesting that task specialization corresponds to purpose and expertise. Krimsky (1984, p. 249) outlines the following intellectual skills that scientific or technical experts bring to a problem: 1) a theoretical framework, lattice of concepts, laws, and explanations, 2) acquaintance with a body of literature, 3) proficiency with specialized instruments, 4) causal knowledge and the ability to frame hypotheses, and 5) a process of inquiry that enables collection, organization, and interpretation of data. Technical rationality led to specialized, expert knowledge, the very life blood of the professional, leading to the proliferation of professional associations in the latter half of the 19th century and early part of the 20th century (Larson, 1977). Only by specialization within applicatory limits can scientific thoroughness and exactness be achieved in any knowledge department (Keynes, 1904, 114). The division of work affects both the efficiency that a given set of tasks is carried out with, and upon the nature of the goals that are achieved (Simon, Thompson, & Smithburg, 1950/1991, 135-136).

Wilson's essay *The Study of Administration* (1887) and its mantra "administration is a field of business" (p. 209), the idea that public administrators should act like professionals or that certain values or

methods are characteristic of professionals, has been at the forefront of administrative scholarship and debate. It represents perhaps the first attempt toward articulating the ideology and theoretical constructs of professionalism in public administration. The science of public administration is concerned with the effective and efficient performance of the machinery of government apart from the "hurry and strife of politics" or the "debatable ground of constitutional study" (Wilson, 1887, 209-210). Public administration was known to deal with the execution of policies enacted by political bodies (Goodnow, 1900). Taylor (1919/2006) attempted to instill standards into administrative practices stating that: "Instead of having only one way which is generally accepted as a standard, there are in daily use, say, fifty or a hundred different ways of doing each element of the work" (p. 31).

One of the earliest attempts to identify the criteria of a profession was offered by Abraham Flexner (1915) who stated "Professions involve essentially intellectual operations with large individual responsibility; they derive their raw material from science and learning; this material they work up to a practical and definite end; they possess an educationally communicable technique; they tend to self-organize; they are becoming increasingly altruistic in motivation." Similarly, Parsons (1939) differentiates professionalism by technical specialty and empirical rigor, specifying that the unique characteristics of professionalism involve task-specific knowledge and abilities related to a single specialization as well as professionals' consistent approach to task completion regardless of any external factors being present. In conjunction with Parsons' definition of professionalism, Eulau (1973) attributes professionalism to the translation of "knowledge into action" and use of that knowledge to help people address problems they cannot resolve themselves (pp. 172-173); a condition referred to by Kline (1989) and Christensen (1994) as specialized, or esoteric subject matter. Accordingly, Sanders (1993) denotes the essence of professionalism as: "A professional is one who is competent at some difficult task; the term 'profession' describes either the pursuit of the work in question, or the aggregate of persons doing that work; 'professionalism' and other cognates must similarly involve reference to this central idea" (p. 86).

Task Specialization in Public Procurement

"Public procurement is the designated legal authority to advise, plan, obtain, deliver, and evaluate a government's expenditures on *goods and services* that are used to fulfill stated objectives, obligations, and activities in pursuant of desired *policy* outcomes" (Prier & McCue, 2009). In this sense, public procurement practitioners play a central role in the provision of public goods in an economy. As a result, public procurement practitioners must manage a variety of job activities or job tasks.

According to the U. S. Bureau of Labor Statistics (BLS), 'purchasing managers,' 'buyers,' and 'purchasing agents' are recognized as an occupation within the business and financial occupation group (U.S. Bureau of Labor Statistics, 2013). Collectively, the three purchasing positions belong to the field of procurement, indicative of the strategic and managerial aspects of purchasing (MoI, 2003; de Boer, Ebben, & Pop Sitar, 2003). Despite the creation of several scholarly journals in the field of procurement, including the *Journal of Public Procurement* in 2001, researchers in public administration, public finance, and public budgeting have largely ignored the purchasing function (MacManus, 1992). Subsequently, labor force participants are largely unaware of public procurement practitioners' roles and responsibilities and if procurement and logistics is noticed, it tends to be dominated by purchasing activities in the private sector.

Beginning in the 1980s and 1990s, the formation of public-private partnerships (PPP) established the necessity of public practitioners to consider stakeholder interests such as business private investors (Kettle, 2002; Cooper, 2003). However, best practices have not been vested to address the various dynamics at each level of government (Steinfeld & Thai, 2013, p. 71). At one extreme, there are prescriptive and regulated structures, where executives or directors are heavily involved in the majority of the procurement process. At the other end, there are loosely guided approaches where responsibilities are devolved and procurement is viewed as a managerial function (Peters, 1996).

The objectives of public procurement and its operations are expansive, even more so than the singular objective of minimizing costs, maximizing value, revenues, or profit (Murray, 1999; Larson, 2009). Such objectives involve the delivery of a wide range of public

services, such as law and order, health, education, defense, transportation, the environment, and social services. Thus, the scope of procurement in public sector organizations is broad with regards to diversity and serving consumers' needs (Erridge, 2007). An increasing recognition of the strategic role of public procurement has emerged that applies cost saving functions to cover more general governmental objectives (Zheng et al., 2007).

As public procurement continues to mature, there is a desire to identify the contours that shape the occupation. Currently, public procurement has some of the contours of a profession including a recognized professional society, codes of ethics, a certifying body, and even a burgeoning interest in developing curriculum in Master of Public Administration programs. However, a major constraint of public procurement's push towards professional recognition is the fact that there is limited research determining what these practitioners actually do on their jobs, and who are the practitioners that assume these roles and responsibilities. To date, there is no specific research that attempts to argue that the job of public procurement practitioners is specialized to require unique knowledge and training (see Gargan, 1998).

JOB TASKS OF US PUBLIC PROCUREMENT

In 2012, the UPPCC conducted a job study to devise sound and defensible content for testing those wishing to pursue certification. The UPPCC gave permission to use the data from that study for analysis and publication. For the UPPCC survey, there were 2,593 respondents, all from public procurement organizations in the US such as the California Association of Public Procurement Officials, Florida Association of Public Procurement Officers, National Association of Educational Procurement, National Association of State Procurement Officials, National Contract Management Association, National Procurement Institute, and the National Institute for Governmental Procurement: The Institute for Public Procurement. As part of the survey, respondents were asked whether they "perform," "manage," "perform and manage," or "neither perform nor manage" each of a list of 75 job tasks. Respondents also identified themselves according to one of thirteen job descriptions, as well as responded to questions regarding attainment of UPPCC certifications, years of experience, and salary.

