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# Journal Futures: researcher behaviour at early internet maturity

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**NOP World**  
United Business Media

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# Background & Methodology

- Elsevier collaborated with NOP and CIBER
- Objective: to understand how motivations and behaviour of researchers has been affected as internet use reaches early maturity
- The largest research project of its kind
  - 6,344 researchers completed an online survey
  - all subjects
  - all ages
  - global survey
- To fully understand these responses, a further 70 follow-up in-depth telephone interviews were completed in late 2005





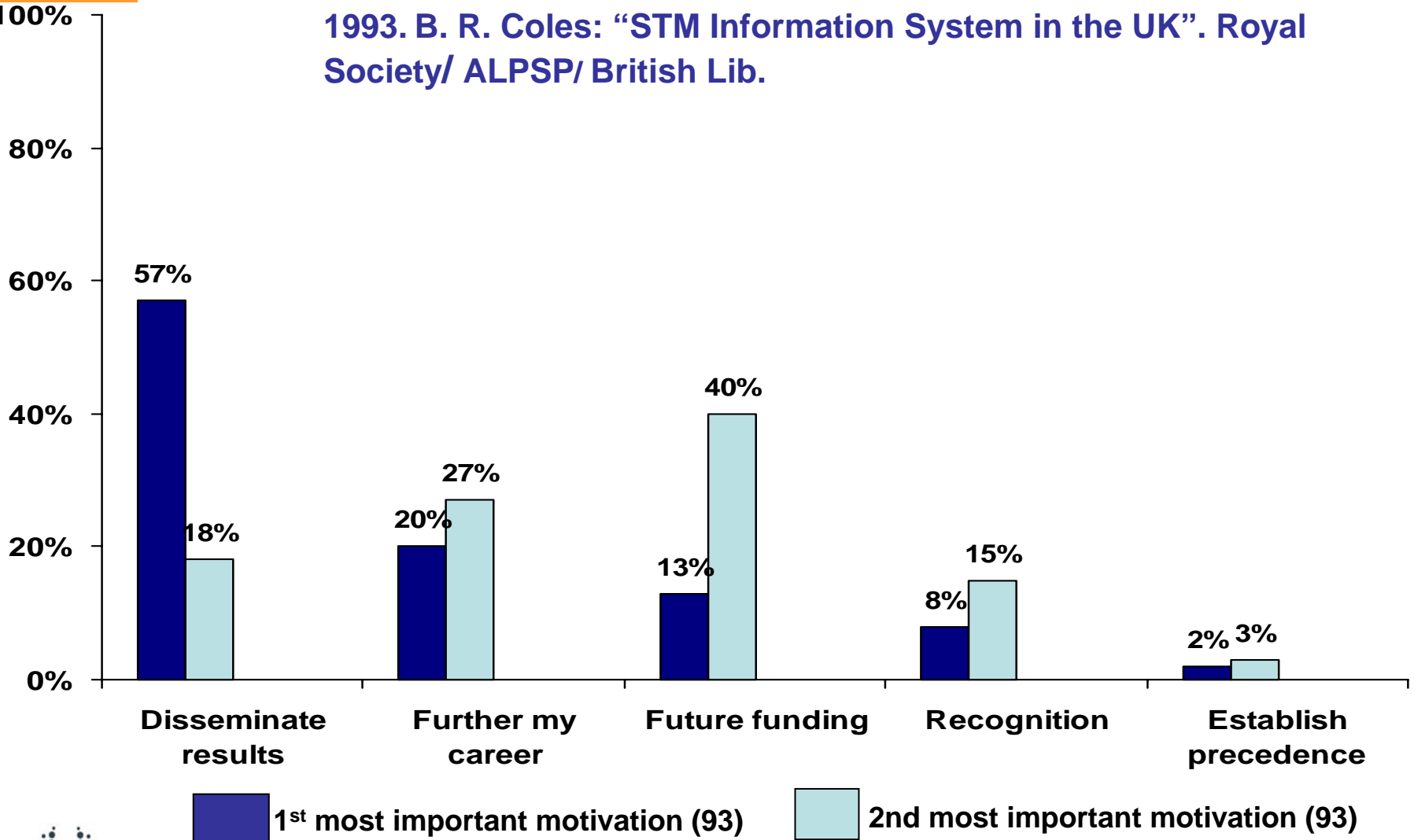
# Topics

- Motivations for publishing
- Funding bodies
- Quality versus quantity
- Prestige journals
- Peer review
- Browsing and reading behaviour
- Sharing data
- Different version of articles
- Permanent record
- Repositories



