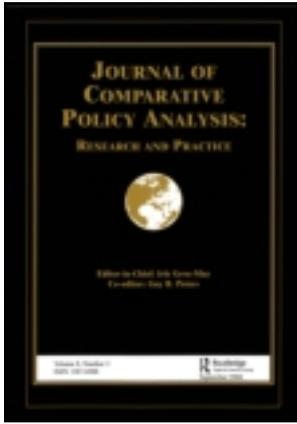


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Assessing Public Policy Research in Taiwan: An Analysis of Journal Publications, 1996-2007

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Comparative Statistics

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ABSTRACT *This study examines the contributors, subject contents, and methodologies of public policy scholarship in Taiwan. Through an analysis of 192 articles published in five journals between 1996 and 2007, it suggests that a professional journal solely devoted to public policy analysis is necessary to connect academic researchers and practitioners, and that policy studies in Taiwan must continuously raise the level of methodological rigor. The study's results help public policy communities in other countries to have a better understanding of Taiwan's public policy research; furthermore, by drawing attention to the problems and weaknesses in the development of Taiwanese public policy scholarship, the study is meant to advance the current discussion on ways to strengthen the quality of policy research around the world.*

I. Introduction

Regardless of their branch of learning, scholars have always been interested in the evolution and state of their scientific discipline. The reason for taking this inward look at one's own field every once in a while is simple: to take stock of what has been

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achieved recently and to consider future directions or actions. For the emerging public policy community in Taiwan, the need to engage in this self-evaluation or stock-taking has becoming pressing and imperative. Despite the discipline's rapid growth over recent decades, however, no study thus far has analyzed Taiwanese policy research in a truly systematic manner. Previous work in this area has been mostly focused on the various aspects of the Taiwanese public administration literature (for example, Sun 1998a, 1998b), but never specifically on the public policy literature. To bridge this gap in our understanding of public policy research in Taiwan, this article addresses the following three basic questions: 1) who contributes to public policy research, 2) what are the topic areas in policy research, and 3) how is the policy research conducted?

These inquiries into the state of Taiwan's public policy research merit serious consideration because we firmly believe that the issues of public policy *scholarship* and public policy *education* can seldom be easily divorced from one another. James Perry, former editor-in-chief of the *Journal of Public Affairs Education*, opined that public affairs programs need to concern themselves with three "multi-faceted" (but inseparable) aspects of public affairs education: a) preparing students for professional lives in democratic systems; b) improving the nature and experiential character of public affairs pedagogy; and c) increasing the extent to which public affairs *scholarship* is engaged in public service (Perry 2004: 193–195, emphasis original). Writing about the state of doctoral public administration programs, Raadschelders and Douglas (2003: 242) share a similar perspective:

Training students to perform well at publishing should be done as a means to help them develop as individuals. This, we expect will improve the quality and impact of their scholarly research, academic teaching, and/or practical service; all of which can contribute to a better-educated citizenry.

In light of global developments in the public policy analysis profession and the emergence of numerous public policy programs around the world (see Fritzen 2007; Geva-May et al. 2007), we feel that comparative studies of public policy instruction should also expand to include topics that are pertinent to public policy scholarship, including its promises, prospects, and challenges. So far, most of the emphasis in the comparative public policy education literature is focused on issues related to curricular design, program development, benchmarking and accreditation, and so forth (Geva-May 2009). As much as these concerns are vital to the growth and development of a global policy analysis profession, they only communicate part of the story. This study can thus be regarded as an effort to report the "research" or the "scholarship" side of Taiwanese public policy education, as opposed to the "teaching" or the "pedagogical" side.¹ Additionally, our attempt to draw attention to the development of public policy analysis in a small developing country such as Taiwan is meant to advance the current discussion on ways to strengthen the quality of policy research in all parts of the world.

Throughout most of its history, public policy research in Taiwan has been closely intertwined with that of public administration. By most published accounts, the origins of public policy study in Taiwan can be traced to two key events that occurred in the 1970s. The first event refers to a series of public policy-related classes taught by Gerald McBeath (now a professor of political science at University of Alaska-Fairbanks), who was then a visiting professor at the National Chengchi

University; and the second event refers to a series of 16 public policy conferences, organized around the lectures of Professor Wendell Schaeffer, that were held over a five-month period in 1977 (Jan 2005; Lin 2005). Both of these seminal events were particularly significant in introducing the concept of public policy and its study to Taiwan, and soon after the conferences were finished, the first graduate program dedicated to the study of public policy in Taiwan was founded at the National Chung Hsing University (reorganized as National Taipei University) in 1977.

While other groupings are possible, Jan (2005) believes that the history of public policy research in Taiwan can be broadly divided into three periods: an initial stage (1970s), an enlargement stage (the 1980s to the mid-1990s), and an enrichment stage (the mid-1990s to the present). The first stage was principally about Taiwan learning and grasping the idea of a “policy science” from the West. The second stage saw Taiwan’s incipient policy research community flourishing rapidly and achieving some level of empirical and epistemological maturity, just as the country underwent peaceful democratic transformation and reform during the mid-to-late 1980s. The third and current stage may be characterized by a further expansion of the discipline along multiple dimensions, the coexistence of diverse research paradigms or perspectives, and the uneven movement towards the “indigenization” of policy research in the country (Chiang 1997).

Overall data provided by Taiwan’s Ministry of Education (MOE) can be useful to provide a snapshot of the field’s growth over the past two decades. For example, in 1991 MOE data show that six universities (three public, three private) offered instruction in public administration and/or policy. Yet by 2007, 25 universities (ten public, 15 private) from around the country did so, including eight institutions that grant PhD degrees. Back in 1991, there were a total of 113 university professors in public administration and policy departments, including 15 females. Sixteen years later, the total number of professors in the discipline has more than doubled to 265, while the number of women faculty has tripled to 47.

