Iowa State University Faculty Survey:
Report of Findings

Table of Contents

Overview

The Iowa State University implementation of the Ithaka S+R Faculty Survey was launched on April 6, 2015, and was closed to new responses on April 30, 2015, with a total of 487 complete responses. The questionnaire covers topics in several key areas, including: how faculty members discover materials for research; the value of mechanisms for gaining access to research literature; faculty members' data preservation and management behaviors and needs; faculty members' usage of scholarly communication services; the role of the library in supporting faculty members' needs; faculty members' perceptions of students' research skills; and faculty members' undergraduate and graduate instruction practices. The following report provides a high-level overview of findings from the Iowa State University faculty survey.[1]

Details

1,815 Iowa State University faculty members received an email invitation to participate in a survey about faculty research habits.[2] Four $50 gift cards for the University Bookstore or ISU Dining Services and one $300 gift card for the University Bookstore were offered as incentives for participation. Three email reminders were sent before the close of the survey. In total, 647 respondents clicked the survey link (about 36% of those who received the email invitation), with 626 of those starting the survey (35%), and 487 of those respondents completing the survey, for an overall response rate of about 27%. Due to the survey flow and skip patterns, not all Iowa State University faculty respondents received every question in the survey.

How to interpret the findings

For each question in the Iowa State University survey, this document provides a single graph and table of overall responses. Title pages provide information about survey flow and contingent items, which signify that a question was only presented to those who satisfied a condition in their response to another question.

If you have any questions about this report or working with the raw data provided, please contact Christine Wolff, Ithaka S+R Survey Administrator, at Christine.Wolff@ithaka.org.

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[1] This report covers results from completed surveys and does not include an overview of partially completed responses. Partially completed responses are included in the spreadsheet of raw data.
[2] The maximum sample size is 1,813 faculty members, after taking consideration of undeliverable emails.

Discovery

DSC1

Below are four possible starting points for research in academic literature. Typically, when you are conducting academic research, which of these four starting points do you use to begin locating information for your research? Please select one of the following answers.

DSC2

When you try to locate a specific piece of secondary scholarly literature that you already know about but do not have in hand, how do you most often begin your process? Select one of the following answers.

DSC3

When you explore the scholarly literature to find new journal articles and monographs relevant to your research interests, how do you most often begin your process? Select one of the following:
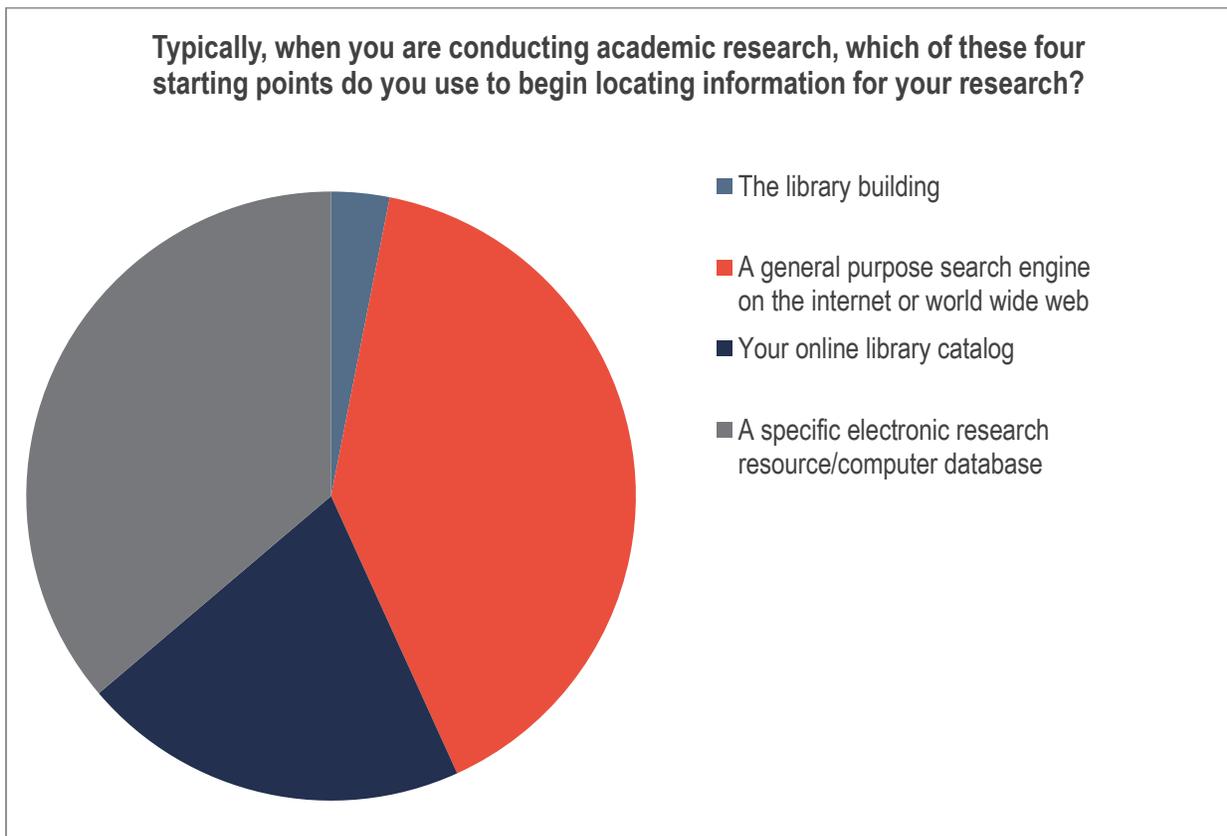
DSC4

You may employ a variety of different tactics to "keep up" with current scholarship in your field on a regular basis. Please use the scales below to rate from 10 to 1 how important each of the following methods is for staying current with new scholarship in your field, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one rating for each item.

DSC1

Below are four possible starting points for research in academic literature. Typically, when you are conducting academic research, which of these four starting points do you use to begin locating information for your research? Please select one of the following answers.

	Response	Percent
The library building	15	3.09%
A general purpose search engine on the internet or world wide web	195	40.12%
Your online library catalog	100	20.58%
A specific electronic research resource/computer database	176	36.21%
	486	100.00%

Typically, when you are conducting academic research, which of these four starting points do you use to begin locating information for your research?
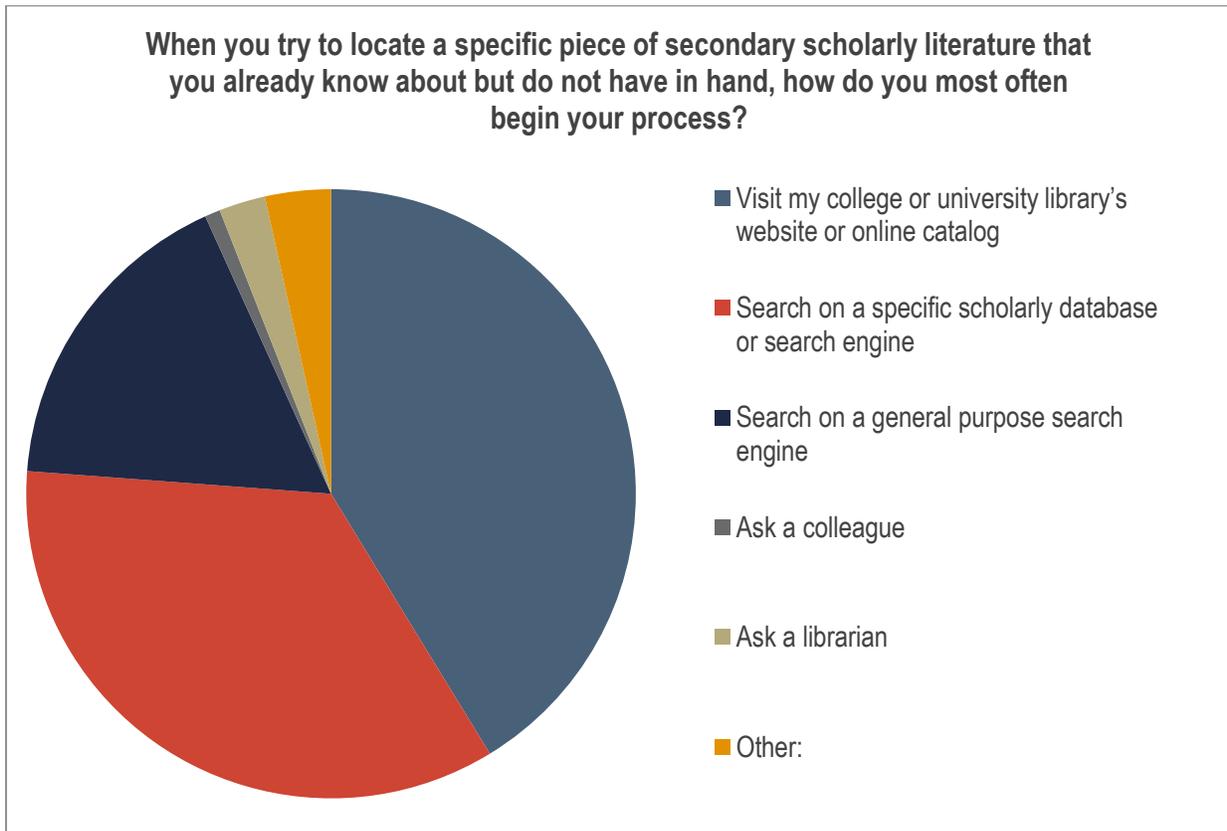

- The library building
- A general purpose search engine on the internet or world wide web
- Your online library catalog
- A specific electronic research resource/computer database

DSC2

When you try to locate a specific piece of secondary scholarly literature that you already know about but do not have in hand, how do you most often begin your process? Select one of the following answers.
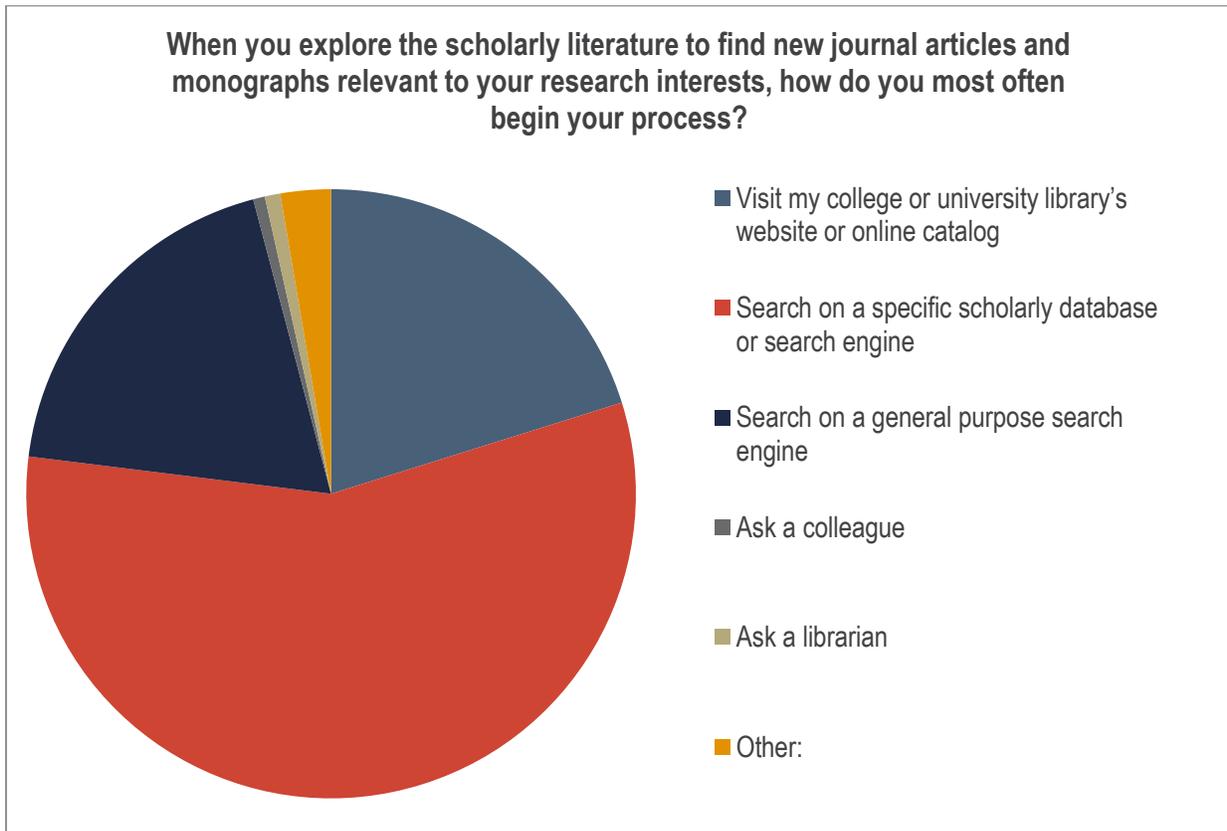
	Response	Percent
Visit my college or university library's website or online catalog	201	41.27%
Search on a specific scholarly database or search engine	170	34.91%
Search on a general purpose search engine	83	17.04%
Ask a colleague	4	0.82%
Ask a librarian	12	2.46%
Other:	17	3.49%
	487	100.00%

When you try to locate a specific piece of secondary scholarly literature that you already know about but do not have in hand, how do you most often begin your process?

- Visit my college or university library's website or online catalog
- Search on a specific scholarly database or search engine
- Search on a general purpose search engine
- Ask a colleague
- Ask a librarian
- Other:

DSC3

When you explore the scholarly literature to find new journal articles and monographs relevant to your research interests, how do you most often begin your process? Select one of the following:

	Response	Percent
Visit my college or university library's website or online catalog	98	20.16%
Search on a specific scholarly database or search engine	276	56.79%
Search on a general purpose search engine	92	18.93%
Ask a colleague	3	0.62%
Ask a librarian	4	0.82%
Other:	13	2.67%
	486	100.00%

When you explore the scholarly literature to find new journal articles and monographs relevant to your research interests, how do you most often begin your process?

- ■ Visit my college or university library's website or online catalog
- ■ Search on a specific scholarly database or search engine
- ■ Search on a general purpose search engine
- ■ Ask a colleague
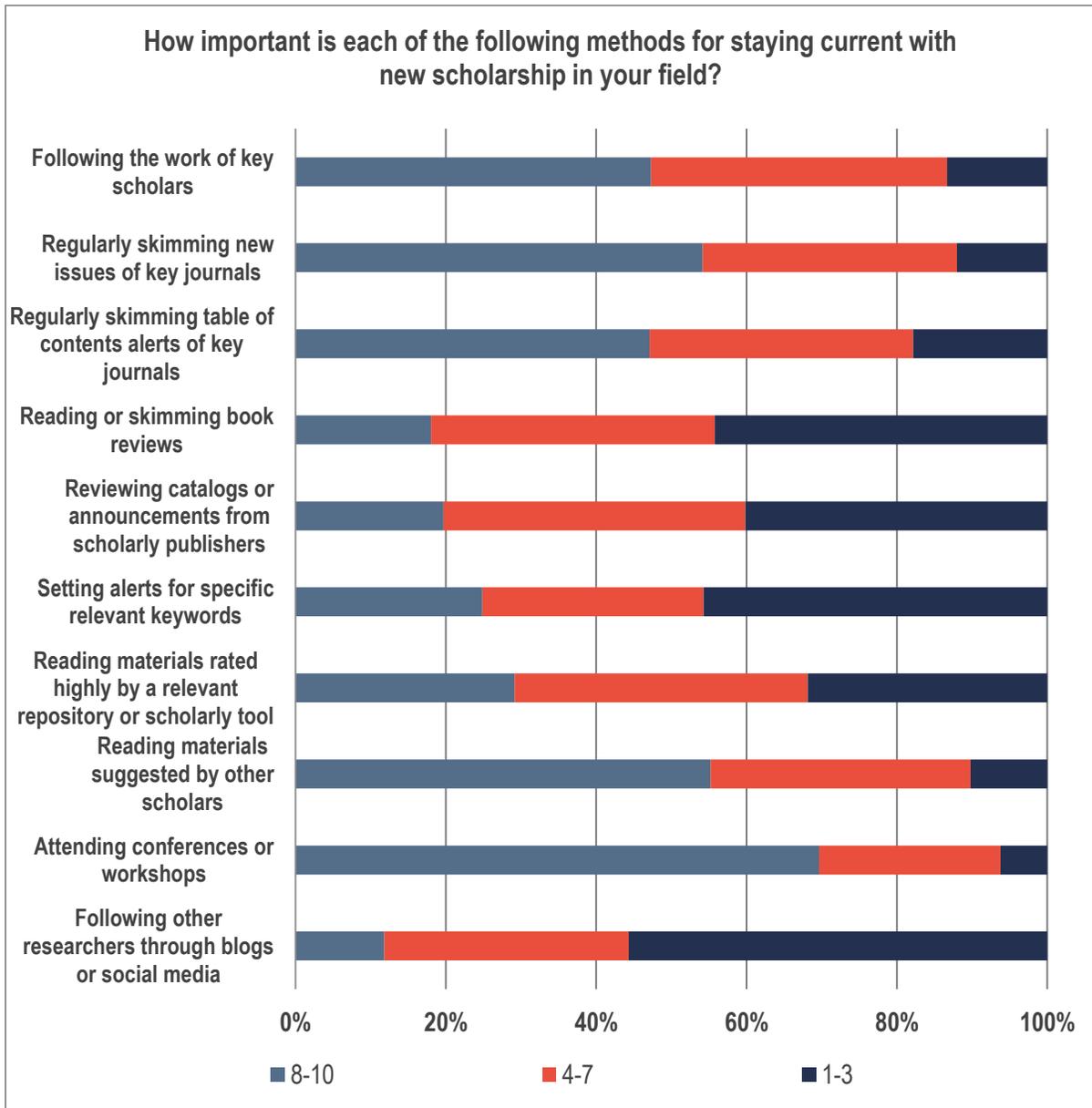- ■ Ask a librarian
- ■ Other:

DSC4
You may employ a variety of different tactics to "keep up" with current scholarship in your field on a regular basis. Please use the scales below to rate from 10 to 1 how important each of the following methods is for staying current with new scholarship in your field, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one rating for each item.

	8-10	4-7	1-3	Response
Following the work of key scholars	47.29%	39.38%	13.33%	480
Regularly skimming new issues of key journals	54.15%	33.82%	12.03%	482
Regularly skimming table of contents alerts of key journals	47.10%	35.06%	17.84%	482
Reading or skimming book reviews	18.03%	37.74%	44.23%	477
Reviewing catalogs or announcements from scholarly publishers	19.67%	40.17%	40.17%	478
Setting alerts for specific relevant keywords	24.84%	29.44%	45.72%	479
Reading materials rated highly by a relevant repository or scholarly tool	29.14%	38.99%	31.87%	477
Reading materials suggested by other scholars	55.21%	34.58%	10.21%	480
Attending conferences or workshops	69.65%	24.12%	6.24%	481
Following other researchers through blogs or social media	11.81%	32.49%	55.70%	474

DSC4

You may employ a variety of different tactics to "keep up" with current scholarship in your field on a regular basis. Please use the scales below to rate from 10 to 1 how important each of the following methods is for staying current with new scholarship in your field, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one rating for each item.

How important is each of the following methods for staying current with new scholarship in your field?

	8-10	4-7	1-3
Following the work of key scholars			
Regularly skimming new issues of key journals			
Regularly skimming table of contents alerts of key journals			
Reading or skimming book reviews			
Reviewing catalogs or announcements from scholarly publishers			
Setting alerts for specific relevant keywords			
Reading materials rated highly by a relevant repository or scholarly tool			
Reading materials suggested by other scholars			
Attending conferences or workshops			
Following other researchers through blogs or social media			

Access

A1

When you think about the journal articles and scholarly monographs that you routinely use - for research as well as for teaching - how important are each of the following sources? Use the scales below to rate each item 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important".

A2

When you want a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections, how often do you use each of the following methods to seek access to that material - often, occasionally, rarely, never?

A3

In addition to the published version of a scholarly work, you may also be able to access pre-print or other versions of the work made available by the author directly or through an institutional or disciplinary repository which contain the same substance as the published version but may lack the copy editing, layout, and formatting of the final version. How often do you do each of the following with these versions of scholarly outputs - often, occasionally, rarely, or never? Please select one answer for each item.
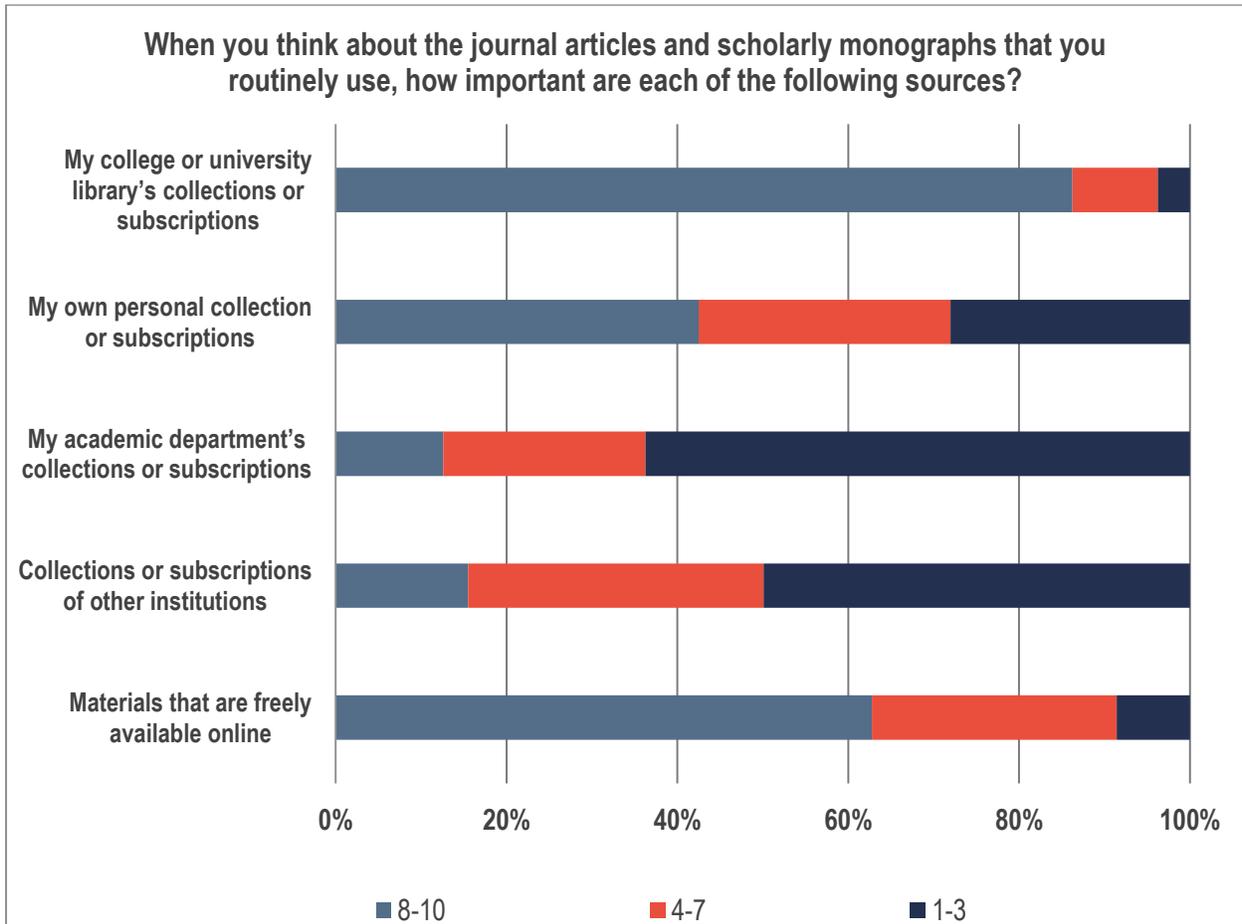
A4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

A1
When you think about the journal articles and scholarly monographs that you routinely use - for research as well as for teaching - how important are each of the following sources? Use the scales below to rate each item 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important".