# Motivations for Publishing

1993. B. R. Coles: "STM Information System in the UK". Royal Society/ ALPSP/ British Lib.

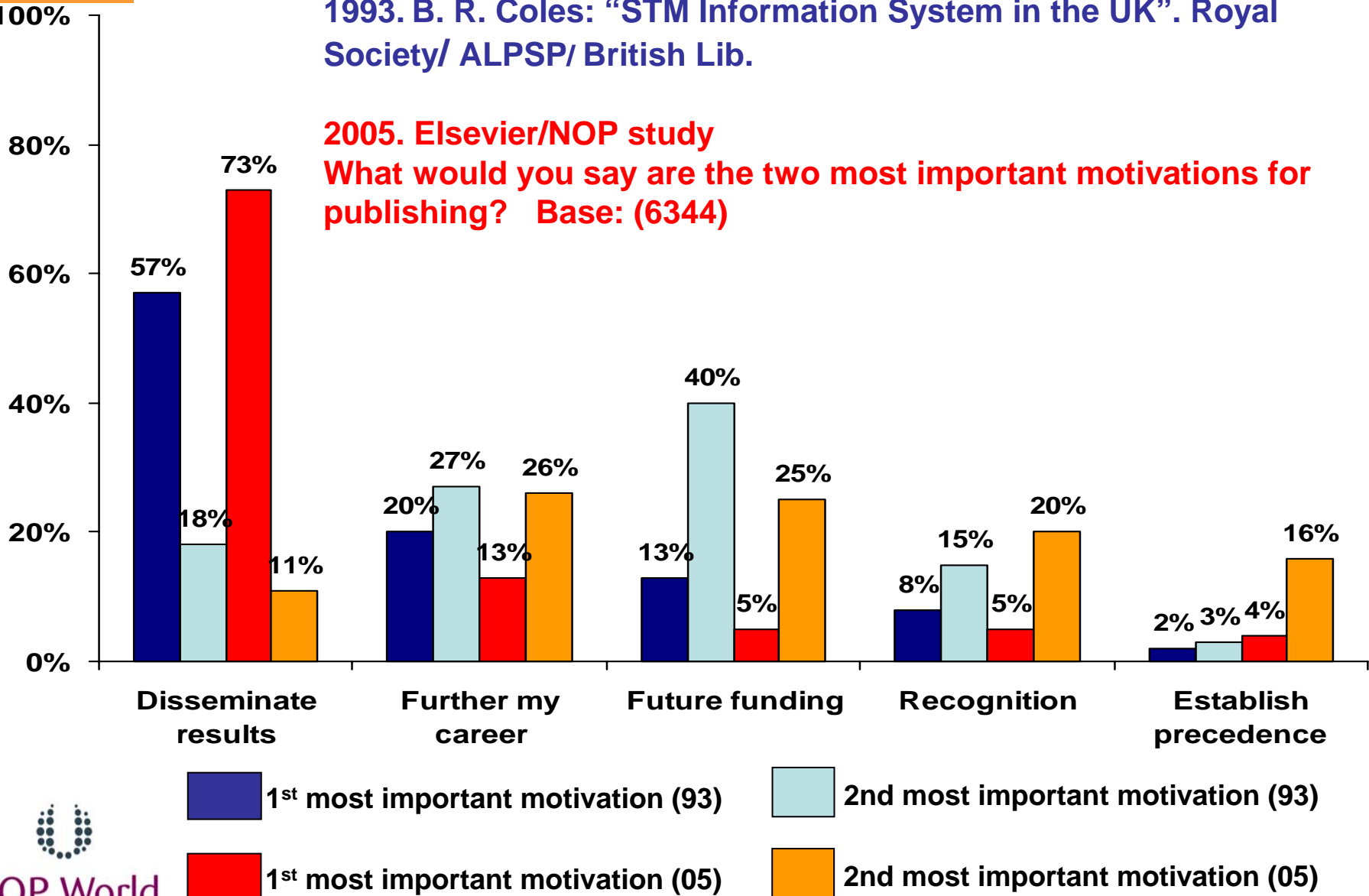




# Motivations for Publishing

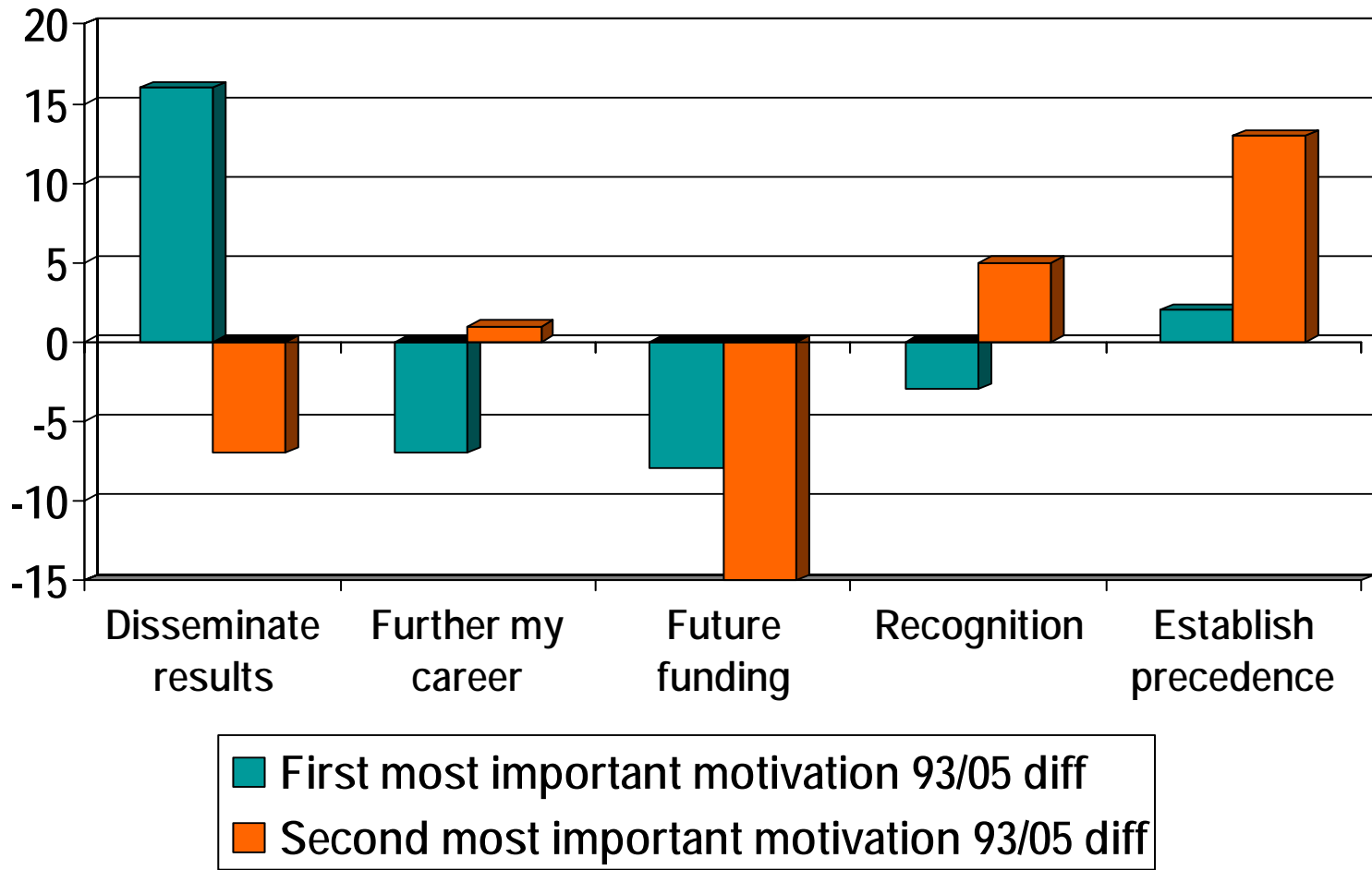
1993. B. R. Coles: "STM Information System in the UK". Royal Society/ ALPSP/ British Lib.