Some 30 years have passed since the concept of public policy study was first introduced to the domestic community of scholars in Taiwan. Yet much remains unknown about the contributors, subject areas, and methodologies of public policy research that is conducted. Answers to these questions can help us gauge the scope and direction of the field, including its overall characteristics, current challenges, and future prospects.

This paper is structured as follows. In section 2 we describe the study’s data and methods. In sections 3, 4, and 5 we present our core findings, which are organized around the three research questions that guide this study: the profiles and characteristics of contributors (“who”), the primary research focus or topic areas (“what”), and the methods employed in the policy research articles (“how”). Last, in section 6, we discuss the study’s main implications and provide suggestions for future research.

II. Data and Methods

The data for this study were gathered from an analysis of published research articles that appeared in five well-known academic public administration periodicals in Taiwan from 1996 to 2007. The five journals selected for analysis are the *Chinese Journal of Administration* (CJA), the *Chinese Public Administration Review* (CPAR), the *Journal of Public Administration* (JPA), the *Open Public Administration Review*

(OPAR), and *Public Administration and Policy* (PAP). These five journals were primarily chosen for two reasons: their high rankings on the list of Taiwan's *Best Political Science Journals* (Wu et al. 2003), and the journals' editorial commitment to advance the study of public administration in Taiwan, including policy research and analysis. There is, however, also a practical reason for using these journals as the basis for this study: since there is no flagship policy analysis or policy research journal in Taiwan, the most prestigious public administration periodicals are arguably the closest substitutes.

Following previous content analysis of journal articles (for example, Bowman and Hajar 1978; Legge and Devore 1987; Houston and Delevan 1990; Forrester 1996), we included only original, full-length research contributions in our dataset sample. Comments, replies, editorials, standard book reviews, and short introductions were excluded from further consideration. Twenty-one articles were removed because all of their authors had a foreign (non-Taiwan) address. A total of 722 articles from the five journals fitted our selection criteria. After reviewing the abstracts of the articles and using the coding schemes developed by Chiang (1997), Sun (1998a), and Lan and Anders (2000) as guidelines, we determined that 192 out of 722 (26.6 per cent) may be classified as policy research, policy sciences, or policy analysis, broadly defined (MacRae and Feller 1998). The distribution of policy research articles across the five periodicals are as follows: in three journals (CPAR, JPA and PAP), policy-related articles constitute about one-quarter of all articles (25.0 per cent, 23.7 per cent, and 28.3 per cent, respectively). OPAR is the only journal that published more than one-third of its articles on policy-related topics (37.3 per cent). CJA, on the other hand, had the smallest proportion of policy research articles at 18 per cent.

Each of the 192 policy articles in our database was coded along three basic dimensions: 1) authors' characteristics, which include their institutional setting, academic position/rank, educational background, and gender; 2) article's subject areas of research; and 3) the primary research methods or techniques used in the article, including whether or not it employed a quantitative method, its source of quantitative data (first-hand or second-hand), the type of statistical technique, and the method of qualitative research (if any). To the extent possible, all data were retrieved from the journal articles themselves. Occasionally, when articles provided too little background information regarding the authors, the MOE database, university catalogs, and/or departmental websites were used to fill in the gaps.

Admittedly, the resulting sample of 192 policy research articles and their 254 authors represents only a small subset of all policy research that is conducted in Taiwan. Nonetheless, we contend that our sample does capture a sizable portion of the academic scholarship that is policy-relevant, at least at the level of major public administration/policy journals in the discipline. In terms of the coding process, we do recognize that our judgments are subjective. To improve the data's quality, validity, and reliability as much as possible, all coding inconsistencies were resolved by a meeting of all the authors involved in the study.²

III. Author Profiles ("Who")

The basic descriptive characteristics of policy research authors are depicted in Tables 1–5. As the data from Table 1 show, 91.7 per cent of the authors are affiliated with

Table 1. Institutional affiliation of public policy authors

Author's institutional affiliation	Frequency (%)
Public university	56.3
Private university	35.4
Government agencies	4.3
Research institutes	2.4
Other or unknown	1.6
Total	100
<i>N</i>	254

either a public or a private university; only 6.7 per cent ($N = 17$) of authors hail from non-university institutions such as government agencies and research institutes. These figures corroborate the finding in public administration literature that academics are the principal contributors to knowledge advancement in the field (see Bowman and Hajjar 1978; Houston and Delevan 1990; Forrester 1996; Lan and Anders 2000). The fact that public universities outperform private universities in the aggregate (56.3 per cent against 35.4 per cent, respectively) fits the general perception of Taiwan's higher education and overall dynamics. Public universities in Taiwan are generally larger, older, more prestigious, and enjoy more resources than the private institutions. Professors in Taiwan's public universities generally also have a lighter teaching load compared to their counterparts in private universities. This confluence of factors favoring public universities usually puts the newer, less well-connected private institutions at some disadvantage when it comes to recruit (or to retain) the best academic minds in their faculty appointments.

The very low overall percentage (6.7 per cent) of policy articles written by practitioners and non-university faculty members in Taiwan, however, suggests two things. First, similar to the "ongoing struggle for connectedness" between scholarship and practice in American public administration (Newland 2000; Ospina and Dodge 2005; Raadschelders and Lee 2011), the linkage between the producers (academicians) and users (practitioners) of policy research in Taiwan is also not evident from an analysis of the journals' contributors.³ Compared with previous findings, the share of Taiwanese policy research authored by those not affiliated with universities is between 4 and 5 percentage points smaller than those reported in the literature.⁴ Second, despite the recent expansion of policy-oriented study in Taiwan, the problem of research utilization and diffusion (for example, Weiss 1979) is likely to continue to plague the domestic public policy community at large (Sun 1998a, 1998b). In fact, the predicament over knowledge utilization (or lack thereof) is not just exclusive to the Taiwanese policy research community. Larger and historically more established academic disciplines in Taiwan, such as public administration (Sun 1993) and sociology (Su 2004), appear to suffer from the same disorder.