	8-10	4-7	1-3	Response
My college or university library's collections or subscriptions	86.25%	10.00%	3.75%	480
My own personal collection or subscriptions	42.47%	29.50%	28.03%	478
My academic department's collections or subscriptions	12.58%	23.69%	63.73%	477
Collections or subscriptions of other institutions	15.51%	34.59%	49.90%	477
Materials that are freely available online	62.76%	28.66%	8.58%	478

When you think about the journal articles and scholarly monographs that you routinely use, how important are each of the following sources?
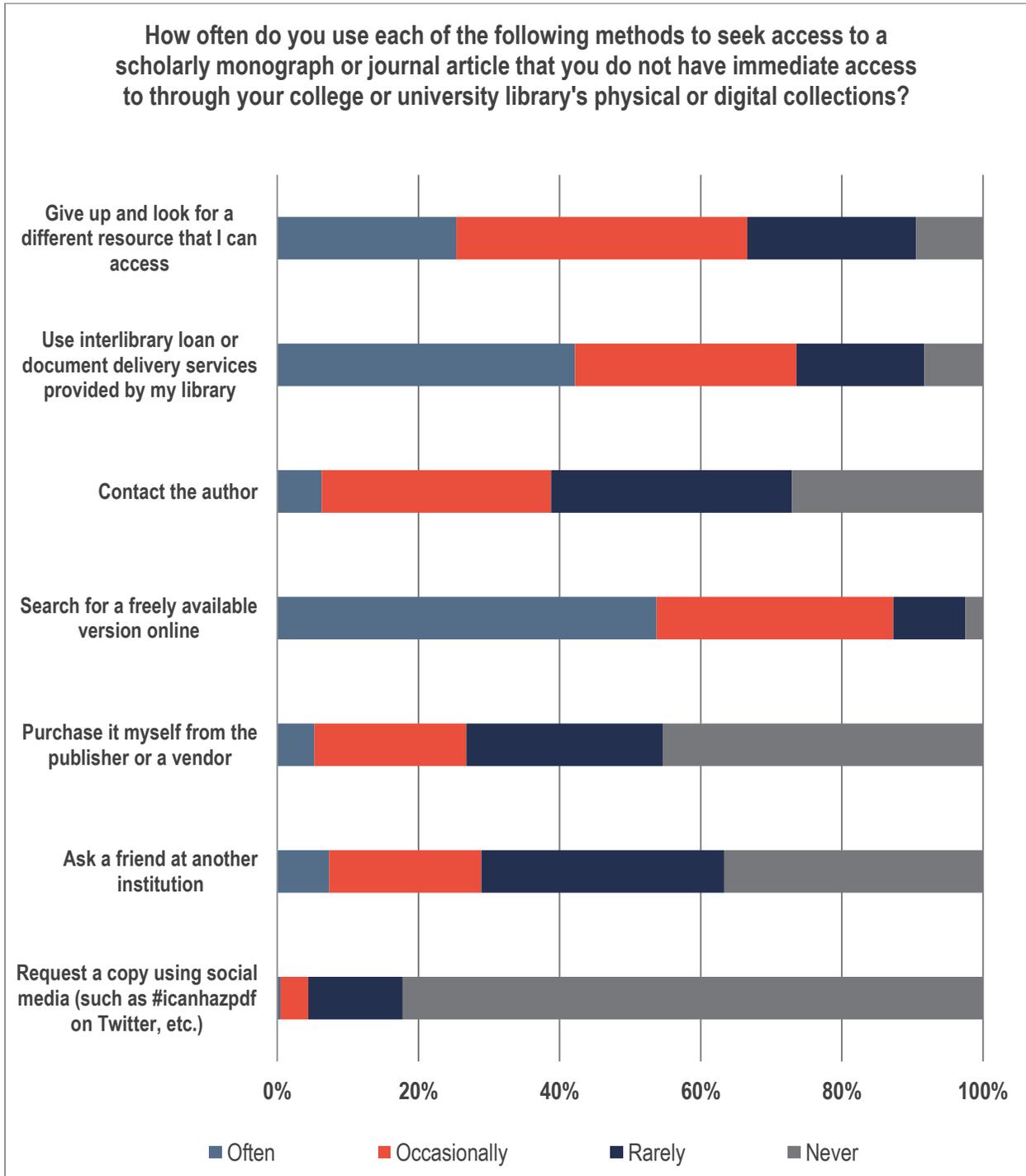
A2

When you want a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections, how often do you use each of the following methods to seek access to that material - often, occasionally, rarely, never?

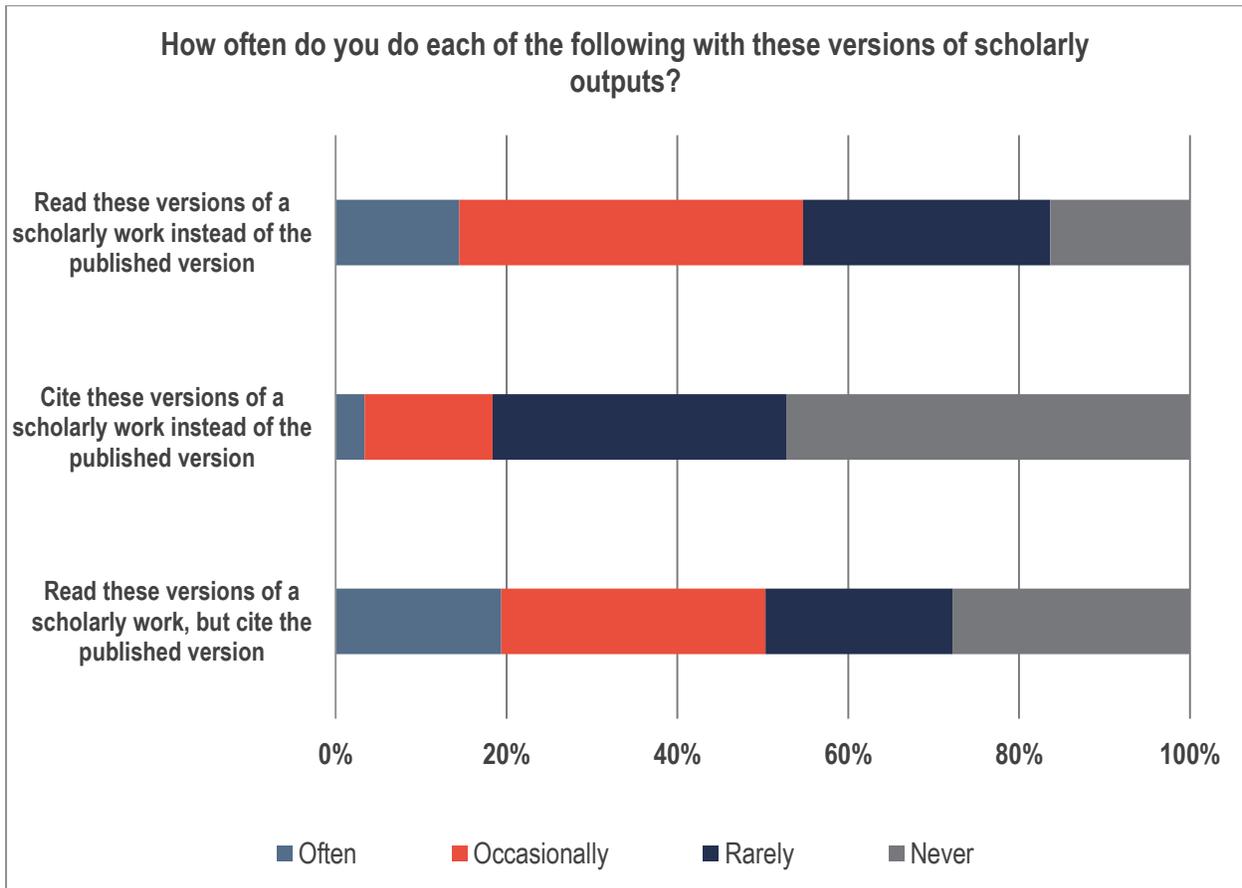|	Often	Occasionally	Rarely	Never	Response
Give up and look for a different resource that I can access	25.37%	41.23%	23.89%	9.51%	473
Use interlibrary loan or document delivery services provided by my library	42.20%	31.39%	18.09%	8.32%	481
Contact the author	6.29%	32.49%	34.17%	27.04%	477
Search for a freely available version online	53.75%	33.54%	10.21%	2.50%	480
Purchase it myself from the publisher or a vendor	5.23%	21.55%	27.82%	45.40%	478
Ask a friend at another institution	7.34%	21.59%	34.38%	36.69%	477
Request a copy using social media (such as #icanhazpdf on Twitter, etc.)	0.42%	3.97%	13.39%	82.22%	478

A2

When you want a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections, how often do you use each of the following methods to seek access to that material - often, occasionally, rarely, never?

How often do you use each of the following methods to seek access to a scholarly monograph or journal article that you do not have immediate access to through your college or university library's physical or digital collections?

A3

In addition to the published version of a scholarly work, you may also be able to access pre-print or other versions of the work made available by the author directly or through an institutional or disciplinary repository which contain the same substance as the published version but may lack the copy editing, layout, and formatting of the final version. How often do you do each of the following with these versions of scholarly outputs - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Read these versions of a scholarly work instead of the published version	14.47%	40.25%	28.93%	16.35%	477
Cite these versions of a scholarly work instead of the published version	3.38%	14.98%	34.39%	47.26%	474
Read these versions of a scholarly work, but cite the published version	19.37%	30.95%	21.89%	27.79%	475

How often do you do each of the following with these versions of scholarly outputs?

A4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
I find it very frustrating that I have to use a variety of different tools and databases to find and access journal articles, monographs, finding aids, datasets, primary sources, and other types of scholarly sources	33.19%	41.96%	24.84%	479
When I am looking for journal articles and monographs in the course of my research, I often use a variety of different sources, including the library, scholarly databases, and mainstream search engines	78.13%	19.17%	2.71%	480
In my research, I often would like to use journal articles that are not in my library's print or digital collections	36.33%	45.51%	18.16%	479
When I discover journal articles I need for my research that are not in my library's collections, I can almost always get satisfactory access to these materials elsewhere	36.13%	45.38%	18.49%	476

A4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.
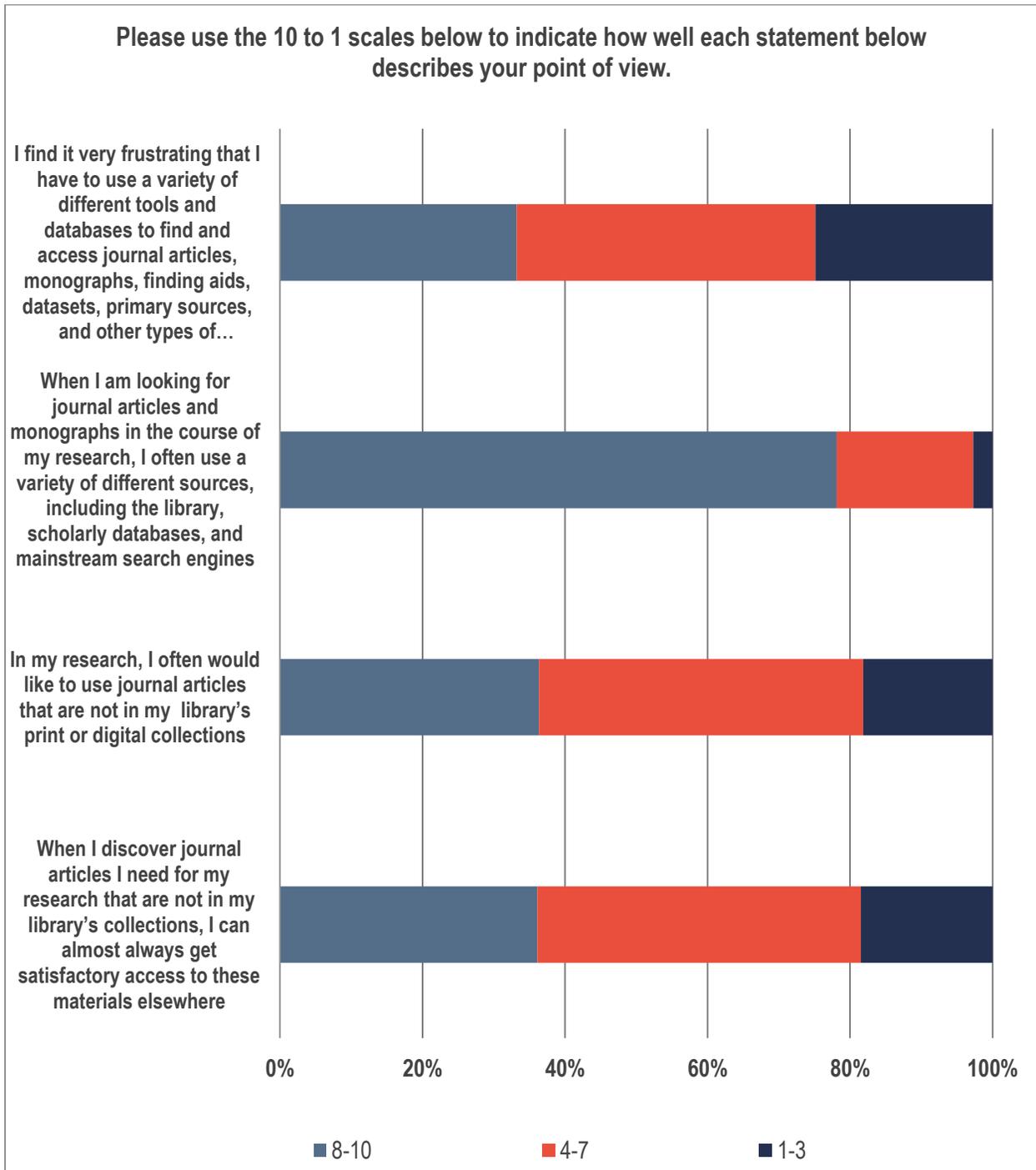
Data Preservation and Management

DATA1

In the course of your research, you may build up collections of scientific, qualitative, quantitative, or primary source research data. Do you accumulate any of these types of data in your research? Please select one answer.

DATA2

In the course of your research, you may build up digital collections of image or media research data, either by personally digitizing these materials or by downloading these materials from other sources. Do you accumulate any of these types of data in your research? Please select one answer.

DATA3 **[Contingent on DATA1 and DATA2]**

How important to your research are the following types of data? Use the scales below to rate from 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.

DATA4 **[Contingent on DATA1 and DATA2]**

When you think about managing or preserving the research data, media, or images that you collect, how important are each of the following features or how important would each of the following features be? Use the scales below to rate each item 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important".

DATA5 **[Contingent on DATA1 and DATA2]**

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

DATA6 **[Contingent on DATA1 and DATA2]**

Please use the scale below to rate from 10 to 1 how valuable you would find each of the following possible sources of support for managing or preserving research data, media, or images or how valuable you do find each of the following sources of support for managing or preserving research data, media, or images, where 10 equals "Extremely valuable" and 1 equals "Not at all valuable." Please select one answer for each item.

DATA7 **[Contingent on DATA1 and DATA2] [Multiple selections possible]**
If these collections or sets of research data are preserved following the conclusion of
the projects, what methods are used to preserve them? Please select each method by
which they are preserved or indicate that they are not preserved.

DATA1

In the course of your research, you may build up collections of scientific, qualitative, quantitative, or primary source research data. Do you accumulate any of these types of data in your research? Please select one answer.

	Response	Percent
Yes	358	74.27%
No	124	25.73%
	482	100.00%
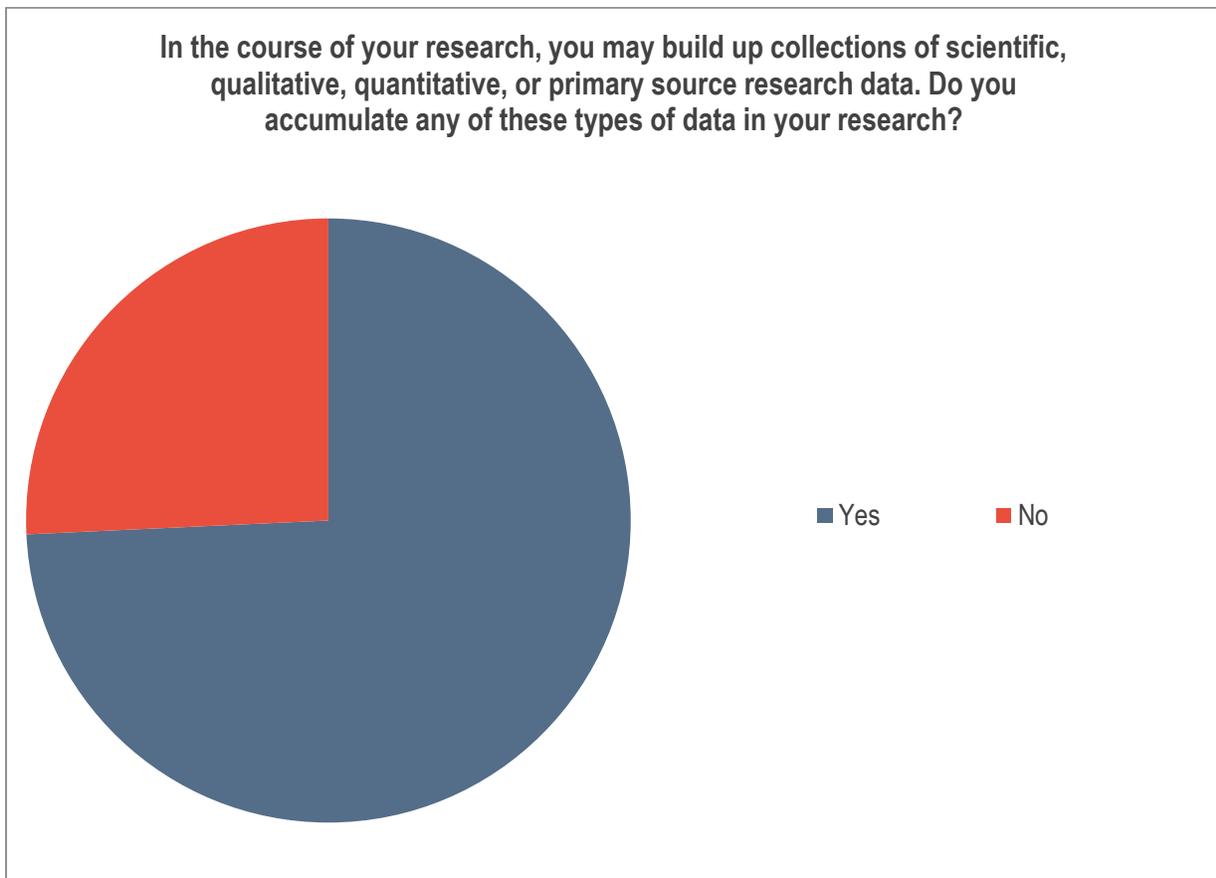
In the course of your research, you may build up collections of scientific, qualitative, quantitative, or primary source research data. Do you accumulate any of these types of data in your research?
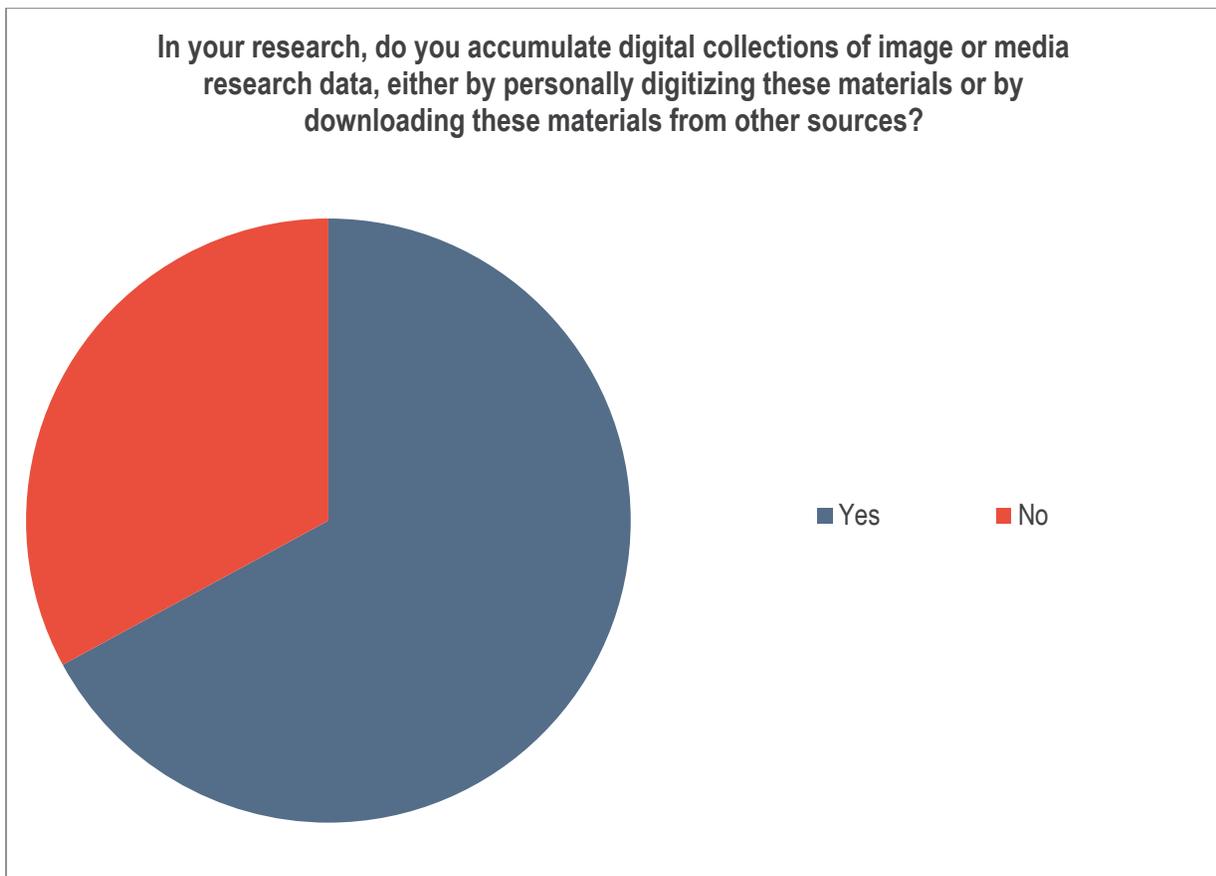
■ Yes ■ No

DATA2

In the course of your research, you may build up digital collections of image or media research data, either by personally digitizing these materials or by downloading these materials from other sources. Do you accumulate any of these types of data in your research? Please select one answer.

