Out for the count: some methodological questions in ‘publications counting’ literature

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Abstract

This paper considers ‘publications counting’ literature, that literature which seeks to establish league tables of the published output of academics. Often justified on the grounds of benchmarking for supporting tenure and appointment decisions, publications counting literature is revealed to be methodologically flawed. This paper focuses on the major limitations of this kind of study, presenting a conceptual critique of existing ‘publications counting’ processes, and argues that the methods of such studies are neither reasonable nor consistent. This is particularly clear in areas such as the choice of journals to be sampled, the time frame established in sampling procedures, and various arithmetic procedures employed in calculating output measures. The paper concludes with discussion of possible alternative means of achieving goals of benchmarking hospitality scholarship while suggesting that publications counting should be abandoned as a sole means of determining research excellence. © 2001 Published by Elsevier Science Ltd.

Keywords: Hospitality research; Journal status; Measurement of research output

1. Introduction

Measurement of the publications output of academics as a means of eliciting some assessment of individual and institutional productivity and equality is not a new phenomenon, although in the hospitality and tourism context it is thus far principally a US one. A number of studies focusing on the tourism and hospitality areas have appeared in the last dozen years or so (Weaver and McCleary, 1989;...
Weaver et al., 1990; Rutherford and Samenfink, 1992; Samenfink and Rutherford, 1996). Related studies have been undertaken on faculty selection and review criteria (Sheldon and Collinson, 1990; Schmidgall and Woods, 1992); trends in the authorship and content of published articles in hospitality (Chon et al., 1989; Roberts, 1998); the rating of different kinds of publications output (Schmidgall and Woods, 1993); the rating of journals in the hospitality and tourism fields (Ferreira et al., 1994, 1998); and perceptions of the value of single, co-authored and multiple authored articles in hospitality (Woods, 1998). The ‘publications counting’ literature has been further extended by citation analysis of published hospitality research (Woods and Schmidgall, 1995; Howey et al., 1999).

Although, ostensibly, the purpose of the research studies described above has been to investigate the most productive and influential scholars in the fields concerned, precise research objectives are noticeable by their absence although there are passing references to the benefits of benchmarking (Rutherford and Samenfink, 1992) and to the usefulness of such research in terms of “tenure, promotion, and salary issues...recruiting purposes and for promotional reasons...for placement or relocation purposes” (Woods and Schmidgall, 1995, p. 33). Perhaps more remarkable has been the lack of apparent critique of the methodologies of these studies or their general tenor. In an early and still important paper Smith (1983), by the way of outlining approaches to the production of academic articles, charted much of the political context and terrain attendant on such activity. More recently, Seaton (1996) has commented upon the claustrophobic nature of the refereeing process in tourism journals and Wood (1995) has examined some of the conceptual and methodological problems raised by the hospitality ‘publications counting’ literature. These contributions, while valuable, are characterised by brevity and leave considerable scope for further reflection on a range of issues, issues that this paper seeks to address.

The rationale for what follows does not simply emanate from the nature of the studies concerned. In many countries higher education is subject to increasing public and political scrutiny in the name of fiscal accountability and cost efficiency. The workings of the contemporary university in particular are constantly subjected to new tests of social, business and community ‘relevance’. In America, where publication has always had a central role in individual and institutional politics in higher education, these and additional pressures are reflected in semi-public critical discourse on the intellectual practices of higher seats of learning (Sykes, 1988; Hughes, 1994; Paglia, 1993, 1994). Fears about the quality of academic research recur, as is most recently seen in the controversy over Alan Sokal’s duping of a social science journal, where the latter published a ‘phoney’ article by the physicist purporting to deconstruct theories of quantum gravity (Sokal and Bricmont, 1998). These and other pressures have led to a measure of defensiveness on the part of the higher education sector. More important, perhaps, are the mechanisms that some governments have introduced to place checks on quality. In the last 10–15 years in the UK both teaching and research have come to be periodically peer-assessed, the latter every five years in a ‘Research Assessment Exercise’ (RAE) with resultant ratings in subject areas being widely published (a similar exercise is undertaken in
Hong Kong). The circulation of such information and the competitiveness it creates means that measures such as publications counting and citation analysis, when they come from academic scholars, are particularly important as they might exert influence on external assessments. Thus, the main objective of this paper is to offer a conceptual critique of existing studies of ‘publications counting’ in the hospitality field.