For the quantitative analysis conducted here, first, the question of what public procurement practitioners actually do is addressed by identifying the most commonly performed and/or managed public procurement job tasks. The goal is to identify the most common, or frequently, performed and/or managed job tasks to establish basis for task specialization among a majority of practitioners. Also, a reason for identifying the *most commonly* performed and/or managed job tasks, rather than all job tasks on the survey, is to establish a firmer basis for the job tasks expected to be present in public procurement. These robust results may demonstrate a set of job tasks that can be considered to reflect the core responsibilities most frequently performed and managed by public procurement practitioners to establish a basis for task specialization.

Once the job tasks are identified, the issue of "who" completes these job tasks is examined according to practitioner job descriptions. However, identifying the job descriptions that perform and/or manage the most common job tasks only covers one approach to differentiating between job descriptions. For example, it is expected that more competent procurement professionals not only perform and manage certain job tasks more frequently, but that they also assume a greater breadth of roles and responsibilities as well. Therefore, the *uncommonly* managed job tasks are also identified to discern the esoteric job tasks within procurement of each practitioner job description.

There are two reasons for focusing on the commonly *performed and/or managed* job tasks and those that are uncommonly *managed*. The distinction between performance and management is not always straightforward, so when trying to identify the common job tasks, it makes sense to capture the variations that exist among practitioners in job task completion. Additionally, when looking at uncommon job tasks, management connotes a more intensive measure, as management of a job task indicates greater mastery and therefore serves as a more pivotal data point when differentiating job descriptions.

To determine the threshold to use in establishing which job tasks are commonly performed and/or managed and which job tasks are uncommonly managed requires sensitivity analysis. The sample mean and standard deviation are calculated for the means of each job task so that only job tasks performed and/or managed by a proportion of

respondents falling beyond one standard deviation are included. The one standard deviation benchmark is used to separate those job tasks that are statistically more common because based on the normal bell-shaped curve, more than 68.2% of respondents are found to perform and/or manage job tasks beyond one standard deviation, which represents greater than a two-thirds majority, and can thus be considered a common, or central task for the typical procurement practitioner. The mean of means is calculated for performance and/or management responses of each job task and the standard deviation is added to the sample mean, the resultant value is the threshold used to determine which job tasks are commonly performed and/or managed by procurement practitioners (Appendix A). Job tasks where the rate of performance and/or management by surveyed practitioners exceeds the threshold value are included as commonly performed and/or managed job tasks for the analysis.

For the threshold used to categorize uncommonly managed job tasks, the two resulting sample means are summed and the standard deviations are averaged to determine the threshold percentage for uncommonly managed job tasks (Appendix A). The standard deviation of the management of all job tasks is then subtracted from the sample mean calculated from the means of each job task managed in order to determine which job tasks are deemed to be uncommonly managed. Whereas the standard deviation was added to the sample mean of job task means for the purposes of determining commonly performed and/or managed job tasks, in this case, the standard deviation is subtracted from the sample mean of job task means to determine which job tasks are uncommonly managed by procurement practitioners.

Sensitivity analysis indicates that thresholds of 85% and 38% are appropriate in determining what constitutes commonly performed and/or managed job tasks and uncommonly managed job tasks, respectively. The sample mean of the proportion of all survey respondents who indicated performance and/or management of each job task is 67.5% and the standard deviation is 17.4% (Appendix A). Since the aim is to identify the most commonly performed and/or managed job tasks, only job tasks that are performed and/or managed by a proportion of survey respondents extending beyond one standard deviation from the sample mean (67.5% + 17.4% = 84.9% → 85%) are included in the subsequent

analysis.

Regarding the uncommonly managed job tasks the sample mean of the proportion of all survey respondents who indicated management of each job task is 46.5% and the standard deviation is 8.2% (Appendix A). gain employing the one standard deviation benchmark, job tasks that are considered uncommonly managed are those job tasks that less than 38% of all survey respondents reported managing (46.5% - 8.2% = 38.3% → 38%). Rounding down to 38%, from 38.3%, for the threshold of uncommonly managed job tasks and rounding up to 85%, from 84.9%, for the commonly performed and/or managed job tasks helps ensure that approximating errors do not include job tasks that should not be included, and also serves to simplify the benchmark thresholds.

It is found there are 13 job tasks that 85% or more of all survey respondents reported performing and/or managing as shown by the overall totals that each exceed the 85% threshold (Table 1). Also, it is demonstrated that survey respondents of all job descriptions perform and/or manage common job tasks since each job description has a proportion of respondents greater than zero for each of the 13 job tasks, indicating the breadth of job tasks that procurement practitioners perform and/or manage across all job descriptions. More specifically, directors/managers of procurement, executive director/chief procurement officers, intermediate buyers, and risk management supervisors all performed and/or managed common job tasks at a proportion of greater than 90% on average across practitioners surveyed at these job descriptions. Also, assistant directors, contract administrators, and entry-level buyers performed and/or managed common job tasks at a proportion of greater than 80% on average across practitioners for these job descriptions.

Furthermore, the findings suggest there are 18 job tasks that fewer than 38% of all survey respondents reported managing (Table 2). By looking at the "overall" column (Table 2), it can be seen that less than 38% of all survey respondents manage the 18 listed job tasks. More specifically, directors/managers of procurement and executive director/chief procurement officers manage the uncommonly managed job tasks at proportions of 59% and 58% on average for surveyed practitioners at each job description, respectively. Assistant directors, finance/accounting managers,

TABLE 1
Percentage of Job Tasks Commonly Performed and/or Managed by Public Procurement Practitioners (>85%)

	AS	AD	CA	DM	EB	CP	FA	IB	CO	PM	PS	WM	RS	All
Interpret policies and procedures	70	91	88	98	84	96	86	86	92	90	88	83	91	90
Review compliance with law, policy, procedures	65	92	89	98	89	96	78	83	86	78	87	56	94	91
Identify sources of services and/or supplies	75	87	89	96	94	87	89	96	73	78	78	90	96	91
Select method of procurement	60	90	87	98	88	93	82	95	73	77	75	74	95	90
Develop solicitation document	56	90	89	98	88	89	74	93	69	70	74	61	96	89
Review solicitation document	51	93	93	99	90	92	75	93	86	73	80	62	97	92
Select contract type	48	89	88	96	81	85	71	91	66	65	75	55	93	87
Solicit competitive quotes	62	81	79	95	90	83	78	92	65	66	78	83	92	86
Ensure transparency for open/fair competition	57	90	91	99	90	93	71	95	77	67	81	63	98	91
Analyze and evaluate solicitation responses	49	88	91	96	83	87	63	91	71	73	71	60	97	88
Prepare and make recommendation award	37	86	86	95	80	87	66	87	67	73	72	56	93	85
Prepare and execute contractual documents	52	85	93	96	84	88	81	90	68	70	69	44	93	87
Uphold/promote mission, vision, values	62	92	84	98	87	93	62	87	84	83	84	59	89	88
Avg % for Job Description By Common Task	57	89	88	97	87	90	75	91	75	74	78	65	94	89

Note: See Table 3 for job description abbreviations. "All" column is average % completion across the 13 job descriptions for each job task, n = 2518.

