

Table 1 (continued)

PRS (no. of publications adjusted by impact factor)	PRS rank	REP (USNWR specialist reputation score average 2011–2013; in %)	REP rank	Change in ranking (PRS–REP)
33.7	37	0.0	47	–10
33.6	38	0.4	42	–4
33.3	39	0.0	47	–8
32.2	40	5.8	15	25
28.7	41	0.4	40	1
21.4	42	1.0	30	12
19.6	43	0.9	33	10
18.3	44	0.0	47	–3
13.2	45	0.2	45	0
12.3	46	4.4	20	26
10.4	47	0.7	35	12
8.5	48	0.6	38	10
2.3	49	0.4	40	9
1.7	50	0.8	34	16

First, while multiple years of data were included in the PRS, the authors compared only 1 year of USNWR rankings. Noise from year-to-year changes in ranking methodology or data error may obscure real relationships. To address this concern, I averaged 3 years of reputation data.

Second, the authors did not describe how they determined PRS rankings. They reported ties at ranks 47 and 49 despite differences in impact factor-adjusted publication numbers, which may affect the rank-based statistics calculated. For transparency, I recalculated PRS rankings based on those raw scores alone.

Third, the authors computed Spearman's rank correlations on the USNWR top 10 subgroup (in addition to the entire top 50), even though a sample size of 10 is underpowered to detect associations of moderate size using this test [6]. Unsurprisingly, they failed to find a statistically significant correlation between USNWR rank and PRS ranks in this group.

Finally, though the authors found a highly statistically significant association between the overall ranks of institutions in the USNWR top 50 and PRS ranks ( $p = 0.0004$ ), they write it off as "little correlation". To the contrary, a Spearman's  $\rho$  of 0.48 is considered of moderate size. The current analysis only further reaffirms the presence of an association between PRS and existing quality metrics.

These findings suggest that reputation captures an aspect of hospital quality that overlaps significantly with academic productivity. The existence of collinearity may hold implications for ranking publishers and policy-makers looking for adjunctive measures of hospital process quality.

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## References

- [1] Lloyd JC, Madden-Fuentes RJ, Nelson CP, Kokorowski PJ, Wiener JS, Ross SS, et al. The publication ranking score for pediatric urology: quantifying thought leadership within the subspecialty. *J Pediatr Urol* 2013 Apr 24. pii: S1477-5131(13)00075-2. <http://dx.doi.org/10.1016/j.jpuro.2013.03.012>. [Epub ahead of print].
- [2] Joseph DB. Editorial comment on "A publication ranking score for pediatric urology: quantifying thought leadership within the subspecialty". *J Pediatr Urol* 2013 May 23. pii: S1477-5131(13)00106-X. <http://dx.doi.org/10.1016/j.jpuro.2013.04.012>. [Epub ahead of print].
- [3] Olmsted MG, Geisen E, Murphy J, Bell D, Morley M, Williams J, et al. Best children's hospitals 2013e14 methodology. *RTI Int Retrieved Sept 7, 2013*, from: [http://www.usnews.com/pubfiles/BCH\\_Methodology\\_2013-14.pdf](http://www.usnews.com/pubfiles/BCH_Methodology_2013-14.pdf).
- [4] Olmsted MG, Geisen E, Murphy J, Williams J, Pitts A, Bell D, et al. Best children's hospitals 2012e13 methodology. *RTI Int Retrieved Sept 7, 2013*, from: [http://www.rti.org/pubs/bchmethod\\_2012-13.pdf](http://www.rti.org/pubs/bchmethod_2012-13.pdf).
- [5] Olmsted MG, McFarlane E, Murphy J, Severance J, Pitts A, Bell D, et al. Best children's hospitals 2011e12 methodology. *RTI Int Retrieved Sept 7, 2013*, from: [http://www.rti.org/pubs/abchmethod\\_2011-12.pdf](http://www.rti.org/pubs/abchmethod_2011-12.pdf).
- [6] Bonett DG, Wright TA. Sample size requirements for estimating Pearson, Kendall and Spearman correlations. *Psychometrika* 2000;65(1):23–8.

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## Response to "Reputation rankings for pediatric urology moderately"



We read with interest the recent letter regarding the Publication Ranking Score (PRS), and we appreciate the author's methodological points.

As we noted in the paper, the point of the PRS paper was to neither advocate for nor against any particular ranking system—including our own. Rather, we hoped to draw attention to the fact that USNWR ranks hospitals based solely on clinical parameters and does not formally consider academic productivity. Given the academic structure of most pediatric urology programs, it is not surprising that there was a moderate degree of correlation between "reputation" and academic productivity. What is interesting, to us at least, is that this correlation was not stronger.

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There are clearly flaws to any possible ranking system, including the PRS. There are also benefits and potential uses, however; for example, the PRS may be helpful for individuals seeking fellowships in pediatric urology, or for administrators looking for ways to rate the research output of pediatric urology programs. We welcome the suggestions of the author and are pleased that our exercise has generated further discussion on this timely topic.

### Conflict of interest

JSW currently serves on the pediatric urology working group for RTI International Best Hospitals Project which is a consultant to US News and World Report magazine regarding their ranking of pediatric urology hospitals. JSW also has served on an advisory panel for Glaxo Smith Kline. AK is a co-manager and co-owner of Urology Match, LLC. None of the remaining authors have any conflict of interest, financial or otherwise, to disclose.

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