ABSTRACT: In this article we examine the state of public management research, specifically focusing on the scope of research and variety of methodologies pursued in the field. We use a sample of manuscripts from three successive meetings of the Public Management Research Association to explore these issues. Our analysis is organized along four themes that have been central to public management’s identity as a field of research: (1) the link between theory and practice; (2) focus on prescription and performance; (3) debate over empirical and nonempirical approaches; and (4) preferences for quantitative or qualitative data. We find that public management research has not yet bridged the gap between theory and practice, although substantive areas of research appear to reflect current trends in the public sector. There is moderate but slightly declining interest in performance. Empirical methods appear to be the norm, with an even mix of qualitative and quantitative data.

There has been very little examination of the progress that public management research has made in advancing knowledge. Public management is a new field of study that is still developing norms and approaches to research, and key questions push at its identity. How can public management be distinguished from public administration and public policy? How should it manage its relationship with practicing public managers? Should it adopt a methodological pluralism or focus on a practical, applied empiricism? Is public management a craft, an art, a science, or a profession (Behn 1996; Lynn 1996)? There is notable disagreement on all of these questions, which makes it difficult to coherently examine progress in
knowledge-building. We are not yet to the point where we can ask, “Are we there yet?” We do not even know where we are going.

Despite division among public management scholars about the identity, goals, and research orientation of the field, it is vital to understand how the field is going about advancing knowledge, even if we cannot all agree on whether it is the right way. In this paper, we examine the state of public management research by analyzing the scope and research methodology employed in a sample of public management studies. We begin by outlining the history of public management, followed by an explanation of the core questions and issues that we consider in our sample of public management studies. After discussing the data, method, and findings, we conclude by recommending ways that public management research can more profitably push forward.

THE ROOTS OF PUBLIC MANAGEMENT

There is disagreement as to how the field of public management actually began in the United States, but most would probably agree that it evolved from the intellectual history of public administration. Prior to the 1950s, the public administration and organization studies literatures were coherently focused on economy and efficiency (Gulick and Urwick 1937; Taylor 1919; White 1926). During the 1950s scholars began to argue that public organizations were distinct because of their political nature, calling for less focus on efficiency and a greater focus on democracy (Gaus 1950; Waldo 1948, 1952). This created a separation between public administration and organization studies that arguably still persists today (Kelman 2007), but some cast public management as an attempt to rejoin public administration and mainstream management (Perry and Kraemer 1983; Rainey 2003). A series of empirical studies in the 1970s began to analyze the environments in which public organizations operated and the management challenges faced by those working in government agencies, using generic management theories coupled with data from the public sector (Meyer 1979; Rainey, Backoff, and Levine 1976; Wamsley and Zald 1973). Empirical research on management in public organizations began to build, borrowing theory from generic management but also generating a distinct research area that focused on managing public organizations. To many, this is the initiation of the public management field.

Others argue that public management did not begin as an area of research, but rather as a means of policy schools distinguishing themselves from public administration programs (Lynn 1996). In the mid-1960s, a push by the Ford Foundation led to the creation of eight schools of public policy, tasked with training public servants who were well-versed in both substantive policy issues and rigorous analytical methods (Ellwood 2008). The focus on the latter was a marked departure from public administration programs: “…the first generation of the public policy movement looked down on public administration as a brain-dead endeavor that taught facts rather than analytics” (Elwood 2008, 174). Policy schools recognized the need for management training in the curriculum, but chose to adopt the name “public management” in order not to be mistaken for traditional public administration.
Public management education in schools of public policy focused on executive-level policy leadership rather than mid-level management skills (Lynn 1996), in large part because the policy analysis function was housed at the top of the hierarchy (Radin 1997).

