

Connecting the Dots in Public Management: Political Environment, Organizational Goal Ambiguity, and the Public Manager's Role Ambiguity

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ABSTRACT

This article is a systematic effort to study a key theoretical question from the vantage point of public sector organizational behavior. Most political science models, with a primary interest in democratic control of bureaucracy, study the political influence on the bureaucracy from an agency theory perspective. Organization behavior literature, on the other hand, is focused largely on the study of individual-level phenomena in private organizations and does not incorporate political context as part of explanatory models. This article proposes a middle-range theory to “connect the dots,” beginning with disparate sources in the polity influencing organizational goal ambiguity, which in turn is expected to increase managerial role ambiguity. An empirical test, using data collected from a national survey of managers working in state human service agencies, supports this theoretical model. We find that certain types of political influence have an impact on organizational goal ambiguity, which in turn has a direct effect in increasing role ambiguity and also an indirect effect in increasing role ambiguity through organizational structure.

Despite well-argued briefs in favor of public organizations' distinctive institutional context (e.g., Perry and Rainey 1988; Wamsley and Zald 1973), much of the scholarship on organization behavior and theory subscribes to a generic perspective on management and organizations (Rainey 2003, 56–58). This is not due to a preponderance of evidence in favor of the generic tradition. Rather, there is a paucity of systematic efforts to study key

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theoretical questions from the vantage point of public sector organizational behavior. This article addresses one such question—does the political environment of organizations have an effect on organizations and individuals working in them? More specifically, this article examines the relationships among political environment, organizational goal ambiguity, and role ambiguity. These relationships are not only at the core of public management theory but also can inform public management practice.

Even as public management embraces the value of theory and theoretically driven research (Bozeman 1993; Frederickson 1999; Jones 2003; Rainey 1993a), critiques of the public management research enterprise highlight that it does not pay sufficient attention to evidence, connectedness, and relevance to the public manager's world (Boyne 2002; Dubnick 1999; Kelman et al. 2003; Newland 1994, 2000; Pandey and Scott 2002; Wright, Manigault, and Black 2004).¹ While some assessments of relevance and connectedness focus on high-level issues such as the disciplinary bona fides and affinities of public management (e.g., Dubnick 1999; Meier and Stewart 1987; Newland 1994, 2000), others offer more grounded critiques that suggest that public management scholarship can do more to reflect the realities of the public manager's work environment (e.g., Brewer 2005; Pandey and Welch 2005; Scott and Pandey 2005).²

Indeed, much of what we know about a manager's day-to-day world does not seek to understand its workings from the public manager's vantage point. For example, the substantial literature on political (or democratic) control of bureaucracy focuses on aligning bureaucratic behavior in accordance with the political principals' wishes (e.g., Moe 1987; Waterman, Rouse, and Wright 2004; Wood and Waterman 1994) and not on the stresses that the public manager faces in performing his or her role when faced with multiple and conflicting signals from a range of sources in the polity. While it may not be hard for some political scientists who study bureaucracy to agree with the suggestion that multiple and conflicting sources of political influence create substantial role ambiguity for the public manager, there have been few attempts to study this directly.³

The goal of this article, therefore, is to test a model that tries to “connect the dots,” beginning with disparate sources in the polity influencing organizational goal ambiguity,

1 A fuller discussion of these issues is beyond the scope of this article. Nonetheless, these issues are important enough to be noted in passing. For example, Boyne (2002, 118), based on a meta-analysis, concludes, “In sum, the available evidence does not provide clear support for the view that public and private management are fundamentally dissimilar in all important respects.” This assessment highlights the prevalence of widely accepted, yet untested, assertions in public management. However, this is not a contemporary theme. Indeed, sixty years ago, no less a social scientist than Herbert Simon noted that public administration scholarship did not pay sufficient attention to evidence (Simon 1946). On the issue of connectedness between the academic and practitioner worldviews, the American Society for Public Administration, the oldest public management scholarly association, has tried hard to bridge the practitioner-academician divide. Newland's (2000, 24) observation in this regard is apropos: “ASPA was founded on the ideal of connectedness among practitioners and academicians, across specializations, and between senior and younger professionals. The first part of that foundation now barely survives!”

2 By no means can one say that issues surrounding disciplinary bona fides and affinities of public management have been resolved. There are those who view public management as a subfield of political science, and others who see public management as a subfield of management sciences. These worldviews and claims are of more than mere symbolic import and indeed have a bearing on the nature and conduct of inquiry. The establishment of Public Management Research Association (PMRA) has been a positive development in this regard because it has been able to bring together scholars from a variety of disciplinary perspectives and provide a venue for thoughtful and sustained dialogue on key questions in public management.

3 Especially those who take a multiple principals perspective on principal-agent models are likely to view this position favorably (e.g., Moe 1987; Waterman, Rouse, and Wright 1998, 2004; Wood and Waterman 1994).

which in turn is expected to increase managerial role ambiguity. It is important to connect the dots for two reasons. First, much of the evidence on antecedents and consequences of organizational goal ambiguity in public organizations confounds conventional wisdom (Rainey 1993b, 2003; Rainey and Bozeman 2000), and therefore it is important to seek empirical validation for what appears to be a reasonable proposition linking political environment to managerial circumstances.⁴ Second, we hope to offer an alternative to the somewhat limiting viewpoints about democratic control and managerial behavior that emerge from different variants of principal-agent models (Jones 2003; Kelman et al. 2003; Moe 1987; Waterman and Meier 2004).⁵ Put another way, managerial behaviors that are characterized as “shirking” under principal-agent models and offered as evidence of loss of political control may in fact be manifestations of role ambiguity experienced by managers as a result of conflicting and varying influences from multiple political principals. In our attempt to connect the dots, we begin by elaborating and developing our theoretical model. We then use data from a national survey of managers from state human service agencies to empirically test our model. We conclude with a discussion of the findings and some thoughts about the implications of this research.

THEORY AND HYPOTHESES

Although political scientists who study bureaucracy have discussed a variety of ways in which politics has an impact on public organizations (e.g., Dahl and Lindblom 1953; Hecl 1977; Meier 1987; Wilson 1989), they have focused more on the political aspects of the phenomenon and less on its organizational manifestations. Furthermore, this research typically occurs at the agency level with few attempts to examine the effects of the political environment at the individual level (Brehm and Gates 1993, 1999, are notable exceptions). Public management scholars, with a keener interest in organizational phenomena, have produced some of the more insightful work examining the effects of political environment on organizational phenomena (Bozeman 1987; Perry and Rainey 1988; Rainey, Backoff, and Levine 1976; Wamsley and Zald 1973).

Public management scholarship has suggested that public organizations are fundamentally different from private organizations as a consequence of the function they serve in society (Baldwin and Farley 1991; Fottler 1981; Rainey 1989; Whorton and Worthley 1981). Public organizations address complex social functions, providing goods and services that cannot be easily packaged for exchange in economic markets (Baldwin 1987; Rainey 1983).⁶

4 To most observers, there are two sources of conventional wisdom on this issue—generic management theorists and public management theorists. We are more interested in public management theorists. In particular, a number of the studies highlight the fact that the comparative public-private differences perspective, rooted in political economy, suggests that public organizations have more ambiguous goals; yet survey questionnaire-based studies show that public managers (as compared with private managers) do not report facing higher levels of goal ambiguity (Boyne 2002; Rainey and Bozeman 2000).

5 We use the term “limiting viewpoints” to highlight the profound framing effects of principal-agent models on research in political science as well as public management. For more on how such framing effects can drive research and as a result our understanding of the world on another public management theme, see Pandey and Welch (2005).

6 As Wilson (1989, 129–31) notes, even in cases where the agency goals are clear, “contextual goals” develop to emphasize “desired states of affairs other than the one that the agency was brought into being to create.” Wilson’s definition of contextual goals is somewhat broad and includes a range of constraints, such as procurement and personnel procedures, privacy requirements, and environmental protection mandates that agencies must abide by in pursuing their primary mission.

