

DISCUSSION PAPER SERIES

IZA DP No. 10752

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Evidence from a Survey Experiment**

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ABSTRACT

Impact of Lower Rated Journals on Economists' Judgments of Publication Lists: Evidence from a Survey Experiment*

Publications in leading journals are widely known to have a positive impact on economists' judgments of the value of authors' contributions to the literature and on their professional reputations. Very little attention has been given, however, to the impacts of the addition of publications in lower rated journals on such judgments. In our main tests, we asked subsamples of economists in 44 universities throughout the world to rate either a publication list with only higher rated journals or a list with all of these but with additional publications in nearly as many respected but lower rated journals. Our primary finding was that the inclusion of lower rated journals had a statistically significant negative impact on these economists' judgments of the value of the author's contribution. To the extent that such judgments may influence research and publication strategies our findings imply negative implications on social welfare.

JEL Classification: A14

Keywords: lower ranked journals, publication, judgment bias, less-is-better effect, resume

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NON-TECHNICAL SUMMARY

The results of our survey experiments of economists from 44 universities around the world suggest that publications in lower ranked journals, added to lists containing publications in higher ranked journals, do not add positively to judgements of the research contribution of the individuals who provide them. Whatever the positive social value of the increased availability of research findings made available in such publications, they nonetheless strongly appear to have a negative impact on judgments of the contributions of, at least hypothetical, authors – a statistically significant subtraction.

There appear to be at least two major groupings of implications of our empirical finding of the likely often negative contribution of publications in lower rated journals to economists' judgments of the contributions of their authors. The first is the socially perverse incentives it provides to individual researchers' research and publication strategies. The other is the detrimental impacts on the social efficiency of the conduct of research and the dissemination of the outputs.

I. Introduction

Judgments of individual economists' contributions to the scientific literature, and their professional reputations, are heavily influenced by not just the number of publications, but the perceived quality of the journals in which their publications appear. Such assessments of an individual's publication list play a varying, but usually an important, role in hiring, promotion, and tenure decisions, in not just research universities, but in many other institutions as well (Grimes and Register, 1997; Combes et al., 2008; Conley et al., 2011). They are also often instrumental in awarding research support, generating requests to offer their professional advice as consultants and as advisors to public bodies, and prompting invitations to take part in conferences, workshops, seminars, and the like – and it is rare that publication in “top five” journals is not mentioned in introductions when economists are invited to speak to their peers.[†] A consequence is the huge and growing demand of authors, especially those associated with academic institutions, to get their papers into top journals. Indeed in a recent research by Card and DellaVigna (2013) the number of papers to these top five journals over the last two decades has doubled from 2,800 in 1990 to 5,800 in 2011. This growth in demand, unfortunately, is not matched by the supply side. The total number of papers published in these top five journals has decreased by 20% in 2011 from that in 1976-1980 period (Card and DellaVigna, 2013).

Faculty members' publication records are also used in the construction of departmental rankings (see, e.g., Dusansky and Vernon, 1998; Kalaitzidakis et al., 2003), which are then used to further attract grants and prospective faculty members and students. Moreover, many universities and departments – especially ones with relatively less experience in making hiring and promotion decisions that are based on research accomplishments – regularly rely on journal ranks to provide not only

[†] The “top five” are widely regarded to refer to the American Economic Review, *Econometrica*, The Journal of Political Economy, The Quarterly Journal of Economics, , and the Review of Economic Studies – though there is far less consensus on the ordering among the five. While publication in a “top five” journal is seen by many as the highest “certification” of our profession, research has shown that many papers published by them have little impact and some are never cited, and many of the most noteworthy papers and ideas of economists did not enter the literature via their pages (Oswald, 2007; Hamermesh, 2015). Further evidence was presented by Heckman (2017) in a panel discussion on publishing and promotion in economics; *The Curse of the Top Five*, at the 2017 AEA Annual Meeting in Chicago. He showed that journals outside these top five account for a substantial proportion of the top 1% of highly cited Economics articles in RePEC (<https://ideas.repec.org/top/>).

validation of their decisions but evidence of a more “objective” standard for judging people, thereby reducing the criticisms of committee decisions.

While it is widely appreciated that the presence of well recognized and prestigious journals on a publication list has a very favourable impact on judgments of an author’s contributions and resulting reputation, much less is known and very little attention has been given to the impact of publications in lower ranked journals.[‡] Although such publications may have substantial positive social value in disseminating useful innovations and empirical findings, it seems unclear if this contribution is in any way commensurately recognized in the judgments of other economists and of those making decisions that affect them. Indeed, it is not even clear if publications in lesser ranked journals, when added to publications in higher ranked journals, have a positive or negative impact on people’s assessments.

The notion that producing something having positive value, publications in this case, may not contribute much to a person’s reputation, and might even detract from it, arises at least in part from empirical demonstrations of a form of focal illusion whereby people sometimes assess something having greater objective value as being worth less than a related good of objectively lesser value. For example, in one of a series of clear, and very helpful, tests, Christopher Hsee (1998), found that people shown a set of dinnerware having 24 pieces in good condition, were willing to pay significantly more for these than another group of people were willing to pay for a set that contained 28 pieces in good condition but with another 11 that were broken. Clearly, even though valued less by the individuals in the two groups, by the more meaningful criteria of having more usable pieces the latter set was worth more – something that was only reflected in the valuations of a third group who were shown both sets.

The main purpose of our study was to test whether or not something of the same less-is-better effect might also influence peer evaluations of economists’ publication lists. That is, might the inclusion of publications in well-known and respected, but lower ranked, journals along with those in higher ranked ones, either not add much

[‡] One exception is the work by Grimes and Register (1997) who found, using a data of academic economists in year 1968, that publishing in low-ranked journals correlates negatively with job rank within the profession.

positive impact on the assessments of other economists or even have a negative impact?

Our main finding from two tests, each involving two pairs of reading lists, was that in the judgments elicited from a total of 378 economists from 44 universities in nearly all regions of the world – many of whom holding senior appointments and would likely be in a position to exercise or influence hiring, promotion, tenure, and research grant award decisions – it appears likely that the inclusion of lower ranked journals on an individual’s publication list will have a *negative* impact on the assessment of such lists by other economists. We found statistically significant differences between the higher average 1 to 10 rating that respondents gave to both lists having only eight higher ranked journals, and the lower average rating that other subsamples gave to lists containing all of the same eight higher ranked journals plus six more lower ranked ones.

The implications of these, and other, findings from our study seem likely to extend beyond just the individual authors. To the extent that they adjust their research and publication strategies in line with the incentives which these judgments provide, institutions that rely, at least to some extent, on judgments of research quality to guide their activities and personnel decisions, journals that may see their submissions responding to these judgments, the wider community which both funds research and benefits from its findings are all also likely to be affected. Although the importance of these implications varies, they nearly all imply negative impacts on social welfare.

II. Survey Design and Procedures

Our respondents were faculty members from research-led economic departments in universities located in different parts of the world. For each of these regions, we randomly selected economic departments that belong to the top 10% research based universities as listed in the Research Papers in Economics (RePEC) website: <https://ideas.repec.org/top>. As a main focus of our study was on UK and US universities, more than a proportionate share of data was collected in these two areas. In total, we have economists from 44 universities in our sample, with 14 universities in the UK, 12 in the US, 2 in Canada, 5 in Continental Europe, 1 in Hong Kong, 3 in Singapore, 6 in Australia, and 1 in New Zealand. These universities are reasonably

well known in academic circles and many of their faculty members received PhD degrees from the world's top ranked universities. Publications in internationally peer-reviewed economic journals would be important for the appointment, promotion, and tenure decision process in all of these universities.

