Research Quality Matters

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Abstract. *This paper discusses how meaningful the expression 'research quality' is in Universities. Measuring the quality of a research publication, it is argued, cannot be done. The issue of the surrogate of Journal League Tables is used to exemplify some of the issues that need to be addressed by the community, from which a number of proposals are made that it is argued, would improve matters quickly and effectively. This is not an information systems crisis paper or similar nonsense, but one possible positive way forward.*

1. Information Systems Publications

Dissemination is the bedrock of academic research, for without it, the research undertaken may as well not have been undertaken. Since publication is the main observable output of academic endeavour, a thinking-free approach to the question concerning quality, value for money, etc popularly suggest that measuring the quality of a research publication is meaningful. I have argued against the absurdity of such a view, and will doubtless need to continue to do so (Paul, 2008; 2007; 2006). Without attempting to be comprehensively damning about the issue, I observe

- We have no criteria for evaluating the quality of a paper other than peer review
- Peer review is notoriously conservative
- Research progress comes from disestablishing the accepted beliefs of the research community, not by erroneously trying to show that the accepted beliefs are in some sense "correct".
- The impact of any research result has a variable life span, sometimes immediate, sometime with a very long fuse.
- What is believed to be good or bad quality is a dependency of too many variables: state of the world, fashionable research directions, reputation of the researcher, what people want to believe etc.

Given these comments, you might wonder if research publications have any value at all. Our knowledge, tenuous as it is, is enhanced by an open debate amongst interested parties, from which one might expect a gradual improvement in understanding (cf On Giant's Shoulders). Such a debate is to my mind indivisible, and major contributions are I suggest less discernible in the general debating hubbub than some would like to assume.

To summarise, research publication is essential to research progress, but associating quality (of a positive kind) can only be pretence.

2. Journal League Tables

Measuring the research qualify of a research publication, whilst impossible, will be tedious if the method of evaluation is to read the paper. Is it possible to find an easier-to-use surrogate? It is currently considered that one can assume that the place of publication has some two-way reflected glory with the papers published. If so, wouldn't it be a good idea to believe that you can ascertain the quality of a paper just from the place of publication. Then all you have to do is produce a ranking of the journals and hey presto, now you know the quality of the paper. All very conveniently easy, not requiring much intellectual effort and easily regulated. And nonsense. And you can use the league tables to put pressure on employees to produce "better" research by mandating which journals they should publish in. In this way, the issue of research quality is entirely the responsibility of the individual – publish in these journals at such and such a rate or you have contractually failed.

But what if the recommended journals are the same for so many institutions that the combined desired research output of these institutions exceeds the combined capacities of the journals selected? Well, that is what competition is all

about, supposedly good for you! Wouldn't that ensure that research operators, people with an ability to judge how to write an acceptable paper from a peer review point of view, rise to the top? Well, you never know, they might co-incidentally have something worth reporting on!

I hope this makes quite clear my view about journal league tables. It is why the two UK Government's Higher Education Funding Council's Research Exercise 2008 Sub-panels that I served on decided to read all the papers and not to use journal league tables in their assessments (I served on Library and Information Management and on Business and Management Studies).

But maybe I am being too critical. People like league tables, a sense of winning and losing. I am one of the editors of the European Journal of Information Systems (EJIS). I have no regard for league tables, but given they exist, I want to be high up the table, preferably number one. And I enjoy real games. So, let's see what we can do!

3. Fun and Games: Measuring Measures

3.1. AIS League Table

Whose table shall we start with? How about the AIS MIS Journal Rankings that should be respectable enough. I shall restrict my fun and games to the basket of eight journals recommended by AIS's Senior Scholars. This gives the league table shown in Table 1.

Table 1. AIS League Table

Journal	Position in AIS table	Relative Position
MISQ	1	1
ISR	2	2
JMIS	5	3
EJIS	11	4
JAIS	26	5
ISJ	32	6
JSIS	46	7
JIT	78	8

So EJIS is fourth, first amongst non-North American journals. Biased? OK let us look at the flavour of the moment, Impact Factors, shown in Table 2

3.2. Impact Factors

Table 2. The 2008 Impact Factors

Journal	Impact Factor 2008	Relative Position
MISQ	5.183	1
ISJ	2.375	2
JMIS	2.358	3
ISR	2.261	4
JIT	1.966	5
JSIS	1.484	6
EJIS	1.202	7
JAIS	?	-

What does this show? EJIS is last. No, the table shows the need to translate impact factor movements over time, and not just take a snapshot view. The highlights of the 2008 Impact Factors for IS journals show:

- MISQ, down slightly at 5.183, number one IS journal, number 3 amongst all management journals.
- ISJ dramatically up and moving into second IS place at 2.375
- ISR, crashing down at 2.261
- EJIS seventh at 1.202, 28th amongst all management journals.
- Now some observations:
  o EJIS is 28th out of all management journals. EJIS made a gain in Impact Factor of over 0.4 since 2007
  o EJIS was one of the top two journals with more papers listed in the2008 RAE than any other IS journals.
  o EJIS's Impact Factor is distorted by the following deliberate policy of the EJIS editors
    ▪ EJIS was a four issues a year journal four or five years ago, publishing about 24 papers a year or about 300 pages
    ▪ It was decided to use its reputation to go for a larger market by switching to six issues a year and increasing pagination per issue. EJIS now publishes about 50 papers per year in 700 pages over 6 issues
    ▪ The way the Impact Factor is counted (citations divided by

number of papers) means that if the number of papers goes up, the Impact factor goes down. And vice versa. So EJIS went down for 3 years (there was a 5 issue interim year as well), but is now going to go up for 3 years as we level out the output. Going to 1.202 is the first of these 3 rises. In two years time, reflecting the stable state levels and the continuing quality improvements, EJIS will be 2 to 2.5

o ISJ is second because it published many less papers last year, artificially pushing the Impact Factor up. Its Impact Factor will sink over the next 1 or 2 years, possibly as low as 1.2.

o JMIS was nearer the top 2 but is sliding down remorselessly

o ISR is in freefall, it was not far behind MISQ until recently

o JIT has moved up with few papers last year. It will sink to below 1.5 next year because suddenly the number of papers has doubled.

o JSIS, always slim (12-15 papers per year) therefore has a volatile impact factor

o EJIS is substantively advancing and is beginning to be seen as the journal of first choice to publish in amongst most authors (hence its popularity in RAE 2008)

So there you have it, EJIS is top 28, and the most published in, and in the steady state at least third or even second ranked IS journal.

Taking MISQ and ISR as the 'quality' journals, given the 3 to 4 year publication turnaround time, will not reflect quality, merely who has research conducted in between 1997 and 2005 in these journals.

3.3. Number of papers published

Where would authors like to publish? In quality journals. So wouldn't the number of papers published in a journal each year indicate relative quality? See Table 3.

That's a good result! No? Biased, size isn't everything. But EJIS's acceptance rate is now at an all time low of 8-9% of submissions, and is the same for special issues as for general submissions. EJIS has 33 Associate Editors and Seniors, mostly well known but all active and enthusiastic. The quality of published papers is obviously high.

Table 3. Number of papers published in last 2 years

Journal	Papers Published (PP)	Relative Position
EJIS	87	1
JMIS	84	2
MISQ	82	3
JAIS	67	4
ISR	55	5
JIT	54	6
ISJ	51	7
JSIS	32	8

In any event, how about popularity combined with impact to give some impression of the 'force' of the journal.

3.4. Popularity and Impact Factors

The combined papers published times impact factor gives a measure of strength of impact or force:

Table 4. Number of papers published in last 2 years times impact factor

Journal	Impact Factor (IF)	Papers Published (PP)	IF x PP	Relative position
MISQ	5.183	82	425	1
JMIS	2.358	84	198	2
ISJ	2.375	51	121	=3
JIT	1.966	54	106	=3
ISR	2.261	55	124	=3
EJIS	1.202	87	105	=3
JSIS	1.484	32	48	7
JAIS	-	67		

But we have to be careful. Normalisation has taken place, so small decimal points can assume large differences erroneously. So I show positions relative to other major positions.

Table 5. Combined Table of Tables

Journal	AIS league table	Impact Factor (IF)	Papers Published (PP)	IF x PP	RAE papers	Ray's rank	Ray's wtd rank
EJIS	4	7	1	3	2	3(17)	1(35)
MISQ	1	1	3	1	6	2(12)	2(64)
JIT	8	5	6	3	1	6(23)	3(65)
JMIS	3	3	2	2	7	1(17)	4(71)
ISR	2	4	5	3	5	4(20)	5(86)
ISJ	6	2	7	3	4	5(22)	6(88)
JSIS	7	6	8	7	3	7(31)	7(97)
JAIS	5		4				

3.5. The Fiddling-with-Violins (cf Nero) League Table

But why be so conservative? Many league tables are weighted combinations of other league tables: see Table 5.

So we can see that most journals can be number one in a league table built to seek that outcome.

4. Quality Matters

What has the above got to do with quality? Nothing of course, although many would like to pretend it does. Why? The measured person knows exactly what and what will not get him/her promotion in the system; the measurer person has a relatively easy task of recording quality using just the journal's league table ranking.

5. How to write a paper that will be accepted (most likely)

So here is the latest version of Paul's "How do you write a quality paper?"

As I have mentioned before in the European Journal of Information Systems (Paul, 2009), you could do worse than making sure your paper would provide 'obvious' answers to the four questions below. In fact, very few published papers meet all four questions obviously. But they would be better papers if they did.

