How Effective is Public Management Research?

An Analysis of Scope and Methodology

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Introduction

Public management research grapples with a number of difficult issues. It is a new field, with developing norms and approaches to research, and there has been little examination of the progress it has made in advancing knowledge. Nomenclature concerns have prevented a coherent analysis of public management research, since much of what many would consider "public management" has historically been classified as public administration or public policy research. In this paper, I analyze public management as a field of scholarship and offer some definitional boundaries for consideration. Using a sample of public management research, I analyze the scope and methodology employed by a set of scholars and assess the breadth, depth, and quality of the research. I pose and answer eleven questions about public management research: six pertaining to its scope and content, and five concerning its research methods. In the following sections, I define public management's scope and content and outline some key methodological issues in public management research. After formulating some key research questions, I discuss the data and method used in the study, followed by a discussion of the findings. I close with a discussion and implications for future work.

Defining Public Management: Scope and Content

Lynn (1996) argues that public management as a field did not begin as an area of scholarship, but rather as a means of policy schools distinguishing themselves from public administration during the 1970s.[1] As public administration and public policy scholars began to see themselves tackling similar questions, the name "public management" began to trickle into research as a means of uniting the efforts of public administration and public policy researchers.

[1] Use of public management, public administration, and public policy as terms throughout this paper is purposeful. When discussing research that self-identifies as "public administration" or "public policy," I identify it with those labels.

Others viewed public management as a synthesis of the generic management literature with research in public administration, a development that paralleled the policy school movement (Perry and Kraemer, 1986). Research in public management grew during the 1980s, and in 1991, the first Public Management Research Conference was held in Syracuse, NY (Brudney et al., 2000). The scope of public management research has been broad: it includes elements of traditional public administration, traditional public policy, and "generic" management. That is, focus seems to be not only on how to manage people, budgets, and processes, but also on managing public service provision, policy implementation processes, and program evaluation. Theoretical approaches to public management are borrowed broadly from a number of social science disciplines, including economics, political science, sociology, and organization theory.

Definitions of public management are multiple and overlapping. Some view public management simply as a subfield of public administration (Overman, 1984), while others cast it more broadly as an "umbrella" field that encompasses elements of public administration, public policy, and generic management (Kettl, 1990). In one of the first comprehensive treatments of public management, Bozeman (1993) identified five distinctive elements of public management research: "(1) a concern with prescription and, often prescriptive theory; (2) a focus on the distinctive nature of public management and public organizations and, particularly, the effects of politics; (3) a problem focus more than a process focus; (4) a strong emphasis on contextual and experimental knowledge (as compared to empirically based theoretical knowledge); and (5) a focus on strategy and multiorganizational problems" (p. 362). In 1995, Behn followed with three "big questions" in public management: (1) How can managers break the micromanagement cycle? (2) How can public managers motivate people to work energetically and intelligently toward achieving public purposes? (3) How can public managers measure the achievements of their agencies in ways that help to increase those achievements?" (p. 315). O'Toole (1999) would later define public management as "a set of conscious efforts to concert actors and resources to carry out established collective purposes." In their initial effort to model the impact of public management, O'Toole and Meier (1999) expanded upon O'Toole's definition to include efforts to "leverage other inputs to performance, take advantage of environmental disturbances that can provide chances for performance improvement, and to reshape the structural setting in which both management and operations function" (p. 510).

These definitions share four important themes that reflect larger patterns of concern in the public administration and public policy communities: (1) concern with public management practice, (2) acceptance of "public" organizations as distinct, (3) focus on multiorganizational issues and the role of networks, and (4) organizational performance as an important goal. I use these four themes to organize my discussion of public management scope and content.

First, concern with the theory-practice link has been a key component of public management, public administration, and public policy research for some time. While his overall tone speaks to the need for a division between theory and practice, Bozeman (1993) notes that public management research is concerned with prescription, reflecting an argument made by others (see, e.g., Gill and Meier, 2000, 2001; Meier and Keiser, 1996; Overman, 1989; Simon, 1969) that public administration should focus on identifying how things *should* be done, not just how they *are* done. All three of Behn's (1995) "big questions" are oriented toward finding answers to real public management problems. This concern comes on the heels of decades of debate. In 1956, Thompson wrote that public administration research should resist pressure for immediately applicable results, arguing for a distance between theory and practice. More recently, arguments for a closer relationship have been forwarded. Perry (1993) argued that public management research should produce useful and practical generalizations about how managers behave at different levels, and Bendor (1994) called for a closer connection between basic and applied public administration research. Lynn (1996), in his examination of whether public management was an art, science, or profession, advanced a fourth option – public management as craft, where research informed practice by producing explanatory heuristics. More recently, Franklin and Ebdon (2005) advocated explicitly for a "Wheel of Practice" embedded within a larger scientific framework, such that theory and practice are better integrated. The theory-practice question is not limited to public management – it is a key issue for cognate fields like policy implementation (O'Toole, 1997) and policy analysis (Lynn, 1999) as well.

