

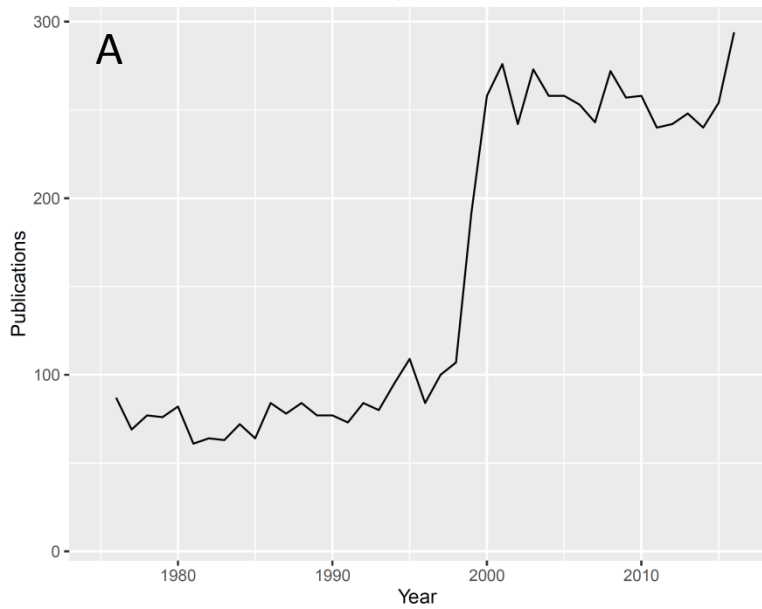
Detecting signals within the noise - methodologies for finding meaning in large data sets. Case Study: 'Medical Education' publications 1951-2016.

Richard Arnett. RCSI Quality Enhancement Office

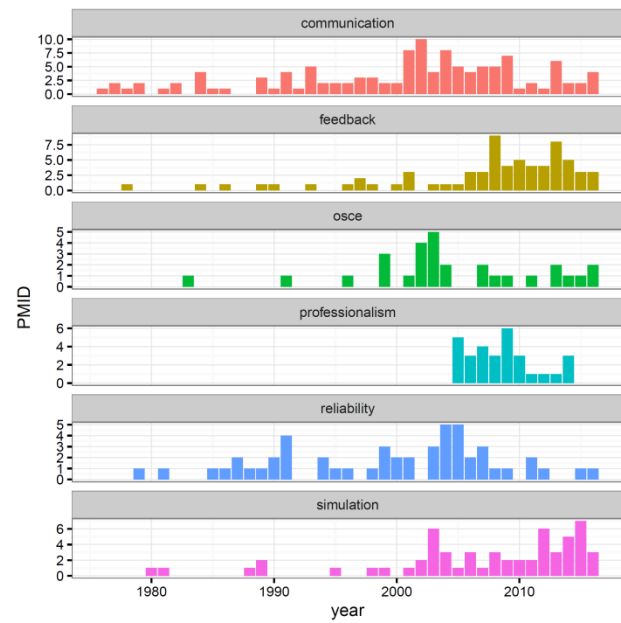
- (Big) Data?
- PubMed API: 6432 'articles' 1951-2016
 - 'Study of applicants for admission to United States medical colleges--class entering in 1950-1951. – Stalnaker, JM'
- Data on publication dates, authors, titles etc.
- Abstract text n=3861 (60%)
- Process, visualise and analyse (critically)



