Preliminary Results on Survey about Reuse of Species Occurrence Data and Use of Web-based Information Systems by Professionals

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Doctoral Research

Primary Goals

- Increase understanding on use of Web-based species occurrence information systems by academic and non-academic professionals
- Gather baseline data for future evaluations and comparisons

Online survey of professionals

- Reuse of species occurrence data
- Use of Web-based information systems that provide species occurrence data

Research co-advisors: Larry Page & Shari Ellis

Online Survey Methods

Identified organizations' websites & staff emails

Academic institutions

- Universities
  - Classified as 'Highest Research Activity' *

  Departments searched:
  - Biological, Ecological Sciences
  - Earth, Ocean, Environmental Sciences

Non-academic organizations

- State & Federal Agencies
  - 50 states

  Agencies/programs searched:
  - Natural resource management & research
  - Environmental quality & protection
  - Agriculture (invasive species, pests)

* 2015 Carnegie Classification of Institutions of Higher Education

Online Survey Administration & Response

- UF Qualtrics
  - closed & open-ended questions
  - 10 - 20 minutes to complete
- 7,092 email invitations sent:
  - Academia - 3,143 emails
  - Non-Academia - 4,150 emails
- Survey was open
  - March 21 - April 25, 2017

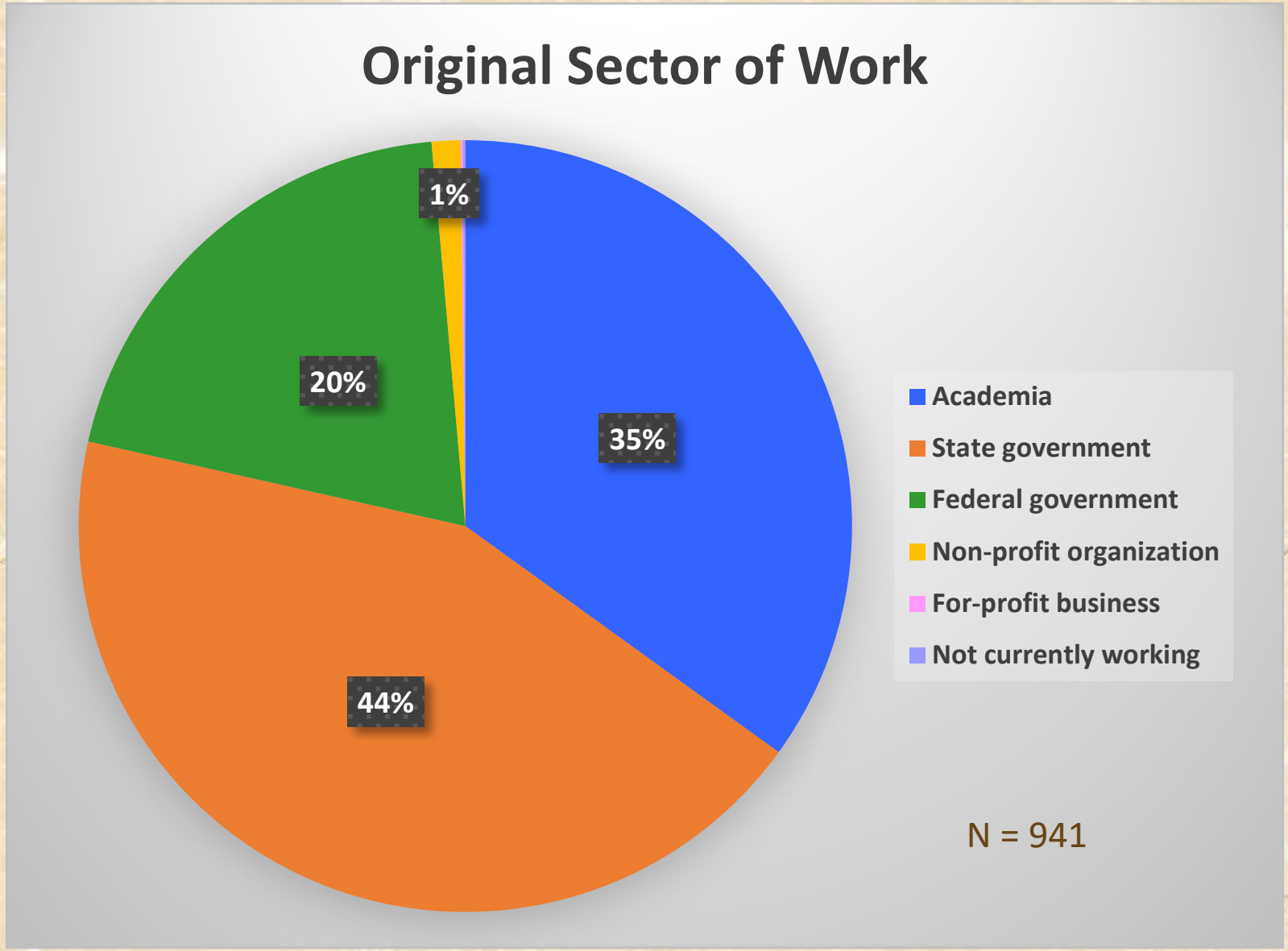
Response

942 usable survey responses

Response Rate = 15%

Completion Rate = 95%

Respondents Sector of Work



Summarized as:

- Academia (35%)
- Non-Academia (65%)