Second, there is an emphasis on the publicness of organizations studied under the public management label.[2] Behn's (1995) "micromanagement" problem is concerned with the shortcomings of bureaucracy and red tape that, while present in private organizations, seems to be a persistent concern of government and non-profit agencies. His "motivation" problem speaks implicitly (and, in his article, explicitly) to the issues involved in paying government employees a salary that reflects their performance and effort. Both Bozeman (1993) and O'Toole and Meier (1999) reference public organizations in their definitions. This reflects a longstanding debate in the field about distinctions between public and private organizations. Sayre wrote in 1958 that "public and private management are alike in all unimportant respects," a quote repeated in Allison's (1980) work along the same lines. In their analysis of the empirical literature, Rainey and Bozeman (2000) found that public managers differed from private managers in some regards, but not in the stereotypical ways that one might expect, leading them to argue for

[2] For a comprehensive review of the literature on public-private management, see Rainey (2003).

caution in making *a priori* assumptions about sectoral differences. In his analysis of the literature on public-private management, Rainey (1993) cautions against oversimplication of the public-private divide but notes that important distinctions remain relevant. Similarly, Boyne's (1993) meta-analysis found support for only a handful of distinctions between public and private organizations, but he notes that measurement and sampling problems make it difficult to be confident in the results. There seems to be evidence for a "publicness" inherent in government and non-profit organizations, but support is mixed and analyses are made difficult by methodological issues that are tough to overcome.

Third, there is a shared focus on multiorganizational and network management issues. Bozeman's definition of public management (1993) explicitly refers to multiorganizational and complex problems, and O'Toole and Meier's definition (1999) discusses how managers take advantage of "environmental disturbances" in order to achieve high performance. As government moves toward an increased reliance on contracting out and alternative modes of service delivery, managing networks and partnerships has become particularly important to public management practice. Berry et al. (2004) note that public management has become so network-focused that it is important to borrow from other fields to create a more comprehensive understanding of inter-organizational collaboration. In their research on governance, Lynn et al. (2001) identify a series of hierarchical interactions that lead to the creation and implementation of public policy. Inherent in their model of governance is extensive collaboration between agencies, policymakers, citizens, and service recipients, though in no particular order and often reciprocal. In their body of research on public management, Meier and O'Toole demonstrate convincingly that public managers who manage outwardly are more likely to steer their organizations toward high performance than those managers who focus on intra-organizational issues (see, e.g., Meier & O'Toole, 2001).

Finally, a fourth theme to note is that of performance. This is not surprising, given the multitude of global management reforms over the past twenty years that have sought specifically to make government more effective. Reforms related to the New Public Management, Managerialism, and Reinventing Government have shifted the emphasis of government toward efficiency and results, creating a practical need for the scholarly community to produce research that is performance-based. There has indeed been an explosion of research on public-sector performance that has attempted to measure and validate public organization performance (see, e.g., Boyne et al., 2005, 2007; Meier & O'Toole, 2001). Despite more abundant research, there remain serious challenges to measuring performance in public organizations: comparing agencies across policy areas, using subjective performance indicators in the absence of objective data, and quantifying effective policy provision, to name just three. However, if public management is prescriptive, then it must be concerned with understanding how the *best* and *most effective* organizations operate, not how the average ones do, despite the inherent methodological issues (Behn, 2003).

These themes related to the scope of public management research, along with the short history of the field, produce six research questions that might be asked of the public management literature: (1) Do scholars identify with public management as a field, or do they continue to refer to public administration or public policy? (2) Does public management research reflect a commitment to practice? (3) To what extent does public management research concern itself with *public*-sector organizations and data? (4) Does public management research focus on inter-organizational problems? (5) To what extent does public management research focus on performance? (6) What subfields tend to dominate public management research? After reviewing the literature on methodological issues in public management research, I will outline my approach to answering these six questions and discuss the results of my analysis.

Understanding Public Management: Research and Method

There has been little research on the quality of public management research methods. This is likely due at least partially to public management's status as a relatively young field of study, and also to the difficulty inherent in defining its boundaries. Nevertheless, there has been meaningful and compelling commentary on research in public administration, which perhaps reflects authors' nomenclature preferences more than substantive distinctions. For example, Gill and Meier (2000) provide a thorough review of problems in public administration research, an article that the authors would no doubt argue applies equally to public management. Research by Lynn and colleagues uses the governance lens, but much of their research applies directly to public management issues (see, e.g., Heinrich and Lynn, 2001; Hill and Lynn, 2005; Lynn et al., 2000, 2001).

Hill and Lynn (2005) identify three approaches to empirical research on governance and public management: (1) a descriptive and historical approach, often using archival data and qualitative methods; (2) a "best practices" approach that uses detailed case studies to establish "what works"; and (3) use of formal models, theories, and methods to study management and policy. They note that the third approach is growing in popularity, a view that is shared by others in the field who have investigated the use of methods in research (Boyne, 2003; Cleary, 2000; Rainey, 1994). This third method typically involves formal hypothesis testing and quantitative methods. While they argue against its use, Gill and Meier (2000) agree that hypothesis testing has become the mainstream approach to research in public administration, a finding echoed by Boyne (2003) and DeLorenzo (2001). As Boyne notes, even if one disagrees with how hypothesis testing is conducted, it does permit a standard means of comparing the strength of relationships (Winch and Campbell, 1970, cited in Boyne, 2003).

