

Peer Review Report

Review Report on A new model for ranking schools of Public Health: The Public Health Academic Ranking –The PHAR

Original Article, Int J Public Health

Reviewer: Jadranka Bozиков

Submitted on: 23 Nov 2023

Article DOI: 10.3389/ijph.2024.1606684

EVALUATION

Q 1 Please summarize the main findings of the study.

The starting point of the study was the fact that many international academic ranking systems exist but there are not any specifically designed for the Public Health discipline. The author(s) hypothesized four criteria (productivity, quality, accessibility for readers, international collaboration) measurable by 11 bibliometric indicators as relevant for the ranking of the public health schools (PHSs). Due to the mutual interrelation of those 11 indicators, there were de facto only six bibliometric indicators (figures) extracted from the Web of Science Core Collection citation database (herein WoS while in the manuscript referred to as “database”) while the remaining five are derived (computed) from that six. The author(s) used data for the five-year time span (2017 to 2021) in order to avoid year-to-year variations and to encompass a satisfactory period for a relevant number of citations. The author(s) included 26 schools in a pilot ranking. Data for 12 of them were collected from the InCites Benchmarking & Analytics™ citation-based database and tool (in the manuscript referred to as “software”) while data for the additional 14 schools were gathered from WoS by search queries combining university names and certain parts of addresses (Advanced searches which combined two fields of the publication’s metadata: OG=[Affiliation] and AD=Address). A special methodology was used for one school, namely the Swiss School of Public Health (SSPH+), due to its specific structure in the form of a “virtual school” or a network gathering its scholars across different Swiss universities (12 universities at the time of the study). Given that the SSPH+ does not employ its virtual faculty members, it was necessary to make 12 separate search queries and summarize their results subsequently.

In the next step data for each indicator were normalized (not standardized according to a “base 100” as it is called in the manuscript) i.e. the school with the highest value of a particular indicator was given a score of 100, while all the remaining schools were assigned scores based on their accomplishments relative to the highest one. Then two different equations (i.e. formulas or models) were introduced to enable the calculation of overall scores for each school in two different ways (referred to as Total 1 and Total 2). Both models were used for the ranking of 26 included schools, the results have been documented, compared, and discussed. The second model was chosen and became the final proposal for ranking of PHSs based on two arguments: (i) The top five ranks are occupied by the same schools using both models; (ii) the extremes of the ranking are at the least subject to change (top five and bottom five ranks) between two models.

Q 2 Please highlight the limitations and strengths.

The main limitations of the new model for ranking public health schools (The Public Health Academic Ranking – PHAR) are:

1) The PHAR ranking system relies solely on bibliometric indicators and does not consider other parameters or factors such as school size, performance, educational excellence, and impact on population health and the whole society. The author(s) clarified that the present study is only an initial step (pilot ranking of PHSs) and that the overall evaluation and ranking of the PHSs will include additional parameters that will be developed in later phases of the project.

2) Bibliometric indicators included in the model are in no way specific to Public Health as a discipline but rather are general indicators of scientific productivity, quality of publications, publications’ accessibility, and the extent of international collaboration despite the well-known fact that Public Health is not as attractive as

some other fields (e.g. Neurosciences, Oncology, General & Internal Medicine), particularly when it comes to the number of citations and percentage of highly cited and hot papers. At the same time, all document types were included in the calculations of bibliometric indicators used in the present study despite the determination of quality as an important criterion. This means that all types of documents indexed in WoS, i.e. meeting abstracts, editorial material, book chapters, letters, proceeding papers, early accesses, notes, and even corrections and reprints were considered and evaluated equally as articles and review articles, i.e. documents that are original and complete scientific works.

3) The main shortcoming of the PHAR ranking model is that it does not take into account the size of the school, i.e. per capita academic performance of the school's faculty which makes the ranking unfair. It is very likely (and already visible) that small schools are deprived due to ranking rules (algorithms) which could disappoint their scholars and stakeholders. Large schools already have international visibility and reputations either as self-standing institutions or as the departments of highly ranked universities thanks to other ranking systems made for academic institutions, e.g. ARWU (Academic Ranking of World Universities) introduced two decades ago and well-known as Shanghai Ranking. The smaller and recently established schools will be deprived even if their faculty has higher productivity per capita. Nevertheless, even ARWU acknowledges the per capita academic performance of an institution, weighted only 10 % of the overall score, but still.

