The Case for Journal Ranking Lists and the Case of the Association of Business Schools'

Journal Quality Guide

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**Abstract: Purpose** – To provide an outline of the arguments for journal ranking lists and a critical account of the development of the Association of Business Schools' (ABS) Journal Quality Guide.

**Design/methodology/approach** – The article identifies recent trends in academic journal publication which have increased the need for mechanisms to rate or rank journal publications systematically. Six different approaches to ranking are outlined and evaluated including the hybrid approach adopted in the compilation of the ABS Journal Quality Guide.

**Findings** – The ABS Journal Quality Guide provides wide journal coverage; has high levels of internal and external reliability, is sensitive to small variations in the ratings of journals and is generally accepted as a means of ranking journals within its user community.

**Research limitations/implications** – This paper focuses on developments in the UK and while the findings of this study may have consequences for researchers and publishers in other countries the implications for policy and practice will be felt most keenly in British business schools.

**Originality/value** – This paper describes a hybrid, iterative and consensual approach to developing and validating a journal list which is likely to be of use to new researchers, academic managers, subject librarians and research auditors.

Key words: business, management, journal, rating, ranking

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## Introduction

The number and range of academic journals in the fields of business and management has increased rapidly over recent years (Ulrich, 2007). This increase in the number of titles has brought both benefits and problems. The benefits mean that it is now easier for researchers to find an outlet for their writing and to communicate the results of their work. It is also simpler for lecturers and students to find a wider range of articles in a greater range of specialisms. The problems arise as a direct consequence of these benefits. There are now so many journals available that it is difficult for academics, university managers, librarians and institutional auditors to determine the currency and relative value of publications in different sub-fields.

There are currently five widely used methods for ranking or rating the quality of journal articles and journal series without repeating the peer review process which preceded their original publication. The five approaches are: individual citation scores, institutional lists, peer surveys, derived lists and citation studies. This article describes the main features of each of these approaches, comments on their relative advantages and disadvantages and then outlines a new hybrid method of rating journals developed by members of the Association of Business Schools (ABS). The main argument advanced in this article is that there is no perfect method of assessing journal quality, but that the ABS journal quality guide overcomes some of the failings of established methods. It is suggested that the use of a range of indicators and an iterative process of gaining consensus among peers, sets this list apart from others in the UK. As a consequence it is suggested that this method should make it easier for researchers to identify which journals might publish their work. It could help academic managers to make staff selection, development, promotion and reward decisions. It might enable librarians to focus their acquisitions budget on the most appropriate journals. It may also assist auditors to make judgements about the nature and quality of research being undertaken in particular departments and research centres. Finally, it offers the prospect, through the demonstration consensus within the field and related specialisms, of gaining more resources for researchers.

This article is divided into three sections. The first section describes recent changes in the volume and form of journal publication in business and management. The second section outlines the main features of the five established methods of assessing the quality of articles and journals. The final section describes the processes which led to the compilation of the ABS guide and discusses the merits and problems associated with this approach.

# 1. Academic Journal Publication in Business and Management

The history of journal publication In the field of business and management is a relatively short one, beginning in the USA in the third decade of the twentieth century (e.g. Harvard Business Review first published in 1922; Journal of Marketing 1936; Personnel Psychology 1948; Management Science 1954; Administrative Science Quarterly 1956 and the Academy of Management Journal 1958). In the United Kingdom the record is even shorter with the first academic journals concentrating solely on contemporary business and management appearing in the 1960s (e.g. Management Decision 1963; Journal of Management Studies 1964 and Long Range Planning 1968). Meanwhile, the British Journal of Management, the house journal of the British Academy of Management (BAM), first appeared in 1990, four years after the formation of BAM and the first Research Selectivity Exercises in 1986 and 1989.

For much of the twentieth century journal publication in the field of business and management was paper based and low volume. In the 1990s and early 2000s, five significant changes came together to increase the scale of activity and generate the need for journal ranking lists.

The first, and perhaps the most significant change, was an increase in the number of higher education staff and students. In the UK alone the number of academic staff in university business schools increased between 1994 and 2006 by 30% from 7,157 to 9,608. Meanwhile, the number of students grew

over the same period by 40% from 159,700 to 223,041 (ABS, 2007a). Parallel increases in the number of academically informed business and management researchers took place in universities overseas and in private sector companies, public sector agencies and voluntary organisations around the World (Pettigrew, 1997). This `massification' of research made it more difficult for business and management researchers in general, and academics in particular to know everyone in their field (Scott, 1995; Becher and Trowler, 2001). A palpable example of this problem is provided by the business and management component of the Research Assessment Exercise (RAE) in 2001. In this exercise the publications of 2,554 researchers working in 91 universities undertaking work in at least 22 major sub-fields was submitted for assessment. The volume of this submission made business and management the largest subject area in the exercise.