In Table 2, the job positions (or academic ranks) of policy article authors are tabulated. As this table indicates, about 64 per cent of the articles were produced by tenured or tenure-track faculty members (including lecturers), with assistant professors leading the way at 25.6 per cent. What is very unexpected from the table, however, is the high level of research productivity shown by the group comprised of students and recent graduates of public policy programs: 27.2 per cent of all published articles were written (or co-written) by those who were still "learning

the ropes” about the discipline, surpassing even the assistant professors as the most productive cohort of policy research.

This last finding is very different from what is known in the mainstream policy literature. Most previous content analyses of American journals related to public administration and policy have found graduate student productivity to be quite low, normally 3–5 per cent of all articles sampled (Houston and Delevan 1990; Douglas 1996; Forrester 1996; Lan and Anders 2000; Watson et al. 2005). For example, Forrester (1996: 551) found that only 3.9 per cent of all articles from 26 public administration journals between 1989 and 1993 were attributed to students. Similarly, in eight public administration journals published from 1993 through 1995, Lan and Anders (2000: 146) found that 3.3 per cent of the articles listed a student as the first author, whereas the Houston and Delevan study (1990: Table 3) placed the number closer to 5.2 per cent. More recently, Watson et al. (2005: 58) found that a mere 4.8 per cent of all article authors in ten American Society of Public Administration journals from 1993 to 2002 were students.

For reasons yet to be fully understood, graduate students in Taiwan’s public administration and policy programs publish at an anomalously higher rate than their American counterparts. What explains the Taiwanese students’ success in publishing their work in academic periodicals? Our conjecture is that this is a direct consequence of many advanced degree-granting public policy departments in Taiwan mandating

Table 2. Job position or rank of public policy authors

Author’s job position or rank	Frequency (%)
Full Professor	12.6
Associate Professor	24.0
Assistant Professor	25.6
Lecturer	1.6
Student*	27.2
Others**	9.1
Total	100
<i>N</i>	254

*Includes PhD and masters students, as well as recent graduates.

**Includes full, associate, and assistant researchers from research institutes and centers, practitioners from government and business sectors, and scholars with other job titles.

Table 3. Cross-tabulation between university institutional type and faculty/student status

Institutional Type	Faculty*	Student**	Total***
Public university (%)	50.0	88.1	61.1
Private university (%)	50.0	11.9	38.9
Total (%)	100	100	100
<i>N</i>	162	67	229

Apart from the *N* row, cell entries are column percentages.

*Includes full, associate, and assistant professors, as well as lecturers.

**Includes PhD and masters students, as well as recent graduates.

***Table excludes practitioners from government agencies, scholars from research institutes and centers ($n = 6$), and other researchers whose academic or institutional status is unclear or unknown.

their students to publish in refereed journals before they can graduate from the program. Currently, all eight universities (both public and private) that confer PhD degrees in public administration and policy have publication requirements for the students in their program. Although these requirements vary by university, most departments ask students to have published at least two papers in peer-reviewed journals or books, either as the sole author or as the first author in a collaborative work. Thus graduate students in Taiwan are almost obliged by their home departments to publish, unlike students who do not face similar graduation requirements elsewhere. Nevertheless, we cannot and do not discount the students' own self-initiative or talent for producing quality work, or the possibility that they had received great faculty supervision and mentoring, as other potential reasons explaining the percentage disparity in article productivity rates between students in Taiwan and those in other countries.

The relatively high publication productivity rate demonstrated by Taiwan's policy students adds a new layer of complexity to the results obtained thus far. In Table 1, we found that more policy articles authors were located in the public universities than in the private ones. That finding, we reasoned, was likely due to the public universities being older, more prestigious, and having more resources than the private institutions, all of which allowed them to hire more and better faculty. In light of the results obtained in Table 2, however, we question whether the public universities' larger share of policy research articles could also be because of their students' contributions. Indeed, private universities did not establish a "stand-alone" PhD program in public policy and management until 2005, during which time there were already six universities across Taiwan that offered PhD instruction in public policy.⁵

Thus in Table 3 we cross-tabulate institutional type by faculty and student authors. The table indicates that, once students have their own separate category, the gap in faculty share of policy articles between public and private universities is now identical (50.0 per cent versus 50.0 per cent). Also, the data confirm our suspicion that student authors play a very significant part in enhancing the overall publishing productivity of public universities: 88.1 per cent of the student authors in public policy research are affiliated to public universities, while only 11.9 per cent of the student authors are from the private universities. In short, according to our data, graduate students (and their contributions to the academic literature) are essentially what make up the difference in the scholarly productivities between the public and private universities in Taiwan.

Analyzing further, in Table 4 we separate the research articles into single-authored and multi-authored publications. The idea here is to explore the *collaborative nature* of policy research articles produced by authors within the academic sector. The table indicates that, overall, the number of articles authored by a student working alone (31 papers) is nearly the same as the number of articles written by a student in collaboration with a faculty member (30 papers), regardless of authorship position. Hence, this finding shows that graduate student productivity in Taiwan is, in equal measure, a product of students' own individual efforts, and also a very active and engaging faculty collaborating with them.

Table 4 contains several additional interesting results, chiefly among them: a) single-authored publications dominate the policy research scene in Taiwan between

Table 4. Cross-tabulation between university institutional type and collaborative nature of articles

Institutional type	Single-authored publications		Multi-authored publications			
	Faculty alone	Student alone	All faculty	Faculty/student*	Student/faculty**	All student
Public university (%)	43.6	93.6	50.0	69.2	100	0.0
Private university (%)	56.4	6.5	50.0	30.8	0.0	0.0
Total (%)	100	100	100	100	100	0.0
<i>N</i>	101	31	8	26	4	0

Apart from the *N* row, cell entries are column percentages.