Source: Universal Public Procurement Certification Council (UPPCC) 2012 Job Analysis.

program managers, and warehouse managers each manage the uncommonly managed job tasks at proportions of greater than one-third (33%) on average for surveyed practitioners at each job description. Thus, even though these uncommon job tasks are less frequently managed across all practitioners, a substantial portion of practitioners at these six aforementioned job descriptions do manage these uncommon job tasks, indicating these job tasks are indeed a

part of public procurement but esoteric among practitioners to the point that only certain job descriptions manage them, and there may be distinctions within some of these job descriptions that dictates management of these uncommon job tasks as well. The proportion of administrative support, entry-level buyers, and intermediate buyers who manage the uncommonly managed job tasks is especially low, with numerous uncommonly managed job tasks being managed at a proportion of survey respondents at each respective job description that is below 10% (Table 2).

TABLE 2
Percentage of Job Tasks Uncommonly Managed by Procurement
Practitioners (<38%)

	AS	AD	CA	DM	EB	CP	FA	IB	CO	PM	PS	WM	RS	All
Administer a procurement card program	11	34	16	58	18	59	36	17	33	39	39	23	18	31
Implement a sustainable procurement program	11	38	23	55	8	57	19	14	15	34	23	26	18	29
Prepare department operating budget	16	27	10	58	1	59	66	5	10	31	19	31	4	24
Ensure compliance with sustainable procurement	21	43	24	60	16	61	30	17	22	36	34	42	19	33
Maintain inventory	29	18	8	40	15	43	53	13	10	37	17	80	11	23
Design internal distribution channels	24	19	8	39	9	39	35	8	7	30	13	69	11	21
Account for assets	24	23	11	43	9	47	58	9	10	31	19	74	11	23
Establish warehouse shipping and receiving processes	15	18	5	36	8	37	47	8	5	24	7	75	9	19
Select method of disposal for surplus equip/material	28	32	11	64	16	55	57	15	25	32	39	75	18	33
Facilitate movement of goods	23	25	11	48	18	43	37	13	12	33	16	77	16	36
Establish mission statement, vision, operating values	13	52	20	78	5	77	38	6	24	43	26	20	14	35
Conduct business analyses (e.g., outsourcing, privatization, partnering)	8	39	22	64	3	58	32	9	13	30	13	24	15	30
Analyze economic trends/ conditions affecting	9	53	27	70	7	68	30	13	24	40	23	20	20	35

procure														
Conduct cost/benefit analyses on future acquisitions	11	47	26	69	8	62	41	11	20	33	32	20	19	34
Implement a process improvement plan	8	53	29	68	5	74	31	9	22	51	30	24	19	35
Plan/implement procurement strategies by forecasting	8	50	26	69	8	70	32	11	19	39	29	20	17	34
Formulate a procurement contingency/continuity plan	11	50	20	69	6	70	38	8	18	41	26	30	16	33
Develop staff succession plan	9	50	14	68	4	64	35	4	11	43	30	30	9	29
Avg % for Job Description By Uncommon Task	16	37	17	59	9	58	40	11	17	36	24	42	15	30

Note: See Table 3 for job description abbreviations. "All" column is average % completion across the 13 job descriptions for each job task, *n* = 2514.

Source: Universal Public Procurement Certification Council (UPPCC) 2012 Job Analysis

For each of the 31 job tasks of focus, the proportion of practitioners at each job description that perform and/or manage the common job tasks and manage the uncommon job tasks is shown in Tables 1 and 2. These proportions of practitioners at each job description, with respect to each job task, is then averaged to determine the cumulative proportions of practitioners for each job description that performs and/or manages common job tasks and manages uncommon job tasks. The cumulative proportions are shown by the last row of Table 1 denoted as *Average % of Each Job Description by Common Job Tasks* and the last row of Table 2 labeled *Average % of Each Job Description By Uncommon Job Tasks*. Finally, the proportions of practitioners at each job description for each job task are then averaged, across the 31 job tasks of focus, and the resultant cumulative, averaged percentages are illustrated in Table 3.

The quantitative results are as expected from an intuitive perspective, with job descriptions of executive director/chief procurement officer, director/manager of procurement, and assistant director demonstrating the most frequent completion of job tasks, contract administrator, program supervisor, and intermediate buyer in

TABLE 3
Average Percentage of Each Job Description That Completes Common and Uncommon Job Tasks in Public Procurement

Director/Manager of Procurement (DM)	75
Executive Director/Chief Procurement Officer (CP)	71
Assistant Director (AD)	59
Finance/Accounting Manager (FA)	55
Program Manager (PM)	52
Warehouse Manager (WM)	52
Risk Management Supervisor (RS)	48
Program Supervisor (PS)	47
Contract Administrator (CA)	47
Intermediate Buyer (IB)	44
Entry-level Buyer (EB)	42
Compliance Officer (CO)	41
Administrative Support (AS)	33

Source: Universal Public Procurement Certification Council (2012).

the middle, and compliance officer, entry-level buyer, and administrative support near the bottom of job descriptions for job task completion. The findings are paramount as they demonstrate that job descriptions considered to be more senior in public procurement are indicative of a greater frequency and larger breadth of job tasks and hence a greater scope and complexity of work, which directly relates to professionalism through technical expertise and task specialization.

Another consideration is to examine who make-up these 13 job descriptions in terms of practitioners' experience, attainment of certifications, and salaries. The data shows the job descriptions that most frequently complete these job tasks also have more years of experience and earn higher salaries (Table 4). In particular, the proportion of practitioners with 0-5 years and 5-10 years of experience diminishes while ascending job descriptions that more frequently complete public procurement job tasks, and the proportion with over 20 years of experience increases as well. For

compensation, the proportions increase while ascending job descriptions in the 80-100k and 100-125k salary ranges, with a decrease in those practitioners making only 30-60k. Looking at certification, the proportion of practitioners holding a UPPCC certification is consistent for the mid and upper-tier job descriptions, with certification noticeably absent from the lower-tier job descriptions. Since more years of experience and compensation are indicative of a practitioners' history of job completion, these results demonstrate that the job tasks and the respective job descriptions identified are implicative of a relationship that may connote indicators for the presence of professionalism in public procurement as related to task specialization and KSA's necessary for task completion.