2005. Elsevier/NOP study  
What would you say are the two most important motivations for publishing? Base: (6344)



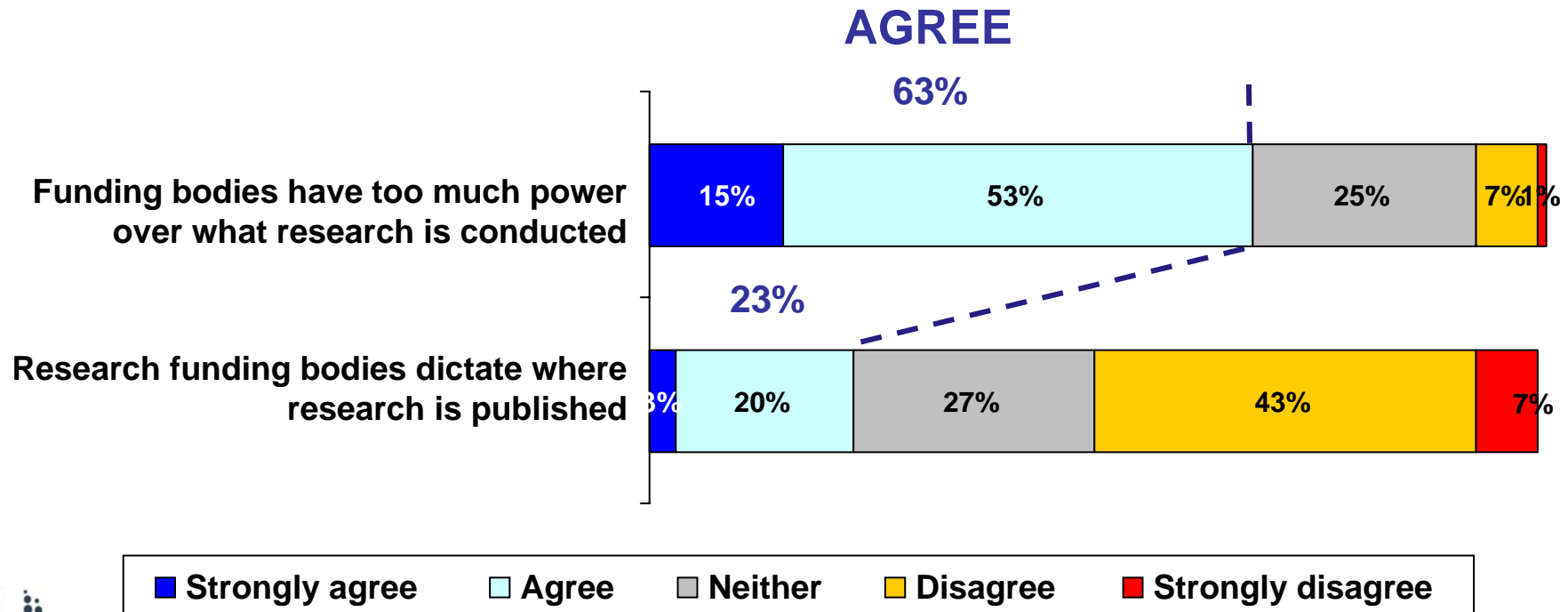
# Motivational change over 10 years

- Establishing precedence and gaining recognition are more important than previously



# Funding

- Researchers have **ambivalence towards funding bodies**:
  - 63% think they have too much power over what research is conducted
- Despite concerns about the pressure to publish in high impact journals, **funding bodies do not dominate choice of journal**



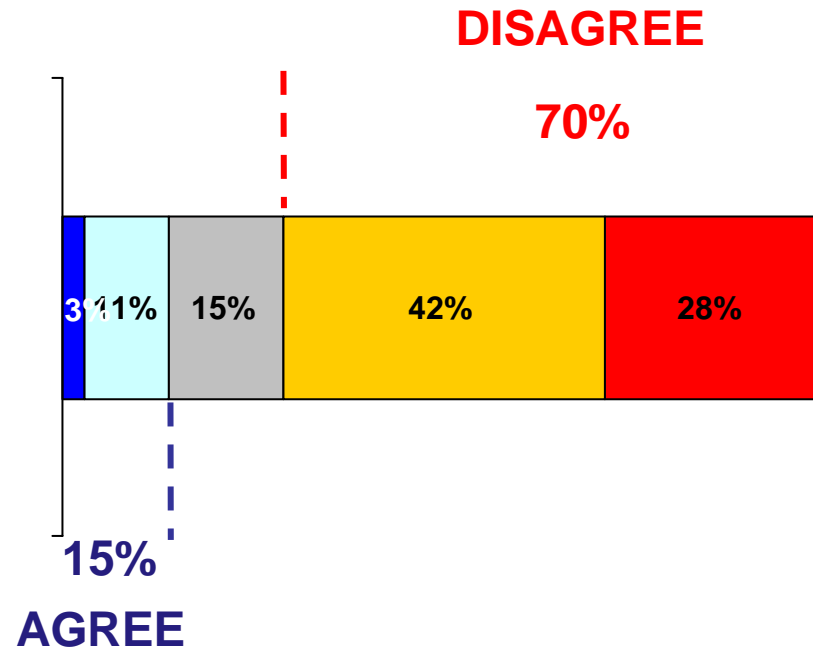
Q.2 Thinking about your experience of academic publishing in your own specific field, how much do you agree or disagree with the following statements?

Base: (6344)

# Are there too many articles being published?

- Quality is more important than quantity
  - the majority **disagree (70%)** that it is better to publish a **large number of papers**

It is more important that I publish a large number of articles than a smaller number of higher quality articles