If quantitative methods and hypothesis testing are becoming more the norm for public management researchers, it is important to understand how scholars are going about it. Brewer et al. (1998) found that almost half of public administration dissertations used regression analysis as the primary method. In an assessment of published research articles, Houston and Delevan (1990) found that multivariate regression was more common than all other methods except for univariate analysis. Lynn et al. (2001) noted the ubiquity of ordinary least squares (OLS) regression in governance research, finding little use of techniques designed for limited dependent variables or methods such as structural equation modeling, hierarchical linear modeling, or time series. In addition, much of the research on public administration studies has found that quantitative methods are often too basic and/or inappropriate for the analyses being conducted (Gill and Meier, 2000, 2001; McCurdy and Cleary, 1984; Stallings and Ferris, 1988). Despite these findings, Schroeder et al. (2004) show in their survey of top scholars that only 30% view the research methods used in projects to be "very important," signaling that a focus on appropriate quantitative methods may not be as key as some of the above researchers might argue. Given the lack of consensus about what constitutes appropriate methods (and, perhaps more importantly, whether it even matters), it is vital for public management to ask whether methodological sophistication is a priority for the field. To cast it in Lynn's (1996) terms, is public management a science? If not, are sophisticated quantitative methodologies relevant?

Some would argue that sophistication is vital, particularly given the complexities of public management and policy provision. One of the most important recent developments in the overlapping fields of public management, public administration, and public policy has been the introduction of the governance lens in research (see, e.g., Lynn et al., 2001). The governance lens provides a framework for understanding management and policy in public organizations, but perhaps more importantly, it firmly establishes the need to consider interactions between multiple levels of government. In order to appropriately model these interactions, research must use multilevel methods in order to ensure that individual-level and organization-level impacts are appropriately measured and utilized. For example, Heinrich and Lynn (2000) provide a comprehensive analysis of multilevel modeling issues in social services research, showing that much of the literature uses modeling strategies that were flawed and yielded inaccurate results. They compare OLS and HLM approaches and demonstrate that HLM provides a better understanding of hierarchical governance. Ellwood (2000) demonstrates that relationships between education inputs and outputs have become clearer as data from multiple levels have been introduced into research. Data are often not available for multilevel modeling, but there appear to be strong arguments in favor of its use and a movement toward seeking multilevel data at the outset of data collection.

Of course, the best methods are not always quantitative, and it seems that many (if not most) public management scholars would advocate mixed methods, at least in the abstract. Perry and Kraemer (1986) made early arguments about the important role of case study and qualitative methodologies in public management. Ken Meier, a noted quantitative methodologist, praises Lin (2000) and Maynard-Moody's (1995) carefully executed qualitative research (2005). Lynn et al. (2001) note that "some of the most convincing studies" use both qualitative and quantitative approaches. But is this only lip service, given the minor emphasis on qualitative training in the field? As Meier (2005) points out in his critique of the best practices literature, some qualitative research barely rises to the level of journalism, but Brower et al. (2000) find in a review of published research that qualitative approaches share many of the same strengths and weaknesses as quantitative methods. The answer may be in doctoral education: anecdotal evidence suggests that qualitative methods are often not an option for students in the most highly regarded institutions. Qualitative methods may be a good idea in theory, but perhaps their implementation is made difficult by a training deficit that is tough to overcome.

While much of the discussion has revolved around whether qualitative or quantitative research is more appropriate, there remains a contingent of the public management community that remains skeptical of using empirical methods at all. For example, Luton (2007) argues that public administration empiricism is deeply flawed, primarily because of an absence of "objective reality" and the ensuing difficulties in measuring behavior. It is not clear whether Luton has proposed an alternative approach to research in his essay, other than for empiricists to "lighten up in their claims" about the value of their work, but his arguments are interesting nonetheless (p. 542). Spicer (2005) pays due respect to empirical methods but ultimately calls for a larger role for historical and philosophical approaches to public administration, noting that empirical methods are limited in their ability to provide a comprehensive body of knowledge. Earlier critiques of public administration dissertations and journal articles also contend that less empiricism and more attention to critical and interpretive theory is warranted (Box, 1992; White, 1986). The above arguments have yielded strong and focused response from scholars with a more empirical orientation (see, e.g., Meier, 2005; Meier and O'Toole, 2007), and it is unclear the extent to which "anti-empiricists" represent a valid contingent of the public management community or a small minority that ultimately has little influence. Raadschelders (2005), in an effort to unite the field, contends that a methodological pluralism that connects scholars with disparate orientations is the best solution, but as O'Toole notes in an earlier review (1995) and Jordan (2005) points out in her essay in the same symposium, the implementation problems with this approach would be substantial.

These issues lead me to pose five questions about the methods used in public management research: (1) Does public management research formulate and test hypotheses? (2) To what extent is public management research empirical? (3) Is the focus of empiricism on qualitative or quantitative inquiry? (4) To what extent are case study methodologies used? (5) To what extent are sophisticated quantitative methodologies employed? In the following section, I will outline the data and method that I use in order to answer the above questions.

Data and Method

In order to assess the state of public management research, I use all conference papers presented at the 6th, 7th, and 8th Public Management Research Conferences (PMRC). Held every other year, the PMRC focuses primarily on theoretically guided empirical research on public management. It is attended almost exclusively by academic researchers and is sponsored by the Public Management Research Association. PMRC requires papers to be posted in advance of the conference and made available to all attendees.[3]

PMRC papers present a strong dataset for exploring the state of public management research. It is one of the few conferences that include "public management" in their nomenclature, and it is certainly the largest public management conference in the United States.

[3] A list of papers included in this study can be obtained from the author. A small number of PMRC papers (10 of 198, or 5.1%) were excluded from this research because of file corruption or author refusal to post the paper to the conference website.