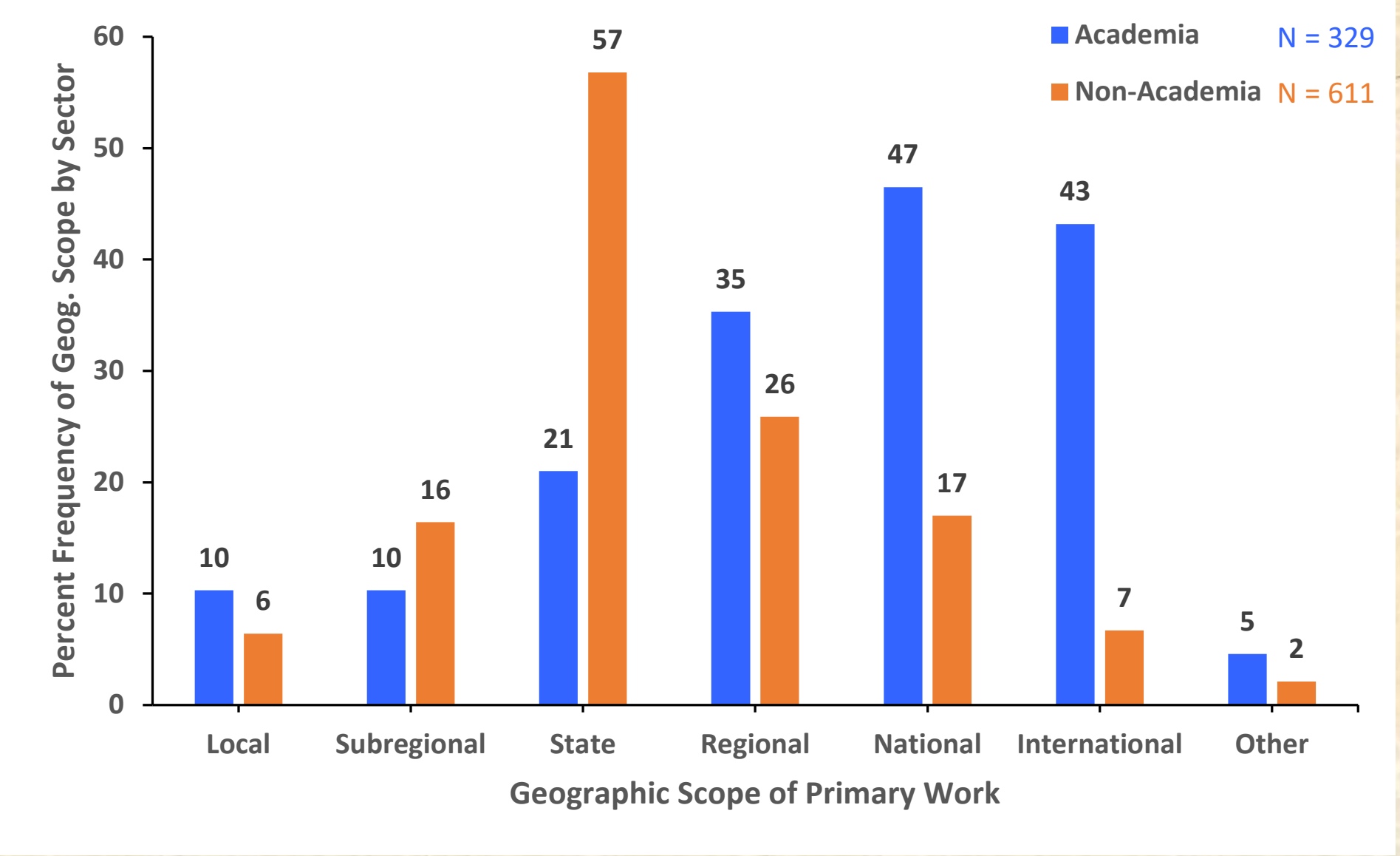
Primary Area of Work of Respondents

Primary Area of Work	Academia Frequency (%)	Non-Academia Frequency (%)
Scientific research	283 (86%)	121 (20%)
Teaching	36 (11%)	10 (1%)
Natural resource management, conservation, and restoration practice	4 (1%)	386 (63%)
Environmental planning & review	1 (0.5%)	34 (6%)
Policy, law, administration	1 (0.5%)	29 (5%)
Technical / scientific information transfer & communications	4 (1%)	32 (5%)
Sample size (N)	329	612

Academia ≈ work primarily on scientific research activities (86%)

