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ARTICLES

Measuring Public Service Motivation: An Assessment of Construct Reliability and Validity

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ABSTRACT

The public administration literature makes many assertions that the motivations of individuals who pursue public service careers differ in important ways from other members of American society. This research advances the study of these assertions by creating a scale to measure public service motivation. Public service motivation (PSM) represents an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions. The construct is associated conceptually with six dimensions: attraction to public policy making, commitment to the public interest, civic duty, social justice, self-sacrifice, and compassion. Likert-type items are developed for each dimension to create the PSM scale. The measurement theory for the scale is tested using confirmatory factor analysis (CFA). The present study reports initial reliability and validity results.

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Many practitioners and scholars of public administration have long claimed that public service is a special calling. Proponents of this perspective suggest that those who answer the call may be different than their fellow citizens with respect to a range of attributes. The school of thought is epitomized by Elmer Staats's (1988) reverential description: "'Public service' is a concept, an attitude, a sense of duty—yes, even a sense of public morality."

Although the theory is not well developed, several scholars contend that the public service ethic, which is defined more formally in the present study as public service motivation (PSM), has significant behavioral implications. The level and type of an individual's public service motivation and the motivational com-

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position of a public organization's workforce have been posited to influence individual job choice, job performance, and organizational effectiveness (Perry and Wise 1990; Rainey 1982; Romzek 1990).

Despite the strength and frequency of these themes in the public administration literature, empirical research about public service motivation is almost nonexistent (Rainey 1982). The purpose of this study is to begin closing the gap between assertion and empirical research. It reports initial steps to develop a public service motivation scale that could be used for systematic research. First, I discuss the theoretical dimensions of public service motivation identified in the public administration literature. I then review the procedures that were used for translating the theoretical dimensions into a scale. The scale's reliability and validity were assessed with survey data from 376 respondents using confirmatory factor analysis. I conclude the study with a discussion of the validity of the theoretical construct and future steps to refine the scale.

THE PUBLIC SERVICE MOTIVATION CONSTRUCT

Public service motivation (PSM) is defined as an individual's predisposition to respond to motives grounded primarily or uniquely in public institutions (Perry and Wise 1990). The term *motives* is used here to mean psychological deficiencies or needs that an individual feels some compulsion to eliminate. Following Knoke and Wright-Isak (1982), this discussion recognizes that these motives may fall into three analytically distinct categories: rational, norm-based, and affective. Rational motives involve actions grounded in individual utility maximization. Norm-based motives refer to actions generated by efforts to conform to norms. Affective motives refer to those triggers of behavior that are grounded in emotional responses to various social contexts.

A rational motive that some argue draws individuals to public service is the opportunity to participate in the formulation of public policy (Kelman 1987). *Attraction to public policy making* can be exciting and dramatic and can reinforce one's image of self-importance. Given government's role in American society, this motive is unique to public institutions.

One of the most commonly identified normative foundations for public service is *commitment to the public interest*. Downs (1967) argues that the desire to serve the public interest is essentially altruistic even when the public interest is conceived as an individual's opinion. Others may disagree with Downs's inter-

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pretation of public interest but still agree that the norm is integral to most conceptions of public service motivation.

A desire to serve the public interest is only one value integral to the construct of public service motivation. Bruce Buchanan (1975), citing Frederick Mosher's (1968) classic *Democracy and the Public Service*, argues that the public service ethic involves a unique sense of *civic duty*. Buchanan speculates that this norm derives from the state's sovereign power and the role of public employees as nonelected trustees of portions of this power.

A related normative anchor for public administrators flows from the concept of *social justice*. Social justice involves activities intended to enhance the well-being of minorities who lack political and economic resources. Frederickson (1971) argues that the obligations of public administrators are threefold: to provide services efficiently and economically while enhancing social equity. He suggests that the inclusion of social equity among the values that public administrators serve helps to define the political nature of public administration roles.

