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## **Peer Effects in Universities**

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The major advantage of going to a top university is the high standard of its teaching and research, isn't it? Umm, no. Think again. It is the psychological pressure induced by keeping up with your dazzling flatmates that does much of the trick. Peer-pressure propels.

Fascinating new evidence on this, by Bruce Sacerdote of Dartmouth College in the US, has just been published. The author proves that the quality of your immediate student contemporaries turns out to be crucial to how you do at university.

This is hard to study convincingly. Clever people tend to go to elite universities. It is then tough for a researcher to sort out whether the good results those students produce are merely because they had to be talented simply to get in. What you need, ideally, is an experiment in which some youngsters are randomly assigned to particular places at top universities, while others in a control group get sent elsewhere. But it is not possible to run that experiment in a free society.

Sacerdote solves this simply and brilliantly. He notices that at Dartmouth, one of the Ivy League universities in the United States, all incoming students are randomly allocated to their halls of accommodation (to dorms, in American jargon). They share a bedroom with someone of their own gender, but do not get to choose whom. These students are randomly matched and forced to live together for the whole of the first year. Hence we have a 'natural experiment'.

It turns out that how successful your room-mate is has a noticeable effect on your own academic performance in the first year of college. If you are paired with someone who does well, you tend to do well. If you are paired with a dud, you tend to become a dud. Because the accommodation service at Dartmouth draws room partners out of a hat, this is good scientific evidence for what might be called peer

pressure effects. The size of the sample, at 1600 students, is reasonable, and the effect discovered by Sacerdote is a strong one statistically.

How large are these peer effects? Could a university, or a country for that matter, use this discovery to become more efficient as a producer of education?

Your room-mate's talent has quite serious consequences for you. If he or she starts coming near to top of the class in the first-year exams, then, compared to having a room-mate who is pretty average, you tend to go up (in British jargon) from a Lower Second to an Upper Second. This effect is probably a mixture of getting actual help from, and psychologically the fact you have to compete with, your talented friend.

A natural question then to ask is whether social and personal behaviour also end up being moulded by the person with whom you share. Interestingly, it mostly does not. But which societies you join, the author shows, do depend on those picked by your room-mate. How much beer you drink in the first year of university turns out not to be correlated with the consumption of your enforced friend, though it is affected by how much drinking there is in the entire hall of residence to which you are sent. Participation in athletic events is not influenced in a statistically significant way by whether you live with a top athlete. Nor does one's final choice of university degree subject - Americans choose after their first year -- turn out to be affected by the subject choice of your room-mate.

One finding by Sacerdote is that the size of peer effects depends on the exact mix of talents of the two individuals. If you are assigned a middle quality room-mate, you do no better than if you are assigned a bottom quality room-mate. Furthermore, middle students are not hurt or helped much by whatever quality their room-mate turns out to be. Ordinariness, it seems, is hard to overturn.

Yet being allocated someone who gets First Class or very good Upper Second marks helps two sorts of students. One is those who come in with top grades from high school. These talented entrants are more likely to get Firsts in their early exams if they are made to live with someone who gets Firsts. The second type who are helped by being made to have an outstanding room-mate are people who only just squeaked onto the course in the first place. The Firsts pull up the potential Thirds.

So the strange bottom line is this. Get your housing administrators to drop First Class people into the apartments which have only very good or very bad students. The relaxed apartments where everyone is scraping an Upper Second cannot be galvanised into action. They probably just want to be Friends.