TABLE 4

Years of Experience, Certification, and Salary by Job Description (in %)

	0-5 Yrs	5-10 Yrs	10-20 Yrs	20+ Yrs	UPPCC	30-60K	60-80K	80-100K	100-125K	125+K	n=2508
DM	11%	16%	37%	37%	59%	20%	35%	27%	13%	4%	594
CPO	8%	14%	31%	47%	64%	19%	15%	24%	22%	18%	118
AD	9%	17%	44%	31%	66%	22%	47%	20%	9%	2%	137
FA	26%	37%	31%	6%	31%	60%	23%	11%	3%	0%	35
PM	14%	19%	39%	28%	65%	24%	46%	17%	10%	1%	72
WM	9%	23%	49%	19%	42%	56%	28%	7%	5%	0%	43
RS	10%	24%	40%	26%	66%	50%	38%	10%	1%	0%	554
PS	16%	23%	42%	19%	74%	26%	58%	10%	6%	0%	31
CA	14%	25%	38%	23%	62%	44%	38%	14%	3%	1%	281
IB	26%	27%	36%	11%	49%	77%	18%	3%	0%	0%	352
EB	44%	26%	20%	9%	26%	80%	9%	3%	0%	0%	137
CO	24%	21%	43%	13%	38%	49%	24%	16%	3%	2%	63
AS	29%	16%	42%	13%	22%	66%	11%	3%	1%	0%	91

Source: Universal Public Procurement Certification Council (2012).

DISCUSSION AND CONCLUSION

The job tasks performed and managed most frequently by public procurement practitioners have been identified along with the management of job tasks deemed to be uncommon among practitioners. To better understand the actors who perform and manage these job tasks, a cross tab analysis was conducted according to practitioner job description. The results of the study serve to identify specific job tasks and the practitioners who perform and manage these tasks. These findings may be of relevance to scholars interested in how the public procurement function can be executed, either politically or neutrally, to achieve public service outcomes. The matter of how public procurement practitioners go-about, or approach and execute, their job is centrally important to understanding the impacts of decision-making and establishing standards of practice accordingly.

Similar to public administration (see Gargan, 1998), public procurement has undergone scholarly challenges in the literature with regard to defining the functions of public procurement practitioners in terms of the scope of knowledge and skills fit for the job (Callender & Mathews, 2000; Thai, 2001; McCue & Gianakis, 2001; Prier, McCue, & Steinfeld, 2013; Steinfeld, McCue, & Prier, 2015). The job tasks identified herein shed light on the knowledge and skills of practitioners. However, Nanda (2003) cites concerns with professionalism such as conflict of interests that coincide with the characteristic of esoteric, task-related competencies professionals have been labeled to imbue. For Nanda (2003): "The distinguishing characteristic of professionals is [the] pledge to actively manage the conflict between the client and personal interests to favor the client" (p. 3). In the professions, a fiduciary relationship exists whereby the principal, or appraiser, has knowledge and abilities that are not possessed by the client, or layperson, yet these professional attributes are necessary for accomplishing the objectives of the work for which the professional has been retained (Nanda, 2003, 6). Therefore, professionalism connotes an ethical standard and code of conduct by which the professional will put the interests of the client in front of the professional's extrinsic values such as compensation, notoriety, client-dependency, or other personal interests. It is these social and political factors that have been of interest to public administration and public procurement scholars alike.

Roman (2013) conducts an empirical study that surveys public procurement specialists and finds that a politics-procurement dichotomy exists in which public procurement practitioners assume roles and responsibilities as either purists or brokers. Purists are "defenders and enforcers of the supposedly neutral and hierarchical nature of the procurement process" and define decision-making criteria and performance measures exogenously from their organizational context (Roman, 2013, 40). Brokers focus on human relationships and learning dynamics, characterizing themselves as helpers and facilitators in the public procurement process, heavy emphasis is placed on developing personal, professional, and inter-organizational relationships; believing that external environments can be shaped in ways that assist public procurement habits or practices (Roman, 2013, 40).

The purist model in public procurement assumes a politically neutral orientation, whereby purchasing practices are pursued according to scientific styles of management and decision-metrics involving cost-benefit analysis. Differently, the broker model in public procurement assumes a political orientation involving a circular interaction between exogenous factors such as the environment and other organizations, and the purchasing practices within the organizational context. In this manner, political factors such as the needs and wants of inter-organizational participants can impact the decision-making that takes place with respect to the nature and type of specific procurements.

Numerous public procurement scholars have posited professional practices in public procurement, like public administration, according to either the politically neutral or politically oriented bureaucrat. Durant, Girth, and Johnston (2009) juxtapose the issues surrounding politically neutral procurement agents as the trend to outsource, or contract-out, has become prevalent in which private sector and nonprofit entities are doing the work that the procurement practitioners once loved. In this way, the political orientation of procurement practitioners is being transferred to supposedly neutral agents of the administration. Agranoff and McGuire (2003), Lynn, Heinrich, and Hill (2001), and Meier and O'Toole (2006) elaborate on the recent trend for public procurement to adopt market-based best-business practices including privatization, contracting, competitive sourcing, public-private partnerships, and cross-sectoral networks.

Agranoff and McGuire (2003) discuss the new roles of procurement and contract specialists as being immersed within networks involving dyadic and bilateral contract relations and thus these roles for procurement specialists are outside of the agency. Lynn, Heinrich, and Hill (2001) argue that the tools now exist for "a new logic of governance" in which social, economic, and political factors are incorporated into inanimate clients who are deemed to be separate from political thrift. Meier and O'Toole (2006) further examine the political sway between bureaucracy and clients (the public) but determine that it is the complex intergovernmental and inter-organizational networks themselves that limit bureaucracy's ability to implement public policy in tune with public preferences, and that instead, bureaucracy responds to the public's demands. Bureaucracy is thus limited with its response according to executing these initiatives with solely efficiency and effectiveness in mind.

The idea of procurement-as-administration, or that public procurement mimics private sector notions of business management, efficiency, effectiveness, and mechanistic approaches is widely discussed in the theoretical literature. The mission of the supply function in public procurement, like the private sector counterpart, is to manage deliveries of goods and services in a cost-effective manner (Johnson, Leenders, & McCue, 2008, p. 176). Financial management, negotiations, purchasing, contract administration, and evaluation are all tasks central to the achievement of cost-effectiveness in the public and private sector alike. Muller (1991) surveyed National Association of Purchasing Management (NAPM) members in U.S. state and local governments in addition to private procurement employees where the responsibilities of respondents between the two sectors was found to be minimal. Only areas of inventory management, material flow, and special considerations for performance enhancement were found to be differentiating, with the public sector being less active in all three (Johnson, Leenders, & McCue, 2008, 177). Meanwhile, utilization of automated purchasing systems for transaction processing and tracking as well as execution of multi-year contracts are common trends in both sectors.