The second important change was an increase in the volume of supply. The number of journals and the number of issues and articles within each volume increased between 1980 and 2000 at a compound annual rate of 3.3% (Mabe and Amin, 2001). Between 2000 and 2006 the rate of growth appears to have increased further, at least in the field of business and management (Ulrich, 2007). As a consequence of these changes by 2006 there were over 1,000 academic journals which could be considered vehicles for the publication of business and management research. Growth in the volume of journals followed increases in the number of academics and journals in an environment within which RAE audits in 1992, 1996 and 2001 were an increasingly important part of measuring and determining the funding of research activity (Henkel, 2000; Strathern, 2000; Roberts, 2003). An example of these trends is provided by the RAE in 2001 when referred journal articles as a proportion of all publications submitted stood at 80.2% in Business and Management, 81.9%, in Accounting and Finance and 76.25% in Economics and Econometrics. Figures which were at least twice as high as in other social science disciplines.

Accompanying expansion in the supply of journals, the third change was a shift in the means of delivery. From the beginning of the 1990s print journals

were complemented, supplemented and then increasingly replaced by electronic journals. In 1991, the estimated total number of electronic journals in all subject areas was 27, by 1997 this had grown to 3,634 and in 2006 stood at over 20,000 (Okerson, 2000; Ulrich, 2007). As the number of journals grew, aggregating companies sought to provide libraries with searchable collections of many thousands of titles (e.g. EBSCO Business Source Premier, Emeraldinsight, Ingentaconnect and ProQuest ABI Inform). The bundled nature of these products made it difficult for librarians to buy journals on a title by title basis and it also contributed to above inflation rate increases in journal costs and library budgets (Tenopir and King, 2000). This is not to say these changes were without benefits. Bringing together many journals in a few databases made it easier for researchers to use key words to search for articles, rather than systematically work through paper indexes and individual journal series. However, this change in search behaviour combined with an increase in the number of journals and a decline in personal journal subscriptions to reduce researchers' knowledge of particular journals (Tenopir, 2003).

The fourth important change was an increase in the average number of journal articles read by academic researchers (Tenopir and King, 2002; Tenopir, 2003). While reading patterns vary between subject areas, Tenopir found among social science academics in the USA at the beginning of the 21<sup>st</sup> century that it was not uncommon for individuals to read an average of over 150 articles per year (Tenopir, 2005). For most of these researchers, articles were generally drawn from a small number of core journals and supplemented by more general database searches when faced with a project or query. However, despite growth in the average number of articles read, it is not clear that this kept pace with increases in the amount of material available. A flavour of this problem is provided once again by the RAE 2001 in which the business and management panel was faced with 9,020 journal articles to read in less than four months. With an average of 693.8 articles per panel member, it is not surprising that they reported reading "15-30% of outputs with some reading as much as 75%" (Bessant et al, 2003:53).

The final change to academic journal publication in business and management has been shifts in the nature of what is published. There are a wider range of theoretical traditions and analytical methods brought to bear on issues discussed in these publications than ever before. Thus, despite encouragement from within and outside, business and management research has not coalesced around a set of ontological, epistemological and methodological norms (Transfield and Starkey, 1998). Instead, it has remained a loose collection of specialisms and semi-disciplines with a common interest in business and/or management, but with different values, reference points, methods, writing styles and heros. Thus, the marketeers remain very different from the human resource management specialists, who in turn differ from the information systems researchers, the strategists and the small business people. Developing the metaphorical allusions of Tony Becher, business and management research is a conurbation or an urban sprawl rather than a city (Becher, 1989). To a participant observer from another discipline it would appear that there are groups within this metropolis that know how to get to one another (in all senses of this phrase), but who don't necessarily share the same interests, work in the same ways or indeed have the same accents. In recent times to add complexity to these internal differences, these separate traditions have themselves been cross-cut by wider seismic movements in social science disciplines which have altered relationships within and between fields and given rise to new specialisms and on occasion promoted multi- and inter-disciplinarity (Becher and Trowler, 2001; Lee, 2003).