Frederickson and Hart (1985) suggest that the central motive for civil servants should be the "patriotism of benevolence," what is termed here *compassion*. They define patriotism of benevolence as "an extensive love of all people within our political boundaries and the imperative that they must be protected in all of the basic rights granted to them by the enabling documents." Frederickson and Hart go on to suggest that the concept combines love of regime values and love of others. Although they argue that the patriotism of benevolence represents a particular moral position, it also may be understood to describe an emotional state. In fact, the type of moral "heroism" Frederickson and Hart envision may be attainable only through an emotional response to humankind.

A sixth motive frequently associated with public service is *self-sacrifice*, the willingness to substitute service to others for tangible personal rewards. President Kennedy's call to "Ask not what your country can do for you; ask what you can do for your country" is a classic example of an appeal to the self-sacrifice motive. Kennedy's civil service director, John Macy, was more concrete. In a book written after his service (Macy 1971), he wrote of the willingness of public servants to forego financial rewards for the intangible rewards they received from serving the public.

METHODS

Measuring Public Service Motivation

The central purpose of the present study is to translate the theory about public service motivation into a measurement scale to facilitate research. Several design considerations were important in developing the scale. Construct validity, that is the correspondence between the conceptual and operational definitions of public service motivation (Schwab 1980), was paramount. Another priority was unidimensionality of the component constructs that made up the scale (Anderson and Gerbing 1988). A final consideration was parsimony. The more concise the measurement instrument, the more easily and frequently it could be used.

Given the importance of construct validity, the scale was developed starting with the conceptual dimensions identified in the literature review. Likert-type items were written for each of the six dimensions. The wording of items initially was based on how various writers had described motivations associated with public service. Both positively and negatively worded items were developed. A focus group of students in a master of public administration (MPA) program convened to discuss their ideas about public service. Approximately thirty-five items were created based on the literature and the input from the focus group.

These items were administered to MPA students. Responses were provided on a five-point Likert scale (ranging from agree to disagree). After they completed the survey, the respondents were asked for feedback about the items they thought best captured their motivations for pursuing public service careers. They were also asked to identify ambiguous or confusing items. Based upon about thirty responses to the initial survey items and extensive open-ended feedback, the items were revised.

A revised version of the scale was administered to small groups of MPA and MBA students. The groups were selected because of the presumed dissimilarity in their dispositions toward public service. Using the distributions of responses from these groups and comments from respondents, the revised items were evaluated. This process led to another revision.

The revised scale was again tested by comparing groups of MPA and MBA students. Inter-item and item-total correlations were computed for seventy-five responses to the revised survey. Cronbach's alpha, a measure of internal consistency, was computed for the six subscales. The third iteration led to further revisions, culminating in the forty items reported in exhibit 1.

Two primary challenges surfaced in constructing items for the scale. The first was to create items that captured abstract and

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subtle ideas. For example, the idea of interdependence, which emanated from the initial MPA focus group, was difficult to capture with only a Likert-type item.

A second challenge was to write items that did not elicit socially desirable responses. One reviewer commented about an early draft of the scale: "The responses you want are normatively transparent." One strategy for dealing with the problem of social desirability was to frame items as choices between alternatives. For example, an item that originally read "good government demands ethical commitments" was revised to "the ethical commitments of public officials are more important for assuring good government than is their competence." (The rewritten version of this item was later rejected because of its weak correlation with the overall scale.) Items were also personalized with "I" or "me" to assure that respondents did not answer in the abstract. In some cases, intensive adverbs (e.g., rarely, definitely) were used to elicit a range of responses.

In designing the survey, the author took steps to reduce any social desirability effects. On the front instruction page, the heading "Opinion Survey" was followed by instructions that indicated that the questionnaire sought opinions on a variety of issues. The public service motivation items were placed at the beginning of the survey to avoid priming effects from other validation questions (not reported here). Most surveys were administered during scheduled sessions so that respondents generally answered questions in the order presented in the survey and had no interaction with peers.