Consequently, Bozeman (2007), Rosenbloom (2007), and Rosenbloom and Piotrowski (2005) discuss the issues with privatization and market-based purchases to be centered on threats to democratic ideologies. Adams and Balfour (2004) and

Frederickson (1997) believe that the politically neutral bureaucrats, i.e. public procurement specialists who serve as purists in purchasing roles, and their tendency to assume neutrality through shifting managerial responsibilities have led to corruption, immoral practices, and commodification. Milward and Provan (2000) and Suleiman (2003) point to an encompassing shift to a "hollow-state" and an undermining of its democratic principles.

One specific challenge posed to public purchasing managers is achieving accountability for effectiveness despite the presence of multiple, competing, and alternating performance expectations of diverse, legitimate, and conflicting sources (Hayes, 1996; Khademian, 2000; Klingner, Nalbandian, & Romzek, 2002). In some cases, contractors face trade-offs between being accountable to the client (purchasing department) and their own organization (Frumkin, 2001). Additionally, overall effectiveness is determinant on shared impressions involving the key players, issues of program turmoil, political controversies, client satisfaction, points of ongoing conflict, and issues that remain unresolved (Romzek & Johnston, 2005, 441).

Meyers, Riccucci, and Lurie (2001), Riccucci (2005), and Sandfort (2000) believe that de-politicization in public procurement can actually lead to goal divergence between public policy directives and implementation, presenting further accountability and effectiveness issues. Hardin (2002) and Yamagishi and Yamagishi (1994) elaborate on the importance of strategic relations between political actors, a trust that is based on the knowledge of and experience with other parties, which involves a mutual expectation of reciprocity in the present and future. Resultantly, trust is a major political function involving psychological and social processes that underlie developing, maintaining, changing, and continuity of operations (Rousseau, 1995).

Phillips, Caldwell, and Callender (2007) recognize political factors for public procurement outcomes but "the missing link" between good governance and other tenets of democracy is what is absent in procurement activities. For example, the outcomes vis-à-vis public policies of elected officials are reflected through specific procurements, however, when the public procurement function fails in delivering the appropriate quality or quantity of public goods/services demanded by the public, the engagement between elected officials and public procurement fails to be interpreted or

reported (Caldwell, Bakker, & Read, 2007, 156). As an example, Erridge, Fee, and McIlroy (1998) conduct a case study regarding the balanced-scorecard approach that includes leadership, policy, and strategy, however this scorecard failed to address engagement with politicians. Reed, Luna, and Pike (2005) advocates that the design of performance metrics must consider both the audience and the input of politicians. More often than not, procurement's customers are actually internal departments (Schiele & McCue, 2006), thereby insinuating devolution from implicating the political needs and wants of politicians and residents.

Chen (2009) presents the notion that the policy school of thought grounded in theoretical and economic techniques has provided public managers with an applicable understanding of the deficiencies separating politics from procurement, thus leaving motivational, sociological, and political aspects unexplored. Van Slyke (2007) emphasizes the need for public procurement to serve as both technically rational administrative functions and functional conduits for the proliferation of political will. Public policy directives, policy goals, and program requirements may be ambiguously defined and monitored infrequently, making it difficult for public managers to evaluate frequency, consistency, and quality of service in light of privatized or contracted-out social services (Van Slyke, 2007, 159). Therefore, the attributes of public services require that public managers exercise discretion in the provision of public goods and services (Van Slyke, 2007, p. 159).

Tacit knowledge involving political issues, cultural issues, and value-orientations are crucial elements in the public sector (McAdam & Reid, 2000). Public procurement personnel therefore are expected to contribute to the strategic policy process by interpreting what "good service" means through reconciling the diverse values of varying constituent groups and deeper community cultures (Chen, 2009). Public procurement practitioners ensure accountability and effectiveness by balancing numerous sources of authority including board policies, purchasing guidelines, public hearing requirements, and civil service regulations (Morgan et al., 1996). If responsibility is degraded with respect to failure in catering to, or considering stakeholder factions, there is a chance of eroding democracy and impeding citizen participation, leading to public value failures (Bozeman, 2007).

The findings provide a basis for further study into how public procurement job tasks may be performed and managed either politically and neutrally, which can then lead to understanding outcomes via the purist or broker models (see Roman, 2015). Steinfeld, McCue, and Prier (2015) compare the job duties of public sector practitioners to those denoted for procurement by the U.S. Bureau of Labor Statistics (BLS), in which the BLS does not differentiate its description of procurement as relating specifically to the "public" or "private" sector. Steinfeld, McCue, and Prier (2015) find that public sector procurement practitioners perform and manage the job duty of "establish/uphold mission, vision, and values," while a duty with similar or general relative scope was completely absent from the BLS description of procurement. There is substantial research to indicate that the essence of professionalism in public administration can be found in its differentiating characteristics from the corresponding practices in the private sector. The study's findings relate the performance and management of establishing/upholding mission, vision, and values to the social responsibility aspect of public administration; seemingly the defining characteristic that makes the field esoteric, at least in its contemporary form, from related practice in the private sector such as business administration (Dahl & Lindblom, 1953; Wamsley & Zald, 1973; Perry & Rainey, 1988; Nutt, 2005; Bowman & Thompson, 2013), and public procurement from private sector purchasing and supply management (Murray, 1999; Telgen, Harland, & Knight, 2007; Larson, 2009; Jaafar & Radzi, 2012), respectively. The implication is that the nature by which these job tasks are completed, politically or neutrally, may substantially impact the levels of professionalism displayed by the practitioner.

Given the political narratives identified in public procurement such as practical idealist, adapted idealist, steward of public interest, resigned custodian, or businesslike utilitarian (Roman, 2015), in addition to the purist and broker models, the next step in developing professionalism of public procurement is to examine how practitioner job tasks are performed and managed according to these narratives. The positive and negative outcomes that could hypothetically result from performing and managing job tasks either politically or neutrally, can be assessed for substantiating standardization of public procurement practices.

REFERENCES

Agranoff, R., & McGuire, M. (2003). *Collaborative Public Management: New Strategies for Local Governments.* Washington, DC: Georgetown University Press.

Andersen, L. B., & Pederson, L. H. (2012). "Public Service Motivation and Professionalism." *International Journal of Public Administration*, *35*(1): 46-57.

Blum, T., Roman, P., & Tootle, D. (1988). "The Emergence of an Occupation." *Work and Occupations*, *15*(1): 96-114.

Bowman, L., & Thompson, J. (2013) "Departments of Public Administration and Colleges of Business Administration: Allies or Aliens?" *Journal of Public Affairs Education*, 19(2): 239-261.

