THIS WEEK

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Confront sexual harassment

Too many universities give low priority to tackling sexual misconduct in science. It is time for them to take action.

The year 1752 was a momentous one for Britain and its colonies. While many countries were enjoying the stability and reliability of the modern Gregorian calendar, the British Empire was stuck in the past. By the time it was willing to drop its stubborn adherence to the Julian system, Britain had fallen so far behind in time-keeping that it needed to catch up — so it simply missed out 11 days in September 1752. Citizens went to bed on 2 September and woke up on 14 September.

The label 1752 would thus seem to be useful for any project seeking to address a problem that officials would prefer to wish away. But that's not why the UK-based lobby group 1752 chose its name (https://1752group.com). The group is tackling sexual harassment in science and other academic environments, and the number is a reminder of the low priority that too many attach to the problem. When the lobbyists arranged their first meeting in 2015 and asked for support, they received funds of just £1,752 (then US$2,600).

Speaking at the International Conference on Women in Physics last week, Emma Chapman, an astrophysicist at Imperial College London and a member of the 1752 group, said that although some British universities acknowledge the issue, they are slow to make any improvements. Academic culture prioritizes the protection of staff and the reputation of the institution, she said, and effectively condones misconduct.

Exactly how many students and staff are sexually harassed by university employees each year is hard to know. Many victims understandably do not report their experiences, and universities are hardly forthcoming in publicizing complaints. Leaks to the news media seem to have become the established way to bring cases to light.

But an idea of the scale of the problem, at least in the United Kingdom, could emerge next year, when the National Union of Students concludes a country-wide survey into sexual misconduct by university staff towards students. Australia will release the findings of its national student sexual-harassment survey on 1 August. Universities should not wait for the results. All of the evidence suggests — as *Nature* said last year — that sexual harassment is rife in science (*Nature* **529,** 255; 2016). Universities must acknowledge this before their denial starts to seriously harm them, as it already does the victims of sexual harassment.

Many UK institutions do acknowledge that there is a problem, but they need to confront it. Around one-third lack guidelines on staff–student relationships. And although the umbrella body Universities UK produced guidance in October 2016 on how its members should deal with sexual harassment by students, it is still consulting with 1752 and other bodies on how best to deal with harassment by staff.

Top of the list should be creating, and enforcing, codes of conduct that make patently clear what constitutes acceptable behaviour. Universities also need transparent reporting processes and investigatory procedures, which use independent investigators and conclude quickly.

Addressing the issue of serial perpetrators of harassment is crucial. For this reason, universities should not seek to minimize the apparent problem by encouraging staff to resolve issues informally. Earlier this year, an investigation by *The Guardian* newspaper found that students and staff had made at least 296 allegations against UK university staff since 2011. But the figures — disclosed through freedom-of-information requests — omit a number of known reported cases.

Non-disclosure agreements compensate victims, but, by silencing them, discourage others from reporting new cases and do nothing to tackle the wider problem. And given the length of time that investigations can drag on, universities should include active cases in the figures they collate.

"Sexual harassment will occur even in the most diligent of universities."

More universities should look at what the United States is trying to do. Shaken by several high-profile cases, institutions and funders there are recognizing a requirement for more rigorous enforcement of Title IX legislation that protects staff and students from any sexual discrimination. And Congresswoman Jackie Speier (Democrat, California) is highlighting the need to ensure that when perpetrators change universities, the new institution is always told of the person's previous record.

Just as institutions that strive hard to prevent research misconduct will still face cases of fabrication, falsification or plagiarism, sexual harassment will occur even in the most diligent of universities. In both cases, perpetrators can be powerful and influential. But the advice should be the same: to pretend an institution is immune does not make it look good. At best it suggests a failure to take the problem seriously; at worst it looks as if there is something to hide. ■

Game on

There are now vast opportunities to study the effects of online gaming on young minds.

Parents beware: a Chinese smash-hit computer game so addictive that state media labels it "poison" is on the march. The multiplayer game *Honour of Kings* has some 200 million users already, mostly in China, and reports suggest that it could be launched to eager teenagers in Europe and the United States later this year.

Although free to download, the mobile-device game encourages players to spend on character upgrades and equipment. Many do, making it the most lucrative game of its type in the world. But faced with a media backlash and complaints from parents, the company that produces *Honour of Kings* this month announced some severe restrictions on its use. Tencent Holdings in Shenzhen, China, has limited users under 12 years old to a single hour's play a day, and has stopped them playing at all after 9 p.m.. Those aged between 12 and 18 get just two hours.

(The restrictions are possible because players must register and log in.)

It's not just in China that teenagers are seeing their use of mobile devices curtailed. Elsewhere, schools are making a stand, too. Stroud High School in Britain made headlines this month when it announced that pupils aged 12–14 would not be allowed to use their phones during the school day; those aged 15 and 16 can use them only at lunchtime. Headteacher Mark McShane told parents that the move was to reduce the possible negative impact of social media on their children's mental health and well-being.

These impacts — and others attributed to the increasing ubiquity of electronic devices — are the latest battleground in a long-running dispute over the effects of visual and interactive media on minds and the brain. From video nasties to nasty video games, how and how much the thoughts and behaviours of young people (and some not so young) are influenced by what they see on their screens is a regular source of disagreement.

