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LEARNING

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SNSI Libraries | Research report

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BACKGROUND AND METHODOLOGY

The brief
The Scholarly Networks Security Initiative (SNSI) wanted to understand what academic librarians understood about cybercrime and what their main concerns were. They particularly wanted insights on what the librarian community thought about illegal websites that offer access to scholarly resources that would normally be accessed from publishers' platforms.

The approach
Shift developed a survey in collaboration with SNSI. The survey was disseminated via a combination of data suppliers, data from SNSI members and Shift's own lists, which allowed Shift to reach respondents from around the world. As part of the survey, academic librarians were shown a range of statements and asked to rate how much they agreed with each one. In the analysis stage this revealed librarian attitudes towards illegal websites that offer access to scholarly resources.

The value
The report and presentation were shown to SNSI members, including large and small publishers, learned societies and university presses, and others involved in scholarly communications. The findings grew their understanding of how best to support librarians with cybercrime, and how to tailor communication to different groups.
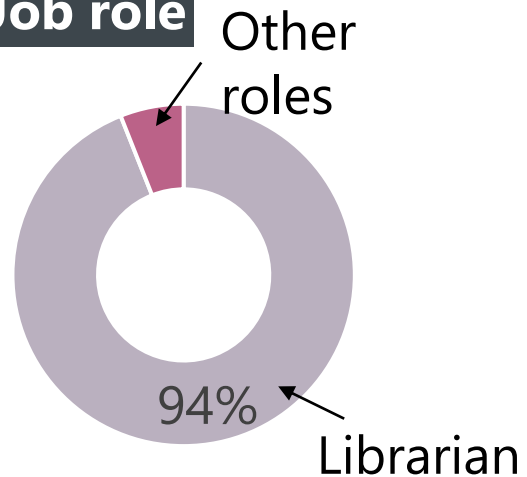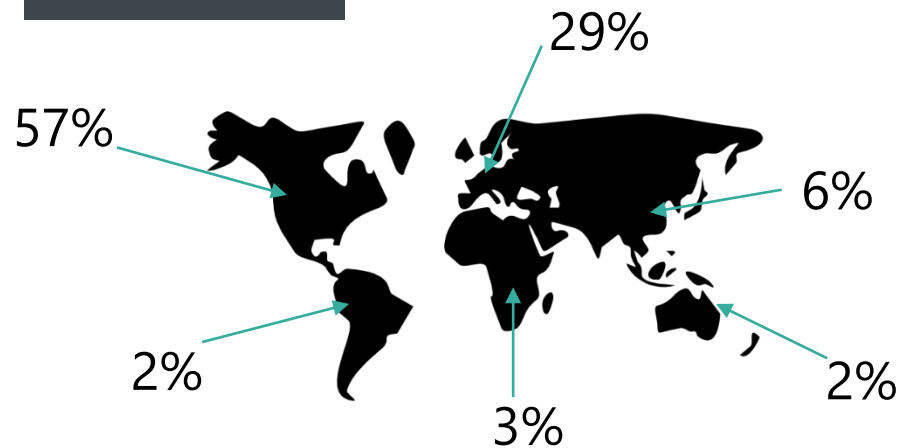
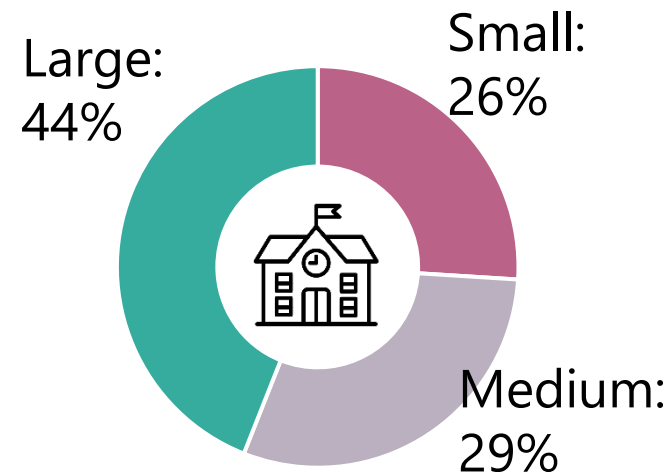RESPONDENT SAMPLE

There were 278 usable responses to the survey.

