

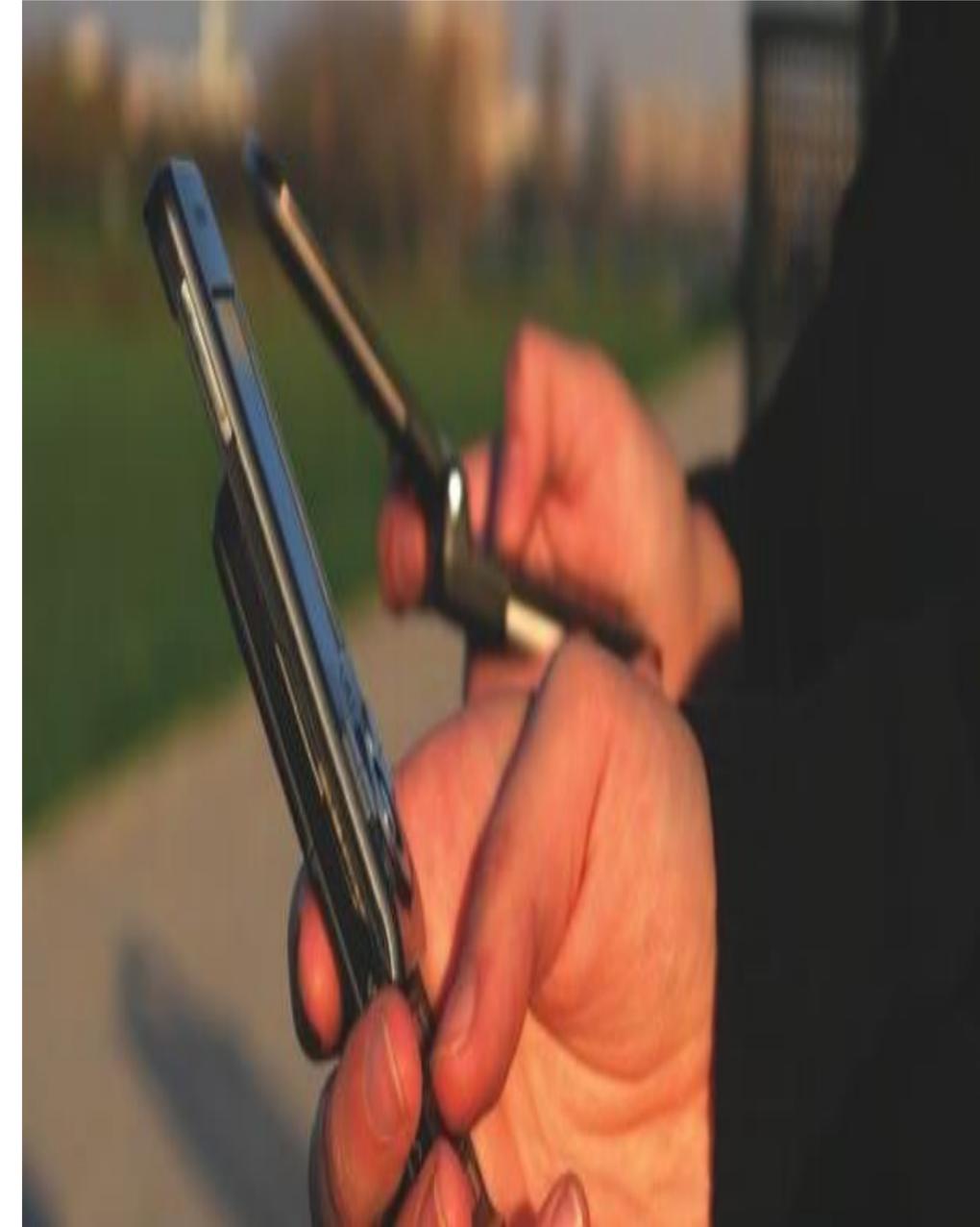


SCHOLARLY INTEGRITY AND MATTERS OF TRUST

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The big questions: does digital lower the bar, open the floodgates and leads to a loss of integrity?