As a result, the economic indicators of efficiency and effectiveness that help direct and clarify goals in the private sector, such as prices and profits, are often unavailable in the public sector. Even when public organizations are driven by supply and demand, these forces do not necessarily converge toward optimal efficiency in the public sector because the purchaser of public sector goods and services is often different from the beneficiary (Kettl 1995; Wagenheim and Reurink 1991). For public programs funded by individuals who do not receive the direct benefits, there are ineluctable attendant demands for equity, accountability, and responsiveness, in addition to economic efficiency.⁷ When an organization lacks traditional market information and must respond to the conflicting interests of multiple external stakeholders, goal ambiguity may be an inevitable outcome of (or mechanism to cope with) policy conflict and complexity.

Although empirical findings regarding the existence of sector differences in organizational goal ambiguity have been mixed (Baldwin 1987; Rainey 1983; Rainey, Pandey, and Bozeman 1995), one recent study has found that the lack of market incentives, competing demands, and policy complexity were important contributors to goal ambiguity in federal agencies (Chun and Rainey 2005). Our model does not directly test the effects or even the existence of market incentives, competing demands, and policy complexity. If competing demands and policy complexity produce organizational goal ambiguity, it is important to examine the role played by key political actors in this process. Indeed, it makes sense to assume that activities of key actors in the political environment produce intermediate conditions (such as competing demands and policy complexity) that determine the actual prevalence and magnitude of ambiguity in organizational goals.

Instead of focusing on potential intermediary mechanisms, our theoretical model directly links the influence of different political actors in the environment with organizational goal ambiguity. Although it may not be as comprehensive and ambitious as some previous attempts to explain organizational goal ambiguity (Rainey 1993b), we propose a complementary and testable middle-range theory (Merton 1968). This middle-range theory simply suggests that disparate influences in the political environment lead to increased organizational goal ambiguity; in turn, the increased organizational goal ambiguity can be expected to have a direct effect on employee role ambiguity and an indirect one through the bureaucratization of the organizational structure. We discuss different aspects of this model in greater detail below.

Political Environment and Organizational Goal Ambiguity

Public organizations have long been recognized as key actors in the political arena (Appleby 1945; Long 1949; Waldo 1948), and a number of scholars discuss the implications of the political environment of the bureaucracy in a more comprehensive manner (e.g., Bozeman 1987; Downs 1967; Meier 1987; Rainey 2003; Stillman 1996; Wilson 1989). Accounting for the effects of the political environment can be daunting because of the fragmentation of political authority that arises from the constitutional separation of powers among the three, coequal branches at all levels of government, the division of labor

⁷ Meier (1987, 112) notes that public organizations are judged according to “two standards: responsiveness to public needs and competence in the performance of tasks.” He argues that responsiveness and competence-based criteria are often at odds. These conflicting performance criteria and goals, combined with public expectations that bureaucracies meet both sets of goals, can be a source of goal ambiguity.

in the federal form of government, and the activities of various formal and informal political actors (Stillman 1996, 233). Our goal in this section is more modest as we simply seek to draw connections between political environment and organizational goal ambiguity.

Much of the connection between the political environment and organizational goal ambiguity is a result of the delegation of significant aspects of contentious political choices to the administrative arm of the government under the American system of politics (Long 1949). In fact, Meier (1987, 47), echoing Wolin (1960), suggests that the very nature of American politics leads to the “sublimation of political decisions to administrative ones.” He ascribes this partly to Americans’ propensity to view politics as lacking integrity and partly to the tremendous growth in the responsibilities of the federal government during the twentieth century. Kelman (1987) provides a revealing numerical “portrait” of this remarkable growth in the responsibilities of key political institutions at the federal level. The U.S. Congress, for example, spent 2,000 hours and its committees spent 7,500 hours in session during the 1980s as compared with 1,000 and 3,000 hours, respectively, during the 1950s (Kelman 1987, 53). The mismatch between the capacity of policymaking institutions and the sheer variety and complexity of public policy issues ensures that political institutions are not able to discharge policymaking obligations completely, leaving a substantial role for public agencies in the policymaking process.

Even when policymakers do not delegate their policymaking duties for resource reasons, they still may do so for political ones. Rainey (1993b, 122–26) offers a synthesis of a wide range of political science scholarship that underscores the political benefits, such as compromise and responsiveness to diverse preferences and interests, conferred by vague and abstract policies that public agencies must carry out (Lindblom 1959; Lowi 1979; Wildavsky 1979; Wilson 1989). The net result is that the agencies are provided limited statutory direction and, therefore, face considerable organizational goal ambiguity, that is, “vague, multiple, and mutually conflicting goals” (Rainey 1993b, 123).⁸

How can these external political actors influence organizational goal ambiguity? The generic and public management theorists have proposed similar answers. Rogers and Molnar (1976) argue that ambiguity is increased when an organization’s interactions with external actors focus on issues regarding the exchange of resources or joint decision making. Such interactions, by their very nature, bring the organization in conflict with external actors about issues of equity and direction (Rogers and Molnar 1976, 601), a conflict that is likely to increase organizational goal ambiguity. Certainly, public agencies must interact with political actors on matters of resource allocation. In addition, either due to intentional or unintentional delegation, public agencies are also involved in joint decision making.

8 Although much of the research cited above is based on federal agencies, state government agencies face similar circumstances. Given the prominent role played by the federal government in state policy matters, the institutional environment for policymaking at the state level is more complex due to the extra layer of federal political, judicial, and regulatory oversight. Moreover, key policymaking bodies, such as the legislature, are not typically as professionalized as those at the federal level and in many cases have shorter sessions, tipping the scales on policymaking responsibilities even more to the agency concerned (Daniels 1998). Compounding these factors is the emergence of “compensatory federalism,” especially in health and human services agencies—state governments increasingly are taking a larger role in health and social policymaking, partly because of the continued erosion of federal influence in this policy sphere (Pandey 2002; Thompson 1998). Although state governments are thought to be closer to the people than the federal government, this proximity does not necessarily result in clear public support for government programs. As Lynn (1990, 137–38) points out, generalized support for collective goals and espoused values does not necessarily translate into tangible fiscal support.

This is consistent with recent public management research on “venues of influence” conducted by Waterman and his colleagues (Waterman, Rouse, and Wright 1998, 2004), which finds that policy actors can be categorized according to the roles they play in determining an agency’s actions. In particular, agencies will respond more substantively to actors who are seen to have more direct hierarchical control over their budget, organizational structure, and decision making. Given that our data were collected at the state level (state human service agencies), the state legislature or governor are the direct sponsors⁹ of the agencies with the most control over the agency resources, structure, and decision making. Other policy actors are still important but in different ways. The courts and some federal agencies, for example, will also have some hierarchical control over agency action at the state level because their oversight can have an immediate influence on agency action. Although important, the sponsorship of such legal or regulatory actors is more diffuse because their influence is limited to the interpretation and enforcement of the direction provided by other political institutions.

In addition to having direct and diffuse sponsors, Waterman, Rouse, and Wright (2004) suggest that other actors serve as direct and diffuse clients. In contrast to actors with more direct authority over state agencies, clients have less immediate control over agency action because their influence depends on their ability to shape the actions of other policy actors. Direct clients, for example, are either the citizens who receive the agency’s goods and services or groups that represent the interests of these citizens. Nongovernmental actors have little direct influence on agency actions without influencing other actors such as the courts or legislature to act in their interest (for a historical perspective see Tichenor and Harris 2003). Consequently, agencies are more likely to respond symbolically rather than substantively to their demands. Alternatively, the president and Congress may serve as diffuse clients for state-level agencies that receive federal direction and resources. Although such federal political actors are hierarchical principals who need to be satisfied with the services for which they provide some support, they do not have immediate control over state agencies/employees and must influence agency behavior through the policy interpretation and enforcement of state policymaking institutions. Thus, similar to Rainey (1993b), we hypothesize:

- H₁ Increased political influence from groups of actors who share formal power over agency policy and resources will increase organizational goal ambiguity.