	Response	Percent
Yes	324	67.08%
No	159	32.92%
	483	100.00%

In your research, do you accumulate digital collections of image or media research data, either by personally digitizing these materials or by downloading these materials from other sources?
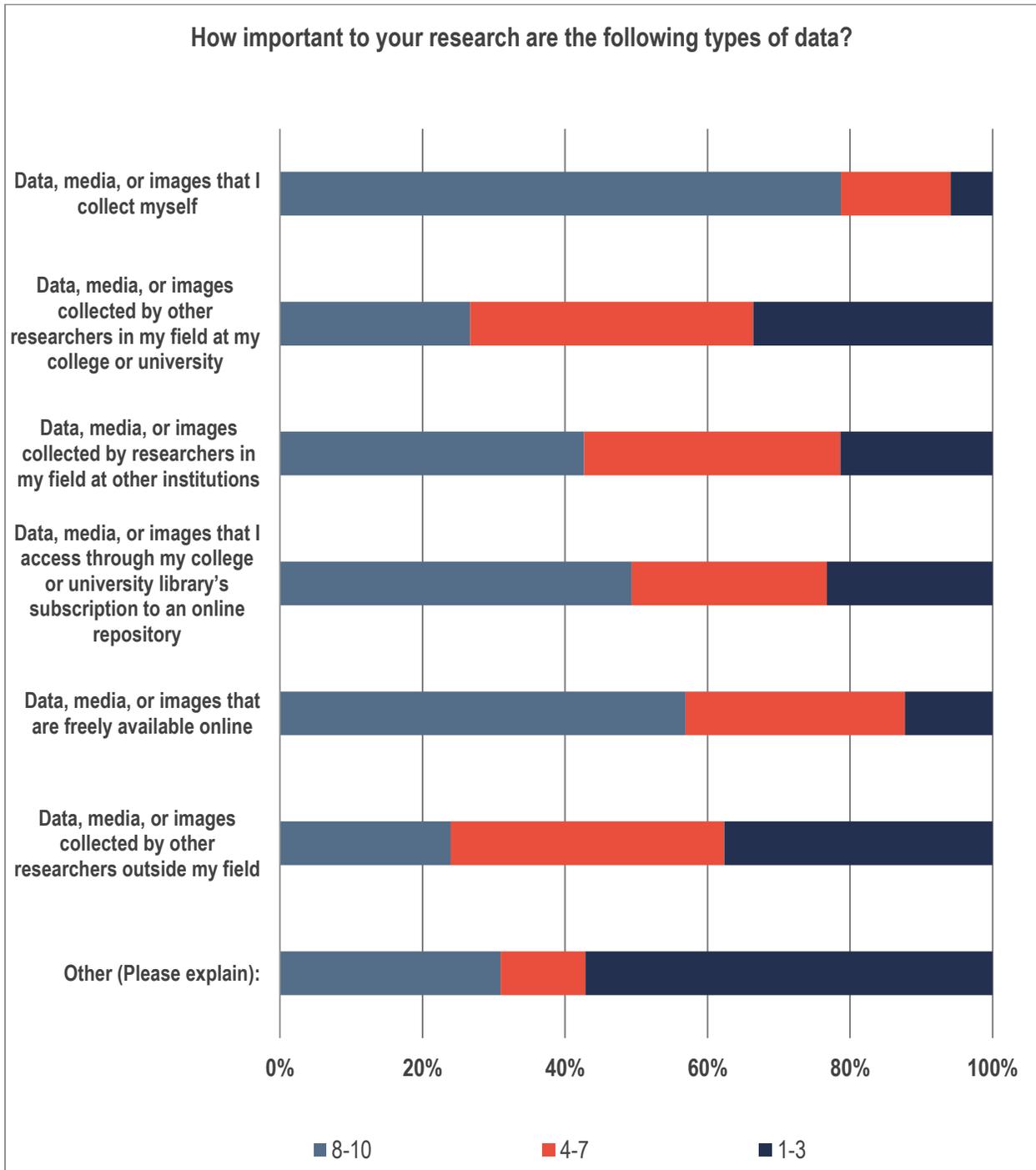

■ Yes   ■ No

DATA3 **[Contingent on DATA1 and DATA2]**
How important to your research are the following types of data? Use the scales below to rate from 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.

	8-10	4-7	1-3	Response
Data, media, or images that I collect myself	78.72%	15.38%	5.90%	390
Data, media, or images collected by other researchers in my field at my college or university	26.67%	39.74%	33.59%	390
Data, media, or images collected by researchers in my field at other institutions	42.67%	35.99%	21.34%	389
Data, media, or images that I access through my college or university library's subscription to an online repository	49.36%	27.37%	23.27%	391
Data, media, or images that are freely available online	56.92%	30.77%	12.31%	390
Data, media, or images collected by other researchers outside my field	23.97%	38.40%	37.63%	388
Other (Please explain):	30.95%	11.90%	57.14%	42

DATA3 [Contingent on DATA1 and DATA2]

How important to your research are the following types of data? Use the scales below to rate from 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.
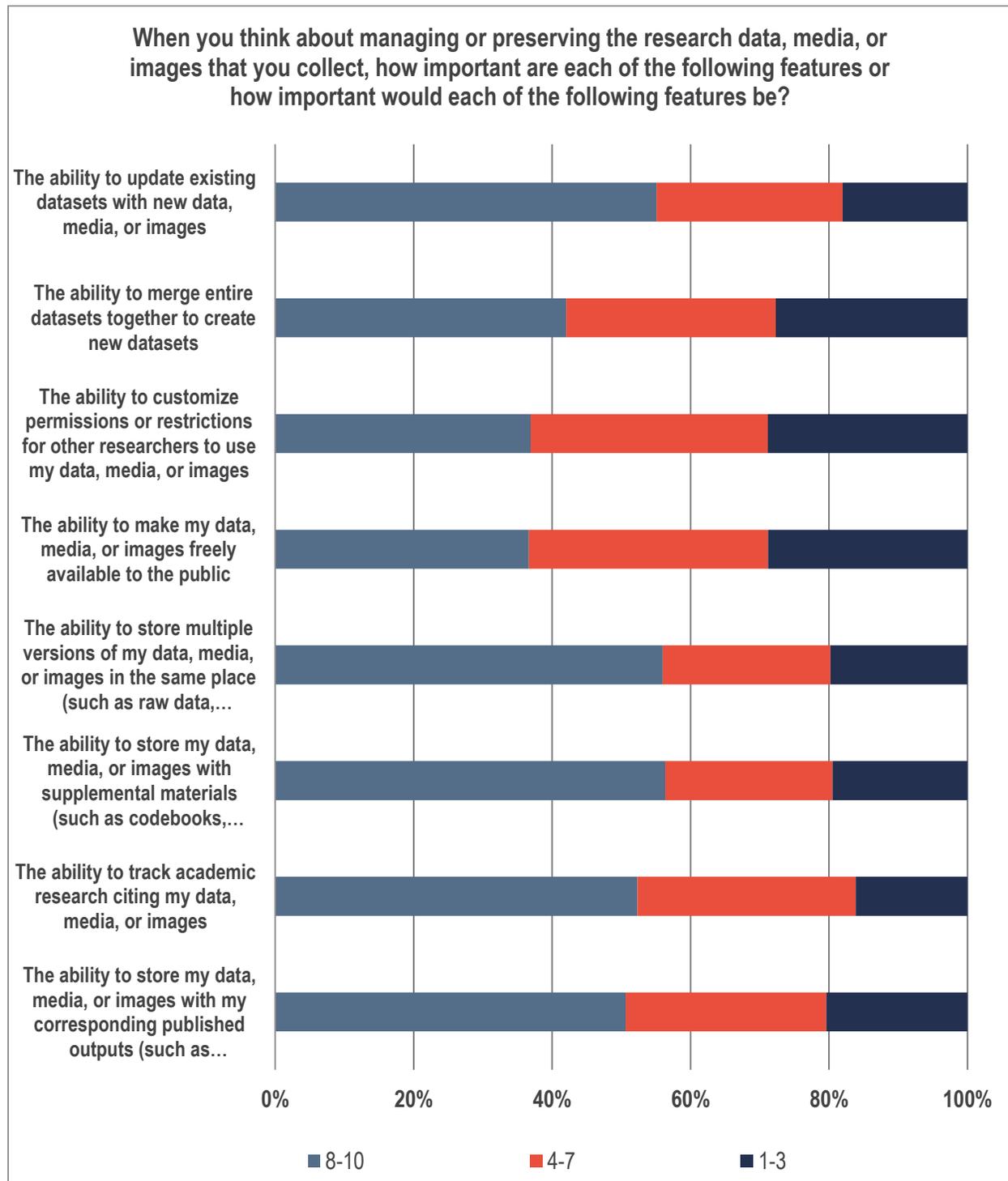
How important to your research are the following types of data?

Category	8-10	4-7	1-3

Data, media, or images that I collect myself

Data, media, or images collected by other researchers in my field at my college or university

Data, media, or images collected by researchers in my field at other institutions

Data, media, or images that I access through my college or university library's subscription to an online repository

Data, media, or images that are freely available online

Data, media, or images collected by other researchers outside my field

Other (Please explain):

Legend: ■ 8-10   ■ 4-7   ■ 1-3

Axis: 0%   20%   40%   60%   80%   100%

DATA4 **[Contingent on DATA1 and DATA2]**

When you think about managing or preserving the research data, media, or images that you collect, how important are each of the following features or how important would each of the following features be? Use the scales below to rate each item 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important".

	8-10	4-7	1-3	Response
The ability to update existing datasets with new data, media, or images	55.09%	26.89%	18.02%	383
The ability to merge entire datasets together to create new datasets	42.04%	30.29%	27.68%	383
The ability to customize permissions or restrictions for other researchers to use my data, media, or images	36.88%	34.29%	28.83%	385
The ability to make my data, media, or images freely available to the public	36.65%	34.55%	28.80%	382
The ability to store multiple versions of my data, media, or images in the same place (such as raw data, normalized data, recoded data, restricted use data, etc.)	55.99%	24.22%	19.79%	384
The ability to store my data, media, or images with supplemental materials (such as codebooks, questionnaires, interview transcripts, software code, etc.)	56.36%	24.16%	19.48%	385
The ability to track academic research citing my data, media, or images	52.34%	31.51%	16.15%	384
The ability to store my data, media, or images with my corresponding published outputs (such as monographs, journal articles, etc.)	50.65%	28.98%	20.37%	383

DATA4 **[Contingent on DATA1 and DATA2]**
When you think about managing or preserving the research data, media, or images that you collect, how important are each of the following features or how important would each of the following features be? Use the scales below to rate each item 10 to 1, where 10 equals "Extremely important" and 1 equals "Not at all important".

When you think about managing or preserving the research data, media, or images that you collect, how important are each of the following features or how important would each of the following features be?
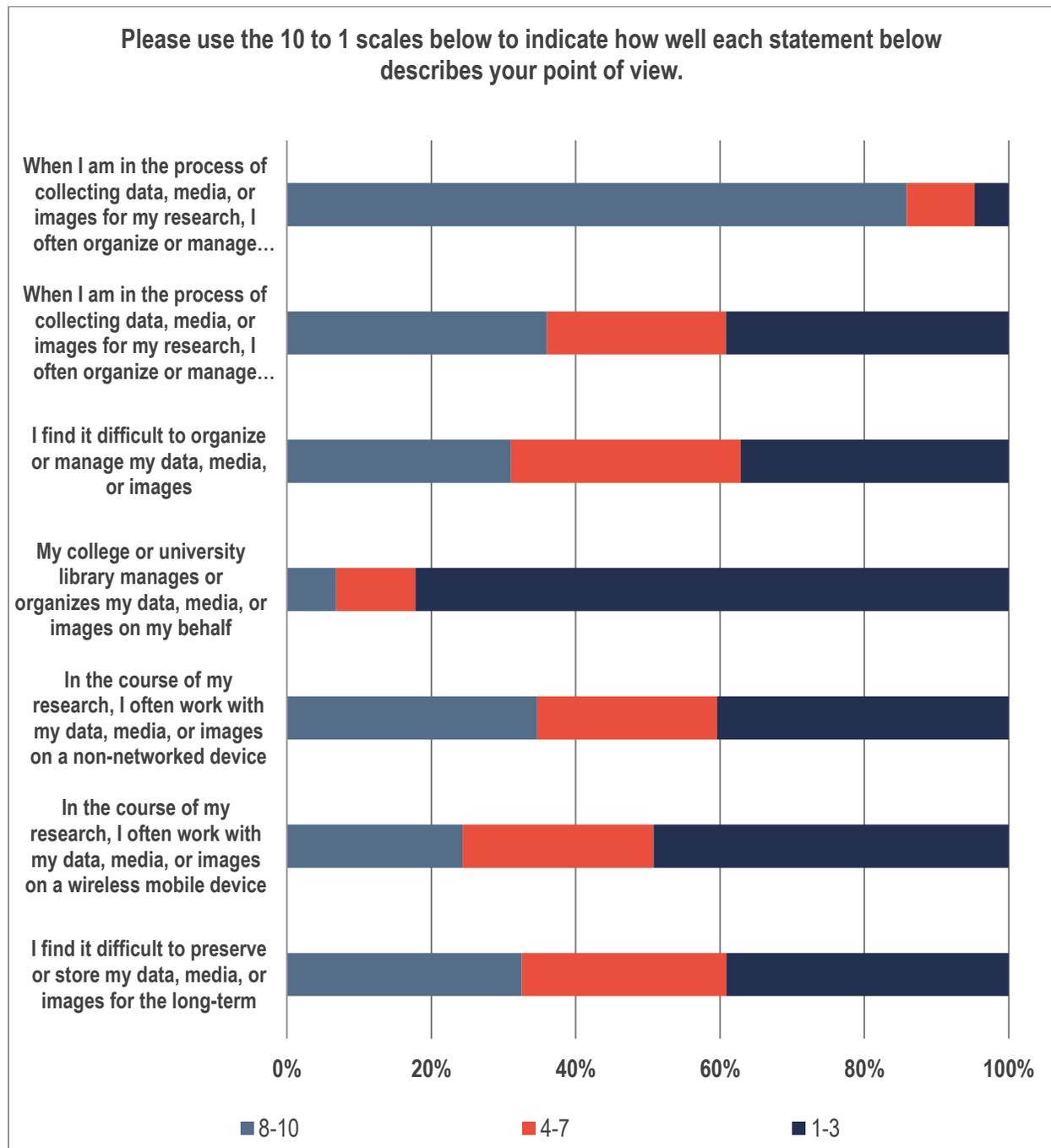
DATA5 [Contingent on DATA1 and DATA2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
When I am in the process of collecting data, media, or images for my research, I often organize or manage these data on my own computer or computers	85.86%	9.42%	4.71%	382
When I am in the process of collecting data, media, or images for my research, I often organize or manage these data on a cloud storage service (such as Google Drive, Dropbox, Flickr, etc.)	36.03%	24.80%	39.16%	383
I find it difficult to organize or manage my data, media, or images	31.05%	31.84%	37.11%	380
My college or university library manages or organizes my data, media, or images on my behalf	6.81%	10.99%	82.20%	382
In the course of my research, I often work with my data, media, or images on a non-networked device	34.65%	24.93%	40.42%	381
In the course of my research, I often work with my data, media, or images on a wireless mobile device	24.35%	26.44%	49.21%	382
I find it difficult to preserve or store my data, media, or images for the long-term	32.55%	28.35%	39.11%	381

DATA5 [Contingent on DATA1 and DATA2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view, where a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.
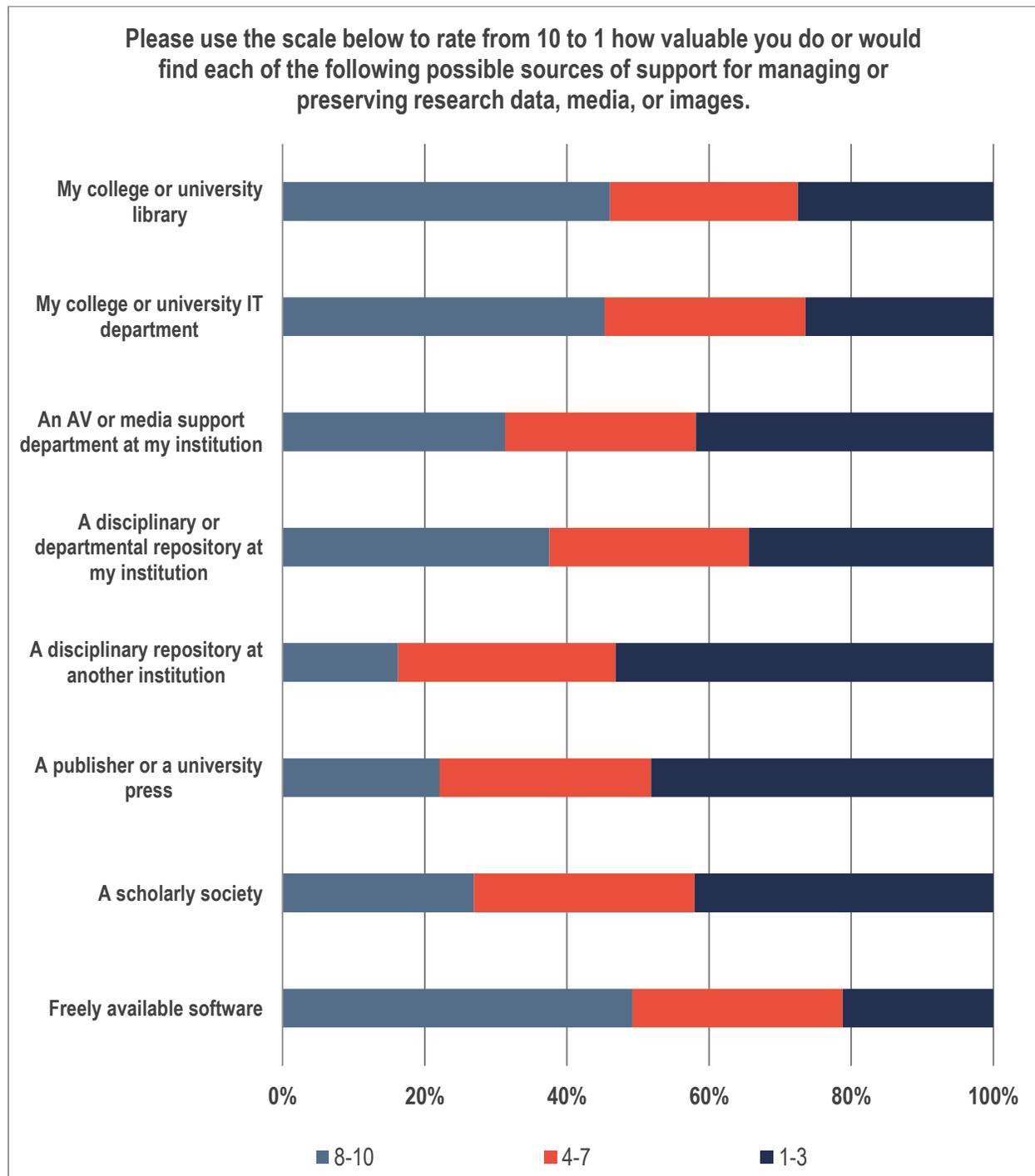
DATA6 [Contingent on DATA1 and DATA2]

Please use the scale below to rate from 10 to 1 how valuable you would find each of the following possible sources of support for managing or preserving research data, media, or images or how valuable you do find each of the following sources of support for managing or preserving research data, media, or images, where 10 equals "Extremely valuable" and 1 equals "Not at all valuable." Please select one answer for each item.

	8-10	4-7	1-3	Response
My college or university library	46.07%	26.44%	27.49%	382
My college or university IT department	45.29%	28.27%	26.44%	382
An AV or media support department at my institution	31.32%	26.84%	41.84%	380
A disciplinary or departmental repository at my institution	37.53%	28.08%	34.38%	381
A disciplinary repository at another institution	16.23%	30.63%	53.14%	382
A publisher or a university press	22.11%	29.74%	48.16%	380
A scholarly society	26.89%	31.07%	42.04%	383
Freely available software	49.21%	29.58%	21.20%	382

DATA6 [Contingent on DATA1 and DATA2]

Please use the scale below to rate from 10 to 1 how valuable you would find each of the following possible sources of support for managing or preserving research data, media, or images or how valuable you do find each of the following sources of support for managing or preserving research data, media, or images, where 10 equals "Extremely valuable" and 1 equals "Not at all valuable." Please select one answer for each item.

Please use the scale below to rate from 10 to 1 how valuable you do or would find each of the following possible sources of support for managing or preserving research data, media, or images.

Source	8-10	4-7	1-3
My college or university library			
My college or university IT department			
An AV or media support department at my institution			
A disciplinary or departmental repository at my institution			
A disciplinary repository at another institution			
A publisher or a university press			
A scholarly society			
Freely available software			

DATA7 **[Contingent on DATA1 and DATA2] [Multiple selections possible]**
If these collections or sets of research data are preserved following the conclusion of the projects, what methods are used to preserve them? Please select each method by which they are preserved or indicate that they are not preserved.

	Response	Percent
I preserve these materials myself, using commercially or freely available software or services	304	80.00%
I preserve these materials myself in a repository made available by my institution or another type of online repository	121	31.84%
My campus or university library preserves these materials on my behalf	20	5.26%
A publisher preserves these materials on my behalf alongside the final research output	37	9.74%
These materials are generally not preserved following the conclusion of a project	50	13.16%
	532	

If these collections or sets of research data are preserved following the conclusion of the projects, what methods are used to preserve them?

Scholarly Communication Services

SC1
Are any of the following types of your scholarly research available online for free (such as via your personal webpage or an open access repository)?

SC2 **[Contingent on SC1]**
Is your scholarly research hosted online at your institutional repository (Digital Repository @ Iowa State University), an open access disciplinary repository (such as PubMed, SSRN, etc.), or is your scholarly research freely available elsewhere (such as your personal webpage)? For each of the type(s) of scholarly work(s) listed below, please select all hosting sources that apply:

SC3
How useful is it to you personally that your college or university provides each of the services listed below? If one or more services are not currently provided, please indicate how useful it would be to you personally if your college or university provided the service(s).

SC4
Have you ever negotiated with a publisher to modify the copyright terms of your author agreement(s)?