In all, we sent 1,827 email invitations to take part in the survey to faculty members of these 44 universities, in which we provided a web link to the Google form page of our randomized survey. If they agreed to participate, they were then asked to proceed to the survey page by clicking the web link provided. In addition, we also invited current PhD students at 7 universities in the US, the UK, Australia and Singapore. There were in total 502 PhD students invited, with 52 completing the survey. Overall, we received 378 anonymous positive responses to our surveys, which represents around a 16% response rate.[§]

(Table 1 about here)

Table 1 provides detailed summary statistics of characteristics of both the population sample of individuals invited to take part in the survey and those that did so. These show that the characteristics of the individuals replying positively to our invitation to take part, such as; the gender composition, the highest education attainment, the year of PhD completion, the country where the PhD degree is obtained, and the job title, fairly well mimic those of the population that was invited – including the gender imbalance among people holding academic positions (for example, Kahn, 1993).^{**}

A total of seven individual survey treatments were used in our study. The first four provided the primary tests of the influence of lower ranked journals on economists' judgments of publication lists – the main purpose of the study. Two provided a comparison of the ratings for lists containing two publications in “top five” journals (*The Quarterly Journal of Economics* and *the Journal of Political Economy*), but one list with and the other without the addition of publications in lower ranked journals (“Long Top 5” and “Short Top 5”, respectively). The other two provided a

[§] It should be noted that we did not incentivize our colleagues to complete the survey, or send reminders when questionnaires were not completed. We relied completely on their willingness to volunteer a few minutes of their time to participate in the survey, with only the promise that we would send them the results later if they were interested in having them.

^{**} See Appendix A for more detailed summary statistics, Appendix B for the distribution of survey responses, and Appendix C for the list of the sampled universities.

similar comparison test of lists with and without inclusion of lower rated journals, but with both lists having no “top five” journals (“Long No Top 5” and “Short No Top 5”).

(Table 2 and Table 3 about here)

Two further treatments asked for ratings of the same lists when each pair was viewed together by respondents – joint valuation of “Short Top 5” and “Long Top 5”, and joint valuation of “Short No Top 5” and “Long No Top 5”. The seventh treatment contained only lower ranked journals (“Long Lower Ranked”) and provided a confirmation test of the sensitivity of people’s judgments of the quality of publication lists to the rankings of the journals that are included.

(Table 4 about here)

For every university in our list, we randomly allocated their faculty members among the 7 experimental treatments. In particular, we provided 7 different Google form web links in the email invitation, with each bringing the respondents to the unique survey website for the respective treatment. We used a between-subject survey design which allowed each participant to participate in only one treatment.

After examining the hypothetical CV publication list they were randomly given (or two lists for those asked for joint valuations), respondents’ valuations of the publication lists were elicited with the following question:

“Without any other information, rate individual A’s publications as contributions to the literature and individual A’s professional reputation on the following 10-point scale, where 1 = worst possible CV,..., 10 = best possible CV”.

To further increase respondents’ focus on the journals in the lists as indicators of the value of the contributions, the instructions noted that the list did not include solicited or invited papers, or ones submitted to conferences. The responses are collected anonymously online using Google survey form.

III. Results

As indicated in Figure 1, the means of the single valuation ratings of the five lists provide clear evidence of the ability of respondents to discriminate among the different lists with reasonable sensitivity to differing ratings of the journals on these individual lists. The two containing publications in Top 5 journals (the “Short Top 5” and the “Long Top 5”) were, quite reasonably, given the highest ratings. These were followed, but by statistically significant lower mean ratings, by the two lists which contained all of those in the higher rated lists, but with the two “Top 5” journals (The *QJE* and *JPE*) replaced by two middle-tier general journals, *Economica* and *Economic Inquiry* (the “Short No Top 5” and “Long No Top 5” lists). Not surprisingly, the lowest single valuation ratings, by a good margin, were given to the list included as a consistency check, that is comprised entirely of publications in unambiguously lower ranked journals (the “Long Lower Ranked” list).

(Figure 1 about here)

III.A. Impact of Lower Ranked Journals in Separate Comparisons

The results summarized in Figure 1, also provide the main answers to the central question addressed in the study – the impact of lower ranked journals on economists’ assessments of publication lists. In the judgments of the 378 economists completing our surveys, inclusion of lower ranked journals does have an impact on their judgments of the value of the research contribution of an individual: it is negative, it is statistically significant, and it is meaningfully large.

In the first comparison test, one sub-sample of respondents was given only the single “Short Top 5” publication list to view and to rate on a 0 to 10 scale. Another sub-sample of respondents was asked to do the same for the only list they saw, the “Long Top 5”. Again, and as is evident in comparing the two (Table 2), the longer list contains all eight of the higher rated journals, including two of the “Top Five”, on the short list, but it has six others of lower rank included as well.

Respondents given the “Short Top 5” list, gave it an average rating of 8.1; those given the “Long Top 5” list provided ratings with a 7.6 mean. As indicated by a Mann-Whitney nonparametric test, the difference is statistically meaningful (Table 5).

(Table 5 about here)

A second, and similar, comparative test was provided by the ratings given to the “Short No Top 5” and “Long No Top 5” lists; ones that excluded any “Top Five” journals, but with the long list again including all eight of the journals on the short list, plus another six lower ranked ones. The mean rating given by respondents seeing only the “Short No Top 5” journal list was 7.0. The mean rating given by economists shown only the “Long No Top 5” list was 6.3. In this case as well, the Mann-Whitney test indicated a comfortable level of statistical significance between the two means (Table 5). Here, as in the other comparison test, the average rating of the publication containing lower ranked journals was judged to be significantly less worthy than a publication list that differed only by not having such “lesser” publications added to ones in the other more higher ranked journals.^{††}

While the tests of differences in the means of the ratings of individual publication lists, provides strong empirical evidence that inclusion of publications in lower ranked journals has a substantial negative impact on economists’ judgments of the research of the authors, there remains the possibility that this may be at least in part be due to confounding effects of other variables. To check for this, we conducted a series of further tests of the effects of various control variables on the conclusions reached on the basis of comparisons of the means of individual ratings of different publication lists.

(Table 6 about here)

The results of regressions of respondents’ ratings on different Separate-evaluation treatments using OLS in Columns 1 and 2, and ordered probit in Columns 3 and 4, are reported in Table 6. Columns 1 and 3 include treatment dummies as the only independent variables, whilst Columns 2 and 4 control for respondent’s gender, academic positions (professor/associate professorship/assistant professorship/current PhD student), highest education level, dummies for year completed highest education

^{††} This conclusion is further supported by the much lower mean rating of 3.2 given by respondents seeing only the “long lower ranked” journal list.

level, and country where the highest level of education was obtained (US/UK/Rest of the World). The baseline for comparison is the “Short Top 5” publication list.