Bozeman, B. (2007). *Public Values and Public Interest: Counterbalancing Economic Individualism*. Washington, DC: Georgetown University Press.

Buchanan, J., & Tullock, G. (1962). *The Calculus of Consent*. Indianapolis, IA: Liberty Fund.

Caldwell, N., Bakker, E., & Read, J. (2007). "The Purchasing Process in Public Procurement." In L. Knight, C. Harland, J. Telgen, K. Thai, G. Callender, & H. McHen (Eds.). *Public Procurement: International Case and Commentary* (149-159). London: Routledge.

Callender, G., & Mathews, D. (2000). "Government Purchasing: An Evolving Profession?" *Journal of Public Budgeting, Accounting, and Financial Management*, *12*(2): 272-290.

Chen, C. (2009). "Antecedents of Contracting-Back-In: A View Beyond the Economic Paradigm." *Administration and Society*, *41*(1): 101-126.

Chen, T. (1947). "Occupations." *American Journal of Sociology*, 52, (Supplement: Population in Modern China): 43-56.

Christensen, B. A. (1994). "What Is a Profession?" *Journal of the American Society of CLU & ChFC. 48*(1): 28.

Cooper, P. J. (2003). *Governing by Contract: Challenges and Opportunities for Public Managers.* Washington, DC: CQ Press.

Crosby, O. (2002). "New and Emerging Occupations." *Occupational Outlook Quarterly*, *46*(3): 16-25.

Dahl, R., & Lindblom, C. E. (1953). *Politics, Economics, and Welfare*. New York: Harper & Brothers.

De Boer, L., Ebben, M., & Pop Sitar, C. (2003). "Studying Purchasing Specialization in Organizations: A Multi-agent Simulation Approach." *Journal of Purchasing and Supply Management*, *9*(5&6): 199-206.

Downs, A. (1967). *Inside Bureaucracy*. Boston, MA: Little, Brown, and Company.

Durant, R. F., Girth, A. M., & Johnston, J. M. (2009). "American Exceptionalism, Human Resource Management, and the Contract State." *Review of Public Personnel Administration*, *29*(3): 207-229.

Erridge, A. (2007). "Public Procurement, Public Value, and the Northern Ireland Unemployment Pilot Project." *Public Administration*, *85*(4): 1023-1043.

Erridge, A., Fee, R., & McIlroy, J. (1998). "Public Sector Quality: Political Project or Legitimate Goal?" *International Journal of Public Sector Management*, *11*(5): 341-353.

Eulau, H. (1973). Skill Revolution and the Consultative Commonwealth. *American Political Science Review*, *67*: 169-191.

Faunce, W. (1968). *Problems of an Industrial Society*. New York: McGraw-Hill.

Flexner, A. (1915), "Is Social Work a Profession?" Paper Presented at the National Conference on Charities and Correction, pp. 581-590.

Freidson, E. (1985). "Foreward." In G. Gritzer & A. Arluke (Eds.), *The Making of Rehabilitation: A Political Economy of Medical Specialization* (pp. 1890-1980). Berkeley, CA: University of California Press.

Freidson, E. (1970). *Profession of Medicine: A Study of the Sociology of Applied Knowledge.* New York: Dodd, Mead.

Frumkin, P. (2001). *Managing for Outcomes: Milestone Contracting in Oklahoma*. Arlington, VA: Pricewaterhouse Coopers Endowment for the Business of Government.

Gargan, J. (1998). "The Public Administration Community and the Search for Professionalism." In J. Rabin, W. B. Hildreth, & G. Miller (Eds.), *Handbook of Public Administration* (2nd ed.) (1089-1161). New York: Marcel Dekker.

Goffman, E. (1969). "Role Distance," In *Where the Action Is* (37-103). London: Allen Lane.

Goodnow, F. (1900). *Politics and Administration: A Study in Government*. New York: MacMillan.

Hardin, R. (2002). *Trust and Trustworthiness*. New York: Russell Sage Foundation.

Hayes, T. (1996). *Management, Control, and Accountability in Nonprofit Voluntary Organizations*. Ipswitch, UK: Ipswitch Book Company.

Hughes, E. C. (1958). *Men and Their Work*. Glencoe, IL: Free Press.

Jaafar, M., & Radzi, N. M. (2012). "Building Procurement in a Developing Country: A Comparison Study Between Public and Private Sectors." *International Journal of Procurement Management*, *5*(5): 608-626.

Johnson, F. P., Leenders, M., & McCue, C. (2009) Public Procurement Organization: A Comparison of Purchasing's Organizational Roles and Responsibilities in the Public and Private Sectors. In K. V. Thai (Ed.), *International Handbook of Public Procurement* (175-186)*.* New York: Taylor and Francis.

Kettle, D. (2002). *The Transformation of Governance*. Baltimore, MD: Johns Hopkins University Press.

Keynes, J. N. (1904). *The Scope and Method of Political Economy* (3rd Ed.). New York: MacMillan and Co.

Khademian, A. (2000). "Is Silly Putty Manageable? Looking for the Links Between Culture, Management, and Context." In L. O'Toole and J. Brudney Jr. (Eds.), *Advancing Public Management: New Developments in Theory, Methods, and Practice* (pp. 33-48). Washington, DC: Georgetown University Press.

Kline, E. (1981). "To Be a Professional." *Southern Review of Public Administration, 5*(3): 258-281.

Klingner, D., Nalbandian, J., & Romzek, B. (2002). "Politics, Administration, and Markets: Conflicting Expectations and Accountability." *American Review of Public Administration*, *32*(2): 117-144.

Krimsky, S. (1984). "Epistemic Considerations on the Value of Folk-Wisdom in Science and Technology." *Policy Studies Review*, *3*(2): 246-262.

Larson, M. (1977). *The Rise of Professionalism*. Berkeley, CA: University of California Press.

Larson, P. (2009). "Public vs. Private Sector Perspectives on Supply Chain Management." *Journal of Public Procurement*, *1*(1): 71-95.

Levi-Strauss, C. (1966). *The Savage Mind*. Chicago, IL: University of Chicago Press.

Lynn, L., Jr., Heinrich, C. J., & Hill, C. J. (2001). *Improving Performance: A New Logic for Empirical Research*. Washington, DC: Georgetown University Press.

MacManus, S. (1992). *Doing Business with Government: Federal, State, Local and Foreign Government Purchasing Practices for Every Business and Public Institution*. New York: Paragon House.

McAdam, R., & Reid, R. (2000). A Comparison of Public and Private Sector Perceptions and Use of Knowledge Management. *Journal of European Industrial Training*, *24*(6): 317-329.

McCue, C., & Gianakis, G. (2001). "Public Purchasing: Who's Minding the Store?" *Journal of Public Procurement*, *1*(1): 71-95.