Organizational Goal Ambiguity, Bureaucratic Structure, and Role Ambiguity

Although organizational goal ambiguity and the ambiguity in the policymaking process are discussed extensively by public management scholars and political scientists, there have been few attempts to link them with the construct of role ambiguity. Since the introduction of the role ambiguity concept by Kahn et al. (1964), research on the causes and consequences of role ambiguity has burgeoned (Abramis 1994; Fisher and Gitelson 1983; Jackson and Schuler 1985; Tubre and Collins 2000). Much of this empirical research uses a scale for measuring role ambiguity that was devised by Rizzo, House, and Lirtzman (1970). Although Rizzo and colleagues (1970) built on the work of Kahn et al. (1964), their

9 Waterman, Rouse, and Wright (1998, 2004) used the terminology direct/diffuse and sponsor/client to categorize four sets of actors along two dimensions.

conceptualization of role ambiguity was somewhat different. Pearce (1981) points out that while Kahn et al. defined role ambiguity to mean the unpredictability of behavioral outcomes, Rizzo, House, and Lirtzman (1970) define it in terms of a lack of clarity about what kind of behaviors are appropriate and functional. Clarifying this distinction, Pearce suggests that while the former conceptualization is about “unpredictability,” the latter is about “information deficiency” (Pearce 1981, 666).

The cumulative research on role ambiguity demonstrates its importance as a key antecedent to both dispositional and behavioral outcomes. Role ambiguity has been shown to be an important determinant of a number of dispositional variables such as job satisfaction, organizational commitment, and job involvement. While these relationships alone would make role ambiguity an important construct for our purposes, the evidence for a substantial link between role ambiguity and individual performance makes it even more compelling. Although early meta-analyses (e.g., Abramis 1994; Jackson and Schuler 1985) reported a relatively weak relationship between role ambiguity and performance, more recent studies not only report a robust association between role ambiguity and performance but also find that this relationship holds true for both self-rated and supervisory-rated performance (Tubre and Collins 2000).

There is, however, very little research that tries to establish a direct link between organizational goal ambiguity and role ambiguity. In a study of the local Department of Social Services in New York, Elera (1989) found that policies and procedures established by the state government caused considerable role ambiguity for middle managers. Managers in this study attributed this ambiguity to the vagueness, irrelevance, and continual change in state policies. Wright (2001, 2004) proposes an elaborate conceptual model that posits a direct relationship between organizational goal ambiguity and role ambiguity. Using the goal-setting framework advocated by Locke and Latham (1990), Wright argues that clear organizational goals focus attention and reduce the necessity to search for alternative solutions. Conversely, vague, multiple, and conflicting goals distract attention and do not provide clear guidelines on searching for alternative solutions. The net result of organizational goal ambiguity is to increase information deficiency about job processes and salient outcomes.¹⁰ Thus, we hypothesize:

- H₂ Increased organizational goal ambiguity is associated with increased role ambiguity for the public manager.

We also expect organizational goal ambiguity to have an indirect impact on role ambiguity through its effect on organizational structure. When goals are clear, they provide useful guides for organizationally valued behaviors. In the absence of clear goals, however, organizations need to put in control mechanisms to indicate the organizational value of different kinds of behaviors. These control mechanisms are typically structural in nature (Chun and Rainey 2005; Rainey 1993b; Wilson 1989). Chun and Rainey (2004) identify centralization and red tape as two consequences of organizational goal ambiguity. In addition to centralization and red tape, we add a third dimension of bureaucratic structure, routinization, which represents another organizational response to goal ambiguity. Taken together, these three portray the classic characteristics of bureaucratic organizational structure.

¹⁰ See Pandey and Rainey (2005) for an alternate perspective on this relationship.

Ironically, the measures that may be intended to increase control in the presence of organizational goal ambiguity may do so at the cost of role clarity. Kahn et al. (1964) suggested that the structural characteristics of the organization contributed to role ambiguity, and empirical research provides support for this assertion. Organizational properties such as the centralization of decision-making authority (House and Rizzo 1972; Morris, Steers, and Koch 1979; Nicholson and Goh 1983) and formalization (Ramaswami, Agarwal, and Bhargava 1993) have been found to increase role ambiguity. The explanation for why centralization and other aspects of bureaucratization increase role ambiguity may be rather straightforward. While control is a critical factor in the relationship between principals and agents (Moe 1984), its value is predicated on the assumption that the principals know (or can agree on) what they want the agents to do (Behn 1995). In the presence of clear goals against which performance can be assessed, a bureaucratic structure can provide the means to direct employee performance toward goal attainment. When such benchmarks are not available, however, one is likely to see undue deference to standardized procedures, rules, and hierarchy as ends in themselves, a classic case of goal displacement (Merton 1940). In other words, when such structural mechanisms are used to compensate for organizational goal ambiguity, they cannot refine performance expectations but must instead redefine them in terms of process or accountability rather than outcomes and, by doing so, create yet another set of goals.¹¹ Although at one level, public employees may perceive their day-to-day tasks as clearly defined in terms of conformity to specified policies and procedures (Meyer 1979; Rainey 1983), at another level employees may remain uncertain as to their larger role in the organization because such policies or procedures seem to conflict with each other or with desired policy outcomes. Furthermore, if employees are asked to perform complex tasks, such tasks are not easily codified or routinized without numerous exceptions (Ramaswami, Agarwal, and Bhargava 1993). Consequently, efforts to develop clear performance standards through instituting bureaucratic structure may only increase role ambiguity by adding to the complexity and confusion that employees experience at work (Lynn 1981; Warwick 1975). Therefore, we hypothesize:

- H₃ Increased organizational goal ambiguity, through its effect on enhancing the bureaucratic structure in the organization, leads to increased role ambiguity.

METHODS, MEASUREMENT, AND FINDINGS

Sample Selection and Survey Administration

The data for this study were collected in Phase II of the National Administrative Studies Project (NASP-II), which focused on state-level primary human service agencies. Primary human service agencies were identified according to the definition used by the American Public Human Services Association (APHSA) and include agencies that house programs related to Medicaid, Temporary Assistance to Needy Families (TANF), and child welfare. In addition to collecting state and agency information from secondary data sources, original data were collected from a survey of senior managerial employees in these organizations,

¹¹ In Wilson's (1989) terminology, "contextual goals" may get emphasized at the expense of the primary agency goal(s). In fact, such goals may have conflicting motivations, attempting to both ensure procedural fairness and favor certain stakeholders over others.

including the top program administrator, as well as managers of information system applications, evaluation and research, and public information and communication. The sampling frame was developed from the most widely used and authoritative directory of human service agency managers: the APHSA directory (American Public Human Services Association 2001). Application of study criteria resulted in a sampling frame made of 570 managers, representing all fifty states and Washington, DC. Given the small size of the sampling frame, a decision was made to administer the survey to the entire sampling frame (i.e., conduct a census).

The data collection phase of the study began in fall of 2002 and followed Dillman's (2000) comprehensive tailored design method approach to maximizing the response rate. Based on information accumulated during this period, the size of the sampling frame was reduced from 570 to 518. Although the APHSA directory is the best available source of information on the sampling frame, the information in the directory at publication time is a year old. As a result, managers who had left the organization before the survey administration efforts were deleted from the sampling frame. By the time survey administration concluded in winter of 2003, a total of 274 responses were received. Thus, the response rate for the study was approximately 53 percent. Further details on data collection procedures are available in Pandey (2003).

Measures

Each of the study variables was measured using responses from multiple survey items taken, whenever possible, from previously validated measures. These measures are described below, and a full list of the relevant questionnaire items and coding scales is provided in the appendix. Although our analysis relies on self-reports from individuals to measure organizational properties, previous studies have suggested that such data can provide valid indicators of organizational properties (Lincoln and Zeitz 1980).

To measure the political influence, respondents were asked to rate the level of influence that various institutional actors had on their agency. A factor analysis was then used to group actors by their patterns of influence into four groups: state political hierarchy, federal political hierarchy, legal/regulatory actors, and nongovernmental actors. The resulting factor pattern confirmed the categorization of "venues of influence" found in a previous study of political influences on state agencies that operate in areas with a strong federal policy presence (Waterman, Rouse, and Wright 1998, 2004).