Both of these explanations probably hold some truth. Other factors that are less tangible and more random are probably also at work. For example, the worldwide reforms in the 1980s and 1990s to make government more efficient and effective are often grouped under the umbrella term “New Public Management.” Many of those reforms are based explicitly on a philosophy of “managerialism” (Pollitt 1991), and use of the “manager” root word is likely to encourage a shift from public administration to public management worldwide. Similarly, schools of business administration have undergone a parallel shift over the past thirty years, increasingly renaming themselves schools of “management.” As a result, many scholars of public administration—and to a much lesser extent, public policy—are likely to have recast their work as “public management” more in response to isomorphic pressures than to substantive considerations. If this is the explanation, it would suggest that public management is the natural progression (and often the identical twin) of public administration, with no meaningful distinction between the two.

The use of the public management terminology is purposeful for some and accidental for others, but this does not devalue the systematic need to examine the state of the field’s research. It warrants a caveat, to be sure. Given the interconnectedness of these fields, it is impossible for us to claim that the results we discuss here reflect only public management and not public administration or public policy. However, these results do shed some light on the progression of a field that is a key part of public service education. For example, a number of faculty have “public management” in their title. Some departments are named “Department of Public Management and Policy” or have a “public management faculty.” Students at many universities can elect an MPA, MPP, or PhD concentration in public management. Almost all will take a course with “public management” in the title. What does it mean for faculty to carry these titles and work in these departments? What does it mean for a student to earn a degree with this concentration? A thorough and unforgiving examination of research is key to understanding how the field of public management is taking shape.

THEMES FOR ANALYSIS

We center our analysis on four themes that have been at the center of public management discussion. Our list is certainly not exhaustive, and we acknowledge that other scholars may have chosen different themes to investigate. We use these as an organizing framework for reading and understanding the public management studies in the sample we generated for this study. Our focus is two-fold. First, we examine two themes related to the scope of public management: (1) the link between theory and practice; and (2) the role of performance. Second, we examine two themes related to public management methodology: (1) the debate over empirical versus nonempirical approaches; and (2) use of qualitative and quantitative methods.
Public Management as an Applied Field: Bridging the Theory–Practice Divide

The divide between public management researchers and practicing public managers has been deep for some time. Even though it is an applied field, public management often does not overtly promote interaction between the two sides. For example, research often does not adequately delineate policy and management implications, focusing instead on sophisticated quantitative analyses that are of little use to practitioners (Barzelay and Thompson 2009; Ghoshal 2005; Perrow 2007). On the other hand, practitioners are often suspicious of academics and are quick to discard the value of research that does not mesh well with their own previous experience. Academics are protective of their research and insist that the needs of practitioners not drive their research agenda; practitioners are reluctant to share organizational data with academics who could potentially make good use of them.

Bozeman (1993) defines public management research as being concretely concerned with prescription and prescriptive theory, indicating that some amount of interaction between academics and practitioners is to be expected. In addition, all three of Behn’s “big questions” (1995, 315) for public management are oriented toward finding answers to real public management problems: “(1) How can managers break the micromanagement cycle?; (2) How can public managers motivate people to work energetically and intelligently toward achieving public purposes? and (3) How can public managers measure the achievements of their agencies in ways that help to increase those achievements?” (Behn and Bozeman reflect similar arguments made by others that public administration should focus on identifying how things should be done, not just how they are done (Barzelay and Thompson 2009; Chisolm 1995; Gill and Meier 2000, 2001; Meier and Keiser 1996; Overman 1989). Much of this research is based on Simon’s notion of a “science of the artificial” or “design science” (1969) that provides explicit links between research, pedagogy, and practice.

