

# Scholarly Communication in the Digital Environment: Chemistry and Chemical Engineering

Dr Ian Rowlands

ciber

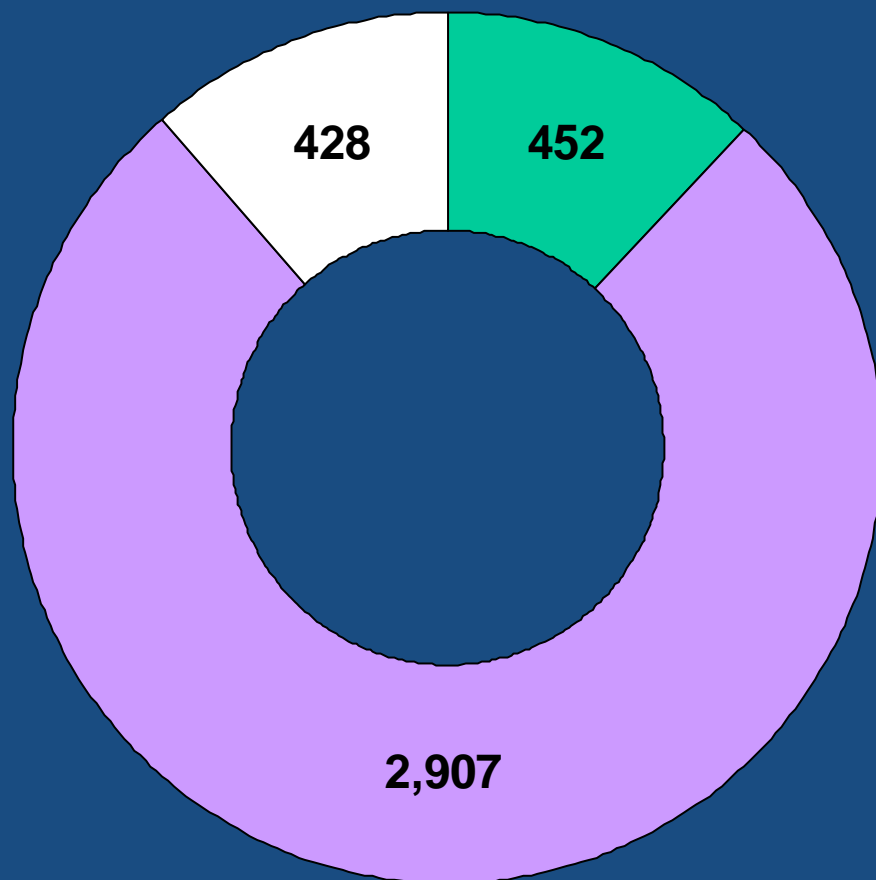
Centre for Information Behaviour and the Evaluation of Research  
City University, London

Paper presented at the 228<sup>th</sup> Meeting of the American Chemical Society,  
Philadelphia, 23 August 2004

# background and methodology

- online web survey, designed and piloted by ciber and NOP
- ISI mailing list of corresponding authors, duplicates removed
- worldwide sample, all disciplines, all sectors (universities, medical schools, government, industry)
- 91,000 email invitations sent out- 3,787 fully completed responses from 97 countries
- research funded at arm's length by the UK Publishers' Association

# survey population



■ chemists

■ other scientists

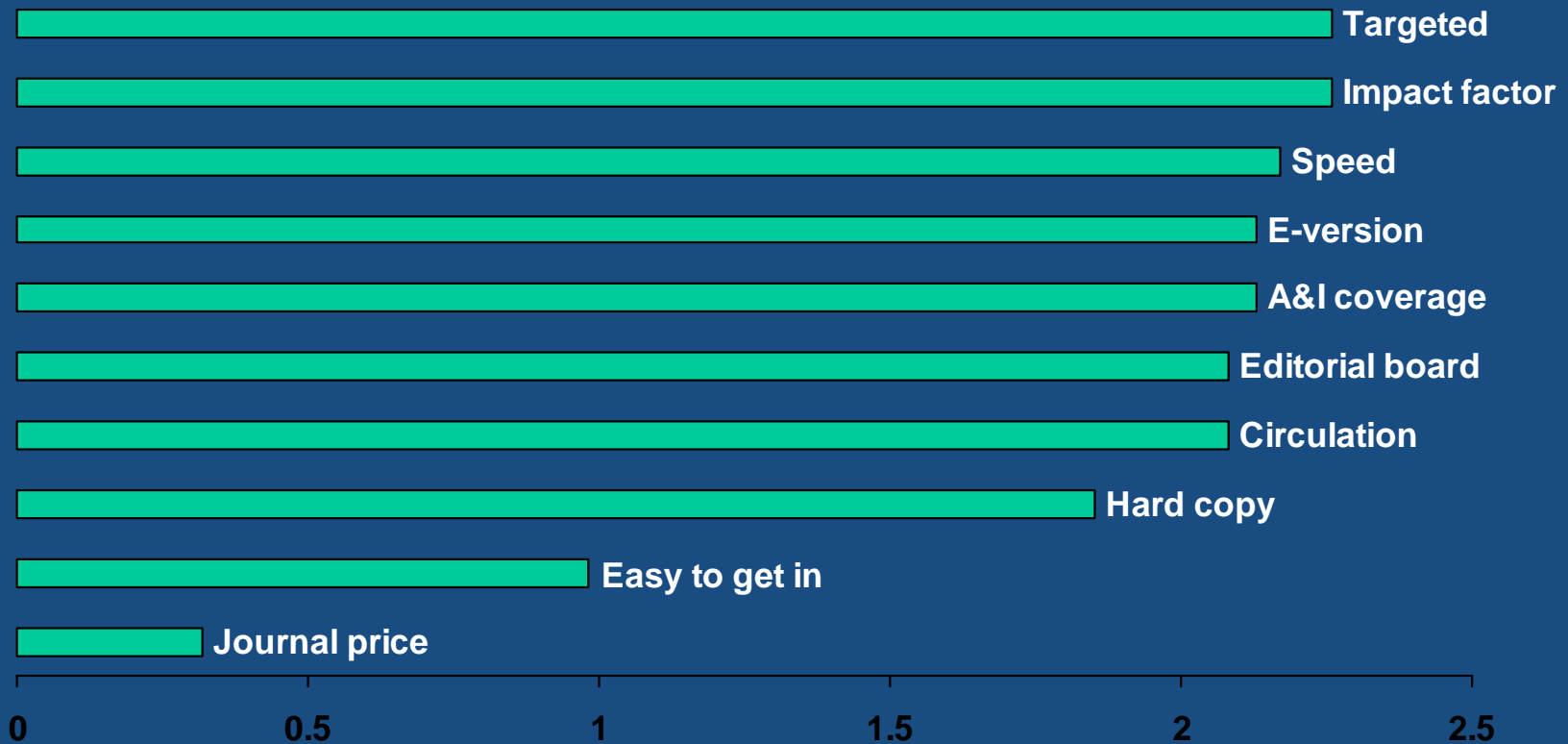
■ humanities and social sciences

**Last published article**

ciber key findings:

# authors' reasons for choosing the journal in which they published

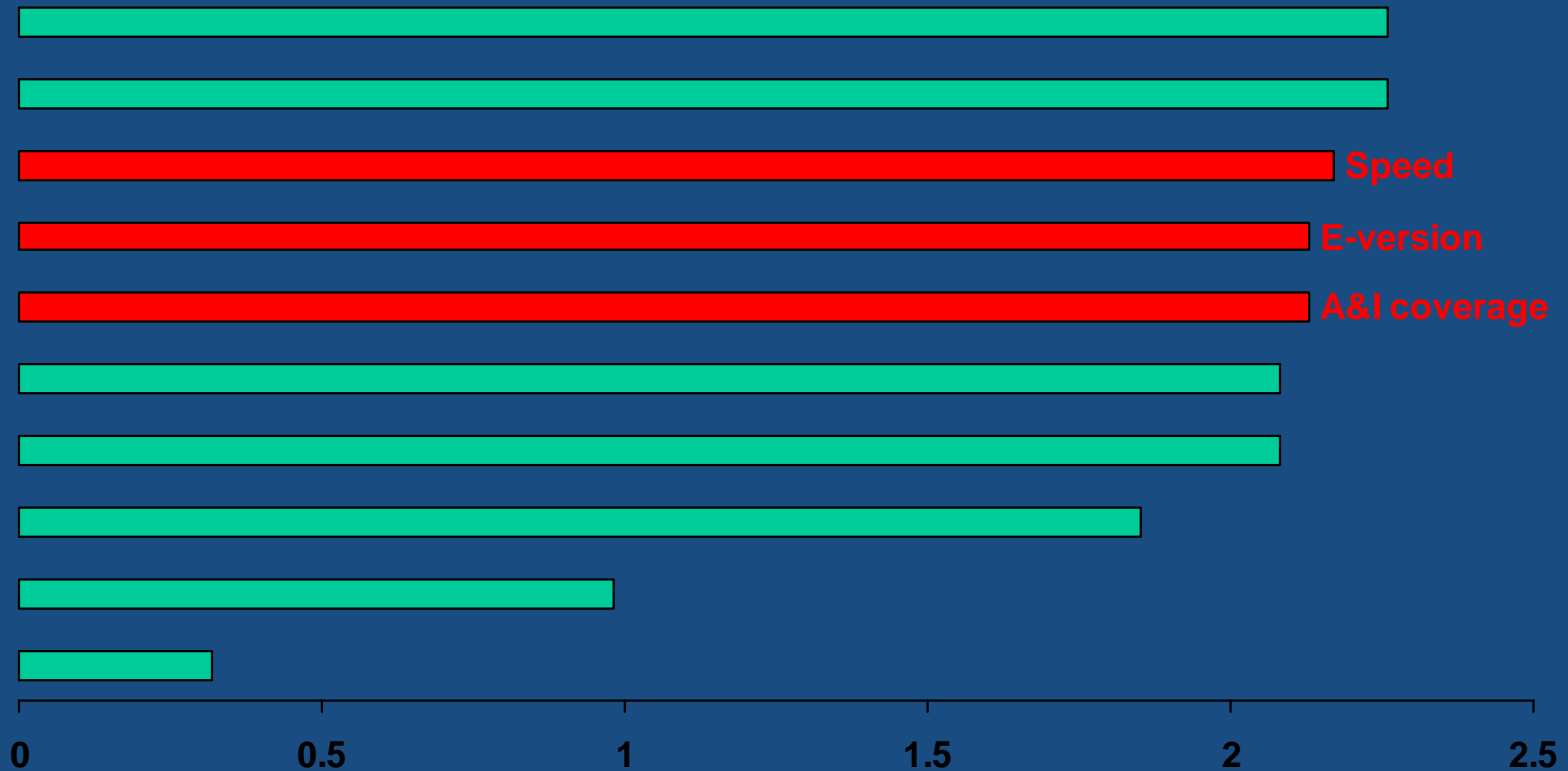
1=very unattractive, 4=very attractive



# ciber key findings:

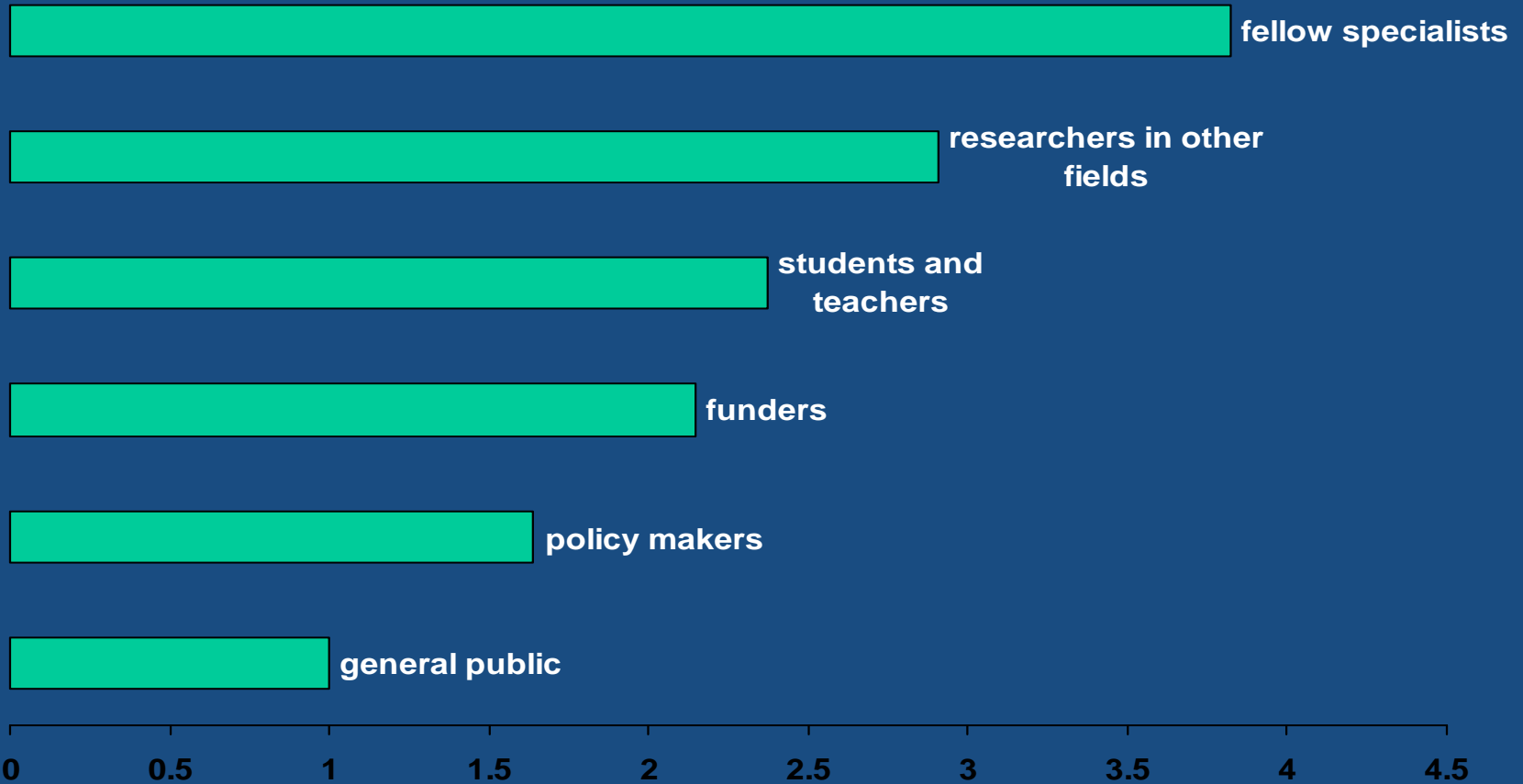
## authors' reasons for choosing the journal in which they published