The final survey instrument did not contain explicit checks for social desirability. Although such checks would have been desirable, common tests for social desirability such as the Crowne-Marlowe scale (1964) were judged either unreliable or too long. Thus, rather than add items of questionable utility to a long survey, analysis of social desirability was deferred until a future study.

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Exhibit 1

Public Service Motivation Items by Subscale

Attraction to Policy Making (5 items)

- PSM 11 Politics is a dirty word. (Reversed)
PSM 15 I respect public officials who can turn a good idea into law.
PSM 22 Ethical behavior of public officials is as important as competence.
PSM 27 The give and take of public policy making doesn't appeal to me. (Reversed)
PSM 31 I don't care much for politicians. (Reversed)

Commitment to the Public Interest (7 items)

- PSM 7 People may talk about the public interest, but they are really concerned only about their self-interest. (Reversed)
PSM 16 It is hard for me to get intensely interested in what is going on in my community. (Reversed)
PSM 23 I unselfishly contribute to my community.
PSM 30 Meaningful public service is very important to me.
PSM 34 I would prefer seeing public officials do what is best for the whole community even if it harmed my interests.
PSM 37 An official's obligation to the public should always come before loyalty to superiors.
PSM 39 I consider public service my civic duty.

Social Justice (5 items)

- PSM 18 I believe that there are many public causes worth championing.
PSM 20 I do not believe that government can do much to make society fairer. (Reversed)
PSM 32 If any group does not share in the prosperity of our society, then we are all worse off.
PSM 33 I am willing to use every ounce of my energy to make the world a more just place.
PSM 38 I am not afraid to go to bat for the rights of others even if it means I will be ridiculed.

Civic Duty (7 items)

- PSM 14 When public officials take an oath of office, I believe they accept obligations not expected of other citizens.
PSM 21 I am willing to go great lengths to fulfill my obligations to my country.
PSM 25 Public service is one of the highest forms of citizenship.
PSM 28 I believe everyone has a moral commitment to civic affairs no matter how busy they are.
PSM 29 I have an obligation to look after those less well off.
PSM 35 To me, the phrase "duty, honor, and country" stirs deeply felt emotions.
PSM 36 It is my responsibility to help solve problems arising from interdependencies among people.

Compassion (8 items)

- PSM 2 I am rarely moved by the plight of the underprivileged. (Reversed)
PSM 3 Most social programs are too vital to do without.
PSM 4 It is difficult for me to contain my feelings when I see people in distress.
PSM 8 To me, patriotism includes seeing to the welfare of others.
PSM 10 I seldom think about the welfare of people whom I don't know personally. (Reversed)
PSM 13 I am often reminded by daily events about how dependent we are on one another.
PSM 24 I have little compassion for people in need who are unwilling to take the first step to help themselves. (Reversed)
PSM 40 There are few public programs that I wholeheartedly support. (Reversed)

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Exhibit 1 (concluded)

Self-Sacrifice (8 items)

- PSM 1 Making a difference in society means more to me than personal achievements.
PSM 5 I believe in putting duty before self.
PSM 6 Doing well financially is definitely more important to me than doing good deeds. (Reversed)
PSM 9 Much of what I do is for a cause bigger than myself.
PSM 12 Serving citizens would give me a good feeling even if no one paid me for it.
PSM 17 I feel people should give back to society more than they get from it.
PSM 19 I am one of those rare people who would risk personal loss to help someone else.
PSM 26 I am prepared to make enormous sacrifices for the good of society.
-

Sample

Responses were sought from a sample comparable to the population on whom the instrument would be used. Thus, respondents were selected through purposive rather than random sampling. Respondents were drawn from a variety of primarily public sector backgrounds: in-service MPA students; public affairs undergraduates; business executives; department heads in a municipal government; social work graduate students; sheriffs' deputies; university employees; social service and natural resources department employees from a state government; county government employees; and management employees at a federal defense installation. There were 376 usable responses.