Bureaucratic structure was measured as a higher-order construct reflecting three dimensions: routinization, centralization, and red tape. To measure these underlying dimensions, three items were used from previously developed scales of routinization and hierarchy of authority scale (Aiken and Hage 1968; Hall 1963), as well as a single-item global measure of red tape (Bozeman 2000). Bureaucratic structure was then created from a factor analysis of these three scales as part of the underlying measurement model in LISREL.

The existence of ambiguity experienced by employees was measured at the organizational level using a three-item scale devised by Rainey (1983), and role ambiguity was measured using three items from Rizzo, House, and Lirtzman's role ambiguity scale (1970). These three items were chosen, from a larger set of items, based on strong factor loadings reported by Boles and Babin (1994), and the resulting measure exhibits high internal consistency (Cronbach's $\alpha = 0.81$).

Psychometric Properties of the Measures

Table 1 provides the reliability estimates for the study measures included in the final analysis, as well as the zero-order correlations between them. Reliability estimates (Cronbach's coefficient alpha) for the multiple-item measures ranged from 0.60 to 0.81. Although twenty-one of the thirty-six bivariate correlations were statistically significant at $p < .05$, the strength and pattern of the measures suggested that they were relatively distinct. The bivariate correlations ranged from 0.01 to 0.48 with a mean correlation among the measures of 0.17. Mono-method bias, if present, was not very strong. On average, the proportion of shared variance between any two measures was low ($r^2 = 0.03$), and no measure shared greater than 23 percent variance with any other measure.¹²

Univariate Analysis

Table 2 shows the univariate statistics for each measure. The potential range of values for each scale varied depending on the number of items or questions used to create each measure. Although there is considerable variation in how individual respondents view their jobs, in general the data suggest that the public sector work environment is characterized by moderate rather than extreme conditions. While respondents reported relatively low levels of role ambiguity, organizational goal ambiguity, routinization, and centralization (the average score on each measure was below the scale midpoint), they also noted higher levels of red tape (the average score was above the scale midpoint). All four types of political actors were seen to exercise at least a moderate amount of influence, but, as expected, the state political hierarchy was seen as the most influential and the nongovernmental actors as the least influential.

Multivariate Analysis

The hypothesized relationships were tested in a covariance structure analysis using LISREL version 8.30. Six of the study variables were modeled as single indicators incorporating measurement error (Hayduk 1987). For these variables, the composite scores of the multiple-item measures were used as single indicators of their respective latent variable. This recognizes that the observed value of each measure was expected to have a relationship with the true score of the corresponding theoretical construct. To adjust for measurement error, the error variance for each measure was set by constraining the values associated with the measure in the theta delta or theta epsilon matrices equal to the variance of the measure multiplied by one minus the reliability (Hayduk 1987; Jöreskog and Sörbom 1992). This fixed the path from the latent variable to the measured indicator as equal to the square root of the measure's reliability.¹³ One variable, bureaucratic structure, was modeled using multiple indicators and represents the shared variance of centralization, red tape, and routinization.

¹² The pattern of our findings presents additional evidence against common source bias. For example, two of the sources of political influences have no effect, one has a positive effect, and another has a negative effect on goal ambiguity. Such a pattern of findings is inconsistent with effects of common source bias large enough to be of material relevance (Spector, forthcoming). Also see Moynihan and Pandey (2005, 429) for comment on the reflexive invocation of common source bias.

¹³ This path can be interpreted as the factor loading of the observed indicator on the conceptual variable it was intended to measure.

Table 1
Bivariate Correlations and Reliabilities

	1	2	3	4	5	6	7	8	9
1 Role Ambiguity	(0.81)								
2 Organizational Goal Ambiguity	0.48*	(0.81)							
3 Centralization	0.40*	0.37*	(0.78)						
4 Red Tape	0.22*	0.22*	0.40*	(na)					
5 Routinization	0.14*	0.14*	0.35*	0.25*	(0.62)				
6 Nongovernment Influences	0.01	0.02	0.02	-0.06	-0.12*	(0.72)			
7 Federal Political Hierarchy	-0.19*	-0.15*	-0.08	-0.02	-0.13*	0.15*	(0.78)		
8 State Political Hierarchy	0.10	0.12*	0.10	0.02	-0.17*	0.32*	0.09	(0.71)	
9 Legal/Regulatory Influences	-0.09	0.02	0.02	0.10	-0.07	0.23*	0.38*	0.19*	(0.60)

* $p < .05$.

Cronbach's alpha in parentheses.

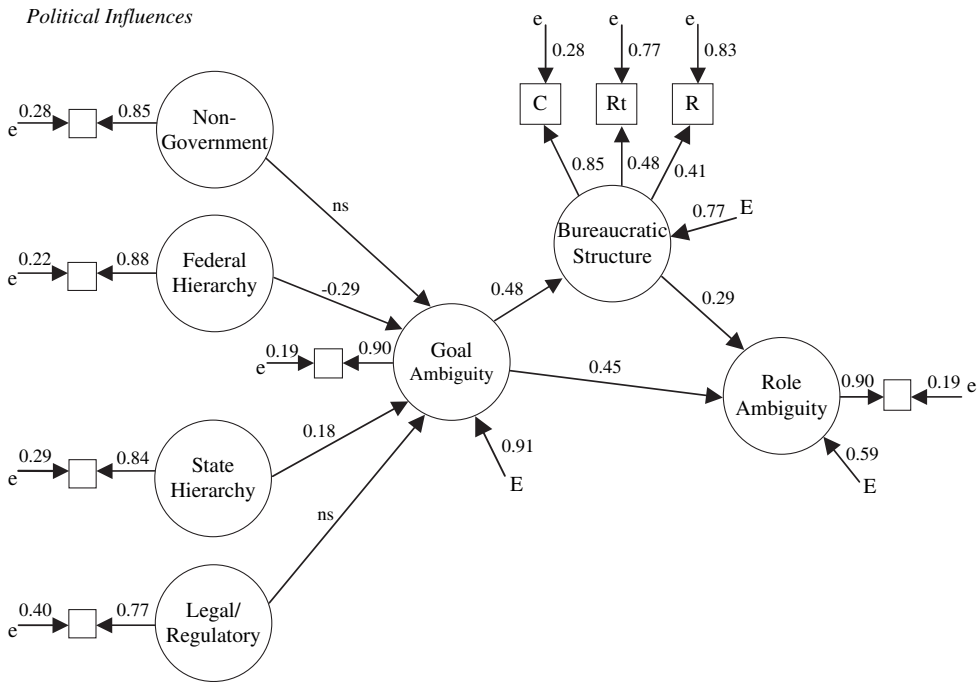
The overall model fit of the hypothesized structural model was tested using six fit indices recommended by Jaccard and Wan (1996). All six of these indices were consistent with a good model fit, suggesting that the theoretical model accurately captured the pattern of relationships found in the data. The maximum likelihood chi-square ($\chi^2(20) = 31.57, p > .05$) and the p -value test for close fit (0.53) was statistically significant, consistent with good model fit. The root mean square error of approximation (RMSEA) was 0.047, and the standardized root mean square residual (standardized RMR) was 0.049; both indices were lower than the thresholds generally considered necessary for a satisfactory model fit (0.08 and 0.05, respectively). The comparative fit index (CFI) was 0.96, and the goodness-of-fit index (GFI) was 0.97; both indices were greater than the 0.90 value used to suggest good model fit.

Figure 1 presents the parameter estimates for the model as standardized regression weights. The t -statistics for path coefficients for five of the seven tested relationships were statistically significant ($p < .05$), providing additional evidence to support the accuracy of the theoretical model. The model provided only partial support for the first hypothesis.