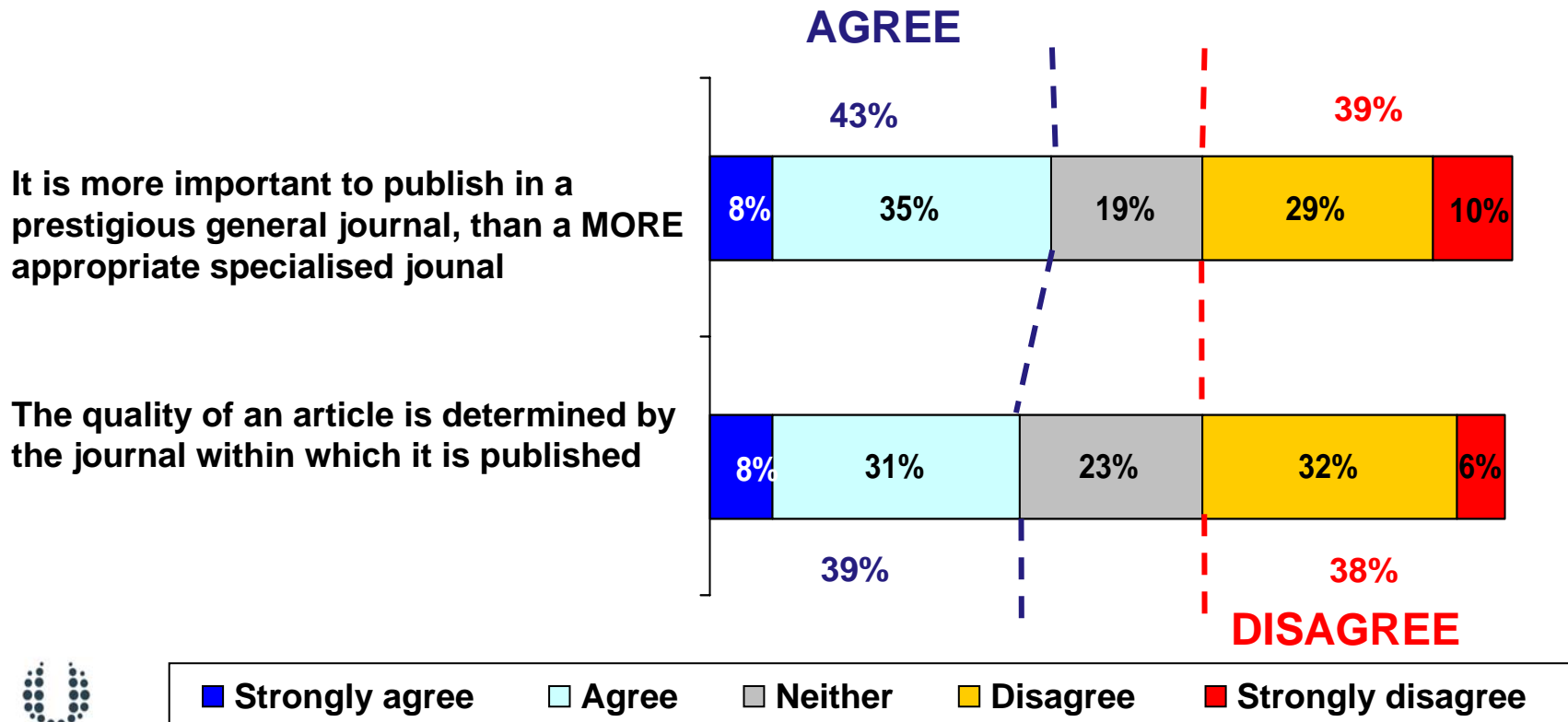


■ Strongly agree    ■ Agree    ■ Neither    ■ Disagree    ■ Strongly disagree



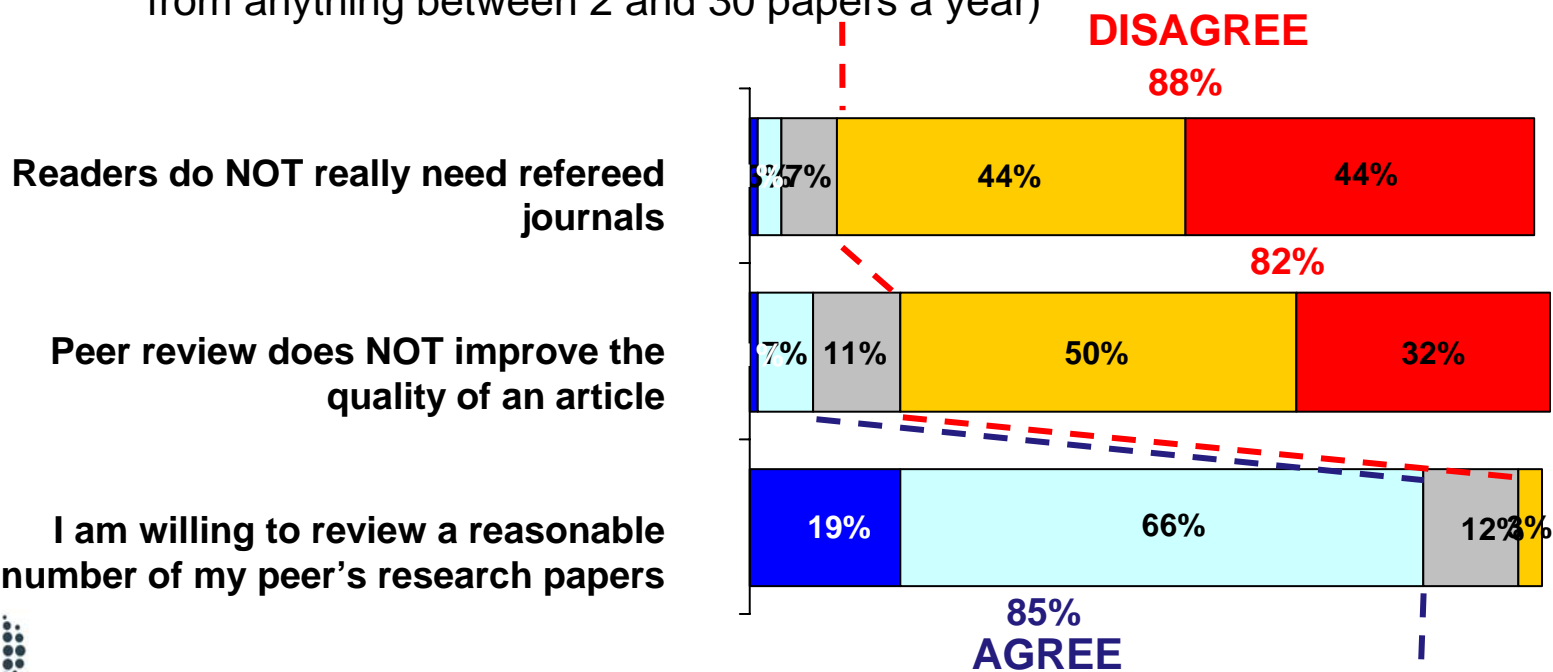
# Prestige journals

- Authors are divided when it comes to deciding whether to publish in a prestigious or niche journal
- Readers are also divided when assessing a paper. Significant proportions believe that the quality of the article is NOT determined by the journal



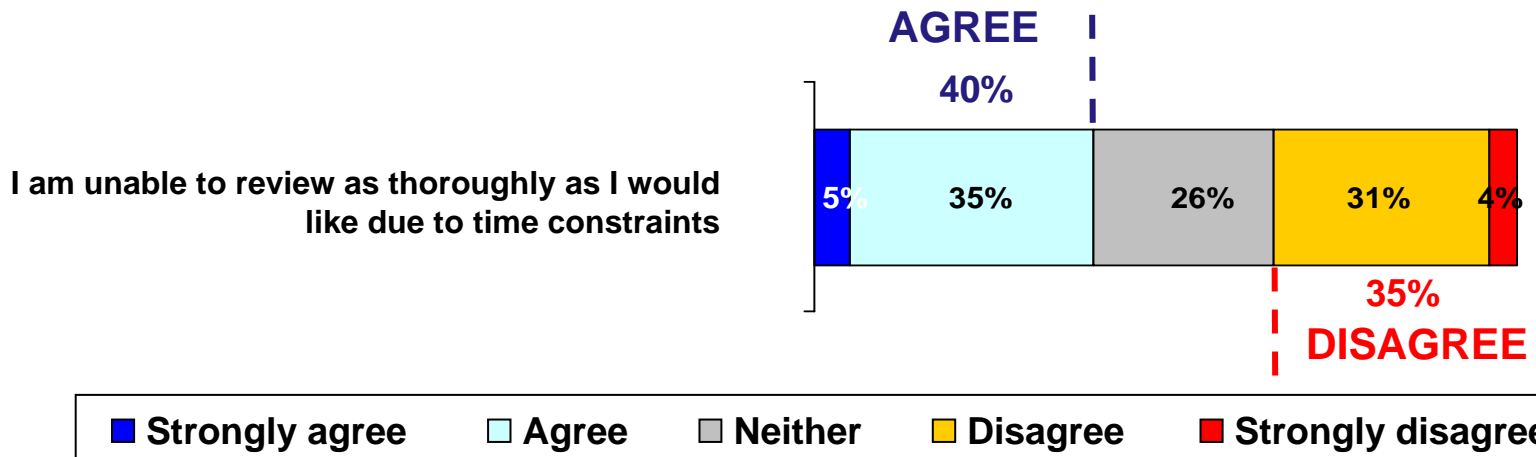
# Peer review is important and is supported

- **Universal agreement that refereed journals are required**
  - 88% disagree that readers do not need refereed journals, only 4% agree
- **Majority believe that peer review improves an article**
  - 82% disagree that peer review does *NOT* improve an article's quality
- **Committed to peer review**
  - 85% are willing to review a reasonable number of their peer's research (ranging from anything between 2 and 30 papers a year)



# Constraints on peer review

- **Time is an issue** 40% say they cannot review as thoroughly as they would like due to time constraints
- Alongside time, researchers indicated that **lack of relevance** also makes them less willing to review
- Other reasons are:
  - being asked to review **poor quality articles**
  - reviewed for that journal in the past (**now on CV**)
  - have not reviewed in the past (**no personal relationship**)
  - **less well-known** journals



Q. 2 Thinking about your experience of academic publishing in your own specific field, how much do you agree or disagree with the following statements?