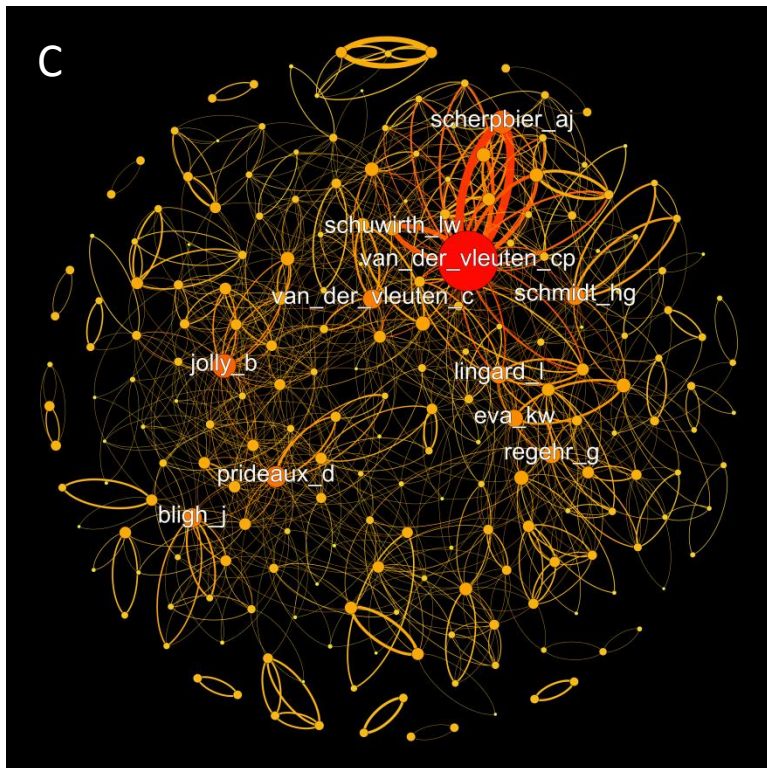
'Medical Education' publications 1975–2016



