

**Relating Public Service Motivation to Behavioral Outcomes
Among Local Elected Administrators**

Jeffrey R. Paine
Visiting Professor in Environmental Studies and Political Studies
University of Illinois at Springfield

Contact:
10022 Gilreath Road
Chatham, IL 62629
(217)899-2206
jpain01s@uis.edu

Paper prepared for presentation at the International Public Service Motivation Research
Conference, Bloomington, IN, June 7-9, 2009

Abstract

Motivation leads to three kinds of measurable outcomes in the work setting: direction, intensity and duration of effort. Motivation—measured using the Public Service Motivation instrument Perry’s (1996), a material self-interest instrument derived from the PSM instrument, and a task motivation instrument (Lee and Olshfski, 2002)—is tested in this study as a factor contributing to actual work-related behavior. The three measures are used as predictor variables along with a set of control variables for regression of a set of six response variables measuring individual intensity (four variables) and duration (two variables) of work effort.

Surveys were sent as a census to 1,069 officials in 138 townships in ten Illinois counties. All of the officials surveyed were elected officials; about half of the respondents held administrative positions, while the remainder were trustees with oversight duties.

Analysis of the regressions suggests that while motivation may have a significant role in determining the direction of effort, the impact of motivation on intensity and duration of effort in most cases is not as important in predicting behavioral outcomes as job-related and individual factors.

Introduction

There is no universally accepted definition of motivation, yet motivation is central to understanding the behavior of individuals in work settings. Motivation is especially important in understanding the behavior of individuals in public work settings, as there are theoretical bases and mixed empirical evidence suggesting that there significant differences between individuals who work in the public and private sectors, as well as differences in the details of the work settings between the two sectors. While there is no universal definition, many existing definitions focus on a number of similar features. For example, motivation is conceived of as a part of human behavior that cannot be directly measured, and thus can only be assessed through indirect means and through its effects on measurable behavior. One recent definition suggests that the term motivation “refers to internal factors that impel action and to external factors that can act as inducements to action. The three aspects of action that motivation can affect are direction (choice), intensity (effort), and duration (persistence),” (Latham & Locke, 2004, p. 388).

The “internal factors that impel action” are not directly measurable, but may be measured indirectly using instruments such as Perry’s (1996) public service motivation instrument. Perry

and Wise (1990) and Perry (2000) discuss the internal state of the individual—his or her motives—as reflecting, “psychological deficiencies or needs that an individual feels some compulsion to eliminate,” (Perry and Wise, p. 368). As a result, the individual will look to the environment to find work situations—jobs or organizations—that will help eliminate those needs or deficiencies. The “external factors that can act as inducements” includes features of an organization or position, such as pay, working conditions, or benefits, which can attract an individual. Perry and Wise (1990) briefly review literature in the field of public administration and public management supporting the idea that there are significant differences between jobs and organizations in the public and private sectors, which will thus result in individuals with different sets of motives pursuing jobs in organizations in the two sectors. Individuals are widely assumed to be motivated to pursue jobs in organizations in the private sector by self interest, especially such factors as pay, benefits and material working conditions, whereas individuals who seek employment in jobs in government and nonprofit organizations are asserted to have motives that are rooted in non-material rational self-interest, norms and affective reasons (Perry, 1996; 2000; Perry and Wise, 1990).

Each of the three aspects of action that motivation may affect is behavioral, and can therefore be directly measured. Direction/choice can be measurable by the kind of job or organization in which the individual seeks employment. Intensity/effort can be measurable by the amount of time or productivity of service in that job or organization. Finally, duration/persistence can be measured by the continuation of service in that job or organization over an extended period of time, or through repeated instances of service.

To test different theories of motivation, a survey was constructed that included three instruments measuring motivation, as well as a number of other items collecting personal and

demographic information about the respondents. The first theory tested was Public Service Motivation (Perry, 1996, 2000; Perry and Wise, 1990), by including the 24 items of Perry's (1996) Public Service Motivation instrument. The second theory tested was Material self-interest, using items from the Public Service Motivation instrument and other instruments to create a new instrument. The third theory tested was Task Motivation (Rainey and Steinbauer, 1999), using a four-item job commitment and role identification instrument proposed by Lee and Ohlshfski (2002).

Public service motivation theory suggests that individuals have needs or deficiencies that can be met by holding jobs in organizations that serve the public, such as government agencies and nonprofit organizations. Individuals with higher scores on public service motivation should demonstrate higher levels of intensity/effort and duration/persistence toward government and other publicly oriented organizations than those with lower scores.