4) The PHAR was tested in a bottom-up manner and the study would benefit very much if a more structured and systematic approach were possible enabling the evaluation and ranking of PHSs generally, i.e. for all PHSs having diverse structures or focus, different organizations, and other characteristics.

The main strengths of the new model for ranking public health schools (The Public Health Academic Ranking - PHAR)) are:

1) A pioneering attempt to define criteria and indicators for ranking PHSs deserves to be praised despite the drawbacks of its temporary results. It is a valuable study with the potential for generalization to other types of scientific organizations, too. A lot of effort and work was invested in the design and construction of reliable variables for the measurement of the scientific impact of the institutions.

2) Although the PHAR ranking system at the present stage of its development relies solely on bibliometric indicators, it is part of a larger project foreseen to consider other domains, too (e.g. education, health economics) and additional bibliometric and non-bibliometric parameters specific to Public Health.

3) The PHAR is constructed on a well-recognized, reliable source of well-structured and standardized data retrievable online by the use of powerful software from citation databases.

4) The PHAR provides full transparency about the methodology used, allowing reproducibility to external stakeholders unlike some of the existing ranking systems whose methodology is not fully transparent and thus doesn't allow replications.

Q 3

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

Firstly, it is necessary to elaborate on methods and terminology in order to have common ground for understanding major and minor comments. At this point, I would like to admire the clear and detailed presentation of the methods and results, both in the manuscript and in the Appendices, but also stress that several common (statistical) terms and concepts are often used mistakenly in the manuscript that needs correction.

Equations:

What is named “equation” in the manuscript is in fact formula or function (function of several arguments, 11 in case of Equation 1 and six in case of Equation 2). These functions (or formulas) assign the numerical values denoted by Total 1 and Total 2 based on sets of either 11 or 6 arguments.

Indicators (abbr. ind or ind#):

Some of the indicators introduced in Total 1 (Equation 1) as well as in Total 2 (Equation 2) are based on absolute numbers (ind1, ind2, ind4, ind6, ind8, and ind10) while the remaining are brought in by relative numbers (ind3, ind5, ind7, ind9, and ind11) which is very confusing and creates problems, particularly when it comes to the interpretation of the results. The latter group of indicators corresponds to what are commonly known as indicators (for example birth rates and mortality rates in demography or incidence rates and prevalence rates in epidemiology). Here the first group and second group of indicators are mixed up in both “equations”, which one can describe literally as “sum up apples and oranges”. Also, the same term “indicator” is used for different things. However, ind1 to ind11 in Table 2 are somehow scores and not values of ind1 to ind11. In other words, ind1 to ind11 are transformed indicator values (in this case normalized values of indicators ind1 to ind11 (see below). The suggestion is to use the term “scores” instead of indicators (in Table 2 and elsewhere), where scores will denote normalized indicators’ values (i.e. score 1 = normalized value of indicator 1, etc.). Of course, any other appropriate term is acceptable if it distinguishes the values of scores and indicators (i.e. transformed values from the original ones).

The problem arises because the same term “indicator” in its conceptual meaning (as a variable name) is used also to denote its transformed values. Indicator values are entering computations as input data or “raw data” as they are properly named in line 60. Of course, according to the definitions given in Table 1, the indicators used in this study are interrelated: the value of indicator 3 is computed as a ratio of indicator 2 and indicator 1, while indicators 5, 7, 9, and 11 are ratios having indicator 1 in the denominator and the indicators 4, 6, 8, and 10, respectively, as numerators. It means that it was necessary to extract only six indicators from the source database, i.e. values of indicators 1, 2, 4, 6, 8, and 10 rather than 11 values (no matter which database is used). In this regard, both “equations” include only six indicators but those six “indicators” are not something commonly understood as indicators which makes interpretation difficult. On the contrary, indicators 3, 5, 7, 9, and 11 are commonly understood as indicators and they are interpretable.