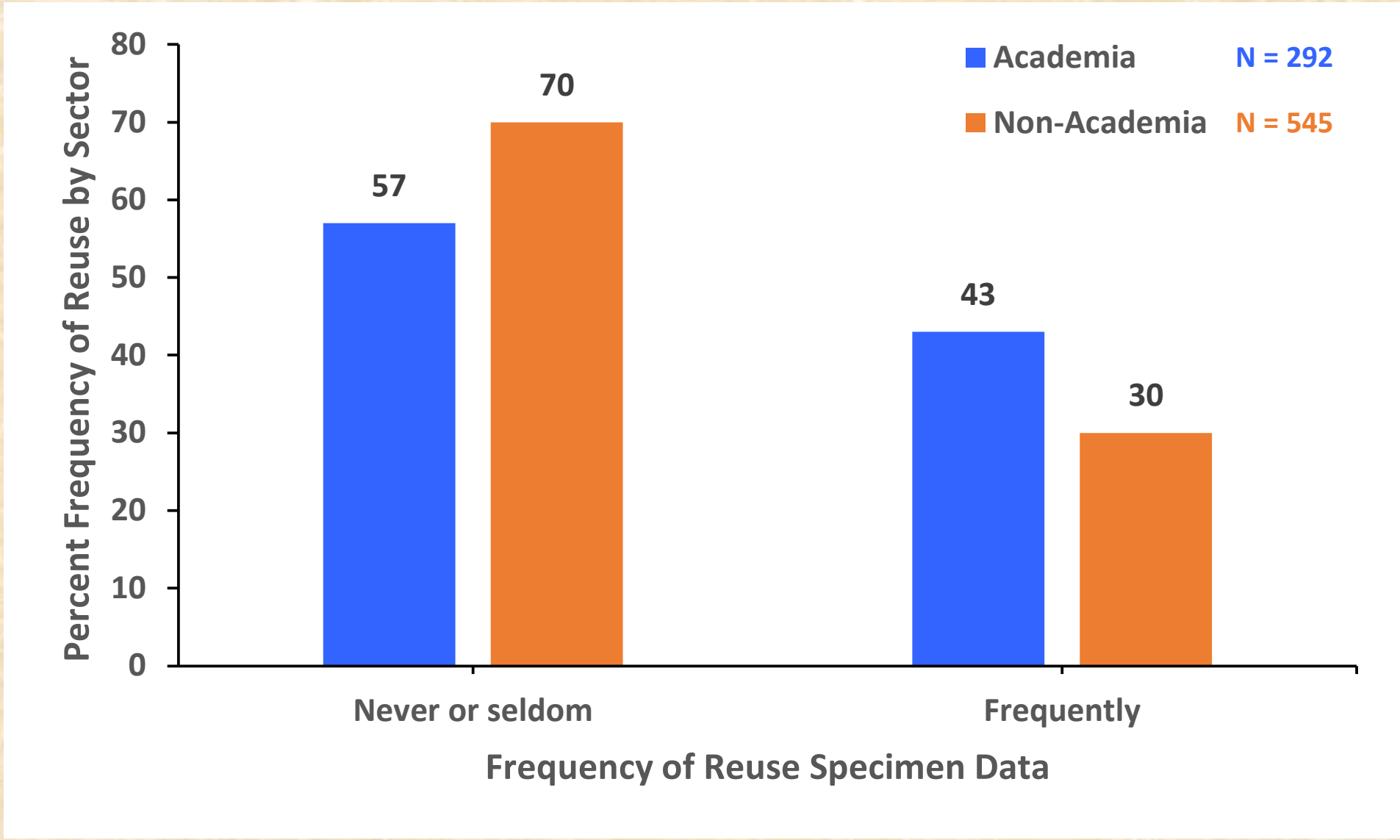
Non-Academia ≈ work primarily on natural resource & environment activities (79%)

Geographic Scope of Respondent's Primary Work

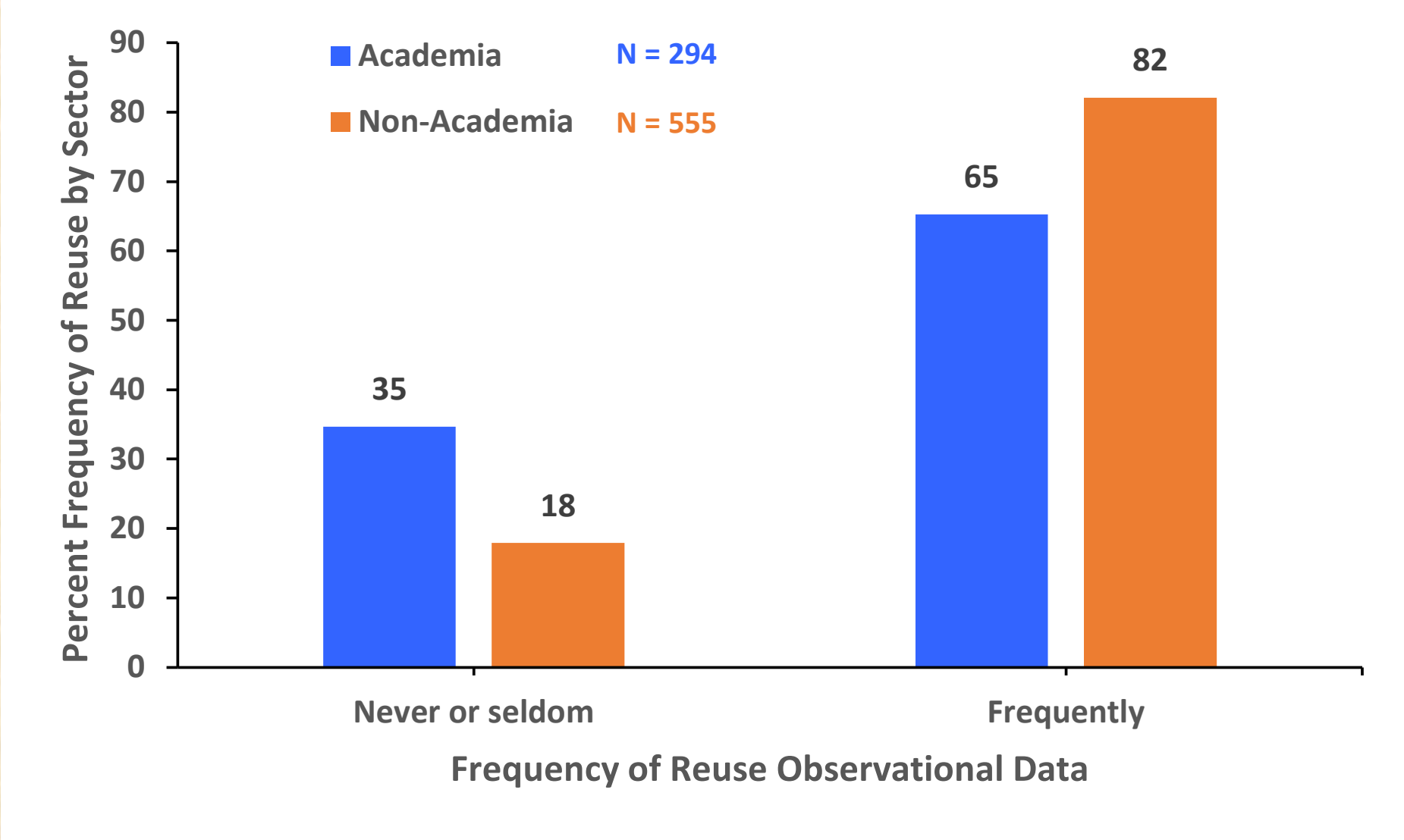


From 'Select All that Apply' question. Total percentages by sector are greater than 100%.

