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Ranking institutions by the handicap principle

Lutz Bornmann

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Dear Sir,

Bornmann et al. (2014) have mapped and ranked university and non-university research institutions by a statistical method which integrates factors that may have an influence upon research performance—measured here by the best journal and best paper rate indicators (see www.excellencemapping.net). For example, we may expect that institutions in high GDP countries will be stronger in research than those in low GDP countries. This effect is likely to be evident primarily in disciplines such as medicine, which necessitate expensive major equipment and laboratories (but less so e.g. in mathematics). It is also to be expected that corruption will have a negative impact on the institutions' research performance. As the results of Ariu and Squicciarini (2013) show, corruption has a negative effect on a country's ability to recruit specialist staff.

Taking into account factors such as GDP and the corruption perception index—so it may be argued—Bornmann et al. (2014) facilitates a ranking against the backdrop of the handicap principle (Zahavi 1975). According to this principle, a handicap (specific disadvantage), such as a country finding itself in a weak financial situation, can also reveal strengths. Those who prove themselves in competition with rivals despite a handicap (disadvantage) are, in line with this principle, perceived by those around them as particularly vital, potent and therefore attractive. Accordingly, a handicap may be regarded as a factor "which tests for quality" (Zahavi 1975, p. 205).

www.excellencemapping.net therefore offers interested users the opportunity to take a look at those particularly "vital" research institutions worldwide. Institutions are highlighted which (actually or potentially) exhibit strong research performance despite a weak financial situation or corruption (and other putative disadvantages) in their home country.

L. Bornmann (✉)
Division for Science and Innovation Studies, Administrative Headquarters,
Max Planck Society, Munich, Germany
e-mail: bornmann@gv.mpg.de

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