- **Digital transition** and especially, **open science** initiatives, raise doubts about trustworthiness of scholarly communication and potentially opens the door to 'dodgy' practices
- **Easier** to write and publish and many new 'actors', which possibly means more rubbish/irresponsible stuff, plagiarism etc. In the borderless world unethical practices mushroom and science loses authority. 'Easy' replacing 'trust or authority'?
- **Doomsday scenario**: straying from traditional path will lead to science being devalued and nobody trusting it. Lack of quality control and credibility will result in 'hippy' science. Popularisation, a result of pursuing open science, leading to a dumbing down.



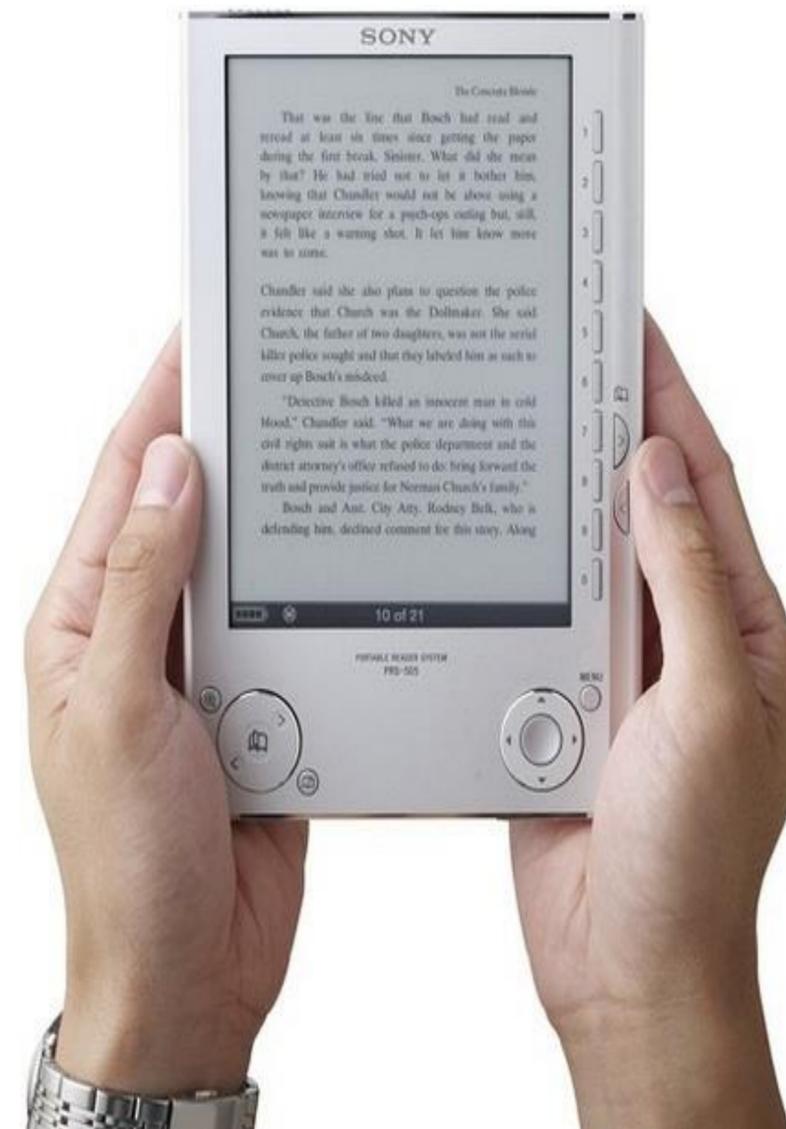
Research response: international study of research behaviour and perceptions

- These considerations – among others - led to an 18 month international investigation of behaviours and perceptions of nearly 4000 researchers using qualitative and quantitative methods. Continued in Malaysia and China
- *'Trust and authority in scholarly communications in the light of the digital transition'*, funded by Alfred P. Sloan Foundation. [see <http://ciber-research.eu/> for reports and publications]
- Will focus mainly on three issues close to the subject of conference:
 - Are things that bad and getting worse?
 - Unethical practices
 - Open access publishing (peer review and charging)



Bad and getting worse?