Meier, K., & O'Toole, L., Jr. (2006). *Bureaucracy in a Democratic State: A Governance Perspective*. Baltimore, MD: Johns Hopkins University Press.

Meyers, M., Riccucci, N., & Lurie, I. (2001). "Achieving Goal Congruence in Complex Environments: The Case of Welfare Reform." *Journal of Public Administration Research and Theory, 11*(2): 165-201.

Milward, H., & Provan, K. (2000). "Governing the Hollow State." *Journal of Public Administration Research and Theory, 10*(2): 359-380.

Mol, M. J. (2003). "Purchasing's Strategic Relevance." *Journal of Purchasing and Supply Management*, 9(1): 43-50.

Muller, A. W. (1991). "An Analysis of the Purchasing Managers' Position in Private, Public and Non-Profit Setting." *International Journal of Purchasing and Materials Management*, 27(4): 16-23.

Murray, J. G. (1999). "Local Government Demands More from Purchasing." *European Journal of Purchasing and Supply Management*, 5(1): 33-42.

Nanda, A. (2003). "The Essence of Professionalism: Managing Conflict of Interest." (Working Paper No. 03-066, Note 9-903-120: 1-14). Cambridge, MA: Harvard Business School.

Nutt, P. (2005). "Comparing Public and Private Sector Decision-Making Practices." *Journal of Public Administration Research and Theory*, 16(2): 289-318.

Olson, M. (1965). *The Logic of Collective Action: Public Goods and The Theory of Groups*. Cambridge, MA: Harvard University Press.

Park, R. E. (1931). "Human Nature, Attitudes, and Mores." In K. Young (Ed.), *Social Attitudes* (17-45). New York: Henry Holt.

Parsons, T. (1939). "The Professions and Social Structure." In T. Parsons (Ed.), *Essays in Sociological Theory (Revised Edition)* (34-49). Glencoe, IL: The Free Press.

Perry, J. L., & Rainey, H. G. (1988). "The Public-Private Distinction in Organization Theory: Critique and Research Strategy." *Academy of Management Review*, 13(2): 182-201.

Peters, B. G. (1996). *The Future of Governing: Four Emerging Models*. Lawrence, KS: University of Kansas Press.

Phillips, W., Caldwell, N., & Callender, G. (2007). "Public Procurement – A Pillar of Good Governance?" In L. Knight, C. Harland, J. Telgen, K. Thai, G. Callender, & H. McHen (Eds.). *Public Procurement: International Case and Commentary* (138-148). London: Routledge.

Price, B. (1878). "Address of the President of the Department of Economy and Trade of the National Association for the Promotion of Social Science, at the Twenty-Second Annual Congress Held at Cheltenham, in October 1878." *Journal of the Statistical Society*, *41*(4): 637-653.

Prier, E., McCue, C., & Steinfeld, J. (2013). *Identifying Position Domains in Public Sector Procurement: Towards the Establishment of Standardized Job Descriptions for the Profession.* Herndon, VA: National Council for Public Procurement and Contracting.

Prier, E., & McCue, C. (2009). "The Implications of a Muddled Definition of Public Procurement." *Journal of Public Procurement*, *9*(3&4): 326-370.

Pugh, D. (1985). "ASPA's History: Prologue!" *Public Administration Review*, *45*: 475-484.

Reed, T., Luna, P., & Pike, W. (2005). "Balancing Socio-economic and Public Procurement Reform Goals: Effective Metrics for Measuring Small Business Participation in Public Procurement." In L. Knight, C. Harland, J. Telgen, K. Thai, G. Callender, & H. McHen (Eds.). *Public Procurement: International Case and Commentary* (81-100). London: Routledge.

Reisman, D. (1990). *Theories of Collective Action: Downs, Olson, and Hirsch.* New York: St. Martin's Press.

Riccucci, N. (2005). "Street-level Bureaucrats and Intrastate Variation in the Implementation of Temporary Assistance for Needy Families Policies." *Journal of Public Administration Research and Theory*, *15*(1): 89-111.

Roman, A. (2013). "The Politics of Bounded Procurement: Purists, Brokers, and the Politics-Procurement Dichotomy." *Journal of Public Procurement*, *13*(4): 447-475.

Roman, A. (2015). "Public Procurement Specialists: They Are Not Who We Thought They Were." *Journal of Public Procurement*, *15*(1): 38-65.

Romzek, B., & Johnston, J. (2005). "State Social Services Contracting: Exploring the Determinants of Effective Contract Accountability." *Public Administration Review*, *65*(4): 436-449.

Rosenbloom, D. (2007). "Reinventing Administrative Prescriptions: The Case for Democractic Constitutional Impact Statements and Scorecards." *Public Administration Review, 67*(1): 28-39.

Rosenbloom, D., & Piotrowski, S. (2005). "Outsourcing the Constitution and Administrative Law Norms." *American Review of Public Administration*, *35*: 103-121.

Rousseau, D. (1995). *Psychological Contracts in Organization: Understanding Written and Unwritten Agreements*. Thousand Oaks, CA: Sage Publications.

Salaman, G. (1974). *Community and Occupation: An Exploration of Work/Leisure Relationships*. London: Cambridge University Press.

Sandfort, J. R. (2000). "Moving Beyond Discretion and Outcomes: Examining Public Management from the Front Lines of the Welfare System." *Journal of Public Administration Research and Theory, 10*(4): 729-756.

Sanders, J. T. (1993). "Honor Among Thieves: Some Reflections on Professional Codes of Ethics." *Professional Ethics, 2*(3): 83-103.

Schiele, J., & McCue, C. (2006). "Professional Service Acquisition in Public Sector Procurement: A Conceptual Model of Meaningful Involvement." *International Journal of Operations and Production Management, 26*(3): 300-325.

Simon, H., Thompson, V., & Smithburg, D. (1950/1991). *Public Administration*. New Brunswick, NJ: Transaction Publishers.

Simon, H. (1946). "The Proverbs of Administration." *Public Administration Review, 6*(1): 53-67.

Skowronek, S. (1982). *Building a New American State: The Expansion of National Administrative Capacities, 1877-1920*. Cambridge, England: Cambridge University Press.

Snider, K., & Rendon, R. (2012). "Public Procurement: Public Administration and Public Service Perspectives." *Journal of Public Affairs Education, 18*(2): 327-348.

Spicer, M. (1995). *The Founders, the Constitution, and Public Administration: A Conflict in Worldviews*. Washington, DC: Georgetown University.

Steinfeld, J., McCue, C., & Prier, E. (2015). Public Procurement and the BLS: Operationalizing Occupational Duties. *International Journal of Public Sector Management*, 28(7): 510-527.

