

## Differences in Production of Knowledge between Internationally Mobile versus Nationally Mobile and Non-Mobile Scientists

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**Abstract :** The presented study examines the impact of international mobility on knowledge production among mobile scientists and within the sending and receiving research groups. Scientists are relevant to the dynamics of knowledge production because scientific knowledge is mainly characterized by embeddedness and tacitness. International mobility enables the dissemination of scientific knowledge to other places and encourages new combinations of knowledge. It can also increase the interdisciplinarity of research by forming synergetic combinations of knowledge. Particularly innovative ideas can have their roots in related research domains and are sometimes transferred only through the physical mobility of scientists. Diversity among scientists with respect to their knowledge base can act as an engine for the creation of knowledge. It is therefore relevant to study how knowledge acquired through international mobility affects the knowledge production process. In certain research domains, international mobility may be essential to contextualize knowledge and to gain access to knowledge located at distant places. The knowledge production process contingent on the type of international mobility and the epistemic culture of a research field is examined. The production of scientific knowledge is a multi-faceted process, the output of which is mainly published in scholarly journals. Therefore, the study builds upon publication and citation data covered in Elsevier's Scopus database for the period of 1996 to 2015. To analyse these data, bibliometric and social network analysis techniques are used. A basic analysis of scientific output using publication data, citation data and data on co-authored publications is combined with a content map analysis. Abstracts of publications indicate whether a research stay abroad makes an original contribution methodologically, theoretically or empirically. Moreover, co-citations are analysed to map linkages among scientists and emerging research domains. Finally, acknowledgements are studied that can function as channels of formal and informal communication between the actors involved in the process of knowledge production. The results provide better understanding of how the international mobility of scientists contributes to the production of knowledge, by contrasting the knowledge production dynamics of internationally mobile scientists with those being nationally mobile or immobile. Findings also allow indicating whether international mobility accelerates the production of knowledge and the emergence of new research fields.

**Keywords :** bibliometrics, diversity, interdisciplinarity, international mobility, knowledge production

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