2. Conceptual critique of ‘publications counting’

Within the hospitality field, publications counting research is, as already intimated, an ethnocentric affair, the majority of published work emanating from the USA. Of the literature cited earlier, Rutherford and Samenfink (1992) remains the seminal template for the field, a point noted by Wood (1995) who illustrates his own discussion with examples from this study. A similar approach is undertaken here, but examples are drawn from a slightly larger number of sources. The main areas for consideration are:

- choice and relative status of journals included in studies of publications counting;
- the timeframe employed for analysis of published journal contributions relative to journal selection; and
- the arithmetic procedures employed in calculating outcome hierarchies.

2.1. The choice and relative status of journals

The enormous expansion of academic journals in both tourism and hospitality management in the last 10 years (the latter especially so in the USA) means that there are logistical as well as methodological obstacles to any census of publications output in these fields, especially when the time factor is taken into account (although many journals are of recent origin, several of the more established ones have long back runs). Authors of publication counting studies are therefore selective in their choice of journals to analyse. As Wood (1995) has noted in the context of the Rutherford and Samenfink (1992) paper, the rationale for such selection is not always clear. Indeed, Wood (1995) levels a number of accusations against these authors’ choice, arguing that it is ethnocentric (three of the four journals chosen are US-based and, Wood argues, biased); partial (two of the American journals selected are closely identified with their host institutions, i.e. their publishers); and unrepresentative (because they exclude, in particular, tourism journals that publish ‘hospitality’ articles). A limitation of this critique is that Rutherford and Samenfink (1992) are following in a tradition of selecting those journals which are available and conform to broadly established characteristics of academic journals in other fields. Put another way, as early as 1986, Kent and Rutherford employed these titles, as noted by Chon et al. (1989, p. 483) who, however, in also focusing on the four publications suggest they are “the most important hospitality management journals” as opposed to (at the time) the only ones!
Selection of journals for inclusion as bases for publications counting studies is intimately bound up with the perceived status of such journals. Mindful of the limited range of titles extant at the time of the Rutherford and Samenfink study, the choice of the *Cornell Hotel and Restaurant Administration Quarterly*, the *Hospitality Research Journal* (now the *Journal of Hospitality and Tourism Research*), the *International Journal of Hospitality Management* and the *Florida International University Hospitality Review* seems unavoidable, although it excludes those tourism journals of the time that published ‘hospitality’ articles, journals which might reasonably be included in any count. Much has changed since the beginning of the 1990s however. There is now some information on how various (usually academic) audiences view the status of journals in the field. Two influential studies by Ferreira et al. (1994, 1998) identified the ‘leading’ journals as shown in Table 1.

Both these studies were predominantly American in orientation and sample. Nevertheless the UK-based *International Journal of Hospitality Management* performed well as did *Annals of Tourism Research* and the *Journal of Travel Research*, both long-established and respectable publishing outlets and both clearly tourism-orientated. An interesting question thus arises. Does the proliferation of journals in hospitality since 1994 explain the diminution in status of tourism-created journals (i.e. does the 1994 status of *Annals of Tourism Research* and the *Journal of Travel Research* reflect a view of quality based on the relative scarcity of hospitality journals)?

Such a question brings us neatly to the topic of the relative status of journals. However, this is not simply a matter of academics’ perceptions of such status. In established disciplines and subject areas, collegial consensus as to journal status develops over time. In relatively new areas with limited and short research traditions perceived status of journals can arguably be influenced by a much wider range of variables over the, by definition, relative short term. For example, in an academic culture which is increasingly driven by encouragement to ‘publish or perish’, the availability of new journals (which, after all, often operate on market principles

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**Table 1**

Leading hospitality and tourism journals after Ferreira et al. (1994, 1998)

