

International Publications of Filipino Social Scientists in Universities: Responding to Global Changes in Knowledge Production

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Philippine social science in the previous century was predominantly applied, and mainly concerned with addressing the problems of Philippine society. Bautista (1999) observed that during that time, “activities of most social scientists reflected the value they attached to linking scholarship to the amelioration of Philippine conditions” (p. 393).

There are several implications of this approach to doing social science. The first is that the research and knowledge production functions of social science were not emphasized as much as doing applied work in the form of community, and social development, policy formulation, consultancy, and similar activities that apply social science methods, concepts, and frameworks to somehow address concrete social concerns (c.f. Bautista, 2000).

Second, the research and knowledge production outputs of Philippine social scientists also emphasized this applied orientation, as reflected in the choice of research topics and research problems, and perhaps more importantly, in the “atheoretical character of research or the absence of theories developed by social scientists”

(Bautista, 1999, p. 393). This is particularly reflected in specific social science disciplines such as psychology (Bernardo, 1997, 2001) and sociology (Bautista, 1994; Porio, 2009).

In the context of the knowledge production enterprise, the third and most concrete implication to doing social science is the weak presence of Philippine social scientists in the international social science journals. Bautista also noted the “demand for relevance-oriented social science writing to a Philippine audience – explaining why competent Filipino social scientists, with the exception of economists, have been as concerned with publishing in international journals” (Bautista, 1999, p. 393). This is reflected in the volume of publications compared to those of their counterparts in the other sciences. Bernardo (2009) reported that during the five-year period from 1994 to 1998, Philippine social scientists based in colleges and universities in the various social science disciplines produced only a total of 64 publications in international journals, compared to 122 by their counterparts in the physical sciences (chemistry and physics), 120 by those in the medical and health sciences, and 304 by those in

the natural sciences (biology and agricultural science).

However, the professional context of Philippine social scientists based in academic institutions has been transforming in the past decade or so. This transformation is one of the consequences of the globalization of higher education, which has created a highly competitive environment for colleges and universities (Salmi, 2009). This competitive environment is reinforced by the increase in global rankings of higher education institutions (Hazelkorn, 2009; Marginson & van der Wende, 2007), which has had a profound influence on how universities all over the world make decisions (Hazelkorn, 2007, 2008). These rankings give much weight to publications in journals indexed in international and publically-verifiable databases such as the Thomson Reuters and/or SCOPUS. In this regard, universities that give importance to such rankings have put much pressure on their faculty to publish in such journals, among other institutional responses to support the kind of research that would improve the institution's rank in these global comparisons (Hazelkorn, 2009).

The focus on international refereed publications as one of the main indexes of research quality in ranking universities has been widely criticized (see Hazelkorn, 2009; Marginson, 2008 for discussions). For example, research in the natural and physical sciences do not often reflect truly innovative research, and has difficulty capturing the impact of multidisciplinary research, among others. These criticisms notwithstanding, education quality assurance systems in different parts of the world now use the same metric to measure research quality and institutional quality in higher education (Hazelkorn, 2009).

Philippine higher education institutions have been largely unaffected by these developments, mainly because research remains to be a marginal activity in most colleges and universities (Gonzalez, 2006; Salazar-Clemeña, 2006), and perhaps because internationalization and globalization are also not their major concerns (Bernardo, 2003). Philippine colleges and

universities have largely been insulated from this global push to use research as index of quality higher education, in spite of explicit government policies to develop research (Bernardo, 2006). However, in leading universities that are in the best position to participate in the global competition in higher education, merit or incentive systems for faculty members have increasingly emphasized publication in international refereed publications. For example, the four Philippine universities that have figured in international rankings (i.e., University of the Philippines, De La Salle University, Ateneo de Manila University, and University of Santo Tomas) all give substantial monetary incentives to faculty members who publish in such journals. Other universities that aspire to compete at the global level also try to implement programs to encourage their faculty members to publish in international refereed journals.

These changes in the higher education environment have somehow required Philippine social scientists based in such universities to begin focusing on producing the kind of research that would get published in these types of journals. Bautista (1999) asserted, "(w)ith globalization and the Universities' bid for competitiveness, there is increasing pressure on the social science community to communicate with colleagues abroad and meet international standards" (p. 393). But how have Philippine social scientists actually responded to these changes? Have Philippine social scientists, particularly those based in colleges and universities, focused more on producing international refereed publications in recent years?