Using PMRC papers for this project helps to avoid the potential problem in deciding what actually constitutes public management research. Since the PMRC program is chosen by a committee of public management scholars, each PMRC paper has already been qualified as "public management" by at least part of the community. Certainly other conferences, notably the Association for Public Policy Analysis and Management, Academy of Management, and American Society for Public Administration, include public management research on their programs. However, given that those conferences do not require papers to be posted in advance of the meeting and made available to all attendees, it would be impossible to obtain such a broad cross-section.

There are some potential drawbacks to using PMRC papers in this project. By using conference papers instead of published journal articles, this project is limited in its ability to assess research in its final form. Indeed, many conference papers undergo a substantial revision between delivery at a conference and final publication, and the difference between the PMRC and journal versions of the same research introduces some error in these findings. However, given the number and diversity of journals in which public management research appears, it would be impossible to create a dataset as coherent and representative as this one. It would also invite criticism to choose some journals over others for analysis, a process that would require complicated and imperfect decision rules. Given the alternatives, PMRC papers seem to be a more realistic and useful dataset than a subset of journal articles.

In collaboration with two other researchers, the author read and analyzed 188 conference papers delivered in 2001, 2003, and 2005.[4] Of these, 21.3% (*N*=40) were presented at the 6th PMRC in 2001, 39.9% (*N*=75) at the 7th PMRC in 2003, and 38.8% (*N*=73) at the 8th PMRC in

[4] All three coders are working toward or have completed a Ph.D. with at least some emphasis on public management.

2005. The protocol used in the analysis appears in the Appendix (Table A2). Two individuals, one being the author, independently completed the protocol for each paper. Where the two coders disagreed, a third coder was asked to read the paper and make a decision without knowing the classifications given by the other two coders. In only a handful of cases did all three coders disagree, in which case the author examined the discrepancy and made a final determination. Coding was generally consistent, with some exceptions that will be discussed below. Initial interrater reliability statistics appear in the Appendix (Table A1).

Findings: Scope of Public Management

The first research question that I consider asks whether or not scholars associate themselves with the public management label. While not extensive, there does seem to be a general inclination toward using the "public management" nomenclature as an organizing name for the field (Table 1). Fifty percent (*N*=94) of papers stated explicitly that they were contributing to the public management literature, compared to 29.3% (*N*=55) that referenced "public administration" and only 3.2% that identified with "public policy."[5] Almost 6% (*N*=11) simply referred to management generally, while 11.7% (*N*=22) did not identify an area to which the research was designed to contribute. Public management outnumbered public administration, public policy, and (generic) management, but there is no *consensus* among researchers that public management is the field to which they intend to contribute. Furthermore, this number could be artificially boosted by the title of the conference, which might motivate scholars to use the public management label for these purposes but drop it afterward. It is an interesting time to

[5] Many of the PMRC papers were in WordPerfect or Microsoft Word format, which permitted us to conduct a search for these terms in the document. If multiple terms (e.g., public administration and public management) were used, I identified which seemed to be the primary contribution sought by the author(s). This was often mentioned in the first several paragraphs.

be considering the public management term; the introduction of the governance approach to research, it is possible that use of public management language could decline. Governance is a handy term that is sufficiently ambiguous to satisfy scholars with varied interests, and it accommodates those who do not want the "applied" label of management attached to their work.

Table 1: Public Management Nomenclature

To which field does the paper state it is contributing?

Response	*Number*	*Percentage*
Public management	94	50.0%
Public administration	55	29.3%
Management	11	5.9%
Public policy	6	3.2%
None of the above	22	11.7%

The second question that I sought to answer was whether or not public management research addressed the needs of practitioners. The findings reveal that these papers demonstrate a strong tendency toward academic research, with most choosing not to address practitioner or policy implications. Almost three quarters (70.7%, N=133) did not provide explicit recommendations for practice. This is an interesting result, given the relatively strong emphasis in the literature on prescription and actionable research. It is possible that this is simply a failure of the coding scheme – perhaps many of these papers are prescriptive in that they consider best practices or governmental performance as key themes but do not explicitly outline how practitioners might accomplish them. However, one must ask whether or not such prescriptive research is valuable if it does not lend itself to easy interpretation by those who would implement the prescription itself. Two small caveats warrant mention on this finding. First, this is likely at least partially due to the academic nature of PMRC, particularly compared to other professional meetings where public management papers would be delivered. Second, it is possible that these papers address practitioner concerns and policy implications in their final, published form. As conference papers completed on a deadline, it is possible that authors chose not to prioritize the practical side on the first draft of the paper. However, unless the error resulting from these caveats is substantial, it is unlikely that the bulk of the evidence would swing the other direction.