Steinfeld, J., & Thai, K. V. (2013). "Technology Advancement and E-Procurement in the US." In Natasa Pomazalova (Ed.)*, Public Sector Transformation Processes and Internet Public Procurement* (68-84). Hershey, PA: IGI Global.

Suleiman, E. (2003). *Dismantling Democratic States*. Princeton, NJ: Princeton University Press.

Telgen, J., Harland, C., & Knight, L. (2007). "Public Procurement in Perspective." In L. Knight, C. Harland, J. Telgen, K. V. Thai, G. Callender, & K, McKen (Eds.), *Public Procurement: International Cases and Commentary* (pp. 16-24). London: Routledge.

Theriault, S. (2003). "Patronage, the Pendleton Act, and the Power of the People." *The Journal of Politics*, *65*(1): 50-68.

Thai, K. V. (2001). "Public Procurement Re-Examined." *Journal of Public Procurement*, 1(1): 9-50.

Universal Public Procurement Certification Council (2012). *2012 Job Analysis*. Herndon, VA: Author.

U.S. Bureau of Labor Statistics. (2013). *Occupational Outlook Handbook*. [Online]. Available at http://www.bls.gov/ooh/business-and-financial/home.htm.

Van Slyke, D. (2007). "Agents or Stewards: Using Theory to Understand the Government-Nonprofit Social Service Contracting Relationship." *Journal of Public Administration Research and Theory*, *17*(2): 157-187.

Wamsley, G., & Zald, M. (1973). *The Political Economy of Public Organizations*. Lexington, MA: Heath.

Wilson, W. (1887). "The Study of Administration." *Political Science Quarterly*, *2*(2): 197-222.

Yamagishi, T., & Yamagishi, M. (1994). "Trust and Commitment in the United States and Japan." *Motivation and Emotion*, 18(2): 129-166.

Zheng, J., Knight, L., Harland, C., Humby, S., & James, K. (2007). "An Analysis of Research into the Future of Purchasing and Supply

Management." *Journal of Purchasing & Supply Management,* *13*(1): 69-83.

APPENDIX A
Sample Means and Standard Deviations

	P and/or M	M	P and M
Recoded Variables	Mean	Mean	Mean
recodedesmain	0.160	0.150	0.495
recodeimpauto	0.392	0.139	0.139
recodeadminprocard	0.583	0.126	0.185
recodeadmineproc	0.416	0.141	0.251
recodeimpstand	0.201	0.174	0.395
recodeimpopwork	0.246	0.111	0.406
recodeinterpolic	0.096	0.098	0.514
recodeestcoop	0.376	0.125	0.283
recodeimpsustproc	0.482	0.135	0.157
recodeauditproc	0.268	0.141	0.356
recodeprepdeptbud	0.652	0.058	0.184
recodemandeptpers	0.495	0.072	0.328
recodetrainpurch	0.237	0.108	0.404
recodeutilauto	0.196	0.129	0.356
recodeutileproc	0.358	0.121	0.256
recodeenscop	0.358	0.152	0.241
recodeenscomplis	0.414	0.156	0.177
recoderevprocomp	0.091	0.112	0.522
recodeconmktres	0.238	0.156	0.305
recoderecombuydec	0.247	0.137	0.321
recodeusehistinfo	0.161	0.148	0.361
recodeanalecon	0.287	0.139	0.275
recodeensourcofsupp	0.088	0.161	0.448
recodeselecmeth	0.100	0.145	0.498
recodedevsolic	0.106	0.128	0.537

recoderevsolic	0.085	0.100	0.561
recodeselecont	0.132	0.140	0.480
recodesoliccopquote	0.136	0.181	0.482
recodesoliccompbid	0.156	0.144	0.493
recodesoliccompprop	0.169	0.128	0.506
recodeenstranp	0.089	0.114	0.582
recodeidenteval	0.185	0.168	0.443
recodecondprebid	0.184	0.140	0.483
recodeprepissueadd	0.159	0.137	0.499
recodeanalevalsolic	0.117	0.140	0.529
recodepreprecomm	0.148	0.143	0.499
recoderespprotest	0.232	0.085	0.436
recodeselecpayme	0.354	0.157	0.279
recoderevsuppsam	0.269	0.172	0.323
recodeprepcontr	0.126	0.119	0.537
recodecondpostawd	0.300	0.128	0.363
recodemitirskterm	0.256	0.099	0.422
recodeselecnegmem	0.428	0.157	0.268
recodeprepnegostra	0.357	0.141	0.310
recodecondnego	0.284	0.117	0.391
recodedocnegoproc	0.279	0.135	0.376
recodecondpostawdconf	0.451	0.152	0.232
recodeevalsupp	0.337	0.198	0.250
recodemonsuppcomp	0.282	0.194	0.302
recodedevstaffsuccess	0.207	0.261	0.216
recodemodcontract	0.272	0.143	0.404
recoderemednoncomp	0.255	0.135	0.368
recoderesolvdispute	0.269	0.109	0.414
recodetermcontract	0.389	0.106	0.398
recodecondcloseact	0.312	0.154	0.268
recodefollupexporder	0.303	0.195	0.286
recodesolvdelrecprob	0.702	0.214	0.272

recodemaintaininven	0.720	0.125	0.104
recodeintdistchan	0.674	0.114	0.093
recodecountassets	0.752	0.114	0.119
recodeestwareship	0.585	0.106	0.082
recodeselecmethdisp	0.593	0.148	0.177
recodedispobssurp	0.622	0.158	0.164
recodeacilmovgood	0.484	0.141	0.123
recodeestmisstatvis	0.119	0.069	0.281
recodeupholdpromomis	0.280	0.079	0.439
recodecondvaluanal	0.340	0.129	0.309
recodeimpgoalsobjmeas	0.320	0.085	0.338
recodemonlegtrendlaw	0.527	0.085	0.305
recodecondbusanal	0.391	0.094	0.201
recodeanalecontrendcond	0.420	0.109	0.240
recodecondcostbenac	0.462	0.114	0.224
recodeimpprocimprov	0.472	0.104	0.243
recodeplanimpprocstra	0.500	0.097	0.240
recodeformprocconting	0.612	0.091	0.237
Mean for non-Performance nor M of job tasks	0.325		
Mean for P and/or M of job tasks	**0.675**		
Std dev for P and/or M of job tasks	**0.174**		
Mean for *only* management of job tasks		0.132	
Std dev for *only* M of job tasks		0.034	
Mean for P and M of job tasks			0.333
Std dev for P and M of job tasks			0.129
Mean for M of job tasks: 0.465			
Std dev for M of job tasks; 0.082			

Source: Universal Public Procurement Certification Council (UPPCC) 2012