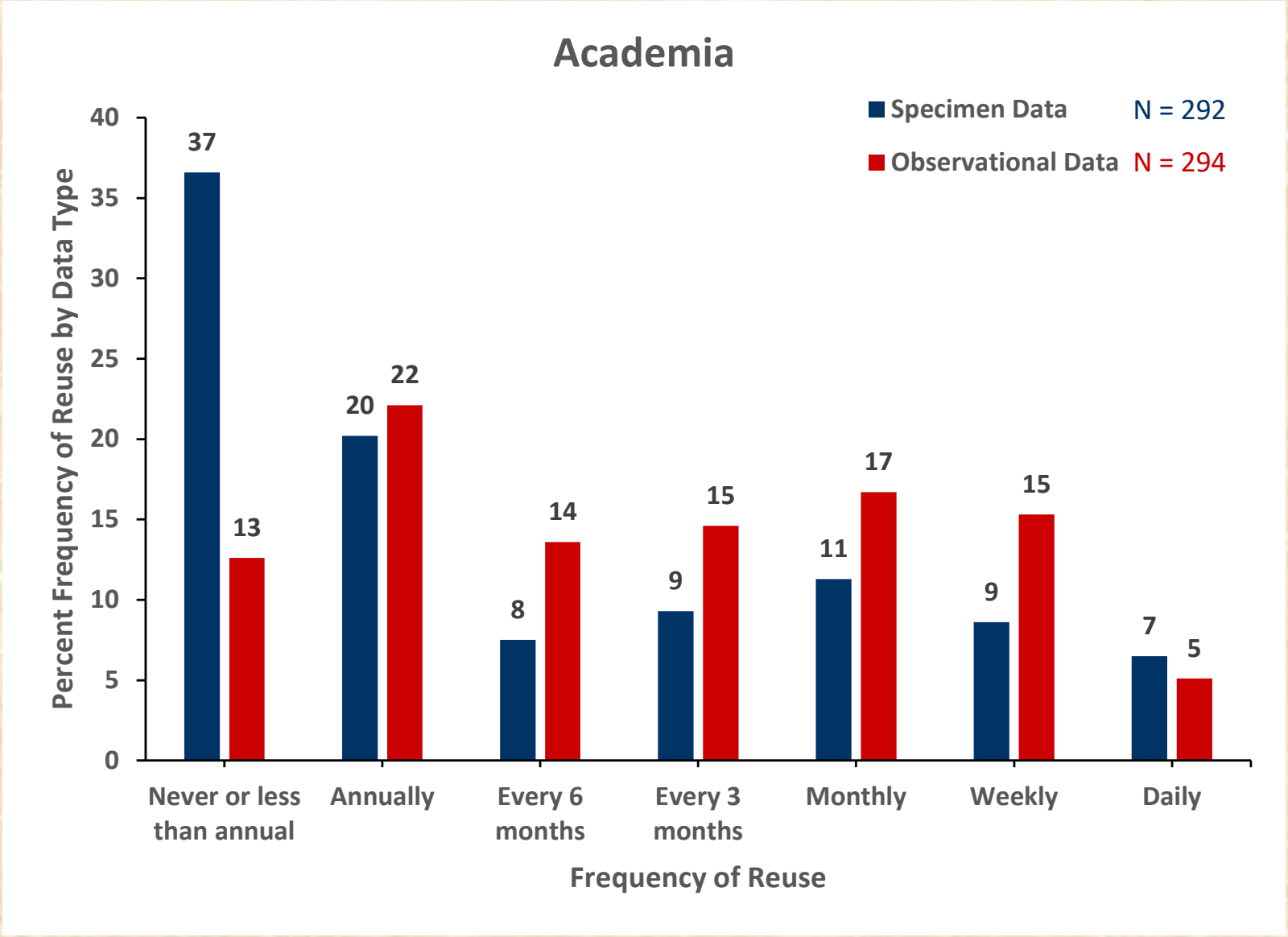
Reuse of Specimen Data



Reuse of Observational Data

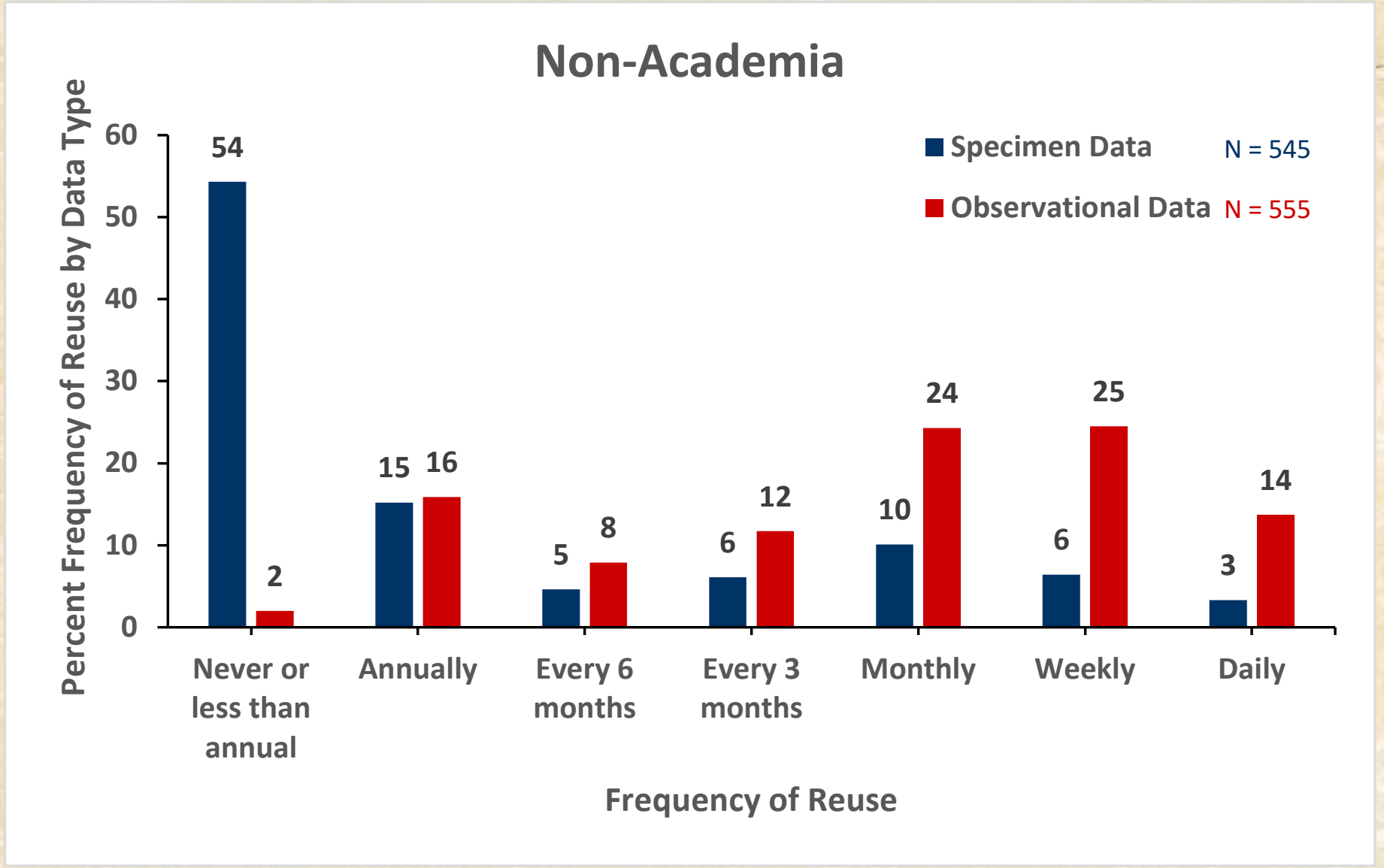