1=very unattractive, 4=very attractive



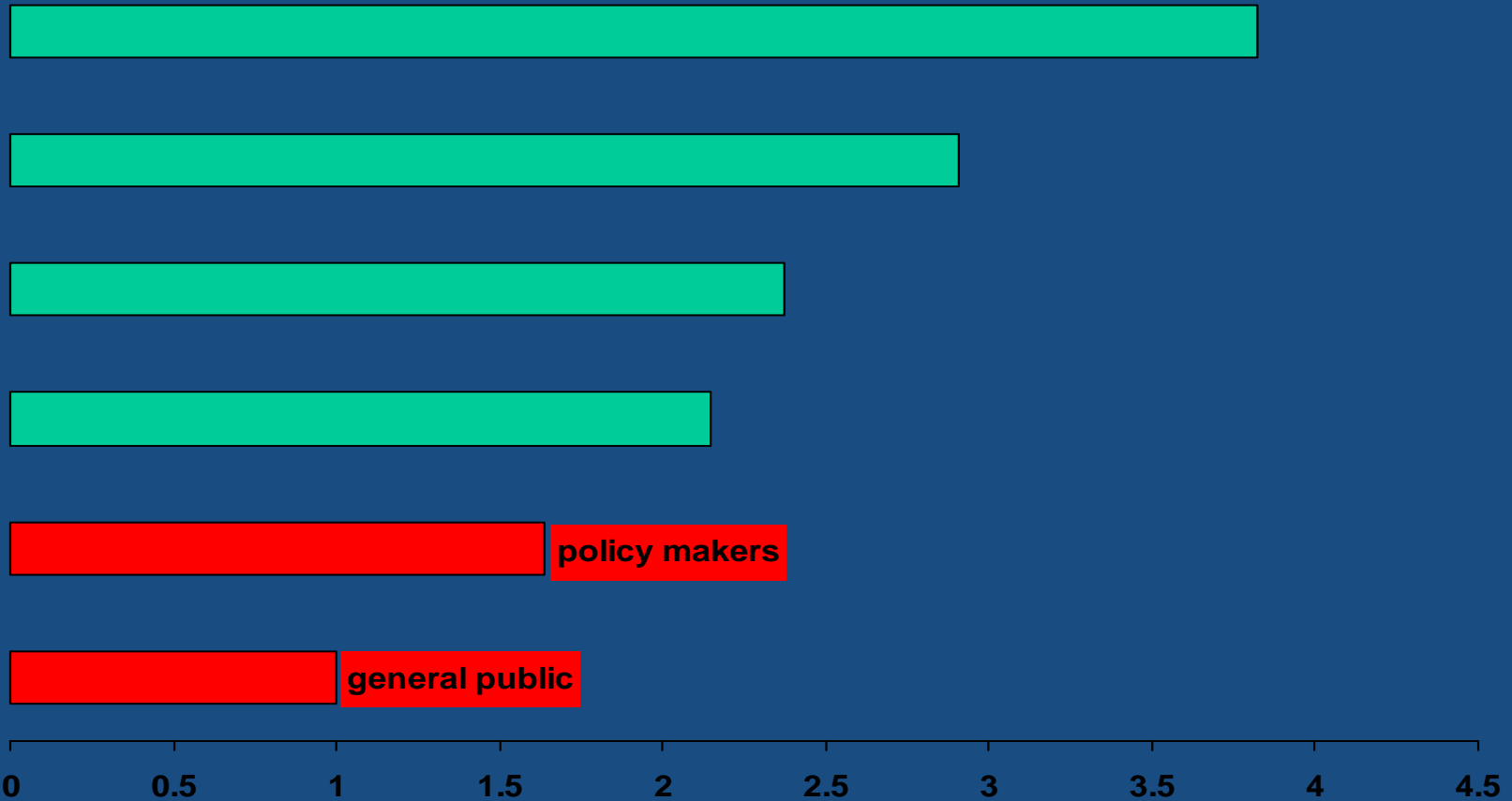
# ciber key findings: target audiences

1=very unimportant, 5=very important



# ciber key findings: target audiences

1=very unimportant, 5=very important





ciber key findings:

# authors' interest in the copyright implications of their last paper

% of respondents

detailed interest

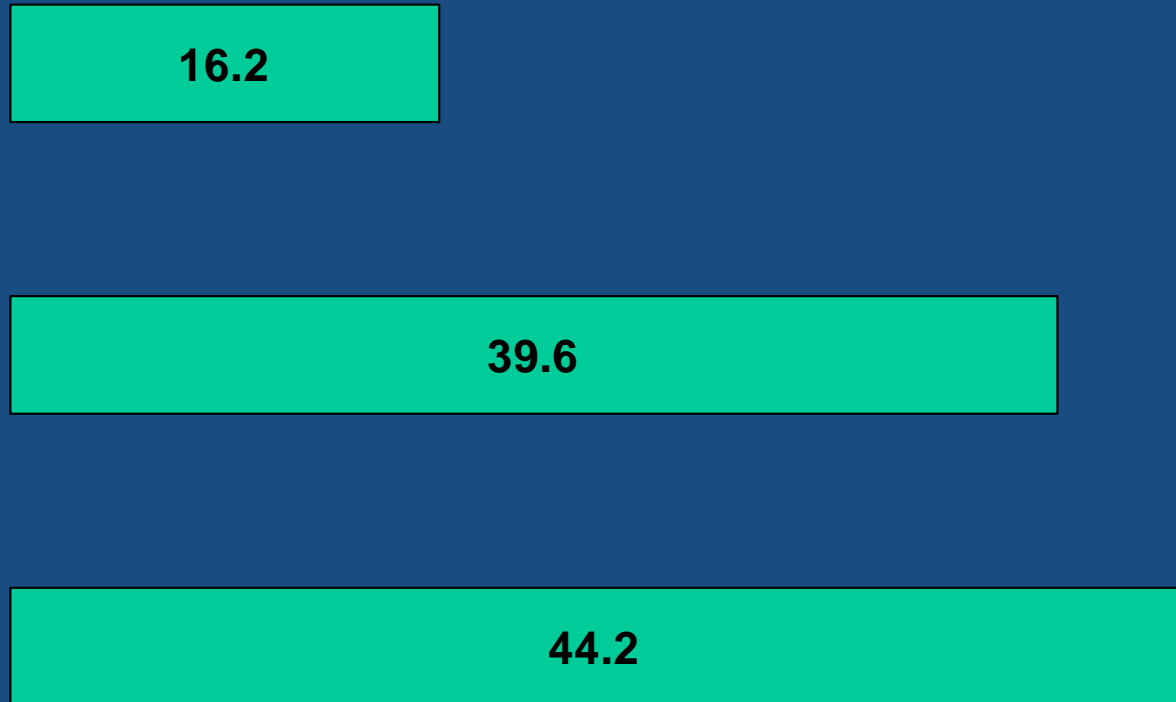
16.2

some interest

39.6

no interest

44.2



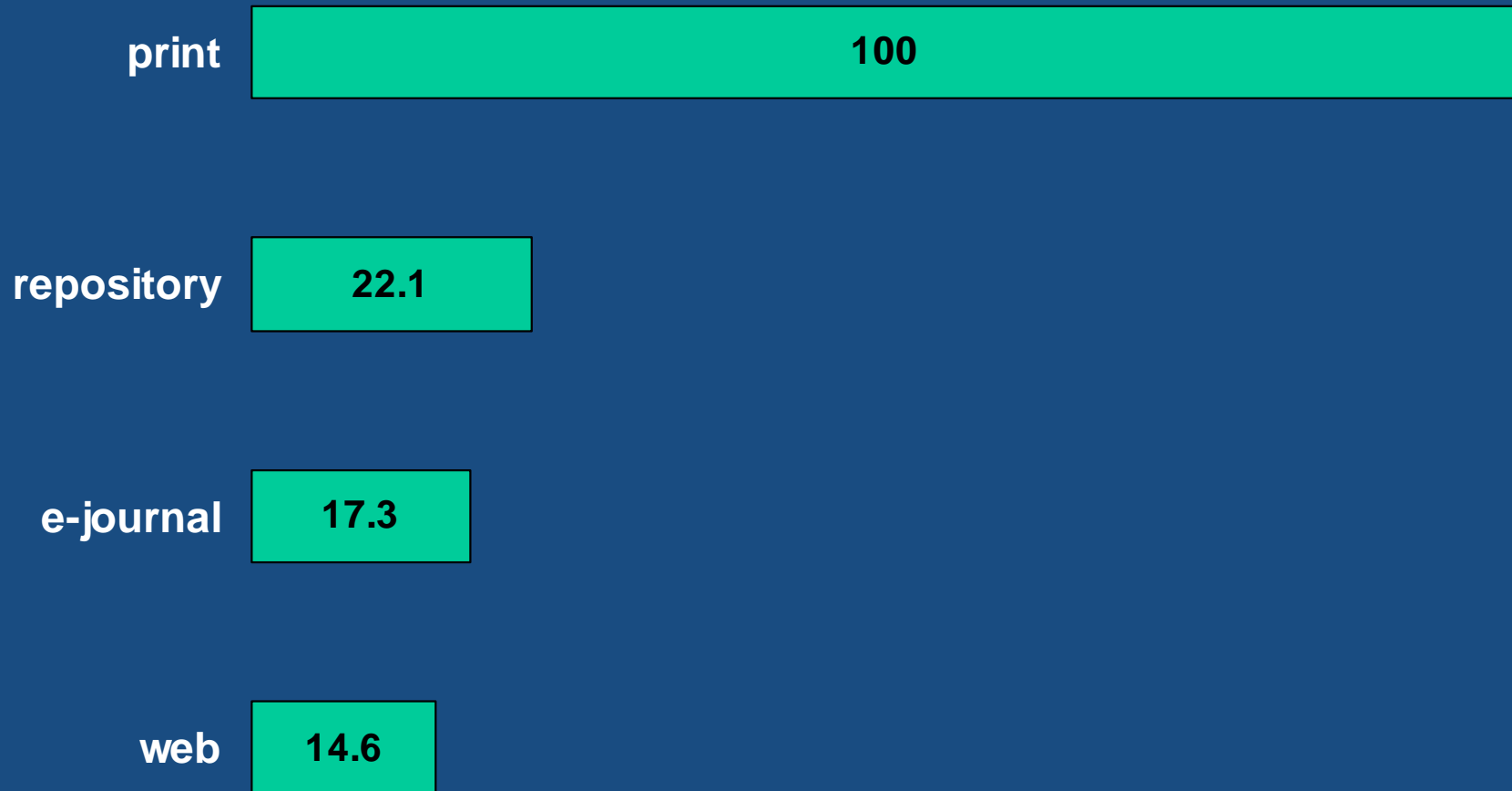
*Most scientific authors publish for prestige, not money, so copyright is of little interest.*