This paper is a preliminary attempt to see the response. The paper explores these questions by looking at the publications of university-based Philippine social scientists in international refereed journals for a 15-year period, from 1994 to 2008. The 15-year period was chosen to cover the time when Philippine higher education became first engaged in international rankings. It was in 1996 when the *Asiaweek Magazine* first ranked the best universities in Asia, and when a few Philippine universities were included in the ranking. For

purposes of the present analysis, the five years covering 1994 to 1998 are assumed to be the “baseline” years when Philippine social scientists based in universities were probably being introduced to the need to publish in international refereed journals. The subsequent five-year periods from 1999 to 2003 and from 2004 to 2008 represent the periods when the response of Philippine social scientists based in universities can be assessed. By looking at the trends in publications during these periods, we can determine how Philippine social scientists responded to what Bautista (1999) characterized as the increasing pressure to meet international standards of knowledge production in the social sciences.

The specific questions addressed in this paper are as follows:

- Did Philippine social scientists based in universities increase their publications in international refereed journals?
- Are the increases observed across a wide range of universities, or only in particular universities?
- Are the international publications of Philippine social scientists based in universities products of local research activities or of international collaborations?

RESEARCH APPROACH

The main research approach to answer the research questions involves documentary analysis using publicly available (through subscription) bibliographic searches. An exhaustive bibliographic search using electronic databases in De La Salle University was conducted. The initial plan was to also include a search of the electronic databases of the Ateneo de Manila University, but after checking the available databases, it was found that all the database systems included in the Ateneo library were covered in the De La Salle library, hence there was no need to refer to additional databases. The bibliographic search was used to generate an inventory of publications of

Philippine-based researchers, including those who were not based in colleges and universities.

Databases

The first database searched was the largest abstract and citation database of scholarly/ research literature: SCOPUS, which indexes over 19,000 journals from 1960 to the present. SCOPUS is organized in terms of four main categories: life sciences (which indexes over 4,300 journals), health sciences (over 6,800 journals), physical sciences (over 7,200 journals), and social science and humanities (over 5,300 journals). Although this particular inquiry focused only on social science publications, even publications classified in the three other categories were considered, as there may be social science research publications included in those. For each of the four categories, research assistants conducted a bibliographic search using “Philippines” as the search term for institutional affiliation. All the entries generated were transferred to a spreadsheet file which included the following variables for each entry: (a) author(s) with affiliation, (b) title, (c) year, (d) source/journal title, (e) volume, (f) issue, (g) page start, (h) page end, (i) abstract, (j) author keywords, and (k) database source.

Because individual entries may appear in more than one of the four main categories of the SCOPUS, the research assistants searched for and removed all duplicate entries. After the entries from SCOPUS were completed, the research assistants began doing additional searches in the other databases, also using “Philippines” as the search term under affiliation. Among the other large databases searched were Science Direct, PsycARTICLES, JSTOR, Proquest, and EBSCO. The entries generated by these searches were compared to the SCOPUS entries, and the new entries were added to the spreadsheet. The research assistants went through more databases until the new databases failed to generate any new entries.

Although an exhaustive search was intended, there was no guarantee that the bibliographic

search covered all the scholarly publications of researchers based in Philippine HEIs. First, there may be international publications that were not included in the various databases for one reason or another. As most database systems have inclusion criteria, it is likely that the journals and publications not included have been deemed inadequate with reference to some international standards, and if so, the non-inclusion of some publications by Philippine-based researchers in the inventory would not be too much of a concern. However, it has been noted that many of these databases have been biased in favor of listing journals and publications from developed countries, and journals and publications in the English language. In response to such criticisms, many databases have expanded the geographic and linguistic scope of the databases in recent years. Since the expansion of the journal coverage of the databases involved the retroactive indexing of publications in the newly included journals, the impact of this factor should be minimal in the analysis. More importantly, however, the bibliographic search systems of the various databases could not guarantee that all Philippine-based research publications would be included because there may be errors in encoding the institutional affiliations of the authors of the papers. For example, if the publication only lists the name of the university, but does not indicate that the university is in the Philippines, then that entry would not have been generated in the bibliographic search. An entry which incorrectly spells "Philippines" would also not be generated in the bibliographic search. Thus, even as an exhaustive search was intended, these technical considerations prevent us from claiming that the inventory is actually exhaustive.