ANALYSIS AND RESULTS

Descriptive and reliability statistics were computed for individual items and the forty-item scale. The descriptive statistics are presented in exhibit 2. Based on inspection of these results, five items (PSM 7, 14, 15, 22, 37) were dropped from further analysis because they had low variances and were weakly correlated with the overall scale. The item-total correlations for these items ranged from .11 to .26, well below the average for other items. The deletion of five items left thirty-five items for the next stage of analysis.

Confirmatory Factor Analysis

The scale construction problem addressed in the present study is well suited to confirmatory factor analysis (Long 1983; Bollen 1989). Unlike exploratory factor analysis in which only

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Exhibit 2 Descriptive Statistics

	Mean	Standard Deviation	Item-Total Correlation
PSM1	3.4918	1.0771	.43
PSM2	4.1831	.9914	.42
PSM3	3.1967	1.2048	.32
PSM4	3.4645	1.0892	.33
PSM5	3.5656	1.0362	.32
PSM6	3.7896	1.0060	.38
PSM7	2.5720	1.1280	.11
PSM8	3.8907	.9871	.49
PSM9	3.6038	1.0798	.46
PSM10	3.7705	1.1162	.40
PSM11	3.1311	1.3197	.31
PSM12	3.9399	1.0023	.47
PSM13	4.1038	.9006	.45
PSM14	4.1515	1.0785	.23
PSM15	4.2121	.8938	.26
PSM16	3.7268	1.1062	.42
PSM17	3.8579	.9135	.48
PSM18	4.2760	.7819	.51
PSM19	3.4836	1.0329	.44
PSM20	3.5164	1.3006	.38
PSM21	3.4809	.9950	.34
PSM22	4.5833	.6646	.20
PSM23	3.5000	.9616	.46
PSM24	2.4754	1.2728	.38
PSM25	3.6995	1.0162	.37
PSM26	2.9426	1.0174	.55
PSM27	3.0601	1.1898	.40
PSM28	3.6011	1.0227	.50
PSM29	3.4344	1.1078	.60
PSM30	3.8115	.9986	.64
PSM31	2.7350	1.2200	.31
PSM32	3.5874	1.1380	.36
PSM33	3.0628	1.1510	.54
PSM34	3.8224	.9355	.45
PSM35	3.4153	1.1597	.26
PSM36	3.3087	1.0015	.57
PSM37	4.0189	1.0298	.16
PSM38	4.0109	.9005	.43
PSM39	3.4617	1.0243	.58
PSM40	3.1066	1.1969	.39

N=366

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the number of factors and observed variables are specified, confirmatory factor analysis (CFA) permits specification and testing of a more complete measurement model. Statistical tests are applied to assess whether the substantive model is confirmed.

The general expression for the confirmatory factor model is

$$X = \Lambda\xi + \delta$$

where X is a vector of observed variables; ξ is a vector of latent variables; Λ is a matrix of loadings that gives the magnitude of the effects of ξ on X ; δ is a vector of measurement errors.

Because initial measurement models often fail to provide acceptable fit (Anderson and Gerbing 1988), confirmatory factor analysis is typically used in two distinct ways. The first is strictly confirmatory (Joreskog 1993). The six-dimension, thirty-five-variable model would be tested to determine whether to accept or reject it.¹ Depending on the results from this application of confirmatory factor analysis, a second potential application is model generating (Joreskog 1993). If the initial model is rejected, then the model may be modified and tested again using the same data.

The initial CFA model contained the following specifications: (1) six dimensions, corresponding to the theoretical model of public service motivation, with each dimension or factor correlated with the other dimensions; (2) thirty-five observed variables, each loading on only one latent dimension or factor as indicated in exhibit 1; and (3) uncorrelated error terms. The model is identified according to Bollen's (1989) identification rules for CFA. The chi-square statistic for the model is 1558 with 544 degrees of freedom ($p = .00$), suggesting a poor model fit. As further indication of poor model fit, the goodness of fit index (GFI) is .785, and the adjusted goodness of fit index (AGI) is .751, both below the .90 benchmark typically used for acceptable fit.