Table 2: Source of Public Management Research Data

Source of Data/Focus of Discussion[6]	*Number*	*Percentage*
Local government (counties, cities, or towns)	54	29.7%
Federal government	50	27.5%
State government	41	22.5%
Public schools, utilities, and special district governments	17	9.3%
Non-profit organizations	16	8.8%
Private sector organizations	4	2.2%

Next, I examined whether public management researchers concerned themselves with public, private, or non-profit organizations (Table 2). The overwhelming majority of papers examined public and non-profit organizations (97.8%, N=178). If public and non-profit organizations are distinctive, then this body of research seems to recognize that. The largest category of research was that pertaining to local organizations, or counties, cities, and towns (29.7%, N=54). Research on federal government organizations comprised 27.5% (N=50) of the research, followed by state government organizations at 22.5% (N=41). Public schools and other special governmental districts made up 9.3% (N=17) of the papers, followed by non-profit organizations (8.8%, N=16). This diversity indicates that no one type of government agency

[6] I applied these categories to all countries, but there were no sub-national data used for countries other than the U.S.

dominates the public management field, despite whispers that research on public schools has taken over our journals.[7]

The fourth research question produced interesting findings. Interorganizational issues have received a great deal of attention, and given the realities of contracting and use of non-profits in service delivery, the field seems to be aligned with public management practice. Just over half of the papers (55.9%, *N*=105) focused on interorganizational issues, although the specific approach varied significantly. For many of these, this meant a focus on contracting out or alternative service delivery options. For others, it meant examining network management and managing "outward." Some of these used data from multiple partner agencies to test research questions,[8] while others were more conceptual.

Next, I asked whether or not public organizations focused on performance. Despite the *practical* emphasis on performance issues at all levels of government, the research literature does not appear to be too narrowly focused on this area. Roughly 1/3 (32.4%, *N*=61) of PMRC papers used performance as a key component or variable in research, compared to 67.6% (*N*=127) that did not consider performance as a primary theme. Of those 61 papers that focused on performance, 24 were delivered at the 6th PMRC in 2001, compared to 19 in 2003 and 18 in 2005, indicating a decline in emphasis on performance. This is an interesting trend and overall finding. It is possible that the research community has simply become fatigued by the strong emphasis on Reinventing Government and New Public Management in the late 1990s and early 2000s. As the field moves toward an increased emphasis on quantitative methods, it is also possible that scholars are avoiding performance because of its notorious measurement problems

[7] An analysis of journal articles could yield different results, but these data suggest that 90% of conference papers do not focus on public education organizations, a clear preponderance.
[8] I did not classify research as "inter-organizational" just because it used data from multiple organizations. The organizations must have been partners in a meaningful way and a component of the manuscript had to examine the partnership.

(but see Boyne et al., 2007). While some areas, notably public education, lend themselves to easy performance measurement, other substantive policy areas do not. Research using data from across policy areas is particularly doomed in this regard, since a common performance metric has eluded researchers.[9]

Given public management's broad scope and definitional ambiguity, my sixth question sought to uncover more specifically what comprised public management research (Table 3). The results uncovered substantial diversity. I identified fifteen subfields of public management with two or more papers each, and 9.0% (*N*=17) of the papers eluded classification into one of the categories that I established prior to coding the manuscripts. Nevertheless, one area – networks and privatization – was the dominant category, accounting for 20.2% (*N*=38) of the papers in the dataset. A number of other categories were tightly clustered. Fifteen papers (7.9%) examined organizational change and innovation, followed by fourteen papers (7.4%) that looked at recent public management reforms. Twelve papers each (6.4%) considered diversity and research methods. Other areas with ten or more papers each included strategic planning and management (*N*=11, 5.9%), employee motivation (*N*=11, 5.9%), leadership (*N*=10, 5.3%), and information technology (*N*=10, 5.3%).

Despite finding earlier that many of the papers did not address practitioner needs directly, this distribution seems to indicate that public management research is seeking to fulfill the *substantive* needs established by practitioners. As government and non-profit organizations become increasingly networked, and in the U.S. context, political officials increasingly favor contracting out, it makes sense that public management research would tackle networks as its most common theme. Similarly, organizational change and innovation and government reform

[9] One might argue that PART scores or subjective indicators of performance can be profitably used to compare agencies in different policy areas, but this presents other measurement challenges.

have been vital to effective practice in the past 10-20 years. As government organizations introduce market-oriented reforms and encourage innovative behavior, it is important that research produce recommendations for success in these areas. Diversity management, another one of the top areas of research, is also a dominant concern among practitioners: about 90% of agencies at the federal level have adopted formal diversity management programs (Kellough & Naff, 2004). While I indicated above that much of the research analyzed here does not provide explicit recommendations for practitioners, it is noteworthy that research *content* is directed firmly at some of the key needs in the field.

Table 3: Public Management Research Content

Which of the following areas of public management best describes the focus of the piece?

Research Area	*Number*	*Percentage*
Networks, privatization, contracting out, "Hollow State"	38	20.2%
Organizational change and innovation	15	8.0%
Public management reform (i.e., New Public Management, Reinventing Government, President's Management Agenda)	14	7.4%
Diversity management and representative bureaucracy	12	6.4%
Research methods and epistemology	12	6.4%
Employee motivation, including Public Service Motivation	11	5.9%
Strategic planning and management	11	5.9%
Information technology and e-government	10	5.3%
Leadership and decision-making	10	5.3%
Non-profit management, including managing volunteers	9	4.8%
Accountability	8	4.3%
Policy implementation	7	3.7%
Budgeting and financial management	5	2.7%
Human resources management	4	2.1%
Conflict resolution and management	3	1.6%
Public-private distinctions	2	1.1%
None of the above	17	9.0%

One caveat is necessary for this dimension of the analysis. Many of these categories are overlapping, and papers might contribute to multiple areas at the same time. For example, one paper could easily address organizational change, public management reform, and strategic planning simultaneously (and some did). I purposefully did not classify papers into multiple categories – it is easier to identify the *primary* subfield to which a paper contributes than to determine how much of a paper's content is sufficient to classify it into a particular category, if multiple categories are possible. Nevertheless, this dimension resulted in the lowest interrater reliability and likely raises the most questions about the coding process. What I hope to demonstrate here is a general overview of public management research content, understanding that some might disagree with these choices and categories.