Job role

Other roles

94%

Librarian

Continent

29%

57%

6%

2%

3%

2%

Institution size

Large: 44%

Small: 26%

Medium: 29%

Institution type

University – 86%

Other higher or further education establishment – 14%

Age

53%

30%

15%

3%

18-34   35-54   55-74   Prefer not to say
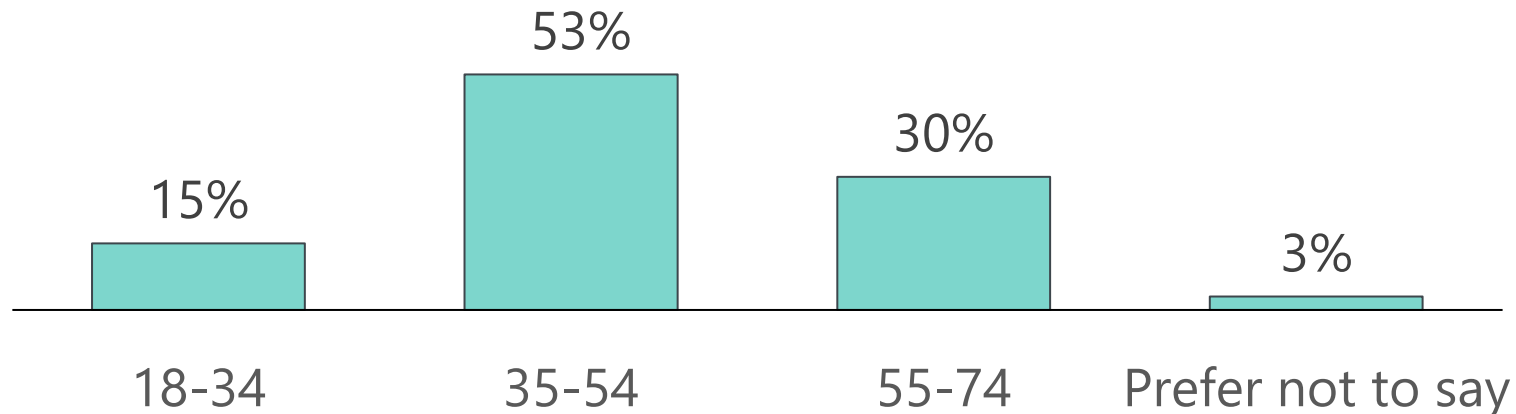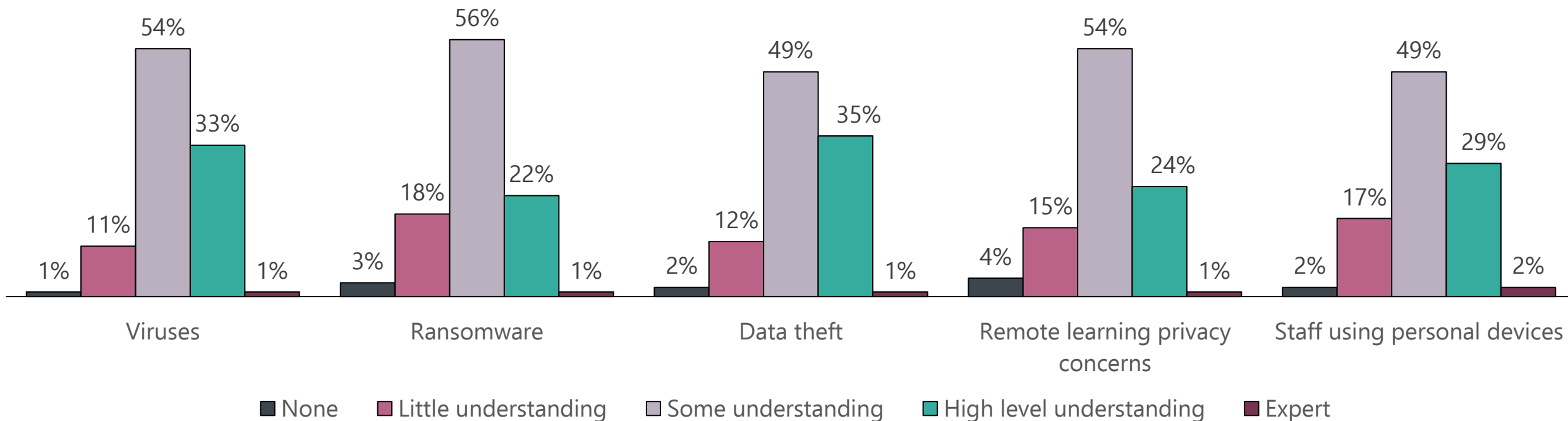
UNDERSTANDING AND CONCERNS AROUND CYBERCRIME & DATA SECURITY