*In these types of collaborations, the faculty member is listed first.

**In these types of collaborations, the student is listed first.

1996 and 2007: about 78 per cent of the articles are single-authored publications, compared to 22 per cent for multi-authored publications;⁶ b) private institutions produced more *faculty-only* (alone or with other faculty members) policy articles than public institutions (61 and 48 papers, respectively); c) students in public universities play a very active role in all published policy research, whether as sole authors, first, or secondary authors (51 papers total).

In breaking down article authors by gender, we find that men produced 81.5 per cent of the articles, against 18.5 per cent that were contributed by women. While males dominate much of the public policy research that appeared in the five periodicals over the period, we believe that more detailed data are required to understand the extent to which gender differences in research productivity have evolved over the past two decades. The percentages may just be the consequence of there being fewer women in university ranks. According to university workforce data provided by Taiwan's MOE, in 1996 there were only 17 female public administration and policy professors in Taiwan out of a total of 125 (or 13.6 per cent), compared with 47 female professors out of 265 (or 17.7 per cent) in 2007. "Back-of-the-envelope" calculation shows that, if anything, women perform comparably well relative to their overall population share: female scholars produced 18.5 per cent of all policy research articles when there were between 13.6 to 17.7 per cent of them over the period. This statistic alone is impressive considering that women academicians in Taiwan, similar to their counterparts in the West, may also have additional family and other burdens at home.⁷ Nevertheless, it is expected that as increasingly more women enter the field of public policy research in forthcoming years, their share of the articles will grow.

We consider the effect of one particular aspect of the policy authors' educational background: whether or not they obtained their highest degree in Taiwan. This question is relevant because there are many who worry about the capacity of Taiwan's public administration and policy degree programs to produce future generations of scholars and practitioners who can help solve the society's most pressing problems or help meet the government's needs (Sun and Gargan 1997). Interestingly, as the rightmost column in Table 5 indicates, there is nearly an equal

Table 5. Cross-tabulation of location of author's highest degree and their academic/institutional status

Location of highest degree	Faculty*	Student**	Government	Research institutes	Total***
In Taiwan (%)	27.8	97.1	72.7	16.7	47.6
Outside Taiwan (%)	71.6	2.9	0.0	83.3	48.4
Not available (%)	0.6	0.0	27.3	0.0	1.6
Total (%)	100	100	100	100	100
<i>N</i>	162	69	11	6	248

Apart from the *N* row, cell entries are column percentages.

*Includes full, associate, and assistant professors, as well as lecturers.

**Includes PhD and masters students, as well as recent graduates.

***Table excludes six researchers whose academic or institutional status is unclear or unknown.

split in the percentages of domestic versus foreign-university degree holders in our dataset (47.6 per cent versus 48.4 per cent, respectively). Judging by the overall numbers, there appears to be no indication that those who had received their education and training overseas are more or less likely than locally educated scholars to conduct public policy research.

Yet once we take into consideration the academic or institutional status of policy research authors, the other columns from Table 5 indicate that an overwhelming 71.6 per cent of faculty authors received their highest (usually PhD) education and training outside of Taiwan, compared with 27.8 per cent of those who did so at Taiwanese universities. Students and practitioners from government agencies, however, show the opposite trend: except for two students who obtained their last degree at foreign institutions, all of the authors in the "Student" and "Government" categories are locally trained and produced. The educational profile of scholars from research institutes is closer to that of academic faculty: five out of six received their highest degrees abroad.

Data collected for this study allow us to identify the most prolific/productive Taiwanese policy authors in the five domestic journals over the period 1996–2007.⁸ Of the 23 scholars with three or more policy articles to their credit, 13 work in public universities, nine are located in private universities, and one is affiliated with a research institute, the prestigious Academia Sinica in Taipei. Four women made this elite list: in fact, three out of the top six policy authors are female. In terms of education and training, universities in the United States are the most popular destinations to obtain a doctoral degree: 15 scholars had received their PhD training in the US, followed by Taiwan (5), Japan (2), and Germany (1).

IV. Subject Areas of Policy Research (What)

One of the many hallmarks of public policy research is the wide range of issues that it may study (Lasswell 1951; McCool 1995). In reviewing the subject areas of the articles in the database, we find that there is indeed a great diversity in the type and in the scope of topics that Taiwanese scholars have chosen to investigate. Table 6

Table 6. Subject areas of public policy research articles, 1996–2007

Substantive issue topics		Policy research areas (one subject term assigned to each article; <i>N</i> = 192)	
Frequency (%)	Substantive issue topics	Frequency (%)	Generic policy topics
12.5	Labor and personnel management	2.1	Policy formulation (including policy analysis)
18.3	Public finance and budgeting	2.1	Policy – other (for example, policy learning, policy transfer, policy arguments, and so forth)
16.8	Environment, energy and sustainable development	2.1	Policy implementation
5.7	Land use policy	1.6	Multiple generic policy topics
15.2	Economic and industrial policy	1.6	Policy evaluation
4.2	Health policy	1.0	Agenda-setting
3.6	Privatization and regulation	1.0	Policy legitimization
3.1	E-government	1.0	
3.1	Technology and telecommunications policy	0.5	
3.1	Transportation and tourism	1.0	
2.6	Social welfare and family policy		
<i>N</i>	Total (Substantive issue topics)	72.4	Total (Generic policy topics)
		139	<i>N</i>
			27.6
			53

presents the results of this topical content analysis. To make the discussion easier, for each article we assigned only one subject or topic term that *best* described its main theme, and we divided these subject or topic terms into *substantive* and *generic* policy areas. By “substantive”, we mean that the article only concerned itself with a *specific* policy topic area such as health, the environment, social services, national defense, the economy, and so forth. By “generic”, we mean that the main contributions of an article could be classified or placed into a particular stage of the “textbook” public policy-making process (Nakamura 1987), usually identified with agenda-setting, policy formulation, policy legitimation, policy implementation, and policy evaluation (Lasswell 1956; Jones 1970; Anderson 1975; Brewer and deLeon 1983; Dye 2008). Articles that dealt with other general policy issues, such as policy learning, policy transfer, lesson drawing, policy arguments, and so forth, were lumped in the “policy-other” category.