SC5 **[Contingent on SC4]**
Please select the statement from the following list that best describes your point of view about negotiating copyright terms with publishers, or explain your point of view about negotiating copyright terms with publishers in the "other" option:

SC6 **[Contingent on SC4]**
Have you ever gone to any of the following sources for assistance with negotiating author agreements or determining how to license your scholarly publications?

SC7
How would you rate your personal understanding of your institution's policy or stance on publishing journal articles via a freely available repository? Please use the scale below to rate from 6 to 1, where 6 equals "Have a very good understanding" and 1 equals "Do not understand at all."

SC8

To what extent do you support or oppose your institution or university system requiring that each of the following types of scholarly research outputs be made freely available online (i.e., via an open access repository or database)? Please use the scale below to rate from 6 to 1, where 6 equals "Highly support" and 1 equals "Highly oppose."

SC9

Have you ever received or are you currently receiving extramural funding for your scholarly research from a public or government grant-making organization (such as the NSF, NIH, NEH, etc.)?
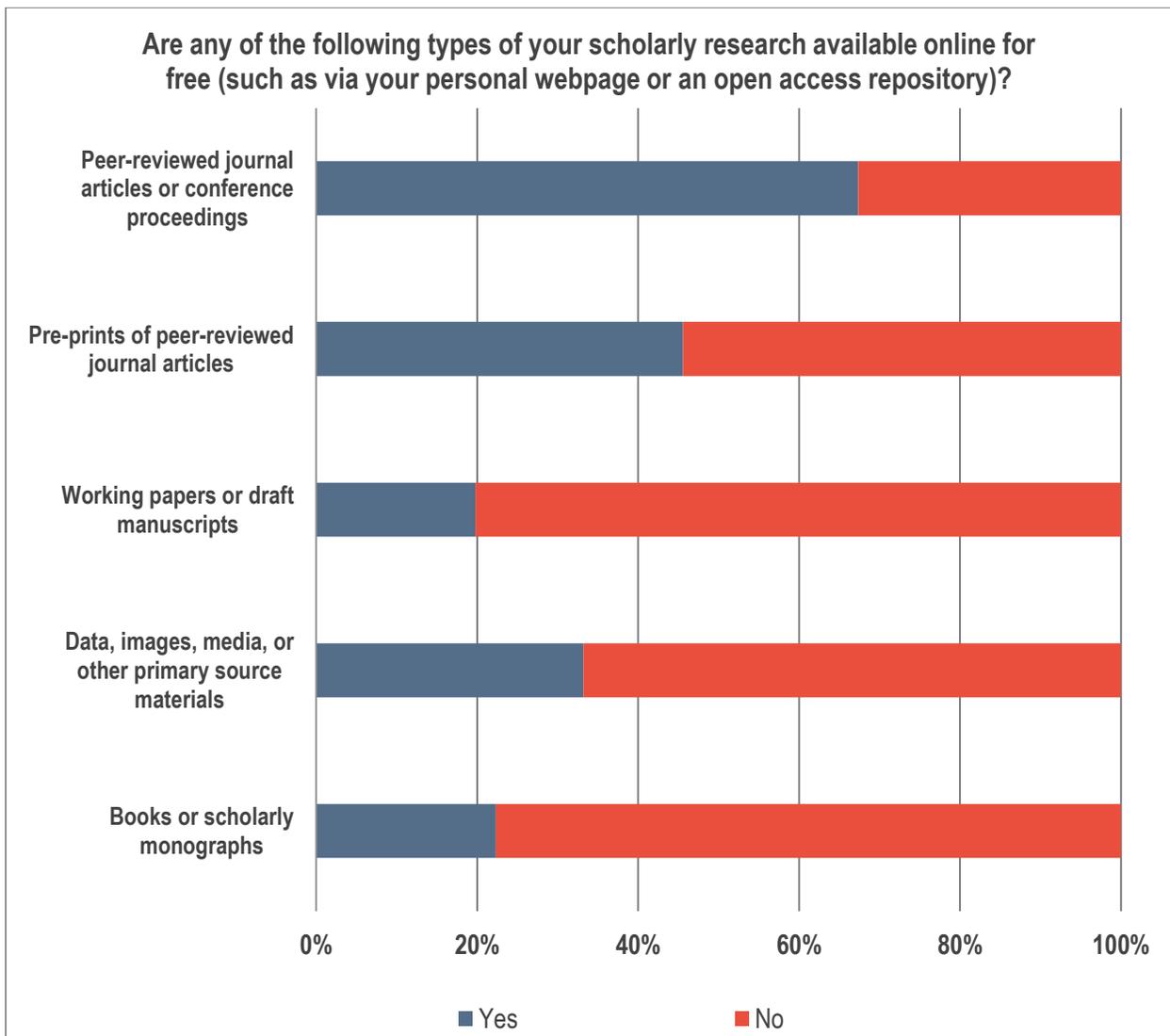
SC10

To what extent do you support or oppose the federal policy mandating that publicly funded scholarly research and/or data be made freely available online (i.e., via an open access repository or database)? Please use the scale below to rate from 6 to 1, where 6 equals "Highly support" and 1 equals "Highly oppose."

SC1

Are any of the following types of your scholarly research available online for free (such as via your personal webpage or an open access repository)?
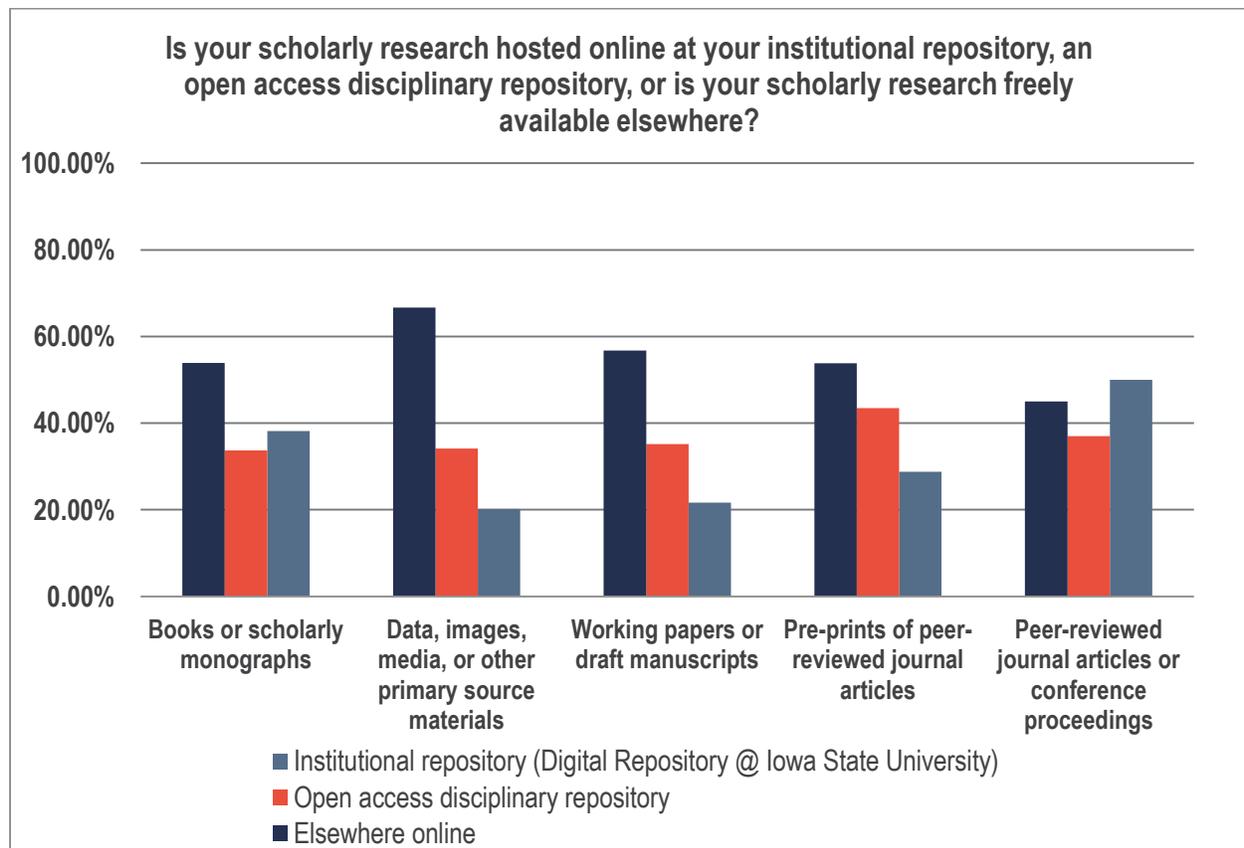
	Yes	No	Response
Peer-reviewed journal articles or conference proceedings	67.36%	32.64%	478
Pre-prints of peer-reviewed journal articles	45.57%	54.43%	474
Working papers or draft manuscripts	19.79%	80.21%	475
Data, images, media, or other primary source materials	33.19%	66.81%	476
Books or scholarly monographs	22.32%	77.68%	475

Are any of the following types of your scholarly research available online for free (such as via your personal webpage or an open access repository)?

SC2 **[Contingent on SC1]**

Is your scholarly research hosted online at your institutional repository (Digital Repository @ Iowa State University), an open access disciplinary repository (such as PubMed, SSRN, etc.), or is your scholarly research freely available elsewhere (such as your personal webpage)? For each of the type(s) of scholarly work(s) listed below, please select all hosting sources that apply:

	Institutional repository (Digital Repository @ Iowa State University)	Open access disciplinary repository	Elsewhere online	Response
Peer-reviewed journal articles or conference proceedings	50.00%	37.00%	45.00%	396
Pre-prints of peer-reviewed journal articles	28.80%	43.48%	53.80%	232
Working papers or draft manuscripts	21.62%	35.14%	56.76%	84
Data, images, media, or other primary source materials	20.16%	34.11%	66.67%	156
Books or scholarly monographs	38.20%	33.71%	53.93%	112

Is your scholarly research hosted online at your institutional repository, an open access disciplinary repository, or is your scholarly research freely available elsewhere?

SC3

How useful is it to you personally that your college or university provides each of the services listed below? If one or more services are not currently provided, please indicate how useful it would be to you personally if your college or university provided the service(s).

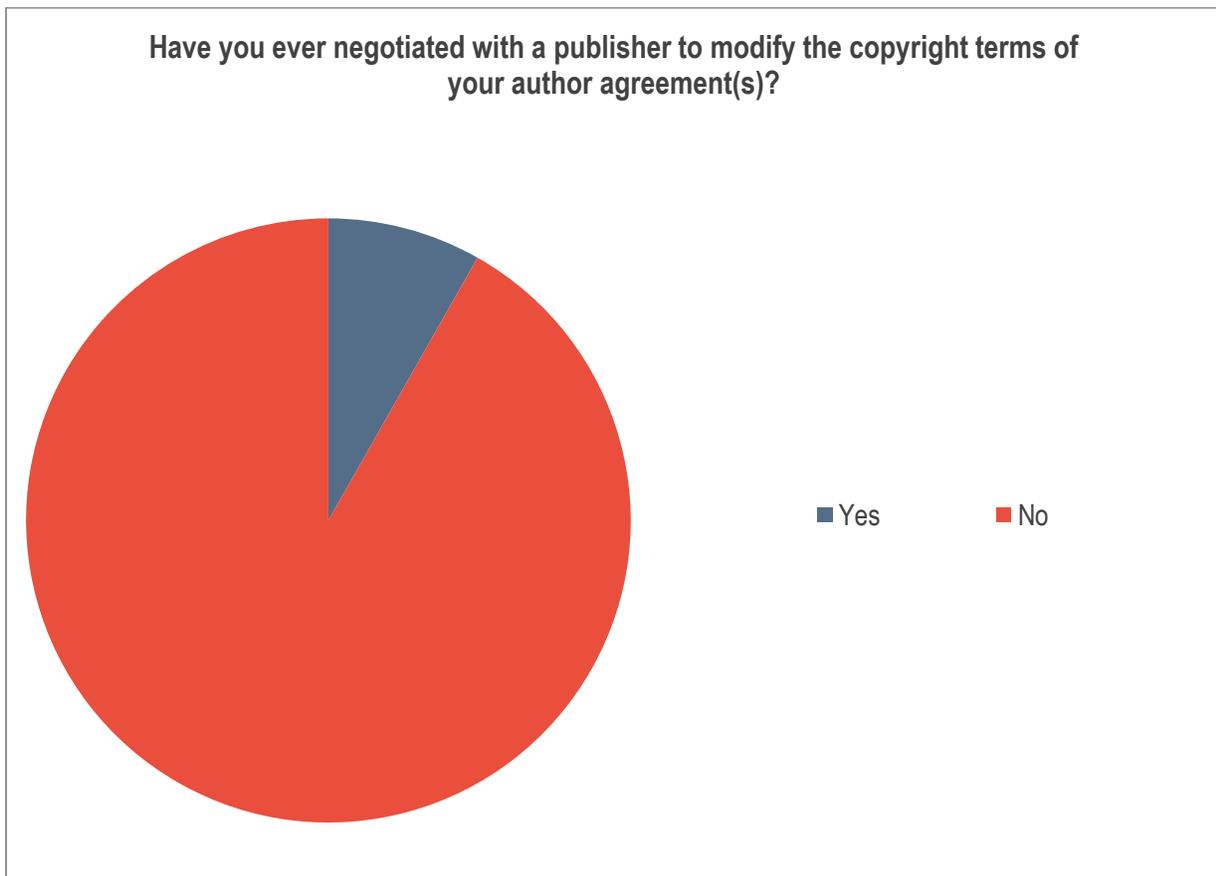|	Very useful	Somewhat useful	Not too useful	Not useful at all	Response
Consultation on or review of author agreement terms	21.24%	34.33%	30.26%	14.16%	466
Advice about intellectual property or author's rights issues (such as retaining copyrights for your publications or fair use of copyrighted works)	31.26%	39.40%	18.63%	10.71%	467
Data management, preservation, or storage planning	30.75%	37.20%	20.65%	11.40%	465
Online guides or tutorials about copyright or intellectual property issues	25.54%	40.56%	23.39%	10.52%	466
Assistance with depositing your scholarly research in Digital Repository @ Iowa State University or an open access disciplinary repository (such as PubMed, SSRN, etc.)	35.97%	34.69%	17.99%	11.35%	467
Workshops or seminars on copyright or intellectual property issues tailored for your department or field	20.39%	37.12%	26.39%	16.09%	466
Advice about open access publishing options tailored for your department or field	23.01%	40.00%	23.01%	13.98%	465
Assistance with obtaining permission(s) to use copyrighted works for instructional purposes	37.93%	38.79%	14.44%	8.84%	464
Identifying publishers that are willing to comply with open access policies mandated by your institution and/or funding source (such as research funded by the NIH, NSF, NEH, etc.)	30.11%	33.98%	21.94%	13.98%	465

SC3

How useful is it to you personally that your college or university provides each of the services listed below? If one or more services are not currently provided, please indicate how useful it would be to you personally if your college or university provided the service(s).

How useful is it to you personally that your college or university provides each of the services listed below?

SC4
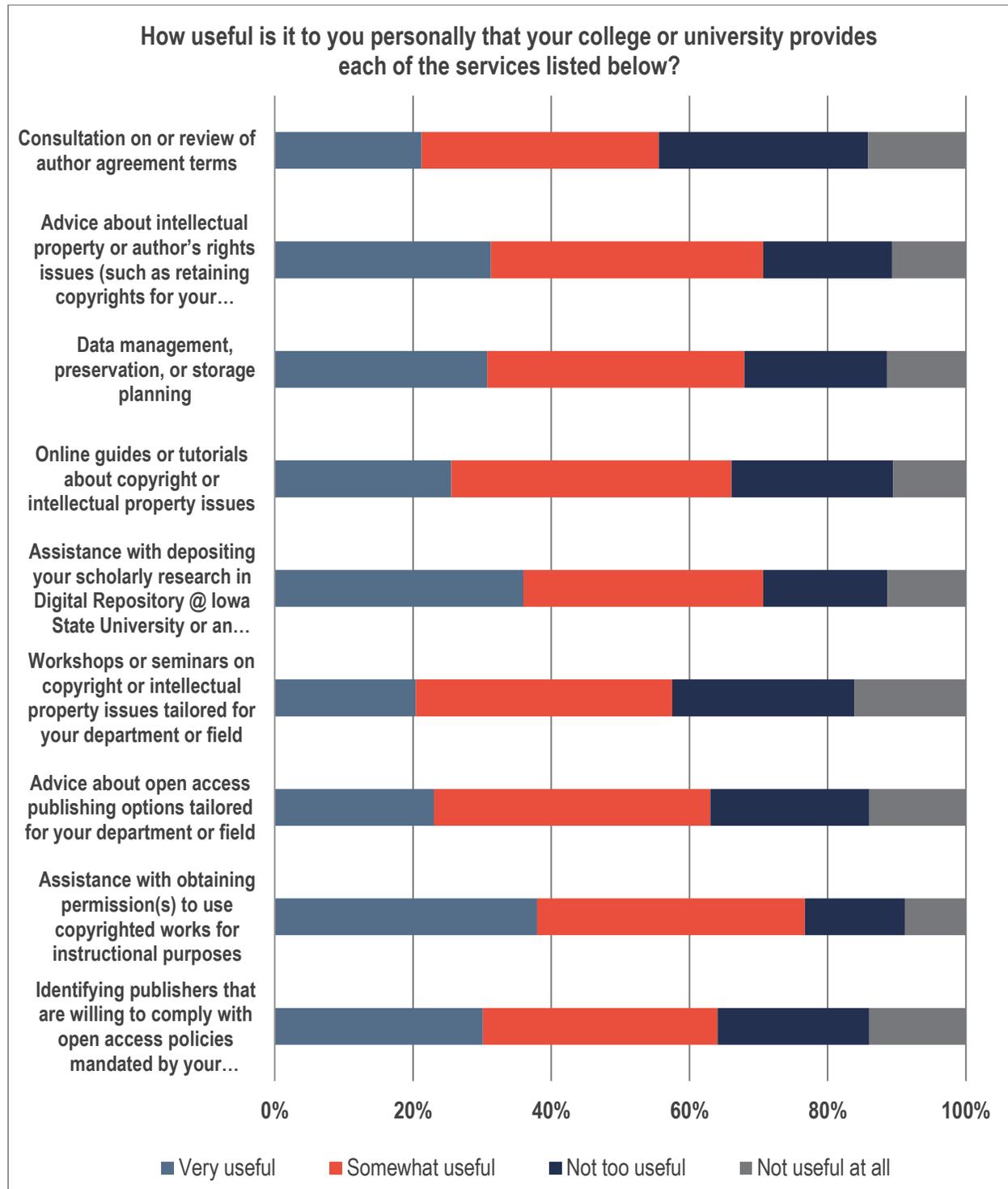
Have you ever negotiated with a publisher to modify the copyright terms of your author agreement(s)?

	Response	Percent
Yes	39	8.21%
No	436	91.79%
	475	100.00%

Have you ever negotiated with a publisher to modify the copyright terms of your author agreement(s)?
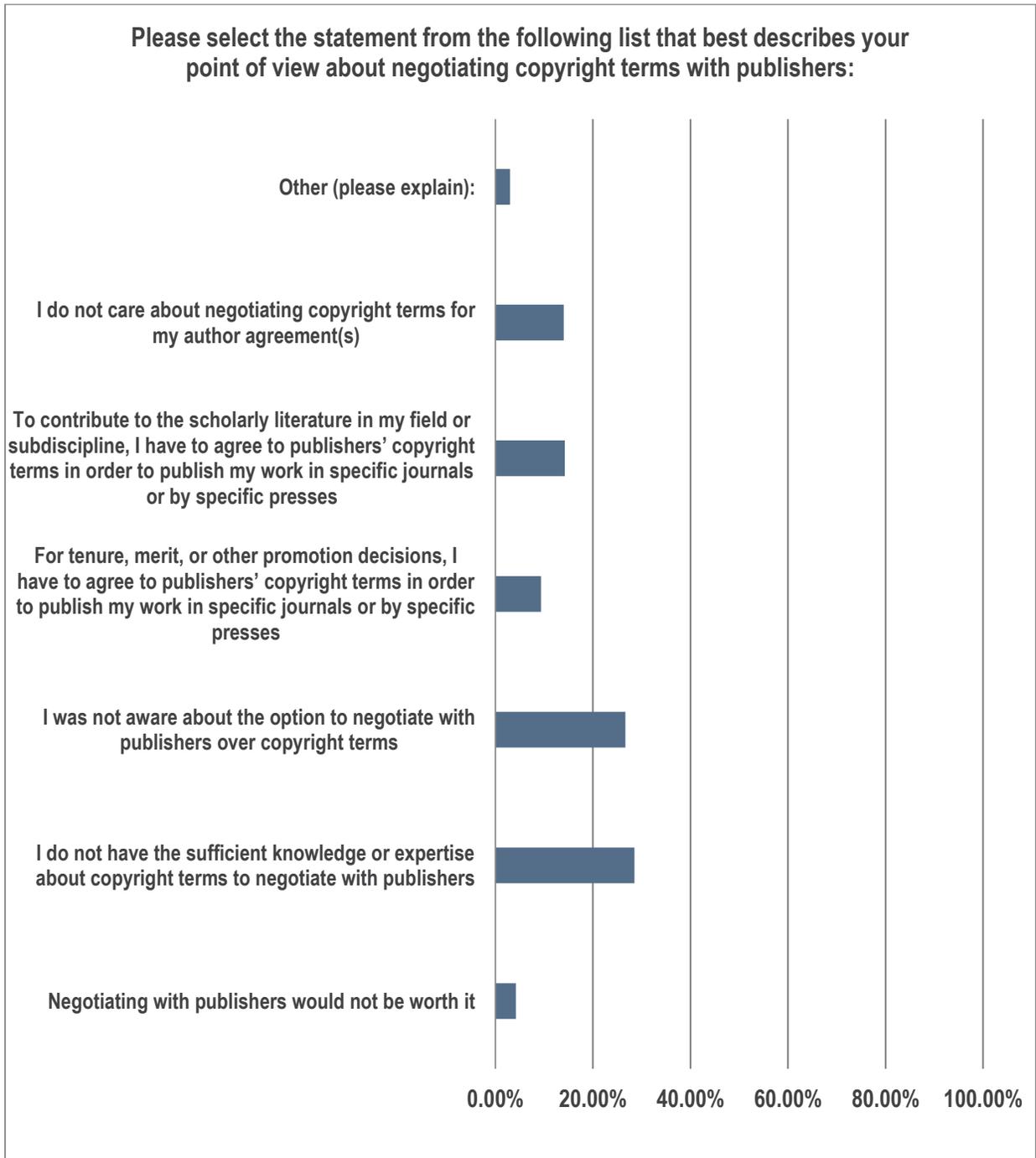

Yes   No

SC5 **[Contingent on SC4]**
Please select the statement from the following list that best describes your point of view about negotiating copyright terms with publishers, or explain your point of view about negotiating copyright terms with publishers in the "other" option:

	Response	Percent
Negotiating with publishers would not be worth it	18	4.21%
I do not have the sufficient knowledge or expertise about copyright terms to negotiate with publishers	122	28.50%
I was not aware about the option to negotiate with publishers over copyright terms	114	26.64%
For tenure, merit, or other promotion decisions, I have to agree to publishers' copyright terms in order to publish my work in specific journals or by specific presses	40	9.35%
To contribute to the scholarly literature in my field or subdiscipline, I have to agree to publishers' copyright terms in order to publish my work in specific journals or by specific presses	61	14.25%
I do not care about negotiating copyright terms for my author agreement(s)	60	14.02%
Other (please explain):	13	3.04%
	428	100.00%

SC5 [Contingent on SC4]

Please select the statement from the following list that best describes your point of view about negotiating copyright terms with publishers, or explain your point of view about negotiating copyright terms with publishers in the "other" option:

Please select the statement from the following list that best describes your point of view about negotiating copyright terms with publishers:

SC6 [Contingent on SC4]

Have you ever gone to any of the following sources for assistance with negotiating author agreements or determining how to license your scholarly publications?