The theory-practice issue in public management follows decades of debate in public administration about the relationship between scholars and practitioners. In 1956 Thompson wrote that public administration research should resist pressure for immediately applicable results, arguing for a distance between theory and practice. More recent research has called for a closer relationship. 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. In his examination of whether public management was an art, science, or profession, Lynn (1996) advanced a fourth option—public management as craft, where research informed practice by producing explanatory heuristics. 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 such as policy implementation (O’Toole 1997), policy analysis (Bardach 2004; Lynn 1999), and organizational science (Rousseau, Manning, and Denyer, forthcoming) as well.
Concern with Performance

The second theme that we examine in our analysis is organizational performance. Recent reforms related to the New Public Management and Reinventing Government have shifted the emphasis of government worldwide toward efficiency and results (Kettl 2000; Osborne and Gaebler 1992). Like for-profit firms, government agencies are developing strategic plans, developing performance metrics, and experimenting with performance-based compensation (Bryson 2004; Moynihan 2008; Perry, Engbers, and Jun 2009). As Radin (2006) writes, these efforts are hardly new: U.S. agencies experimented with performance-based budgeting in the 1960s, followed by Management by Objectives, Zero-Based Budgeting, the Government Performance and Results Act, and finally, the Program Assessment Rating Tool. However, as information has become easier to obtain and communicate to the public, pressures on public organizations to measure and report performance have mounted. Recent projects that rank or score government performance have found considerable appeal among both the public and elected officials (e.g., Best Places to Work by the Partnership for Public Service and the Government Performance Project conducted by the Pew Center on the States).

While this focus on performance makes sense in theory, the implementation of these reforms has been problematic. Measuring performance can be difficult in the public sector, where the lack of a bottom line makes it tough to articulate organizational goals (Chun and Rainey 2005; Pandey and Rainey 2006; Rainey 1993). This can lead to goal displacement, where agencies focus on minor goals that are not central to the core mission, just because they can be easily measured (Bohte and Meier 2000), or on inputs or outputs that do not promote the outcomes the organization is trying to achieve (Hatry 2007; Poister 2003). Even if measures can be articulated, implementation difficulties muddy the waters (Radin 2006). For example, many would argue that it is unrealistic to hold agencies accountable for achieving outcomes that are largely affected by forces outside the organization’s control. In addition, it is difficult to formulate an objective performance metric on which agencies in different policy areas can be compared directly. Does this mean that subjective indicators of performance should be used in the absence of objective data? Can effective service provision and policy implementation be quantified, and if not, how can qualitative data be used effectively in comparing performance?

There is some disagreement as to whether the field of public management is producing performance-oriented research to help solve these problems. For example, Kelman (2007) argues that public management research lags mainstream management research in its emphasis on performance. Boyne and Walker (2005) appear to agree, noting a limited number of studies on performance and not enough diversity in the data used in empirical research. Barzelay and Thompson (2009) argue that public management research should adopt Bardach’s “smart practices analysis” (1998) to better use theory and evidence to improve performance. On the other hand, several books have appeared in the past ten years on the topic of performance (Bouckaert and Halligan 2008; Boyne et al. 2007; Ingraham 2003; Pollitt 1999; Radin 2006). Entire journals are devoted to performance issues in public organizations.
Given its role in the practice of public management, a core question for research is whether, and to what extent, it takes performance issues seriously.

The Epistemology Debate: Empiricists vs. Nonempiricists

There has been little research on public management’s choice of method and epistemology. 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. Some studies related to the standing of the field within academia or the quality of its research seem implicitly to regard public management as existing within public administration (Gill and Meier 2000; Wise 1999). Research by Lynn and colleagues uses the governance lens, but much of their research applies directly to public management issues (Heinrich and Lynn 2001; Hill and Lynn 2005; Lynn, Heinrich, and Hill 2000, 2001). Kelman (2005) notes that public management and public administration, while distinct, share common methodological shortcomings that need to be addressed.

Much of the methodological debate centers on whether the field should promote use of empirical methods, an ongoing controversy in mainstream management as well (Hatchuel 2005; Wicks and Freeman 1998). Luton (2007, 542) 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. 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 responses from scholars with a more empirical orientation (Andrews, Boyne, and Walker 2008; Lynn, Heinrich, and Hill 2008; Meier 2005; Meier and O’Toole 2007), and it is unclear the extent to which those opposed to empirical methods represent a sizeable contingent of the public management community or a small minority that has difficulty generating influence. Raadschelders (2005) contends that a methodological pluralism that connects scholars with disparate orientations is the best solution, but the question then becomes whether such a pluralism could be effectively implemented (Jordan 2005; O’Toole 1995).