<table>
<thead>
<tr>
<th>1994</th>
<th>1998</th>
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</thead>
<tbody>
<tr>
<td>International Journal of Hospitality</td>
<td>Cornell Hotel and Restaurant</td>
</tr>
<tr>
<td>Management</td>
<td>Administration Quarterly</td>
</tr>
<tr>
<td>Cornell Hotel and Restaurant</td>
<td>Hospitality Research Journal</td>
</tr>
<tr>
<td>Administration Quarterly</td>
<td></td>
</tr>
<tr>
<td>Hospitality Research Journal</td>
<td>International Journal of Hospitality</td>
</tr>
<tr>
<td>Journal of Travel Research</td>
<td>Management</td>
</tr>
<tr>
<td>Annals of Tourism Research</td>
<td>Journal of Hospitality and Leisure</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
</tr>
<tr>
<td></td>
<td>Annals of Tourism Research (6)</td>
</tr>
<tr>
<td></td>
<td>Journal of Travel Research (8)</td>
</tr>
</tbody>
</table>
which means they require copy) may lead academics publishing in these journals to have a not unreasonably heightened perception of their quality. This, put crudely, is the cogito ergo sum approach: I am a good academic, I publish, therefore I publish in good journals and journals in which I am published are good journals. Other factors that may influence the relative status of journals include editorships and editorial board memberships. This can work in two ways. A respected editor (and their associates) can confer equal (and sometimes spurious) respectability on a journal. Membership of an editorial board can flatter to deceive (or at least encourage self-deception) as picking up such baubles is part of the currency of academic life (Sykes, 1988; Seaton, 1996). Cultural differences can also play a role, with regionally based journals enjoying a high status in their region of origin or operation and individual academic credibility dependent on publication in such journals.

The pre-eminence of the Cornell Hotel and Restaurant Administration Quarterly (CHRAQ) in Ferreira et al.’s (1994, 1998) surveys provides an ironic inflection of the above observations. The CHRAQ is the longest-established journal in the hospitality field, published out of one of the World’s leading hotel schools which is itself part of one of America’s ‘ivy league’ universities. It is frequently cited as one of the most important journals in the US hospitality academy over a variety of criteria. Yet in the UK many in both the hospitality and wider business education community would look upon the CHRAQ with suspicion and probably regard it as being at the margins of status as an academic journal (the phenomenon is not entirely confined to the UK, a recent well-regarded survey of hospitality management education included an analysis by Chacko (1999), which placed the CHRAQ firmly in the second tier of hospitality journals). There are a number of reasons for this. First is the composition of the journal which constitutes a mixture of news, current affairs and ‘scholarly papers’ which make it more of a professional rather than academic publication. Then there is the close association with Cornell itself: the CHRAQ is published very much as a corporate work (as of the December 1998 issue, some 17 (41%) of 41 board members were Cornell graduates). Perhaps significant is that CHRAQs main US-based competitor, the Journal of Hospitality and Tourism Research has recently ceased to be published by its sponsoring organisation (the Council on Hospitality and Restaurant Industry Education, CHRIE) and is now under the wing of distinguished academic publishers Sage. Finally, there is the question of how a refereed journal like the CHRAQ can contrive to publish a disproportionate number of papers by its own Faculty. In preparing this article, the authors did a ‘spot check’ and found that between the February 1995 and December 1998 issues, some 24 in all, some 210 papers were published of which 51 were Cornell authored and 17 Cornell co-authored. Thus, nearly one-third of all papers published during this period had a Cornell Faculty or student author, a statistical distortion of some magnitude.

The difficulties attendant on the status and ranking of journals in general and the CHRAQ in particular can be further illustrated by consideration of the findings of a limited research probe undertaken for this and a related research project. No more is claimed for this illustration than its suggestiveness. A mail shot to 300 randomly chosen US CHRIE members in 1999 yielded a meagre 26 responses (8.6%).
Respondents were asked to rank over 30 hospitality and tourism journals in terms of their research value (respondents were also allowed to insert and nominate any titles not included on this list). The top five journals thus nominated are shown in Table 2. The results, though not in any sense capable of generalisation, do suggest a possible congruence with those of Ferreira et al. (1994, 1998). More interestingly, because the research value ranking is transparent for each of the first five positions, by applying a reverse scale (i.e. ranked first scores 5 points, ranked second scores 4 points and so on) it is possible to assign a crude weighting to each rank. On this basis the ‘final’ rank order is the CHRAQ, followed by the JTHR, ATR, IJHM and finally JTR (see Table 2 for legend). It does therefore appear that some consensus is emerging as to the ‘best’ journals, notwithstanding the issues attendant on the status of the CHRAQ. What uses such consensus can be put to will be revisited later in this paper.