Data Type Reuse by Academia



Percentages do not total 100% due to rounding

Data Type Reuse by Non-Academia



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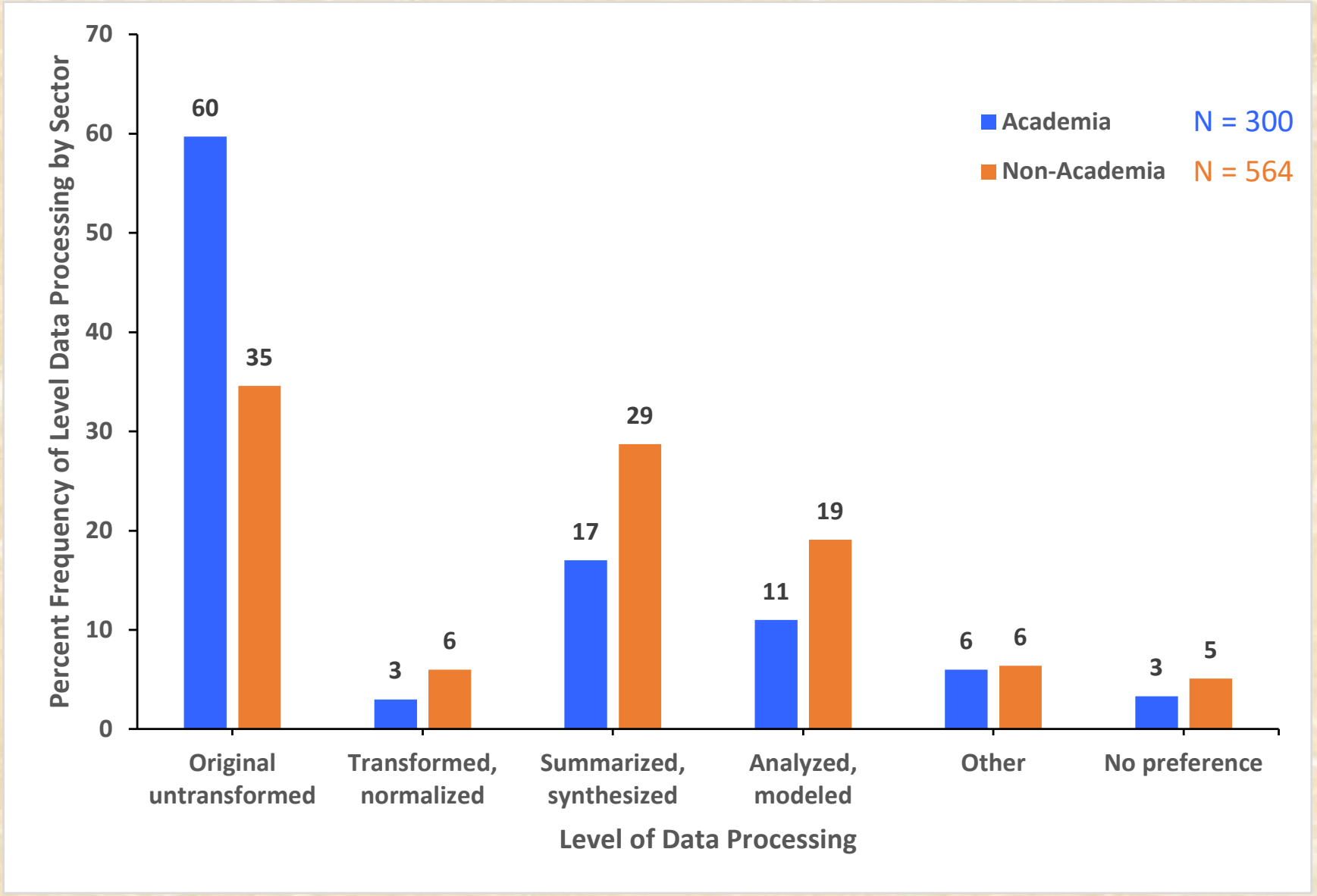
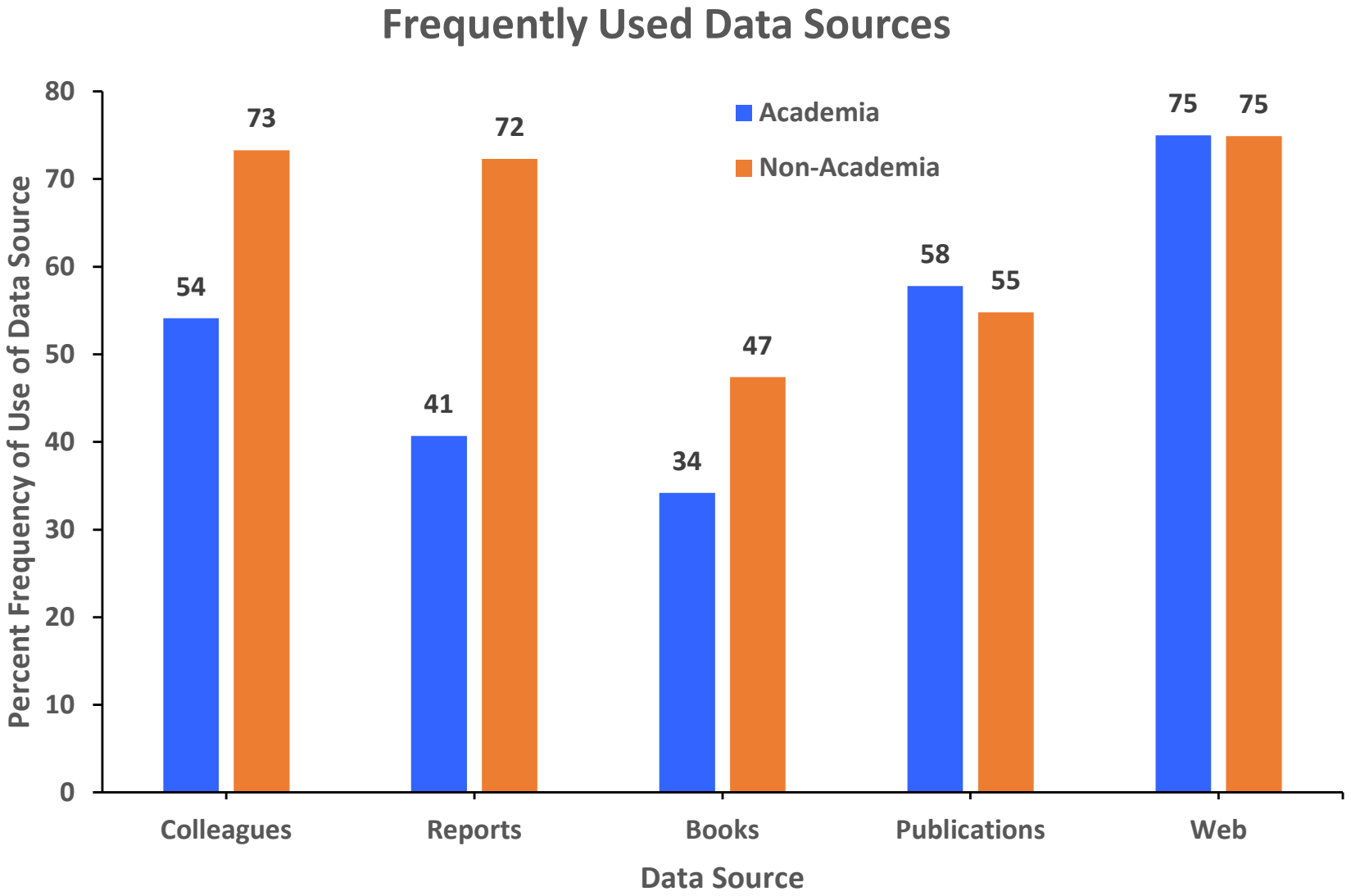
Level of Processing of Preferred Data for Reuse