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# Informal Sources

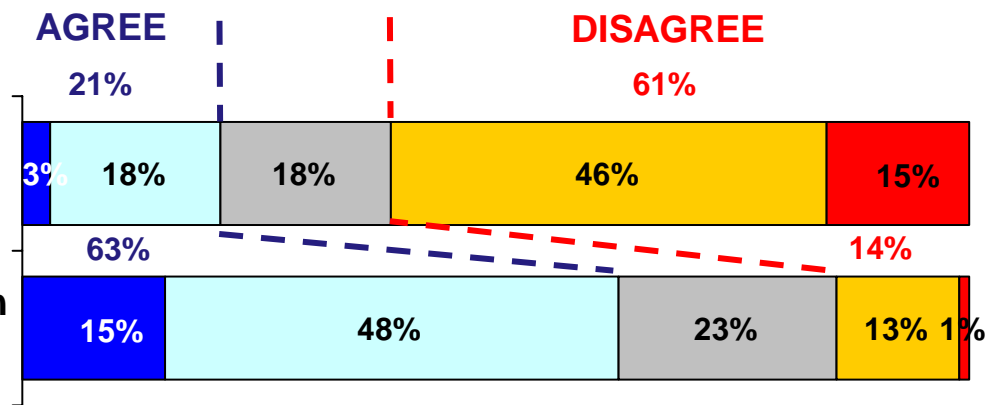
- **Informal channels** such as conferences and bulletin boards **are still important** (just 21% believe it is not important)
- Those key sources include:
  - **e-mail, meetings/ discussions** with colleagues, **collaborations**

When you sit down with colleagues, that's when you get the main feedback.  
Medicine, UK, 26-35, Female

- **Collaboration has increased**, largely facilitated by the adoption of technology

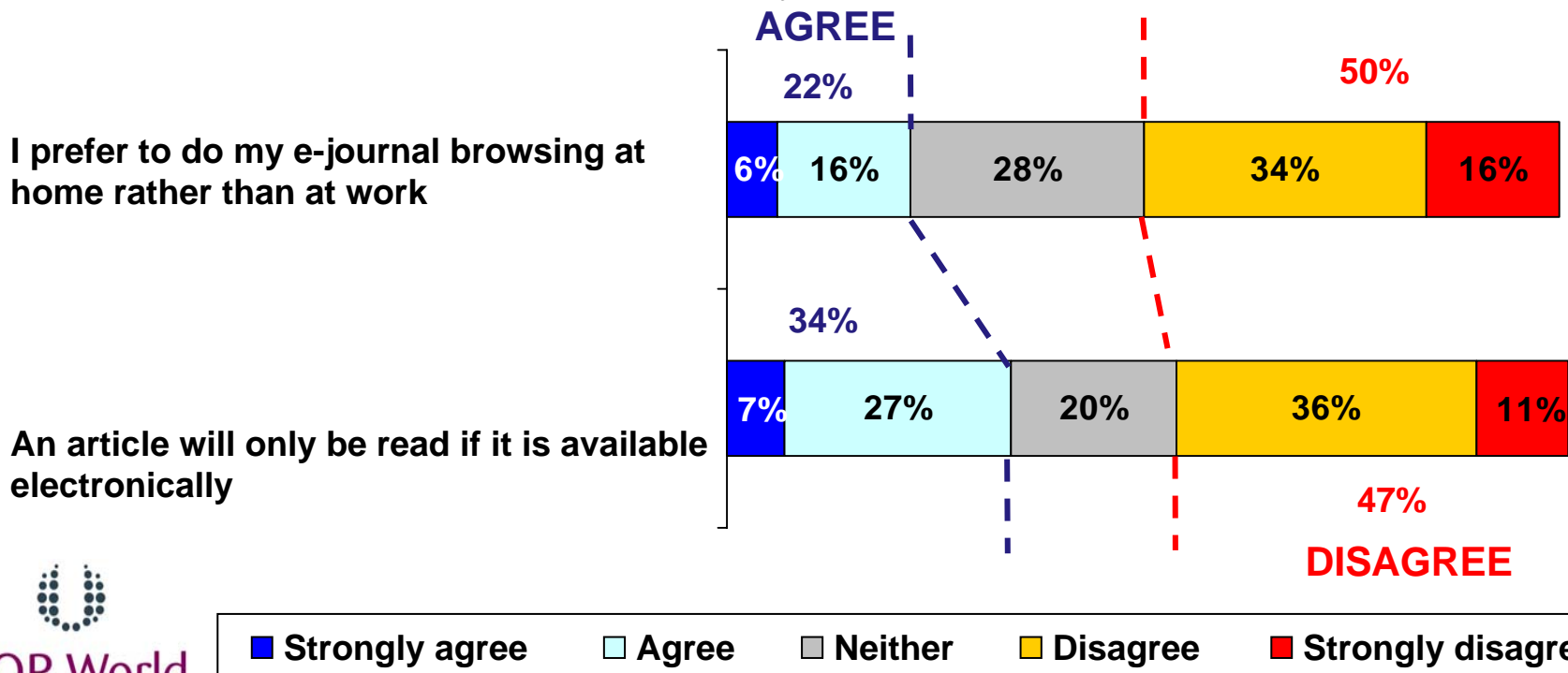
Informal sources of communication such as conferences, bulletin boards are **NOT** important in scholarly publishing

Researchers are more likely to collaborate on research projects now than they were 10 years ago



# Reading Behaviour

- **Reading patterns** are slowly changing, a significant minority (22%) of respondents prefer to conduct their e-browsing from the comfort of home
- **Electronic versions have not yet taken over** the majority disagree that an article will only be read if available electronically
  - more junior authors are much more likely to depend on electronic articles
- Shorter articles much more likely to be read online (CIBER)



# Supplementary data

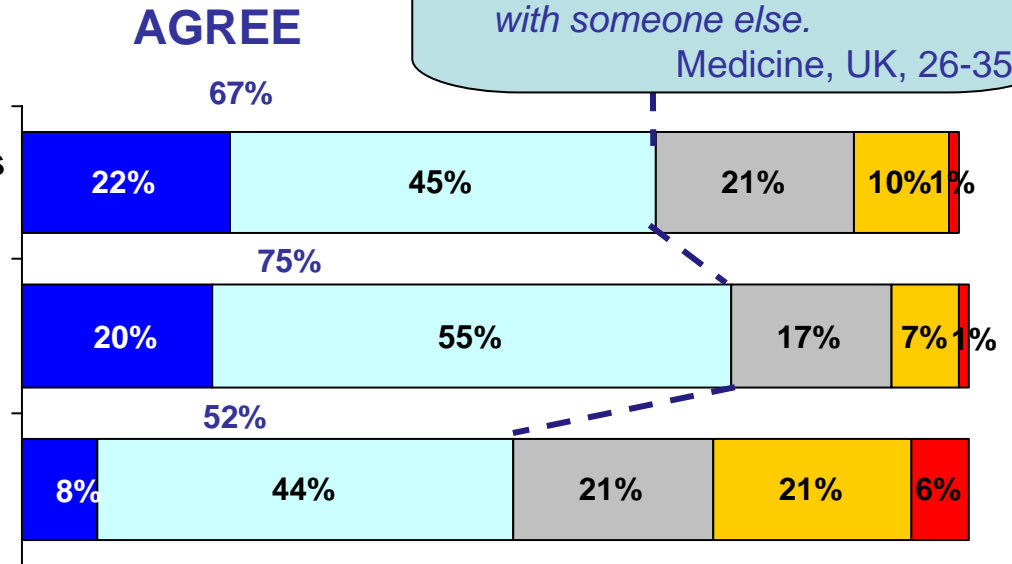
- As expected clear agreement that all supplementary data should be published
- Author/reader dichotomy – contradiction when it comes to sharing data
  - Many want **access to others' data** (75%), but **fewer are willing to share their own** (52%)
- Among the reasons for not sharing are:
  - **competition** - capitalise as much as possible on its production
  - others may **interpret or use it incorrectly**