- Researchers asked whether agreed with a range of positive/negative views provided by focus group participants/interviewees (200+ of them) in respect to what has happened to their research field over past decade.
- In fact, researchers generally pragmatic; there are ups and downs, take the rough with the smooth. **Overall things are better.** There is not so much bad stuff about that we cannot handle it – connectivity (online communities) and visibility really helps.
- However demographic differences, thus:
 - Young researchers thought more negative things going on. Down to: a) not much time to reflect on things; b) more sceptical attitude to scholarly standards and measures of quality assurance
- Lets look at the data through the lens of mature v early career researchers, because latter are the new wave...

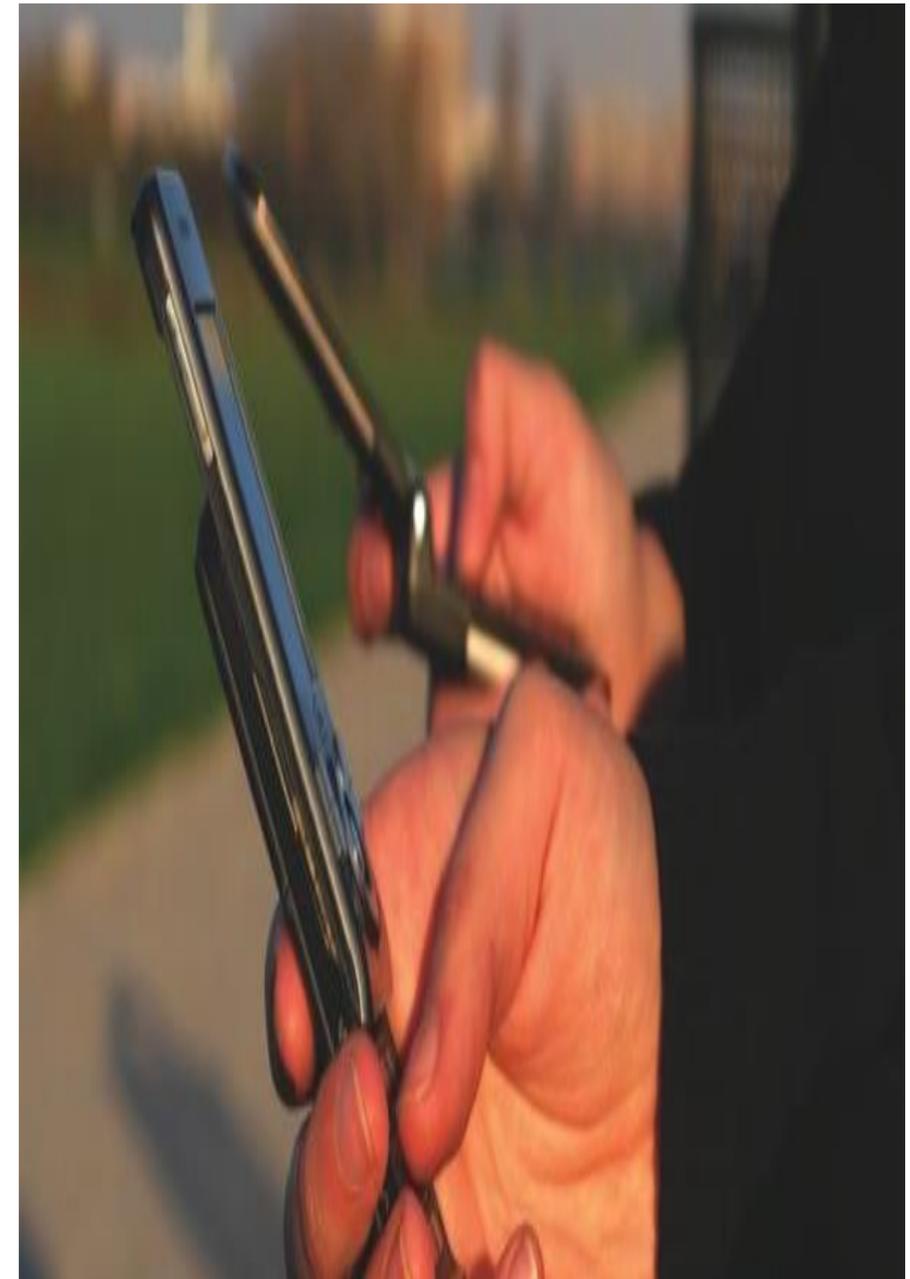


Views on what has happened to their subject over last decade: younger v older researchers (Mean rating, 1= no, not at all to 5= yes, to a great extent)

View	≤30	>30	All
1. The closer ties with researchers in my field, enabled by digital communication, make it easier for me to judge the trustworthiness of material.	3.57	3.14	3.19
2. There are more outlets, it is easier to get published and as a result, there is a flood of poor quality material.	3.21	3.03	3.05
3. More researchers entering the field have raised standards.	3.39	2.80	2.87
4. There is a less strict/ less rigorous peer review process and as a result, there is a flood of poor quality material.	2.92	2.70	2.73
5. Easily available metrics make the evaluation of trustworthiness easier.	3.12	2.43	2.51