According to our data, the five substantive issue topics that appear most frequently in the selected journals are labor and personnel management (12.5 per cent), finance and budgeting policy (8.3 per cent), environment, energy, and sustainable development (6.8 per cent), land use policy (5.7 per cent), and economic and industrial policy (5.2 per cent). Overall, 72.4 per cent of the articles in the sample had a specific policy concern.

In terms of articles that dealt with or were related to the general public policy-making process, the total share of these articles is much smaller, occupying just 27.6 per cent of all articles. Research inquiries that involved policy formulation – which includes policy analysis – lead the way at 11.5 per cent, followed by policy topics other than the policy-making process (4.7 per cent), policy implementation (3.6 per cent), multiple generic policy topics (2.6 per cent), policy evaluation (2.1 per cent), agenda-setting (1.6 per cent), and policy legitimation (1.6 per cent). Overall, this table provides crude but clear evidence that policy studies is indeed a diverse and multi-pronged scientific pursuit, and research into complex social and policy problems would require multi- and inter-disciplinary approaches (Lasswell 1971; MacRae and Wilde 1985).

The analysis presented thus far in Table 6 involved the adoption of a rather strict classification scheme, in which the articles were assigned to a single category only. Most policy research, in actuality, is likely to draw upon and contribute to *both* substantive and generic knowledge modes of policy. Thus, in Table 7 we relax our criteria and allow each article to contain more than one descriptive term. As can be

Table 7. Type of policy article content

Policy article content	Frequency (%)
Both substantive and generic	51.6
Single generic	25.0
Single substantive	20.3
Multiple generic	2.6
Multiple substantive	0.5
Total	100
<i>N</i>	192

seen from the table, over half of the articles (51.6 per cent) contain both substantive and generic policy topics. One-quarter of all articles refer to a single stage of the general policy process model, and just a little over one-fifth of all articles involve a single substantive policy topic.

The extent to which a policy subject area appears higher, lower, or at all in Table 6 is, in all likelihood, a function of both supply (that is, policy scholars and their individual research interests) and demand (for example, extramural funding agencies, journal readers, and others) for such research. As a case in point, nearly all of the finance and budgeting policy articles were produced by the same handful of investigators and teams (data not shown here). On the demand side, the Taiwanese government also has a long history of financing or procuring academic policy research in key/strategic areas through its funding agencies and programs. “Environment, energy, and sustainable development” (ranked third in Table 6), and “e-government” (eighth), provide two clear illustrations of strong governmental interest, initiative, involvement, and investment in the subject.

A more than perfunctory scrutiny of the policy research issue topics, however, would also reveal the fact that, a) important policy subject areas may be missing, and b) neither the rankings nor the number of times that a policy subject area appears necessarily reflects academic and societal priorities. For example, articles related to public sector ethics and administrative reforms are, inexplicably, notably absent from the table. It can also be argued that some topics – such as social welfare (ranked 11th), education (tied for 12th), and national defense (tied for 15th) – perhaps warrant extra analytical attention from the scholarly community.

Current available data, unfortunately, do not allow us to trace the evolution (or the popularity) of policy topic areas over time. Also, while it is tempting to make comparisons of Taiwan’s policy research topics with those from other countries, differences in societal needs and in the level of political and economic development would likely render such cross-national contrasts not a very useful exercise.

V. Research Methods Used (How)

While policy research scholars have often debated the epistemological natures of empirical versus post-positivist approaches to policy analysis (for an example, see deLeon 1998), there is a general agreement within the policy studies community that “some level of empirical and theoretical rigor is desirable” in all scientific inquiries, even if it is not always attainable (Hedge and Mok 1987). In Table 8 we report on the

Table 8. Primary research methods used in public policy articles

Primary research method	Frequency (%)
Quantitative	21.4
Qualitative	71.9
Both quantitative and qualitative	3.7
Other*	3.1
Total	100
<i>N</i>	192

*These include experimental methods and game theory applications.

research methods employed by the public policy articles in Taiwan, as an effort to uncover and highlight the potential methodological weaknesses found in published quantitative and qualitative public policy research.⁹

As Table 8 shows, about 72 per cent of all policy research articles in the selected periodicals used qualitative methods; only 21.4 per cent of the articles may be classified as quantitative-based, or reported “hard” data of any kind. Seven articles (3.7 per cent) employed both qualitative and quantitative methods in their analysis, but these were clearly the exceptions, not the rule. Our finding is somewhat consistent with those obtained by Hedge and Mok (1987) in their study of six major US policy journals from 1975 to 1984. In that study, 29 per cent of the sampled articles may be classified as quantitative. Though our finding is lower than that reported by Hedge and Mok, the discrepancy is not large percentage-wise, and may simply reflect the difference in policy research development as a field between Taiwan and the United States.

The “quantitative” policy articles can be further examined by type of data source and by statistical techniques employed. In our tally, 45.8 per cent of the quantitative articles used first-hand or primary data, against 52.1 per cent of articles that relied on second-hand or secondary data, which generally include the census, official government statistics, and other survey data collected by others. With respect to the statistical tools employed, descriptive statistics (33.9 per cent) is the most commonly used statistical technique, followed by regression analysis (23.1 per cent), “other” statistical methods (23.1 per cent), and basic inferential statistics (20 per cent).¹⁰ The infrequent use of more sophisticated statistical tools in the quantitative policy research articles is somewhat troublesome, given that there were relatively few empirically based studies to begin with. Although the sample is small, the paucity of empirical rigor in the policy research articles is likely among the many challenges in Taiwan’s policy studies community today.