*We would like to get our data published rather than share it with someone else.*  
 Medicine, UK, 26-35

It is vital that all supplementary data such as extra table, images and video are published electronically

Having greater access to other researchers' data would benefit my own research

I am willing to allow other researchers to access my raw research data

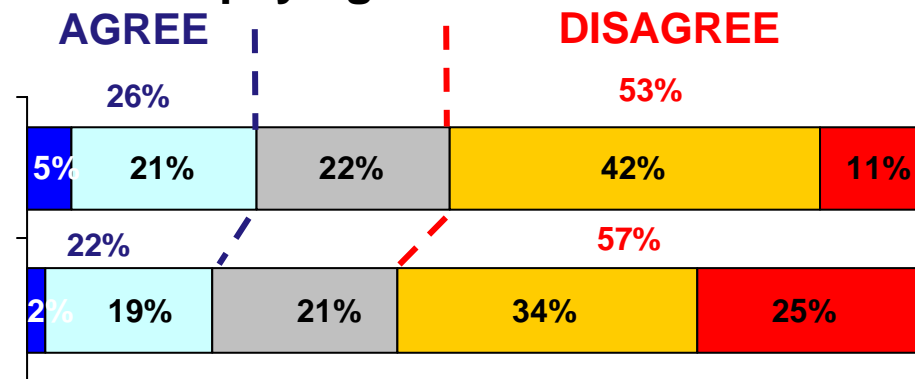


# Accessing articles and Self-publishing

- A number (26%) say they **always search authors' websites** for the full article (rises to 33% for junior authors)
  - keep up-to-date with the **latest developments**
  - most are looking at **specific authors**
  - **Infrequently do they request or download**
- **14%** say they **have self-published a final version**
- As many as **25%** believe they have published in an open access journal, but there is **doubt over this figure**
- There is **little enthusiasm for authors paying** to have their article published, just 22% agree

I always search authors' own websites for the full article

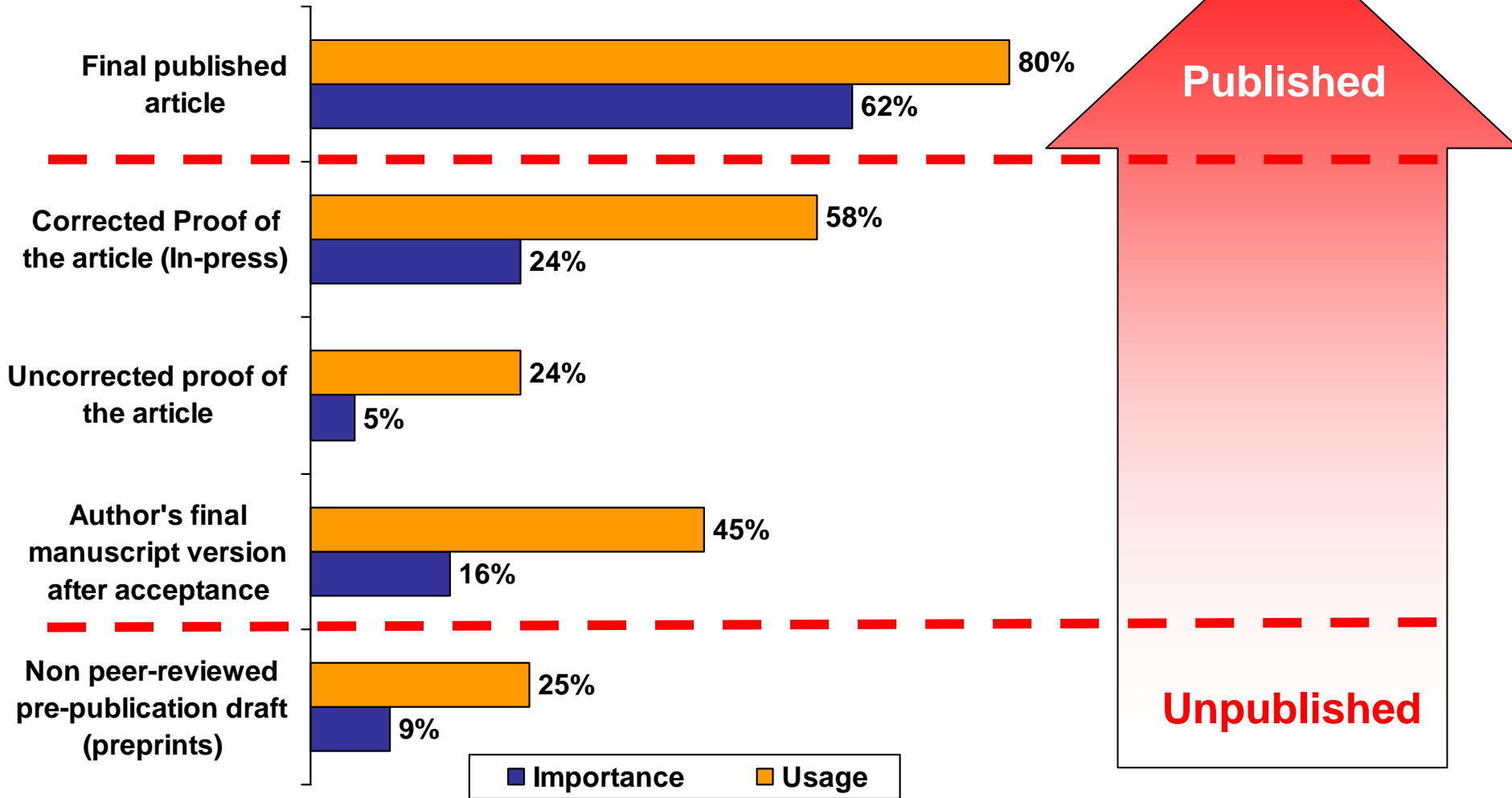
Authors will pay to have their article published



Q. 2 Thinking about your experience of academic publishing in your own specific field, how much do you agree or disagree with the following statements?

Base: (6344)

# Usage and importance of different versions of an article



Q. 3 A journal article can go through many stages and be available to researchers at different points and in differing locations. Which versions of articles do you use in the course of your research?