Frequently Used Sources of Data for Reuse



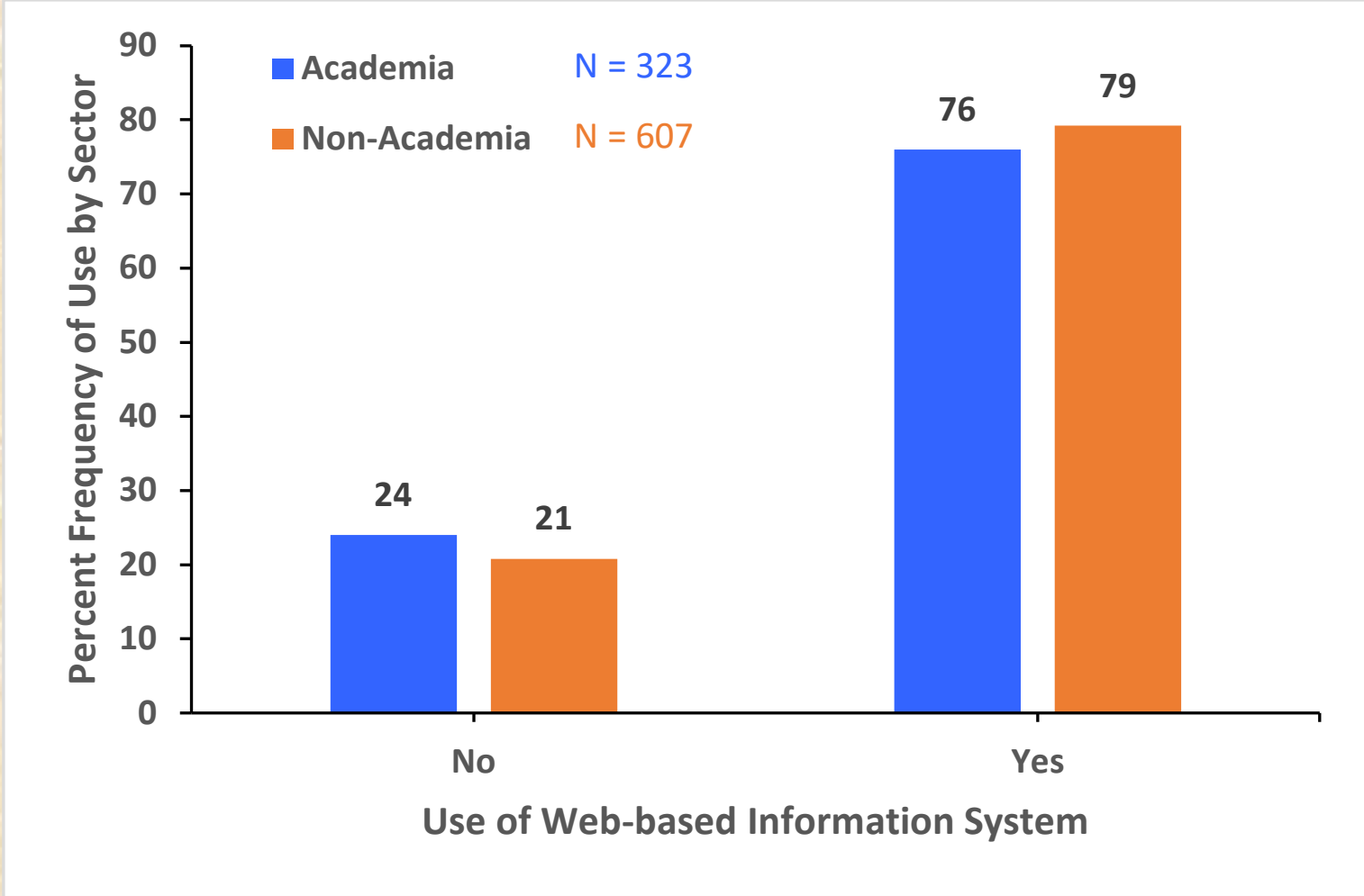
Sample size (N) per data source:

Data Source	Academia	Non-Academia
Colleagues	290	550
Reports	290	552
Books	286	540
Publications	287	544
Web	292	554

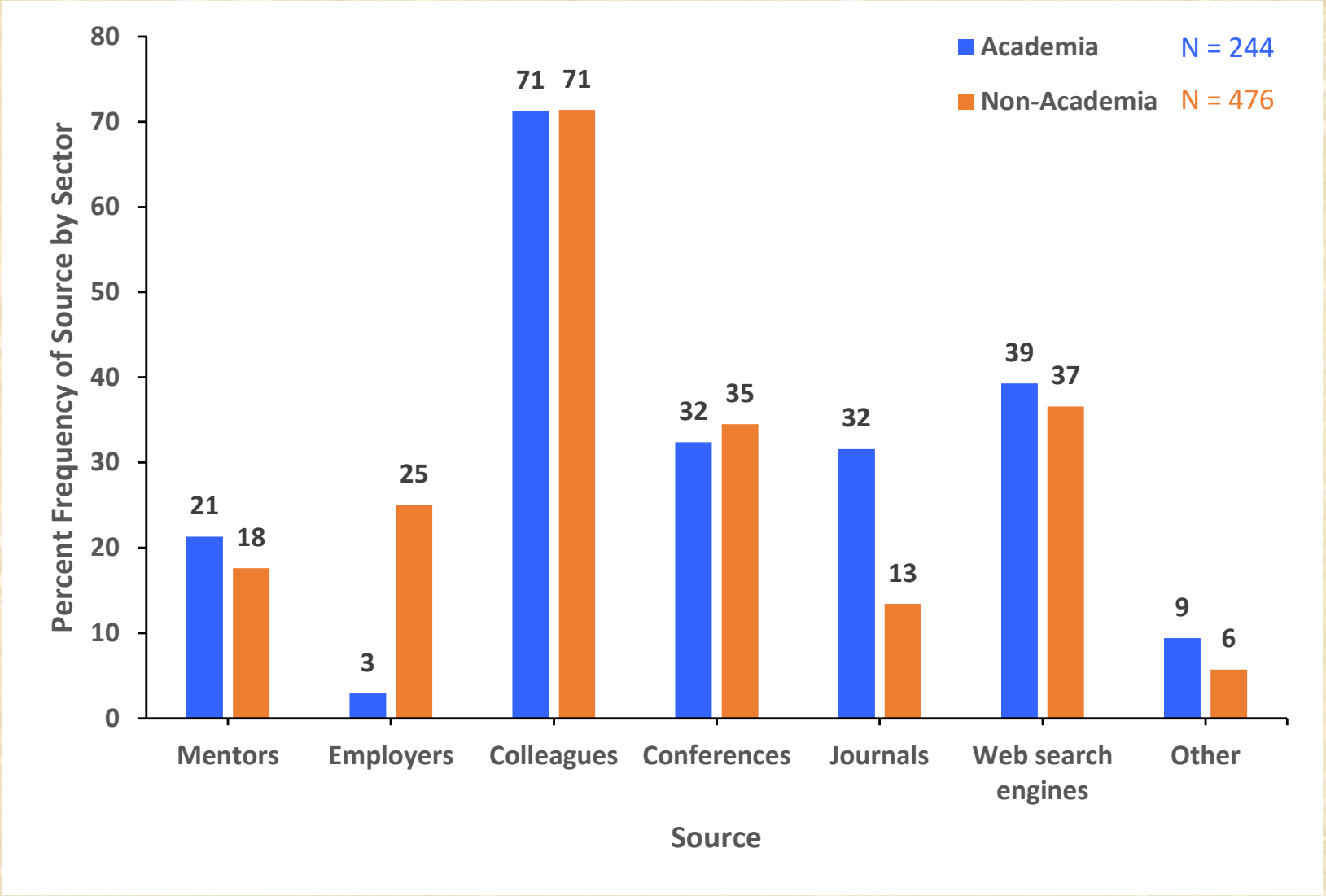
From 5 separate data source questions. Total percentages per sector are greater than 100%.