To the issue of the relative status of journals, mention should also be made of the role of non-hospitality journals in publication counts. Some hospitality academics at least publish in tourism journals, others in both mainstream and specialist journals of other disciplines. To define ‘most frequent contributors to the hospitality literature’ purely in terms of hospitality journals seems even more absurd when considering the diversity of researchers’ publishing interests and aspirations: such a strategy certainly has the potential to distort outcomes to the extent of rendering them meaningless.

The point of the above discussion is a simple one. It is that a whole range of variables and influences remain to be thought through before it is possible to produce a remotely credible international framework for conducting ‘publications counts’ or indeed a range of related research. To dignify existing commentaries as ethnocentric is to understate the degree of American parochialism in evidence. More important perhaps is that, given the relatively small number of authors recently engaged in research in the hospitality field, it seems remarkable that some methodologically detailed consensus has not been established among those with a clear commitment to the field.

<table>
<thead>
<tr>
<th>Rank/journal</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mentions in top five</th>
<th>Total mentions and as a percentage (x/26), and rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>14</td>
<td>17 65% 4</td>
</tr>
<tr>
<td>CHRAQ</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>16</td>
<td>24 92% 1</td>
</tr>
<tr>
<td>IJHM</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>15</td>
<td>20 77% 3</td>
</tr>
<tr>
<td>JTHR</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>19</td>
<td>23 88% 2</td>
</tr>
<tr>
<td>JTR</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>8</td>
<td>15 58% 5</td>
</tr>
</tbody>
</table>

2.2. Timeframe employed for analysis of published journal contributions relative to journal selection

The final point of the preceding section is brought home with a vengeance when considering certain details of the methodology of publications counting studies. The first of these was alluded too earlier, and concerns timeframes of analysis. As previously noted, the growth in number of hospitality-related journals in the 1990s means that as a population, there is now a range of publications, many with different dates of commencement. These include the long-standing Cornell Hotel and Restaurant Administration Quarterly, in excess of 40 years old, to journals of a few years’ standing. The problem for any ‘publications counting’ research in terms of attaining some degree of meaningful outcome is one of sampling. A census of all journals regardless of period covered is likely to be costly and useful only as a historical exercise. Since the objective of most research of this type is precisely a snapshot in time of ‘the best’ (i.e. most frequently cited authors or journals) the weight of methodological logic is thrown behind what might be called the ‘least inconvenient starting point’ or, alternatively, the most contemporaneous period that is likely to yield meaningful results. Both are, in effect, forms of convenience sample.

The least inconvenient starting point method is employed in the Rutherford and Samenfink (1992, p. 25) study which uses “...the publication date of the first HRJ [Hospitality Research Journal] in 1976 as its departure point. Although begun in 1960, the CHRAQ [Cornell Hotel and Restaurant Administration Quarterly] is only analysed from 1976 to maintain consistency. The debut issues of IJHM [International Journal of Hospitality Management] and FIUHR [Florida International University Hospitality Review] in 1982 and 1983, respectively, became the departure point for the analysis of those periodicals”. The advantage of this approach is that it allows some historical perspective but a bias is built into the survey by the longer runs of the first two named journals. This lends a high probability to the presence in any league table of longer-established scholars who have published in the longer-established journals, favouring the time-served over newcomers. The only adequate means of establishing a contemporary picture of leading scholar publishers is to standardise to a common time period for all journals—anything else is literally ‘none sense’. This is the ‘most contemporaneous period’ method, and entails analysing a publications period likely to yield meaningful results and ensuring a selection of journals that are available for the full duration of the period of study. This approach has the added advantage of eliminating new or recently established journals whose reputation and longevity remain to be demonstrated or whose configuration may change (for example, the journal Progress in Tourism and Hospitality established in 1995 ceased publication in 1998 to be replaced by two journals, the International Journal of Tourism Research and Tourism and Hospitality Research: The Surrey Quarterly Review. Following this line addresses several of the issues raised in the earlier discussion concerning the relative status of journals.