Material self-interest, often called rational choice theory, on the other hand suggests that individuals consider their options and pursue the one that will maximize their personal benefits while minimizing their personal costs. Individuals with higher material self-interest scores should demonstrate lower levels of intensity/effort and duration/persistence toward government and other publicly oriented organizations. The exception to this would be individuals who have assessed their options and determined that their own self-interest will be best met by working in a public organization. However, it is widely asserted that government and nonprofit organizations operating in the public interest generally do not provide as many material benefits compared to private for-profit organizations. From the data collected in this study, it is impossible to determine if this is the case for any individual respondent.

Finally, task motivation implies that individuals identify and commit first and foremost with the task of the job and the role it holds in the context of the organization and the individual's life. Individuals with higher task motivation scores should demonstrate a high level of intensity/effort and duration/persistence in those jobs and organizations with which they identify and commit to, but should demonstrate much lower levels of intensity and persistence in those they do not identify with or commit to. In this study, it must be presumed that the individuals who demonstrate a high level of task motivation identify with and commit to the township positions they hold; otherwise they would not have been motivated to pursue and hold such a position.

The survey was sent as a census to the 1,069 elected township officials in 138 townships in 10 counties in Illinois. Elected township officials were selected for this study because about half of them are administrators and the remainder hold oversight responsibilities; their jobs and organizations are clearly public as opposed to private in nature; the effects of their efforts are seen and felt by the members of the public who elect them; and from a theoretical perspective, the individual official must be motivated to seek out and hold their positions through a potentially expensive and risky electoral process. Thus, using the theoretical construct underlying Public Service Motivation theory (Perry, 1996, 2000; Perry and Wise, 1990), these individuals must all have some need or deficiency that they see as potentially being fulfilled by pursuing and holding these elected positions.

In the current study, since all the subjects are township officials, it can be assumed all are more or less equally motivated in the same direction, toward government service, since each individual must put out effort to become a candidate and run for election to their position. Therefore, it can be assumed that motivation's effect on direction does not vary significantly in

this sample. However, motivation may vary considerably in its effect on either or both of the other behaviors, intensity and duration.

Variables and Hypotheses

The survey instrument collected information on six measures of behavioral outcomes that can be affected by motivation. These six serve as the criterion variables in the following analysis. Four models measure the impact of motivation (that is, public service motivation, material self-interest, and task motivation) on the intensity or effort of action, including hours devoted to three different activities, and personal identification with a profession. Two other variables measure the impact of motivation on the duration or persistence of action, including the number of government jobs held during the individual's career, and total years serving in government jobs.

Three variables measure hours devoted each week to various activities: duties related to the township position; volunteer activities engaged in through other organizations; and duties related to a job other than the township position. Each of these variables is measured using near-interval ordinal categories, so each is amenable to regression analysis. Because public service motivation is a general motivation, it can be satisfied through membership and service in a wider variety of organizations and jobs. Thus, an individual with a higher intensity of public service motivation would be expected to devote more hours to their township duties, as well as likely devote more hours to volunteer service in other kinds of organizations. Self-interested individuals, on the other hand, will probably not devote as much time to township or volunteer activities, unless they saw that time as an immediate connection to their self-interest, while it may be predicted that the self-interested individual will devote more time to non-township job duties. Individuals motivated by task motivation should be positively related to more hours

devoted to both township and another job, while no prediction can be made about volunteer effort. Hypotheses 1 through 3 can be stated:

H1 = Public service motivation should be positively related to township hours.

Material self-interest should be negatively related to township hours.

Task motivation should be positively related to township hours, as the individual must be attracted to the task their position entails.

H2 = Public service motivation should be positively related to volunteer hours.

Material self-interest should be negatively related to volunteer hours.

No prediction is made for the relationship between task motivation and volunteer hours.

H3 = Between public service motivation and other job hours, no prediction is made.

Material self-interest should be positively related to hours devoted to another job.

Task motivation should be positively related to other-job hours, as the individual must be attracted to the task their position entails.