Use of Web-based Information System in Past 12 Months

~ 80% of survey respondents used a Web-based information system in the last year



Sources where Respondents Learned about Web-based Information Systems



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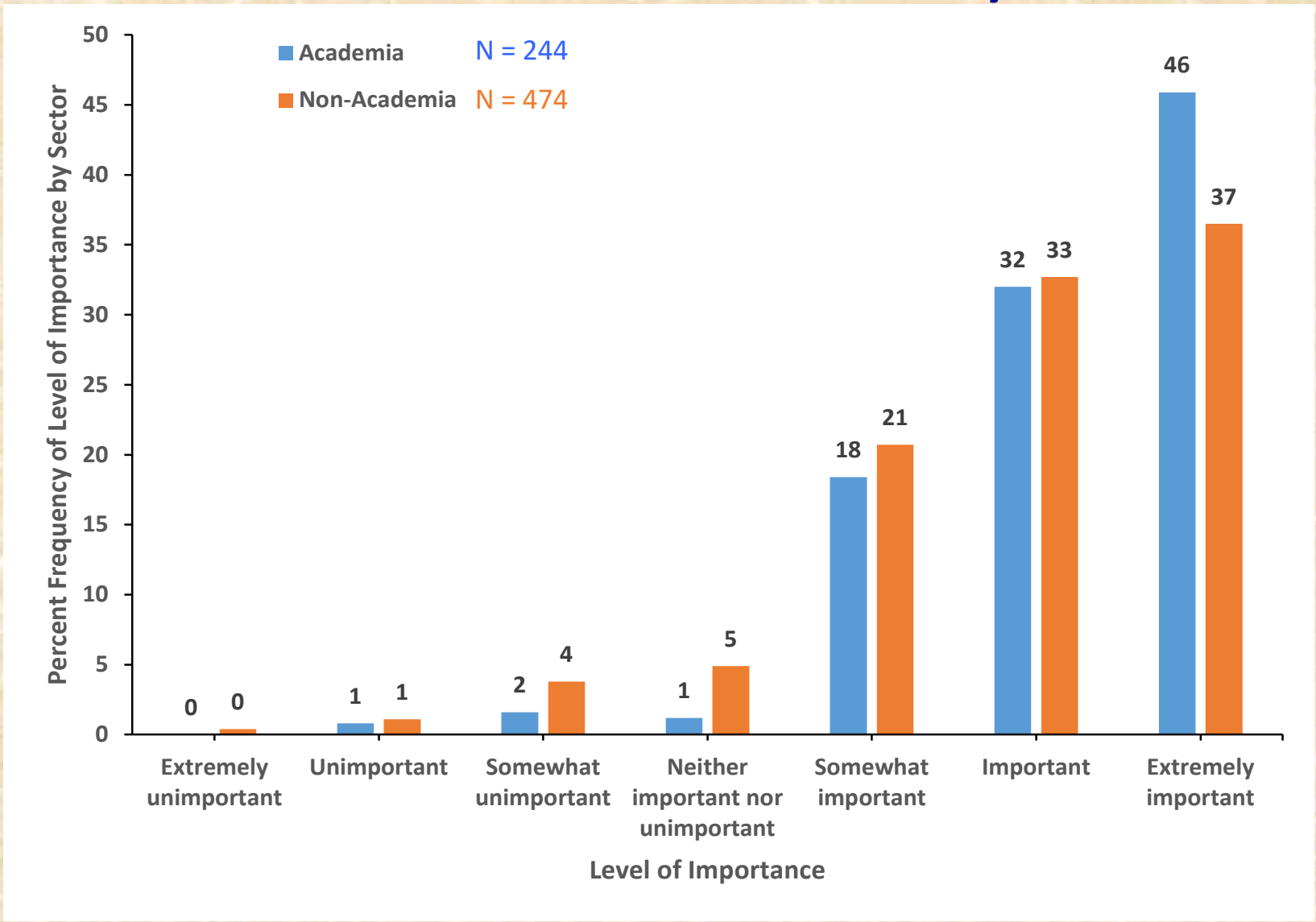
Importance of Availability of Web-based Information Systems



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Next Steps

- Conduct statistical analyses of closed-ended questions
- Code and analyze open-ended questions

Thank You