Assuming the paper is an appropriate paper for the journal being submitted to, then:

1. What story are you trying to tell the reader?

   One story, note, not many. There may be two or three major points to the story, but much more than that confuses readers. A story written for the reader can be understood in 10 years time by the author if they need to revisit the paper. A story written for the writer (the majority published) will leave the authors as perplexed in 10 years time as readers are now.

2. What will the reader know after reading your story that they did not know before reading the story?

   The whole point of the paper one presumes

3. Why should anyone believe you?

   This is the downfall of many papers, but if not believable, then that is the end of the paper.

4. Why should anyone care about the story being told?

   What value will the reader attach to the point of the story? If none, you will find that reviewers tend to disguise this problem under the rubric 'significance of the contribution'.

5. What is the essence of your paper in one sentence?

   I know I said four questions, but the fifth question has nothing to do with whether your paper is published or not. Answering this question readily enables readers to attach the idea to you the author, and hence is likely to push your citation index up and enhance your reputation

6. What motivated your research and the paper you have written?

   Again, I know I said four questions, but the sixth question may have nothing to do with whether your paper is published or not. Putting this information in your paper is likely to make the paper more interesting, and

therefore it might be more widely read than otherwise.

So it should be clear from the above that if we would like what is published in our journals to change, then we the research community have to change how we go about our business. There is no one else to do it. I look forward to a flood of well-written publishable papers submitted to EJIS in the near future.

6. Paul's Seven Success Factors for I.S.

But this is all rather narrow, a part of the I.S. communities activities. There is talk of crisis in I.S. which I have no time for. I see a positive future for I.S., driven by the continuing saga of big system 'disappointments', which shows the huge need for help from us. What should we do? I think I have covered all the necessities for success in this short study of journal league tables. So let me present them, **Paul's Seven Success Factors for I.S.** Please note that this for me is not a list to chose from, success depends on all seven factors being addressed, since they all interact with each other.

1. Integrity

    If we cannot be trusted, we shall not be used. Sometimes we have to say unpalatable things, but this is necessary for long-term trust. We should constantly ask ourselves concerning our activities "What good is it?"".

2. Dissemination

    Research quite simply may as well as not have occurred if the benefits are not disseminated. All researchers should ensure that their work is in the public domain. (but see 6 in particular)

3. Experience

    How can we research into I.S. unless we have considerable experience of practice, which we continuously maintain? Research into theory may be fun, but if the theory is of a fantasia, it hardly enhances our integrity.

4. Confidence

    First, you should believe in yourself. If you don't, why should anyone else? But what if you are not self-confident? Talleyrand, Napoleon's and the Restoration's Foreign Minister was a noted self-confident man. When asked by a brave soul why he had such self-confidence, he is reported to have said something like: When I examine myself I worry. When I compare I am reassured!

    We should be confident about I.S. The latter is a new subject with a poor body of knowledge, and many difficulties in practice. Great, lots of opportunities to make major contributions early as in other subjects when they started up. Who wants to research into a mature academic discipline, with an excess of well formed knowledge and only room to make largely insignificant contributions. Other new subjects, management etc? Puffs of wind, 2 by 2 matrices, the 4 or 5 P's and other rigorous trivia. My work in I.S. is potentially ground breaking, fun, and if successful, would help society. What more could I want?

5. Quality

    Quality could be greater in any organisation if Quality Assurance and its related paraphernalia were not applied, because the time saved would be made available. Quality is not about benchmarks and standards, which assume a 'stopping' point, it is about improving what you do all the time – forever!

6. Simple

    I firmly believe that if you understand something well, you can express it simply, and if you cannot express it simply, you do not understand it well. So, for example, after 20 years of vain attempts, I now have a definition of I.S. which succinctly captures the essence of what it is, is easily explained to the uninitiated and is only 7 words:

I.S. is I.T. in Use

In Use implies users, so it's the combination of the two in Use that implies a time dimension, so an I.S. has a time associated with it. Hence the combination of users using I.T. plus any ad hoc decisions gives the I.S at that point in time. Can you do better?

7. Determination

In my experience, whilst academics can be tenacious about their pet ideas, when it comes to matters of the world they tend to bore easily if the argument is sustained. So if we want to establish I.S. we need a concerted community determination to make it happen. Then it will. If you cannot be bothered to defend your subject, don't be surprised if your disciplinary home disappears about you.

So what is my conclusion.

IDECQuSD

pronounced ID excused.
We should embark on activity which ensures that our I.S. identity is at least excused and allowed, if not completely accepted.

References

Paul R. J. (2005-2009) a mass of editorials in the European Journal of Information Systems

Including

Paul R. J., What is published in our journals cannot change unless we do. *European Journal of Information Systems*, 18, 189-191 (2009).