Lastly, in regard to the methods used by non-empirical or “qualitative” research articles, two-thirds of these articles employed the literature review (66.5 per cent) as part of their argumentation and presentation, followed by case studies (17.1 per cent), in-depth interviews (8.2 per cent), participant observation (3.8 per cent), and document (or content) analysis (1.9 per cent). This finding is worrisome, as in the case of quantitative research articles, and for similar reasons: there is not much variety outside of literature reviews and case studies, and most qualitative policy articles, simply put, are not rigorous, “critical”, or “interpretive” enough. Nevertheless, the prevalence of literature reviews in Taiwanese policy research articles represents something of a puzzle. We believe that this has very much to do with the unique features of Taiwan’s academic journals. In addition to serving as the main publication outlets for domestic scholars, periodicals in Taiwan also function as a fundamental node in the flow of information or knowledge, helping to bridge any gap that may exist between the international and domestic scholarly communities. In the not so distant past, journals in Taiwan had published literature review articles whose sole purpose was to introduce a particular concept or topic, to bring the domestic community up-to-date on the latest empirical/theoretical developments, to set benchmarks, etc. However, one thing we could observe during the coding process was that these types of “introductory” literature reviews were becoming less common over

time. More recent articles employed more sophisticated research methods than those that appeared earlier.¹¹

VI. Conclusion and Suggestions

In this study an extensive analysis of five academic journals was performed to shed light on the state of public policy research in Taiwan over a 12-year period. Our examination of the discipline took the form of three basic questions: 1) who are the contributors of policy research; 2) what are the subject areas or foci of policy research; and 3) how is the policy research conducted? Our analyses indicate that policy research in Taiwan is predominantly university-based, written by male academicians of assistant professorial rank and above, and equally produced by foreign and domestic degree holders. Although less than one-fifth of the articles were produced by female scholars, three of the top six most productive policy scholars are women, and, as a group, women perform well relative to their overall population share. Graduate student productivity in Taiwan, in particular, is comparatively higher than the graduate student productivity rate reported in the American policy journals. The subject areas of policy research in Taiwan are, expectedly, wide-ranging, cutting across multiple disciplines and concerned with all stages/aspects of the public policy-making process. With regards to research methodology, our data suggest that the methodological sophistication of policy research articles is low, irrespective of where they are located along the quantitative–qualitative spectrum. Overall, few articles are empirically based policy articles, and fewer still utilize statistical techniques beyond basic inferential statistics. Similar observations can be made regarding the non-empirical or qualitative articles: despite the fact that a majority of the policy articles were categorized as “qualitative”, most are reviews of foreign literature and almost none espouses or proposes to advance a “critical” or “post-positivist” perspective.

Several implications can be derived from the above findings, but we focus on three general points that seek to strengthen the quality of policy research in Taiwan. First, as noted earlier, the percentage of “practitioner” research contributions to the journals is fairly low, and we take this to be an indication that the relationship and mutual exchange of ideas between academicians and practitioners via the journals is not particularly strong or dynamic in Taiwan. While practitioners are not normally expected to publish in journals under other circumstances, based on anecdotal evidence we had expected more involvement by senior Taiwanese government officials to engage in creating useful policy knowledge because many of them have PhD degrees and/or teach in universities. This problem is compounded by the fact that no academic journal dedicated exclusively to policy research, policy analysis, or policy practices – in the mold of the *Journal of Policy Analysis and Management*, a journal that is also committed to foster academic–practitioner linkage, for example – currently exists in Taiwan. Public policy authors are often forced to submit their manuscripts to a range of public administration, political science, and economics journals. A first step to building a more cohesive, vibrant, and inclusive policy studies community is perhaps the formation of a professional journal solely devoted to the dissemination of policy theories, applications, and practices that are of interest to both scholars and practitioners. At the institutional level, policy researchers

should also strive to form their own professional association, either as an independent entity or as a specialized, organized “section” within other professional societies, such as the Taiwanese Political Science Association (TPSA), or the more recently formed Taiwan Association for Schools of Public Administration and Affairs (TASPAA).

Second, the policy studies community in Taiwan, as a whole and from the top down, must commit and continue to do its part to raise the level of methodological rigor of its research products. This may imply placing more emphasis on “methods” classes at the doctoral study level, or providing more funding opportunities for policy scholars who wish to sharpen or enlarge their set of analytical tools. While this project will likely take some time, we believe it to be a critical step to producing a more meaningful and more cumulative body of knowledge. We are not advocating either a specific quantitative or a qualitative perspective: both lines of inquiry and a range of other approaches are necessary to maintain an active, diverse, and methodologically plural discipline. The goal is to improve policy research sophistication in all its aspects, from policy prediction and explanation on the one hand, to policy reflection and interpretation on the other. There is also the obvious need for policy research products to be “relevant” or “applicable” to decision-makers. Yet until policy research becomes more empirically or theoretically rigorous, they are not likely to be of much help to or be taken seriously by practitioners and other decision-makers.

Third, graduate students in Taiwan’s public policy graduate programs deserve to be commended for the ostensibly high number of publications that they are contributing to the discipline. To the extent that this very positive result may be a direct consequence of stringent publication requirement guidelines placed upon students by their departments, it is nevertheless a welcome and healthy indication that Taiwanese public policy programs – through its faculty members – are perhaps doing a laudable job in teaching their students about the importance and necessity of scholarly research. Whether having publication requirements is a good way to prepare doctoral students for a research career in the academy, and whether this model can be successfully implemented in other countries, are questions that deserve future analysis.