# Alternative publishing media

## ciber key findings:

# current article publishing behaviour

% of respondents

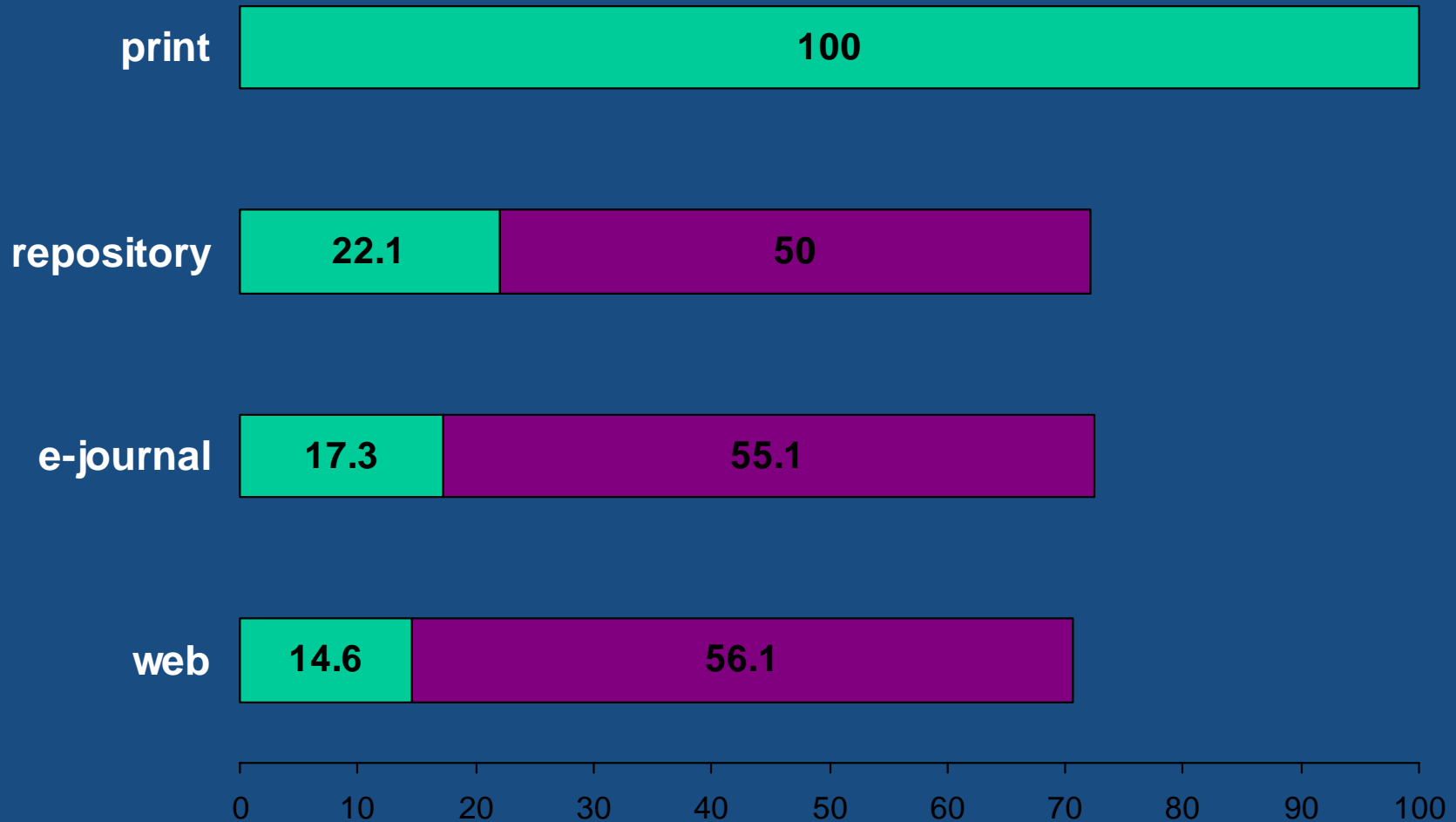


*Despite being highly computer literate, I am strongly averse to publishing in journals that do not have print versions, and this will not change. The day I have no option but to publish in electronic format alone is the day I consider a change of career.*

# ciber key findings:

## future article publishing intentions

% of respondents

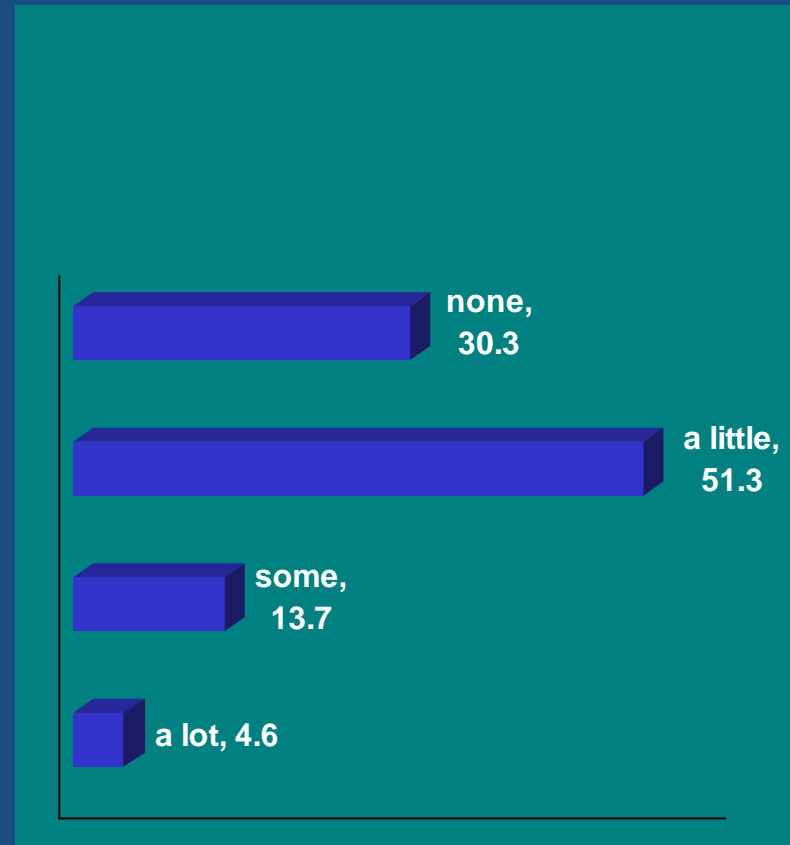


## ciber key findings:

# knowledge of the open access movement

% of respondents

- only **one author in twenty** feels well informed about the open access movement
- the following slides on attitudes to open access included a high number of `don't knows', so **authors' opinions are largely unformed**
- nearly ten per cent of science authors admitted that they **didn't know if they had published** in an open access journal or not



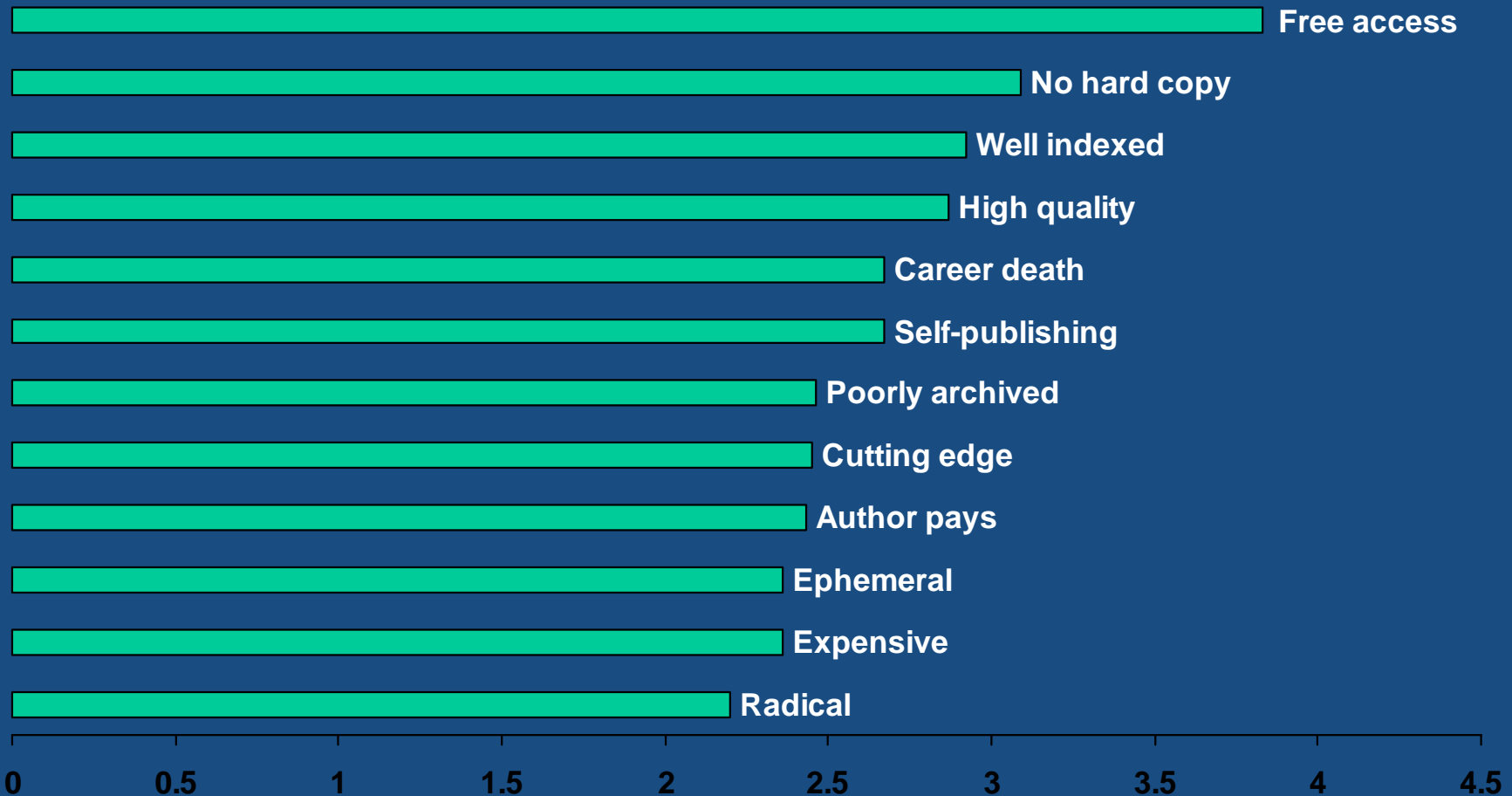
*The survey made me realise that there are aspects of publishing, especially open access, which I don't know very much about. This is basically good, as finding out what you don't know is the first step toward knowledge.*