Table 2
Univariate Statistics

	Items in Scale	Potential Range	Midpoint	Observed Score		Mean	Standard Deviation
				Minimum	Maximum		
Role Ambiguity	3	3–15	9	3	15	6.68	2.83
Organizational Goal Ambiguity	3	3–12	7.5	3	12	6.11	2.06
Centralization	3	3–12	7.5	3	12	6.68	2.09
Red Tape	1	0–10	5	0	10	6.42	1.98
Routinization	3	3–12	7.5	5	11	6.85	1.73
Nongovernment Influences	4	0–16	8	1	16	9.48	2.58
Federal Political Hierarchy	2	0–8	4	0	8	5.29	1.87
State Political Hierarchy	3	0–12	6	0	12	10.86	1.63
Legal/Regulatory Influences	3	0–12	6	3	12	8.77	2.06

Figure 1
Model Results



As expected, political actors without formal shared power over agency decision making and resources had no effect on organizational goal ambiguity. Of the three types of political actors with formal shared power, however, only the state political hierarchical actors increased organizational goal ambiguity as hypothesized. The impact of the other two such actors was not as predicted: the federal political hierarchical actors decreased organizational goal ambiguity, while the legal/regulatory actors had no significant effect. Overall, the political influence variables only explained 9 percent of the variance in organizational goal ambiguity. Although there was only moderate support for the first hypothesis, the model fully supported the remaining hypotheses. Organizational goal ambiguity, in turn, increased employee role ambiguity, having both a direct effect and an indirect effect mediated through its influence on the bureaucratic structure of the organization. While the organization’s goal ambiguity explained nearly a quarter ($R^2 = 0.23$) of the variance in its bureaucratic structure, goal ambiguity and bureaucratic structure together explained well over a third of the variance ($R^2 = 0.41$) in the role ambiguity reported by employees.

Although we are able to “connect the dots” and find support for the middle-range theory we proposed linking political environment, organizational goal ambiguity, and role ambiguity, there are a few surprises. Of the three sources of political influence with formal authority over the agency, one increased organizational goal ambiguity, a second one decreased it, and yet another had no effect. One way to explain these results is to look at goal conflict, in addition to political influence, as a potential source of organizational goal ambiguity. Implying that certain policy actors will share similar types of influence does not mean that they will use this influence to achieve identical objectives. Conflict is

expected to exist among actors with similar influence. Such conflict may be between two institutions (i.e., legislature and executive) or even between two actors within the same institution.¹⁴ Previous studies have found that conflicting organizational goals can create greater uncertainty regarding performance expectations and be an important source of goal ambiguity in public sector organizations (Chun and Rainey 2005; Wright 2004). Therefore, perhaps we should expect that a given set of political actors will more likely contribute to organizational goal ambiguity not only to the degree that they have (and actually exercise) strong formal influence over the organization but also to the degree that they have potentially incongruent or conflicting performance expectations.

Under this additional assumption, the typology of political influence developed by Waterman might imply another way in which not all venues of influence would contribute equally to organizational goal ambiguity. For example, in the case of state human services agencies, state political hierarchical actors should be expected to directly increase organizational goal ambiguity because they have the most direct influence over the agency (budgets, organizational structure, policymaking) and exhibit considerable goal conflict as a group due to the conflict between institutions and the elected officials that control those institutions.¹⁵

At first glance, federal political hierarchical actors might be expected to have a similar effect on organizational goal ambiguity. These actors have some, albeit less, formal influence over the agencies studied here and exhibit the same potential for goal conflict as a group due to the conflict between institutions and the policy objectives of the elected officials within those institutions. However, the federal government, unlike state governments, provides generous support to key programs operated by these agencies.¹⁶ Similarly, although the federal political hierarchy has some influence over state health and human service agencies, the nature of this control may be different. The agencies may look to these federal actors as only providing general policy direction and resources, viewing their state-level counterparts as the source of more specific, detailed implementation guidelines and budget constraints. In fact, the distance may buffer state agencies from much of the conflict that exists between these federal actors or in their policymaking process. Consequently, state employees focus more on the policy decisions and less on the conflicts underlying those decisions.

When looking at both conflict and formal power as necessary conditions for external influence on organizational goal ambiguity, both legal/regulatory actors and nongovernmental actors might not contribute to organizational goal ambiguity although for different reasons. While legal/regulatory actors have some immediate hierarchical control over agency action, they have relatively low goal conflict as a group because they look to each other for precedents and guidance on rulings. State human service agencies operate in

14 For example, two state senators may have the same type of influence over agency actions but want the agency to do completely different things. Political party differences may exacerbate policy differences.

15 Medicaid, the biggest program operated by these agencies, provides another potential source of conflict-initiated ambiguity at the state level. Although Medicaid is a major line item in state budgets, it has limited political support (Boyd 2003). The low mission valence of these agencies makes them subject to political micromanagement (Hargrove and Glidewell 1990; Rainey and Steinbauer 1999). While there is little the state political hierarchy can do to significantly alter the mission of these agencies, it can and does cut resources (Boyd 2003; Bozeman and Pandey 2004). Cutbacks, accompanied with no changes in mission, can cause significant goal conflict.

16 Although there are a few states that are more generous, federal policy has typically set and financed more liberal eligibility and benefit levels. Federal support for these agencies was especially strong in the wake of demise of Clinton health reforms, when the Clinton administration made vigorous use of the tools of administrative presidency to support Medicaid expansions (Pandey and Cantor 2004; Thompson 2001).

a stable legal environment wherein the principal framework for initiating interactions and resolving conflicts is administrative law.¹⁷

Direct clientele groups and other nongovernmental actors, on the other hand, may have greater goal conflict (less agreement as a group of actors over preferred agency action) but little direct control over the resources and decision making of government agencies charged with pursuing those goals. In the absence of such influence, these actors have to either resort to exercising their influence through other channels or work in a cooperative manner with the agencies. Indeed, there is some evidence for key stakeholder groups working cooperatively with these agencies to advance their objectives (Grogan 1993; Grogan and Patashnik 2003; Pandey 2002; Pandey et al. 2000).

CONCLUSION

Before highlighting the contributions of our article, we want to note its limitations. The article has the usual shortcoming of a cross-sectional analysis, in that we do not test causal relationships across time. However, we do elaborate the causal processes underlying our theoretical model and test it using structural equation modeling—perhaps, the best methodological alternative when testing causal models with cross-sectional data. In addition, care needs to be exercised in generalizing our findings beyond the sample of human service managers in state government. Another limitation of the research is that we use just one measure of organizational goal ambiguity. However, recent research has conducted an in-depth examination of this measure and has found it to be both usable and valuable (Pandey and Rainey 2005).¹⁸

Our findings on the effects of different sources of political influence on organizational goal ambiguity, especially the counter-hypothetical finding on federal influence, point to a need for a more nuanced understanding of the effects of political environment on organizations. Clearly, broad generalizations are inadequate, and it is important to develop a better appreciation of different cross-currents in the political environment. The dynamics of the political environment may manifest themselves in a different manner for other policy domains and agencies.¹⁹ More research is needed to better understand and differentiate

17 In fact, this administrative law framework is maintained by an agency, Centers for Medicare and Medicaid Services (CMS), that has been noted for the flexible manner in which it carries out its oversight function (Gormley and Boccuti 2001; Thompson 1998). Rather than acting as “master puppeteer in its dealings with state government,” Gormley and Boccuti (2001, 577) argue that CMS functions like a “bass player in a jazz band” who merely “anchors and structures the performances of the other musicians” and is free to “indulge in some solo riffs from time to time” but only “when issues are low in salience and conflict.” Put simply, CMS is flexible and works with individual state agencies to clarify goals and to adapt them to specific and unique circumstances of the state.

18 Also, it must be borne in mind that goal ambiguity has been measured using similar items widely in the public management literature (e.g., Lan and Rainey 1992; Rainey 1983; Wright 2004).

19 It is also possible that our finding in this article on the effect of federal political hierarchy is unique to this policy domain served by state human service agencies. It is not uncommon for health policy scholars to view the role of federal actors with approbation (Aaron and Butler 2004). The creative federalism espoused by President Lyndon B. Johnson relied heavily on intergovernmental relations, through the use of federal grant-in-aid programs, to encourage state and local governments to achieve national goals (O’Toole 1999; Sundquist and Davis 1969). Achieving national goals is contingent on the ability of different actors in the intergovernmental system to clarify the goals for implementing agencies. When signals coming from different sources are at cross-purposes, it does not advance the ideal of creative federalism. While we find that federal actors reduce goal ambiguity for these agencies—indicative of success in clarifying federal goals at the agency level—state actors on the other hand increase goal ambiguity. To the extent that the promise of creative federalism is premised on different levels of government acting cooperatively, our evidence indicates that the ideal of creative federalism faces implementation challenges.

between the effects of various actors in the polity and their salience to particular types of organizations and levels of government.