Most reported having some understanding of cybercrime and data-security issues
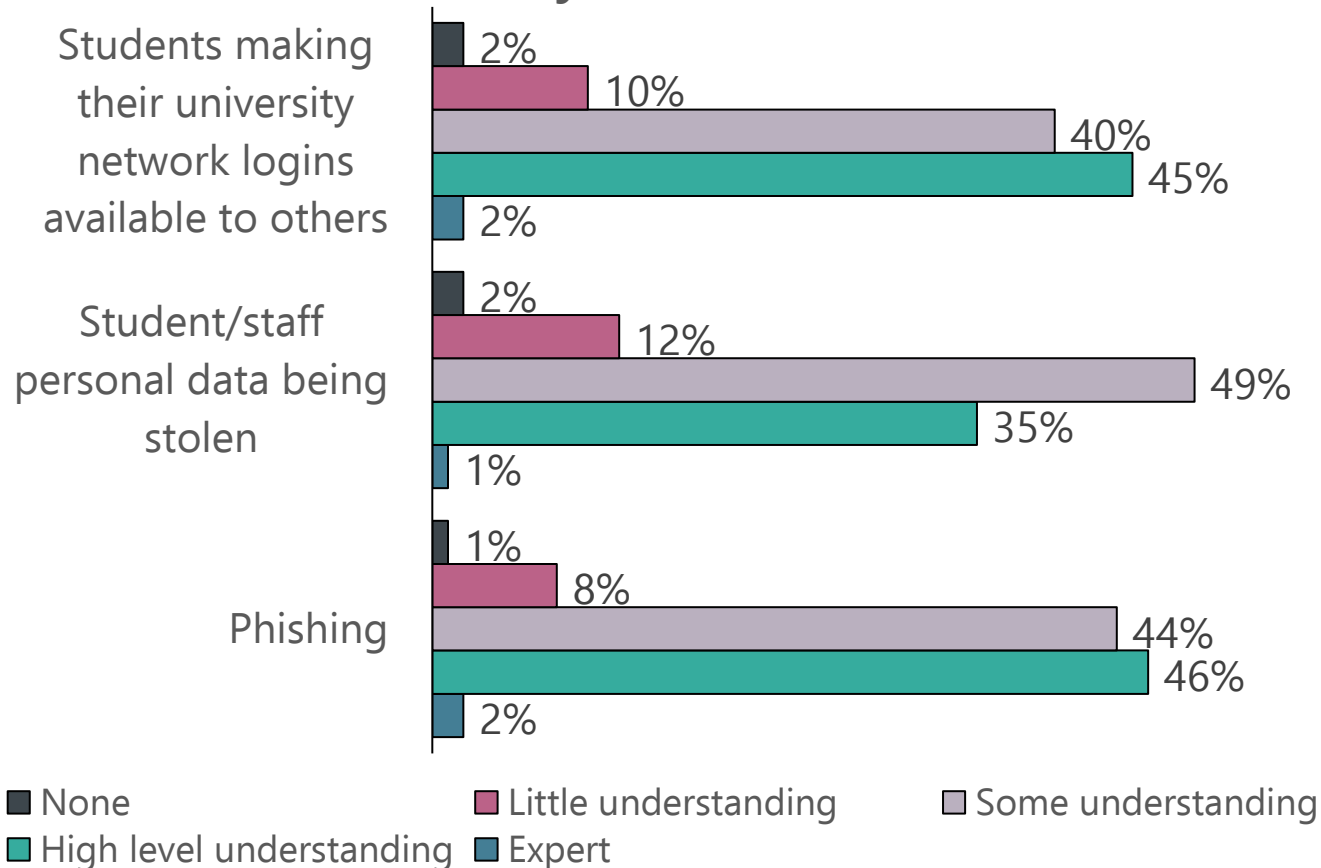
- Reluctance to say expert or no understanding.
- Large higher education institutions more likely to say 'expert'.
- Least confidence around ransomware and remote learning privacy

Q: How well would you say you understand these issues around cybercrime and data-security?

