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Title: Gender and academic promotion: a cross-sectional study of Canadian general surgeons

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Reviewer 1	Steve Slade
Institution	NA
Comment	Response
My only suggestion would be to have someone give it	Thank you, we have corrected these grammar
one last read. There are some minor grammar errors.	errors accordingly.
Reviewer 2	Danielle Rice
Institution	Jewish General Hospital, Montreal, Que.
Comment	Response
Major Comments	
1. Following the STROBE guidelines will greatly improve the usability of this work and many of my recommendations below relate to suboptimal reporting that can be addressed from following a reporting guideline. Introduction	Thank you, we have used the STROBE reporting guidelines, and made changes accordingly. These changes and their locations in the manuscript are detailed in response to your comments below.
1. The sentence "Given the longer standing higher number of women in surgery in Canada, the pipeline should have lessened" is unclear. Just sentences before the lack of women surgeons is described. Is this statement referring to patients?	Thank you for catching this error, this sentence was not supposed to be there and has been deleted because, as you pointed out, it is unclear.
Describing the pipeline effect would be helpful as this comes up in the interpretation section as well.	We have added "(i.e. the pipeline effect)" to our sentence in the introduction that explains the pipeline effect.
3. The last sentence of the final paragraph of the introduction and the last sentence of the second to last paragraph of the discussion are repetitive. I would recommend removing one of these sentences.	We think you meant the last sentence of the final paragraph of the introduction and last sentence of the second to last paragraph of the introduction – if so, we have deleted the duplicate sentence, which was an error. Thank you noticing this duplication.
Methods	
How was it known the surgeons were currently practicing?	This was determined one of two ways: first, in our search of physician directories, provincial colleges list a surgeon as no longer in practice if they have retired their license. Second, in our verification of our participant lists with program administrators and/or division heads, we were advised if there were any surgeons hired, retired, or otherwise practicing at that institution that were not reflected on their website. We have added a statement indicating that this verification was for the purpose of ensuring lists were current and up to date.
2. The publicly available registries should be named and a link should be provided with steps of how to access the relevant lists if it is not one-click access from the link.	The publicly available registries used were the division/department websites for each institution, as well as provincial licensing websites. All are one-click access. We have

	included this list as Appendix 1.
3. The program used to create the database should be named.	We have added that the program used was Microsoft Excel.
4. It is difficult to understand the data collection methods that were used. Once following the STROBE guidelines, this may become more clear to readers. Perhaps the authors could consider noting a list (ex. we accessed XX list on XX website (LINK) and exported all names of surgeons)	We have re-written a significant portion of the data collection methods in an attempt to make this more clear. We have also included a list of websites and information obtained from them in Appendix 1 to further clarify.
5. Was one data source used first for searching? For example, institution of practice listed on the director, and if not there then university faculties were searched?	University websites were used first as each university may have multiple hospitals associated with it. Once names were identified, hospital websites were used to fill in any missing information not listed under the University's website.
6. Please note who was involved in the discussion and group consensus.	Please see Editorial Comment #6 for a detailed response. In summary, various authors were involved in the discussion and group consensus. This has been added to the manuscript accordingly.
7. On what date did searching occur? Or from what timeframe? This will be important as professorship can change on a day-to-day basis.	Data abstraction occurred from October to December 2018, with all professorship determinations conducted in October of 2018. As in editorial comment #4, this has been added to the manuscript.
8. Was the study registered prior to beginning the work? (ex. on Open Science Framework)	The study was not officially registered, however, for this study we followed a pre-defined study protocol, standard extraction process, and recommended guidelines for database analysis.
9. Were tests of assumptions conducted for the regression? If so, these should be noted. If not, a rationale as to why they were not conducted could be helpful.	Tests of assumptions were conducted for the regression. We have added this into the manuscript, as well as descriptions of evaluating potential multicollinearity, potential inflection points, and minimizing potential overfitting.
Results	
The results would benefit from a flow diagram or paragraph noting how many professors were excluded due to being part-time, purely clinical, pediatric focused etc. This could also include any instances where variables could not all be found. Interpretation	Thank you for this comment. The reason we did not include such a diagram is that there was heterogeneity between institutions' inclusions of part-time professors, clinical professors, pediatric surgeons etc. For example, the University of Ottawa does not include any of these surgeons on their website under the Division of General Surgery, and thus 0 were excluded. On the other hand, the University of Toronto does, and thus we excluded many surgeons. Because of this heterogeneity, we thought that including these numbers would be inaccurate and mis-represent the number of clinical, part-time, and pediatric surgeons etc. With respect to instances where variables could not all be found, please see response to editorial comment #8.
Interpretation	
1. From Jena et al, to the end of the paragraph reads	As parts of the Jena et al paragraph were

a bit unclear to me. Could this be simplified? It is the concluding sentence that I don't find overly clear. 2. Table 5 should be removed. New data should not be presented in the interpretation section and the authors have cited relevant promotion and tenure manuals.	removed because of the word count, this statement was effectively simplified and relocated elsewhere in the interpretation. Thank you, we have removed Table 5.
3. It is unclear why teaching evaluations are noted as being something that cannot be captured. There are institutions in Canada where these are captured and average student ratings are taken into consideration and included in the teaching dossier for review.	Teaching evaluations are not publicly available, which is why they could not be captured within the methodology of our study. We have added a statement to this effect in the discussion. While some institutions do capture and consider student ratings, this would require consent and disclosure by each individual surgeon. In addition, literature suggests there are multiple sources of bias in student ratings (ex. class size, student gender, professor gender). (Reference: Centra JA, Gaubatz NB. Is there gender bias in student evaluations of teaching?
4. The sentence "Obtaining information on promotion track []" should be clarified. Is this referring to clinical track positions for example?	The Journal of Higher Education. 2000; 71(1).) We have now clarified this statement. We were referring to the 3 spheres mentioned at the beginning of the paragraph: education, scholarship, and service to the University.
5. The limitations of the study are well described. It also seems relevant to note that University websites are often updated infrequently which can impact the accuracy of professorship categorization.	Thank you for this point. We verified the professorship categorization with Division Heads after the initial website search, and thus we believe that our triangulation methods corrected the infrequently updates of University website and do not represent a limitation. We hope that clarifying the verification process under <i>Data Sources</i> makes this more clear. This is expanded upon in our response to editorial comment 2b.