With more control variables, we continue to find economists preferring shorter CVs to longer CVs when additional publications in the longer CVs appeared in lower-ranked journals: the average rating of the long “Long Top 5” to be around 0.5-point lower than the average rating of the “Short Top 5” in the OLS regression, and this difference is statistically significant different at the 5% level. The “Short no Top 5” receives an average rating that is around 1-point lower than the average rating obtained for “Short Top 5”, while the “Long no Top 5” has received around 1.8-point lower rating than the average rating of “Short Top 5”. As anticipated, the “Long lower-ranked journals” receives the lowest average rating across all CVs, with an average of nearly 5 points (out of 10-point scale) lower than the average rating received by “Short Top 5”. And as can be seen in Column 2, adding control variables to the regression does very little to change the magnitudes and the statistical significances of these estimates. In addition to this, we can see that the estimates obtained from running ordered probit models are remarkably similar to those obtained using OLS, thus suggesting that it makes virtually no difference whether one assumes cardinality or ordinality in the CV ratings.

(Table 7 about here)

How consistent are these findings across different sub-samples? The results of tests of this done by re-estimating the full specification using OLS on different subsamples that are separated by gender, academic positions, year completed highest education, and country where the highest education was completed, using “Short Top 5” as the baseline, are reported in Table 7. Looking across columns, it is remarkable to see that the general pattern of monotonically decreasing in the CV ratings from “Short Top 5” to “Long lower-ranked journals” seems to hold for most of the subsamples. Of 10 subsamples, 4 (females, full professors, completed education by 2010, and completed in the UK) report statistically significantly lower average ratings for “Long Top 5” compared to “Short Top 5”. And of 10 subsamples, only respondents who completed their education from elsewhere other than US and UK report statistically the same ratings for “Short no Top 5” and “Short Top 5”.

In sum, Tables 6 and 7 produce the same striking conclusion: on average, economists judge a publication list containing lower ranked journals as less worthy as that differed only by not having such “lesser” publications added to ones in the other more higher ranked journals. The results are robust to controlling for economists’ characteristics (e.g., gender, position, country where PhD was obtained, etc.), as well as across different sub-groups.

III.B. Impact of Lower Ranked Journals in Joint Comparisons

While the negative impact on valuations of the addition of publications in lower ranked journals to ones of higher rankings was clear when judgments were based on examinations of single, isolated publication lists, the results of similar judgments based on simultaneous examination of both lists were very different. As in the results of the tests on sets of dinnerware, and other pairs of items reported by Hsee (1988), the judgments made when respondents could directly compare both lists, and could immediately see that the long list contained all of the journals in the short list, plus others in addition, the negative impact of the added journals being of lower rank did not materialize in either of our tests of this (Figure 2).

(Figure 2 about here)

In the first joint comparison test respondents were asked to imagine two individuals, A and B, with A having publications in journals in the “Short Top 5” list, and B having publications in the “Long Top 5” list. Both the “Short” and the “Long” “Top 5” lists were shown to respondents to allow them to make direct side-by-side comparisons. In contrast to the significantly lower ratings given in the single comparisons, in this joint comparison there was no evidence of lower ranked journals added to the higher ones having any negative impact on the judgments of their worth. However, neither was there any indication, in this test, that they added positively to these judgments. The average rating of 8.03 given to the “Short Top 5” list is essentially the same as the 7.93 mean rating of the “Long Top 5” list, with no meaningful statistical difference (Table 5).

In the second joint valuation test, in which respondents were shown both the “Short No Top 5” and the “Long No Top 5” lists as being those of two hypothetical individuals, the means of their ratings were 6.53 and 6.94, respectively. In this test, in which respondents could see that the longer list with the lower ranked journals included also contained all of those in the short list, not only did not give a negative weight to the lower ranked journals, but gave a significant *positive* value to their inclusion.

The results of these two joint-evaluation tests strongly suggest that it may not be significantly harmful for economists to publish additional papers in lower-ranked journals as long as the evaluators can clearly see – from being able to evaluate multiple publication lists simultaneously -- that people with longer lists have everything that people with the shorter lists have.

However, it also appears, on the basis of all of the results, that it is not so much that other economists see publications in lower ranked journals as having negative value, as when they see the two in joint valuations they clearly do not judge this to be the case. It seems to be more the case that factors, or characteristics that are taken into account differ between single and joint evaluations and that it is this that gives rise to the results we observe. This view of the results also seems more consistent with other findings from comparative studies of people’s single and joint valuations – including Hsee’s dinnerware study (1998) noted earlier.

Various reasons for the single vs. joint valuation disparities have been suggested. These include the observation that single-valuations commonly limit people’s ability to properly consider the impacts of relevant characteristics and prompt consideration of less, or totally irrelevant attributes, such as Hsee’s finding that people considered the irrelevant characteristic of size of a container as the main reason they were willing to pay more for a smaller serving of ice cream that overflowed a very small dish than they would pay for a much larger serving that only partially filled a large dish (Hsee, 1998). In a somewhat similar way, people have been shown to find some attributes of a good or person easy to evaluate even in an independent single valuation and therefore tend to dominate in such cases, whereas other characteristics which are hard to evaluate in single valuations, and therefore largely ignored, may be easier to assess in joint valuations and become important

considerations of outcomes in such cases – all, therefore leading to very different ratings in the differing circumstance (Hsee, Loewenstein, Blount, and Bazerman, 1999).

(Table 8 about here)

We introduce estimates from the joint-evaluation treatments in Table 8. We can see that the difference in the average ratings between “Short Top 5” and “Long Top 5” when both CVs are being evaluated jointly to be statistically insignificant in Columns 1 and 2 (OLS) as well as in Columns 5 and 6 (ordered probit). On the other hand, respondents in the joint-evaluation treatment tend to rate “Long no Top 5” around 0.4-point higher than “Short no Top 5” in the OLS regression. Qualitatively the same results can also be obtained using ordered probit in Columns 7 and 8. This is consistent with Figure 2’s conclusion

(Table 9 about here)

Finally, Table 9 reports OLS estimates by subsample for the joint-evaluation treatments.^{‡‡} While we cannot reject the null hypothesis that the average ratings between “Short Top 5” and “Long Top 5” are the same, we can nevertheless reject the same null hypothesis for “Short no Top 5” and “Long no Top 5” for the cohorts of our respondents who completed their highest education level after 2010 (i.e., the younger cohorts) and those who completed education outside the US and the UK.

We can also reject the null at the 10% level that the average rating of “Short no Top 5” is statistically the same as the average rating of “Long no Top 5” when CVs are being evaluated jointly. However, we are not able to reject the null that the average ratings of “Short Top 5” and “Long Top 5” are the same in the joint evaluation treatment, which is consistent with Hsee’s (1998) “Less is Better” effect.

There may be in all of our results, a concern that respondents may be inferring a prediction of future productivity from the lists, and in particular that the short lists are signalling a lack of career time to publish more papers as well as an indicator of quality of contributions – and therefore an alternative explanation for our observed results. We deliberately did not give any clues or suggestions as to the career stage of

^{‡‡} We have too few observations by gender and academic positions to do subsample analysis for these groups.

the person our hypothetical CV belongs to, specifically because we did not wish to prime our subjects into evaluating the hypothetical lists based on some expected values that might be deemed appropriate for a certain career stage. So while the lack of career time might be a possible reason for our results, the results of the joint valuations, when respondents can see both lists and rate the value of the contributions of each strongly undermines this suggestion. If it were the cause for the observed ratings of the publication lists in the single valuations, it would also be the case in the joint valuations – authors with fewer publications would in joint valuations too be given a benefit of a doubt of lack of career time being the reason for their shortness of lists. But this was not our finding.