## ciber key findings:

# values associated with open access

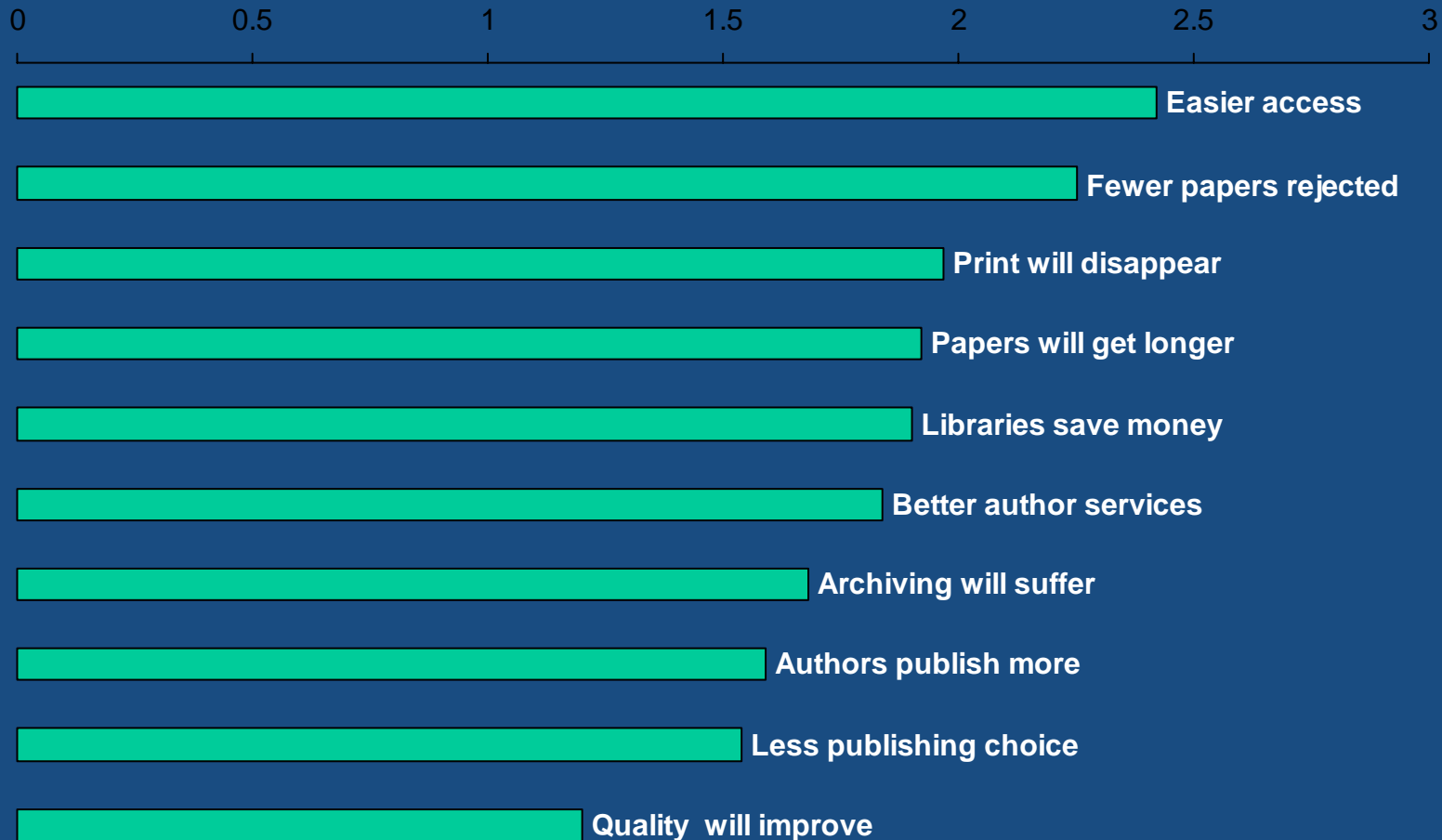
1 = not associated at all, 5 = very strongly associated