Findings: Research Methods

The first question posed about public management research methods concerned the use of hypothesis testing. I found that 67.6% (*N*=127) of the papers analyzed tested hypotheses, compared to only 32.4% (*N*=61) that did not. Whether this result represents a positive or negative finding depends on where one sits, in a sense. For those who adhere to mainstream social science empiricism, where statistical significance and hypothesis testing are the most common means of identifying relationships, this may seem promising. For those who argue that empiricism is irrelevant, or for those who are ardent empiricists but have conceptual concerns with hypothesis testing, this may seem troubling. Research that did not test hypotheses covered a wide range of topics but was typically a descriptive or definitional study of a concept or tool. It is difficult to gauge whether this work is more, less, or equally valuable as research that tested hypotheses. There is a bit of a logic problem with this particular question, since I am using empirical methods to test whether research uses empirical methods, and those who disagree with empiricism may well find my "value-neutral" approach to this question to be a problem. I will leave it up to the reader to decide whether this invalidates the finding, but it the evidence suggests that there is somewhat of a bias toward hypothesis testing in public management research.

Table 4: Public Management Research Methods

Nature of Data	*Number*	*Percentage*
Quantitative only	68	36.2%
Qualitative only	55	29.3%
Both quantitative and qualitative data	19	10.1%
No data were used	46	24.5%
Nature of Case Study[10]	*Number*	*Percentage*
Single case	18	34.6%
Comparative/multiple case study	34	65.4%
Quantitative Methods[11]	*Number*	*Percentage*
Descriptive statistics	66	75.9%
OLS regression	39	44.8%
Bivariate regression/correlation	33	38.0%
Limited dependent variable analyses	22	25.3%
Factor analysis	11	12.6%
Time series or panel data analysis	8	9.2%
Two- or three-stage least squares or Simultaneous Equations modeling	6	6.9%
Hierarchical linear modeling	1	1.2%

To what extent, then, is public management research empirical? I use "empirical" to mean research that uses data to make claims, which is possible in the absence of formulating

[10] One might argue that a large-N analysis from one geographic entity (e.g., public schools in the state of Texas) is a case study, but here I limit the term case study to those papers that do not employ large-N quantitative methods.
[11] Most papers used multiple quantitative methods, so the sum of percentages exceeds 100; figures reflect the percentage of quantitative papers that used each method, not the percentage of all papers.

formal hypotheses or research questions. Of the articles analyzed for this paper, 75.5% (*N*=142) used data to support claims (Table 4). Of those that did not, many of the articles were conceptual frameworks or "idea" pieces that were meant to provoke discussion or future research that was likely to be empirical in nature. It is not clear that *any* of the articles analyzed for this study chose not to use data because the authors did not believe empirical research to be a valid and worthwhile exercise. The evidence here overwhelmingly supports a conclusion that public management is an empirically oriented field of study.[12]

If the field seems to focus strongly on empirical methods, then what type of data prevails? Of the papers we analyzed, only 10.1% (*N*=19) used the mixed methods approach espoused by scholars as the ideal means of answering management questions. By contrast, 36.2% (*N*=68) used only quantitative methods, while 29.3% (*N*=55) used only qualitative methods. This provides an interesting glimpse into the priorities of the field. It is often the case that mixed methods are expensive, time consuming, and difficult to employ, which is likely the explanation behind such a small percentage of papers using both quantitative and qualitative approaches. What is more surprising is the relatively even distribution between quantitative and qualitative data. There has been little research on this point, but the evidence generally has pointed toward quantitative methods as being the dominant force in management scholarship. To the contrary, quantitative papers outnumbered qualitative papers by only thirteen over a four year, three-conference period of time. As with the finding above on hypothesis testing, whether this is positive or negative depends on where one sits. For those who espouse methodological pluralism (within the confines of empiricism, of course), this indicates that public management scholarship does not limit itself to any one approach. For those who believe that quantitative research should

[12] It is important to note that PMRC does specifically seek empirical research, although it is not a requirement for selection. A different sample of public management research could well reflect a lack of attention to empiricism, but it seems unlikely that the difference would be stark.

predominate, this could demonstrate that public management research has not made as much progress as would be ideal. Evaluating the quality of the research in these papers goes beyond the scope of this project, but a further analysis of these manuscripts would assist in determining whether the distribution of quality is even for quantitative and qualitative research.

In addition to considering the type of data, I also classified whether each paper was a single case study, comparative case study, or large-N analysis. Fifty-two of the papers were case studies: 65.4% (*N*=34) were comparative case studies of at least two cases, while 34.6% (*N*=18) were single case studies. Eighty-three of the papers were large-N quantitative analyses, where the mean number of cases was 2,790. This suggests that Perry and Kraemer (1986) were correct to advise the field to take case studies seriously, since a reasonable percentage of public management papers seems to use the case study as method of choice. It goes beyond the scope of this project to gauge whether the quality of the case studies is greater than, less than, or equal to that of the large-N work, but this could be a fruitful avenue for future research.