Despite healthy debate, empirical methods appear to be the default for public management researchers, with some differences among those within the empirical
camp. 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 or econometric 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).

Preference for Quantitative or Qualitative Approaches

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 U.S. public administration dissertations used regression analysis as the primary method. Lynn, Heinrich, and Hill (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, time series analysis, or two-staged least squares. Much of the research evaluating 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; Pitts and Wise, forthcoming; 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 terms (1996), 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, service provision, and policy implementation. One of the most important recent developments has been introduction of the governance lens in research (Lynn, Heinrich, and Hill 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 among multiple levels of governance. 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. 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 are flawed and yield inaccurate results. They compare OLS and hierarchical linear modeling (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 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. Kenneth Meier (2005), a noted quantitative methodologist, praises Lin (2000) and Maynard-Moody’s (1995) carefully executed qualitative research. Lynn, Heinrich, and Hill (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 training in qualitative methods in the field? Meier (2005) points out in his critique of the best practices literature that some qualitative research barely rises above the level of journalism, but Brower, Abolafia, and Carr (2000) find that qualitative work shares many of the same strengths and weaknesses as quantitative research.

DATA AND METHOD

In order to assess the state of U.S. public management research, we use all conference papers presented at the sixth, seventh, and eighth Public Management Research Conferences (PMRC). Held every other year, the PMRC focuses primarily on theoretically guided empirical research on public management (and public administration). It is attended almost exclusively by academic researchers and is sponsored by the Public Management Research Association. PMRC 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.

There are a number of issues related to choosing a sample of manuscripts for a study such as ours. Perhaps the most important is our choice to examine conference papers instead of published journal articles. Our study is consequently limited in its ability to assess research in its final form. Many conference papers undergo 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 difficult to generate a sampling frame that would realistically yield a dataset as coherent and representative as the one we use here. For example, some public management research appears in journals with “public management” in their name (International Public Management Journal and Public Performance and Management Review). Other papers are
published in journals using the phrases “public administration” (Journal of Public Administration Research and Theory) or “public policy” (Journal of Policy Analysis and Management). Still others appear in political science journals, specialty policy journals, and generic management journals. Many public management studies are published as books or book chapters, introducing another complication to generation of an acceptable sampling frame. We believe that the error in our findings that stems from using conference papers instead of published articles and books is less than the error we would find if we drew our sample from a sampling frame of published pieces.

An additional concern is that other conferences include public management research on their programs. Our choice of PMRC papers was purposeful. It would be impossible to obtain a representative cross-section of papers from practically any other meeting. The most important limitation is that no other conference requires that papers be posted online prior to the meeting. Any sample drawn from another conference would be biased against papers that were, for whatever reason, not made publicly available. In addition, papers at a number of conferences—for example, the Association for Public Policy Analysis and Management (APPAM) and American Society for Public Administration (ASPA)—include papers on non-public management topics. Even if we were to gain access to those papers, we would have to discern what did and did not constitute public management. Using papers from three different PMRC meetings results in papers that have been classified as “public management” by three different committees of scholars, a system of classification that is as rigorous as one could feasibly implement.

While we believe that this is the most representative sample of public management manuscripts that can feasibly be obtained, we recognize that there is likely to be some bias in the data. For example, anecdotal evidence suggests that PMRC papers focus more on theory and less on practice than those presented at conferences like ASPA or APPAM. The PMRC call for papers is explicit in articulating a preference for empirical research, which motivates some scholars to select out of the conference and the program committee to reject the proposals of others if they are not empirical. PMRC is a competitive conference, with only 1/3 of proposals being accepted in some years. The papers presented there, and consequently chosen for our sample, are likely to be of higher quality than the norm for public management research in general. PMRC is also primarily attended by U.S. scholars, which means that we are unable to be sure that the trends identified here can be generalized to other countries. We cannot claim that these papers constitute a random or representative sample of public management scholarship, but we believe that the snapshot that we provide is likely to be broadly indicative of trends in the field.