Although the results of any single study should be viewed with some caution, our findings suggest that external political actors can have important consequences for organizations and their employees. Such forces influence not only organizational goal ambiguity directly but also organizational structure and employee role ambiguity indirectly. That said, our study also suggests that not all external actors will have the same effect. While external actors with more direct influence over organizational resources and decision making may increase goal ambiguity, actors with similar but more distal influence may decrease it. Still other external actors without direct influence over such matters or those that attempt to minimize conflict may have no effect at all. Not only do our findings help us understand the connection between the organization and its environment, but they also identify a link that may have special relevance for public sector organizations. Although our study does not make any direct public-private comparisons, it still may shed light on the potential distinctiveness of public sector organizations and management if one assumes that public organizations are more likely to experience organized external actors with considerable influence over organizational resources and decision making.

Our findings also suggest that the structural mechanisms often used to control or direct employee behavior may hinder employee performance when goals are complex or not clearly agreed upon or communicated. Behaviors that are characterized as “shirking” under principal-agent models and offered as evidence of loss of control may in fact be partially due to the ambiguity conveyed by such control mechanisms. Under such conditions, perhaps a better method to increase performance is to align principal and agent interests through mechanisms that encourage cooperation (i.e., communication and participation) rather than control (Kim 2002; Lawler 1986; Pandey and Garnett 2006; Wright 2004, forthcoming). Recent arguments have even suggested that goal ambiguity can actually serve a positive function in organizations by creating opportunities for meaningful communication and dialogue (Noordegraaf and Abma 2003). The potential benefits of ambiguity, however, would be moderated by one’s degree of assigned responsibility or autonomy. Managers or professional employees with more complex roles, for example, may have greater tolerance for ambiguity as a result of their training or need for flexibility when responding to environmental contingencies (Locke et al. 1989; Wright and Kim 2004).

A final contribution of our study is the development of a middle-range theory that straddles the chasm between political scientists on the one hand and organizational behavior scholars on the other. As we have pointed out, there has been a tendency in political science scholarship to bring ever-increasing methodological sophistication to bear on narrowly framed normative questions about political control of the bureaucracy (Jones 2003; Kelman et al. 2003). Organizational behavior scholarship shares a similar pattern of methodological sophistication and barely takes notice of the political environment of organizations. As Pandey and Kingsley (2000, 779) note, “Theoretical frameworks, just like mirrors, have blind spots.” Disciplinary steadfastness to political science or to organizational behavior inhibits development of new insights. Public management theory and reality lie at the crossroads of disciplines; as we ponder conflicting stereotypes and dilemmas about both all-powerful and effete bureaucrats (Pandey and Welch 2005; Waterman, Rouse, and Wright 2004), there is a need for a theory that can connect the dots from political environment to organizational and then

individual role stress. Although this is a preliminary model validated by findings from just one sample, it offers a fresh and promising new way to think about the challenges public managers face.

APPENDIX

Survey Measures

Role Ambiguity

My job has clear, planned goals and objectives.^a (R)

I feel certain about how much authority I have.^a (R)

I know exactly what is expected of me.^a (R)

Organizational Goal Ambiguity

This organization’s mission is clear to almost everyone who works here.^b (R)

It is easy to explain the goals of this organization to outsiders.^b (R)

This organization has clearly defined goals.^b (R)

Bureaucratic Structure

Centralization

There can be little action taken here until a supervisor approves a decision.^b

In general, a person who wants to make his own decisions would be quickly discouraged in this agency.^b

Even small matters have to be referred to someone higher up for a final answer.^b

Routinization

People here do the same job in the same way every day.^b

One thing people like around here is the variety of work.^b (R)

Most jobs have something new happening every day.^b (R)

Red Tape

If red tape is defined as burdensome administrative rules and procedures that have negative effects on the organization’s performance, please assess the level of red tape in your organization.^c

State Political Hierarchy Influence

How much influence does the Governor exert over your agency?^d

How much influence does the State Legislature exert over your agency?^d

How much influence does the Agency Head exert over your agency?^d

Legal/Regulatory Influence

How much influence do Federal Courts exert over your agency?^d

How much influence do State Courts exert over your agency?^d

How much influence do Federal Agencies exert over your agency?^d

Federal Political Hierarchy Influence

How much influence does the President exert over your agency?^d

How much influence does the U.S. Congress exert over your agency?^d

Nongovernmental Influence

How much influence do Business Groups exert over your agency?^d

How much influence do Client Groups exert over your agency?^d

How much influence does Public Opinion exert over your agency?^d

How much influence does the Media exert over your agency?^d

(R) Reverse worded.

^aItems were measured on a 5-point agree/disagree scale (strongly agree, somewhat agree, neutral, somewhat disagree, and strongly disagree).

^bItems were measured on a 4-point agree/disagree scale (strongly agree, somewhat agree, somewhat disagree, and strongly disagree).

^cItem was measured on an 11-point scale with “0” signifying no red tape and “10” signifying the highest level of red tape.

^dItems were originally scored on a 5-point scale from (no influence to great deal of influence).

REFERENCES

- Aaron, Henry J., and Stuart M. Butler. 2004. How federalism could spur bipartisan action on the uninsured. *Health Affairs Web Exclusive*. <http://content.healthaffairs.org/cgi/reprint/hlthaff.w4.168v1.pdf> (accessed 1 August 2005).
- Abramis, David J. 1994. Work role ambiguity, job satisfaction, and job performance: Meta-analyses and review. *Psychological Reports* 75:1411–33.
- Aiken, Michael, and Jerald Hage. 1968. Organizational interdependence and intra-organizational structure. *American Sociological Review* 33:912–30.
- American Public Human Services Association. 2001. *Public Human Services Directory 2001–2002*. Washington, DC: American Public Human Services Association.
- Appleby, Paul. 1945. *Big democracy*. New York: Alfred A. Knopf.
- Baldwin, J. Norman. 1987. Public versus private: Not that different, not that consequential. *Public Personnel Management* 16:181–93.
- Baldwin, J. Norman, and Quinton A. Farley. 1991. Comparing the public and private sectors in the United States: A review of the empirical literature. In *Handbook of comparative and development public administration*, ed. A. Farazmand, 27–39. New York: Marcel Dekker.