The fourth intensity variable is an index score of responses to five items based on a 5-point Likert-type scale concerning the individual's identification with their profession. As such, the variable is interval in nature and amenable to regression. Perry (1997) initially introduced this measure as a possible antecedent to public service motivation. Originally, it consisted of four items. For this study, because of an interest in the difference between local and societal-level impacts on motivation and behavior, one of the four items was rewritten into two items, one

concerning involvement in a local chapter of a professional organization, and the other concerning involvement in such organizations at the state and national level. On its face, it would appear that public service motivation should be positively associated with professional membership, as both are related in this context to the larger interests of society. Because the individual might find such identification and membership either an enhancer or impediment to self-interest, no prediction can be made. No prediction can be made for task motivation, as the individual's motive might be specific to the position being sought and held. The hypothesis for the fourth variable is:

H4 = public service motivation should be positively related.

No prediction is made for material self-interest, as an individual might see identification with and membership in a professional organization as directly connected to their personal benefit, or might reject such identification and membership as not in their self-interest.

No prediction is made for task motivation, as the motivation could be specific to the position held.

There are two variables measuring the duration or persistence of the behavior that may result from motivation. The first is the total number of other elected, appointed and/or employed positions the respondent has held or currently holds with any other unit or units of government. This is measured using four near-interval categories, and is thus amenable to regression analysis. Individuals who are motivated by public service motivation would likely be motivated to serve in a number of positions over a career. On the other hand, material self-interest should lead

individuals to seek out government positions only if the job or organization will fulfill the individuals material needs better than private alternatives. Individuals motivated by the task of the position should only be motivated to serve in positions fulfilling that task-related need, and thus might serve in only one position or many. The hypothesis for the fifth variable is:

H5 = Public service motivation should be positively related as individuals interested in serving the public over a lifetime are probably seeking to fulfill a long-term need.

Material self-interest is not predicted, as an individual may see government service as a means of meeting self-interest, or not meeting it.

No prediction is made for task motivation, as the motivation could be specific to the positions held.

The second measure of duration/persistence is the total number of years the individual has held elected, appointed and/or hired positions in government. This is reported in five approximately interval ordinal steps, and is thus amenable to regression analysis. On its face, it would appear that an individual who is attracted to government organizations and jobs to satisfy an inner need would be more likely to serve for many years. Individuals motivated by self-interest would not necessarily serve in government for less time, if they found their service adequate to meeting their self-oriented material needs. Individuals motivated by the task of the particular job might serve in government for extended periods of time. The hypothesis for the sixth variable is:

H6 = Public service motivation should be positively related as individuals interested in serving the public over a lifetime are probably seeking to fulfill a long-term need.

Material self-interest is not predicted, as an individual may see government service as a means of meeting self-interest, or not meeting it.

No prediction is made for task motivation, as the motivation could be specific to the positions held.

The above six criterion variables may be affected by a number of predictor variables. The most important for this analysis are the three measures of motivation: public service motivation, material self-interest, and task motivation. Each of the three is measured on a 5-point Likert-type scale, with the responses to a number of separate items indexed to create an interval measure amenable to regression analysis. The public service motivation variable is measured using a 24-item instrument developed by Perry (1996). Material self-interest is measured with a three-item instrument, using items from the public service motivation instrument that have face appropriateness as measures of material self-interest when scored in the opposite manner than for public service motivation. (Paine, 2009a) This introduces the possibility of multicollinearity into the analysis, the effects of which will be discussed below. Finally, task motivation is measured using a four-item instrument introduced by Lee and Olshfski (2002). Possible multicollinearity between this scale and the public service motivations scale is also discussed below.

In addition to these predictor variables, a number of control variables were also included in the analysis. These included age, gender, education level, income, and current or past military service. A set of indicator variables concerning the township position held by the individual was

also created to control for differences between the positions. No predictions were made about the relationship of these variables to the criterion variables or the predictor measures of motivation.

Age was measured using a six-step near-interval ordinal scale, grouped in roughly 15-year cohorts. The exception to this was the youngest category, which included individuals under the age of 18, and the second category, which included individuals between the ages of 18 and 30. The highest category was for individuals aged 76 and older. Gender was a dummy variable, with females as the comparison group. Education level was measured with a six-point ordinal scale, ranging from the lowest category of grade school or some high school, a high school diploma or equivalent, some college or technical training, a bachelor degree, a master degree, and education beyond a master degree. Personal income was measured using a six-step near-interval ordinal scale. The lowest category was for annual earnings of less than \$15,000 per year; the following categories increased by intervals of \$10,000; and the highest category was for incomes above \$55,000 per year. Past or current military service was measured using a dummy variable, comparing those with military service to those without such service. A set of indicator variables was created for the different township positions. The comparison group was the township trustees. In the four other categories, individuals were categorized as a supervisor, a clerk, a property assessor or a highway commissioner.