In collaboration with two other public management researchers, the authors read and analyzed 188 conference papers delivered in 2001, 2003, and 2005. Of these, 21.3% (N = 40) were presented at the sixth PMRC in 2001, 39.9% (N = 75) at the seventh PMRC in 2003, and 38.8% (N = 73) at the eighth PMRC in 2005. We read each paper with an eye toward gathering information about the four themes presented above, in addition to classifying papers into a series of substantive categories in order to describe the substantive emphases in the field. The protocol used in the
analysis appears in the Appendix B. Two individuals 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 authors examined the discrepancy and made a final determination. Coding was generally consistent, with some exceptions that will be discussed below. Interrater reliability statistics appear in Appendix A.

RESULTS

Given public management’s broad scope and definitional ambiguity, our first objective was to see more specifically what comprised public management research (Table 1). The results uncovered substantial diversity. We 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 we had established prior to coding the manuscripts (Appendix B). 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 (7.4%) looking at recent public management reforms. Twelve papers each (6.4%)

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

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 political officials increasingly favor contracting out, it makes sense that public management research would tackle interorganizational relationships and networks as its most common theme. On a similar note, organizational change and innovation and government reform have been vital to effective practice during the past decades (Fernandez and Rainey 2006). As government organizations introduce market-oriented reforms and encourage innovative behavior, it is important that research produce recommendations for successful implementation 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 and Naff 2004). While we find below 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.

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). We 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, our categorization of the paper topics resulted in the lowest interrater reliability (66.5\%) and likely raises the most questions about the coding process. What we hope to demonstrate here is a general overview of public management research content, understanding that some might disagree with these choices and categories.

After finding a pattern of research appearing to reflect practitioner concerns, we next examined the extent to which the papers developed explicit prescriptions for policymakers and managers. Our analysis on this point generated substantial agreement across readers (94.1\% interrater reliability). The findings reveal that these papers demonstrate a strong tendency toward academic or basic research, with most not explicitly addressing practitioner or policy implications. Almost three quarters (70.7\%, $N = 133$) did not provide 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 result 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 weight of the evidence would swing the other direction. On balance, we find that public management research reflects the environment in which public managers operate today, but it is less purposeful in its articulation of management implications.

Next, we asked to what extent public management research focused on performance. Despite the emphasis on performance by practitioners at all levels of government, the research literature does not appear to be too strongly 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 this as a primary theme (90.4% interrater reliability). Of those 61 papers that focused on performance, 24 were delivered at the sixth 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 that is likely to be influenced by junctures at which data from large-scale projects like GPP have become available for analysis. It is also possible that the research community has become fatigued by the strong emphasis on “reinventing government” and the 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 notorious measurement problems associated with research on the topic. While some areas—notably public education—lend themselves to easy performance measurement, other policy areas do not. Research using data from across policy areas is particularly problematic in this regard, since an effective common performance metric has eluded researchers.

We then turned our attention to epistemology and methodology, examining whether the papers in our sample engaged in formal hypothesis testing. We found that 67.6% \((N=127)\) of the papers analyzed tested hypotheses, compared to only 32.4% \((N=61)\) that did not (95.7% interrater reliability). 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 management technique. It is impossible 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 we are using empirical methods to test whether research
uses empirical methods, and those who disagree with empiricism may well find our “value-neutral” approach to this question to be a problem.

To what extent, then, is public management research empirical? We use “empirical” to mean research that uses data to make claims, which is possible in the absence of formulating formal hypotheses or research questions. Seventy-five percent of the articles analyzed \((N=142)\) used data to support claims (Table 2). Of those that did not, many were conceptual frameworks or “think” pieces 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. 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 less attention to empiricism, but it seems unlikely that the difference would be stark.