- Behn, Robert D. 1995. The big questions of public management. *Public Administration Review* 55:313–24.
- Boles, James S., and Barry J. Babin. 1994. Role stress revisited: One or two constructs? *Journal of Marketing Theory and Practice* 2:57–69.
- Boyd, Donald J. 2003. The bursting state fiscal bubble and state Medicaid budgets. *Health Affairs* 22:46–61.
- Boyne, George. 2002. Public and private management: What is the difference? *Journal of Management Studies* 39 (1): 97–122.
- Bozeman, Barry. 1987. *All organizations are public*. San Francisco: Jossey-Bass.
- . 1993. Theory, “wisdom,” and the character of knowledge in public management: A critical view of the theory-practice linkage. In *Public management: The state of the art*, ed. B. Bozeman, 27–39. San Francisco: Jossey-Bass.
- . 2000. *Bureaucracy and red tape*. Upper Saddle River, NJ: Prentice Hall.
- Bozeman, Barry, and Sanjay K. Pandey. 2004. Public management decision making: Effects of decision content. *Public Administration Review* 64:542–54.
- Brehm, John, and Scott Gates. 1993. Donut shops and speed traps: Evaluating models of supervision of police behavior. *American Journal of Political Science* 27:555–81.
- . 1999. *Working, shirking, and sabotage: Bureaucratic response to a democratic public*. Ann Arbor: University of Michigan Press.
- Brewer, Gene A. 2005. In the eye of the storm: Frontline supervisors and federal agency performance. *Journal of Public Administration Research and Theory* 15:505–27.
- Chun, Young H., and Hal G. Rainey. 2004. Consequences of goal ambiguity in public organizations. Paper presented at the “Determinants of Performance in Public Organizations” conference, Advanced Institute of Management Research, Cardiff University, Cardiff, Wales, UK.
- . 2005. Goal ambiguity in U.S. federal agencies. *Journal of Public Administration Research and Theory* 15:1–30.
- Dahl, Robert A., and Charles E. Lindblom. 1953. *Politics, economics, and welfare*. New York: Harper and Brothers.
- Daniels, Mark R., ed. 1998. *Medicaid reform and the American states: Case studies on the politics of managed care*. Westport, CT: Auburn House.
- Dillman, Don A. 2000. *Mail and electronic surveys: The tailored design method*. New York: John Wiley.
- Downs, Anthony. 1967. *Inside bureaucracy*. Boston: Little, Brown.
- Dubnick, Melvin J. 1999. Demons, spirits, and elephants: Reflections on the failure of public administration theory. Paper presented at the annual meeting of the American Political Science Association, Atlanta, GA.
- Erera, Irit P. 1989. Role ambiguity in public welfare organizations. *Administration in Social Work* 13 (2): 67–83.
- Fisher, Cynthia D., and Richard Gitelson. 1983. A meta-analysis of the correlates of role conflict and ambiguity. *Journal of Applied Psychology* 68:320–33.
- Fotler, Myron D. 1981. Is management really generic? *Academy of Management Review* 6:1–12.
- Frederickson, H. George. 1999. The repositioning of American public administration. *PS: Political Science and Politics* 32:701–11.
- Gormley, William T., and Cristina Boccuti. 2001. HCFA and the states: Politics and intergovernmental leverage. *Journal of Health Politics, Policy, and Law* 26 (3): 557–80.
- Grogan, Colleen M. 1993. Federalism and health care reform. *American Behavioral Scientist* 36:741–59.
- Grogan, Colleen M., and Eric Patashnik. 2003. Between welfare medicine and mainstream entitlement: Medicaid at the political crossroads. *Journal of Health Politics, Policy, and Law* 28 (5): 822–58.
- Hall, Richard H. 1963. The concept of bureaucracy: An empirical assessment. *American Journal of Sociology* 69:32–40.
- Hargrove, Erwin C., and John C. Glidewell, eds. 1990. *Impossible jobs in public management*. Lawrence: University Press of Kansas.

- Hayduk, L. A. 1987. *Structural equation modeling with LISREL*. Baltimore, MD: Johns Hopkins University Press.
- Hecl, Hugh. 1977. Political executives and the Washington bureaucracy. *Political Science Quarterly* 92 (3): 395–424.
- House, Robert J., and John R. Rizzo. 1972. Role conflict and ambiguity as critical variables in a model of organizational behavior. *Journal of Organizational Behavior and Performance* 7:467–505.
- Jaccard, James, and Choi K. Wan. 1996. *LISREL approaches to interaction effects in multiple regression*. Thousand Oaks, CA: Sage.
- Jackson, Susan E., and Randall S. Schuler. 1985. A meta-analysis and conceptual critique of the research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes* 36:16–78.
- Jones, Bryan D. 2003. Bounded rationality and political science: Lessons from public administration and public policy. *Journal of Public Administration Research and Theory* 13:395–412.
- Jöreskog, K. G., and D. Sörbom. 1992. *LISREL VIII: Analysis of linear structural relations*. Mooresville, IN: Scientific Software.
- Kahn, R. L., D. M. Wolfe, R. P. Quinn, J. D. Snoek, and R. A. Rosenthal. 1964. *Occupational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Kelman, Steven. 1987. *Making public policy: A hopeful view of American government*. New York: Basic Books.
- Kelman, Steven, Fred Thompson, L. R. Jones, and Kuno Schedler. 2003. Dialogue on definition and evolution of the field of public management. *International Public Management Review* 4 (2): 1–19.
- Kettl, Donald. 1995. Building lasting reform: Enduring questions, missing answers. In *Inside the reinvention machine*, ed. D. F. Kettl and J. J. DiIulio, 9–83. Washington, DC: Brookings Institution.
- Kim, Soonhee. 2003. Participative management and job satisfaction: Lessons for management leadership. *Public Administration Review* 62 (2): 231–41.
- Lan, Zhiyong, and Hal G. Rainey. 1992. Goals, rules, and effectiveness in public, private, and hybrid organizations: More evidence on frequent assertions about differences. *Journal of Public Administration Research and Theory* 2:5–24.
- Lawler, Edward E. 1986. *High-involvement management*. San Francisco: Jossey-Bass.
- Lincoln, James R., and Gerald Zeitz. 1980. Organizational properties from aggregate data: Separating individual and structural effects. *American Sociological Review* 45:391–408.
- Lindblom, Charles E. 1959. The science of “muddling through.” *Public Administration Review* 19:79–88.
- Locke, Edwin A., Dong-Ok Chah, Scott Harrison, and Nancy Lustgarten. 1989. Separating the effects of goal specificity from goal level. *Organizational Behavior and Human Decision Processes* 43:270–87.
- Locke, Edwin A., and Gary P. Latham. 1990. *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Long, Norton E. 1949. Power and administration. *Public Administration Review* 9:257–64.
- Lowi, Theodore. 1979. *The end of liberalism*. New York: W. W. Norton.
- Lynn, Laurence E. 1981. *Managing the public's business: The job of the government executive*. New York: Basic Books.
- . 1990. Managing the social safety net: The job of social welfare executive. In *Impossible jobs in public management*, ed. E. C. Hargrove and J. C. Glidewell, 133–51. Lawrence: University Press of Kansas.
- Meier, Kenneth J. 1987. *Politics and the bureaucracy: Policymaking in the fourth branch of government*. 2d ed. Monterey, CA: Brooks/Cole Publishing Company.
- Meier, Kenneth J., and Joseph Stewart, Jr. 1987. Why are people saying all those nasty things about public administration and what should be done about it? Or “Shoot low boys. They’re riding Shetland ponies.” Paper presented at the annual meeting of the American Political Science Association, Chicago, IL.