The empirical findings presented in this study are by no means complete or perfect. The small number of policy articles did not allow meaningful author or topical comparisons across time, or permit us to conduct a more detailed trend analysis. Future research will require better and richer data, such as adding more years to the period covered here, more individual and institutional variables, and more related journals. Improvements can also be made in the variable definitions so as to facilitate coding and enhance the measures’ validity and reliability. Beyond the issue of methodological rigor, future inquiries may focus on the extent to which Taiwan’s public policy research is: a) engaged in hypothesis testing or theory evaluation; b) inter- or multi-disciplinary; c) based on theories/models developed “indigenously”; d) funded by an external source; and e) relevant to practitioners (that is, does the study offer any concrete policy guidance or recommendations). Additional investigations into the status and impact of female scholars in the profession will also advance our understanding of their particular needs, beliefs, experiences, and concerns. Addressing these and other related questions will yield a more complete

profile of Taiwan's public policy research and its community, and also produce more conclusive findings.

This study takes stock of recent policy scholarship published in Taiwan as an ongoing effort to identify the critical issues and potential shortcomings found in the field. A secondary (but no less important) purpose of the study is to help policy researchers and professionals from other countries to better understand the current challenges facing the Taiwanese public policy community today and, in turn, to reflect on the particular situation of their own communities. Strengthening the quality of policy research is a long-term process and requires leadership and a collective commitment from the community. We reckon that observations and lessons drawn from Taiwan may or may not be directly applicable elsewhere, but we nevertheless believe that this is but a small first step in advancing policy theory and practice in Taiwan, and in building a truly sophisticated and genuine global public policy community.

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Notes

1. A study that examines the institutional development of Taiwan's public policy education from a pedagogical perspective is Kuo and Kuo (2009).
2. The levels of intercoder agreement for the variable items are as follows: whether or not an article should be classified as policy research (81.4 per cent); subject areas of study (78.6 per cent); quantitative versus qualitative (96.4 per cent); sources of data (100 per cent), statistical techniques used (95.8 per cent), and qualitative methods used (98.4 per cent).
3. However, for a more optimistic perspective about the research–practice gap in American public administration and possible ways to bridge the chasm, see Gibson and Deadrick (2010).
4. For example, Houston and Delevan (1990) reported that approximately 11 per cent of the principal authors in their database were not university-based. In Lan and Anders's (2000) analysis of the public administration literature, authors affiliated with organizations other than universities were found to consist of no more than 11 per cent of the total. Finally, the practitioners' share of total authors was 12 per cent in Watson et al.'s (2005) study.
5. National Taiwan University (NTU) is the first institution in Taiwan to grant PhD degrees in public administration and policy-related fields through its Department of Political Science. Technically, the first university to offer a “stand-alone” PhD program in public administration is National Chengchi University, beginning in 1989.
6. In reviewing over 2,500 articles from 14 journals associated with the American Society of Public Administration (ASPA) from 1993 through 2002, Watson and colleagues found that 56.2 per cent of all articles were written by a single author, and the remaining 43.8 per cent were collaborative efforts involving two or more scholars (Watson et al. 2005: 55). Interestingly, Schneider et al. (1982: 106) obtained a nearly identical result when they examined 181 randomly sampled articles from nine leading

- policy journals between 1975 and 1980: 56 per cent of the articles were single authored, compared to 44 per cent that had two or more authors.
7. This is perhaps more true in Chinese societies where traditional Confucian values and norms are strong.
 8. Previous studies that attempted to identify the most productive scholars in a discipline or a particular journal include Douglas (1996), Watson et al. (2005), and Corley and Sabharwal (2010) for public administration, Miller et al. (1996) for political science, and Clemens et al. (1995) for sociology. .
 9. For similar studies that analyze research methodology of published articles in the fields of public policy and public administration, see Schneider et al. (1982), Perry and Kraemer (1986), Houston and Delevan (1990), and Wright et al. (2004), for example.
 10. Basic inferential statistics refers to correlations, chi-square tests, ANOVA, and so forth. Regression analysis mainly refers to multivariate regressions or any other statistical estimates beyond multiple regressions. "Other" statistical methods include path and factor analyses, structural equation modeling (SEM), system dynamics, GIS analysis, and other decision-making methods.
 11. Additionally, since more faculty members have received their training abroad, the information/knowledge gap between the international and the domestic policy communities has presumably narrowed over time.

References

- Anderson, J., 1975, *Public Policy-Making* (New York: Praeger).
- Bowman, J. and Hajjar, S., 1978, The literature of American public administration: Its contents and contributors. *Public Administration Review*, **38**, pp. 156–165.
- Brewer, G. and deLeon, P., 1983, *The Foundation of Policy Analysis* (Homewood, IL: Dorsey).
- Chiang, M.-H., 1997, The essentials of government innovation: A review on public administration research and education in Taiwan. *Journal of Public Administration*, **1**, pp. 1–35.
- Clemens, E., Powell, W., McIlwaine, K. and Okamoto, D., 1995, Careers in print: Books, journals and scholarly reputations. *American Journal of Sociology*, **101**, pp. 433–494.
- Corley, E. and Sabharwal, M., 2010, Scholarly collaboration and productivity patterns in public administration: Analysing recent trends. *Public Administration*, **88**, pp. 627–648.
- DeLeon, P., 1998, Introduction: The evidentiary base for policy analysis: Empiricist versus postpositivist positions. *Policy Studies Journal*, **26**, pp. 109–113.
- Douglas, J., 1996, Faculty, graduate student, and graduate productivity in public administration and public affairs programs, 1986–1993. *Public Administration Review*, **56**, 433–440.
- Dye, T., 2008, *Understanding Public Policy*, 12th edition (Upper Saddle River, NJ: Pearson).
- Forrester, J., 1996, Public administration productivity: An assessment of faculty in PA programs. *Administration and Society*, **27**, pp. 537–566.
- Fritzen, S., 2007, Public policy education goes global: A multi-dimensional challenge. *Journal of Policy Analysis and Management*, **27**, pp. 205–214.
- Geva-May, I., 2009, Development in policy analysis education around the world: A comparative perspective. Paper presented at the Sixth International Comparative Policy Analysis-Forum Workshop, Shih Hsin University, Taipei, Taiwan, June 5–6.
- Geva-May, I., Nasi, G., Turrini, A. and Scott, C., 2007, MPP programs emerging around the world. *Journal of Policy Analysis and Management*, **27**, pp. 187–204.
- Gibson, P. and Deadrick, D., 2010, Public administration research and practice: Are academician and practitioner interests different? *Public Administration Quarterly*, **34**, pp. 145–168.
- Hedge, D. and Mok, J., 1987, The nature of policy studies: A content analysis of policy journal articles. *Policy Studies Journal*, **16**, pp. 49–62.
- Houston, D. and Delevan, S., 1990, Public administration research: An assessment of journal publications. *Public Administration Review*, **50**, pp. 674–681.
- Jan, C.-Y., 2005, The study of Taiwan's public administration history – Theoretical evolution and practical development. National Policy Foundation, Taiwan.
- Jones, C., 1970, *An Introduction to the Study of Public Policy* (Belmont, CA: Wadsworth).
- Kuo, Y.-Y. and Kuo, N.-L., 2009, Taiwan public policy education: Opportunities and challenges. Paper presented at the Sixth International Comparative Policy Analysis-Forum Workshop, Shih Hsin University, Taipei, Taiwan, June 5–6.