IV. Implications of results and conclusions

The main conclusion of our test of the impact of publications in lesser ranked journals on judgments of the professional contribution and reputation of economists, by other economists, seems clear – at least for the likely by most common in real life, single valuations. Publications in lower ranked journals, added to lists containing publications in higher ranked journals, do not add positively to judgements of the research contribution of the individuals who provide them. Whatever the positive social value of the increased availability of research findings made available in such publications, they nonetheless strongly appear to have a negative impact on judgments of the contributions of, at least hypothetical, authors – a statistically significant subtraction.

As with Hsee's demonstration, noted above, that a higher value was accorded a larger set of intact dinnerware that also contained broken pieces only when it could be directly compared to the smaller set, our respondents too were quick not to give a lower rating to the publication lists containing publications in lower ranked journals only when they could directly see in a side-by-side comparison that these were clearly in addition to all of the better publications of the shorter list. As the usual occasions calling for actual judgements of publication lists are ones in which people are called on to rate that of a single individual, it is the result of our main test that is most relevant – and, presumably, most worrying.

There are, of course, occasions in which it is the results of joint valuations that will matter to final outcomes. Perhaps most easily imagined are comparisons between candidates for a position or honour – Candidate X vs. Candidate Y. But most others, such as those involving promotion, tenure, and selection of consultants and other experts, seem to be ones more likely to turn on results of single valuations. Further, even in cases of Candidates X and Y competition over a position, it is largely the results of single valuations that determine whether a person becomes a Candidate X or a Candidate Y.

Our respondents also demonstrated their sensitivity to the quality of different journals by their giving an appropriate much lower rating to the list containing publications in only lower rated journals. Even though recruited from faculties in regions throughout the world, this result provides some meaningful assurance that the results of the main test were likely not due to a failure to appreciate the significance of publications in journals of varying rank.

There appear to be at least two major groupings of implications of our empirical finding of the likely often negative contribution of publications in lower rated journals to economists' judgments of the contributions of their authors. The first is the socially perverse incentives it provides to individual researchers' research and publication strategies. The other is the detrimental impacts on the social efficiency of the conduct of research and the dissemination of the outputs.

There seems to be a wide appreciation among most economists actively involved in research that publications in higher rated journals are the ones that really "count" very much for things they care about, such as employment, promotion, tenure, research support, invitations to take part in professionally or financially rewarding activities, and recognition. These concerns have with little doubt been exacerbated in recent years by the growing explicitness of these benefits being known to be tied to individuals' publication in such journals.

There is also a further growing awareness that publications in lower rated journals may not add much, if anything, to other economists' judgments of the author's contributions and resulting impacts on reputations. The findings from the present study strongly suggest that these feelings that such publications will be

seriously discounted are not only likely to be correct, but that reality may be even harsher in ascribing a negative value to such efforts.

To the extent that individual economists are aware of the basis of these judgments, they can be expected to tailor their research and publication strategies to at least some degree accordingly. Research projects will more likely tend to be selected less on the basis of interests and advantages of the researcher in successfully carrying out such research, and more on the basis of topics more likely to appeal to editors and referees for more higher ranked general interest journals. Research papers are also more likely to be more quickly filed away after more minimal efforts to access better journals, rather than redone for a more appreciative specialized field journal readership. Consequently, socially useful and important work to make papers suitable for lower ranked journals may well not be undertaken by authors who see little or no benefit to themselves from their doing so – an all too common case of journal publication incentives to authors leading to external costs to the wider community. Another related case is that of research leading to replication tests of earlier findings being seriously discouraged by the extreme reluctance of top journals to consider publishing them because of their not being sufficiently novel, in spite of such papers being essential to the proper development of the field.

Overall, the patterns of judgments of the value of the contributions of individual economists suggested by the findings of the present study are likely to compromise, rather than enhance, social efficiency and community welfare.

To the extent that these judgments motivate individuals to withhold socially valuable research findings from publication rather than risk having it detract from their professional reputations, people are denied the benefits yielded by resources that have been expended to obtain them.^{§§} Topics pursued with an eye towards ranking of the intended journal publication may, but may well not efficiently match research productivity with reader and community interests. The heavier weighting of publications in higher ranked journals together with the discounting of lower ranked journals in judgments of individual economist's contributions can also be expected to result in a far from socially optimal distribution of submissions across journals of

^{§§} An example of such a case, but one in which the author too bears a, possibly substantial, cost, occurs when tenure-track junior faculty fail to pursue publication in lower ranked good journals after rejections from top ones, only to end up with little to show for their "probationary time" efforts.

differing rank – a bias likely made more serious by the known imperfections in the screening process that feeds the hope that a lesser quality manuscript might just “slip in”, and as the cost to the author is low and the payoff may be extremely high, it could easily be “worth a try”. Evidence that submissions to higher ranked journals have increased disproportionately, and likely not the result of just the increase in the quantity of economics research being done in the world, is provided by the dramatic increase in the numbers of “associate”, “assistant”, and other such editors who have been appointed to handle the larger volumes of their submissions – as a typical example, *The American Economic Review* now has an Editor, and *eight* no doubt needed (and no doubt over-employed) “Co-Editors”.

A further consequence of these and other perversions in incentives induced by the way reputational and contribution judgments are made, as indicated in the findings from the present study, is that hiring and promotion committees and research granting bodies will receive somewhat distorted views of the social productivity of individuals. That this may well often occur receives some considerable credence from our finding that when people viewed both pub lists together, they valued the one with lower ranked publications included as high or higher, so that the pattern that our findings suggest is likely to occur in the world, of giving negative value to lesser journal publications, will give a distorted view of the social value of the contributions of individuals. This can lead to distorted signals to committees and granting bodies, which, of course, can only undermine efficient allocations.

A potentially interesting issue that our design of posing publication lists of hypothetical economists does not allow us to test is the possibly different judgment of the impact of publications in lower ranked journals by more well-known and respected economists. Would, for example, Adam Smith’s reputation have been harmed in any way if the opportunity had been available to him and he had published a paper (or papers) in the equivalent of the *North Borneo Rubber Planters Gazette*? Another potentially interesting issue is whether high citation counts in lower ranked journals can compensate for their known lower ranking.

References

Attema, Arthur E., Brouwer, Werner B. and Van Exel, N. Job, (2014), Your Right Arm For a Publication in AER?. *Economic Inquiry*, 52(1):495-502.

Card, David, and Stefano DellaVigna. (2013), Nine Facts About Top Journals in Economics. *Journal of Economic Literature* 51(1):144-161.

Combes, Pierre-Philippe, Laurent Linnemer, and Michael Visser. (2008). Publish or Peer-Rich? The Role of Skills and Networks in Hiring Economics Professors. *Labour Economics* 15(3):423-441.

Conley, John P., Mario J. Crucini, Robert A. Driskill, and Ali Sina Önder. (2013) The Effects of Publication Lags on Life-Cycle Research Productivity in Economics. *Economic Inquiry* 51(2):1251-1276.

Dusansky, Richard, and Clayton J. Vernon. (1998). Rankings of US economics Departments. *Journal of Economic Perspectives*, 12(1):157-170.

Grimes, Paul W., and Charles A. Register. (1997). Career Publications and Academic Job Rank: Evidence From the Class of 1968, *Journal of Economic Education*, 28(1): 82-92.

Hamermesh, Daniel S., (2015), *Citations in Economics: measurement, uses and impacts*. No. w21754. National Bureau of Economic Research.