Groups of academics warn of the dangers; other groups play them down. Both sides point to what evidence they can find to support their stance, and argue that there is insufficient information to back up the opposition's viewpoint. Guidelines are sketchy. Last year, the American Academy of Pediatrics updated its advice and now discourages media use, except for video-chatting, by children younger than 18 months. For children aged 2–5, it recommends that parents limit screen time to one hour a day of "high-quality" programming.

All involved insist that more research is necessary — they are split only on what should happen in the meantime. And that is a question of politics and personality as much as it is an issue for science.

To make progress, more precision is needed to define just what the groups are arguing about. Although a popular topic with parents and a common public debating point, the effects of 'screen time' — and possible limits on access to it — seem too vague to allow much meaningful science. And there are as many claimed benefits as dangers. Equally, whereas many people diagnose themselves with 'Internet addiction', the point at which normal (useful and productive) activity becomes a scientific and medical problem is not easily categorized, defined or compared. (The same is true of many behavioural addictions. This does not make them not real, just difficult to frame.)

Computer games such as *Honour of Kings* might offer an opportunity here. Data are available on who plays and for how long. Interventions such as the restrictions in China can in theory be tracked, subject to proper privacy safeguards. And, although still controversial, attempts have been made to constrain and diagnose one problem behaviour that can emerge: a condition called Internet gaming disorder. It was included for the first time in the 2013 edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, but only as a topic worthy of further attention.

"Abuse of online games does not have to rot the brain to be a disorder worth investigating."

Cynics may scoff, but abuse of online games does not have to rot the brain to be a disorder that is worth investigating. For teenagers, even apparently mild effects such as sleep disruption can quickly cascade into reduced attention and poorer performance at school.

That was one reason why South Korea started a national experiment in 2011, when it banned under-16s from accessing online video games after midnight. The country labelled the policy as the Shutdown Law rather than as an experiment but, nonetheless, it gave scientists an opportunity to do some of the research that all agree is necessary.

Last week, scientists published some of the first results (L. Changjun *et al. Telematics Inform.* http://doi.org/b9sq; 2017). And, typically, they allow both sides of the debate to claim victory. Internet use rose after the shutdown (maybe teenagers logged on more during the day to compensate?), but addictive behaviour fell. And sleep increased, although by an average of just 1.5 minutes each night. The impact, the scientists say, was statistically significant, but hardly enough to justify the firm hand of the nanny state. Honours are even. For now. ■

Homo zappiens

The tech-savvy generation may not be so different after all.

Some people put the cut-off at 1984, but for most it is 1980. People born after that date are the digital natives; those born before are digital immigrants, doomed to be forever strangers in a computer-based strange land.

The generational difference between the groups goes beyond their numbers of Facebook friends and Twitter followers: it can also help to explain differences in how they buy insurance. At least, that's according to a report released this week for the insurance industry. *Targeting Millennials with Insurance* explains that young people aren't like those who came before and queued passively for cover. They "prioritize holidays", for one, which might surprise some of them. Because they are digital natives, they "will favor technologically innovative insurance policies".

But a paper published last month in *Teaching and Teacher Education* reaches the opposite conclusion. The digital native is a myth, it claims: a yeti with a smartphone (P. A. Kirschner and P. D. Bruyckere *Teach. Teach. Educ.* **67,** 135–142; 2017). The implications go beyond insurance. Many schools and universities are retooling to cope with kids and young adults who are supposedly different. From collaborative learning in the classroom to the provision of e-learning modules in undergraduate courses, the rise of the digital native is being used as a reason — some say a justification — for significant policy changes.

Education policy is particularly vulnerable to political whims, fads and untested assumptions. From swapping evolution for creationism to the idea that multiple types of intelligence demand multiple approaches, generations of children are schooled according to dogma, not evidence. Surveys show, for example, that teachers and education experts subscribe to dozens of different and opposing 'learning styles'. Under these, children can be categorized as activists or theorists, organizers or innovators, non-committers or plungers, globalists or analysts, deep or surface learners, and so on. Could the latest example be altering access to, and the provision of, technology in the classroom, simply because a new cohort is believed to be more familiar with it?

It is beyond dispute that people brought up in the most recent decades have been exposed to a lot of digital technology — at least in developed countries. And paper co-author Paul Kirschner, an education researcher at the Open University of the Netherlands in Heerlen, happily describes himself in his academic work as a "windmill-fighter". But whereas Don Quixote aimed against solid walls, the digital-native assumption, on closer inspection, does seem illusory. It is certainly no giant.

A 2011 review for the Higher Education Academy in York, UK, put it bluntly, as the first of its executive-summary conclusions: "There is no evidence that there is a single new generation of young students entering Higher Education and the terms Net Generation and Digital Native do not capture the processes of change that are taking place" (see go.nature.com/2vepfrv). Many members of the digital-savvy generation use technology in the same way as many of their elders: to passively soak up information. Children say they prefer IT in their lessons and courses? Do schools listen when kids say they prefer chips for lunch every day?

The *Teaching and Teacher Education* paper raises another concern. Digital natives are assumed to be able to multitask, it warns. But the evidence for this is also scant. Reading text messages during university lectures almost certainly comes at a cognitive cost. So too, employers might assume, does fiddling with smartphones and laptops in meetings. Buy that technologically innovative insurance policy another time. ■