At the same time, values that are summed up in the “equations” are the scores of respective variables (indicators) after the transformation of variable values into scores. That’s why indicators are correctly described in the paragraph “Indicators constituting the ranking” (lines 62 to 69) and presented in Table 1 (as well as before in line 57) while in the next paragraph “Equations used in the ranking” (lines 71 to 77) several things are mixed up and a term “indicator” is correctly used in line 72 only. BTW, please consider rephrasing both paragraphs’ subtitles because the words “constituting” and “equations” are misguidedly used. The problem is that the term “score” interferes with the term “indicator”. The procedure well-known as “normalization” is more or less well described but wrongly named “standardization”. Standardization is another well-known statistical procedure while normalization is what here is called standardization according to a “base 100” (even more confusing due to the sentence “The algorithm used for the ranking consisted of standardizing the indicators according to a “base 100” process”). Please, use the right term “normalized” or “normalization” instead of “standardized” or “standardization”. Also, it would be better to omit “algorithm used for the ranking” here because you are speaking about another ranking (i.e. normalization) at the same time. The last sentence (lines 76 to 77) needs special comment (see major comments).

Hint: Statistical procedure standardization could also be applied which would calculate transformed values (scores) in relation to the average or mean value of 26 measured indicator values and it is a parametric method because it assumes that distribution is normal (i.e. has parameters) while normalization is based on the ranking of 26 values and belongs to non-parametric procedures.

Please, rephrase the following: “attribution of a score of 100 to the school scoring the highest, adaptation of a percentage of this score to the other schools, depending on the score they had”. In fact, you made “attribution (or assessment) of a score 100 to the school with the highest value of the indicator” and “assessed the percentage of this score to the other schools, depending on the indicator values they had”. Furthermore, “The indicators were then added according to two different equations” might read “The overall scores were then computed as a sum of scores for the indicators according to two different formulas” or even better “The overall scores were then computed as a sum of scores of indicators in two different ways” or “The overall scores were then computed by summing up scores for the indicators in two different ways”. Here we have two different formulas (or functions) and not equations. Accordingly, please replace indicator 1 to indicator 11 with score 1 to score 11 in Table 2. In other words: Data for each indicator were normalized i.e. the school with the highest

value of a particular indicator was given a score of 100, while all the remaining schools were assigned scores based on their accomplishments relative to the highest one. Then two different formulas (or functions) were used to calculate (or compute) the overall scores for each school in two different ways.”-

It is confusing to use both terms (i.e. Total and Equation) throughout the text and in the tables. Please, try to use only one term taking into account the comments listed above in order not to confuse readers (Table 2, Table 5, Appendix 2, Appendix 4).

Bibliometric indicators and categories (lines 63–65):

The author(s) postulated four categories (productivity, quality, accessibility for readers, international collaboration) measurable by 11 bibliometric indicators for the ranking of the public health schools (PHSs) (see Table 1). What is named “category” is commonly understood as “criterion”. So here we have four criteria measurable by 11 indicators. The first criterion (productivity) is measured by one indicator only, i.e. by indicator 1 (Number of documents in the Web of Science database, per school), and the second one (quality) is measured by six indicators (ind2 to ind7 in the Equation 1) but with only three out of that six in the Equation 2. by definition. Further, the third criterion (accessibility to readers) is measured by the next two indicators (i.e. ind8 and ind9) in Equation 1 but with only one (ind9) in Equation 2 similar to the fourth criterion that is measured by two indicators in Equation 1 and by one indicator in Equation 2. It would be better to use term criteria instead of categories.

Last but not least: Data were collected (extracted) from the InCites Benchmarking & Analytics™ citation-based database and tool or platform or system (in the manuscript referred to as “software”) and from citation database and tools (also can be called platform or system) WoS (in the manuscript referred to as “database”). In fact, both are the same structures, i.e. databases equipped with powerful software for search queries. Moreover, data included in InCites Benchmarking & Analytics™ are extracted from WoS on a monthly basis which means that data available today are already updated in WoS because they were taken from WoS less than a month ago (it does not matter). It means that data for the first 12 schools could be also taken from WoS (?). For example, I am a registered user of WoS (through institutional subscription), but I do not have access to InCites Benchmarking & Analytics™. De facto both are citation databases (or citation-based databases). Maybe not (see lines 218 to 221)? Probably those 12 schools are included in InCites only because they are legal entities (i.e. they are employing its faculty) while the other 14 schools are not employers but their faculty consists of employees of their universities or even of several universities like in cases of SSPH+ (?). In all cases, the raw data could be collected (extracted) from WoS but a problem arises when the user wants to produce a Citation Report for publications attributed to a certain entity because WoS will produce a Citation Report if the list of publications encompasses up to 10,000 documents but not for more than 10,000. BTW number of publications identified as Open Access documents is now enabled also in WoS while a number of publications containing one or more international co-authors remains the only one indicator not available in WoS. BTW paragraph “Temporal criteria for indicators and study period” (lines 57 to 61) correctly mentions methods but it is not said when the data must be extracted (all numbers are changed during the time, not only the number of citations but also the number of documents attributable to each school due to corrections and later inclusion). Hint: compare with the definition of an impact factor for journals.

