Research performance of PhD students and different categories of faculty members at Chalmers University of Technology

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Abstract:

Fierce competition for research funds calls for university strategies that consider the potential benefits that different groups of researchers may provide. Therefore, this study compares scientific performance in terms of output, impact and collaboration among four groups of researchers (doctoral students, postdoctoral researchers, assistant professors and senior researchers) at Chalmers University of Technology in Sweden. Analysis of Web of Science publications (2008-2013) shows that PhD students, who are the largest group, appear as firstauthor in more than half of the total Chalmers output. Post-doctoral researchers and assistant professors publish significantly more in highly prestigious journals, and obtain higher citation rates. The latter two groups of researchers are also responsible for most international collaborations, while doctoral students primarily establish the collaborative links with industry. The intra-institutional collaboration is, however, limited across the four groups. This analysis provides some empirical evidence of how research performance may vary during the research career in academia. Furthermore, it is discussed how bibliometric insight can support a more effective allocation of economic resources at universities.

Keywords: Doctoral researchers; Research assistants; Bibliometric study; Chalmers Tekniska Högskola; Göteborg