

## ***Conflicts of interest***

Conflicts of interest are understood poorly by researchers because they are often conceived merely in *financial* terms. Whilst a financial conflict of interest is both common and significant within the context of research, conflicts of interest have a much wider range than simply financial conflicts. 'Interests' which a researcher may have can consist of a complex combination of *personal*, *professional*, and *scholarly* interests, as well as the *financial*. For instance, researchers may have an interest in achieving particular publications or grant income (professional interests), or an interest in proving that a particular technique or method achieves better outcomes (scholarly interests). Professional and financial interests may overlap, for instance when achieving particular publications has an effect on a research career or promotion, which would have financial as well as professional consequences.

However, interests in themselves are not inherently problematic and conflicts of interest are inevitable: the interests of a junior researcher working in a research team are different from the interests of a Principal Investigator, from the interests of the senior management of the department, from the interests of a research funder, from the interests of a journal who might publish the outcomes of the research; and, ultimately, from the interests of those who read, disseminate, use, or benefit from the research, a large group which might include 'the public' more broadly. This latter therefore includes what is sometimes referred to as 'the public interest'. Conflicts between these differing interests are part of the research environment and, in and of

themselves, do not necessarily constitute a problem, as long as they are recognised and compromises made if necessary to manage them appropriately.

A ***problematic conflict of interest*** arises when three conditions are in place:

- two or more interests are in conflict with one another;
- this conflict might *compromise* the integrity or trustworthiness of the research;
- this conflict goes *undisclosed*.

For instance, a problematic financial conflict of interest would arise if a researcher were to conduct research that would benefit them financially, whether directly or indirectly, if financial benefit depended *on a particular research outcome*. A problematic financial conflict of interest would arise if a funder requested a researcher to suppress or misreport a research outcome because *a particular outcome would have commercial value*. This is a classic example of a financial conflict of interest in which *two* separate conflicts exist: the conflict between the funder's expectations and interests and the scholarly interests of the researcher; and the conflict between the financial interests of the funder and the interests of the discipline and/or the interests of the public in the dissemination of trustworthy research. There might also be a situation in which the researcher benefitted financially from agreeing to suppress or misreport on behalf of a funder, which most people would consider as self-evidently unethical. However, a very similar situation might not have a financial component at all, taking place at the level of professional or scholarly interests: if a funder, such as a third-sector charity, was to request suppression or misreporting of outcomes not for financial benefit but in order to provide evidence for a particular agenda or which might have the potential to shape or change public opinion, whether in an academic or non-academic context. In this case, the integrity of the research is compromised by interests which conflict with the scholarly interests proper to research, defined by the principle of rigour.

Professional and scholarly conflicts of interests are often more difficult to discern than financial conflicts of interest. If a researcher's promotion or professional success depends on particular research outcomes, then there exists a conflict between the professional interests of the researcher and the scholarly interests of the discipline, which rightly expect research outcomes to be trustworthy. Such complexity of interests and the numerous ways in which they can come into conflict suggests that many issues where research integrity might be threatened can be classified, ultimately, as forms of conflict of interest.

However, in terms of the planning and design of research, whether putting together research proposals or writing protocols for gaining permission to conduct research, the major issue to be considered is *whether a conflict of interest could be perceived as problematic if undisclosed*. Therefore, disclosure of potential or actual conflicts of interest removes much of their problematic nature, even in areas where those conflicts might be significant. Disclosure allows others to decide for themselves whether those conflicts are such that the research has been compromised, particularly in cases of funding or professional interests, and therefore whether the research can be trusted.

It should be evident from this that disclosure of conflicts of interest is fundamental to upholding the principle of *honesty*, but that disclosure requires researchers to reflect on what the relevant conflicts might be in order to do any disclosure adequately and also to familiarise themselves with what defines a problematic conflict and in what circumstances. This shows that a principle such as honesty, whilst appearing to be self-evident, actually depends on matters that are not necessarily straightforward to put into practice and cannot be taken for granted by researchers.