	Yes	No	Response
A campus librarian	15.79%	84.21%	38
My publisher	72.97%	27.03%	37
A campus attorney or legal counsel	23.68%	76.32%	38
A colleague or colleagues in my department	44.74%	55.26%	38
A colleague or colleagues outside my department	42.11%	57.89%	38
Web-based resources (such as online guides or tutorials)	36.84%	63.16%	38
Other (please fill in):	16.67%	83.33%	12

SC6 [Contingent on SC4]

Have you ever gone to any of the following sources for assistance with negotiating author agreements or determining how to license your scholarly publications?
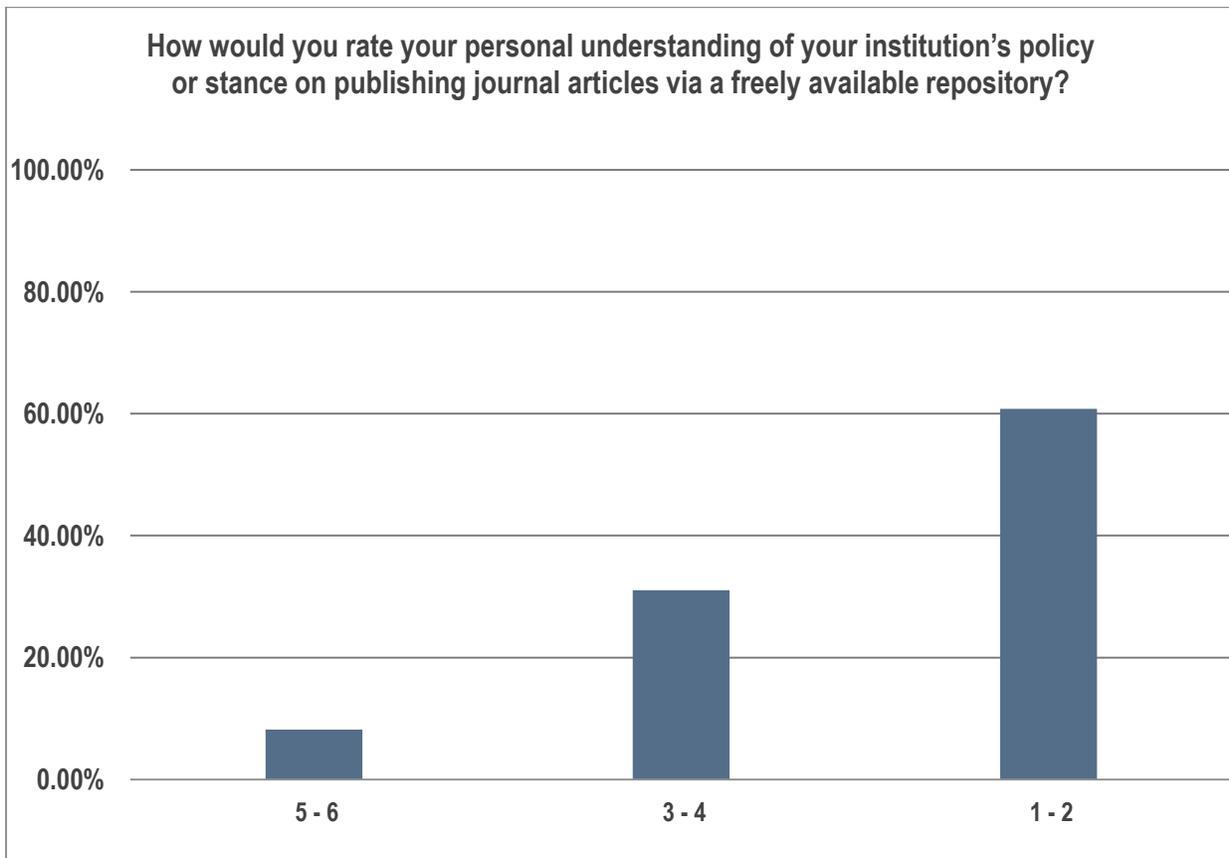
Have you ever gone to any of the following sources for assistance with negotiating author agreements or determining how to license your scholarly publications?

■ Yes   ■ No

SC7
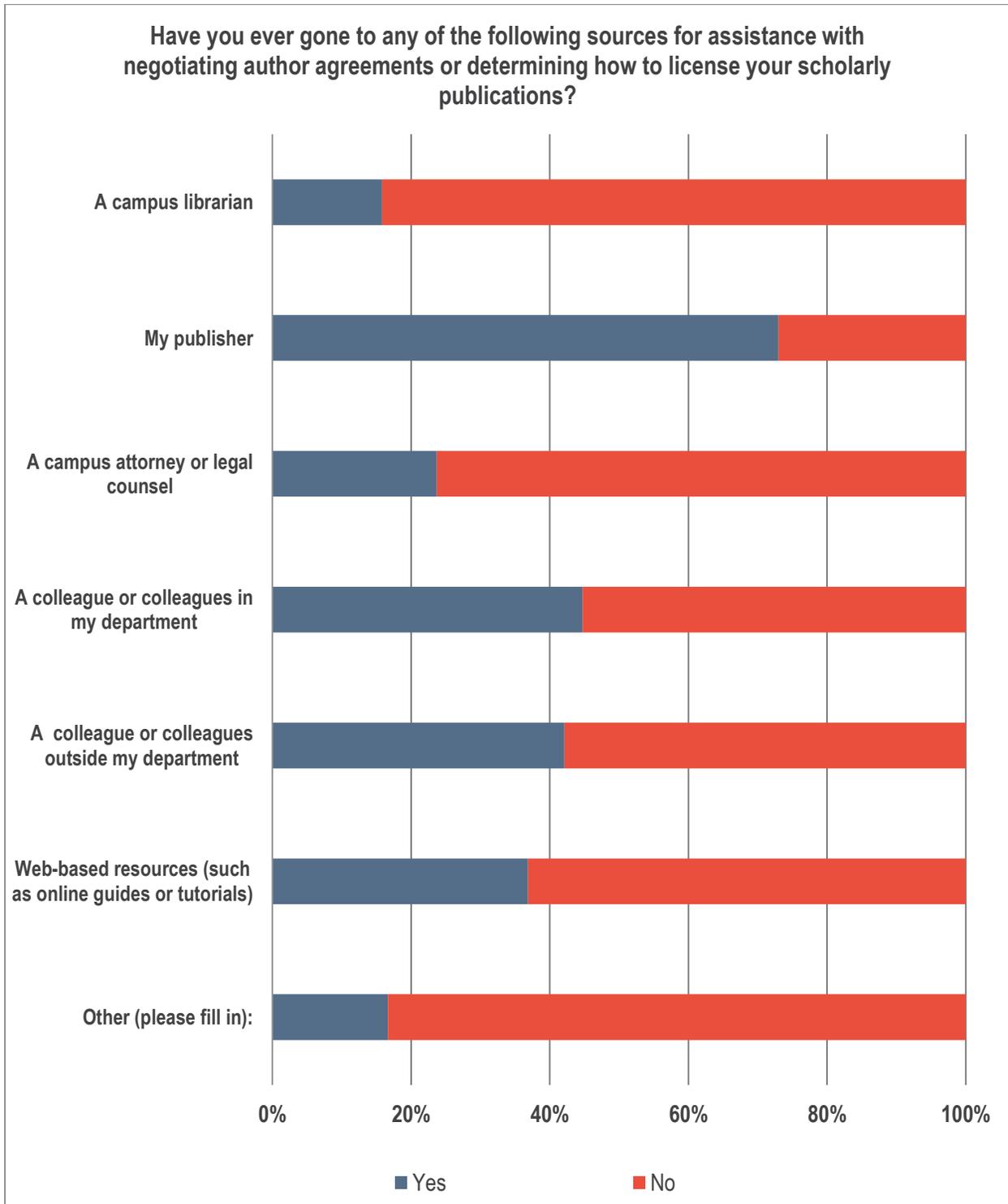
How would you rate your personal understanding of your institution's policy or stance on publishing journal articles via a freely available repository? Please use the scale below to rate from 6 to 1, where 6 equals "Have a very good understanding" and 1 equals "Do not understand at all."
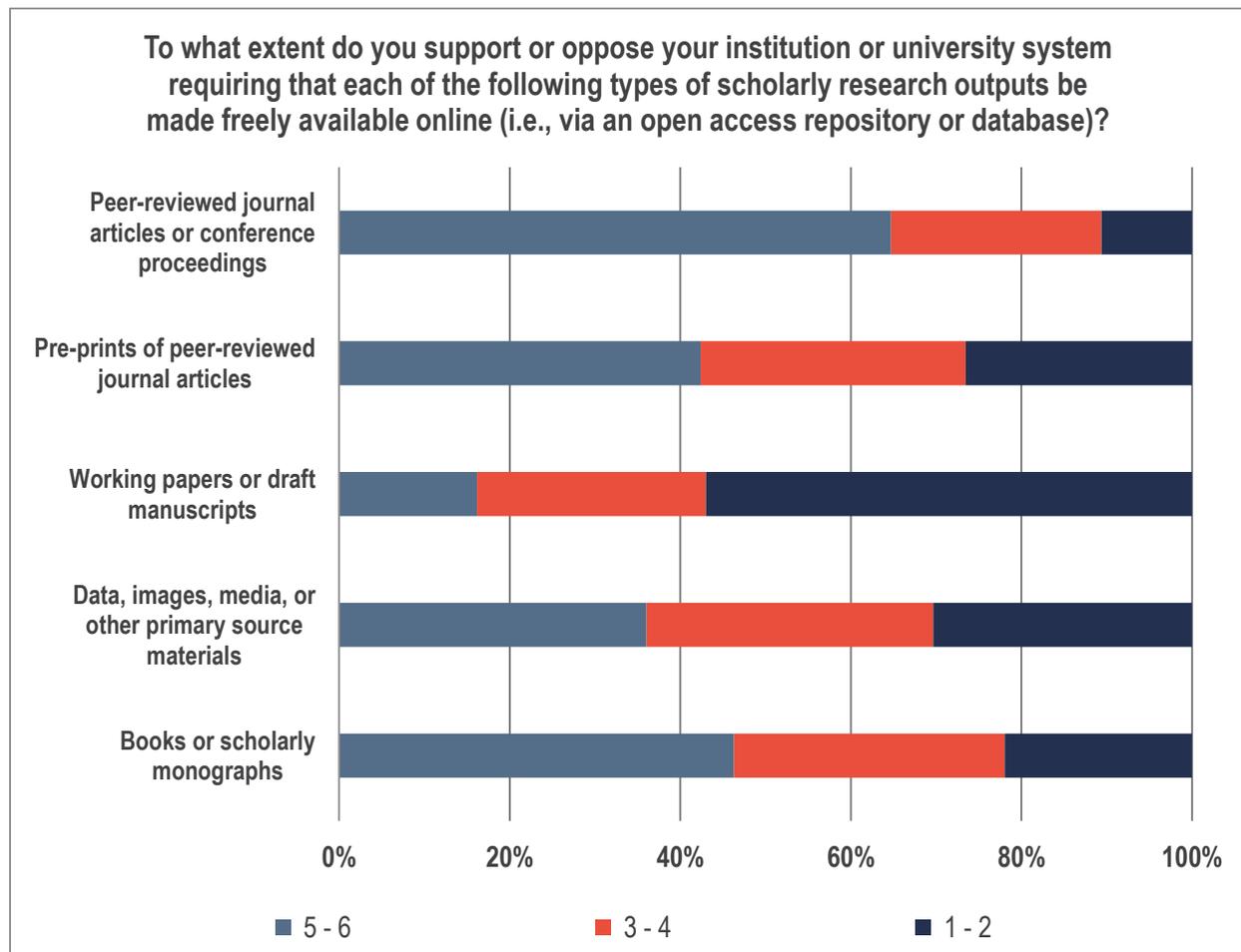
	Response	Percent
5 - 6	38	8.19%
3 - 4	144	31.03%
1 - 2	282	60.78%
	464	100.00%

How would you rate your personal understanding of your institution's policy or stance on publishing journal articles via a freely available repository?

SC8

To what extent do you support or oppose your institution or university system requiring that each of the following types of scholarly research outputs be made freely available online (i.e., via an open access repository or database)? Please use the scale below to rate from 6 to 1, where 6 equals "Highly support" and 1 equals "Highly oppose."
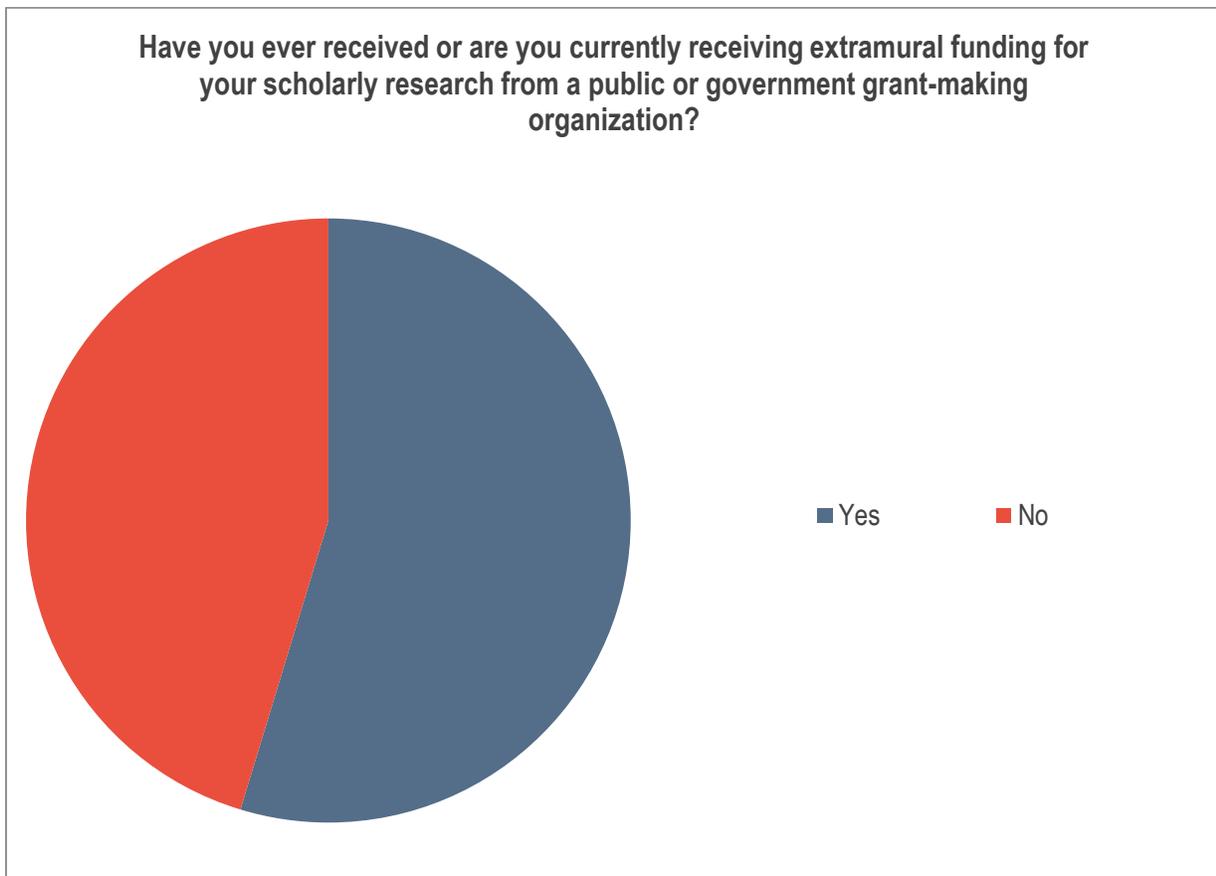
	5-6	3-4	1-2	Response
Peer-reviewed journal articles or conference proceedings	64.72%	24.68%	10.61%	462
Pre-prints of peer-reviewed journal articles	42.39%	31.09%	26.52%	460
Working papers or draft manuscripts	16.16%	26.86%	56.99%	458
Data, images, media, or other primary source materials	36.03%	33.62%	30.35%	458
Books or scholarly monographs	46.30%	31.74%	21.96%	460

To what extent do you support or oppose your institution or university system requiring that each of the following types of scholarly research outputs be made freely available online (i.e., via an open access repository or database)?

SC9

Have you ever received or are you currently receiving extramural funding for your scholarly research from a public or government grant-making organization (such as the NSF, NIH, NEH, etc.)?

	Response	Percent
Yes	256	54.70%
No	212	45.30%
	468	100.00%

Have you ever received or are you currently receiving extramural funding for your scholarly research from a public or government grant-making organization?

■ Yes   ■ No

SC10
To what extent do you support or oppose the federal policy mandating that publicly funded scholarly research and/or data be made freely available online (i.e., via an open access repository or database)? Please use the scale below to rate from 6 to 1, where 6 equals "Highly support" and 1 equals "Highly oppose."

	Response	Percent
5 - 6	296	63.11%
3 - 4	133	28.36%
1 - 2	40	8.53%
	469	100.00%

To what extent do you support or oppose the federal policy mandating that publicly funded scholarly research and/or data be made freely available online?
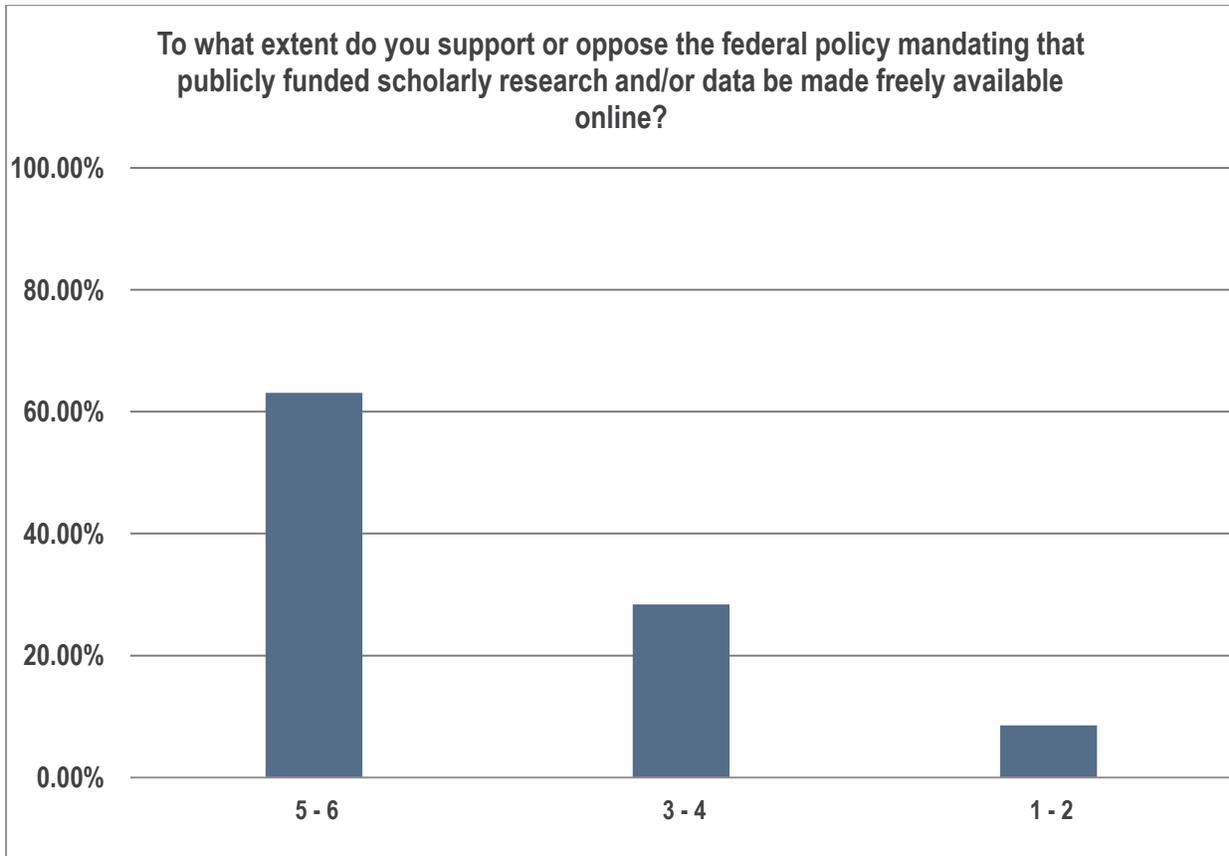
Role of the Library

ROL1

How dependent would you say you are on your college or university library for research you conduct? Please rate from 10 to 1 where 10 equals "Completely dependent" and 1 equals "Not at all dependent."

ROL2

How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? Please use the scales below to rate from 6 to 1, where 6 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.

ROL3

Some libraries offer a range of digital services, like resources and facilities for instructional design, media creation, video editing, and more. How important is it to you that your library offers these digital services? Please use the scales below to rate from 6 to 1, where 6 equals "Extremely important" and 1 equals "Not at all important."

ROL4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

ROL1

How dependent would you say you are on your college or university library for research you conduct? Please rate from 10 to 1 where 10 equals "Completely dependent" and 1 equals "Not at all dependent."