	Viruses	Ransomware	Data theft	Remote learning privacy concerns	Staff using personal devices
None	1%	3%	2%	4%	2%
Little understanding	11%	18%	12%	15%	17%
Some understanding	54%	56%	49%	54%	49%
High level understanding	33%	22%	35%	24%	29%
Expert	1%	1%	1%	1%	2%

Legend: ■ None   ■ Little understanding   ■ Some understanding   ■ High level understanding   ■ Expert
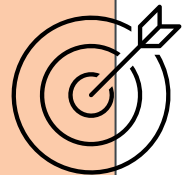
Base n: 278

Q: In your professional life, what concerns you most? (open Q)

Security of staff and student data	37%
A reputationally damaging cyber-attack	18%
Nothing	18%
Loss of data or control over systems	11%
Ransomware	9%
Identity theft	9%
Lack of protective measures	8%
Impact on workload	7%
Cyber-attacks preventing learning	4%
Phishing emails	4%
Protecting research data	2%
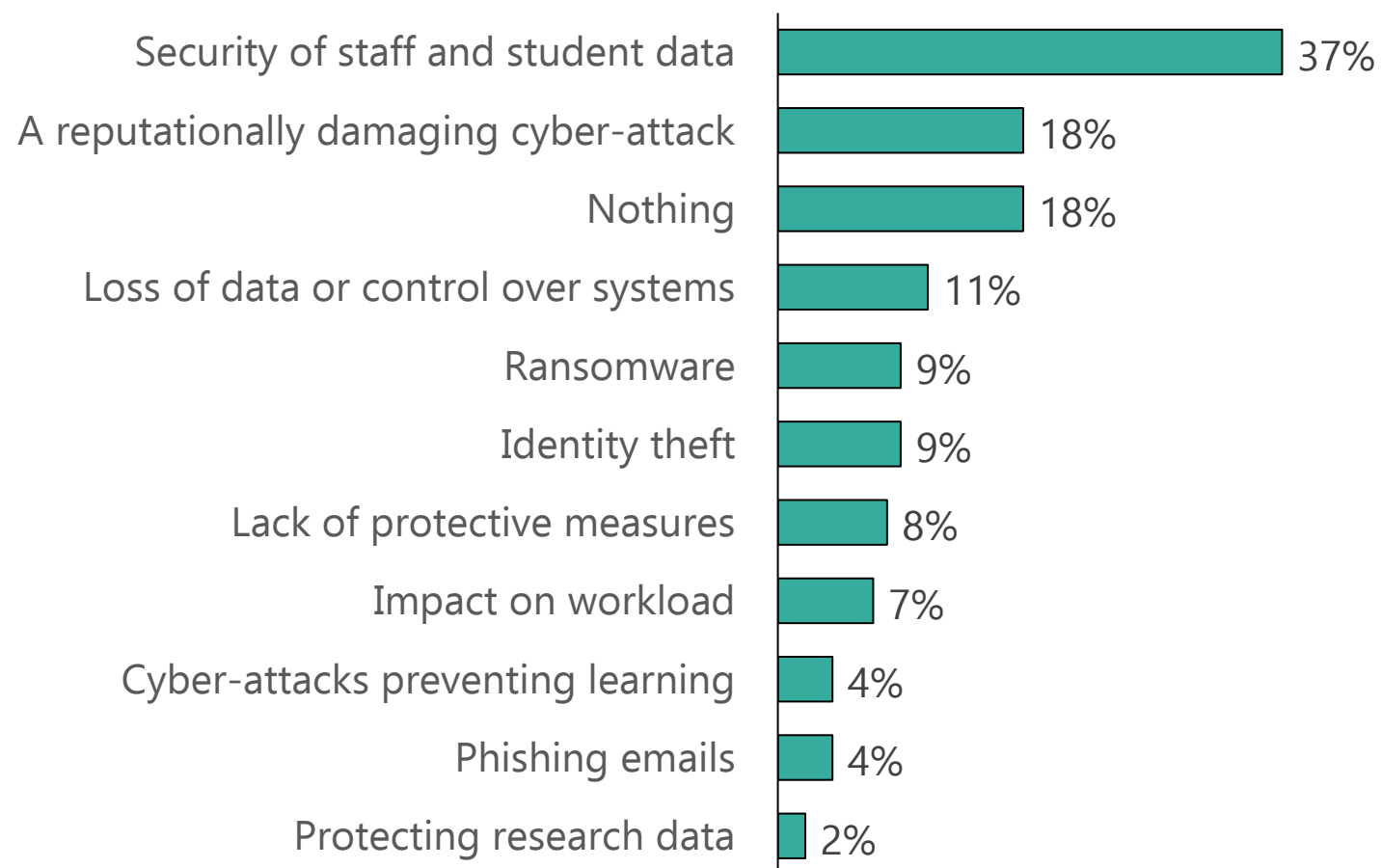
- Protecting staff and student data was the top concern.