6. There are more unethical practices (e.g. plagiarism, falsifying, fabricating, citation gaming).	2.79	2.29	2.35

Footnote on plagiarism

- Thought more widespread by:
 - *a) social scientists;*
 - *b) older researchers;*
 - *c) researchers who had not published much.*
- Some daylight between beliefs of publishers and researchers (former convinced software spotting it)
- Stirring the pot some researchers, most notably younger researchers and those from teaching-intensive universities, thought that some forms of plagiarism were more acceptable than others. Thus, mild 'cut and pasting' was acceptable, providing attribution was given, and self-plagiarism was acceptable, as long as not overdone.



Open access publishing

Generally OK with OA, but peer review, traditional publishers and IF are the insurance
Some confusion and concerns:

- 1) **confusion and irritation.** Distrust/dislike of OA can be put down to misunderstandings and unfamiliarity. Not always aware peer reviewed, published by traditional publishers and not all charge. Tared with the same brush.
- 2) **charging** a concern. Alleged 'vanity publishing' – pay over your money and get published. Reluctance to pay to publish down to:
 - a) concerns that charges undermine review process. Fast tracking.
 - b) an apprehension publishers increase acceptance rates to increase revenues, thereby lowering quality of journal.
- 3) **predatory journals** query the patch
- 4) the academy has yet to **make up its mind**
- 5) OA trust falls along **generational lines** - older researchers more sceptical