	Response	Percent
8 - 10	257	55.99%
4 - 7	143	31.15%
1 - 3	59	12.85%
	459	100.00%
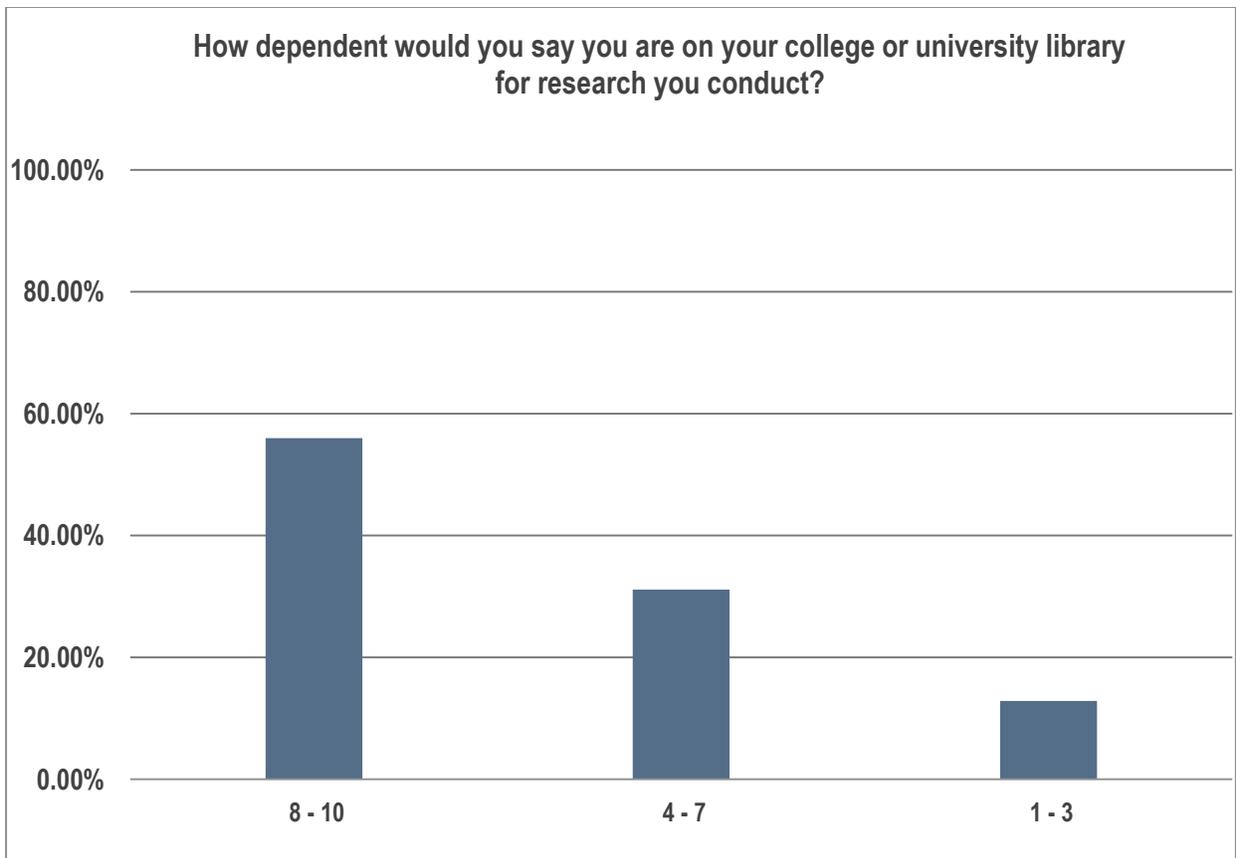
How dependent would you say you are on your college or university library for research you conduct?

ROL2
How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? Please use the scales below to rate from 6 to 1, where 6 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.

	5-6	3-4	1-2	Response
The library serves as a starting point or "gateway" for locating information for my research	66.88%	22.51%	10.61%	462
The library pays for resources I need, from academic journals to books to electronic databases	87.45%	10.61%	1.95%	462
The library serves as a repository of resources - in other words, it archives, preserves, and keeps track of resources	68.25%	21.81%	9.94%	463
The library supports and facilitates my teaching activities	52.49%	30.37%	17.14%	461
The library provides active support that helps to increase the productivity of my research and scholarship	56.18%	31.02%	12.80%	461
The library helps undergraduates develop research, critical analysis, and information literacy skills	60.22%	29.57%	10.22%	460

ROL2

How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below? Please use the scales below to rate from 6 to 1, where 6 equals "Extremely important" and 1 equals "Not at all important." Please select one answer for each item.

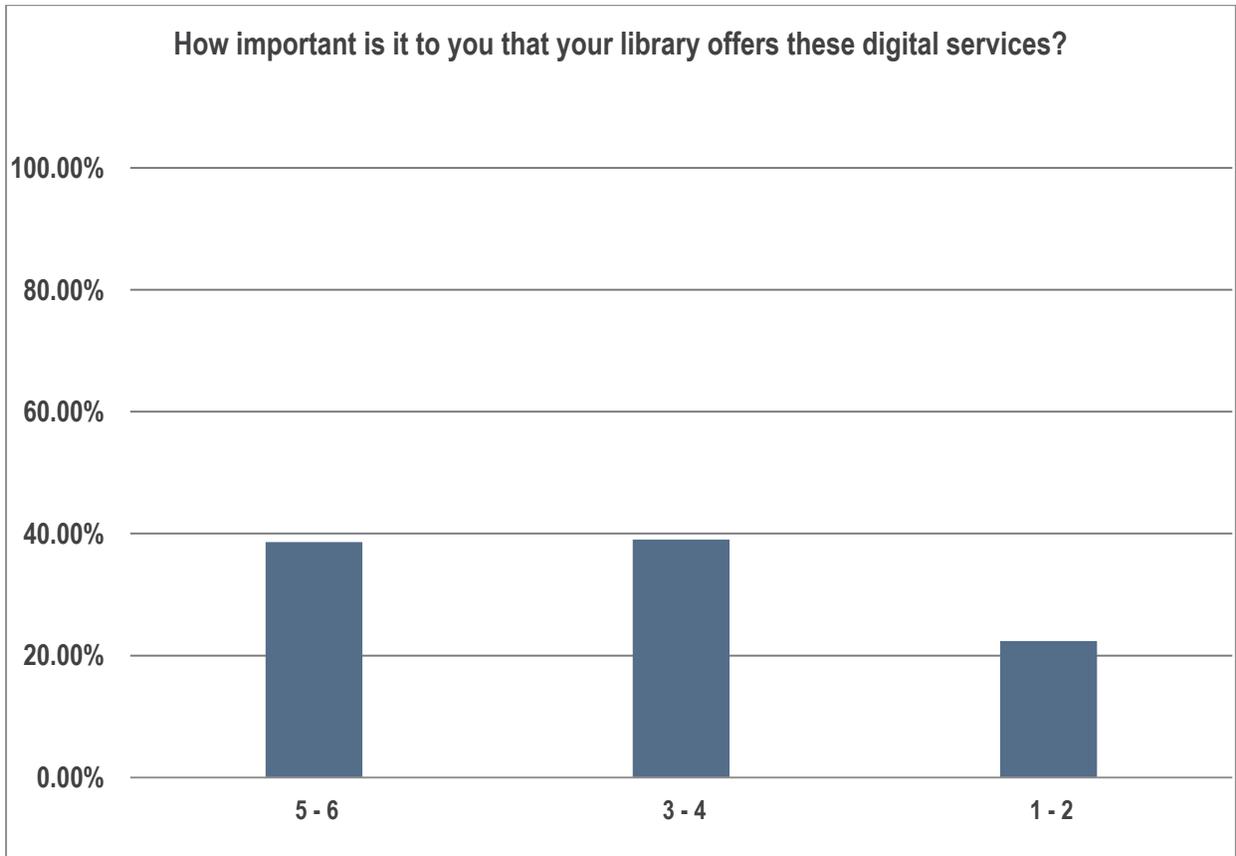**How important is it to you that your college or university library provides each of the functions below or serves in the capacity listed below?**
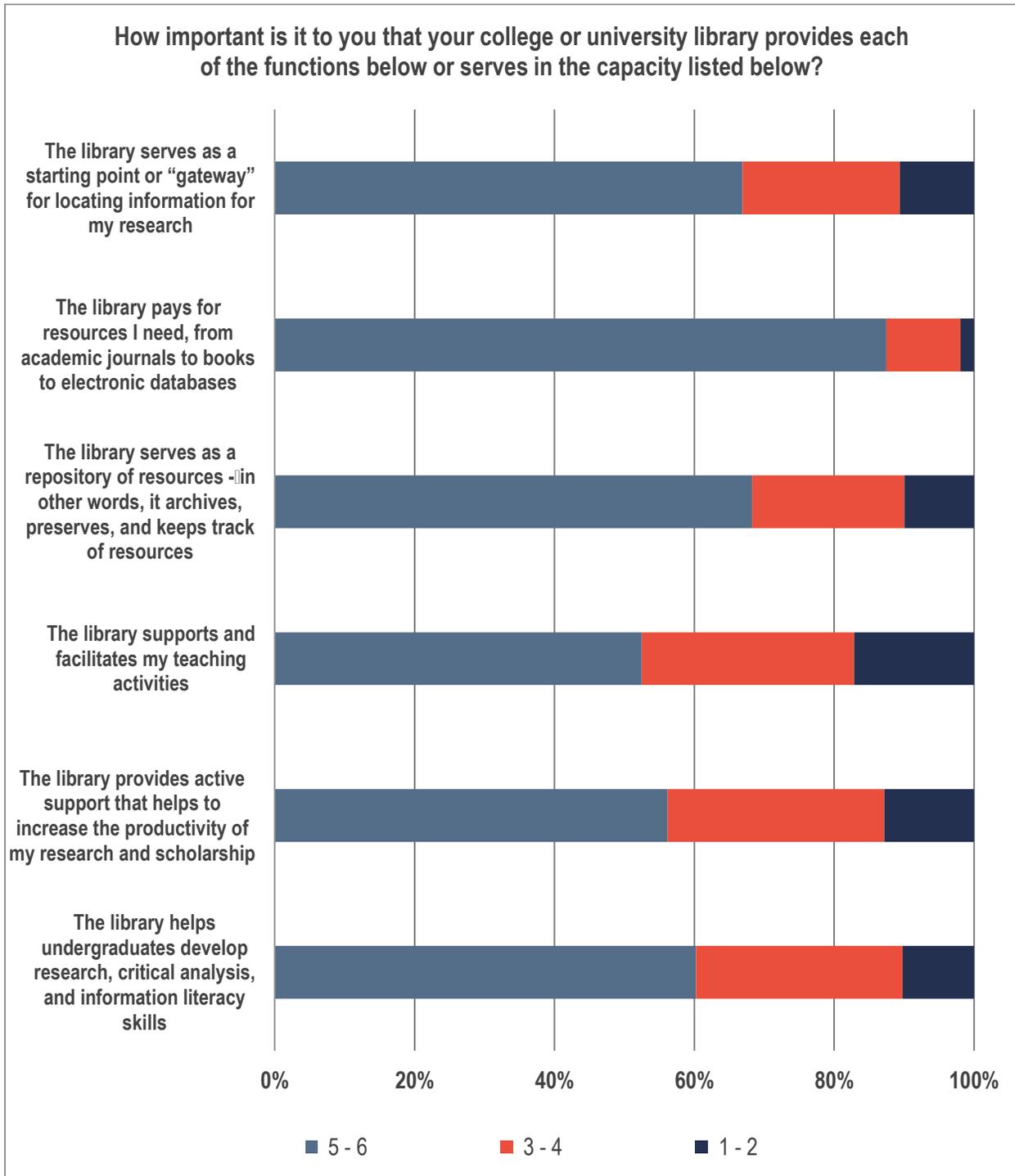
ROL3
Some libraries offer a range of digital services, like resources and facilities for instructional design, media creation, video editing, and more. How important is it to you that your library offers these digital services? Please use the scales below to rate from 6 to 1, where 6 equals "Extremely important" and 1 equals "Not at all important."

	Response	Percent
5 - 6	176	38.60%
3 - 4	178	39.04%
1 - 2	102	22.37%
	456	100.00%

How important is it to you that your library offers these digital services?
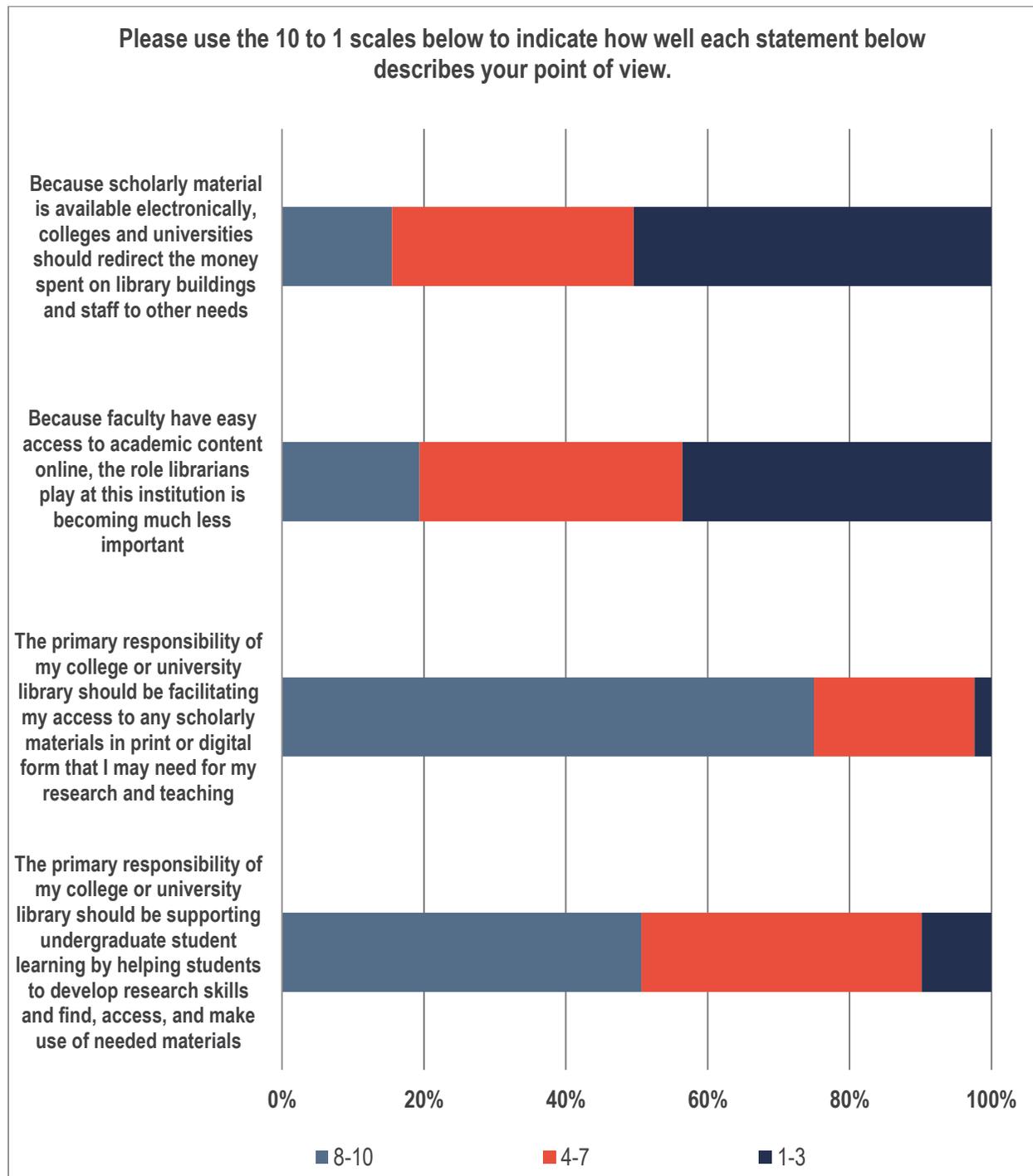
ROL4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
Because scholarly material is available electronically, colleges and universities should redirect the money spent on library buildings and staff to other needs	15.50%	34.06%	50.44%	458
Because faculty have easy access to academic content online, the role librarians play at this institution is becoming much less important	19.39%	37.04%	43.57%	459
The primary responsibility of my college or university library should be facilitating my access to any scholarly materials in print or digital form that I may need for my research and teaching	75.00%	22.61%	2.39%	460
The primary responsibility of my college or university library should be supporting undergraduate student learning by helping students to develop research skills and find, access, and make use of needed materials	50.66%	39.52%	9.83%	458

ROL4

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.

Legend: 8-10, 4-7, 1-3

Student Research Skills

SRS1

Is teaching either undergraduate or postgraduate courses among your professional responsibilities?

SRS2 **[Contingent on SRS1] [Multiple responses possible]**
Please select which types of courses you have taught in the last 2 years:

SRS3 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

SRS4 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

SRS5 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

SRS6 **[Contingent on SRS1]**
As far as you know, how often do students in the courses you teach interact with librarians at your college or university library - often, occasionally, rarely, or never?
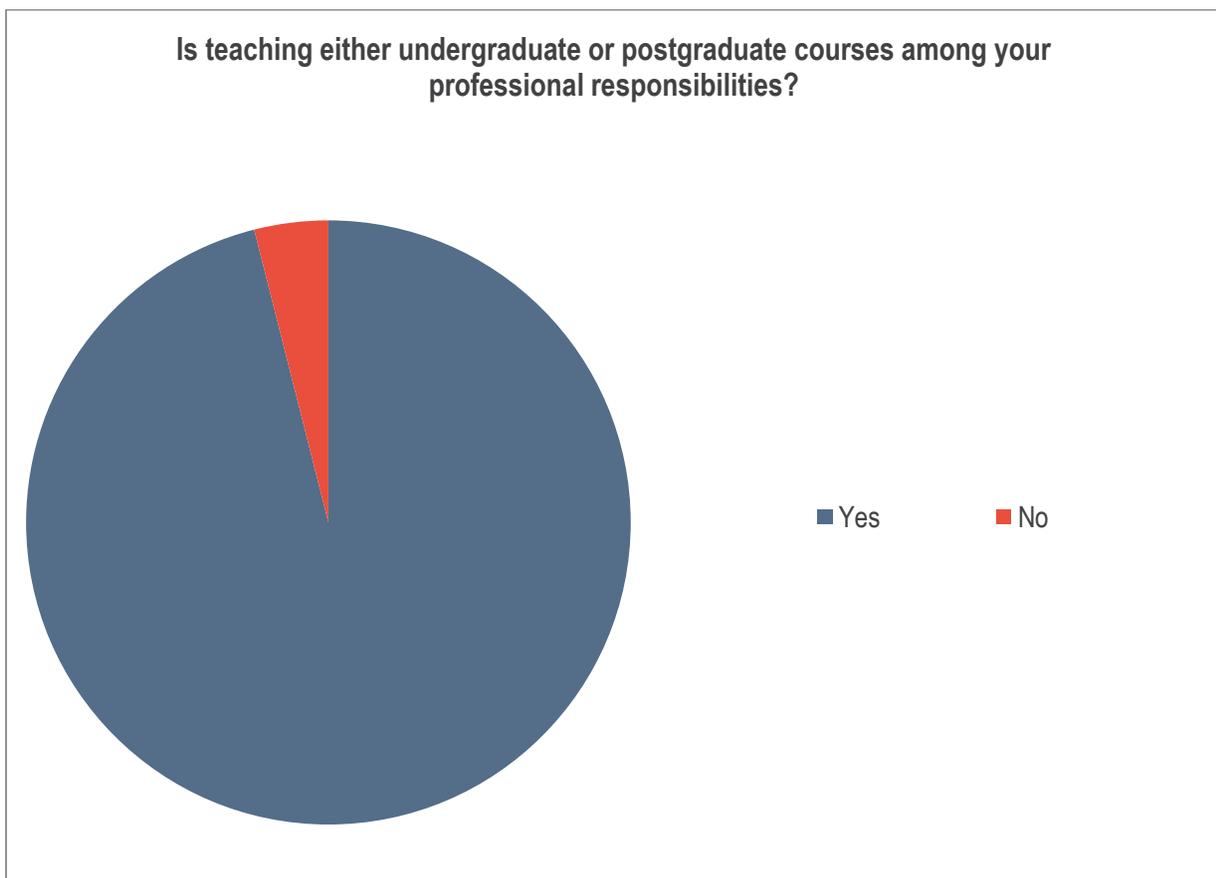
SRS7 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate the extent to which undergraduate students' interaction with librarians at your college or university library helps them to succeed in your courses, where a 10 equals "Helps significantly" and a 1 equals "Does not help at all".

SRS1

Is teaching either undergraduate or postgraduate courses among your professional responsibilities?

	Response	Percent
Yes	462	96.05%
No	19	3.95%
	481	100.00%

Is teaching either undergraduate or postgraduate courses among your professional responsibilities?