- Even more concern around this area in the USA than Europe.

- Fear of damage to reputation, increased work-load, preventing students from learning.

- The more they felt they knew, the more concern they had

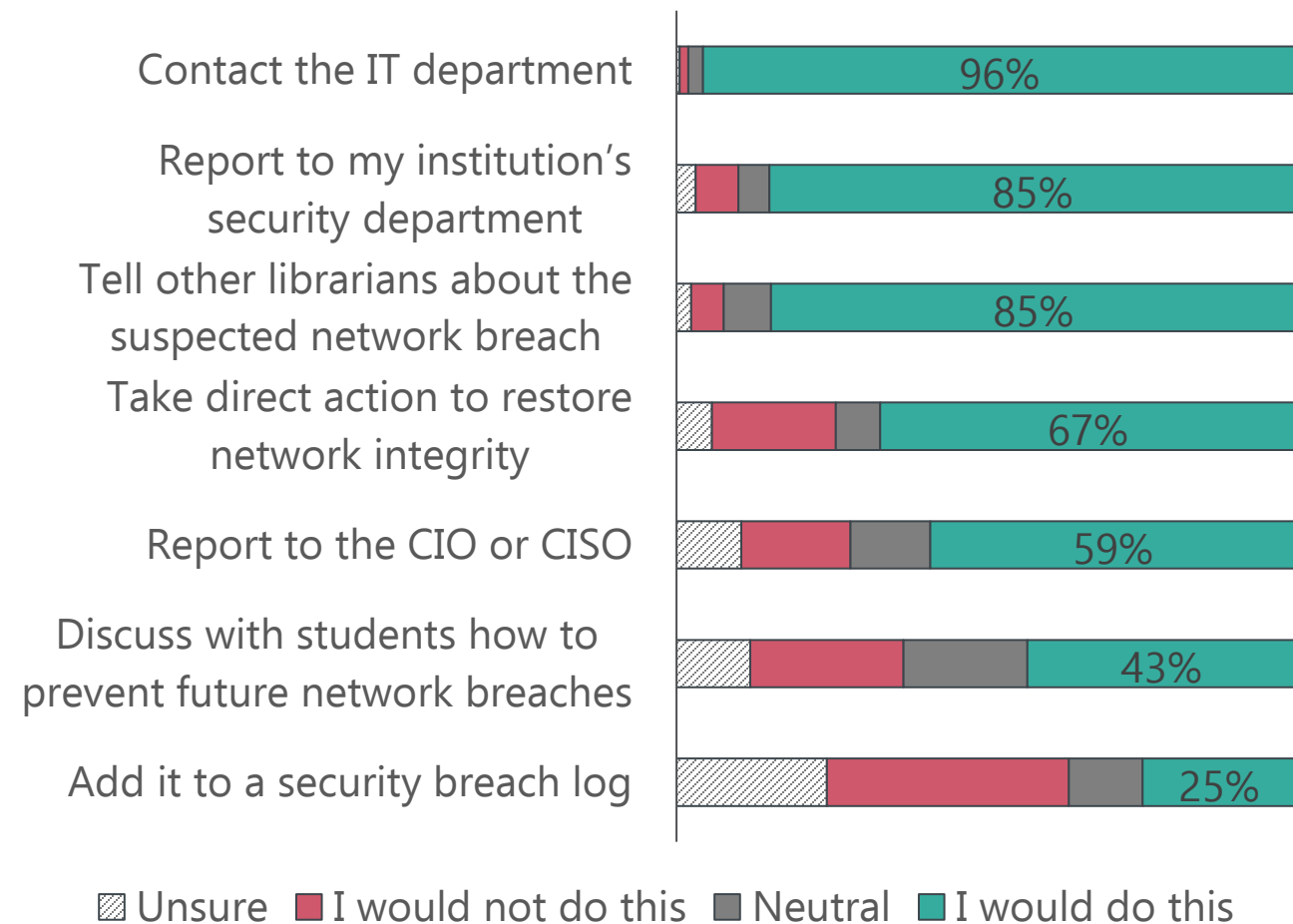**How much do you feel these are concerns for your library?**
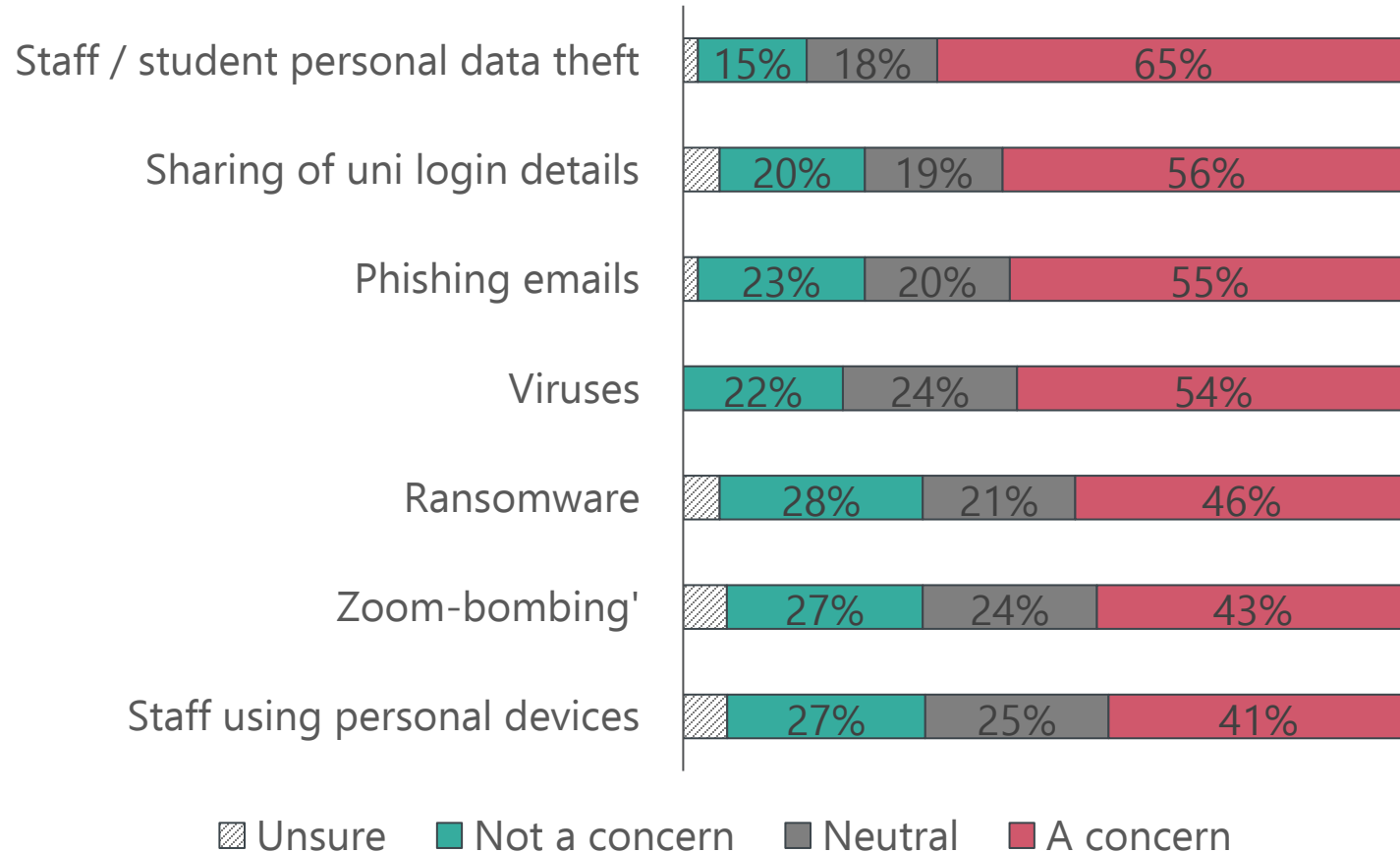
- Concern was high for personal data theft and students making their network login details available online.