Heckman, James J., (2017), Publishing and Promotion in Economics: The Curse of the Top Five, slides presented at the 2017 AEA Annual Meeting in Chicago, available at https://hceconomics.uchicago.edu/sites/default/files/file_uploads/AEA-Curse-Five-HO-SMALL-STATIC_2017-01-06d_jbb.pdf.

Hsee, Christopher K., (1998): The Evaluability Hypothesis: An Explanation of Preference Reversals Between Joint and Separate Evaluation of Alternatives, *Organizational Behavior and Human Decision Processes*. 46:247-257.

Hsee, Christopher K., George F. Loewenstein, Sally Blount, and Max H. Bazerman, (1999), Preference Reversals Between Joint and Separate Evaluations of Options: A Review and Theoretical Analysis, *Psychological Bulletin*, 125(5):526-590.

Kahn, Shulamit, (1993), Gender differences in academic career paths of economists, *The American Economic Review* 83(2):52-56.

Oswald, Andrew J. (2007), An Examination of the Reliability of Prestigious Scholarly Journals: Evidence and Implications for Decision-Makers." *Economica* 74(293):21-31.

Table 1: The Summary Statistics of our Replied and Population Sample

Variables	Sample Completing Survey	%	Sample Invited to Complete Survey	%
<i>Gender</i>				
Male	319	84.4%	1807	77.6%
Female	59	15.6%	522	22.4%
<i>Education</i>				
PhD	329	87.0%	1817	78.0%
Masters	49	13.0%	507	21.8%
Others			3	0.1%
Missing information			2	0.1%
<i>Year completed PhD (faculty members only)</i>				
Before 1991	64	19.5%	317	17.3%
1991-2000	60	18.2%	259	14.2%
2001-2010	110	33.4%	525	28.7%
2011 and beyond	89	27.1%	319	17.5%
Without PhD	0	0.0%	8	0.4%
Missing information	6	1.8%	400	21.9%
<i>Country where the PhD is obtained (faculty members only)</i>				
US	159	48.3%	955	52.2%
UK	88	26.7%	307	16.8%
Rest of the World	82	24.9%	425	23.2%
Missing information			400	21.9%
<i>Job title</i>				
Professor	140	37.0%	769	33.0%
Associate Professor/Reader/Senior lecturer	62	16.4%	304	13.1%
Assistant Professor/lecturer/research fellow	124	32.8%	739	31.7%
PhD Student	52	13.8%	501	21.5%
Missing information			16	0.7%

Table 2: The Short “Top 5” Higher Ranked Journals and the Long “Top 5” with Lower Ranked Journals Added.

A) The Short "Top 5" Higher Ranked Journals

1. Journal of Econometrics
2. Quarterly Journal of Economics
3. Economic Journal
4. Journal of Labor Economics
5. Journal of International Economics
6. Journal of Public Economics
7. Review of Economics and Statistics
8. Journal of Political Economy

B) The Long "Top 5" Higher Ranked Journals

1. Journal of Econometrics
 2. Journal of African Economics
 3. Quarterly Journal of Economics
 4. Economic Journal
 5. Pakistan Development Review
 6. Journal of Labor Economics
 7. Asian Economic Journal
 8. Journal of International Economics
 9. European Journal of Comparative Economics
 10. Pacific Economic Bulletin
 11. Journal of Public Economics
 12. Review of Economic and Statistics
 13. Journal of Political Economy
 14. South African Journal of Economics
-

Table 3: The Short “no Top 5” Higher Ranked Journals and the Long “no Top 5” with Lower Ranked Journals Added.

A) The Short "no Top 5" Higher Ranked Journals

1. *Economica*
2. *Journal of Econometrics*
3. *Economic Journal*
4. *Journal of Labor Economics*
5. *Journal of International Economics*
6. *Journal of Public Economics*
7. *Review of Economics and Statistics*
8. *Economic Inquiry*

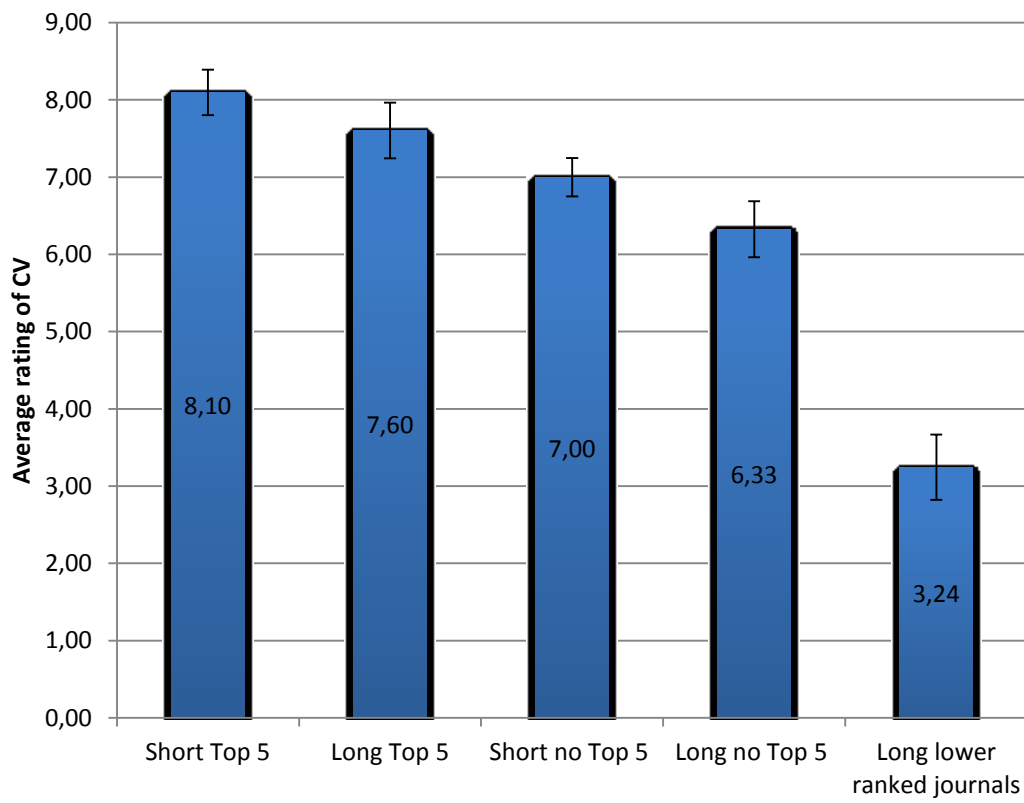
B) The Long "no Top 5" Higher Ranked Journals

1. *Journal of Econometrics*
2. *Journal of African Economics*
3. *Economica*
4. *Economic Journal*
5. *Pakistan Development Review*
6. *Journal of Labor Economics*
7. *Asian Economic Journal*
8. *Journal of International Economics*
9. *European Journal of Comparative Economics*
10. *Pacific Economic Bulletin*
11. *Journal of Public Economics*
12. *Review of Economic and Statistics*
13. *Economic Inquiry*
14. *South African Journal of Economics*

Table 4: the long “lower-ranked journals” CV (CV5)

1. *German Economic Review*
2. *Journal of African Economics*
3. *Emerging Market Review*
4. *Empirical Economics*
5. *Pakistan Development Review*
6. *Eastern Economic Journal*
7. *Asian Economic Journal*
8. *Journal of Economic Methodology*
9. *European Journal of Comparative Economics*
10. *Pacific Economic Bulletin*
11. *Global Economic Journal*
12. *International Journal of the Economics of Business*
13. *Applied Financial Economics*
14. *South African Journal of Economics*

Figure 1: Ratings of different hypothetical CVs, Separate-evaluation treatments



Note: 95% confidence intervals (4 standard error bars, 2 above and 2 below).