Our final area of analysis was in the type of data used in empirical research. Of the papers we analyzed, only 10.1% \((N=19)\) used the mixed methods approach espoused by many 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 (90.8% interrater reliability). 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. This is likely the explanation for such a small percentage of papers using both quantitative and qualitative approaches. What is more surprising is the relatively even distribution between

<table>
<thead>
<tr>
<th>Nature of Data</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative only</td>
<td>68</td>
<td>36.2</td>
</tr>
<tr>
<td>Qualitative only</td>
<td>55</td>
<td>29.3</td>
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<tr>
<td>Both quantitative and qualitative data</td>
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<td>10.1</td>
</tr>
<tr>
<td>No data were used</td>
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<td>24.5</td>
</tr>
<tr>
<td>Quantitative Methods</td>
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<td></td>
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<tr>
<td>Descriptive statistics</td>
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<td>75.9</td>
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<tr>
<td>OLS regression</td>
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<td>44.8</td>
</tr>
<tr>
<td>Bivariate regression/correlation</td>
<td>33</td>
<td>38.0</td>
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<tr>
<td>Noncontinuous dependent variable analyses</td>
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<td>25.3</td>
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<td>Factor analysis</td>
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<td>12.6</td>
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<td>Time series or panel data analysis</td>
<td>8</td>
<td>9.2</td>
</tr>
<tr>
<td>Two- or three-stage least squares or simultaneous equations modeling</td>
<td>6</td>
<td>6.9</td>
</tr>
<tr>
<td>Multilevel modeling</td>
<td>1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

*Note: 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.*
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 (Brewer et al. 1998). To the contrary, quantitative papers outnumbered qualitative papers by only thirteen over a five-year, three-conference period of time.

As with the finding above on hypothesis testing, whether this is positive or negative depends on one’s perspective. For those who espouse methodological pluralism (within the confines of empiricism), this indicates that public management scholarship does not limit itself to any one approach. For those who believe that quantitative research should 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.

Finally, we sought to uncover the extent to which different quantitative methods were employed in public management research. Almost all papers used multiple methods, which results in a sum of proportions that is well above 1. The most common approach to quantitative data analysis was provision of descriptive statistics, used by 75.9% (N = 66) of the papers (72.7% interrater reliability). 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 multivariate regression, included in 44.8% (N = 39) of the papers presented. Given Brewer et al.’s finding (1998) that most U.S. doctoral dissertations used regression as the primary form of analysis, and Lynn, Heinrich, and Hill’s assertion (2001) that OLS was the predominant tool for the field, this seems to make sense. Behind OLS multivariate regression was bivariate regression/correlation, used by 38.0% (N = 33) of the papers. Analyses for models with noncontinuous dependent variables, such as logit, probit, tobit, etc., accounted for 25.3% (N = 11) of the papers. It is possible that only 25.3% of the models presented used dependent variables that violated an OLS assumption and made OLS 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 due to the nature of the dependent variable. Examining the appropriateness of methodology is beyond the scope of this project, so we do not present findings on this point. However, it raises a suggestion that future research might attempt systematically to analyze the appropriateness of the quantitative tools used in public management.

We 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 many 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 longitudinal 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 noncontinuous dependent variables, it seems hard to believe that only six of the papers presented over three years used variables that did not pose endogeneity or simultaneity problems. It is perhaps unfair to be too harsh on this point, since appropriate instrumental variables are extremely difficult to identify, but the public management community should consider ways to increase the availability of data for the creation of instrumental variables in order to address the threat posed by endogenous or simultaneous relationships.

Finally, it is also troubling that only one of the studies that we examined used multilevel modeling techniques. Despite Lynn, Heinrich, and Hill’s research (2001) identifying how hierarchical interactions affect public policy provision, there seems to be little initiative to implement multilevel modeling strategies that will improve research. 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 larger and better sources of data in order to move to the next level of methodological sophistication. This certainly does not suggest that any of the manuscripts that we examined should have necessarily used multilevel modeling instead of the technique that they chose. Our concern is in the absence of multilevel modeling efforts.