Methodology

Of the 1,069 surveys circulated to township officials in the 138 townships in 10 Illinois counties, total response was 518, with 11 unusable forms returned, leaving a valid response of $n = 507$ and a response rate of 47.4 percent. The data were analyzed for evidence of potential

problems, such as outliers and violations of the assumptions of linearity and normality (Elliott and Woodward, 2007; Osborne and Overbay, 2004; Osborne and Waters, 2002).

Multiple linear regression was selected as the proper method of analysis, as the purpose of the analysis was to determine the relationship between each of the criterion variables and the set of predictor variables (Tabachnick and Fidell, 2001). Each of the three criterion variables were regressed separately on the set of predictors: essentially, a multivariate multiple regression. This method obviates concerns about correlation between the criterion variables (Mertler and Vannatta, 2002).

Data and Results

Table 1 presents the descriptive statistics for the data. In regression analysis, care must be taken to minimize violations of assumptions about the data being analyzed. This includes reviewing the data for evidence of problems with outliers, linearity, and normality.

[INSERT TABLE 1 ABOUT HERE]

The data were inspected for outliers. Outliers are important in a regression analysis because even a single outlier may significantly bias the results of the analysis in a positive or negative manner (Osborne and Overbay, 2004; Mertler and Vanatta, 2002). While several outliers were identified, their effects appear to be minimal and mostly reduce the strength of observed relationships, rather than overstate them. No substantial problems were identified with linearity by examining the scatterplots. Examination of the correlation matrix, as well as the tolerance and VIF scores, suggest no significant problems with multicollinearity, with the

exception of moderate to strong correlations between the measures of public service motivation, material self-interest and task motivation. Paine (2009a) investigates these relationships in detail. Because the material self-interest scale consists of reverse-scored items from the PSM instrument, a strong correlation of about -0.68 is not unexpected. There is also a correlation between the PSM instrument and the task motivation instrument. Several items of the former load well in factor analysis with the items from the latter. However, the correlation (0.50) while substantial, is smaller and less of a threat to the analysis. Although the two scales share no items, the task motivation and material self-interest scales have a much more modest correlation of 0.37. This should not affect the analysis.

Analysis of scatterplots and assessment of skewness and kurtosis statistics identify some potential normality problems with several variables. However, given the size of the sample (the N for the various regressions range between 357 and 363), it is possible to assert the central limit theorem, which suggests that when there is a large N of cases, violations of normality will be minimal, even when individual variables are decidedly non-normal in their distribution (Mertler and Vannatta, 2002).

Table 2 displays the regression models for each of the six behavioral outcomes regressed on the set of 12 predictors. The models explain between 4 and 49 percent of the variance in the six criterion variables. Indicator variables for the various township positions are important in five of the six models, while demographic control variables are important in four of the six models. Only two of the measures of motivation—public service motivation and task motivation—are significantly related to any of the models. PSM is related to volunteer hours and professional identification, while task motivation is related to professional identification. Material self-interest is not significant in any of the models. This will be discussed in more detail below.

[INSERT TABLE 2 ABOUT HERE]

Hours devoted to township duties. Four predictors are significantly related to the number of hours per week respondents devote to their township duties, three of them (supervisors, assessors, and highway commissioners) related to the positions themselves. Since the comparison group for these indicator variables is township trustees, it is hardly surprising that these other positions are positively and significantly related to township work hours. Township trustee have an oversight role, and have few duties beyond attending biweekly or monthly township meetings, devoting only a few hours a week to such duties. On the other hand, most highway commissioners are employed 40 hours per week. Supervisors and assessors may have varying hours of service mandated by the board of trustees, or may work hours on an as-needed basis. Township clerks are not significantly different than trustees. Again, this is not surprising as they are primarily responsible for attending meetings and have generally limited administrative duties otherwise. The other significant predictor in this model is military service. There is no clear theoretical reason why this should be associated with hours of service.

Hours devoted to volunteer activities. Only one predictor is related to this behavioral outcome: public service motivation, which is barely significant at the 0.05 level. Thus, individuals with higher PSM scores spend more time in volunteer activities than individuals with lower scores. However, the model explains only 4 percent of the variance in this measure.