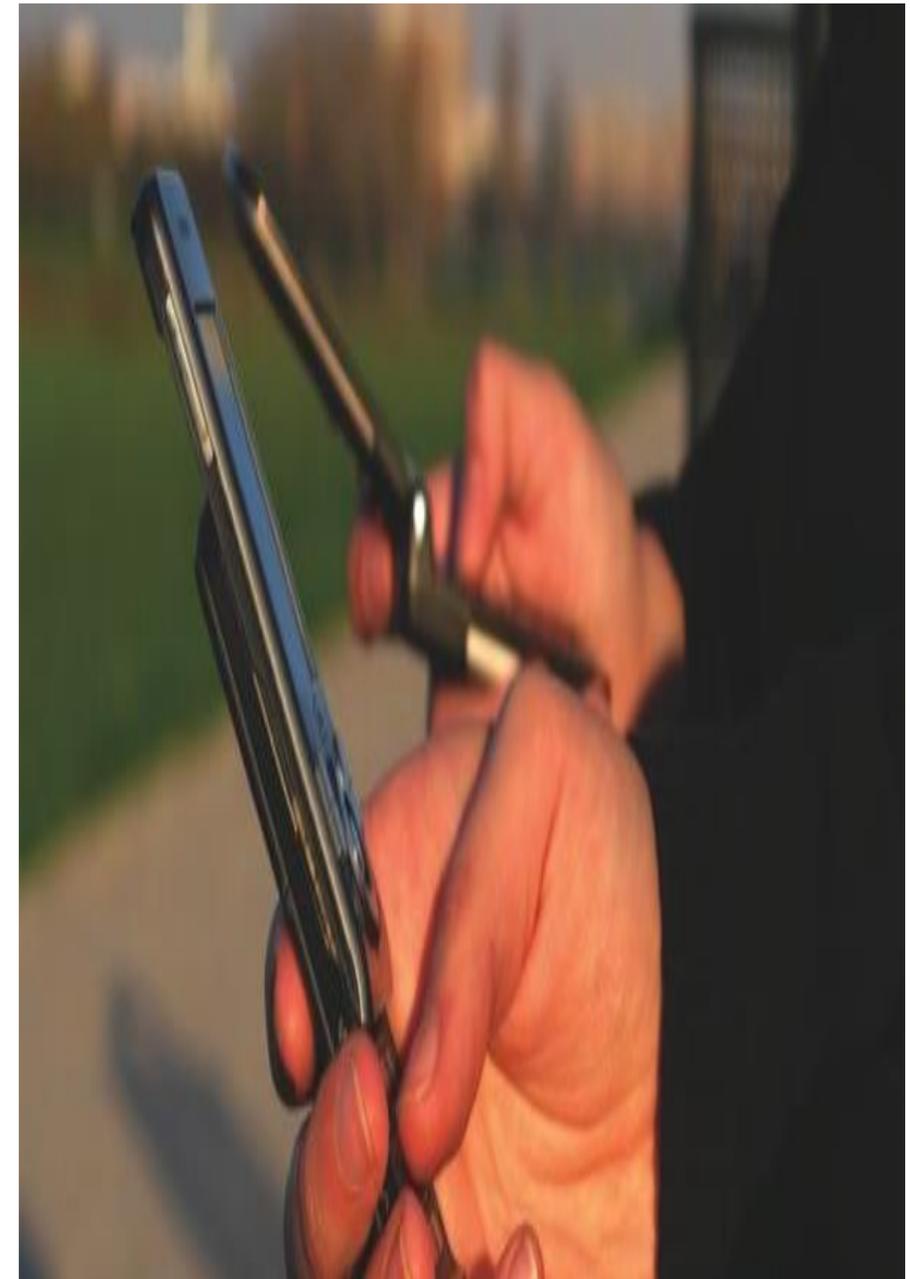
Open access publishing: some quotes

Charging

- *I have been asked to review for open access journals. I do not really know if (OA review process) is normal or not. If you pay for publishing is it really the same thing as peer reviewed? In my mind it changes if you pay to be published. There are problem with quality and veracity.*