Finally, I sought to uncover the extent to which different quantitative methods were employed in public management research. The results were not surprising, but not uplifting, either. The most common approach to quantitative data analysis was the provision of descriptive statistics, used by 75.9% (*N*=66) of the papers. The papers were coded for all of the quantitative tools used, not just the most advanced, so it makes sense that the largest category on this variable would be the most basic. The second most common tool used was OLS regression, included in 44.8% (*N*=39) of the papers presented. Given Brewer et al.'s (1998) finding that most doctoral dissertations used regression as the primary form of analysis, and Lynn et al.'s (2001) assertion that OLS was the predominant tool for the field, this seems to make sense. Behind OLS regression was bivariate regression/correlation, used by 38.0% (*N*=33) of the papers. Analyses for models with limited dependent variables, such as Logit, Probit, Tobit, and others, accounted for only 25.3% (*N*=11) of the papers presented. It is possible that only 25.3% of the models presented used dependent variables that violated an OLS assumption and made it inappropriate, but that does not seem likely. Indeed, a quick analysis of some of the other papers that used OLS uncovered a host of studies that should have used a different technique. I do not present those preliminary and casual findings here, but future research might attempt to more systematically analyze the appropriateness of the quantitative tools used in public management research.

I also found little prevalence of three other advanced quantitative tools. For example, factor analysis was used by only 12.6% (*N*=11) of the papers, and time series/panel data analyses were employed by only 9.2% (*N*=8). Factor analysis can be a particularly useful tool in developing appropriate indices and multidimensional constructs in management research, but these papers were more likely to use additive indices or constructs measured by a single variable. Time series is also a key tool for management questions, since much of the relationships that we seek to understand in public management and public policy are not limited to a single point in time. The lack of time series analyses may reflect the dearth of available data measured over time rather than inadequate training in time series methods, but perhaps that means that the field should invest more in creating datasets that are appropriate for the sorts of questions that it needs to answer. Only 6.9% (*N*=6) of the papers used two- or three-stage least squares or Simultaneous Equations models. As with the finding above for limited dependent variables, it seems hard to believe that only six of the papers presented over three years used variables that did not pose endogeneity problems. It is perhaps unfair to be too harsh on this point, since appropriate instrumental variables are extremely difficult to identify and implement, but the public management community should consider ways to increase the availability of data in order to provide more options when this is the case. It is beyond the scope of this paper to examine the appropriateness of the method used by each case analyzed here, but heightened attention to some of these quantitative tools would likely improve the rigor of public management research.

Finally, it is perhaps most troubling that only one of the studies that we examined used hierarchical linear modeling (HLM). Despite Lynn and colleagues' research identifying explicitly how hierarchical interactions affect public policy provision, there seems to be little initiative to implement multilevel modeling strategies that will improve research. While multilevel modeling is not always the best tool, it seems unlikely that it was the best tool in only one paper over a three-conference, four-year period. Similar to problems noted above, it is likely the absence of hierarchically organized data that is the most important explanation behind this trend. This provides even further support for the argument that public management research must build more data in order to move to the next level of methodological sophistication.

Discussion

Where do these findings leave the field of public management? I have answered eleven questions about public management research, but those analyses are of little value when considered in isolation. I draw six conclusions from this paper that can be used to assess the scope and methodology of public management research.

1. Public management has embraced its "publicness" and is firmly focused on public and non-profit organizations.

It is clear from these analyses that scholars in public management are not recycled business school researchers, but rather those with a keen appreciation for the distinctiveness of public organizations. Very few studies used data from private-sector organizations. The next step for public management research is to evaluate the extent to which public and non-profit organizations are similar enough to form one area of research or different enough to warrant separation. In addition, as the line between public and private becomes blurred by contracting out and other reforms, the field should keep an eye on how it measures those distinctions and continue to assess whether the differences are relevant.

2. *Public management has placed due emphasis on inter-organizational issues, focusing appropriately on understanding collaboration, partnership, and network management.*

Over half of the papers focused on inter-organizational issues, and the largest subfield of inquiry was networks and privatization, which accounted for just over 20% of the papers. As Lynn et al. (2001) argue, governance is a complex phenomenon that cannot be understood by examining a single organization or program. Unfortunately, it is rare that public management research uses appropriate quantitative tools for this sort of arrangement, choosing traditional OLS regression analysis over the (often) more appropriate HLM strategy (see below). As contracting out and alternative methods of service delivery become even more common, it will be vital for public management scholars to continue efforts to understand complex inter-organizational dynamics.

3. *Public management embraces a variety of empirical methods, approaches to analysis, and subfields of inquiry.*

There is no dominant force in public management research, aside from what appears to be a very strong preference for empirical research. Within the empirical approach, scholars seem to use quantitative and qualitative methods with roughly the same frequency, although mixed methods are not as prevalent as many would like. There is an interesting mix of case study and large-N quantitative methodologies. Data used in public management research are drawn broadly from a variety of organizations, including federal, state, and local government; public schools and special districts; and non-profit organizations. Subfields of emphasis are diverse, with no category accounting for much more than 20% of the total sample. Public management research seems to be inclusive of diverse and even competing perspectives.

4. Public management has not determined whether or how to bridge the theory-practice divide.

The bulk of public management research does not offer explicit recommendations for how practitioners and policymakers can take advantage of their findings. This constitutes an identity crisis for the field, given that most definitions of public management note an explicit orientation toward prescription or improved practice. It is not necessary for research to "chase" the practical needs of managers and policymakers, led down an applied path with no theory to guide them, but it is also questionable for research not to engage in practical implications at all. A balance between theory and the needs of practitioners might be the best approach, but public management may require further calibration in order to reach it.