# 2. Methods of Assessing the Quality of Articles and Journals

When asked to assess a large number of journal articles and/or journals with very varied content there are a limited number of methods which can be used. The first and most thorough is to repeat the peer review process which took place prior to the original publication. However, when time and resource constraints prevent this approach, there are five methods commonly used by

business and management researchers to rank the quality of a researcher, an article or the journal within which an article and author's work appeared.

### a. Individual citation

A commonly used proxy for the quality of an article and its author(s)is its or their citation score. This is a measure of the number of times the work or author is referred to in articles from a select range of other journals and on occasion other forms of publication. There are an increasing number of places from which this information can be gleaned. For example, ISI HighlyCited.com provides a searchable database of 250 leading researchers in 21 subject areas as defined by the number of citations their work has received (ISI, 2007a). Unfortunately for business and management research in the UK only 9 of these individuals are from English institutions and all of them are economists. Other resources which can be used to gain citation information include Thomson's ISI Web of Knowledge and Elsevier's Scopus. Both of these online databases provide data on over 22,000 journals, but both have less than 500 business and management titles – fewer than half the number of journals in the field (ISI, 2007b; Scopus 2007). Aside from these subscription services, perhaps the most commonly used citation database is Google Scholar. This database ranks peer-reviewed papers, books, theses and conference papers by their citation count and length. Regrettably, the algorhythm and automated search methods which produce this data are not publicly available and they change from time to time. These changes mean that the recorded citation scores can go up and down and may be affected by high numbers of references in non-refereed publications.

## b. Institutional lists

This approach relies on an academic researcher, department or school compiling a list of journals and then ranking or rating them. Ann Wil-Harzing compiles a list of the most widely used of these lists drawn from business schools in the USA, Australia, China, France, Germany and the UK (Wil-

Harzing, 2007). The motivation behind the compilation of these lists is typically a desire to make the criteria used in hiring decisions, annual review, tenure track progression, promotion, reward and inclusion in external audits clear to academic staff and the panels that assess their work. In the USA research by Van Fleet and colleagues found that 35 of the 252 institutions surveyed maintained a list and while over 1,000 journals were mentioned in total, the average number of journals on each list was only 72. On the basis of subsequent analysis they conclude that "the probability of [a department] adopting a list is positively correlated with department size and inversely correlated with the perceived quality of the department" (Van Fleet et al, 2001).

In the UK the risks associated with managing performance within institutions in successive RAEs appears to have encouraged departments at all levels of perceived quality to adopt journal lists. The business schools which have adopted these lists in the last ten years include: Aston, Bath, Cranfield, Durham, Bradford, Imperial, Kent, Lancaster, London Business School, Nottingham, Sheffield, Strathclyde, the University of the West of England and Warwick. Meanwhile a larger number of institutions have implicitly adopted these measures as external assessors have used lists in their mock RAE assessments. When it comes to assessing the strengths and weaknesses of these lists it is worth noting that they have the virtue of high internal reliability, but are often criticised for over-rating some specialisms and ignoring or underrating others. As a consequence it has been suggested that they may promote the formation of institution specific human capital (Van Fleet et al, 2001).

# c. Peer surveys

Lists in this category are typically collated and rated from the suggestions of members of a research society or network of scholars. As a consequence these lists tend to focus on one sub-field or specialism, They also tend to be drawn up in subject areas which are trying to determine or assert their identity internally or vis-à-vis other specialisms. Over recent years, lists of interest to business and management researchers have been produced in the sub-fields of accounting, entrepreneurship; information systems; international business; international human resource management, marketing, tourism and hospitality (e.g. Caligiuri, 1999; Dubois and Reed, 2000; Mylonopoulos and Theoharakis, 2001; Theoharakis and Hirst, 2002; Ballas and Theoharakis, 2003; McKercher and Lam, 2006). Only very occasionally do these lists extend to include two or more specialisms and here the motivation is typically the collators' desire to produce a league table of institutions rather than a ranking of journals per se (e.g. Financial Times, 2006). The most significant advantage of single sub-field or specialism lists is the detailed coverage of all titles within a specialism. The main disadvantage is the difficulty of calibrating the range and interval of rankings within a list and the comparability of the publications listed with other sub-fields. Peer surveys, like institutional lists, have a tendency to systematically inflate the ratings of journals in which the assessors and their friends have published.

