Academic Integrity: Exploring tensions between perception and practice in the contemporary university (0157)

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There is a growing body of research into the concept and practice of academic integrity (Macfarlane, Zhang and Pun, 2012). However, most work in this area relates to students (Mahmud and Bretag, 2014; Newton, 2015) and focuses particularly on the issue of plagiarism (Ewing, Anast and Roehling, 2015; Leonard et al., 2014). Integrity is less researched and less frequently discussed in relation to the practices of academics and researchers. This paper explores academics' understandings and practice of academic integrity as it applies to their own work.

The global trend to shift the funding of higher education away from the nation state in the form of general taxation and on to individual institutions in the form of student tuition fees and private income generation (see for example Naidoo and Williams, 2014) has arguably led to an intensification of the academic environment. For individual academics and researchers this is often experienced as increasing pressure to recruit, retain and credentialise students on one hand, and to publish, patent, and secure income streams on the other. Job security, personal reputation, and promotion prospects, are often made contingent upon quantifiable outputs.

In parallel with a changing higher education environment, misconduct in research practice is reported to have increased (Steen, Casadevall & Fang, 2013). It has been noted, for example, that 'the rate of retraction of scientific articles has risen sharply in recent years ... A substantial fraction of all retractions are due to research misconduct' (Steen, Casadevall & Fang, 2013). The authors of one study in this area observe 'self-report of substantial levels of a range of behavior antithetical to high-quality science combined with sub-optimal levels of ideal research-related behavior' (Martinson et al., 2010, p. 77). It has been suggested that known cases of misconduct represent the 'tip of the iceberg' (Fanelli, 2009).

While occasional high profile cases of misconduct make the mainstream media there are inherent difficulties in ascertaining the prevalence of breaches of academic research integrity.

Defining misconduct is not straightforward (Macfarlane, Zhang and Pun, 2012). Even plagiarism, perhaps considered to be a relatively clear example of malpractice, may be understood in different ways according to the discipline, institutional status, and career-path of the individual. A further problem in determining the scale of misconduct is that research in this area is dependent upon academics self-reporting issues in their own practice. Given the potential risks to career and reputation, researching academics' accounts of malpractice is a highly sensitive area.

A number of studies have sought to estimate the prevalence of academic malpractice. Reports of academic misconduct appear to occur most frequently in science disciplines and most often they are found in medical related journals (Steneck, 2000). Fanelli's meta-analysis of scientific misconduct suggests between 0.3 and 4.9% of academics have engaged in serious malpractice such as the fabrication and falsification of results, and up to 33.7% of academics have undertaken 'other questionable practices' (Fanelli, 2009). However, it is unclear from the existing research whether the over-representation of misconduct in science is due to more instances of malpractice, easier detection, the potentially more serious consequences of misconduct, or more rigorous peer-review processes. There is evidence of plagiarism and other forms of malpractice within social science and humanities disciplines, perhaps the most famous instance being the Sokal Hoax (Sokal, 2010). The *Journal of Academic Ethics* has been in existence since 2003 and covers issues and examples concerned with all disciplines.

Many investigations into academic integrity meet the problem of securing the trust and cooperation of the researched. We are currently engaged in a research project aimed at determining the extent of academic malpractice among UK academics. We employ a distinctive methodology previously trialled in a small scale investigation designed to test the effectiveness of various approaches to eliciting responses to sensitive research questions (Roberts and St John, 2014). Our research is in two parts. The first part is a qualitative investigation into academics' understandings of the concepts of research integrity and misconduct. We have explored which behaviours academics consider to be examples of malpractice and, within this, which are thought more serious than others. We considered any possible correlation between attitudes towards academic integrity and the discipline, status, and institutional affiliation of the respondent. Having undertaken this qualitative investigation, the second part of the research project uses the behaviours respondents have themselves identified as examples of misconduct to compile a more extensive quantitative

investigation into the realities of academic integrity as practiced by researchers today. For this we will employ innovative methodologies specifically designed to elicit responses to sensitive questions.

The focus of this paper is the preliminary findings from the first part of this research project. We conducted six focus-group interviews with UK academics from a range of institutional and disciplinary backgrounds. The focus groups explored the tensions between participants' understandings and practices of academic integrity. Initial findings suggest that academics do occasionally experience pressure to compromise their integrity and employ personal strategies to resolve such dilemmas. The particular areas in which such pressure occurs, and the main issues considered pertinent to academic integrity, vary considerably according to institution and discipline. For example, while academics at more research intensive universities are concerned with institutional 'research support' processes that might compromise their academic freedom; colleagues at more teaching-focused universities are more likely to consider academic integrity in relation to their teaching practice.

Our initial findings in part confirm the conclusions of a previous study (Fanelli, Costas, and Larivière, 2015) that academic culture and career stage rather than gender affect attitudes towards academic integrity. However, perhaps because our study is qualitative and encompasses all academic disciplines and not just science, we do find that unlike in the study conducted by Fanelli et al. our respondents report pressure to publish rather than misconduct policies as a key influence in their own practice.

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