Major comments:

1) The use of two terms (Total and Equation) throughout the text and in the tables is not necessary. Please, try to use only one term in order not to confuse readers (see Table 2, Table 5, Appendix 2, Appendix 4) but take into account the comments regarding terminology listed above. The first row in Table 2 should read:

Total 1 = score 1 + score 2 + score 3 + score 4 + score 5 + score 6 + score 7 + score 8 + score 9 + score 10 + score 11

or even better

use the term “Overall score 1” instead of “Total 1” and use abbreviations like sc1 for score 1 etc.).

Do not forget to rephrase the table title.

2) Both “equations” i.e. both Totals are mixtures of scores based on indicators whose values are either absolute numbers (indicators 1, 2, 4, 6, 8, and 10) or relative numbers (indicators 3, 5, 7, 9, and 11) which makes them hardly interpretable. Moreover, consequence of ranking schools based on such “equations” is

unfair for the smaller schools because it favours the larger ones. Of course, in Total 2 problem is in score 1 while in Total 1 problems are several.

3) Criteria and indicators are postulated what means that author(s) defined them (see Table 1). It is not logical to compare ranking results between Total 1 and Total 2 later, particularly keeping in mind that different indicators entered in those two “equations” already with different weights. However, in Equation 1 there are four indicators measuring quality while there are only three measuring the same criterion in Equation 2. Moreover, it is senseless to weigh scores later and particularly to compare the weights of criteria. Moreover, each indicator measuring quality (ind3, ind5, and ind7) is included in Equation 1 twice: in the form of an absolute number (ind2, ind4, and ind6) and in the form of relative numbers (ind3, ind5, and ind7). That’s why the comparison is senseless. Moreover, criteria are postulated (i.e. defined). Weights should be given to the indicators, like in ARWU. Hint: Please compare with the definitions of criteria and indicators in ARWU (available at <https://www.shanghairanking.com/methodology/arwu/2023>).

4) The sentence “The second equation consists of the sum of six indicators, with a weighting giving a similar weight to each category.” (lines 76 to 77) is senseless due to 3) above, because weights are not similar (they could be the “same” or not, but anyhow not “similar”).

5) Frankly speaking, a large portion of the text is devoted to comments on the “equation” leading to Total 1, and to the comparison of Total 1 and Total 2 (including Table 3 as well as Appendix 3 and columns in several other Appendices) although it is meaningless because Total 1 is not proposed for ranking. Also, Total 1 is not interpretable and the possible reasons and motivation for its inclusion were not explained. However, neither motivation for why finally it was abandoned was not explained, either. It is not logical at all. Consequently, the comparisons of ranks according to two “equations” presented in Table 3 (Category weighting (in %) for Equation 1 and Equation 2) and Appendix 3 (Change of rank when passing from Equation 1 to Equation 2) and particularly “Difference in category weighting between Equation 1 and Equation 2” are pointless. Out of 6 indicators for quality, only three are independent and the other three are calculated as ratios. Only indicators 3, 5, and 7 deserve to be called as such and included, while 2, 4, and 6 are not indicators at all and should be omitted from the indicator list (they are absolute numbers needed for the calculation of indicators). Correspondingly, indicators 8 and 10 also should be omitted from the indicator list. In addition, the column Score/unit (in Appendix 5) makes no sense.

6) Both “equations” (Total 1 or Equation 1 as well as in Total 2 or Equation 2) “sum up apples and oranges” because absolute numbers are treated as being equivalent to the relative quantities. It would be necessary to use relative numbers only. When we are measuring the productivity of the institutions (schools), we must take into account the number of faculty (the number of publications needs to be divided by the number of employees or typically full-time equivalents (FTEs). Correspondingly, the number of students or graduates would need to be related to the number of teachers when measuring the efficiency of teaching.