- Personal data theft concerns high in North America and at larger institutions.

- For 'experts', there was more worry over ransomware and viruses.

	Not a concern	Neutral	A concern
Staff / student personal data theft	15%	18%	65%
Sharing of uni login details	20%	19%	56%
Phishing emails	23%	20%	55%
Viruses	22%	24%	54%
Ransomware	28%	21%	46%
Zoom-bombing'	27%	24%	43%
Staff using personal devices	27%	25%	41%

Unsure ■ Not a concern ■ Neutral ■ A concern

Base n: 278
Base n North America: 158; base n large institutions: 123

CURRENT SUPPORT FOR
CYBERCRIME & DATA SECURITY

Q: If you suspected your institution's network had been compromised, how likely would you be to:

Action	% I would do this
Contact the IT department	96%
Report to my institution's security department	85%
Tell other librarians about the suspected network breach	85%
Take direct action to restore network integrity	67%
Report to the CIO or CISO	59%
Discuss with students how to prevent future network breaches	43%
Add it to a security breach log	25%

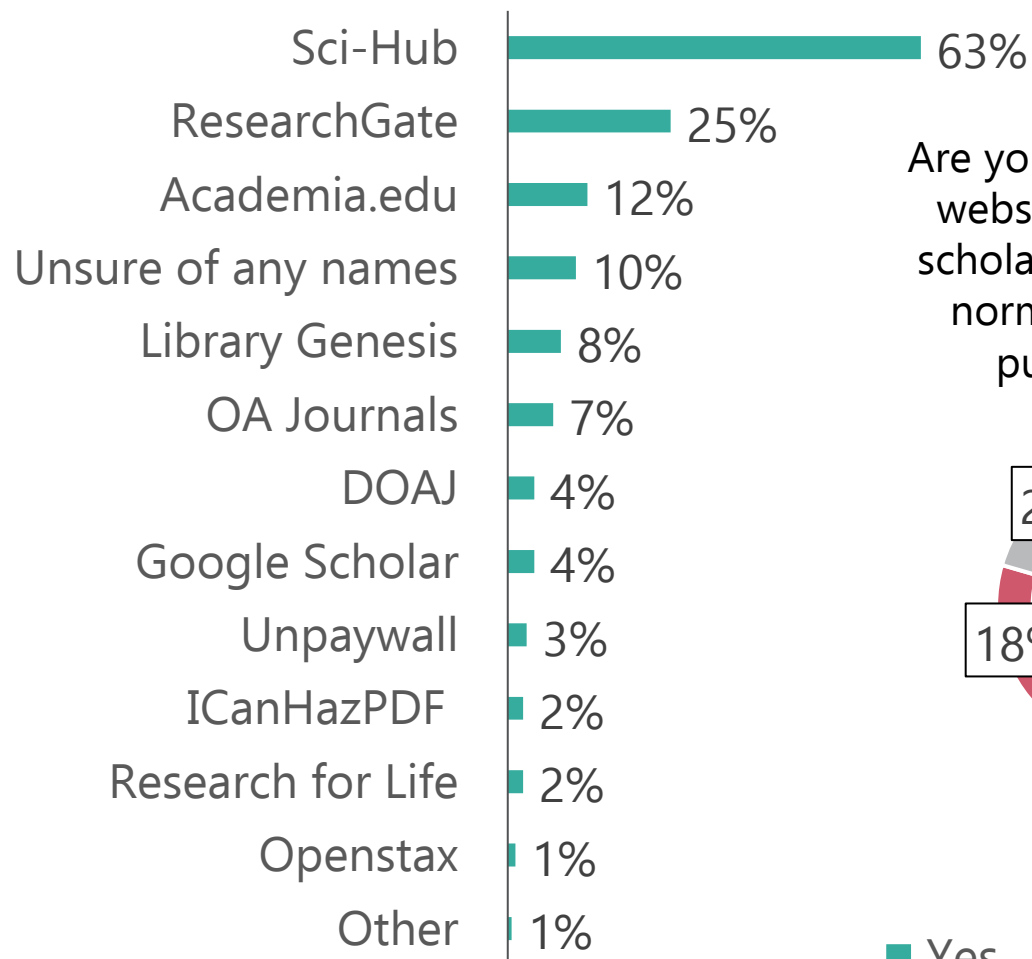Legend: Unsure | I would not do this | Neutral | I would do this

- 96% would contact their IT department.

- Highly likely to report to their institution's security department or tell other librarians.

- Consistent across continents, age groups and institution types.

- Least likely to discuss with students or add to security breach log.

Base n: 210-260

ILLEGAL SITES

There was uncertainty around illegal websites that offer access to scholarly resources

Can you name any examples?

Example	Percentage
Sci-Hub	63%
ResearchGate	25%
Academia.edu	12%
Unsure of any names	10%
Library Genesis	8%
OA Journals	7%
DOAJ	4%
Google Scholar	4%
Unpaywall	3%
ICanHazPDF	2%
Research for Life	2%
Openstax	1%
Other	1%

Are you familiar with any illegal websites that offer access to scholarly resources that would normally be accessed from publishers' platforms?