Coding systems

Once the inventory was completed, the entries were coded for additional variables. First, the entries were coded in terms of whether the Philippine-based author was based in an HEI or a non-HEI. Entries with two or more authors with at least one author coming from an HEI were coded

in the HEI category for purposes of answering the research question. All subsequent codings were done for those entries in the HEI category; the entries from non-HEIs were not analyzed any further.

The remaining entries were then coded in terms of whether they were social science knowledge productions or not. The initial codes were done by one research assistant, and these codes were reviewed and revised by the lead researcher. There were issues related to coding research related to health social science topics, community-related agricultural research, and similar transdisciplinary topics. The final coding included such topics as social science knowledge productions, to make the database more inclusive. Thus, publications in the field of health and social science were listed in social science, and so on. Because of these grey areas, it is expected that some other coders might disagree with some specific codes of particular entries, and this is a limitation of the study.

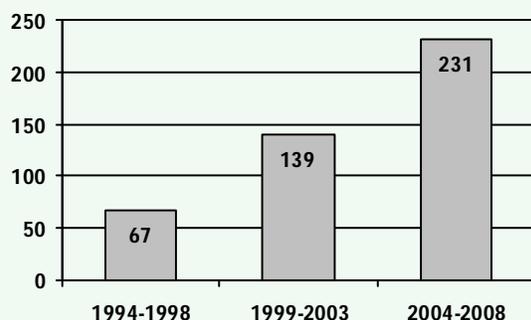
The entries were also coded in terms of the college or university affiliation of the author(s), and the geographic region of the affiliation. Entries with two or more authors coming from two or more colleges or universities from different regions were coded in all the universities and regions. Thus, there were multiple codings for regions (which would explain why totals for the institutional affiliations and regions do not equal the total number of entries). Finally, the entries were coded in terms of whether they involved international collaborative research work, and whether the topic of the research related to an applied social science issue.

RESULTS

Volume of international refereed publications

Did university-based Philippine social scientists publish more papers in international refereed journals in response to the pressure to meet international standards of knowledge production in the social sciences? The data shown

Figure 1 International Refereed Publications of University-based Philippine Social Scientists



in Figure 1 suggest that they did. During the 15 years covering 1994 to 2008, 437 articles were published by Philippine social scientists in the various colleges and universities. This total represents marked increases over the three five-year periods. There was a 107.46 percent increase in the number of publications from 1994-1998 to 1999-2003, and another 66.19 percent increase from 1999-2003 to 2004-2008. I should mention that there were actually no articles published in 1994, which indicates that university-based Philippine social scientists were truly publishing at very low rates during the period covered in the study. Thus the

marked increases over the years point to a rather positive response to the pressure to meet international standards of social science knowledge production.

However, the data indicate that these increases in international publications came from very few universities. Table 1 summarizes the publications of these universities. Of the 437 articles published in the 15-year period, 84.67 percent were published by social scientists in only six universities. Further inspection of the data shows that 41.19 percent of all the publications were authored or co-authored by social scientists in the University of the Philippines Diliman, whereas 59.27 percent were authored or co-authored by social scientists from the University of the Philippines System. Thus, although the volume of publications over the fifteen years clearly suggests a positive response to the demand to meet international standards of social science knowledge production, it seems that only a few institutions were able to do so. Indeed, the articles documented in the study were produced by only 40 colleges and universities, which represent a very small fraction of the total 2,060 HEIs in the Philippines. Degree programs in the various social sciences are offered in 613 of these Philippine HEIs (CHED, 2009).

Table 1 International Refereed Publications by Institution

College / University	Total	1994- 1998	1999-2003	2004-2008
University of the Philippines – Diliman	180	41	64	75
De La Salle University	53	7	22	24
Ateneo de Manila University	41	2	18	21
University of the Philippines – Los Baños	39	4	7	28
University of Santo Tomas	29	0	1	28
University of the Philippines – Manila	28	8	8	12
Asian Institute of Management	12	1	3	8
University of San Carlos	9	0	5	4
University of Asia and the Pacific	8	2	3	3
University of the Philippines in the Visayas	5	1	1	3
Silliman University	5	0	2	3
University of the Philippines – Mindanao	4	0	0	4
University of the Philippines – College Baguio	3	0	1	2
Foundation University	3	0	1	2
Others	30	4	9	17

Table 2 Number of Institutions that Produced International Refereed Publications

College / University	Total	1994-1998	1999-2003	2004-2008
Nationwide	40	12	21	29
National Capital Region	15	7	9	11
Luzon (excluding NCR)	8	3	3	4
Visayas	9	1	5	7
Mindanao	6	1	2	5
Unknown	3	-	2	1

There seems to be some indication that the number of institutions actually increased over the 15-year period. As shown in Table 2, social scientists who published in international refereed journals from 1994-1998 came from only a dozen institutions. This number increased by 75 percent in the next five-year period, and another 38 percent in the next five-year period. We should keep in mind that these large percentages were computed using very low base figures. The 29 institutions that produced international social science publications in the last five-year period still represent an extremely small fraction of the total number of higher education institutions in the Philippines.