- Lan, Z. and Anders, K., 2000, A paradigmatic view of contemporary public administration research: An empirical test. *Administration and Society*, **32**, pp. 138–165.
- Lasswell, H., 1951, The policy orientation, in: D. Lerner and H. Lasswell (Eds) *The Policy Sciences* (Stanford, CA: Stanford University Press), pp. 7–15.
- Lasswell, H., 1956, *The Decision Process* (College Park: University of Maryland Press).
- Lasswell, H., 1971, *A Pre-view of the Policy Sciences* (New York: Elsevier).
- Legge, J. and Devore, J., 1987, Measuring productivity in U.S. public administration and public affairs programs 1981–1985. *Administration and Society*, **19**, pp. 147–156.
- Lin, Y.-H., 2005, The evolution of public administration in Taiwan, master's thesis, Shih Hsin University, Taipei, Taiwan.
- MacRae, D. and Feller, I., 1998, The structure of and prospects for policy research as suggested by journal citation analysis. *Policy Studies Review*, **15**, pp. 115–135.
- MacRae, D. and Wilde, J., 1985, *Policy Analysis for Public Decisions* (Lanham, MD: United Press of America).
- McCool, D., 1995. *Public Policy Theories, Models, and Concepts: An Anthology* (Englewood Cliffs, NJ: Prentice Hall).
- Miller, A., Tien, C. and Peebler, A., 1996, The *American Political Science Review* hall of fame: Assessments and implications for an evolving discipline. PS: Political Science and Politics (March), pp. 73–83.
- Nakamura, R., 1987, The textbook policy process and implementation research. *Policy Studies Review*, **7**, pp. 142–154.
- Newland, C., 2000, The *Public Administration Review* and ongoing struggles for connectedness. *Public Administration Review*, **60**, pp. 20–38.
- Ospina, S. and Dodge, J., 2005, Narrative inquiry and the search for connectedness: Practitioners and academics developing public administration scholarship. *Public Administration Review*, **65**, pp. 409–423.
- Perry, J., 2004, Reflections about public affairs education as the *Journal of Public Affairs Education* turns ten. *Journal of Public Affairs Education*, **10**, pp. 191–198.
- Perry, J. and Kraemer, K., 1986, Research methodology in the *Public Administration Review*, 1975–1984. *Public Administration Review*, **46**, pp. 215–216.
- Raadschelders, J. and Douglas, J., 2003, The doctoral graduate in public administration: Apprentice or master? *Journal of Public Affairs Education*, **9**, pp. 229–243.
- Raadschelders, J. and Lee, K.-H., 2011, Trends in the study of public administration: Empirical and qualitative observations from *Public Administration Review*, 2000–2009. *Public Administration Review*, **71**, pp. 19–33.
- Schneider, J., Stevens, N. and Tornatzky, L., 1982, Policy research and analysis: An empirical profile, 1975–1980. *Policy Sciences*, **15**, pp. 99–114.
- Su, K.-H., 2004, Social production of sociological knowledge: Invisible colleges among sociologists in Taiwan. *Taiwanese Sociology*, **8**, pp. 133–192.
- Sun, T.-W., 1993, Public administration theory and practice connection in Taiwan: An empirical study. *Chinese Public Administration Review*, **2**, pp. 15–38.
- Sun, T.-W., 1998a, The subject areas of public administration research in Taiwan. *National Chi Nan University Journal*, **2**, pp. 133–159.
- Sun, T.-W., 1998b, The intellectual activities and themes in Taiwan's public administration research. *Theory and Policy*, **12**, pp. 96–108.
- Sun, T.-W. and Gargan, J., 1997, In search of identity: Public administration education in Taiwan. *International Journal of Public Administration*, **20**, pp. 1411–1446.
- Watson, D., Hassett, W. and Handley, D., 2005, The ASPA journals: Who is publishing? *Journal of Public Affairs Education*, **11**, pp. 53–60.
- Weiss, C., 1979, The many meanings of research utilization. *Public Administration Review*, **39**, pp. 426–431.
- Wright, B., Manigault, L. and Black, T., 2004, Quantitative research measurement in public administration: An assessment of journal publications. *Administration and Society*, **35**, pp. 747–764.
- Wu, Y.-S., Su, T.-T., Shaw, C. and Lin, J.-W., 2003, *A Study on Ranking Political Science Journals*. National Science Council (Taiwan) Research Project, NSC 91-2414-H-001-028.