Conflict of interest statements: current dilemma and a possible way forward

Daniel R. Dietrich¹ · Jan G. Hengstler²

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A definition of the term ‘conflict of interest’ was suggested by Dennis Thompson in (1993) and can still be considered valid: ‘A conflict of interest is a set of circumstances that creates a risk that professional judgement or actions regarding a primary interest will be unduly influenced by a secondary interest’ (Thompson 1993). Today, the ‘circumstances’ from Thompson’s definition have been restricted almost exclusively to funding or payment from industry. This form of a potential conflict of interest (CoI) is currently handled quite rigorously. For example, in the USA, industry-funded scientists are usually excluded from governmental advisory bodies. This reflects a development which took place during the past 20 years. Back in 2002, there was still an open debate as to whether industry-funded scientists should be included into governmental expert commissions and whether ‘one should look at the data and not who generated the data’ (SOT 2002). While it is beyond dispute that industry employment or funding could potentially represent a CoI, it is just as critical that other circumstances that also could create a secondary interest are taken equally into account.

Currently ignored or unappreciated sources of conflicts of interest

The pressure for self-preservation in academic research has increased over the past decades. This is particularly obvious for scientists with a fixed-term contract. In this case, obtaining grants as well as public visibility may improve the situation. While scientists with permanent contracts may appear less susceptible to these self-preservation and promotion pressures, the public and political expectations of academic institutions and their respective international standing are steadily increasing. This creates a high degree of healthy and unhealthy competition in raising research funds and publication output. Indeed, the level of grant funding, as well as the recognition of an academic as an expert by fellow scientists, funding bodies, authorities and the public, will directly affect the status and tenure of an academic and their institution. Moreover, researchers are involved in defining areas of importance for research grants. Governmental funding agencies will more likely focus a call on a specific research topic if public interest is high. For example, the omnipresence of reports on health hazards of ‘endocrine disruptors’ in the media has certainly influenced funding agencies, such as the European Commission and national funding agencies. This leads to a major problem with respect to CoI: Exaggerated presentation of risks may consequently lead to enhanced funding from governmental organizations. Moreover, when a scientist has obtained public grants in a specific research area in the past, this may automatically lead to a heightened interest in securing more funding in this branch of research. Thus, it is not surprising that publicly visible assessments of potential hazards and risks, e.g., the ‘endocrine disruptors’ (Solecki et al. 2016), often end with a description of

✉ Daniel R. Dietrich
Daniel.Dietrich@uni-konstanz.de

✉ Jan G. Hengstler
hengstler@ifado.de

¹ Human and Environmental Toxicology, Faculty of Biology, University of Konstanz, Universitätsstrasse 10, 78457 Constance, Germany

² Leibniz Research Centre for Working Environment and Human Factors, TU Dortmund, Ardeystr. 67, 44139 Dortmund, Germany

additional research needs and uncertainties, irrespective of whether these uncertainties and research needs really exist or are of importance.

Another potential CoI may be created by non-governmental organizations (NGOs) or philanthropic foundations. These organizations often depend on donations, e.g., from the general public or from governmental sources (NGOs receive nearly 240 million Euros per year from the European Commission). Therefore, public awareness and media presence are important to obtain these funds, which in turn are critical for the very existence of these NGOs. Moreover, industry funding is also a major source of many NGOs. There was a recent case in which a company financially supported an NGO that campaigned against the alleged toxic risks of products of competitors (Hengstler 2014a, b). This and many more examples illustrate that NGOs or philanthropic foundations may be involved in a complex network of secondary interests. Philanthropic foundations and projects financially supported by them often aim at influencing specific political decisions and advocacy may be a major component of that work (for example: Oak foundation 2013). In this case, a potential CoI is clearly present and should be declared.

It is important to stress that the vast majority of scientists, despite the presence of a potential CoI, nevertheless report their results in an unbiased and data-centric way, as would be expected of a well-educated scientist. Accepting financial support from parties with secondary interests, such as government, industry, philanthropic foundations or NGOs, is not unethical by default. Indeed, many grant schemes and call texts of the European Commission and national funding institutions (e.g., the Federal Ministry for Education and Research, BMBF) explicitly require the involvement of small, medium and large enterprises and thus by default will result in joint academic–private publications. It would be absurd to insinuate that all scientists that have been involved in such public funding programs are biased and ‘serve industry’ as claimed by some journalists (Hengstler 2014a, b). However, in the context of potential CoIs, a form of misconduct should be discussed, which is indeed unethical, namely the misuse of a real or alleged CoI as a thought-terminating cliché.

A trick from the psychology of totalism: the thought-terminating cliché

In his book ‘A study of brainwashing,’ the psychiatrist Robert Jay Lifton introduced the term ‘thought-terminating cliché’ as a commonly used phrase that blocks further analytical thinking (Lifton et al. 1961). The use of thought-terminating cliché remained popular and, unfortunately, is still applied successfully today. For example, if a scientist

is accused of a CoI, it is expected by the denouncing party that no further substantiating argumentation is required and by claiming a CoI, the scientist’s findings or conclusions can simply be ignored. Thought-terminating clichés are typically applied when no convincing scientific arguments are available. Although this strategy seems weak, it is nevertheless used relatively often (Hengstler 2014a, b). In our opinion, it is important to consider that a person may have a potential CoI but despite this, the scientific argument may be correct. It is unethical to misuse a real or alleged CoI as a thought-terminating cliché. Typically, the motivation behind such tricks is a lack of argumentation and secondary interests.

A possible way forward: the transparency site

As described above, potential CoI may arise from funding by government, industry, philanthropic foundations or NGOs. It is current practice to declare potential CoIs at the end of each scientific article via a CoI statement. This often represents an awkward procedure, and editors have insufficient means to control whether the given statements are correct and complete. Currently, it is not common practice to indicate all grants from the past years in a CoI statement. However, if a scientist has obtained grants focusing exclusively on a specific class of chemicals or, more importantly, the grant denomination contains specific elements of advocacy, this may result in a potential CoI; the secondary interest may be to maintain or improve the funding situation in future which may be achieved by exaggeration of the risks. Therefore, indicating titles and amount of previous funding would improve transparency. However, it would be lengthy and awkward to provide lists of funded projects after each published article and would certainly deter from the original purpose of the manuscript, i.e., science. In our opinion, there is a better option, the ‘transparency site.’ Today, almost every scientist has or belongs to a website describing their scientific expertise. It will therefore be easy to establish a site which gives information on (1) employment, (2) funding or any payments by government, industry, philanthropic foundations or NGOs, (3) all grants of the past 10 years including information on the title of the project, funding source, total funding and funding period. This transparency site could be linked to the names in the list of authors and would be available to anyone interested. Moreover, this automatically links to the scientific part of a researcher’s website, which may be in the interest of most authors. It will certainly take some years until such a system can be implemented but, in our opinion, it would have major advantages over the current practice of non-standardized CoI statements. Beyond the practical suggestion of a transparency site, our key message is that potential CoIs are

not unethical by default. Considering the current practice of scientific funding, it may even be difficult, if not impossible, not to have any potential CoI or an affiliation, association or activity that could be viewed and construed as a CoI.

In view of the often discussed crisis of scientific research (Kabat 2015) with issues such as lack of robustness and reproducibility of data, data fraud and falsification, published paper retractions, and questionable peer-review processes (Baker 2016), inflated discussions on who published the data and who may have a potential CoI will not improve transparency but add to the loss of credibility of scientific research. Despite all the discussion on secondary interests, ultimately, the scientific argument and the quality (robustness, reproducibility and dependability) of data are what matters.

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