Such an approach nevertheless remains essentially based on convenience sampling and some thought needs to be given to increasing the degree of randomness in a
revised methodological approach. Given that it is the contemporaneous nature of this type of research which lends it any practical or policy value, year starting points should be selected randomly from a delimited range and an adequate sampling period determined. Journals now publish anything from 3 to 10 issues per year, introducing a further requirement for standardisation into any methodological procedure. If the problem of overrepresentation is to be avoided, then periodicity has to be tempered by adoption of common frequencies. This can be problematic for more than methodological reasons as it may mean eliminating from any sample journals of undoubted repute, journals that should necessarily be included in any sample for reasons of credibility.

2.3. The arithmetic procedures employed in calculating outcome hierarchies

The simplest, but nevertheless modestly important point to be addressed here relates to the treatment of co-authored papers. In Rutherford and Samenfink (1992) the paper is treated as 1 and divided by the number of authors to achieve an outcome (i.e. two authors yields 0.5 publication for each author). While this has a surface logic it of course does nothing to reveal the actual contribution of each author. Indeed, the issue is a controversial one (and not only in this field). Woods (1998) surveyed CHRIE members at four-year institutions in the US and a general, if contentious, conclusion was that co- and multiple-authored papers should not ‘count’ in terms of kudos as much as single-authored papers. This response might be contrasted with the natural sciences where much experimental work is teamwork and multiple-authored papers more common, if not actually the norm.

The application of equalising fractions in publications counting for the purpose of establishing league tables of scholars’ research output cannot be regarded as a safe methodology. It underestimates the human element that is involved in the production of publications. To illustrate this point it is necessary to consider only two (not entirely hypothetical) alternatives. First are those research and writing teams who for whatever reasons agree on an alphabetical listing of names on published output regardless of the nature of the contribution (the present paper is a perfect case in point). Second is the team that is perhaps generating a number of papers from a single research project and agrees to a ‘rotation’ of first named author on paper outputs.

A ready alternative to the equalising fractions approach is not immediately evident as to include the qualifications noted above would require perfect knowledge, which to put it mildly is not likely to be attainable.

3. Some ways forward?

This paper has sought to unravel by means of a critique some of the assumptions underlying ‘publications counting’ literature in hospitality. On the basis of the foregoing discussion it would be tempting to suggest clear recommendations as to future methodological procedures for ‘publications counting’ research. Such a
strategy would, however, be flawed. Much of the literature alluded to in this paper evidences, as the critique offered suggests, many methodological flaws and problems, some of them so simple that it is hard to credit that such literature has found itself into the public domain. For every refinement one makes to research design, a boundary problem arises: which journals to search; what length of time period to employ; how to account for multiple- and co-authorship? It is not a prerequisite of this or any research that a consensus be established for progress to be made—methodological pluralism is always to be welcomed. However, if research of this kind is to have, or has, any policy implications, then there must be concern that it is a very blunt instrument indeed.

In point of fact, much of the publications counting literature evidences the preoccupation with crude positivism that Taylor and Edgar (1996, 1999) have, in two influential papers, identified as typical if limiting of hospitality research approaches. There are two main indicators of this approach. First is the preoccupation with quantitative methodology, which often disguises crude methodological assumptions. In respect of publications counting we can cite the boundary issues noted earlier as well as simpler methodological strategies such as fractional apportionment of credit for multiple-authored papers.