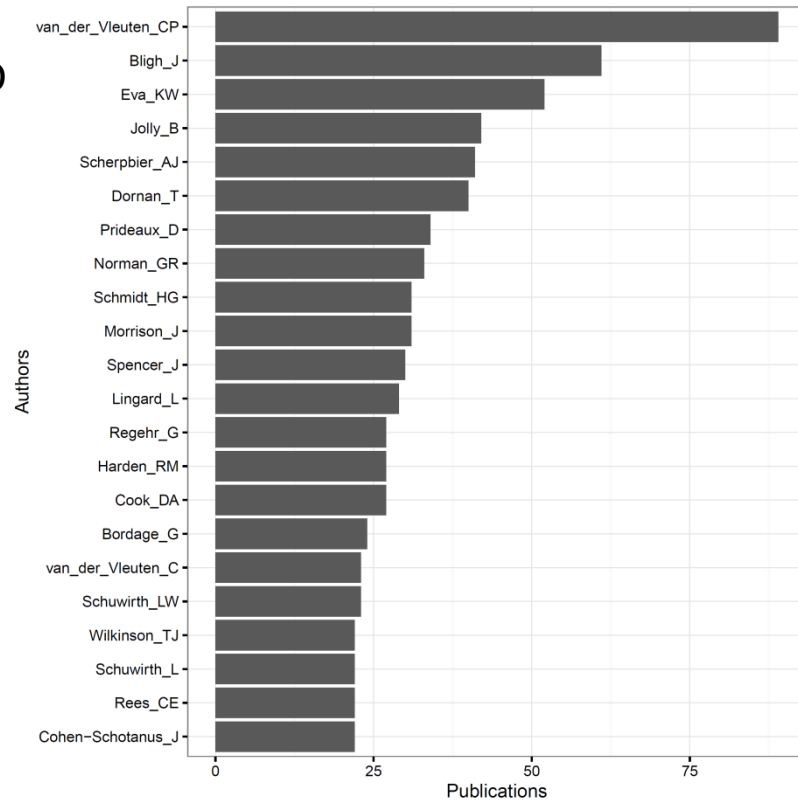
B



C

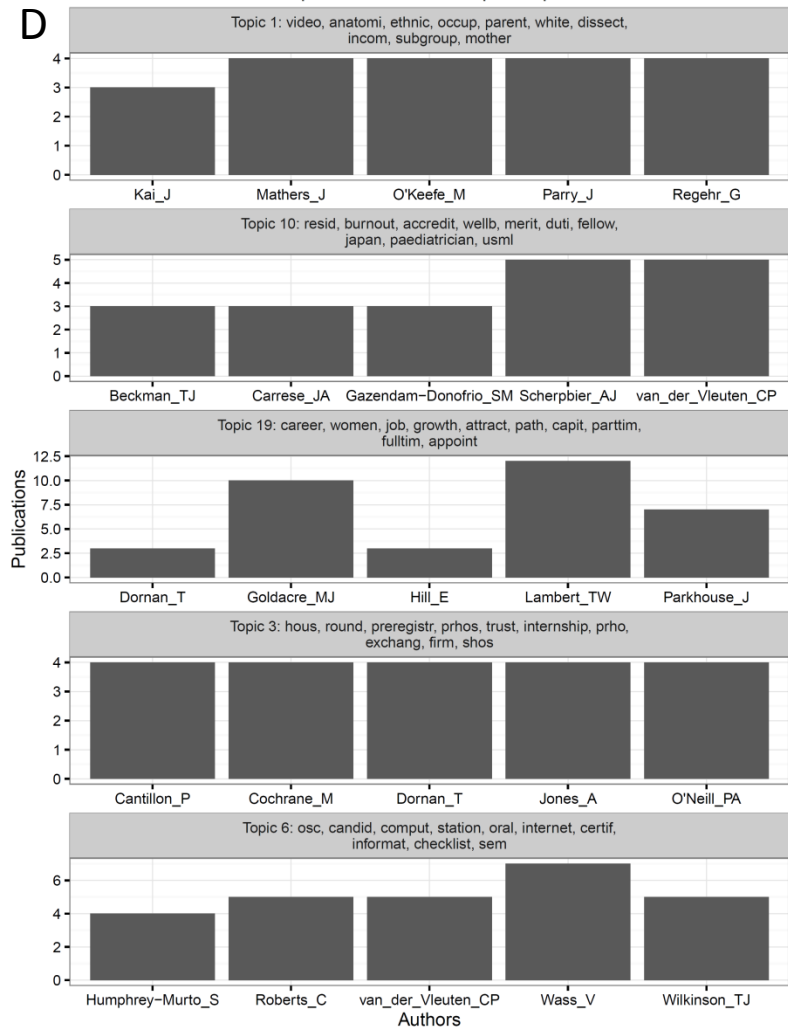


D



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Top 5 Authors For Top 5 Topics



Using Latent Dirichlet Allocation (LDA) to identify 30 discrete 'topics' within abstract text.

E	Topic 1	Topic 3	Topic 6	Topic 10	Topic 19
	Monitoring the widening participation initiative for access to medical school: are present measures sufficient?	How consultants, hospitals, trusts and deaneries affect pre-registration house officer posts: a multilevel model.	Relationship between candidate communication ability and oral certification examination scores.	The relationship between reciprocity and burnout in Dutch medical residents.	The only girl in the room: how paradigmatic trajectories deter female students from surgical careers.
	Increasing tuition fees in a country with two different models of medical education.	Preparation courses for a medical admissions test: effectiveness contrasts with opinion.	The objective structured clinical examination: can physician-examiners participate from a distance?	Number needed to eat: pizza and resident conference attendance.	The careers of women graduates from St Mary's Hospital Medical School, London, 1961--72.
	Supporting student-doctors from under-resourced educational backgrounds: an academic development programme.	Hospital doctors and their schemas about appropriate prescribing.	Multiple mini-interview test characteristics: 'tis better to ask candidates to recall than to imagine.	Obstetrics and gynaecology chief resident attitudes toward teaching junior residents under normal working conditions.	'It was serendipity': a qualitative study of academic careers in medical education.
	What do Australian junior doctors think of white coats?	Operationalising elaboration theory for simulation instruction design: a Delphi study.	A final clinical examination using a sequential design to improve cost-effectiveness.	Teaching skills improvement programmes in US internal medicine residencies.	'You become a man in a man's world': is there discursive space for women in surgery?
	Spatial learning disabilities and underachievement among university anatomy students.	The clinical and educational experiences of pre-registration house officers in general practice.	Reliability estimates: behavioural stations and questionnaires in medical school admissions.	Medical education accreditation in Mexico and the Philippines: impact on student outcomes.	Hard times--hard choices: positive decision-making for part-time women doctors.

