Investigating the probability of student cheating: The relevance of student characteristics, assessment items, perceptions of prevalence and history of engagement

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Abstract

Academic dishonesty is a fundamental issue in terms of the educational integrity of higher education institutions. Accordingly, there is a growing pool of literature that examines this issue. This study adds to this literature by investigating factors that may influence student engagement in academic misconduct. We examine the influence of the type of assessment items, age, gender, nationality, discipline and level of study and the students’ self-reported history of cheating. Drawing from a survey of 1057 students across four major Queensland universities, we find that a student’s age, gender and nationality are useful in explaining the probability of a student cheating. Our key finding, however, suggests that the likelihood that a student will engage in any given cheating behaviour is most strongly influenced by the extent to which the student engages in other forms of cheating, supporting the notion of ‘once a cheat always a cheat’. We conclude that more needs to be done to combat a culture of acceptance of academic dishonesty and to minimise defensive misconduct by students who otherwise might not engage in such behaviour. We suggest that university administrators devote increased resources to this issue and develop mechanisms for managing and curtailing the level of academic misconduct. A failure to do so may result in a further undermining of the academic integrity of the Australian tertiary sector.

Key words: Academic misconduct, prevalence, assessment, age, gender, nationality
Introduction
The role of universities in the modern, knowledge-based economy has become the topic of much discussion and debate in recent times, extending across both popular and academic literature. Some argue that the core business of universities is twofold: teaching and research. Others suggest a broader role of fostering community and economic development. A significant pool of academic literature debates these issues (Batson, Ahmad and Tsang, 2002; Bond and Paterson, 2005; Boyer, 1996; Bringle, Games and Malloy, 1999; Bringle and Hatcher, 2002, among others). The interesting context to this literature is the growing recognition that the use of public funds by universities is attracting increasing attention from governments, who are reconsidering the economic and social purpose of these institutions. This has led to calls for institutions to be more accountable for their use of these funds and to become more relevant to their communities rather than detached or adopting a universalist perspective (Bond and Paterson, 2005).

In the Nelson Report (2002), the Australian Commonwealth Government weighed into this debate, arguing that the role of higher education is “… much greater than preparing students for jobs”, regarding higher education as “… contributing to the fulfilment of human and societal potential, the advancement of knowledge and social and economic progress”. Indeed, the report states the main purposes of Australian higher education are to:

- “Inspire and enable individuals to develop their capabilities to the highest potential;
- Enable individuals to learn throughout their lives;
- Advance knowledge and understanding;
- Aid the application of knowledge and understanding to the benefit of the economy and understanding;
- Enable individuals to adapt and learn; and
- Contribute to a democratic, civilised society and promote the tolerance and debate that underpins it” (Nelson, p1).

Such aims are admirable, but there are several factors that mitigate the likelihood of these being achieved. One such factor is student academic misconduct since it directly undermines these goals, presenting a serious ethical and moral dilemma for universities. This factor becomes particularly pertinent when one considers recent literature suggesting that student academic

1 See Batson, Ahmad and Tsang (2002), Bond and Peterson (2005) and Bringle and Hatcher (2002) for a more detailed discussion of these issues.
dishonesty not only is prevalent in universities around the globe, but tends to be seriously underestimated at the institutional level (Brimble and Stevenson-Clarke, 2005; Bowers, 1963; Crown and Spiller, 1998; de Lambert, Ellen and Taylor, 2003; Dick, Sheard and Markham, 2001; McCabe and Trevino, 1996). It is further postulated by this research that factors such as technological advancement and a tendency toward increasingly large, impersonal and bureaucratic universities with relatively scarce resources to counter the problem have contributed to an increasing prevalence of student academic dishonesty (Bowers, 1963; McCabe, Trevino and Butterfield, 1999). Additional concern arises from evidence of a divergence between the opinions of academics and students in relation to both the seriousness of various types of academic misconduct and the severity of penalties that should be attached to them. Students present a more tolerant view than academics in both respects (Brimble and Stevenson-Clarke, 2005; Bailey, 2001; de Lambert, Ellen and Taylor; Roberts and Toombs, 1993; Roig and Ballew, 1994). Such a culture of acceptance of academic misconduct within the student population serves only to weaken the academic integrity of our tertiary institutions.

Academic dishonesty therefore is a serious issue in terms of quality in learning, teaching and scholarship at tertiary institutions. We predict that universities in Australia will come under increasing pressure to manage this issue as governments increasingly adopt national measures of teaching and learning performance. The wider circulation of such data (including course experience questionnaires and graduate destinations data), together with public investigations of complaints over ‘soft marking’ and corruption in relation to teaching issues in a number of universities (see, for example, Elliot, 2003) have begun to put pressure on the teaching and learning policies and performance of all Australian universities. This raises academic misconduct as a serious issue for universities in light of the evidence of its prevalence. To counter this situation we need to understand more clearly the motivations of students and the factors that are likely to lead them to behave dishonestly. In this study we model the probability that a university student will cheat: individually, in collaboration with others, in their exams and in their assignments. In respect of each of these scenarios we investigate the extent to which this probability can be explained by the students’ personal characteristics, their perception of the extent to which other students cheat and the extent to which they report cheating in other circumstances or during other forms of assessment.

The remainder of the paper is set out as follows. The next section provides a brief review of the literature. This is followed by a description of the data and an explanation of how the data set was constructed, along with a brief explanation of the logistic regression technique employed in
the study. The empirical results are then presented and discussed, while the paper concludes with some observations and suggestions as to how this research might be usefully extended.

Literature Review

The literature on academic dishonesty at the tertiary level has largely concentrated on developing our understanding of the prevalence, penalties and perceptions of dishonesty among students. This literature overwhelmingly concludes that academic dishonesty is highly prevalent in our institutions of higher education, that few students who engage in such behaviour are being caught, and that penalties for those who are caught are insufficient to act as an effective deterrent. For example, in one of the earliest published studies, Bowers in 1963 (cited in McCabe and Trevino, 1996) surveyed five thousand students across ninety-nine United States university campuses. Three out of four students surveyed admitted to having engaged in at least one of thirteen ‘questionable’ activities, such as copying from another student during an examination, using unauthorised materials during an examination, padding out a bibliography or collaborating on assignments requiring individual work. The results were similar thirty years later in a follow up study across the same campuses. It was found that while the overall proportion of students admitting to having engaged in such questionable activities had increased only modestly, the incidence of some activities (including cheating in examinations, helping others to cheat and collaborating on individual work) had risen dramatically, suggesting a shift in emphasis toward particular forms of cheating (McCabe and Bowers, 1994; McCabe and Trevino). Numerous other (predominantly US) studies have reported that student academic dishonesty is both prevalent and growing, including Hard, Conway and Moran (2006), McCabe, Trevino and Butterfield (2001) and Pincus and Schmelkin (2003).

A limited pool of Australian research also documents the prevalence of academic misconduct, as well as a lack of correspondence between the views of students and university academics with respect to what constitutes misconduct and how incidents of misconduct should be dealt with (see, for example, Brimble and Stevenson-Clarke, 2005 and 2006; Dick, Sheard and Markham, 2001; Godfrey and Waugh, 1997; Marsden, Carroll and Neill, 2005; Macdonald and Walsh, 2002; Sheard, Dick, Martin).

A number of factors have been suggested as contributing to what appears to be a global trend in the incidence of student academic misconduct, including: (1) a changing environment for tertiary education, where universities have become larger, less personal and more competitive, leading to increasing student cynicism toward academic dishonesty (McCabe and Trevino, 1996); (2)