Given the disconfirmation of the initial model, an effort was made to estimate an alternative model. The respecification process used two heuristics. First, variables whose modification index indicated association with multiple dimensions, which was contrary to the goal of having each observed variable load on a single latent factor, were eliminated one at a time to increase the unidimensionality of the factors. As a result of this procedure, the correlations among dimensions were altered. A second heuristic was to combine dimensions if the correlations between factors could not be reduced below .90, implying that the

¹The model is not depicted graphically because of its size and the difficulty of representing it. The covariance matrix upon which the analysis is based is available from the author upon request.

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dimensions lacked discriminant validity and therefore did not tap unique dimensions.

The application of these heuristics resulted in the elimination of eleven variables and two dimensions. PSM 29 and PSM 35, both associated with the civic duty dimension, were removed in the first two iterations because the modification indices showed they loaded on three other dimensions (i.e., public interest, social justice, and compassion).

After the removal of PSM 29 and PSM 35, the correlation between civic duty and public interest exceeded .93. At the next iteration, the measures of civic duty and public interest were combined because of the high correlation between the two dimensions. In the next iteration, PSM 36 was removed because the modification indices indicated it was related to social justice and compassion in addition to the modified public interest dimension.

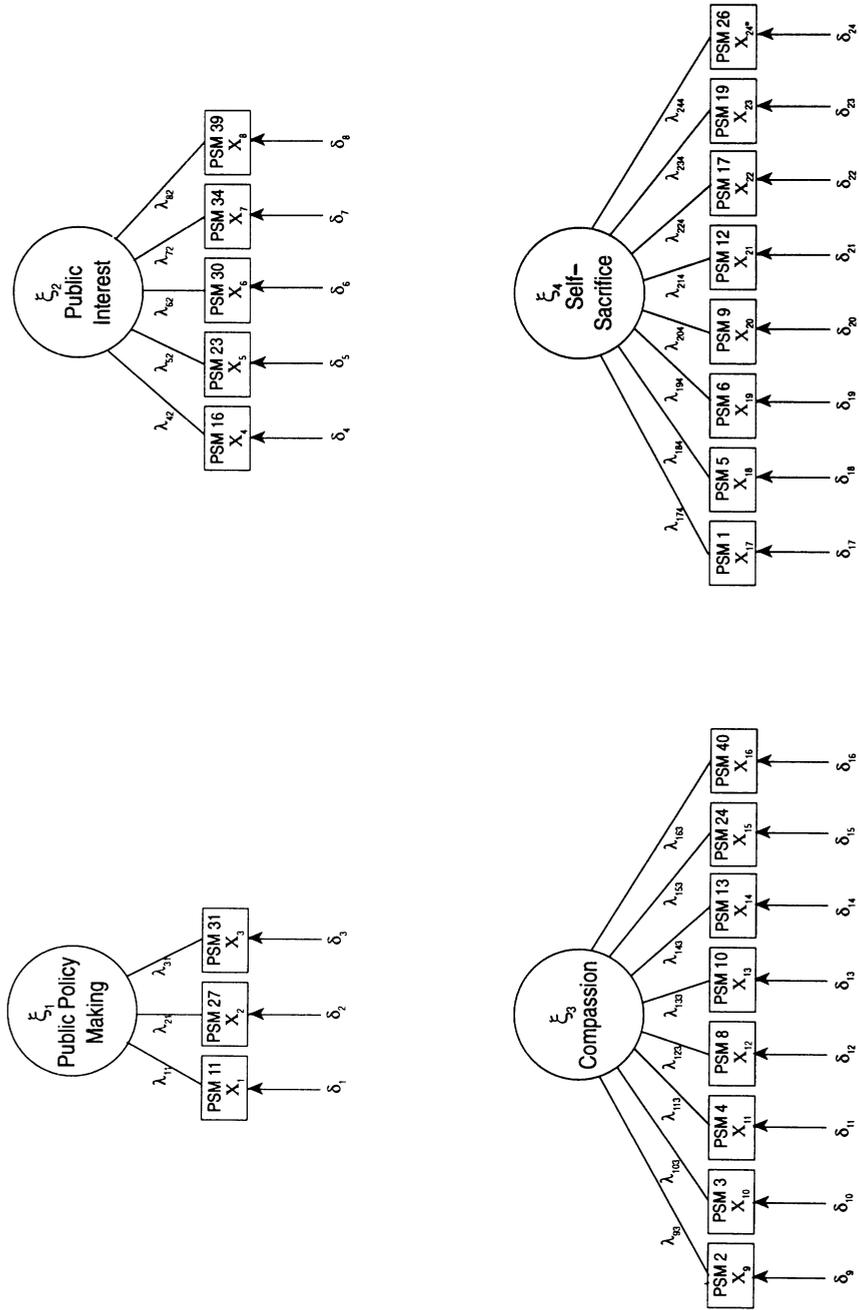
At this stage, social justice was correlated .96 with public interest, suggesting that the two dimensions were not unique and lacked discriminant validity. Thus they were combined to form a single dimension. After the overall number of dimensions had been reduced to four, further adjustments were made to eliminate redundant variables on the individual dimensions and reduce overlap across dimensions. These final adjustments to the model resulted in the four dimensions and observed variables as depicted in exhibit 3. The maximum likelihood estimates for the four-dimension model are presented in exhibit 4.