5. Public management research is challenged to better understand performance.

Practitioners work in an environment that is increasingly attuned to organizational performance as a key outcome, but research on performance in the public sector has actually *slowed* (but see Boyne et al., 2007). Given the difficulties inherent in performance measurement and management, it is hardly surprising that researchers would focus attention on other areas, but a renewed effort may be required to meet the needs of management practice. If public management is prescriptive and works to identify how things *should* be done, then understanding performance and its determinants should be a top priority for the field.

6. Public management quantitative methods are in dire need of improvement.

Public management quantitative methods remain basic and lack sophistication. Despite clear and focused calls for multilevel modeling strategies, practically none of the papers we analyzed employed HLM or similar approaches. Papers using limited dependent variables often used OLS regression; very few time series analyses were conducted, despite a plethora of research questions that have longitudinal aspects or characteristics; and endogenous models did not use two- or three-stage least squares or other methods to repair the endogeneity. The bulk of papers employed simple descriptive statistics. Many of these issues result from a lack of available data, which may be the most dangerous shortcoming in the field. Building comprehensive, multilevel datasets that are available publicly is key if these problems are to be improved.

Conclusion

These six conclusions are offered as food for thought as the field continues to assess what it is and what it aims to be. This research has some limitations, many of which were outlined in the data and methods section above. Future research should consider other populations of manuscripts from which to draw a sample for analysis. Published journal articles, doctoral dissertations, and books on public management topics would be fruitful avenues for such research. Future efforts should also make an attempt to gauge the appropriateness of methods used by public management researchers. In many cases, OLS regression is the most appropriate tool for quantitative analysis. This paper is limited in its ability to assume that the research analyzed should have used a different technique in any particular case, and a systematic review of methodological appropriateness would shed light on this question. Finally, this research makes no normative argument about the comparative worth of different epistemological orientations. A more nuanced and comprehensive discussion of positivist and post-positivist lenses would be a valuable undertaking for public management scholars to undertake. In the meantime, public management researchers should continue to grapple with the theory-practice divide, performance measurement, and choice of appropriate quantitative tools.

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Appendix

Table A1: Interrater Reliability Statistics

Question	*Matched*	*Unmatched*	*Percentage*
Does the piece state explicitly that it is seeking to contribute to the "public management" literature?	181	17	91.4%
Which area of public management best describes the focus of the piece?	125	63	66.5%
Does the piece link a specific component of public management to organization- or individual-level performance	170	18	90.4%
Does the piece focus on inter-organizational (rather than intra-organizational) issues?	165	23	87.8%
Does the piece explicitly address practice? Does it offer best practices or advice for practitioners?	177	11	94.1%
Does the piece formulate and test hypotheses/research questions?	180	8	95.7%
Nature of the data	129	13	90.8%
Number of observations [if quantitative]	67	17	80.7%
Quantitative methods used [if quantitative]	64	23	72.7%
Type of case study employed [if a case study]	51	1	98.1%
Sector studied [state, local, federal, etc.]	162	26	86.2%

Table A2: Protocol for Analysis

(1) Does the piece state explicitly that it is seeking to contribute to the "public management" literature?

(a) Yes
(b) No, but it mentions "public administration"
(c) No, but it mentions "public policy"
(d) No, but it mentions "management" generically
(e) No, and it does not mention any related term

(2) Which of the following areas of public management best describes the focus of the piece?

(a) Human resources management
(b) Organizational change and innovation
(c) Diversity management and representative bureaucracy
(d) Leadership and decision-making
(e) Motivation, including public service motivation
(f) Networks, privatization, contracting out, "Hollow State"
(g) Information technology and e-government
(h) Public management reform (i.e., New Public Management, Reinventing Government, President's Management Agenda)
(i) Strategic planning and management
(j) Policy implementation
(l) Conflict resolution and management
(m) Accountability
(n) Financial management and budgeting
(o) Non-profit management, including managing volunteers
(p) Public-private distinction
(q) Research methods and epistemology
(r) None of the above

(3) Does the piece link a specific component of public management to organization- or individual-level performance?

(a) Yes
(b) No

(4) Does the piece focus on inter-organizational (rather than intra-organizational) issues?

(a) Yes
(b) No

(5) Does the piece explicitly address practice? Does it offer best practices or advice for practitioners?

(a) Yes
(b) No

(6) Does the piece formulate and test hypotheses?

(a) Yes
(b) No

(7) The data used in the piece were:

(a) Quantitative
(b) Qualitative
(c) Both quantitative and qualitative

(8) Number of observations? _________

(9) If data used were quantitative, which of the following analyses were used? [check all that apply]

(a) Descriptive statistics (frequencies, means, etc.)
(b) Bivariate regression/correlation
(c) OLS regression
(d) Limited dependent variable techniques
(e) Time series or panel data analysis
(f) Two or Three Stage Least Squares or Simultaneous Equations Models
(g) Hierarchical Linear Modeling
(h) Factor analysis

(10) If the piece was a case study, was it a single case study or a comparative case study (i.e., multiple case study)?

(a) Single case study
(b) Comparative/multiple case study

(11) From which area of public management were data drawn? [mark all that apply]

(a) Federal government
(b) State government
(c) Local government (counties, cities, or towns)
(d) Public schools/utilities/special districts or types of government
(e) Non-profit organizations
(f) Private organizations