■ Yes   ■ No

SRS2 [Contingent on SRS1] [Multiple responses possible]
Please select which types of courses you have taught in the last 2 years:

	Response	Percent
A lower division undergraduate course (first and second year)	257	56.48%
An upper division undergraduate course (third and fourth year)	327	71.87%
A graduate-level course	300	65.93%
	884	

Please select which types of courses you have taught in the last 2 years:

SRS3 **[Contingent on SRS2]**

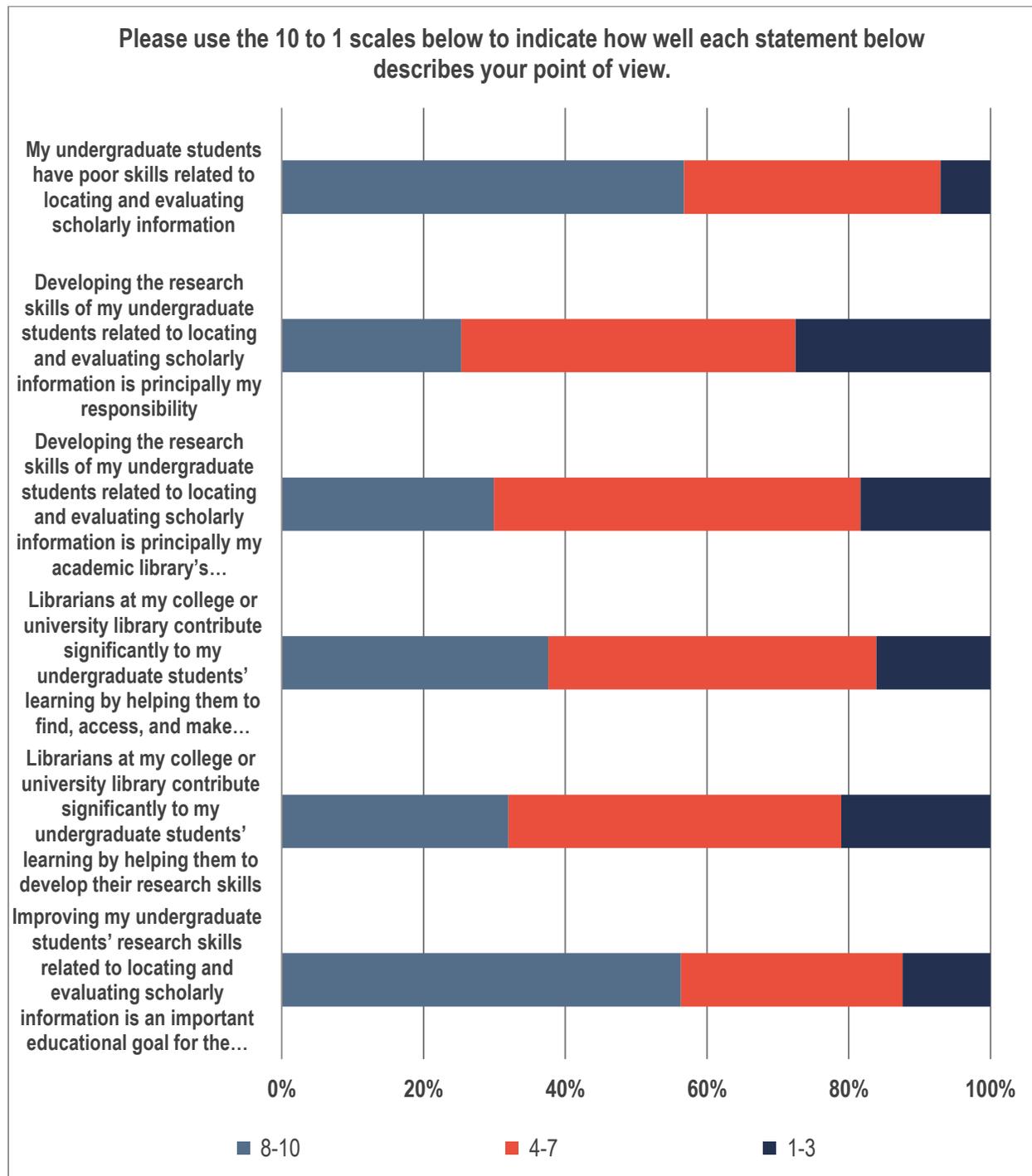Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
My undergraduate students have poor skills related to locating and evaluating scholarly information	56.76%	36.22%	7.03%	370
Developing the research skills of my undergraduate students related to locating and evaluating scholarly information is principally my responsibility	25.34%	47.17%	27.49%	371
Developing the research skills of my undergraduate students related to locating and evaluating scholarly information is principally my academic library's responsibility	29.92%	51.75%	18.33%	371
Librarians at my college or university library contribute significantly to my undergraduate students' learning by helping them to find, access, and make use of a range of secondary and primary sources in their coursework	37.60%	46.32%	16.08%	367
Librarians at my college or university library contribute significantly to my undergraduate students' learning by helping them to develop their research skills	31.97%	46.99%	21.04%	366
Improving my undergraduate students' research skills related to locating and evaluating scholarly information is an important educational goal for the courses I teach	56.33%	31.27%	12.40%	371

SRS3 [Contingent on SRS2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.
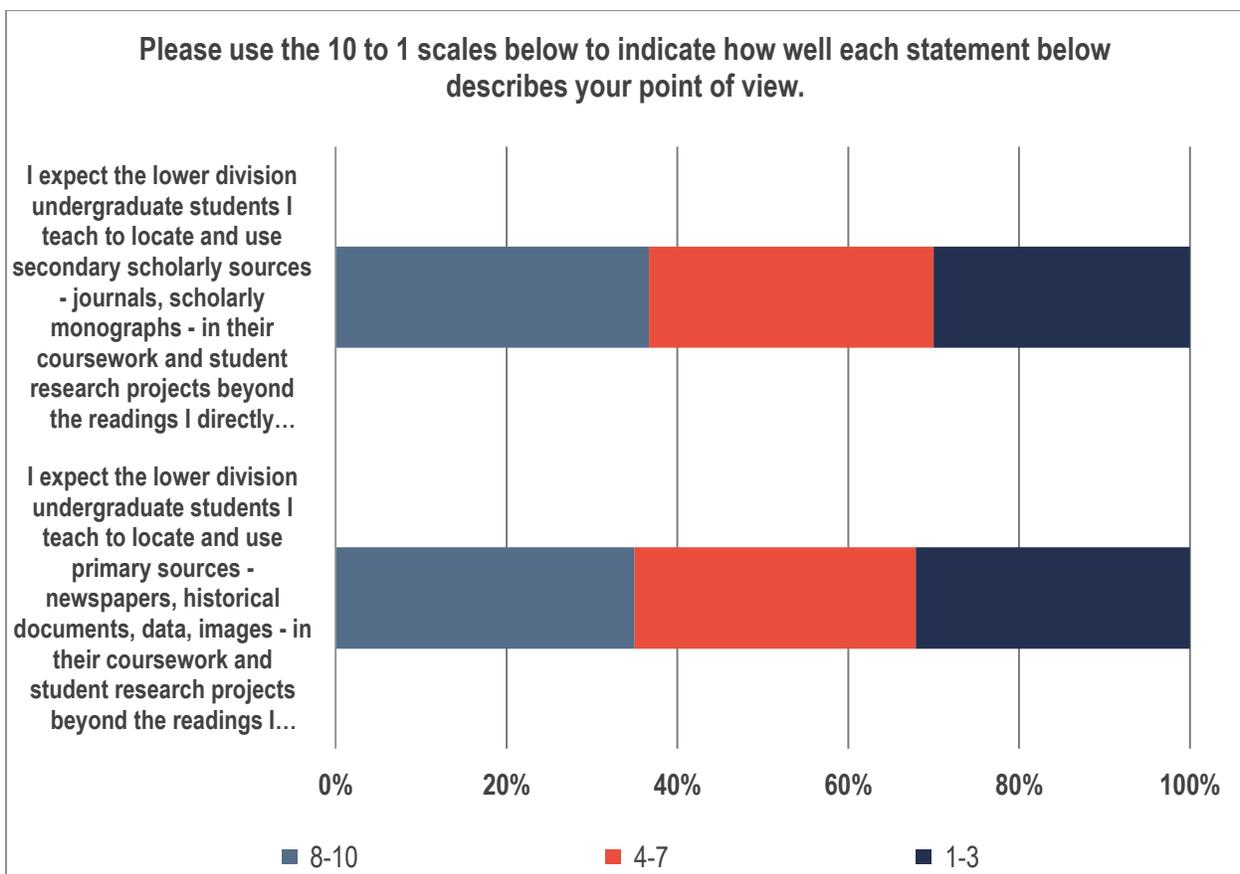
SRS4 [Contingent on SRS2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
I expect the lower division undergraduate students I teach to locate and use secondary scholarly sources - journals, scholarly monographs - in their coursework and student research projects beyond the readings I directly assign them	36.67%	33.33%	30.00%	240
I expect the lower division undergraduate students I teach to locate and use primary sources - newspapers, historical documents, data, images - in their coursework and student research projects beyond the readings I directly assign them	35.00%	32.92%	32.08%	240

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.

SRS5 [Contingent on SRS2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view - a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	8-10	4-7	1-3	Response
I expect the upper division undergraduate students I teach to locate and use secondary scholarly sources - journals, scholarly monographs - in their coursework and student research projects beyond the readings I directly assign them	70.68%	21.82%	7.49%	307
I expect the upper division undergraduate students I teach to locate and use primary sources - newspapers, historical documents, data, images - in their coursework and student research projects beyond the readings I directly assign them	68.08%	18.89%	13.03%	307
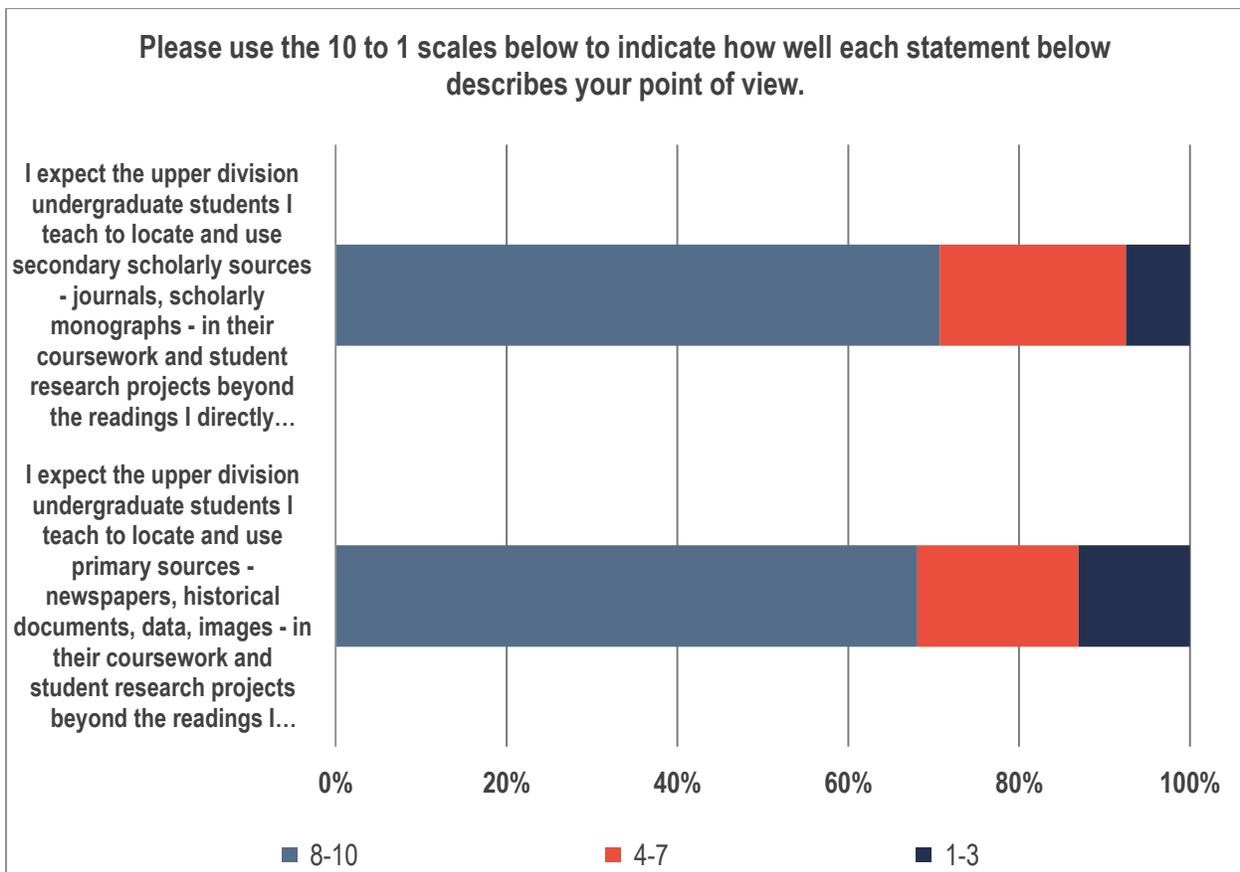
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.

SRS6 **[Contingent on SRS1]**

As far as you know, how often do students in the courses you teach interact with librarians at your college or university library - often, occasionally, rarely, or never?

	Response	Percent
Often	13	3.04%
Occasionally	134	31.38%
Rarely	234	54.80%
Never	46	10.77%
	427	100.00%
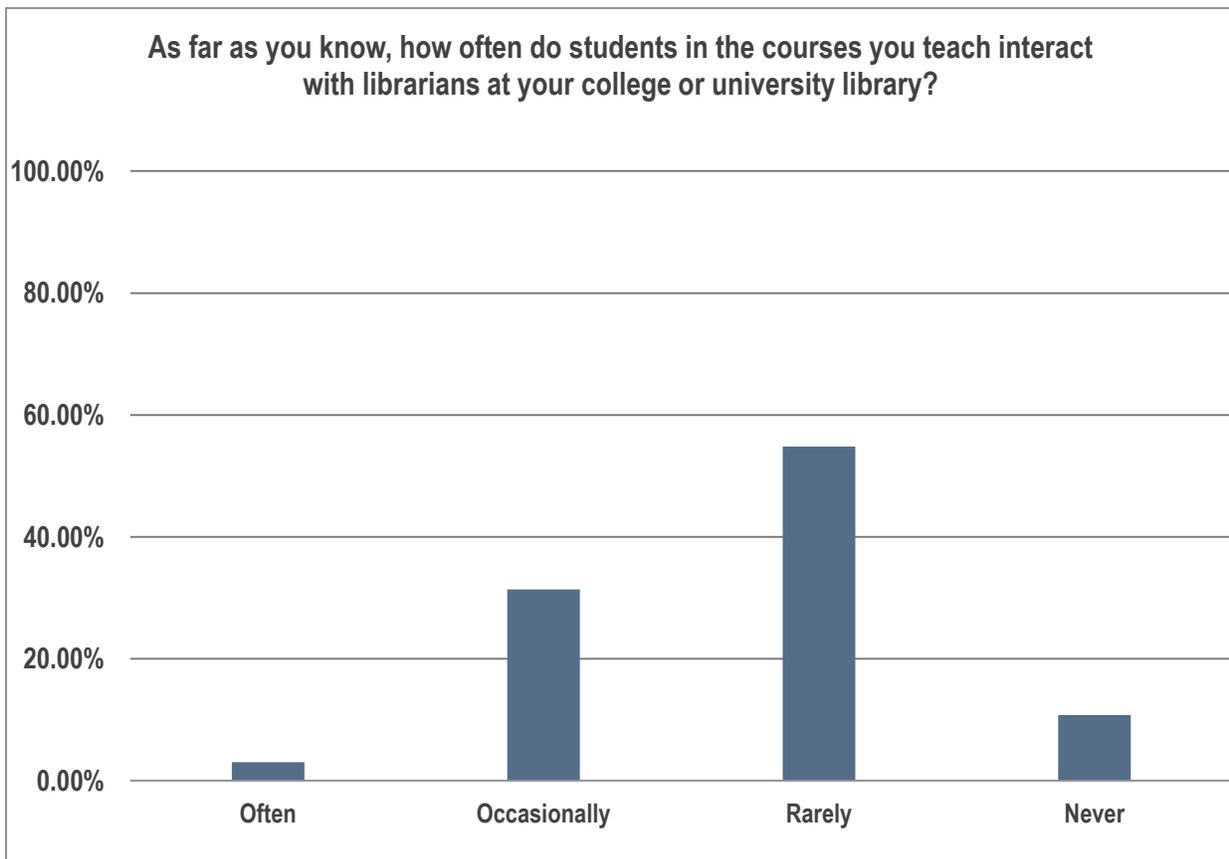
As far as you know, how often do students in the courses you teach interact with librarians at your college or university library?

SRS7 **[Contingent on SRS2]**

Please use the 10 to 1 scales below to indicate the extent to which undergraduate students' interaction with librarians at your college or university library helps them to succeed in your courses, where a 10 equals "Helps significantly" and a 1 equals "Does not help at all".

	Response	Percent
8 - 10	112	31.02%
4 - 7	176	48.75%
1 - 3	73	20.22%
	361	100.00%

Please use the 10 to 1 scales below to indicate the extent to which undergraduate students' interaction with librarians at your college or university library helps them to succeed in your courses.
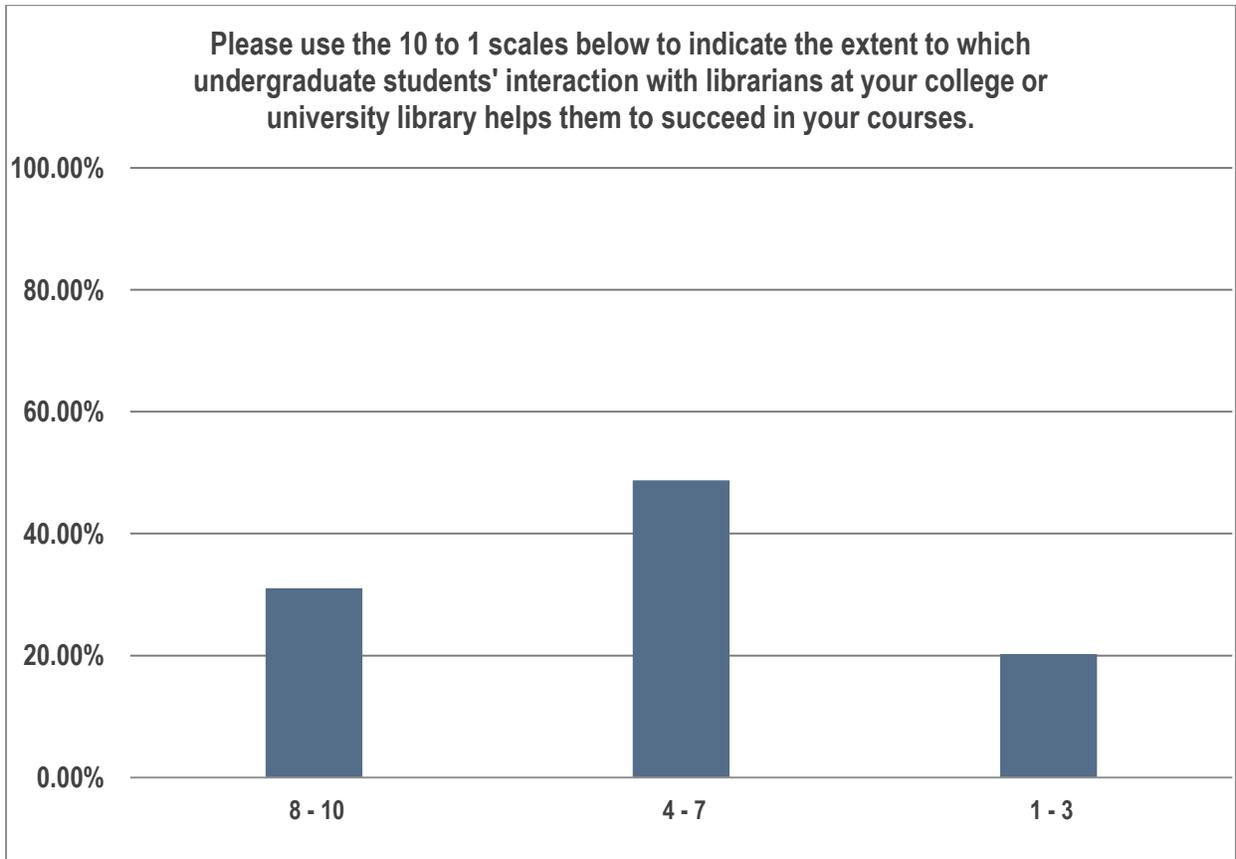
Undergraduate Instruction

UI1 **[Contingent on SRS2]**
How often do you assign your students in a lower division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class - often, occasionally, rarely, or never? Please select one answer for each item.

UI2 **[Contingent on SRS2]**
Do the lower division undergraduate courses that you teach include any of the following types of course formats? Please select yes or no for each item.

UI3 **[Contingent on SRS2]**
Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your lower division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

UI4 **[Contingent on SRS2]**
How often do you assign each of the following types of coursework in the lower division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

UI5 **[Contingent on UI2]**
How often do you do each of the following in the lower division undergraduate courses that you teach - often, occasionally, rarely, or never? Please select one answer for each item.

UI6 **[Contingent on SRS2]**
How often do you make use of email lists or discussion boards on a course management system to support collaboration or ongoing discussion between you and your students outside of the classroom - often, occasionally, rarely, or never?

UI7 **[Contingent on SRS2]**
How often do you assign your students in an upper division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class - often, occasionally, rarely, or never? Please select one answer for each item.

UI8 **[Contingent on SRS2]**
Do the upper division undergraduate courses that you teach include any of the following types of course formats? Please select yes or no for each item.

UI9 **[Contingent on SRS2]**
How often do you assign each of the following types of coursework in the upper division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

UI10 **[Contingent on SRS2]**
Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your upper division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

UI11 **[Contingent on UI8]**
How often do you do each of the following in the upper division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

UI12 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

UI13 **[Contingent on SRS2]**
Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology, where 10 equals "A great deal" and 1 equals "Not at all." Please select one answer for each item.

UI1 **[Contingent on SRS2]**
How often do you assign your students in a lower division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Non-scholarly books	7.92%	21.25%	31.25%	39.58%	240
Scholarly monographs or monograph chapters	12.03%	24.07%	34.02%	29.88%	241
Primary source materials	25.52%	36.40%	23.43%	14.64%	239
Textbooks or textbook chapters	74.69%	15.35%	5.39%	4.56%	241
Scholarly articles	22.08%	40.42%	22.50%	15.00%	240
Films, audio, artwork, or other non-textual media	23.65%	33.61%	21.58%	21.16%	241
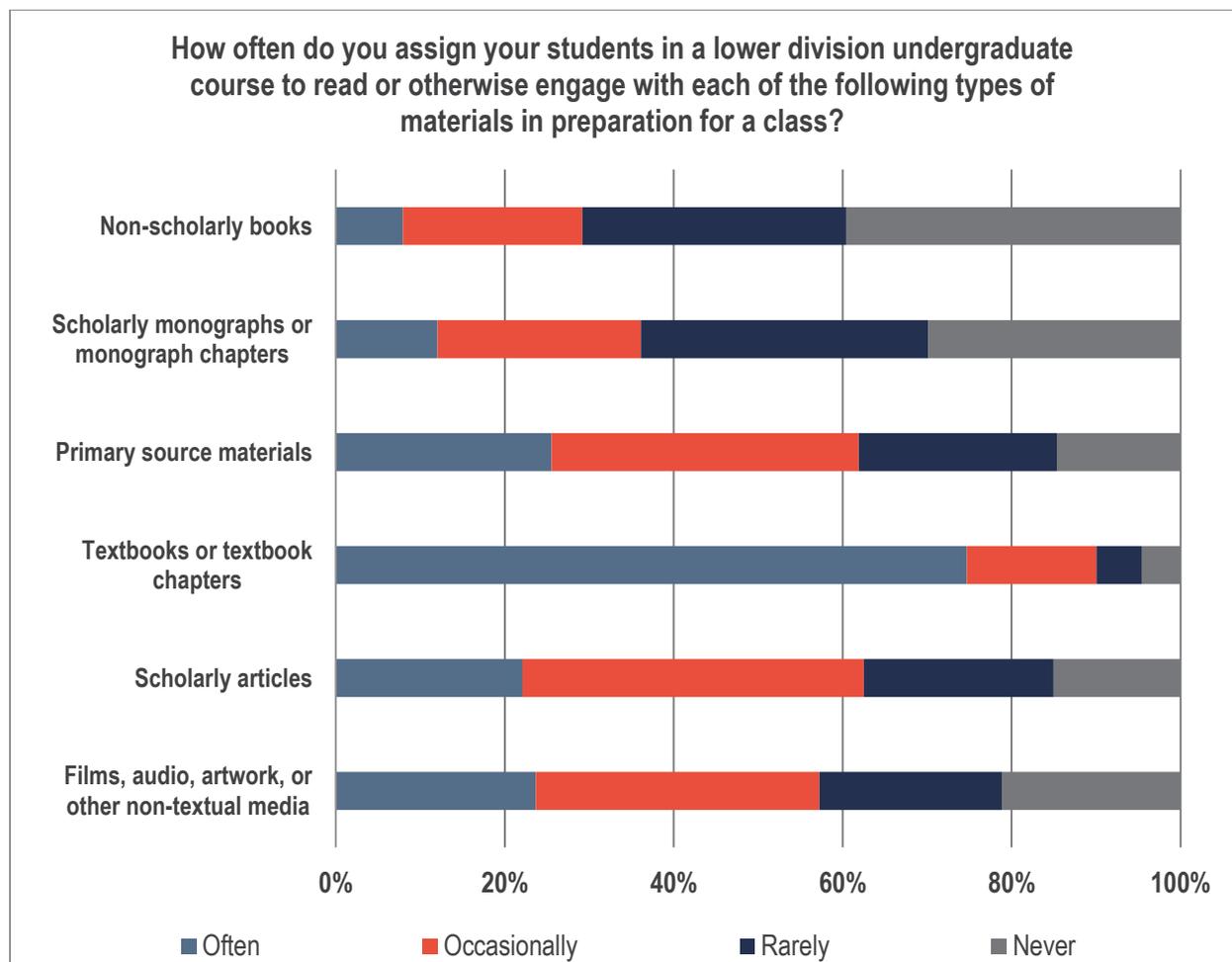
How often do you assign your students in a lower division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class?

