Clinician's Commentary on Montuno et al.¹

Montuno and colleagues¹ investigation of academic dishonesty in the context of physiotherapy is interesting on several levels. Their findings show, in partial contrast to a recent study of pharmacy students and educators,² that opinions on what constitutes academic dishonesty are quite stable across PT generations. Interestingly, however, for several scenarios there was substantially less than 100% agreement as to whether they constituted dishonesty. In addition, there were differences between groups in the perception of how often such behaviours occur. The results lead us to consider two questions: First, how do any of us decide how to behave with (academic) integrity? Second, is the extent to which students commit breaches of academic integrity really changing over time?

Unsurprisingly, scenarios involving covert theft (e.g., gaining advantage from looking at another student's examination without his or her permission) or disobeying well-known rules (e.g., using forbidden memory aids in an examination) were almost universally condemned by both PT educators and PT students. We do not need to consult comprehensive statements about academic integrity³ to decide that these behaviours are unethical; if we presented age-appropriate versions of the theft or flagrant disobedience scenarios to children in the primary grades, we could imagine being greeted by an outraged chorus of "That's not fair!"

Interestingly, however, only about one-fifth of both PT educators and students considered it academic dishonesty to borrow a friend's assignment to gain ideas but not directly copy it. This scenario reflects a form of cooperative learning, although each student is individually accountable. Regarding it as not (or as less than serious) cheating may reflect an intuitive understanding that cooperative efforts generally achieve greater learning than competitive efforts.^{4,5} In addition, this scenario is distinct from many others in relating to an assignment rather than an examination; examinations are inherently about time-limited performance, whereas assignments are more implicitly about mastery. Being mastery-oriented rather than performance-oriented is increasingly recognized as important to educational success,^{6,7} lifelong learning, and the development of "practical wisdom."⁸ Schwartz and Sharpe argue convincingly that the best outcomes arise not from merely following rules and incentives but from learning how to judge what is right in individual circumstances.^{8,9} At its best, the behaviour in this scenario may represent a person attempting to gain the greatest learning from the assigned task: the "canny outlaw," to use Schwartz's term,⁹ achieves a greater good by disobeying low-level rules. (Full disclosure, at the risk of sounding self-promotional: I have elsewhere proposed that even in time-limited performances such as examinations, educators should consider whether permitting collaboration among students creates more learning opportunities than threats.¹⁰)

PT students reported having engaged, or perceiving that peers engaged, in three activities of questionable academic integrity significantly more than educators did: gaining ideas from a peer's assignment; copying from the Internet but crediting the source; and grading peers leniently.¹ The first has been described above; as noted, we may question whether it is indeed cheating. The apparent rise in Internet-based copying over time

may simply reflect increasing opportunity: the Internet was not available, or at least not worthwhile, as a source until recently. Tapscott¹¹ cites evidence that academic dishonesty is not more prevalent now than it was a generation ago; the Internet and other collaborative technologies have merely shifted the forms that academic dishonesty may take. Similarly, the apparent rise in lenient peer grading may also be merely a rise in opportunity, as this was not historically a common feature of evaluation methods. Alternatively, it may reflect what Brown and Adler have characterized as a generational shift away from a Cartesian view of learning—"I think, therefore I am," knowledge as substance, and pedagogy as knowledge transfer—toward a social view of learning, in which "we participate, therefore we are," and understanding is socially constructed.⁵ Assistance to peers could thus be seen as a greater good than rigid rule-following about how to assign a numerical value, and this would be especially true when peer evaluation contributes a relatively small proportion of the overall grade.

An intriguing finding by Montuno and colleagues¹ is that PT educators reported having engaged, or perceiving that peers engaged, in two behaviours significantly more than PT students did. Both of these behaviours involved conveying information about a practical skills exam (PSE) or objective structured clinical exam (OSCE), and both were nearly universally rated as serious cheating by both groups. The authors propose that the group differences may be due to increasingly strict examination protocols and methods to deter cheating. I offer another explanation, admittedly based on anecdote: when I was a teaching assistant in the early 1990s, my request for a list of criteria for grading students' performance on a PSE was met by bewilderment, and the absence of objective criteria increased my suspicion that none had existed when I was a PT student (in the mid-1980s, at a different university). Findings from behavioural economics show that people will engage better and/or longer in tasks that have more meaning,^{12,13} and may risk injury or sanction to take revenge on someone who has violated their trust or devalued their efforts, including behaving in a way that is "rationally" characterized as dishonest.¹³ The growing prevalence of explicit criteria and validated structure in clinical skills exams may have done as much as stricter protocols to increase integrity.

Montuno and colleagues suggest several ways of improving academic integrity, including promoting awareness of educators' and students' opinions on cheating and impressions of its prevalence.¹ Their suggestions should be considered by PT education programmes. In addition, however, academic integrity can likely also be promoted by creating the best possible learning opportunities and the most reasonable evaluation strategies, informed by the growing evidence in the fields of education, psychology, and business. Two areas of evidence are especially relevant. First, as Sir Ken Robinson notes, "Most great learning happens in groups ... If we atomize people [and] judge them separately, we form a kind of disjunction between them and their natural learning environment."^{14,15} Second, people will work hard and honestly to achieve mastery if they see tangible evidence that their efforts are acknowledged respectfully and are evaluated against valid criteria.

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