Tables 1 and 2 also indicate a skewed geographic distribution of these international social science publications. Although only 37.5 percent of the institutions that had social science publications were located in the National Capital Region, the publications of these institutions accounted for 82.25 percent of all the international refereed publications of university-based social scientists. Even with the increase in number of institutions that produced social science publications in the most recent five-year period, those from the National Capital Region still authored or co-authored over 76 percent of total during this five-year period.

So far, the data indicate a positive response to the challenge of meeting international standards of social science knowledge production in recent years, but this positive response seems to be limited to social scientists based in a small number of colleges and universities, and maybe even to only a handful of universities located in the

National Capital Region. The knowledge production of social scientists based in colleges and universities in other parts of Luzon, in Visayas and Mindanao is quite minimal and the increase is not very substantial.

Research collaborations

Aside from an increase in the volume of international refereed publications, one of the positive responses to the challenge of meeting standards of international social science research may take the form of more international collaborative research. Collaborations with research universities and other research organizations in different parts of the world is seen to be an important, and possibly necessary, characteristic of research in universities in the emerging global model of research universities (Mohrman, Ma, & Baker, 2009; see also Huisman, Maassen, & Neave, 2001). Some Philippine universities have reported embarking on such international collaborations to develop their institution's research capacities (Bilbao et al., 2006). Without assuming that international collaborations improve the quality of social science research (i.e., one could argue that such international collaborations fail to fully appreciate the local perspectives or points-of-view), participation in international collaborative research activities may be seen as positive responses to the challenge of meeting international standards of social science research.

However, the international research publications of university-based Philippine social scientists indicate no trend towards increased

Table 3 International Research Collaborations

	Total		1994- 1998		1999- 2003		2004- 2008	
	N	%	N	%	N	%	N	%
All Filipino authors/institutions	254	58.12	40	59.70	86	61.87	128	55.41
International collaboration w/Filipino lead	58	13.28	7	10.45	19	13.67	32	13.85
International collaboration w/foreign lead	125	28.60	20	29.85	34	24.46	71	30.74

international collaborations. As shown in Table 3, although international research collaborations (with either Filipinos or foreigners as lead researchers) comprise a substantial portion of the international refereed publications, the proportion of such collaborative publications remains at similar levels throughout the 15-year period surveyed. From 1994-1998, international collaborative research publications accounted for 40.30 percent of the total, and from 2004-2008, the corresponding figure was 44.59 percent. Thus, it does not seem that increased participation in international research collaborations was a major factor in the increased international publications of university-based Philippine social scientists.

DISCUSSION

This paper was written to begin exploring how university-based Philippine social scientists have responded to the pressure to meet global standards of scholarship by looking into their publications in international refereed journals in publicly verifiable databases. The very preliminary analysis of the data indicates positive trends. However, before I discuss these results, I wish to underscore an important limitation in the scope of the study.

By focusing on the international publications of Philippine social scientists, the study deliberately emphasizes the outcomes of a positive response to the push to meet international standards of social science scholarship. The data and indicators used in the study do not in any way capture what may be negative responses to this pressure, such as the forms of resistance to this pressure and to the globalization of higher education and of knowledge production, in

general. The present study is incapable of assessing such responses, and future studies would do well to investigate these possible forms of resistance and other critical responses to these trends.

The preliminary analysis of the publications of university-based Philippine social scientists point to some positive responses to this so-called pressure to publish in international refereed journals and to meet the standards of international scholarship in the various social science disciplines. Over the 15-year period covered in the study, there was a clear increase in the volume of publications. There was actually a 244.78 percent increase in the volume of publications from 1994-1998 to ten years after in 2004-2008. This might suggest a rather deliberate effort to focus on meeting the requirements of the international scholarly journals in the different social sciences. Indeed, some universities have provided substantial incentives to faculty members who publish in such journals, and some have even made publications in such journals as requirement for permanency or promotions.