Exhibit 4 provides valuable information about validity and reliability of the PSM scale. The t-values of the parameter estimates reported in exhibit 4 are significant at the .05 level. The factor loadings (the λ parameter in exhibit 4) range from .39 to .78. These coefficients may be interpreted as indicators of the validity of the observed variables, that is, how well they measure the latent dimension or factor. Given the significance of the estimates and the size of the coefficients, the observed variables or indicators are valid measures of the dimensions. The R^2 in exhibit 4 is a measure of reliability, which indicates how consistently the observed variable measures the latent dimension. The R^2 s range from .15 to .61, suggesting that the reliabilities are variable.

The indicators for overall goodness of fit for the four-dimension model are mixed. The model is not significant according to the χ^2 statistic, where the goal is to achieve a $p > .05$. The χ^2 statistic, however, is sensitive to the number of cases and

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Exhibit 3
Final Confirmatory Factor Analysis Model for Public Service Motivation*



*For clarity, \emptyset s (i.e., correlations between the dimensions) are not shown on this diagram.

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Exhibit 4

Maximum Likelihood Estimates for Four-Dimensional Model

Coefficients	Standardized ML Estimates (Standard Errors)	t-Values	R ²
Attraction to Public Policy Making			
λ_{11}	0.78 (0.05)	14.35	0.61
λ_{21}	0.54 (0.05)	10.00	0.29
λ_{31}	0.77 (0.05)	14.16	0.59
Commitment to the Public Interest/Civic Duty			
λ_{42}	0.42 (0.05)	7.73	0.17
λ_{52}	0.55 (0.05)	10.69	0.31
λ_{62}	0.78 (0.05)	16.31	0.60
λ_{72}	0.43 (0.05)	8.01	0.18
λ_{82}	0.68 (0.05)	13.86	0.47
Compassion			
λ_{93}	0.61 (0.05)	11.38	0.37
λ_{103}	0.44 (0.06)	7.86	0.19
λ_{113}	0.39 (0.06)	6.85	0.15
λ_{123}	0.57 (0.05)	10.52	0.32
λ_{133}	0.54 (0.05)	9.89	0.29
λ_{143}	0.46 (0.06)	8.33	0.21
λ_{153}	0.57 (0.05)	10.60	0.32
λ_{163}	0.43 (0.06)	7.73	0.19
Self-Sacrifice			
λ_{174}	0.55 (0.05)	10.62	0.30
λ_{184}	0.41 (0.05)	7.69	0.17