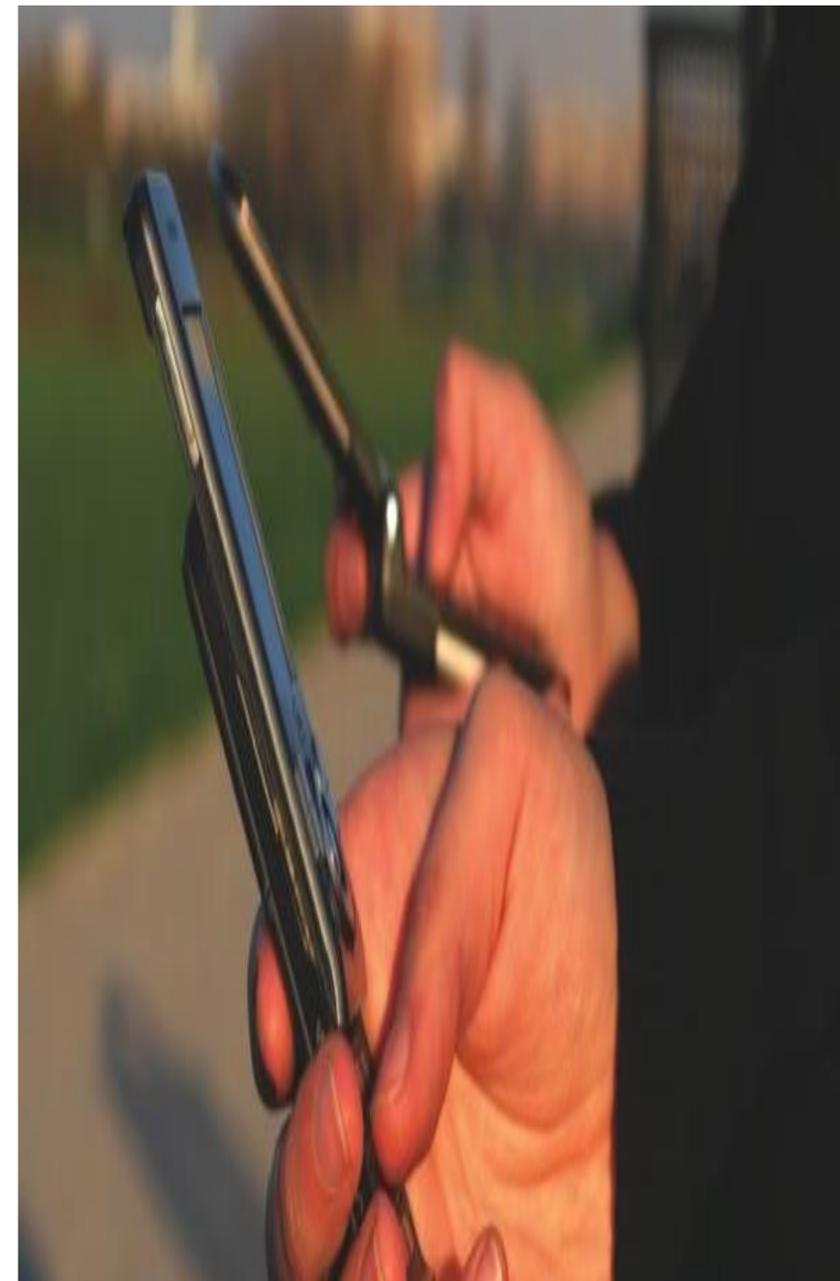
Predatory publishers. Big doubts about peer review. In their own words:

- *“The greatest evidence against the trust/reliability in open source material is the flood of invitations that I get from open source journals (usually I regret to say from emerging countries) which offer to publish whatever I want provided I pay”.*
- *“I feel that many of these (new open access) journals publish all work submitted by authors purchasing a subscription irrespective of the merit of the submission. This needs to be stopped”.*