Table 5: Two-sample Wilcoxon rank-sum (Mann-Whitney) test of equal means

	<i>p</i> -value
1) Separate-evaluation treatments	
Short Top 5 vs. Long Top 5	0.0101
Short Top 5 vs. Long no Top 5	0.0057
Short Top 5 vs. Long lower-ranked journals	0.0000
Short Top 5 vs. Short no Top 5	0.0000
Long Top 5 vs. Short no top 5	0.0000
2) Joint-evaluation treatments	
Short Top 5 vs. Long Top 5	0.5557
Short no Top 5 vs. Long no Top 5	0.0783

Table 6: OLS and ordered probit regressions on ratings of different hypothetical CVs: Separate-evaluation treatments

VARIABLES	OLS		OPROBIT	
	(1)	(2)	(3)	(4)
Hypothetical CV treatments				
Long Top 5	-0.495** [0.232]	-0.491** [0.229]	-0.557** [0.235]	-0.571** [0.234]
Short no Top 5	-1.098*** [0.193]	-1.058*** [0.187]	-1.260*** [0.211]	-1.235*** [0.205]
Long no Top 5	-1.771*** [0.234]	-1.751*** [0.235]	-1.770*** [0.234]	-1.815*** [0.237]
Long lower-ranked journals	-4.853*** [0.258]	-4.856*** [0.242]	-3.698*** [0.324]	-3.830*** [0.310]
Respondent's characteristics				
Associate Professor/Reader/Senior lecturer		-0.028 [0.251]		-0.036 [0.212]
Assistant Professor/Lecturer/Research fellow		0.229 [0.282]		0.314 [0.257]
Current PhD students		0.307 [0.848]		0.216 [0.627]
Highest education: Master level		0.433 [0.789]		0.527 [0.574]
Year completed highest education: 1991-2000		0.175 [0.285]		0.045 [0.238]
Year completed highest education: 2001-2010		-0.103 [0.293]		-0.209 [0.237]
Year completed highest education: post-2010		-0.078 [0.375]		-0.289 [0.326]
Missing information on year completed education		-0.385 [1.227]		-0.354 [1.044]
Male		-0.248 [0.200]		-0.227 [0.174]
Country of highest education: UK		0.168 [0.179]		0.158 [0.155]
Country of highest education: Rest of the World		0.188 [0.185]		0.204 [0.172]
Constant	8.098*** [0.147]	8.036*** [0.279]		
<i>Cut points</i>				
<i>C1</i>			-5.437*** [0.437]	-5.684*** [0.463]
<i>C2</i>			-4.025*** [0.322]	-4.193*** [0.372]
<i>C3</i>			-3.295*** [0.280]	-3.421*** [0.333]
<i>C4</i>			-2.819*** [0.276]	-2.914*** [0.318]

<i>C5</i>			-2.440***	-2.526***
			[0.251]	[0.306]
<i>C6</i>			-1.822***	-1.891***
			[0.214]	[0.287]
<i>C7</i>			-0.919***	-0.967***
			[0.179]	[0.267]
<i>C8</i>			0.456***	0.446*
			[0.159]	[0.255]
<i>C9</i>			1.668***	1.720***
			[0.237]	[0.300]
Observations	271	271	271	271
R-squared	0.649	0.670		
Pseudo R-squared			0.224	0.238

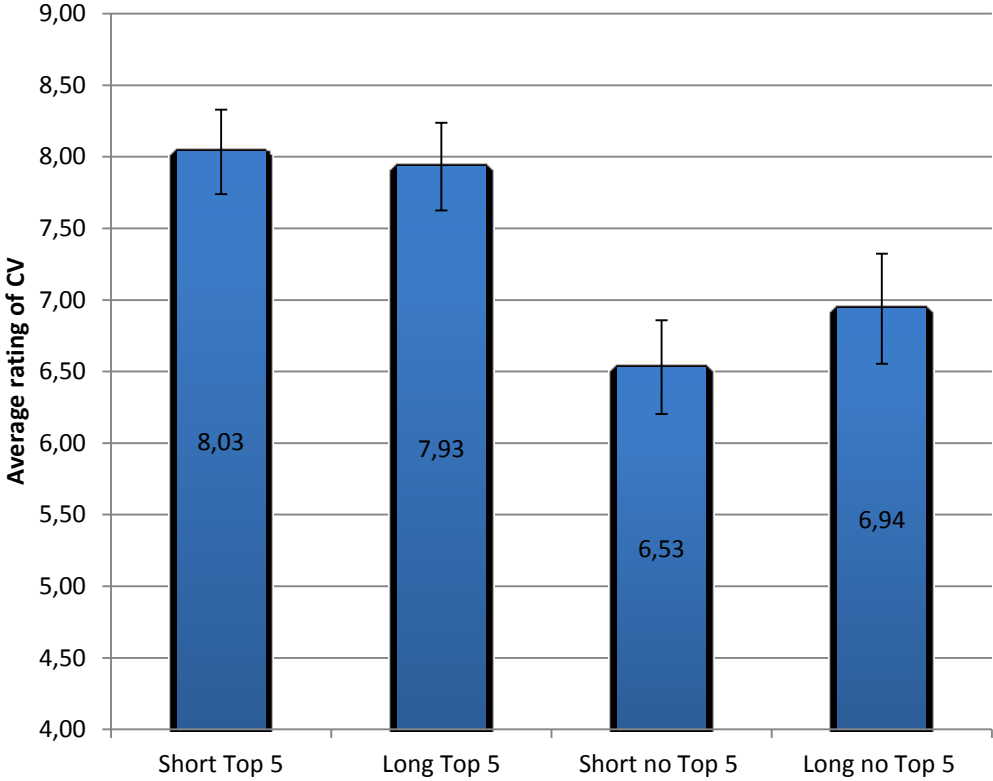
Note: *<10%; **<5%; ***<1%. Robust standard errors are reported in parentheses.

Table 7: OLS regression on ratings of different hypothetical CVs by sub-sample: Separate-evaluation treatments

VARIABLES	Females	Males	Full Professor	Assoc. Professor	Assist. Professor	Completed education by 2010	Completed education after 2010	Completed education in USA	Completed education in UK	Completed education in ROW
Hypothetical CV treatments										
Long Top 5	-1.076** [0.484]	-0.365 [0.252]	-0.898** [0.377]	-0.843 [0.582]	0.592 [0.431]	-1.075** [0.407]	-0.238 [0.276]	-0.391 [0.372]	-0.867** [0.340]	0.232 [0.483]
Short no Top 5	-1.645*** [0.563]	-0.977*** [0.210]	-1.242*** [0.322]	-1.587*** [0.452]	-0.802** [0.336]	-1.193*** [0.371]	-1.061*** [0.222]	-0.877*** [0.259]	-1.304*** [0.304]	-0.595 [0.602]
Long no Top 5	-2.260*** [0.461]	-1.605*** [0.272]	-2.244*** [0.412]	-2.444*** [0.762]	-1.184*** [0.372]	-2.311*** [0.468]	-1.546*** [0.259]	-2.229*** [0.427]	-1.335*** [0.369]	-1.366** [0.538]
Long lower-ranked journals	-4.883*** [0.605]	-4.832*** [0.267]	-5.433*** [0.334]	-6.086*** [0.543]	-4.952*** [0.367]	-5.227*** [0.371]	-4.794*** [0.312]	-5.149*** [0.319]	-4.401*** [0.467]	-4.694*** [0.564]
Observations	45	226	97	41	88	90	177	115	90	66
R-squared	0.786	0.673	0.714	0.739	0.762	0.654	0.710	0.707	0.686	0.735

Note: *<10%; **<5%; ***<1%. Robust standard errors are reported in parentheses.