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Exhibit 4 (continued)

Coefficients	Standardized ML Estimates (Standard Errors)	t-Values	R ²
λ_{194}	0.41 (0.05)	7.55	0.17
λ_{204}	0.54 (0.05)	10.35	0.29
λ_{214}	0.48 (0.05)	9.12	0.23
λ_{224}	0.54 (0.05)	10.32	0.29
λ_{234}	0.48 (0.05)	8.96	0.23
λ_{244}	0.68 (0.05)	13.82	0.47
Correlations of Dimensions			
ϕ_{11}	1.00 ^a (-)		
ϕ_{22}	1.00 ^a (-)		
ϕ_{33}	1.00 ^a (-)		
ϕ_{44}	1.00 ^a (-)		
ϕ_{12}	0.38 (0.06)	6.30	
ϕ_{13}	0.38 (0.06)	6.25	
ϕ_{14}	0.28 (0.06)	4.36	
ϕ_{23}	0.58 (0.05)	11.14	
ϕ_{24}	0.89 (0.03)	28.13	
ϕ_{34}	0.64 (0.05)	13.03	
Variations of Errors			
VAR (δ_1)	0.39 (0.06)	6.69	
VAR (δ_2)	0.71 (0.06)	12.02	
VAR (δ_3)	0.41 (0.06)	7.05	
VAR (δ_4)	0.83 (0.06)	13.12	

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Exhibit 4 (concluded)

Coefficients	Standardized ML Estimates (Standard Errors)	t-Values	R ²
VAR (δ_5)	0.69 (0.06)	12.48	
VAR (δ_6)	0.40 (0.04)	9.30	
VAR (δ_7)	0.82 (0.06)	13.08	
VAR (δ_8)	0.53 (0.05)	11.22	
VAR (δ_9)	0.63 (0.06)	11.38	
VAR (δ_{10})	0.81 (0.06)	12.75	
VAR (δ_{11})	0.85 (0.07)	13.00	
VAR (δ_{12})	0.68 (0.06)	11.80	
VAR (δ_{13})	0.71 (0.06)	12.07	
VAR (δ_{14})	0.79 (0.06)	12.62	
VAR (δ_{15})	0.68 (0.06)	11.77	
VAR (δ_{16})	0.81 (0.06)	12.78	
VAR (δ_{17})	0.70 (0.06)	12.50	
VAR (δ_{18})	0.83 (0.06)	13.13	
VAR (δ_{19})	0.83 (0.06)	13.15	
VAR (δ_{20})	0.71 (0.06)	12.57	
VAR (δ_{21})	0.77 (0.06)	12.87	
VAR (δ_{22})	0.71 (0.06)	12.58	
VAR (δ_{23})	0.77 (0.06)	12.90	
VAR (δ_{24})	0.53 (0.05)	11.25	
N = 376			
$\chi^2 = 576.82$	df = 246	p = 0.00	

^aConstrained parameter

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Exhibit 5 Model Fit Indices for Confirmatory Factor Analysis of 24-Item PSM Scale

Model ^a	χ^2	df	p-value	Goodness of Fit Index (GFI)	Adjusted Goodness of Fit Index (AGFI)
M ₀	2371.80	276			
M ₁	596.15	249	0.00	.88	.86
M ₂	576.82	246	0.00	.88	.86

^aM₀ = Complete null model (baseline model);
M₁ = Three-dimensional solution;
M₂ = Four-dimensional solution.

the substantive requirements for uncorrelated error terms and unidimensionality. Thus, the inability to achieve a nonsignificant χ^2 can be discounted. Several alternative measures indicate good fit. The four-dimension model is compared with a null model in exhibit 5. The null model, which assumes that all observed variables are independent, is a baseline with which other models can be compared. The four-dimension model is a significantly better fit than the null model, with a normed-fit index, Δ_1 (Bollen 1989, 271), of .84. Two alternative indicators of overall fit reported in exhibit 5, goodness of fit (GFI) and adjusted goodness of fit (AGFI), are .88 and .86 respectively, indicating good fit for the four-dimension model.