Conclusions

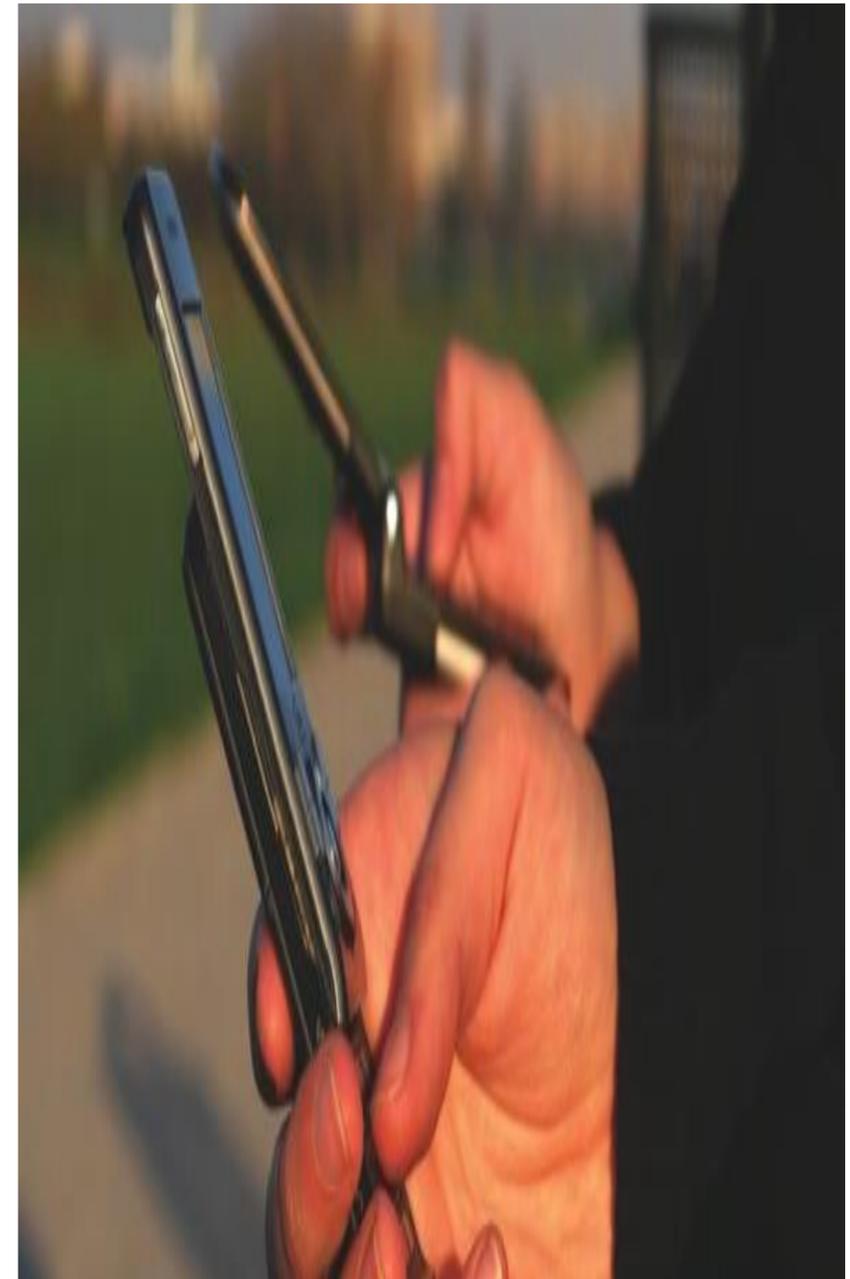
- No time to cover gaming (unethical?) or faking research (more widespread than commonly thought; harder to detect than plagiarism and its not the usual suspects). How else do you get published if you are young and aspiring!
- So, what do we make of it all after reviewing quite a lot of evidence?
 - Given the scale and speed of change not doing too badly, but pressure going to mount as enter an even more open environment.
 - But, who are the policeman in a borderless, do it yourself environment?
 - Peer review still the main policeman, although, increasingly more going on in the 'neighbourhood watch' (social online networks) line.
 - Concerns over trust proxies, such as altmetrics as more easily gamed/ manipulated and EC pressure to make the system more open.



Conclusions

A scholarly reputation or authority based upon altmetrics might destroy faith in the scientific endeavour and the authority of scientific research. Just, maybe, altmetrics and citizen science are the totem poles of hippy science?

Research 'quality' might be more easily (bulk) bought by 'rich' people as it is easier to buy metrics, such as, usage tweets and likes.



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