

**Indications that underpinning research was stronger (likely to have exceeded the 2\* quality threshold) or weaker (likely to have been closer to this threshold) in REF2014 case studies**

Type of indicator	Indications of stronger research likely to have exceeded 2* threshold	Indications of weaker underpinning research, closer to 2* quality threshold
Publication quality	<ul style="list-style-type: none"> <li>• Peer-reviewed in journals that are well-regarded within the discipline, even if journals are not highly ranked</li> <li>• Monographs published by respected academic publishers</li> <li>• Reviews in broadsheet newspapers, specialist magazines and awards (or nominations), coupled with translation into multiple languages (Main Panel D)</li> <li>• Research met the inclusion criteria for a systematic review (Main Panels A-C)</li> </ul>	<ul style="list-style-type: none"> <li>• Absence of peer-reviewed work or “in press” with no DOI (Main Panels A-C)</li> <li>• Publications only in magazines targeted at practitioners e.g. trade magazines</li> <li>• Underpinning research consists only of narrative literature review or other pieces with no original research</li> <li>• Publication in apparently “predatory” journals with limited, poor or no peer review</li> <li>• Reliance on conference papers or lectures in disciplines where this is not widely respected</li> <li>• Books published by non-academic publishers</li> </ul>
Funding	<ul style="list-style-type: none"> <li>• Peer-reviewed funding from sources considered prestigious in the Unit of Assessment the case study was submitted to (even if small total amounts)</li> </ul>	<ul style="list-style-type: none"> <li>• Less prestigious, non-peer-reviewed funding sources</li> <li>• Non-peer reviewed reports submitted as underpinning research</li> </ul>
Narrative description of underpinning research quality	<ul style="list-style-type: none"> <li>• Strong narrative justification of originality, significance and rigour</li> <li>• Awards for research and/or researchers showing academic recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Work described in ways that suggests no original or significant knowledge was generated e.g. the University's role in a project was to generate impact from research done by other partners</li> </ul>
Contribution to underpinning research		<ul style="list-style-type: none"> <li>• Researcher is far down authorship lists with no explanation of the significance of their role in the work</li> <li>• Research included that is unrelated to the impact in the case study</li> <li>• Work based on a funded network where it is not clear if the research emerged from network members or the submitting institution</li> </ul>

Table 17 in: Reichard, B, Reed, MS, Chubb, J, Hall, G, Jowett, L, Peart, A and Whittle, A: “Writing Impact Case Studies: A comparative study of high-scoring and low-scoring case studies from REF2014”, Palgrave Communications, [www.nature.com/articles/s41599-020-0394-7](http://www.nature.com/articles/s41599-020-0394-7)