Q. 4a And which do you consider the most important for your research?

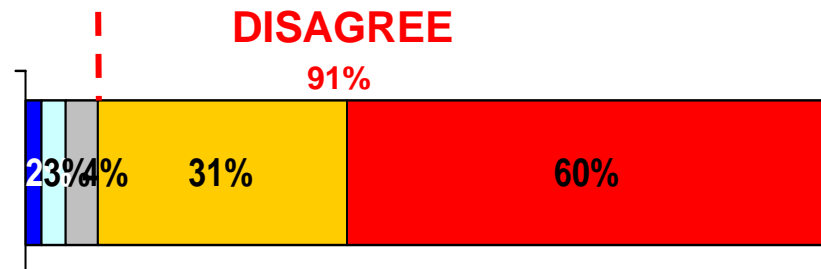
Base: (6344)



# The permanent record

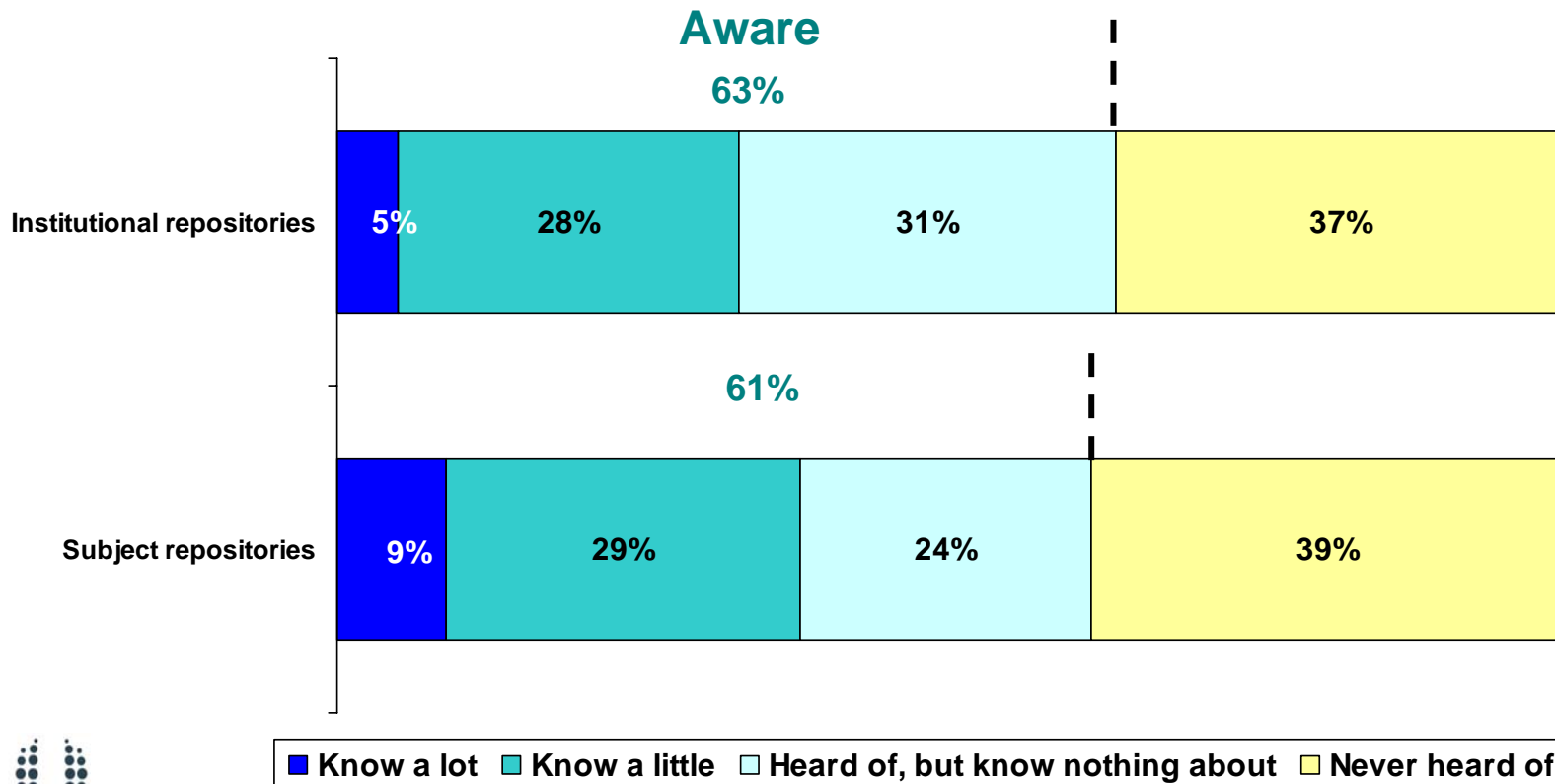
- There is **high demand for articles published more than 10 years ago** and many are referring to papers that are 40 or 50 years old
- **Older** articles are referred to because:
  - They are **seminal or classic** articles
  - They can provide an **overview** of a subject's development
  - It **avoids repeating** research or allows them to see how ideas have not changed
- However, there are some perceived issues with older papers:
  - **Fields can change** quickly and methodologies have moved on
  - Access to the archive is a problem for some

It is NOT important to have access to research articles that were published more than 10 years ago



# Repositories

- Overall the knowledge of repositories is low
  - Awareness is high at over 60% for both types of repositories
  - Actual knowledge is low. Just 5% know a lot about institutional repositories (28% a little) and slightly more 9% know a lot about subject repositories (29% a little)



# Attitudes to Repositories

- A number see repositories as a good idea:
  - **Free access** to current research
  - Find information more **quickly or easily**
  - Raises the **profile of the institution**

*I would be very happy to have my work placed in such a place because I think for the underpinning of science we have to have free exchange of information.*

- Despite positive reactions to the idea of repositories, there are a number of **concerns** about radically changing a system that already works for them.

- What would its **purpose** be?

*What is the difference with the current database I have access to?*

- How would they get **credit**, if their work was published in a repository as opposed to a journal?

*The problem is there has to be a way for me .. .. to get credit for the work that is done.*

- How would it be **funded**?

*The big question would be, who is going to fund it, and is it going to be around a while?*

- How much **quality control** would there be?

*If it hadn't been peer reviewed then just anyone could publish anything.*



# Concluding thoughts...

- **Some behaviours will change**
  - Researchers are and will make more use of technology
  - 24/7 electronic access
  - Faster availability of research
  - Global collaboration
  - Improved efficiencies in peer review
  - Librarians important gatekeepers
- **But, the fundamentals remain the same**
  - Dissemination
  - Registration
  - Certification
  - Archive