## ciber key findings:

# likely impacts of open access publishing

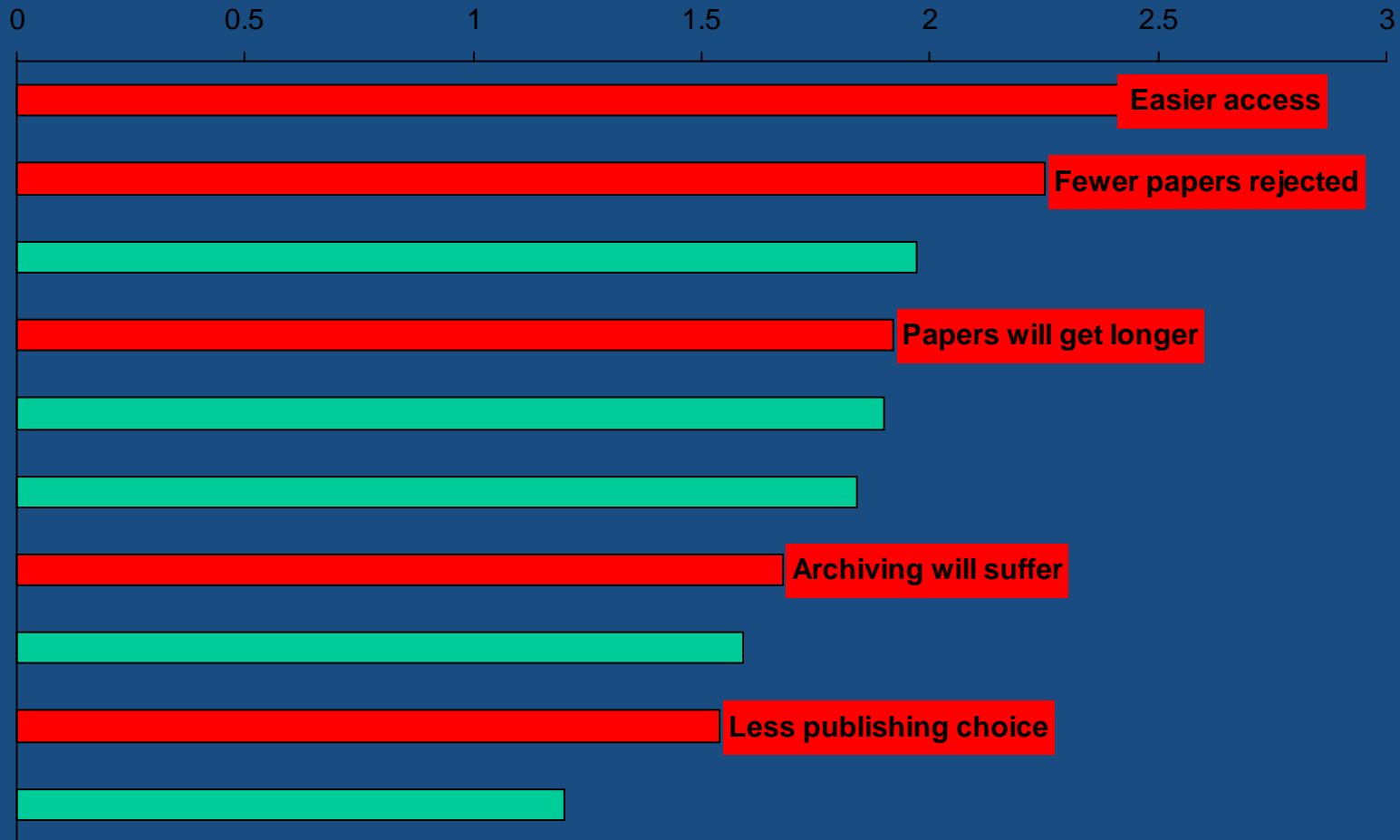
1 = highly unlikely, 5 = highly likely



## ciber key findings:

# likely impacts of open access publishing

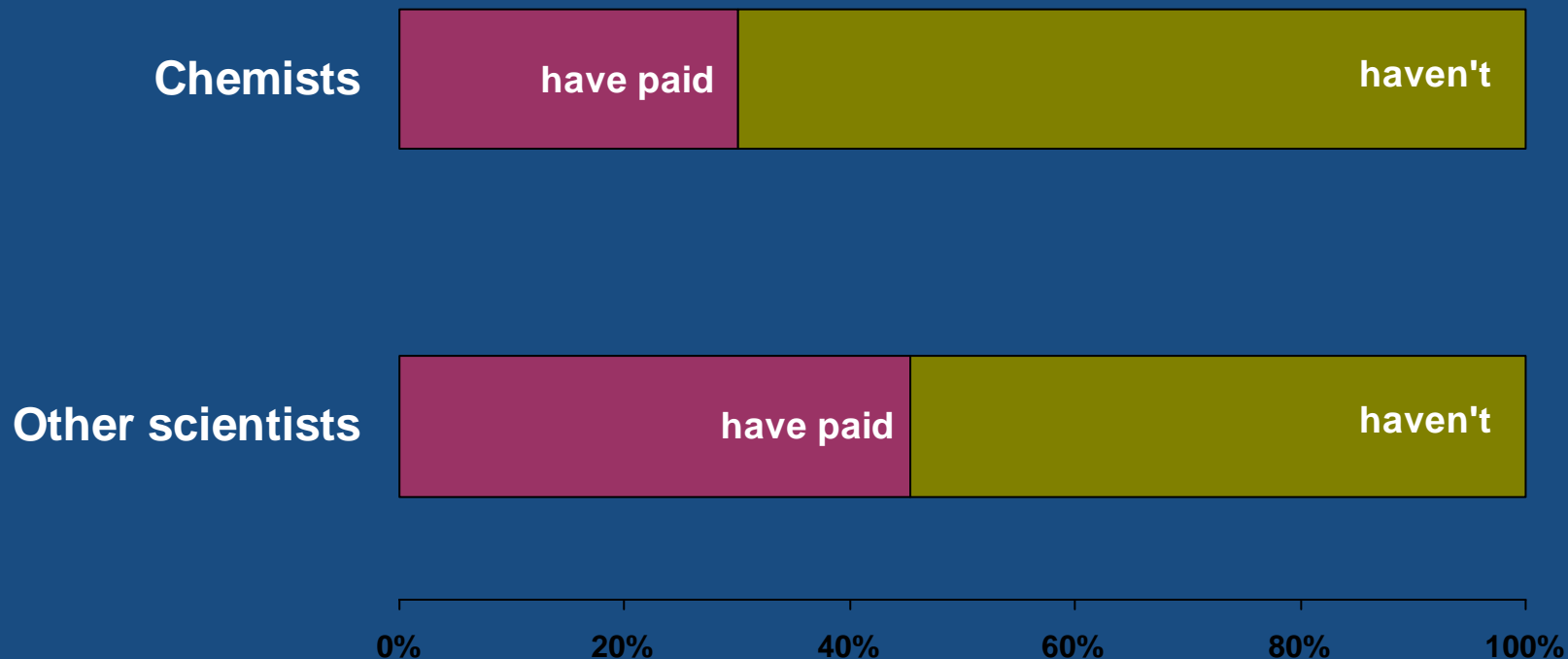
1 = highly unlikely, 5 = highly likely



# Attitudes to author charges

# ciber key findings: experience of author charges

% of respondents



# ciber key findings:

## willingness to pay author charges

% of respondents expressing an opinion



*I would expect open access journals to be very inexpensive to produce. Thus, I thought your question about the range of prices charged to authors to be rather odd: I would expect prices to be on the order of \$100-\$300, not \$500-\$5,000!*

*If authors have to pay this will restrict the views presented in journals to a controlling elite.*