7) The main shortcoming of the PHAR ranking model is that it does not take into account the size of the school, i.e. per capita academic productivity and performance of the school’s faculty which makes the ranking unfair. An implication of such ranking rules is that smaller schools, i.e. the schools having a smaller number of faculty members (or researchers) would be deprived compared to the larger ones, even if their faculty members have been more productive than those in the larger schools. It is true that some other ranking systems (e.g. Shanghai Ranking or ARWU – Academic Ranking of World Universities) use, mainly but not exclusively, similar methodology but one has to keep in mind that they are ranking primarily international visibility of the universities and not their performance. Even ARWU takes into account per capita productivity in its last indicator which is weighted 10% only, but still (see at <https://www.shanghairanking.com/methodology/arwu/2023>).

Hint: Let us suppose that, among other schools, two schools that are entering ranking are the following: a school having 500 researchers that produced 5000 articles in 5 years (so each one has 10 publications on average) and another school having 50 faculty members that produced 500 publications. If the first one has, for example, the largest number of publications among all schools in the ranking, it would have a base of 100 while the second one would have only 10 although the faculty members of both schools have the same productivity (10 publications per capita on average). The other way around: to be equally ranked as the first

(larger) school, the faculty in the second school might be (relatively) 10 times more productive. The same applies to indicators 2, 4, 6, 8, and 10. Of course, a different situation is when we compare relative numbers (e.g. average times cited, percentages of highly cited papers, percentages of hot papers, percentages of Open Access publications, and those with the international collaboration), i.e. relative numbers which are base for indicators 3, 5, 7, 9 and 11).

8) The model for ranking public health schools (PHAR) was tested and the results were discussed in a bottom-up manner. Much structured and systematic approach would be needed in order to enable evaluation and ranking of PHSs generally, i.e. for all PHSs having diverse structures or focus, different organizations, and other characteristics. Hint: The landscape of public health schools is very diverse and colorful. Public health schools vary very much in their structure, functioning, and performance across the world.

9) Twelve search queries for the publications published by SSPH+ faculty performed in WoS and listed in Appendix 1 could be concatenated with operators OR (binary operator OR is a logical operator or Boolean operator) and it might be possible to concatenate 12 separate search queries shown in Appendix 1 if those 12 searches were executed and stored in the session's History as #1, #2, ...etc. and then perform a search that reads: #1 OR #2 OR #3 OR OR #11 OR #12 (?). In that case, the possible overlapping of the results would be eliminated and discussion about the sensitivity and specificity of the results (lines 229 to 243).

Otherwise, methods are well described and the study is replicable.

Minor comments:

1) The divergence between the study's objectives and results is noticeable already in the Abstract: If the project was aimed to design/create a new model for ranking public health schools, then the primary result should have been a proposal of ranking criteria and indicators, and not merely a list of the top five schools (please consider lines 6-7 and 14-16 simultaneously).

2) The final two sentences of the Introduction (lines 41-45) state what this paper, as a part of a larger project, is going not to cover. That is in contrast to the established custom that the last sentence(s) of the introductory part has to specify the objectives of the present paper and not what is not the study's aim.

3) Please check throughout the manuscript that Public Health in the sense of a scientific/academic discipline is written with capital initial letters in contrast to public health as a field for professional practice (e.g. lines 31, 40, 43, etc.).

4) It is not necessary to use both terms (i.e. Total and Equation) throughout the text and in the tables. Please, try to use only one term taking into account comments on the terminology above in order not to confuse readers (Table 2, Table 5, Appendix 2, Appendix 4).

5) Score/unit hardly makes any sense, particularly since it is not true that it enables comparison between two equations (i.e. between two functions or variables or constructs), particularly not keeping in mind the meaning of indicators 3, 5, and 7 (lines 32-33). It only helps readers to figure out the discrimination power of the overall score Total 2 and how every school is placed according to it (see Table 5).