Hours devoted to work at a non-township job or jobs. Six predictors are significant in this model: two are related to township positions (assessor and highway commissioner) while the others are control variables (age, gender, education, and income). Assessors and highway

commissioners are negative, meaning that they spend fewer hours on non-township jobs than do trustees, which makes sense since trustees cannot hope to earn enough through a per-diem and likely must work at another job. Assessors and highway commissioners, on the other hand may work part or full-time at their township duties and have less need for non-township employment to make a living (as is suggested by the regression for hours devoted to township duties). For the control predictors, not surprisingly, age is negatively related to job hours as older individuals may be retired or less dependent on full-time employment. Education also has a negative relationship to job hours, although the reason is not clear; the implication is that lesser-educated people have to work more than those who have more education. However, in Illinois at least, assessors are the only elected position that requires the individual to have achieved a certain level of education and professional certification before being able to serve in the elected post. Gender and income are both positively related to higher non-township job hours, with men working other jobs more than women, and those with higher income levels also working more hours.

Identification with a profession. Five predictors are associated with this response variable, including public service motivation, task motivation, being a supervisor or assessor, and education level. Of the predictors in this model, PSM is the strongest (Beta = 0.39). Because assessors must have a certain level of education and certification in order to achieve their position, it is not surprising that assessors identify more with their profession than do trustees. That supervisors—a category of general administrator—also identify more highly with a profession is less easily understood, when clerks and highway commissioners do not. Identification with a profession almost certainly implies higher levels of education, as virtually all professions require substantial education beyond high school or a bachelor's degree.

Professional membership is high in the sample: of 507 respondents, 334 (almost 66 percent) claimed membership in a township-related professional organization, while 268 (almost 53 percent) claim membership in professional organizations unrelated to townships. Of these, 228 (about 45 percent) claimed membership in both kinds of professional organization, and the total claiming any membership is 374, or almost 74 percent of respondents. Membership, of course, does not necessarily mean that the individual identifies themselves with the organization or the profession itself, but the large number of professional-group members may in part account for the strength of the association for this criterion variable.

Number of different elected, appointed and hired government positions held during career. Only two predictors, both township positions (supervisor and clerk) are significant in this model, meaning that individuals in those groups are more likely than trustees to have held more government posts. The model explains only 4 percent of the variance on this response variable.

Total years in government positions, including elected, appointed and hired positions. Seven predictors explain just 14 percent of the variance for this criterion variable. All four of the position indicator variables are significant and positively related, suggesting that the elected administrators serve for longer periods of time compared to the township trustees. Age is positively related to length of government service, which would seem intuitive: in order to be able to serve for a longer period of time, one must be correspondingly older. Males are likely to have served longer than females. This may be an artifact of the nature of elected township officials; in the current study, roughly three-quarters of respondents were male, a pattern that has some historical documentation (Johnson, 2004). Finally, education is negatively related to length of government service, meaning that less-educated individuals in general have served longer than those with more education.

Discussion

The purpose of this study was to determine whether the three measures of motivation (PSM, material self-interest, and task motivation) have a clearly discernable effect on a selection of behavioral outcomes. That is, because all of the respondents to this study are elected township officials, we may assume that have motivation in the direction of government service. In order to test the association of these measures of motivation against direction, the study would need to include a comparable group of individuals working solely in the private for-profit sector. This study sought to measure the effects of motivation on several behavioral outcomes that would suggest the intensity of effort and the persistence of that effort.

Predictions for the relationship between the motivation predictor variables and the criterion variables were presented above. While the results are generally in accord with the predictions in terms of the directions of the relationship (as indicated by the beta scores), motivation appears to be of limited importance in predicting behavioral outcomes. At a significance level of 0.05, only two of the three are related to any of the outcomes (PSM and task motivation), and only in relation to two of the six models (volunteer hours and professional identification for PSM, and professional identification for task motivation). If the significance criterion is relaxed to 0.10, then task motivation becomes important in two other models: township work hours and other job work hours.

It may be argued that having a sense of identification with a profession is not really an outcome of motivation, but instead be an antecedent (see Paine 2009b); that is, an individual may seek out a government position because of their professional identification, rather than develop a professional identification once in the post. However, since almost all township officials in

Illinois are members of a statewide association of township officials (Township Officials of Illinois, 2007), it is possible that such affiliation once in office may contribute to the higher level of professional identification.