However, the positive response was evident only in a handful of institutions, with the overwhelming majority of other colleges and universities that have social scientists among their staff not producing any publication over the 15-year period. Perhaps only these few institutions aspire to participate and compete at the international level with other higher education institutions. As noted earlier, about six out of every publication in the database (or about 85%) were authored or co-authored by scholars based in only six universities. All these six universities (three in the University of the Philippines System, and three private schools) presently figure in international

rankings of universities, which can be seen as indicating some ability to compete at the international level. These six universities also have the institutional resources and wherewithal to support research and publications of their faculty; for example, all six universities provide sizable financial incentives to publications in Thomson ISI journals. There also seems to be a geographic concentration of research capacities in the National Capital Region, where the authors or co-authors of the overwhelming majority of the published articles are based. This last point further underscores the limited scope of the positive response to the pressure to meet international standards of scholarship.

For the rest of the colleges and universities in the country, the knowledge production of their social scientists as evidenced by international refereed publications is sporadic or non-existent. I do not discuss the possible reasons for this situation in the present paper, but simply underscore what seems to be a rather low capacity of social scientists based in other Philippine colleges and universities to participate in the global level of social science scholarship. Indeed, the six or so leading institutions that were able to respond positively to the pressure are very likely the institutions that already have the research capacities, resources, and infrastructure. The pressure to publish may have prompted social scientists in these institutions to more deliberately sustain their existing research efforts to meet international publication standards. For the remaining colleges and universities in the Philippines, research was probably non-existent to start with and there was nothing that could be elevated to the international level. I should note, however, that the total output of the social scientists in the six leading universities is still quite low and pales in comparison to regional benchmarks (c.f., universities in Japan, Singapore, Hong Kong, South Korea, Taiwan).

The foregoing discussion brings to mind the question of what it takes for Philippine social scientists in the various colleges and universities to participate in the international level of social

science scholarship. Unfortunately the present study cannot provide direct answers to this question. I considered the possibility that international research collaborations may be a strategy to attain this goal, but the data do not indicate any substantial increase in such collaborations that could have pushed an increase in international refereed publications. Perhaps, future studies could focus on the institutional factors that may have helped in boosting the international publications of the leading universities identified in the survey. Such studies might want to consider such factors as the nature and quality of graduate programs offered (Calma, 2009, 2010), the quality of research supervision in graduate training (Calma, 2007), and even personal motivational and experiential variables (Valencia, 2004, 2006). Indeed, it is very likely that even within universities, there are disciplinary differences in how social scientists are able to participate. An ocular inspection of the publications of social scientists in the University of the Philippines Diliman, for example, indicates that economists have disproportionately large number of publications in international journals, while psychologists have very few publications. However, the reverse is true at De La Salle University where psychologists have a disproportionately large number of publications in international journals while economists have only a few. Thus, different factors might come into play for different social science disciplines in different institutions.

One of the factors might be related to the degree to which social scientists in different disciplines and universities cling to the applied approach to doing social science work in the Philippines. It could be argued that focusing on international norms and standards of scholarship would require Filipino social scientists to move away from the applied emphasis on doing social science work (i.e., advocacy, consultancy work, policy development, intervention programs, among others) in order to attend to the more theoretical emphasis of international scholarly publishing, especially in the higher-tier journals.

Unfortunately the data gathered in the present study are not useful to address this matter. It is difficult to discern from mere abstracts of the studies whether Philippine social scientists were doing more applied research or more theoretical studies in their scholarship. Judgments on the theoretical arguments and contributions of particular scholarly works are also best done by experts from the respective disciplines or areas of study. Perhaps this question can be explored more carefully within the individual social science disciplines and thematic areas of scholarship.

CONCLUDING POINTS

This study is a modest attempt to inquire into how Philippine social scientists based in universities have responded to the changes in the global higher education environment which has

put pressure on academics to compete in knowledge production at the global level. The results of the study suggest some positive developments, but these may be severely constrained or limited to a selected few universities. The study raises many questions for further investigation, particularly as regards the specific processes and factors that allow social scientists in particular disciplines and institutions to more effectively participate in the global knowledge production systems in the social sciences and other transdisciplinary areas of study. The preliminary observations made in this paper would hopefully motivate more critical reflections and even systematic investigations regarding how Philippine social scientists should respond to these global changes through their research, while continuing to be responsive to their social development concerns.

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