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## Editorial

### Reply to the Letter to the Editor

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Sir:

My thanks to Professor James Hartley for his valuable comments on my editorial note entitled "[Scientific Collaboration and Quality of Scientific Research](#)" published in *Webology* 5 (4) (2008). The purpose of the previous editorial note was to determine whether and to what extent the top 100 most-cited papers from the top 10 universities were co-authored. It was shown that

"... only a small number of the top 100 papers ranked by the number of citations (17 of 100) were published by single authors. In other words, most of the papers (83%) were the results of scientific collaborations by two or more authors. It is obvious that the majority of the top 100 papers produced by the top 10 universities are co-authored papers and thus are collaborative works. In other words, a ***published paper resulting from collaborative work has a higher chance of attracting more citations***. This study indicates that there is a significant relationship between the high citation counts and co-authorships, i.e. ***highly cited papers are mainly co-authored***."

The concluding sentences of the previous editorial note are:

- "a published paper resulting from collaborative work has a higher chance of attracting more citations"; and
- "highly cited papers are mainly co-authored".

I did not conclude that "co-authoring leads to higher citation rates". I said that "highly cited papers are mainly co-authored", but not vice versa. This does not mean that co-authoring by itself leads to higher citation rates, although "a published paper resulting from collaborative work has a higher chance of attracting more citations" for many reasons, e.g., "self-citations from second, third, so forth authors", etc. It is not easy to answer the following question "*Why co-authored papers are highly-cited?*", and it seems that we should think about it more deeply.

Overall, I do not believe that co-authoring by itself leads to higher citation rates. There are many co-authored papers without citations. So a co-authored paper just "has a higher chance of attracting more citations". Previous studies (e.g., [Glanzel, & Schubert, 2001](#); [Hicks, & Katz, 1996](#); [Narin, Stevens, & Whitelow, 1991](#)) show that co-authoring leads to higher citation rates and higher impact.

### Another example

A simple study on the top 100 most-cited papers in four different subject areas from Canada also confirms that scientific collaborations increase the quality of papers and the number of citations. For this I conducted a *Basic Search* in the "*Affiliation*" field of *Scopus* for Canada, and the resulting papers were ranked by the number of citations (ordered by

"Cited By") that each paper has received since its publication until 2009, and then I examined the top 100 highly-cited papers (see Table 1).

**Table 1. The number of Canadian co-authored papers occurrences in the top hundred papers from different subject areas**

Subject Areas	No. of co-authored papers	No. of single-authored papers
Life Sciences	94	6
Health Sciences	91	9
Social Sciences	88	12
Physical Sciences	82	18
Total	355	45

The table shows that only a small number of the top 100 papers ranked by the number of citations (45 of 400 papers) were published by single authors. In other words, most of the highly cited papers were the results of scientific collaborations by two or more authors. It is obvious that the majority of the top 100 papers produced by Canadian researchers are co-authored papers and thus are collaborative works. The current study also indicates that there is a relationship between the high citation counts and co-authorships, i.e. highly cited papers are mainly co-authored.

Overall, I agree with Professor James Hartley. In order to confirm the above hypothesis (a published paper resulting from collaborative research has a higher chance of attracting more citations), it is necessary to conduct comprehensive studies on the effects of scientific collaboration on citation rates.

Yours faithfully,  
[Alireza Noruzi](#), Ph.D.  
 Editor-in-Chief  
 Editor-in-Chief of Webology

## References

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