Figure 2: Ratings of different hypothetical CVs, joint-evaluation treatments



Note: 95% confidence intervals (4 standard error bars, 2 above and 2 below).

Table 8: OLS and ordered probit regressions on ratings of different hypothetical CVs: joint-evaluation treatments

VARIABLES	OLS				OPROBIT			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Base: Short Top 5</i>								
Long Top 5	-0.103 [0.148]	-0.103 [0.154]			-0.081 [0.131]	-0.096 [0.153]		
<i>Base: Short no Top 5</i>								
Long no Top 5			0.408** [0.160]	0.408** [0.169]			0.352** [0.151]	0.459** [0.200]
Associate Professor/Reader/Senior lecturer		0.872** [0.347]		0.406 [0.425]		1.012*** [0.360]		0.454 [0.443]
Assistant Professor/Lecturer/Research fellow		0.906** [0.390]		0.471 [0.590]		0.955** [0.431]		0.569 [0.622]
Current PhD students		1.364* [0.699]		-0.328 [0.484]		1.233 [0.785]		-0.350 [0.573]
Year completed highest education: 1991-2000		-0.203 [0.479]		0.259 [0.488]		-0.306 [0.481]		0.349 [0.534]
Year completed highest education: 2001-2010		-0.739 [0.470]		0.212 [0.623]		-0.941* [0.502]		0.300 [0.665]
Year completed highest education: post-2010		-1.414** [0.569]		-0.229 [0.718]		-1.555** [0.653]		-0.225 [0.770]
Male		-0.048 [0.793]		-0.524 [0.347]		-0.283 [0.849]		-0.606 [0.379]
Country of highest education: UK		0.023 [0.345]		0.675** [0.308]		0.050 [0.320]		0.756** [0.342]
Country of highest education: Rest of the World		0.932*** [0.345]		0.743** [0.294]		1.155*** [0.427]		0.825** [0.349]

Constant	8.034***	8.115***	6.531***	6.095***				
	[0.148]	[0.903]	[0.153]	[0.518]				
<i>Cut points</i>								
<i>C1</i>					-1.757***	-2.356**	-2.147***	-2.121***
					[0.238]	[0.943]	[0.361]	[0.685]
<i>C2</i>					-1.525***	-2.118**	-0.824***	-0.509
					[0.219]	[0.988]	[0.162]	[0.562]
<i>C3</i>					-0.464***	-0.935	-0.037	0.466
					[0.162]	[0.991]	[0.156]	[0.580]
<i>C4</i>					0.267*	-0.057	0.813***	1.561**
					[0.158]	[1.000]	[0.178]	[0.622]
<i>C5</i>					1.589***	1.593	1.841***	2.947***
					[0.249]	[1.082]	[0.234]	[0.667]
<i>C6</i>							2.548***	4.105***
							[0.390]	[0.711]
Observations	116	116	98	98	116	116	98	98
R-squared	0.002	0.229	0.031	0.389				
Pseudo R-squared					0.001	0.010	0.009	0.158

Note: *<10%; **<5%; ***<1%. Robust standard errors are reported in parentheses.

Table 9: OLS regression on ratings of different hypothetical CVs by sub-sample: joint-evaluation treatments

VARIABLES	Completed education by 2010	Completed education after 2010	Completed education in USA	Completed education in UK	Completed education in ROW
Panel A: Joint-evaluation treatment 1					
<i>Base: Short Top 5</i>					
Long Top 5	-0.095 [0.275]	-0.108 [0.189]	0.069 [0.214]	-0.526 [0.305]	0.200 [0.291]
Observations	42	74	58	38	20
R-squared	0.196	0.415	0.264	0.158	0.113
Panel B: Joint-evaluation treatment 2					
<i>Base: Short no Top 5</i>					
Long no Top 5	0.286 [0.393]	0.394** [0.186]	0.211 [0.280]	0.538 [0.403]	0.529* [0.265]
Observations	28	66	38	26	34
R-squared	0.367	0.325	0.211	0.469	0.205

Note: *<10%; **<5%; ***<1%. Robust standard errors are reported in parentheses.

Appendix A: Descriptive statistics

Treatments	Separate-evaluation					Joint-evaluation			
	Short Top 5	Long Top 5	Short no Top 5	Long no Top 5	Long lower-ranked journals	Short Top 5	Long Top 5	Short no Top 5	Long no Top 5
Ratings	8.10 (1.15)	7.60 (1.31)	7.00 (0.93)	6.33 (1.31)	3.24 (1.48)	8.03 (1.12)	7.93 (1.17)	6.53 (1.06)	6.94 (1.25)
Gender (Male=1)	0.82 (0.39)	0.89 (0.32)	0.82 (0.39)	0.85 (0.36)	0.80 (0.41)	0.91 (0.28)		0.82 (0.39)	
Year completed education	2005.20 (11.69)	2002.11 (10.49)	2004.36 (10.78)	2001.28 (13.00)	2003.38 (11.39)	2001.95 (13.69)		2002.66 (11.45)	
Education (PhD=1)	0.82 (0.39)	0.81 (0.39)	0.86 (0.35)	0.87 (0.34)	0.84 (0.37)	0.91 (0.28)		1.00 (0.00)	
Received PhD from US	0.23 (0.42)	0.26 (0.45)	0.41 (0.50)	0.40 (0.50)	0.37 (0.49)	0.33 (0.47)		0.27 (0.45)	
N	61	53	56	52	49	58		49	

Note: Standard deviations are in parentheses.

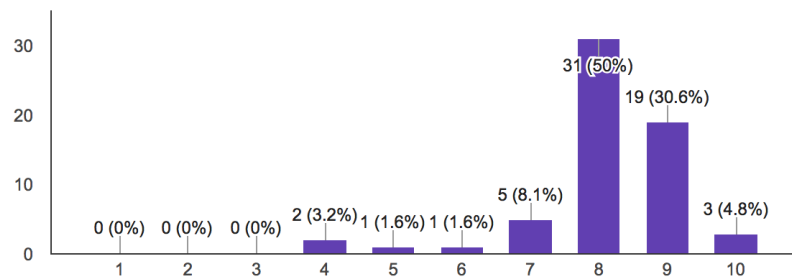
Appendix B: Distribution of responses

1) Short Top 5 (Separate-evaluation)

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(62 responses)

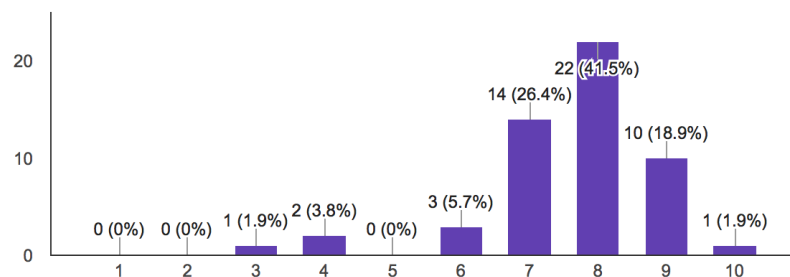


2) Long Top 5 (Separate-evaluation)