- Merton, Robert K. 1940. Bureaucratic structure and personality. *Social Forces* 18:560–68.
- . 1968. *Social theory and social structure*. New York: Free Press.
- Meyer, Marshall W. 1979. *Change in public bureaucracies*. UK: Cambridge University Press.
- . 1982. Bureaucratic vs. “profit” organization. In *Research in organizational behavior*, ed. B. M. Staw and L. L. Cummings, 89–126. Greenwich, CT: JAI Press.
- Moe, Terry M. 1984. The new economics of organizations. *American Journal of Political Science* 28 (4): 739–77.
- . 1987. An assessment of the positive theory of congressional dominance. *Legislative Studies Quarterly* 12 (4): 475–520.
- Morris, James H., Richard M. Steers, and James L. Koch. 1979. Influence of organization structure on role conflict and role ambiguity for three occupational groupings. *Academy of Management Journal* 22 (1): 58–71.
- Moynihan, Donald P., and Sanjay K. Pandey. 2005. Testing how management matters in an era of government by performance management. *Journal of Public Administration Research and Theory* 15:421–39.
- Newland, Chester A. 1994. A field of strangers in search of a discipline: Separatism of public management research from public administration. *Public Administration Review* 54 (5): 486–88.
- . 2000. The *Public Administration Review* and ongoing struggles for connectedness. *Public Administration Review* 60 (1): 20–38.
- Nicholson, Peter J., and Swee C. Goh. 1983. The relationship of organization structure and interpersonal attitudes to role conflict and ambiguity in different work environments. *Academy of Management Journal* 26 (1): 148–55.
- Noordegraaf, Mirko, and Tineke Abma. 2003. Management by measurement? Public management practices amidst ambiguity. *Public Administration* 81 (4): 853–71.
- O’Toole, Laurence J. 1999. *American intergovernmental relations*. 3d ed. Washington, DC: CQ Press.
- Pandey, Sanjay K. 2002. Assessing state efforts to meet baby boomers’ long-term care needs: A case study in compensatory federalism. *Journal of Aging and Social Policy* 14 (3/4): 161–79.
- . 2003. “National administrative studies project (NASP-II): A national survey of managers in state health and human services agencies” (working paper, Rutgers University, Camden, NJ).
- Pandey, Sanjay K., and Joel C. Cantor. 2004. The changing profile of the urban uninsured: Exploring implications of the rise in number of moderate-income uninsured. *Journal of Urban Health* 81 (1): 135–49.
- Pandey, Sanjay K., and James L. Garnett. 2006. Exploring public sector communication performance: Testing a model and drawing implications. *Public Administration Review* 66 (1): 38–52.
- Pandey, Sanjay K., and Gordon A. Kingsley. 2000. Examining red tape in public and private organizations: Alternative explanations from a social psychological model. *Journal of Public Administration Research and Theory* 10:779–99.
- Pandey, Sanjay K., Mary G. Mussman, Harriet W. Moore, John G. Folkemer, and John J. Kaelin. 2000. An assessment of Maryland Medicaid’s rare and expensive case management program. *Evaluation and the Health Professions* 23 (4): 457–79.
- Pandey, Sanjay K., and Hal G. Rainey. 2005. Public managers’ perceptions of goal ambiguity: Analyzing alternative models. Paper presented at the annual meeting of the American Political Science Association, Washington, DC.
- Pandey, Sanjay K., and Patrick G. Scott. 2002. Red tape: A review and assessment of concepts and measures. *Journal of Public Administration Research and Theory* 12:553–80.
- Pandey, Sanjay K., and Eric W. Welch. 2005. Beyond stereotypes: A multistage model of managerial perceptions of red tape. *Administration and Society* 37 (5): 542–75.
- Pearce, Joan L. 1981. Bringing some clarity to role ambiguity research. *Academy of Management Review* 6 (4): 665–74.
- Perry, James L., and Hal G. Rainey. 1988. The public-private distinction in organizational theory: A critique and research strategy. *Academy of Management Review* 13 (2): 182–201.
- Rainey, Hal G. 1983. Public agencies and private firms: Incentive structures, goals, and individual roles. *Administration and Society* 15:207–42.

- . 1989. Public management: Recent research on the political context and managerial roles, structures, and behaviors. *Journal of Management* 15:229–50.
- . 1993a. Important research questions. In *Public management: The state of the art*, ed. B. Bozeman, 9–12. San Francisco: Jossey-Bass.
- . 1993b. A theory of goal ambiguity in public organizations. In *Research in public administration, Vol. 2*, ed. J. L. Perry, 121–66. Greenwich, CT: JAI Press.
- . 2003. *Understanding and managing public organizations*. 3d ed. San Francisco: Jossey-Bass.
- Rainey, Hal G., Robert W. Backoff, and Charles L. Levine. 1976. Comparing public and private organizations. *Public Administration Review* 36 (2): 233–46.
- Rainey, Hal G., and Barry Bozeman. 2000. Comparing public and private organizations: Empirical research and the power of a priori. *Journal of Public Administration Research and Theory* 10:447–69.
- Rainey, Hal G., Sanjay K. Pandey, and Barry Bozeman. 1995. Research note: Public and private managers' perceptions of red tape. *Public Administration Review* 55 (6): 567–74.
- Rainey, Hal G., and Paula Steinbauer. 1999. Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory* 9:1–32.
- Ramaswami, Sridhar N., Sanjeev Agarwal, and Mukesh Bhargava. 1993. Work alienation of marketing employees: Influence of task, supervisory, and organizational factors. *Journal of the Academy of Marketing Science* 21:179–93.
- Rizzo, John R., Robert J. House, and Sidney I. Lirtzman. 1970. Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly* 15:150–63.
- Rogers, David L., and Joseph Molnar. 1976. Organizational antecedents of role conflict and ambiguity in top-level administrators. *Administrative Science Quarterly* 21 (4): 598–610.
- Scott, Patrick G., and Sanjay K. Pandey. 2005. Red tape and public service motivation: Findings from a national survey of managers in state health and human services agencies. *Review of Public Personnel Administration*. 25 (2): 155–80.
- Simon, Herbert A. 1946. The proverbs of administration. *Public Administration Review* 6:53–67.
- Spector, Paul E. Forthcoming. Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*.
- Stillman, Richard. 1996. *The American bureaucracy: The core of modern government*. 2d ed. Chicago: Nelson-Hall.
- Sundquist, James L., and David W. Davis. 1969. *Making federalism work*. Washington, DC: Brookings Institution.
- Tichenor, Daniel J., and Richard A. Harris. 2003. Organized interests and American political development. *Political Science Quarterly* 117 (4): 587–612.
- Thompson, Frank J. 1998. The faces of devolution. In *Medicaid and devolution: A view from the states*, ed. F. J. Thompson and J. J. DiIulio, 14–55. Washington, DC: Brookings Institution Press.
- . 2001. Federalism and health care policy: Toward redefinition. In *The new politics of state health policy*, ed. R. Hackey and D. Rochefort, 41–70. Lawrence: University Press of Kansas.
- Tubre, Travis C., and Judith M. Collins. 2000. Jackson and Schuler (1985) revisited: A meta-analysis of the relationships between role ambiguity, role conflict, and job performance. *Journal of Management* 26 (1): 155–69.
- Wagenheim, George D., and John H. Reurink. 1991. Customer service in public administration. *Public Administration Review* 51 (3): 263–70.
- Waldo, Dwight. 1948. *The administrative state: A study of the political theory of American public administration*. New York: Ronald Press.
- Wamsley, Gary A., and Mayer N. Zald. 1973. *The political economy of public organizations*. Washington, DC: Heath.
- Warwick, Donald P. 1975. *A theory of public bureaucracy: Politics, personality, and organization in the State Department*. Cambridge, MA: Harvard University Press.

- Waterman, Richard W., and Kenneth J. Meier. 2004. Principal-agent models: A theoretical cul-de-sac. In *Bureaucrats, politics, and the environment*, ed. R. W. Waterman, A. A. Rouse, and R. L. Wright, 19–42. Pittsburgh, PA: University of Pittsburgh Press.
- Waterman, Richard W., Amelia A. Rouse, and Robert L. Wright. 1998. The venues of influence: A new theory of political control of the bureaucracy. *Journal of Public Administration Research and Theory* 8:13–38.
- . 2004. *Bureaucrats, politics, and the environment*. Pittsburgh, PA: University of Pittsburgh Press.
- Whorton, Joseph W., and John A. Worthley. 1981. A perspective on the challenge of public management: Environmental paradox and organizational culture. *Academy of Management Review* 6 (3): 357–61.
- Wildavsky, Aaron. 1979. *Speaking truth to power*. Boston: Little, Brown.
- Wilson, James Q. 1989. *Bureaucracy*. New York: Basic Books.
- Wolin, Sheldon. 1960. *Politics and vision*. Boston: Little, Brown.
- Wood, B. Dan, and Richard W. Waterman. 1994. *Bureaucratic dynamics: The role of bureaucracy in a democracy*. Boulder, CO: Westview Press.
- Wright, Bradley E. 2001. Public sector work motivation: A review of the current literature and a revised conceptual model. *Journal of Public Administration Research and Theory* 11:559–86.
- . 2004. The role of work context in work motivation: A public sector application of goal and social cognitive theories. *Journal of Public Administration Research and Theory* 14:59–78.
- . Forthcoming. Public service and motivation: Does mission matter? *Public Administration Review*.
- Wright, Bradley E., and Soonhee Kim. 2004. Participation's influence on job satisfaction: The importance of job characteristics. *Review of Public Personnel Administration* 24 (1): 18–40.
- Wright, Bradley E., Lepora J. Manigault, and Tamika R. Black. 2004. Quantitative research measurement in public administration: An assessment of journal publications. *Administration and Society* 35 (1): 747–64.