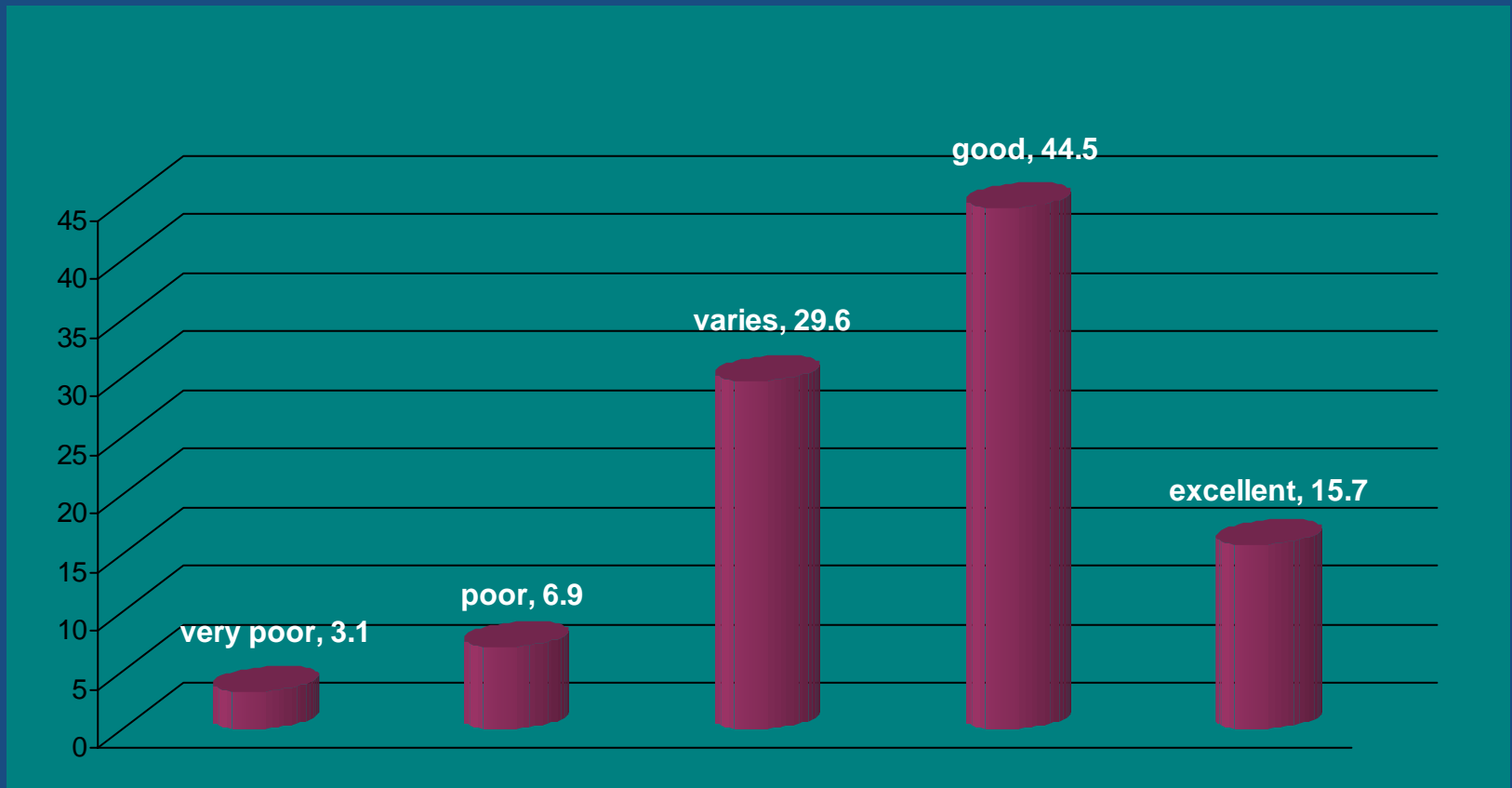


## **Authors as readers**

ciber key findings:

# current satisfaction with access to journals

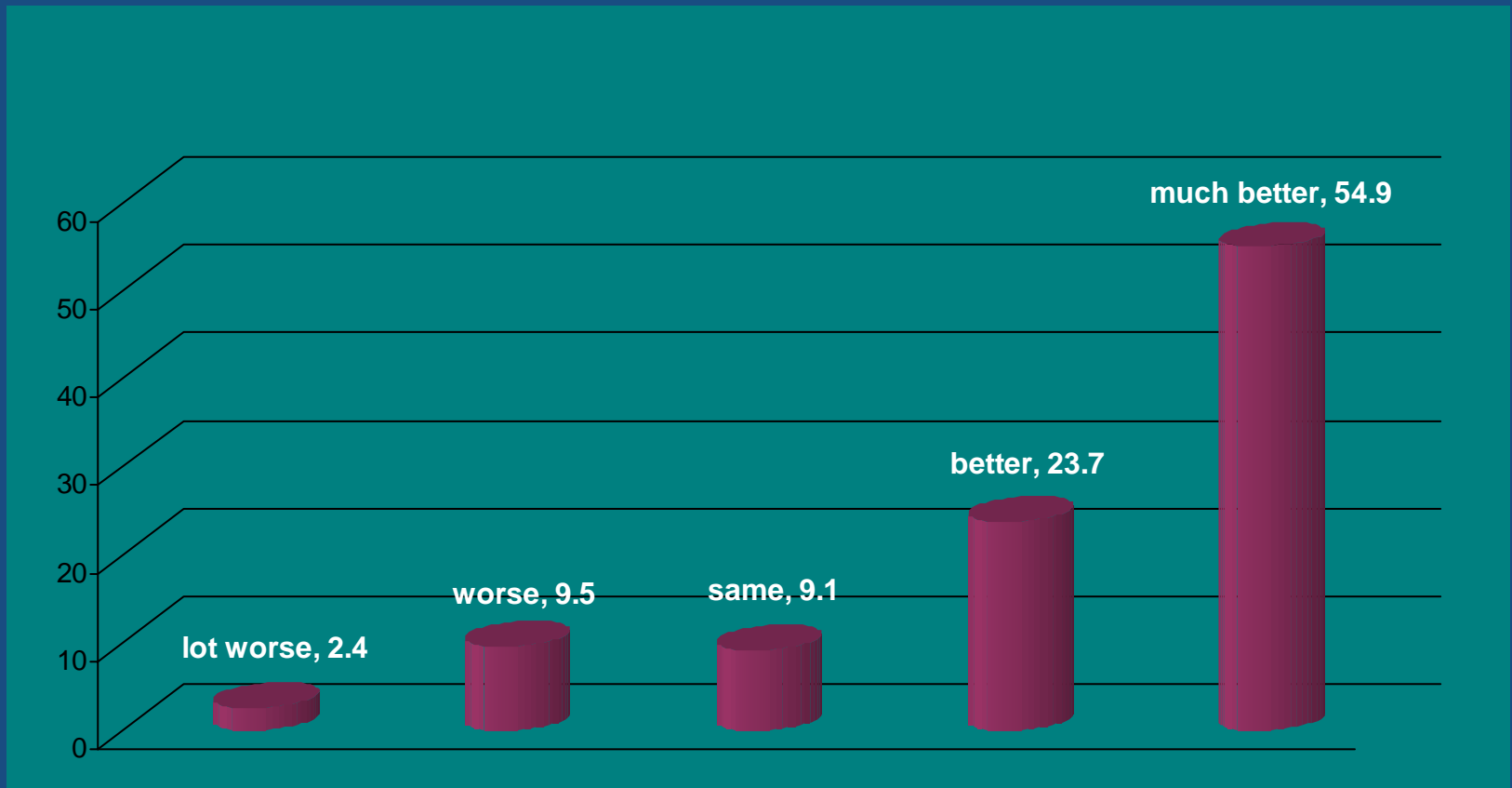
% of respondents



# ciber key findings:

## ... compared with five years ago

% of respondents



# Conclusions

## ciber key findings:

### conclusions

slide 1 of 2

- when deciding where to submit their last paper, authors placed the most value on journals that **target the right audience** and carry the greatest **authority**
- as authors they placed the least value on the **price of the journal** in which they hoped to publish
- authors' **awareness of open access issues** is quite limited; they have yet to form a clear opinion one way or the other

## ciber key findings:

### conclusions

slide 2 of 2

- many dislike the current subscriber pays model intensely, in principle and in practice, but they also dislike **author charges**
- as readers, they are generally content with their **access to the journal literature** and appreciate the substantial improvements made over the past five years
- authors want access to the journals literature to have **utility** characteristics, a basic service like electricity or gas