Size and diversity of research teams does not automatically equate to better research outcomes, finds new study

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While often large research teams are able to generate more impact, they struggle to reach top-tier journals, finds a new study from the University
of Surrey that analyzed data from 1.4 million academic papers. The paper is published in the journal *Academy of Management Learning & Education*.

Professor Sorin Krammer, lead author of the study and Professor of Strategy and International Business at the University of Surrey, said, "Despite the prevalence of large teams in research, there is still a lack of a good understanding of how their size and diversity affects their performance."

"Our findings will help academics, and perhaps industry, to organize teams more effectively according to their performance goals."

The Surrey study used data between the years 1990 and 2020 on more than 1.4 million papers and 18 million citation counts across 22 subfields in management.

The authors of the study captured performance in two distinct areas: impact, in the form of citations gathered by a research paper, and prestige, in the form of ranking of the journal where it is published. Furthermore, they looked at diversity in terms of knowledge expertise and international representation.

The authors discovered that neither the size, nor the characteristics of teams uniformly affected research performance, and highlighted that academics should be cautious in thinking that larger, more technically diverse teams are better.

Professor Krammer said, "We also found a lower success rate for single-authored papers. Often, it takes single authors a huge amount of time, resources, expertise, and effort to develop such research papers that inherently have much lower success rates and impact, therefore, the requirement by many schools to have such single-authored top
publications as a prerequisite for tenure, promotion or career advancement seems unnecessary and unfair."

While both larger and more diverse teams are independently beneficial to research performance, in extreme scenarios (i.e., very large and very diverse teams), researchers found that this combination reduces the impact of research, noting fewer citations.


Provided by University of Surrey