**CONCLUSION**

Our analysis suggests that 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 quantitative methodologies, with opportunity to expand the use of more advanced quantitative methods that address dependent variable limitations, problems with endogeneity, and hierarchical relationships. Subfields of emphasis are diverse, with no category accounting for much more than 20% of the total sample of papers. Public management research seems to be inclusive of diverse and even competing perspectives.

We find that the theory-practice debate appears to be unsettled. The bulk of public management research examined here does not offer explicit recommendations for how practitioners and policymakers can take advantage of their findings. This reflects an ongoing 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. At the very least, public management scholars should make a stronger effort to identify and discuss the policy and management implications of their findings.

Along these same lines, we find that despite increased attention to organizational performance in practice, the research examined here shows that research on performance in the public sector has actually slowed. Given 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 (Kelman 2007).

The next step in the analysis of public management research should be an examination of the quality of research methods. Our findings suggest that relatively sophisticated quantitative methods are not being used very frequently. In some cases, the research question may not require a method other than that chosen, but in others it could be that the authors would improve their analysis by using a different tool. We cannot undertake that kind of analysis here, but we are struck by the relative paucity of studies that use techniques for noncontinuous dependent variables, account for endogeneity, take advantage of multilevel modeling, or use data drawn over time. To put it in Lynn’s terms (1996), we cannot answer whether public management is a science, but future research should expand upon our account here in order to move closer to an answer.

ACKNOWLEDGEMENTS

A previous version of this paper was presented at the 9th Public Management Research Conference in Tucson, Arizona, October 25–27, 2007. The authors thank Ravtosh Bal and Lauren Edwards for their research assistance, and anonymous reviewers for very helpful comments and suggestions.

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APPENDIX A: INTERRATER RELIABILITY STATISTICS

<table>
<thead>
<tr>
<th>Question</th>
<th>Matched</th>
<th>Unmatched</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which area of public management best describes the focus of the piece?</td>
<td>125</td>
<td>63</td>
<td>66.5</td>
</tr>
<tr>
<td>Does the piece link a specific component of public management to organization- or individual-level performance?</td>
<td>170</td>
<td>18</td>
<td>90.4</td>
</tr>
<tr>
<td>Does the piece explicitly address practice?</td>
<td>177</td>
<td>11</td>
<td>94.1</td>
</tr>
<tr>
<td>Does it offer best practices or advice for practitioners?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the piece formulate and test hypotheses/research questions?</td>
<td>180</td>
<td>8</td>
<td>95.7</td>
</tr>
<tr>
<td>Nature of the data</td>
<td>129</td>
<td>13</td>
<td>90.8</td>
</tr>
<tr>
<td>Quantitative methods used [if quantitative]</td>
<td>64</td>
<td>23</td>
<td>72.7</td>
</tr>
</tbody>
</table>

APPENDIX B: PROTOCOL FOR ANALYSIS

1. 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. Strategic planning and management
   j. Policy implementation
   k. Conflict resolution and management
   l. Accountability
   m. Financial management and budgeting
   n. Non-profit management, including managing volunteers
   o. Public-private distinction
   p. Research methods and epistemology
   q. None of the above

2. Does the piece link a specific component of public management to organization- or individual-level performance?
   a. Yes
   b. No
3. Does the piece focus on inter-organizational (rather than intra-organizational) issues?
   a. Yes
   b. No

4. Does the piece explicitly address practice? Does it offer best practices or advice for practitioners?
   a. Yes
   b. No

5. Does the piece formulate and test hypotheses?
   a. Yes
   b. No

6. The data used in the piece were:
   a. Quantitative
   b. Qualitative
   c. Both quantitative and qualitative

7. Number of observations? 

8. 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

9. If the piece was a case study, was it a single case study or a comparative case study (e.g., multiple case study)?
   a. Single case study
   b. Comparative/multiple case study

10. 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