- Yes: 62%
- No: 18%
- Unsure: 21%
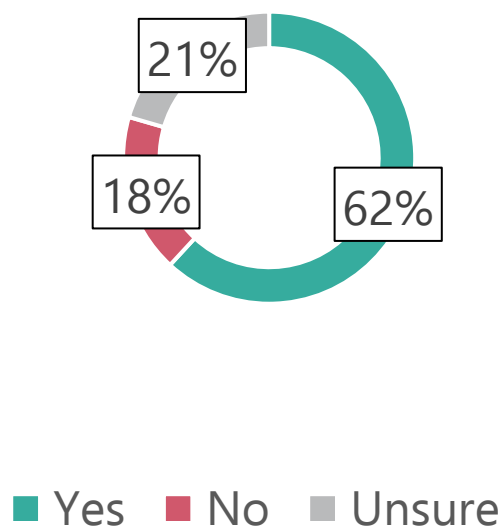
- 21% were unsure if they were familiar with illegal websites.

- Most popular answer was Sci-Hub.

- Other answers included legal websites and OA journals

Familiarity base n = 278, Naming example base n = 172

Q: To what extent do you agree with the following statements with regard to sites such as Sci-Hub

It's fine for librarians to point a learner to these sources if a paper is not available at their institution
| 8% | 64% | 14% | 13% |
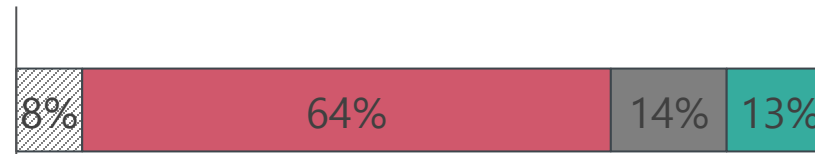
Free public access to research should be a legal right
| 7% | 9% | 18% | 66% |

Using these sites is wrong
| 11% | 17% | 28% | 45% |
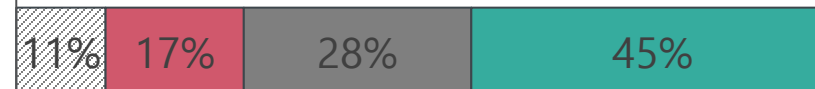
Sources like these are useful to learners
| 10% | 17% | 26% | 47% |

Not sure   Disagree   Neutral   Agree

- Respondents agreed that it shouldn't be used and wouldn't recommend it, but they agreed with some of the principles on which it claims legitimacy.

- The age group 18-34 were more sympathetic to Sci-Hub.

Base n= 278, age group 18-34 base n = 41

Respondents saw Sci-Hub as a threat to their institution's network, but were still sympathetic to some of its values

To what extent do you agree with the following statements with regard to sites such as Sci-Hub:

I worry that sites like this may have access to my institution's networks
18% | 18% | 21% | 43%
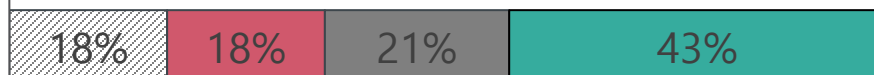
Students using sites such as this puts my institution's network at risk...
23% | 14% | 21% | 42%
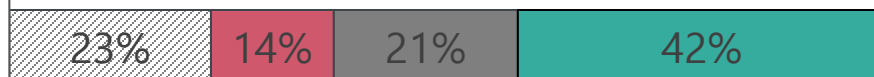
Just because these sites are illegal doesn't mean that they are wrong...
9% | 38% | 27% | 26%

Sites like these are breaking copyright law and should be prosecuted...
12% | 13% | 28% | 47%

These sites are bad for publishers but good for learning
12% | 15% | 27% | 46%

Unsure | Disagree | Neutral | Agree

- Respondents were concerned with Sci-Hub from a data-security perspective.

- There was a gap in understanding about risk to institutions' networks through Sci-Hub.

- And a lack of agreement on ethics

Base n= 278, little understanding base n = 123

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CONCLUSIONS

Respondents had limited confidence around cybersecurity

They were mostly concerned with data protection and ensuring that their colleagues, students and institutions were safe

Librarians main areas of concern around cybersecurity were personal data and reputational risk.

Attitudes to Sci-Hub were complex.