6) All search queries 13 PHSs + 12 performed for the publications published by SSPH+ (i.e. the list of 25 search queries presented in Appendix 1) might be simplified if the filter (Refine) would be put in the title and omitted from each and every search query. Please put in the title of Appendix 1 "Publication years: 2021 OR 2020 OR 2019 OR 2018 OR 2017". Moreover, it would be correct while the presented queries are not correct. For example, the first query should read: (OG=(Monash University)) AND AD=(publ health) AND (Publication years: 2021 or 2020 or 2019 or 2018 or 2017) because as it is presented in Appendix 1 would not give the correct result for the School of Public Health and Preventive Medicine, Monash University, Australia. Also, in other search queries different abbreviations were used: for example, "Public Health" is abbreviated as "publ health" as well as "public hlth", probably because such abbreviations are used as parts of the field (AD=Address) in WoS for the particular schools (?).

7) Public Health is a discipline with a strong international focus not only in areas such as pandemic management or migration policy but in many others (lines 67–68)

Suggestions:

Please, consider including a more general and systematic discussion about different types of PHSs and the implications of the ranking system on them, including smaller institutions from small and non-high-income countries across continents and regions. Although attention has been paid to the schools with a special structure or focus, for example, a “virtual” school like SSPH+, or that established as a public–private partnership that gets together scholars from the national and international academia and other institutions like PHFI, other specific types of schools exist or might be found: those that encompass mixed/joint units linked to the universities like EHESP, or those whose scholars perform as adjunct university teachers/professors on a personal contract basis as well as other types with a different structure or focus (for example those that are self-standing organizations with several departments, those which are constituent parts of larger institutions (most often universities but not necessarily). Such an approach might help readers understand how the ranking system might impact different stakeholders and stimulate further discussion on the improvement of ranking systems. At the same time, it will prevent possible speculations that the ranking in the present study has been adapted to particular schools included.

Please, consider also the possible inclusion of additional bibliometric indicators specific to the Public Health field like the number or rate of publications in journals belonging to certain WoS-CC categories (e.g. Public, Environmental & Occupational Health, Health Care Sciences & Services, Health Policy & Services, Ecology). Please, try to create a systematic classification of PHSs according to their structure which would enable the categorization of the other schools, possibly differently structured, in the future. In that regard, you can consult the literature. Thirty years ago, Evelyne de Leeuw published a study based on a survey encompassing 54 that time European PHSs in the Lancet. In this study, eight types of PHSs according to their structure were identified. The oldest European and American PHSs were established some 100 to 120 years ago as self-standing institutions. PHSs that were established later are often constituent parts of the universities, but other types exist as well. Maybe it is not necessary to distinguish as many as eight types of them but a systematic approach would be preferred in order to enable ranking of the schools beyond the presently included 26 of them. Maybe it is not necessary to distinguish as many types, but you can probably get some ideas and guidelines from that classification as well as from more recent papers.

PLEASE COMMENT

Q 4 ▶ Is the title appropriate, concise, attractive?

Yes, the title is appropriate, concise, and attractive.

Q 5 ▶ Are the keywords appropriate?

There are no specific requirements for keywords in the Instructions for Authors (available at https://static.ssph-journal.org/resources/international%20journal%20of%20public%20health/ijph_instructions_for_authors2022.pdf).

Generally, according to ICMJE (International Committee of Medical Journal Editors) recommendations, keywords in publications in the fields of Biomedicine and Life Sciences should be taken from MEDLINE MeSH (Medical Subject Headings) to facilitate indexing in MEDLINE as well as the search retrieval. Two of the keywords belong to MeSH (“Public Health” and “Public Health Schools”) but the remaining three do not, although “Ranking systems” and “University rankings” well describe the manuscript’s topic while “Academia” is not precise enough but too broad.

Q 6 ▶ Is the English language of sufficient quality?

Yes, the English language is of sufficient quality.

Q 7 ▶ Is the quality of the figures and tables satisfactory?

Yes.

Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes, the reference list covers the relevant literature well, although almost 50 % of the sources are from the Internet partly because some documents are available primarily online. It is recommended to use more scientific papers to adequately cover the relevant literature. If necessary, some Internet sources can be excluded to decrease the number of references.

QUALITY ASSESSMENT

Q 9 Originality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 10 Rigor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q 11 Significance to the field	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q 12 Interest to a general audience	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 13 Quality of the writing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q 14 Overall scientific quality of the study	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

REVISION LEVEL

Q 15 Please make a recommendation based on your comments:

Major revisions.