#### d. Citation Studies

Citation studies are the most commonly used measure of journal quality and the most popular of these measures are provided by ISI Thomson's Journal Citation Rating Reports (ISI, 2007b). The most widely used of the measures contained in these reports is the journal citation impact factor which measures the number of times an average article in a journal is cited in articles within other journals listed on the database. The main perceived advantage of citation studies is that offer the prospect of definitive, fine grained judgements about the relative worth of particular journals based on the principle that the most highly cited publications are the most valuable. However, these studies are not without problems. The most common criticism in the field of business and management is that less than half of all journals are included and that there is a significantly lower proportion than in the related fields of accounting and finance and economics and econometrics. As a consequence of the low number of journals included, not only do many highly regarded journals not

have an impact factor, but also the references contained in these journals are not attributed to listed journals and arguably this drags down the impact factors of the listed journals as well. Another criticism is that differences in the number and type of references made by researchers in different sub-fields and variations in the size and format of journals influence citation impact factors. To overcome these criticisms analyses have been undertaken which either construct citation databases for all journals in a sub-field or attempt to smooth the inter-field effects of different citation practice (c.f. Tahai and Meyer, 1999; Strabuck, 2007). Unfortunately, the costs of constructing these datasets are high and this has prevented them being extended and updated regularly.

#### e. Derived lists

These lists are drawn up using data originally intended for another purpose. For example, the Virginia Commonwealth University list is based on a calculation of the proportion of articles published in each journal which were produced by authors from 60 leading US universities (Virginia Commonwealth University, 1998 detailed in Wil-Harzing, 2007).

The online publication of data submitted to the RAE in 2001 has enabled researchers to analyse submissions and derive lists of the most significant publications by volume and institutional source of submission (Easton and Easton, 2003; Geary et al, 2004). These lists while comprehensive can be criticised for the tautological circularity in their assessment methods. High quality journals are high quality because a high proportion of the articles were contributed by authors from institutions rated as high quality by other means.

# 3. The ABS Journal Quality Guide

The ABS Journal Quality Guide was compiled using elements of the methods used in institutional lists, peer surveys, citation studies and derived lists. As

such it is best described as a hybrid list which combines the virtues of several approaches and which has been developed through several iterations. At each stage in this development the guide has been amended and validated by successively broader processes of benchmarking and peer review. It is the intention of the lists editors that it should contribute to debate within the business and management community about the size and limits of the field as well as discussion about the status of journals in different sub-fields. It is hoped that by promoting a broader consensus on these issues members of the field as a whole will prosper culturally and economically. Culturally, because better understanding of the journals in a field should help young researchers to focus their efforts in literature searches and publication strategies. Economically, by focusing resources on the purchase of the most appropriate journals and also ensuring that university administrations and external funding agencies recognise good work when they see it. As Pfeffer noted fifteen years ago `there is evidence that more highly developed fields [with a high degree of internal consensus] fare better in the contest for resource allocations' (Pfeffer, 1993: 602).

The ABS list began life as a list of all the journals from which three or more articles were submitted to the business and management panel of the RAE in 2001. Other journals were then added through comparison with lists from six UK business schools, Aston, Cranfield, Durham, Imperial, Kent and Warwick. A conscious decision was taken to avoid lists compiled by institutions or individuals from other countries to ensure that the list reflected the views of the UK research community.

The next stage was to compute a citation impact factor index on a four point scale. This index was calculated by taking the mean citation impact factor for the last three years for each listed journal and then converting these scores into a rank from 1 to 4 based on a percentile standardisation of the scores within the relevant sub-field. It was assumed that journals with citation impact scores warranted an impact factor index of 1 or more. These adjustments were undertaken to take account of sub-field effects on raw impact factor scores, while not a wholly accurate means of correcting variations in the

range and distribution of scores within sub-fields, this conversion removed big distortions arising as a consequence of differences in citation coverage and referencing behaviour in different specialisms.

Additional titles were added to the list using information gained from a review of the websites of major journal publishers as well as recommendations received from colleagues in the business and management research community. Working on this master list, each title was systematically reviewed to determine its length and frequency of publication; links if any with a research society or association; the status of its editor and editorial board; statements of editorial policy; as well as the quality of articles in at least three recent issues by reference to research design; analytical methods; theoretical underpinnings and significant findings. On the basis of this review and a comparison of the ranks awarded to each journal in institutional lists and the citation impact factor index a provisional ABS ranking was determined. This provisional ranking was arrived at by reference to the criteria mapped out in Table 1.

Once a provisional rating had been assigned to each journal, the list was sorted into 22 sub-field groupings and opinion was sought from experts in each of these specialisms. At least three experts and sometimes four from a variety of institutions were asked to read the criteria and assign rankings to the journals in their allotted sub-field. In most cases this review confirmed the original rankings. In a less than thirty cases it produced significant differences which were resolved through a further round of reviewing the publication and seeking opinion from other experts. When the final draft list of ABS rankings was produced it was then compared with the five other institutional lists and the citation impact factor index by means of a Spearman's rank order correlation. This analysis revealed a high level of consistency and intercorrelation. The ABS list recorded the highest mean correlation with other lists (0.72) and the highest correlation with the citation impact factor index (0.77).