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(53 responses)

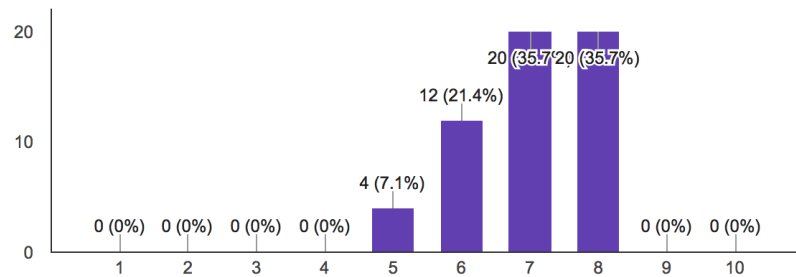


3) Short no Top 5 (Separate-evaluation)

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(56 responses)

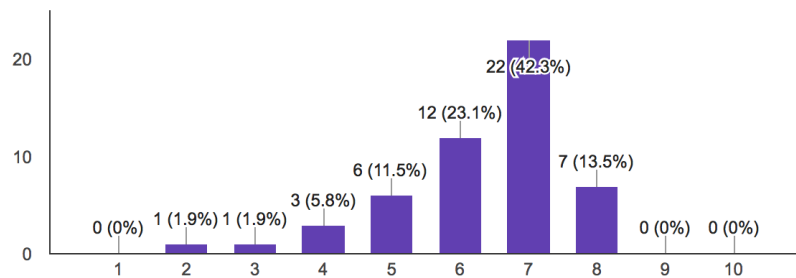


4) Long no Top 5 (Separate-evaluation)

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(52 responses)

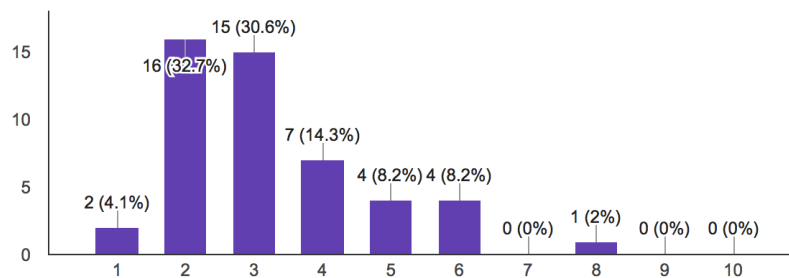


5) Long lower ranked journals CV (Separate-evaluation)

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(49 responses)

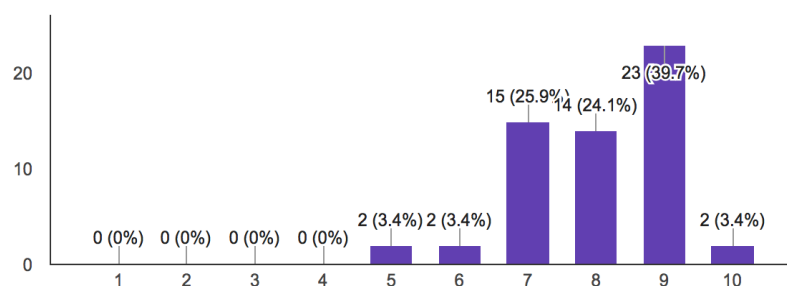


6) Short Top 5 CV versus Long Top 5 CV (Joint-evaluation)

i) Short Top 5

Now, please rate Individual B's publications as contributions to the literature and Individual B's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(58 responses)

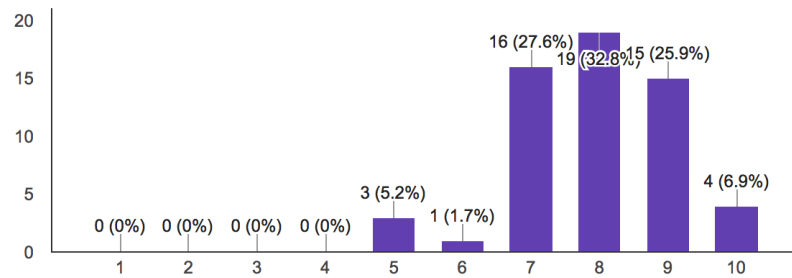


ii) Long Top 5

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(58 responses)

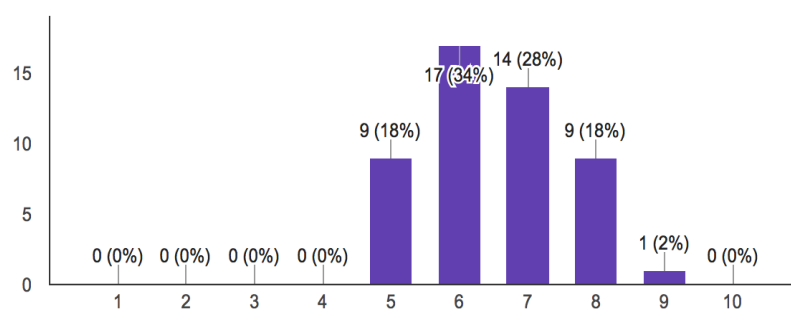


7) Short no Top 5 CV versus Long no Top 5 CV (Joint-evaluation)

i) Short no Top 5

Now, please rate Individual B's publications as contributions to the literature and Individual B's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(50 responses)

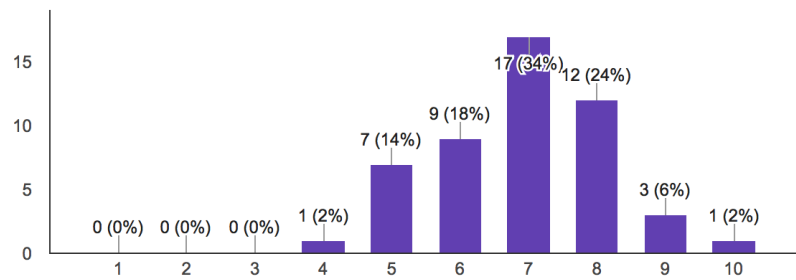


ii) Long no Top 5

Questions

Without any other information, rate Individual A's publications as contributions to the literature and Individual A's professional reputation on the following 10-point scale, where 1 = the worst possible CV, ..., 10 = the best possible CV

(50 responses)



Appendix C: List of sampled universities

1	Adelaide	AUS
2	ANU	AUS
3	Auckland	NZ
4	Berkeley	US
5	Bonn	EU
6	Boston	US
7	Bristol	UK
8	Brown	US
9	Carlos Madrid	EU
10	Chicago	US
11	Cornell	US
12	Dartmouth	US
13	Edinburgh	UK
14	Essex	UK
15	Exeter	UK
16	HKUST	HK
17	LSE	UK
18	Melbourne	AUS
19	Michigan	US
20	North Western	US
21	Nottingham	UK
22	NTU	SG
23	NUS	SG
24	Oxford	UK
25	QMUL	UK
26	Queensland	AUS
27	Royal Holloway	UK
28	Science Po	EU
29	Simon Fraser	CAN

30	SMU	SG
31	St Andrews	UK
32	Surrey	UK
33	Sydney	AUS
34	Texas A&M	US
35	Toronto	CAN
36	UCL	UK
37	UCSD	US
38	UNSW	AUS
39	Uppsala	EU
40	USC	US
41	Warwick	UK
42	Wisconsin	US
43	York	UK
44	Zurich	EU