Secondly, there is evidence in hospitality research of an often implicit and shallow pragmatism directed towards informing policy outcomes in what Taylor and Edgar (1996, p. 222) term a ‘tyranny of relevance’ (the publications counting literature succumbs to this approach all too readily). Thus, in Rutherford and Samenfink’s (1982) paper the objective is to provide publications benchmarking that might be useful in tenure and promotion decisions. For Taylor and Edgar (1996, p. 222) the principal difficulty of such an approach is the propensity for ‘conceptual malnutrition’ that means that a ‘field’s actual research focus can be subsumed by its techniques or instruments’. This ‘conceptual malnutrition’, is a failure to align robust concepts with the focus of research while promoting the ‘instruments’ of research to a largely unsustainable status. In publications counting this is reflected in the (what must be regarded as) false confidence with which quantitative methods are applied with little regard for prior conceptual refinement with the consequences we have seen for the ‘generalisability’ of these methods.

Any way forward for ‘publications counting’ must begin with this conceptual refinement and establish the purpose of this style of research. Let us accept for the sake of argument that our main goal, following Rutherford and Samenfink (1982) is benchmarking research output. There is a general (although by no means persuasive) view that articles published in refereed journals constitute the apex of such output, the alpha case. However, measurement of this output by individuals, for reasons explored in this paper, is beset by methodological problems and in any case, primarily plays to issues of quantity. The focus on individuals also detracts from issues of research culture local to institutions as opposed to the research culture that might be regarded as a possession of the discipline or field.

In the UK, periodic research assessment exercises of subject fields and disciplines insisted upon by government for reasons of quality assurance but conducted under a peer review system have avoided many of these pitfalls.
Here the focus is the subject group within individual institutions. For each subject group, a university is required to determine the number from the total of academic staff in the group who are ‘research active’. Each person thus identified selects their best four publications for the previous audit period (five years) and these are submitted for consideration by a subject panel. For each institution and subject group, compared to other institutions and subject groups a rating on a scale of 1–5 is determined, 5 being the highest. In reaching their grade decisions, the panels take into account a wide variety of variables. These include, inter alia, the journals in which articles are published; the number of ‘research active’ academic staff submitted in an institution’s subject group as a proportion of the total in that group; the level of qualifications of faculty; the number of doctorates awarded; the number of doctoral students registered in the subject group; and the research monies raised by the subject group.

The research assessment exercise has been controversial in the UK, not least because of concerns over transparency of the assessment processes. Nevertheless, the system, however imperfect, embraces a variety of both quantitative and qualitative criteria in an effort to reach a rounded judgement on research quality. More important from the point of view of this discussion is that it recognises that research capability and quality is not simply a property of individuals, or of a field of study, but has important institutional facets. Compared to the individualised and mechanistic publications counting approach, it is a relatively sophisticated and collectivist process. Individual performance is recognised in this approach but placed in a disciplinary and institutional context.

4. Conclusion

Somewhere between the two approaches described in the previous section lies, probably, a means by which research in hospitality can be benchmarked in a fashion that commands reasonable agreement. Some hope resides in the emergent consensus concerning the ‘best’ journals in the field. For the reasons described earlier, ‘bracketing’ the Cornell Hotel and Restaurant Administration Quarterly leaves Annals of Tourism Research, the Journal of Hospitality and Tourism Research, the International Journal of Hospitality Management, and the Journal of Travel Research. It is not unreasonable to regard these publications as equivalent to the ‘best’ journals in any other discipline. They are independent, long-established and figure in most scholars’ estimations of the preferred outlets for publication. Nevertheless, settling a consensus around these titles leaves unresolved questions relating to the breadth of scholarly publishing in journals outside the field (are four articles by a hospitality academic published in Administrative Science Quarterly equivalent in ‘value’ to four in the International Journal of Hospitality Management?) as well as many of the other methodological issues raised in this article.

The critical problem is that in pointing to the weaknesses of the ‘publications counting’ approach it rapidly becomes apparent that that approach cannot be methodologically ‘salvaged’ in any meaningful way. Furthermore, questions of
‘value’ relate not only to the internal system of hospitality research and scholarship but also to the wider position of hospitality within the Academy. An abandonment of ‘publications counting’ is the first prerequisite to undertaking publications and research benchmarking if this is regarded as a legitimate enterprise. In its place is required some holistic methodology where quantitative and qualitative methods can produce profiles of institutions, departments and individuals, not in pursuit of some perverse academic beauty competition, but in an effort to establish and maintain standards and to promote the quality of research to colleagues in other fields and disciplines.

References