Table 1: Journal Quality Guide Ranking Criteria

Quality Rating	Meaning
4* A top journal in its field	Publish the most original and best
	executed research papers. Journals
	typically have high submission and
	low acceptance rates. Papers are
	heavily refereed and the journals
	have high citation impact factors in
	their sub- field
3* A highly regarded journal in its field	Publish original and well executed
	research papers. These journals
	typically have good submission rates
	and are very selective in what they
	publish. Papers are heavily refereed
	and the journals have fair to good
	citation impact factors.
2* A well regarded journal in its field	Publish original research of
	acceptable standard. Papers are fully
	refereed and the journals have
	modest citation impact factors or do
	not carry one at all.
1* A recognised journal in its field	Publish research of a most standard
	or have yet to establish a reputation
	by virtue of being launched recently.
	Few journals in this category have an
	impact factor.
0* A journal not recognised as an	Journals aimed at practitioner
authentic research publication.	audiences which attract academic
	contributors and which do not
	generally rely on peer review.

Once complete the final journal rankings were placed on the Association of Business Schools' website with an electronic form requesting feedback from people in the business and management research community. Over the period January to September 2007 comments were received from over 300 researchers active in the field. While all of these comments have recommended additions or amendments to the list, none have sought to fundamentally question the legitimacy of the list or its potential usefulness. The recommendations received through this process of peer review were considered in early September 2007 by a panel of ten researchers drawn from different sub-fields and institutions across the UK and endorsed or set aside. It is hoped through repeating this process on an annual basis that the field of business and management will gain a progressively more consensual understanding of relative journal rankings and through this process also gain better sense of itself, its relationships with other fields and its the links to publications in the UK and overseas.

### Conclusion

This article has argued that a rapid increase over recent years in the number of researchers, refereed journals and variety of types of research, together with an expansion in journal readerships has increased the need for systematic means of ranking the quality of journals. It has been further argued that this ranking can be of use by researchers in one or more of the following five ways. First, as a means of determining which journals to read and target for submission. Second, to inform decisions about which staff to hire and how to develop, promote and reward those already in employment. Third, to decide which journals to licence as part of an institution's library collection. Fourth, to inform internal and external assessments of the quality of research undertaken in particular institutions. Finally, to encourage the development of a better sense of the contours of the field and sub-fields of business and management and to promote this field inside universities and in dialogues with government and external agencies.

Traditionally, there have been five ways to assess and rank the quality of journals: a) individual author or article citation, b) institution lists, c) peer surveys; d) citation studies and e) derived lists. In this article we have argued that the first four of these methods lack the coverage needed to provide a systematic assessment of the quality of research in business and management. Meanwhile, derived lists contain a tautological logic in their construction which conflates institutional prestige with journal ranking and means that this measure has low internal reliability and sensitivity. Similarly, while institution lists, peer surveys and citation studies have high levels of internal reliability, the calibration and sensitivity of the judgements contained within these lists is rarely fully endorsed by external audiences.

The ranking of journals is inevitably an imprecise science which brings with it the danger that highly original work fails to make a significant contribution to a field because it is damned by the name of the publication it appears in.

Similarly, this approach runs the risk that poor work is seen in a better light because of the company it keeps within the covers of a highly ranked journal. While recognising these dangers, we have argued that people don't always read all that they are expected to read prior to selection interviews, promotion boards, library committees or assessment panels. In this environment, it is surely a good thing if a systematic method of determining journal quality like the ABS guide is used, albeit imprecise, alongside whatever peer review is possible within the constraints of time and money. Better, that is, than the unsystematic and imprecise methods that might prevail in the absence of ranking journal titles as a proxy for the quality of articles and/or their authors.

It has been argued in the past that "enhancing scholarly quality remains essential, but [that] any further retreat to defining scholarship just in terms of publication in `A'-rated scholarly journals will trap us in further in the social echo chamber of our own voice." (Pettigrew, 2001: S69). In this article we have argued that the rating of journals as A or 4\* is widespread within the UK and to pretend otherwise, or to wish that it were not so, is more damaging than to reveal and systematically compare these lists so that the business and management community has a better sense of itself and is better

prepared for discussion with other social scientists and with the representatives of government agencies.

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