These results suggest that while motivation may be important in determining the direction of an individual's behavior (that is, toward government service), the intensity and persistence of that behavior is likely modified by other factors, such as the nature of the job itself (as each of the four positions are related to the behavioral variables in different degrees, and in some cases, different directions), or to individual factors, such as those related to age, gender, education and income. Future research might include looking at other such individual-level factors, such as personality, as well as job-related factors, such as job design, organizational mission, and job satisfaction, as possible influences on work behavior once the individual's direction has been set.

Conclusion

This study has sought to extend the knowledge of PSM and other possible motivations for public service by comparing the relative influence three measures of motivation have in predicting a set of behavioral outcomes. The results suggest that measures of motivation may not be particularly useful in predicting the intensity or duration of behavior, while factors related to the position and individual do a better job of predicting behavior.

References

- Elliott, A.C., & Woodward, W.A. (2006). *Statistical analysis quick reference guidebook: with SPSS examples*. Thousand Oaks, CA: Sage.
- Johnson, R.A. (2004). *Township conditions and status*. Macomb, IL: Illinois Institute for Rural Affairs.
- Lee, S.H., and Olshfski, D. (2002). Employee commitment and firefighters: it's my job. *Public Administration Review*, 62, 108-114.
- Mertler, C.A., and Vannatta, R.A. (2003). *Advanced and multivariate statistical methods: practical application and interpretation*. (2nd ed.). Los Angeles, CA: Pyrczak Publishing.
- Osborne, J.W., and Overbay, A. (2004). The power of outliers (and why researchers should always check for them). *Practical Assessment, Research and Evaluation*, 9(6). Retrieved August 6, 2008, from <http://PAREonline.net/getvn.asp?v=9&n=6>.
- Osborne, J.W., and Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research and Evaluation*, 8(2). Retrieved August 6, 2008, from <http://PAREonline.net/getvn.asp?v=8&n=2>.
- Paine, J.R. (2009a). *Motivation to serve in local government: testing the measures*. Doctoral dissertation. Springfield, IL: University of Illinois at Springfield.
- Paine, J.R. (2009b). *Motivation to serve the public: testing measures and exploring the antecedents in local government*. Paper presented at the International Public Service Motivation Conference, Bloomington, IN, June 7-9, 2009.
- Perry, J.L. (1996). Measuring public service motivation: an assessment of construct reliability and validity. *Journal of Public Administration Research and Theory*, 6, 5-22.
- Perry, J.L. (1997). Antecedents of public service motivation. *Journal of Public Administration Research and Theory*, 7, 181-197.
- Perry, J.L. (2000). Bring society in: toward a theory of public service motivation. *Journal of Public Administration Research and Theory*, 10, 471-488.
- Perry, J.L., and Wise, L.R. (1990). The motivational bases of public service. *Public Administration Review*, 50, 367-373.
- Rainey, H.G., and Steinbauer, P. (1999). Galloping elephants: developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory*, 9, 1-32.
- Tabachnick, B.G., and Fidell, L.S. (2001). *Using multivariate statistics*. (4th ed.). Boston, MA: Allyn and Bacon.

Table 1. Descriptive statistics

		Twphours	Volhours	Jobhours	ProfessID	Othposts	Totyears	PSM	RevMSI	RoleCommit
N	Valid	480	481	483	471	485	478	425	486	495
	Missing	27	26	24	36	22	29	82	21	12
Mean		1.75	1.27	3.08	3.3053	1.81	3.24	3.6590	2.4595	4.2955
Std. Error of Mean		.057	.028	.083	.02561	.043	.068	.01851	.02695	.02422
Median		1.00	1.00	3.00	3.4000	2.00	3.00	3.6667	2.3333	4.2500
Mode		1	1	5	3.40	1	5	3.46	2.00	4.00
Std. Deviation		1.245	.610	1.821	.55578	.937	1.495	.38161	.59404	.53892
Variance		1.551	.372	3.315	.309	.878	2.237	.146	.353	.290
Skewness		1.533	2.771	-.097	-.035	1.056	-.156	.016	.017	-.487
Std. Error of Skewness		.111	.111	.111	.113	.111	.112	.118	.111	.110
Kurtosis		1.051	9.129	-1.829	.335	.229	-1.418	.310	.190	-.146
Std. Error of Kurtosis		.222	.222	.222	.225	.221	.223	.236	.221	.219
Range		4	4	4	3.60	3	4	2.58	3.33	2.50
Minimum		1	1	1	1.40	1	1	2.38	1.00	2.50
Maximum		5	5	5	5.00	4	5	4.96	4.33	5.00