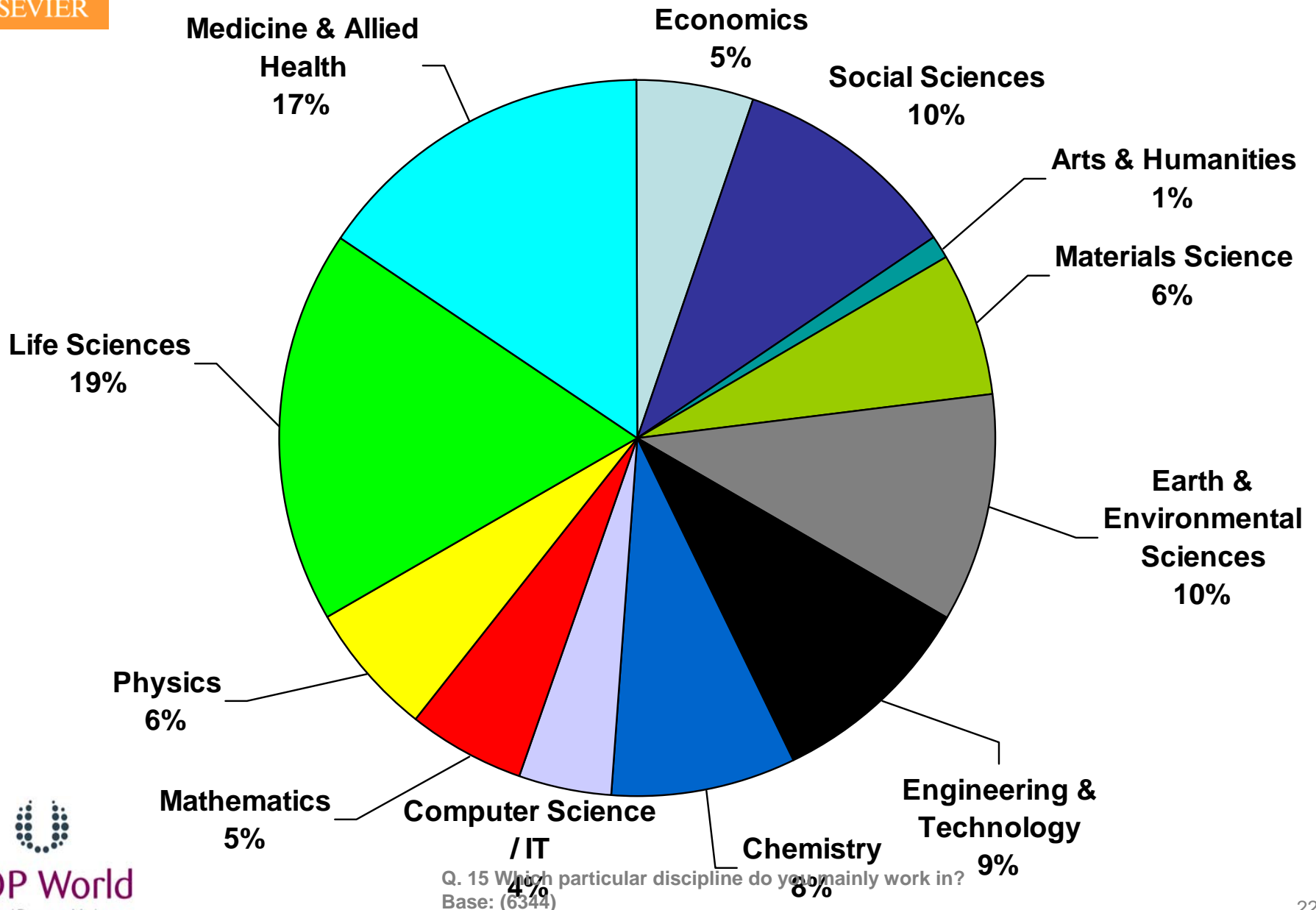
.....unless, the mechanisms that drive **researcher motivations change**





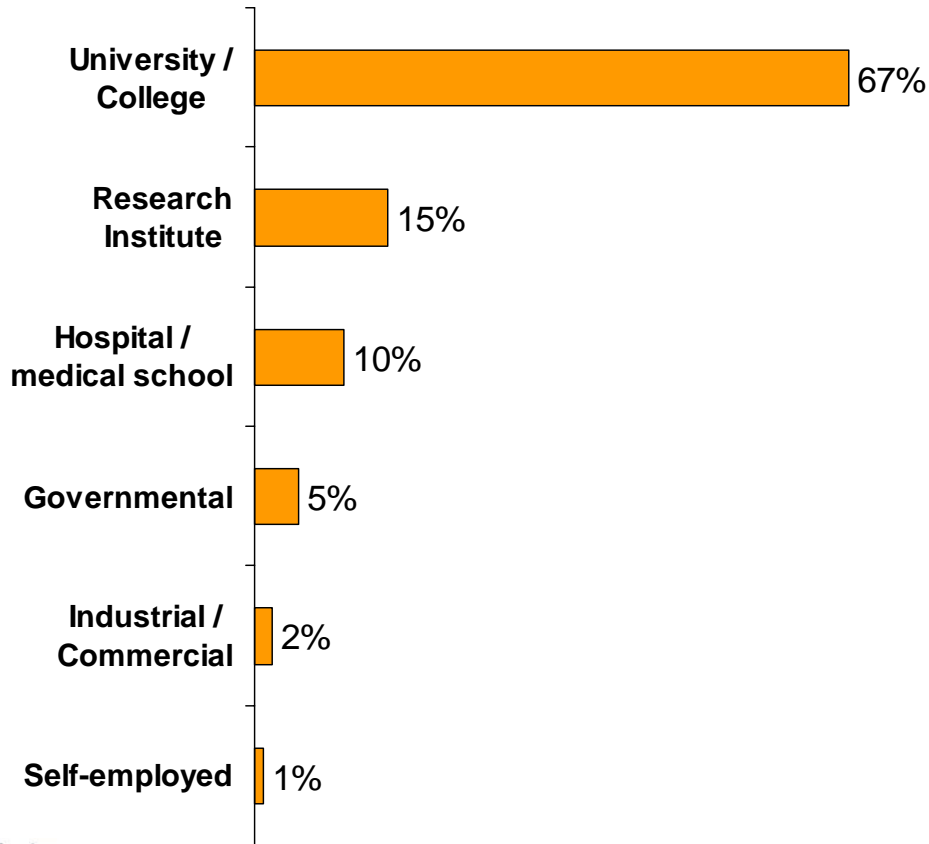
# Appendices

# Who was surveyed - Discipline

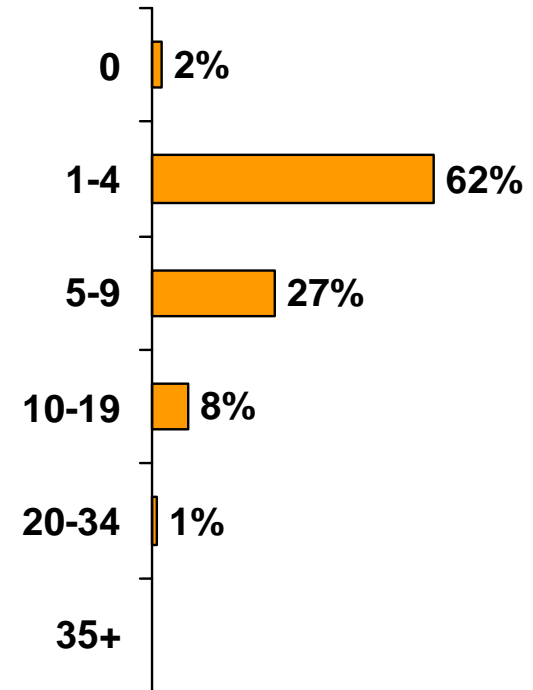


# Who was surveyed

## Organisation



## Articles published in last 12 months



# Definition of different types of repository

- **By ‘institutional repository’, we mean a collection of scholarly materials in digital form that is typically managed by the library at a university.**
- **A ‘subject repository’ is similar, but stores materials specific to a discipline and is normally managed by a funding body or an institution (examples include Pubmedcentral, ArXiv).**
- **Researchers may be asked to deposit materials in these repositories, subject to copyright, with the host institution providing the infrastructure for these materials to be properly organized and archived.**