Because the public interest and self-sacrifice dimensions were correlated at .89, a three-dimensional model, combining these dimensions, was also estimated. Although the overall goodness of fit for the three- and four-dimension models is quite similar, they can be compared using chi-square. The chi-square test ($\chi = 19.23$, 3 degrees of freedom, $p < .005$) indicates that the four-dimension model is superior to the three-dimension model.

A traditional measure of scale reliability is coefficient alpha, which measures the internal consistency among items on a scale. Coefficient alpha for the twenty-four-item PSM scale is .90. This is at the upper end of the range for acceptable internal consistency. The coefficient alphas for the four subscales ranged from .69 to .74. Thus the alpha coefficients provide independent corroboration for the results obtained from use of the confirmatory factor analysis.

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DISCUSSION

This initial effort to develop a measure of public service motivation produced a multidimensional construct grounded in public administration theory. Attraction to public policy making, commitment to the public interest, compassion, and self-sacrifice were confirmed as dimensions of public service motivation. At the same time, the results indicate that public service motivation is less complex than it is portrayed in the literature. Using confirmatory factor analysis, the original six-dimension model was pared to four dimensions.

The model generation process indicated that respondents did not discriminate significantly among constructs of civic duty, social justice, and commitment to the public interest, the three dimensions that are associated with norm-based motives. This suggests that the norm collectively underlying these constructs is a global "public regardness" or "concern for the public weal." Although this norm has long been prominent in the public administration literature in a variety of forms (i.e., the public interest, civic duty, social justice), it is also a prominent intellectual focus in political science (Wilson 1993, 228; Putnam 1993), sociology (Etzioni 1988), and political economy (Hirschman 1982). A common theme among these intellectual traditions is that a form of public orientation is a precondition for public, cooperative action.

The validation of measurement constructs is an iterative process (Schwab 1980). The results suggest some areas for potential refinement of the public service motivation scale. One is the addition of positively worded items to the policy-making subscale. Two positively worded items originally included on the subscale were eliminated because they detracted from internal consistency. Because the current subscale is composed entirely of negatively worded items, it confounds whether the subscale taps the attraction to policy-making dimension or whether it also may tap cynicism or negative affect toward politics. Thus the addition of positively worded items would be desirable.

Another potential refinement of the scale, which raises both theoretical and empirical issues, involves its dimensionalities. As exhibit 5 indicates, there is relatively little difference between the three- and four-dimension models. I have chosen to retain self-sacrifice as an independent dimension on substantive grounds because it has had a historical connection to how we think about public service that is explicitly preserved by retaining the dimension. Although I have retained the self-sacrifice dimension in the final model, a three-factor solution coincides with Knoke and Wright-Isak's (1982) rational, norm-based, and affective dimensions of motivation. Because these dimensions are part of the

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theoretical underpinnings of the scale (Perry and Wise 1990), they are also plausible as an empirical result. The resolution of the precise dimensionalities of the scale must await results from future administration of the scale.

CONCLUSION

The motivational bases of public service are an important issue in public administration (Perry and Porter 1982; Perry and Wise 1990). This study advances a means to measure public service motivation (PSM). Based on the developmental process and statistical analysis, the PSM scale presented here has good overall face and construct validity, discriminant validity among four component dimensions, and high reliability.

The PSM scale can be a valuable tool for accumulating empirical evidence about important facets of public administration. For example, it is being used to assess attitudinal changes among participants in President Clinton's AmeriCorps program. Another use for the PSM scale is as a dependent variable in both cross-sectional and longitudinal studies of bureaucratic socialization. It could also be used to measure differences in motivational orientation among governmental, business, and nonprofit samples. Thus the PSM scale can be used to acquire valid and reliable data about many important questions in public administration.

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