Table 1. Continued

		Supers	Clerks	Assess	Hcomms	Age	Gender	Edu	Income	Milser
N	Valid	507	507	507	507	485	484	489	441	495
	Missing	0	0	0	0	22	23	18	66	12
Mean		.1282	.1361	.0947	.1085	4.46	.72	3.06	4.22	.24
Std. Error of Mean		.01486	.01524	.01301	.01383	.037	.020	.049	.077	.019
Median		.0000	.0000	.0000	.0000	4.00	1.00	3.00	4.00	.00
Mode		.00	.00	.00	.00	4	1	3	6	0
Std. Deviation		.33465	.34323	.29305	.31129	.816	.450	1.073	1.607	.428
Variance		.112	.118	.086	.097	.666	.202	1.152	2.582	.183
Skewness		2.231	2.129	2.777	2.525	.020	-.978	.846	-.418	1.219
Std. Error of Skewness		.108	.108	.108	.108	.111	.111	.110	.116	.110
Kurtosis		2.988	2.542	5.735	4.395	-.167	-1.049	.856	-1.003	-.517
Std. Error of Kurtosis		.217	.217	.217	.217	.221	.222	.220	.232	.219
Range		1.00	1.00	1.00	1.00	4	1	5	5	1
Minimum		.00	.00	.00	.00	2	0	1	1	0
Maximum		1.00	1.00	1.00	1.00	6	1	6	6	1

Table 2. Regression results for various behavioral outcomes regressed on three measures of motivation and control predictors

	Township hours		Volunteer hours		Job Hours		Professional ID		No. of Govt. Posts		Years in Govt.	
	Beta (Std. Error)	Sig	Beta (Std. Error)	Sig	Beta (Std. Error)	Sig	Beta (Std. Error)	Sig	Beta (Std. Error)	Sig	Beta (Std. Error)	Sig
Public service motivation	.05 (.18)	.41	.16 (.13)	.05	-.05 (.33)	.52	.39 (.11)	.00	.10 (.19)	.22	.12 (.30)	.13
Material self-interest	-.08 (.11)	.15	-.03 (.08)	.67	.07 (.20)	.33	.04 (.06)	.59	.04 (.12)	.56	.07 (.18)	.33
Task motivation	.07 (.10)	.10	.08 (.07)	.17	.10 (.17)	.07	.12 (.06)	.02	-.01 (.10)	.87	.03 (.15)	.57
Supervisor	.28 (.14)	.00	-.10 (.10)	.07	.02 (.26)	.68	.12 (.08)	.02	.16 (.15)	.00	.17 (.23)	.00
Clerk	-.00 (.15)	.98	-.02 (.11)	.74	.02 (.28)	.73	.04 (.09)	.46	.13 (.16)	.02	.16 (.25)	.00
Assessor	.43 (.15)	.00	-.08 (.11)	.13	-.16 (.27)	.00	.14 (.09)	.00	.08 (.16)	.17	.19 (.24)	.00
Highway Commissioner	.56 (.17)	.00	.03 (.12)	.66	-.11 (.31)	.02	.05 (.10)	.27	-.02 (.18)	.68	.14 (.27)	.01
Age	-.04 (.06)	.38	.00 (.05)	1.00	-.37 (.12)	.00	.01 (.04)	.91	.11 (.07)	.06	.27 (.10)	.00
Gender	-.06 (.12)	.14	-.08 (.08)	.18	.21 (.21)	.00	.02 (.07)	.69	.10 (.12)	.10	.15 (.19)	.01
Education	.06 (.05)	.18	.01 (.03)	.89	-.14 (.09)	.01	.18 (.03)	.00	-.01 (.05)	.91	-.12 (.08)	.03
Income	-.02 (.03)	.60	-.01 (.02)	.86	.18 (.06)	.00	.02 (.02)	.72	.07 (.03)	.23	.10 (.05)	.08
Military Service	.10 (.12)	.02	-.01 (.09)	.87	-.05 (.22)	.33	-.04 (.07)	.39	.08 (.13)	.15	-.05 (.20)	.36
N		357		358		358		363		359		357
Adjusted R2		.49		.04		.25		.25		.04		.14
F		29.98		2.34		10.92		11.20		2.37		5.64
Significance		.00		.01		.00		.000		.006		.000