UI2 **[Contingent on SRS2]**

Do the lower division undergraduate courses that you teach include any of the following types of course formats? Please select yes or no for each item.

	Yes	No	Response
Lectures	96.65%	3.35%	239
Seminars or discussion sections	60.87%	39.13%	230
Laboratories	37.55%	62.45%	229

UI3 **[Contingent on SRS2]**

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your lower division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

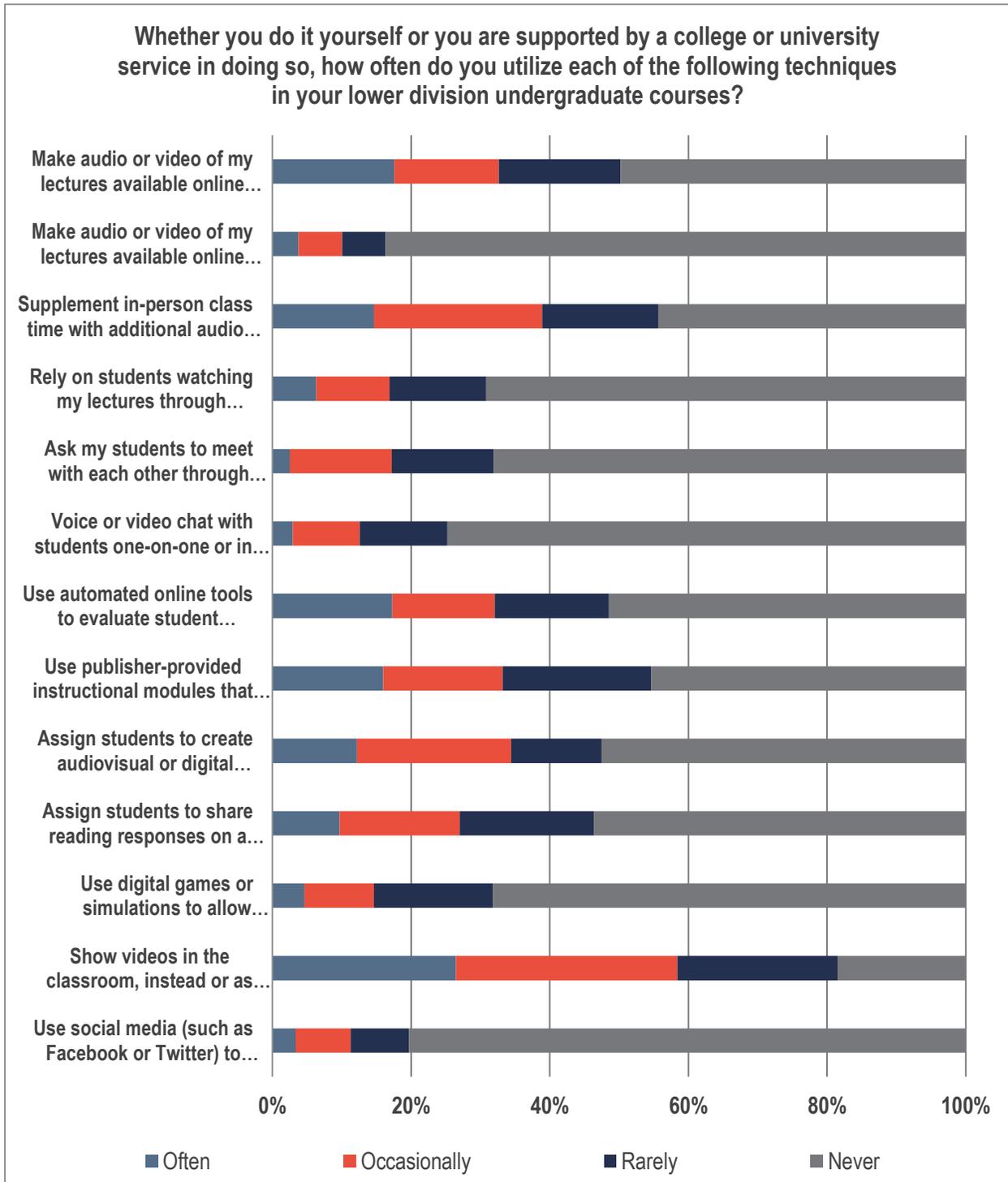|	Often	Occasionally	Rarely	Never	Response
Make audio or video of my lectures available online for my students to access	17.57%	15.06%	17.57%	49.79%	239
Make audio or video of my lectures available online for the general public to access	3.77%	6.28%	6.28%	83.68%	239
Supplement in-person class time with additional audio or video modules	14.64%	24.27%	16.74%	44.35%	239
Rely on students watching my lectures through recorded audio or video to reserve face to face time for other activities	6.33%	10.55%	13.92%	69.20%	237
Ask my students to meet with each other through voice or video chat for collaboration or discussion of course materials	2.52%	14.71%	14.71%	68.07%	238
Voice or video chat with students one-on-one or in small groups for "virtual office hours"	2.94%	9.66%	12.61%	74.79%	238
Use automated online tools to evaluate student problem sets and offer feedback or guidance in real time to students	17.30%	14.77%	16.46%	51.48%	237
Use publisher-provided instructional modules that accompany a textbook to assist students	15.97%	17.23%	21.43%	45.38%	238
Assign students to create audiovisual or digital media projects	12.18%	22.27%	13.03%	52.52%	238
Assign students to share reading responses on a course discussion board or a blog	9.70%	17.30%	19.41%	53.59%	237
Use digital games or simulations to allow students to explore concepts	4.60%	10.04%	17.15%	68.20%	239
Show videos in the classroom, instead or as one component of a lecture or discussion	26.47%	31.93%	23.11%	18.49%	238
Use social media (such as Facebook or Twitter) to keep in touch with students currently enrolled in your courses	3.35%	7.95%	8.37%	80.33%	239

UI3 **[Contingent on SRS2]**

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your lower division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your lower division undergraduate courses?

- Often
- Occasionally
- Rarely
- Never

UI4 [Contingent on SRS2]

How often do you assign each of the following types of coursework in the lower division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Problem sets	38.33%	17.50%	10.83%	33.33%	240
Responses to assigned readings	38.33%	31.67%	15.42%	14.58%	240
Research papers	20.33%	32.37%	19.50%	27.80%	241
Experiments or experiential learning	21.43%	22.69%	17.23%	38.66%	238
Presentations or multimedia projects	29.83%	30.67%	15.55%	23.95%	238
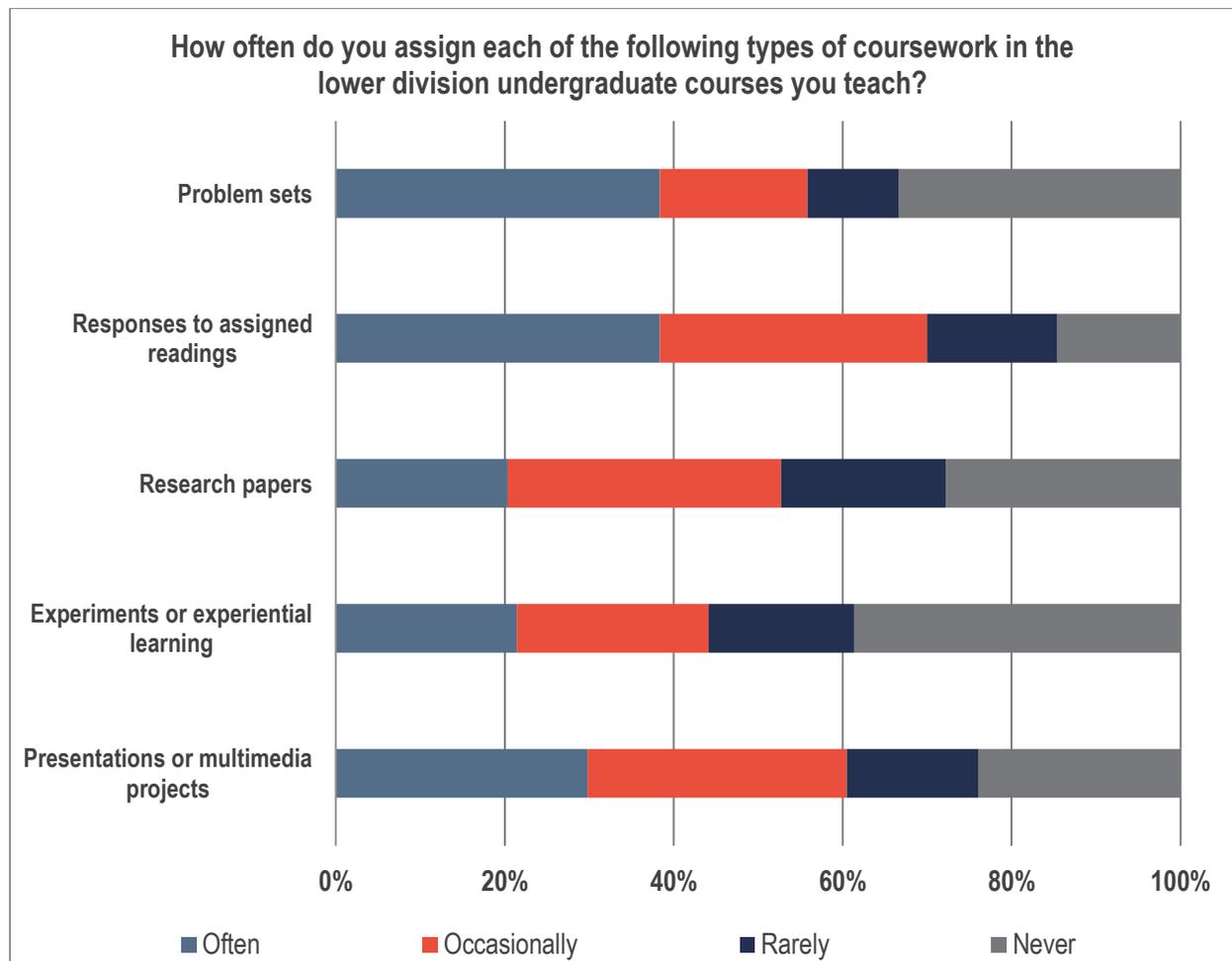
How often do you assign each of the following types of coursework in the lower division undergraduate courses you teach?

UI5 **[Contingent on UI2]**

How often do you do each of the following in the lower division undergraduate courses that you teach - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Supplement in-person laboratory exercises with digital simulations of laboratory activities	9.30%	26.74%	11.63%	52.33%	86
Replace in-person laboratory exercises with digital simulations of laboratory activities	5.88%	15.29%	11.76%	67.06%	85
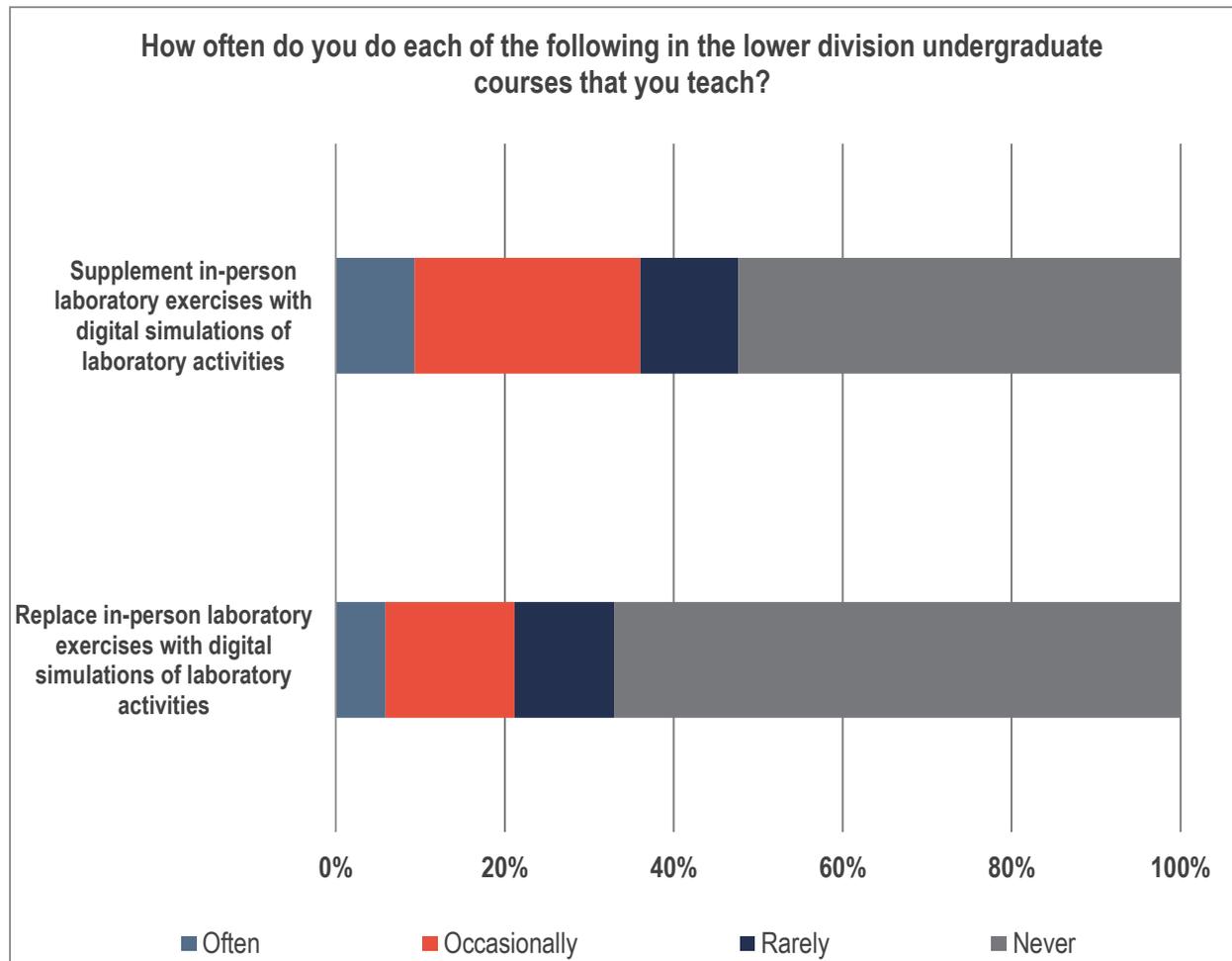
How often do you do each of the following in the lower division undergraduate courses that you teach?

UI6 **[Contingent on SRS2]**

How often do you make use of email lists or discussion boards on a course management system to support collaboration or ongoing discussion between you and your students outside of the classroom - often, occasionally, rarely, or never?

	Response	Percent
Often	114	29.61%
Occasionally	109	28.31%
Rarely	79	20.52%
Never	83	21.56%
	385	100.00%
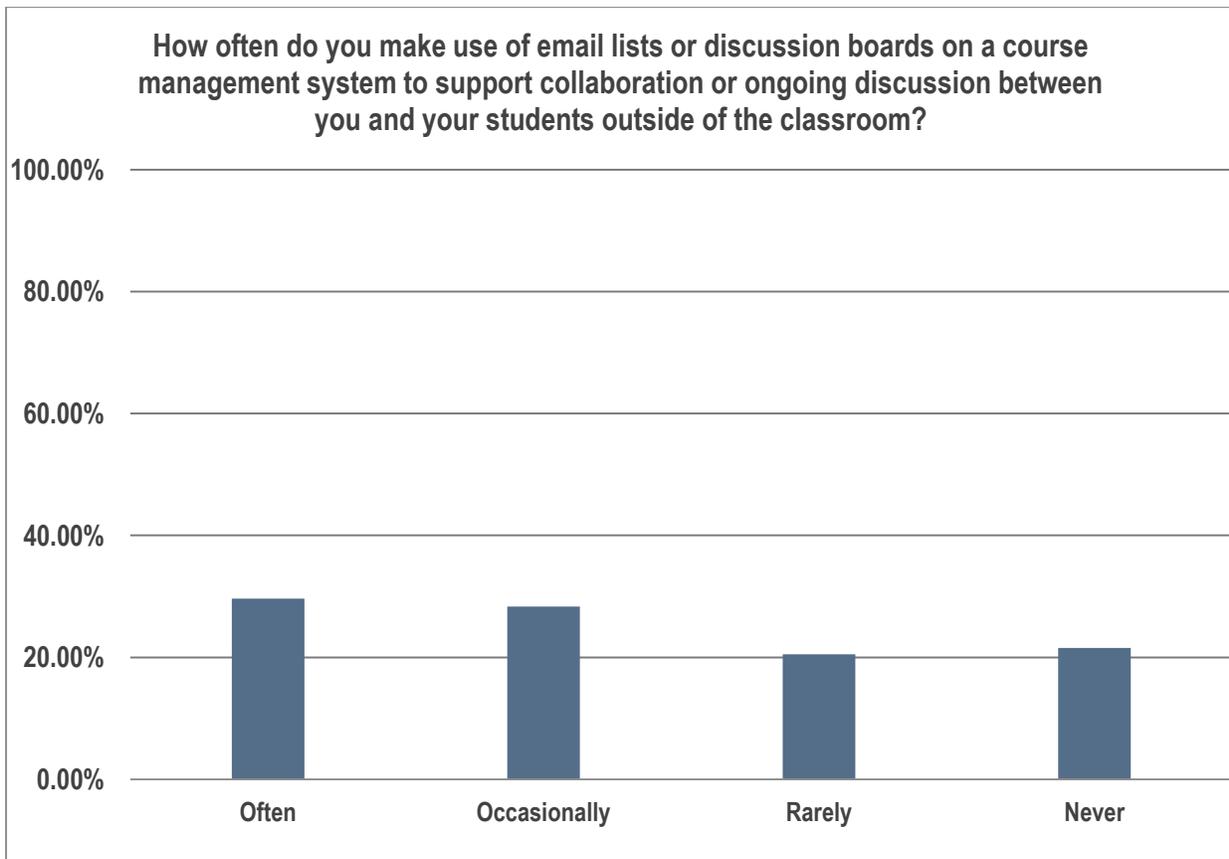
How often do you make use of email lists or discussion boards on a course management system to support collaboration or ongoing discussion between you and your students outside of the classroom?

UI7 **[Contingent on SRS2]**

How often do you assign your students in an upper division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Textbooks or textbook chapters	68.77%	19.27%	7.97%	3.99%	301
Scholarly articles	43.67%	38.00%	12.67%	5.67%	300
Primary source materials	39.74%	31.46%	16.89%	11.92%	302
Scholarly monographs or monograph chapters	22.00%	28.33%	25.33%	24.33%	300
Non-scholarly books	11.67%	22.00%	28.00%	38.33%	300
Films, audio, artwork, or other non-textual media	20.60%	28.90%	17.28%	33.22%	301
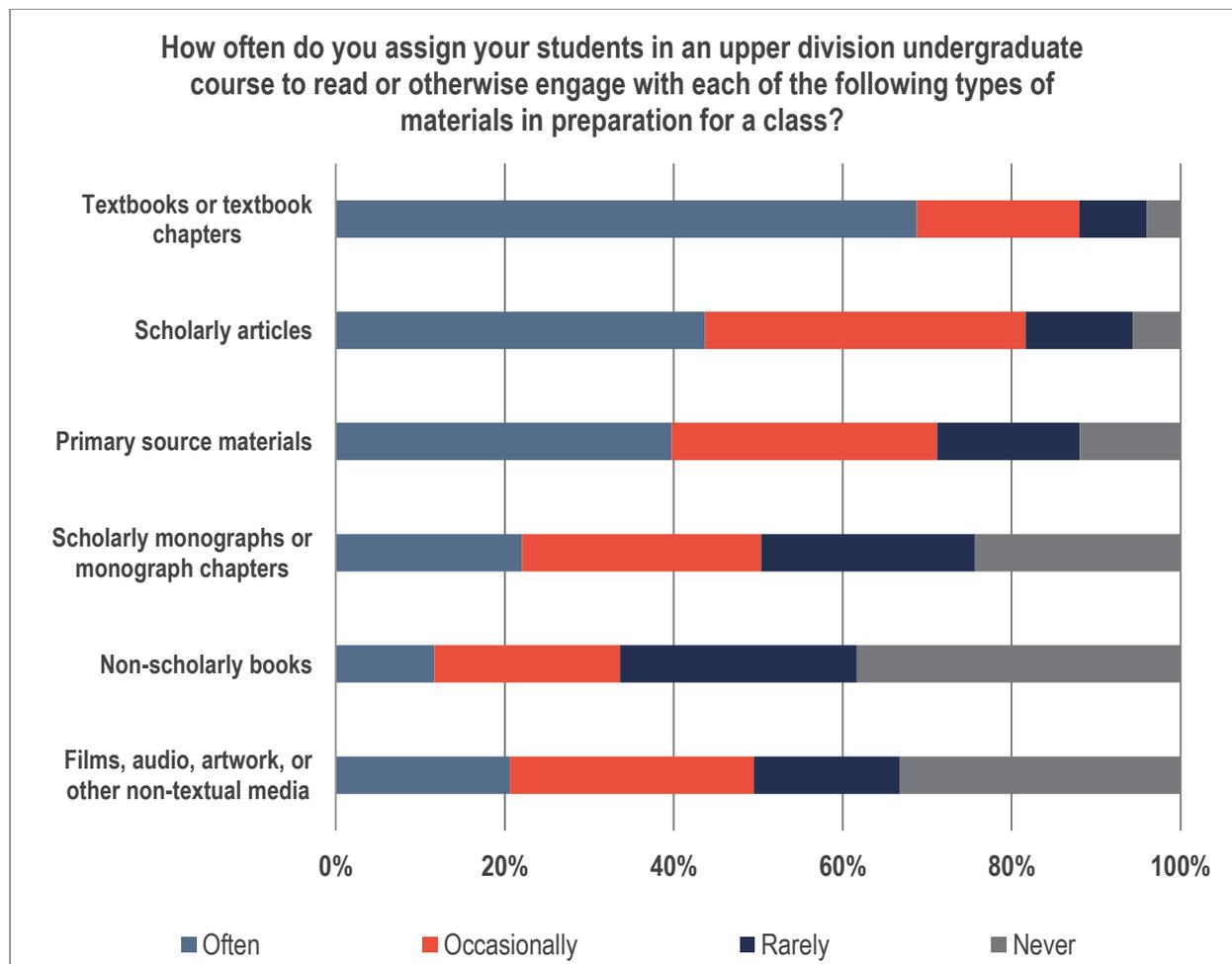
How often do you assign your students in an upper division undergraduate course to read or otherwise engage with each of the following types of materials in preparation for a class?

UI8 **[Contingent on SRS2]**

Do the upper division undergraduate courses that you teach include any of the following types of course formats? Please select yes or no for each item.

	Yes	No	Response
Lectures	94.31%	5.69%	299
Seminars or discussion sections	68.03%	31.97%	294
Laboratories	41.75%	58.25%	285
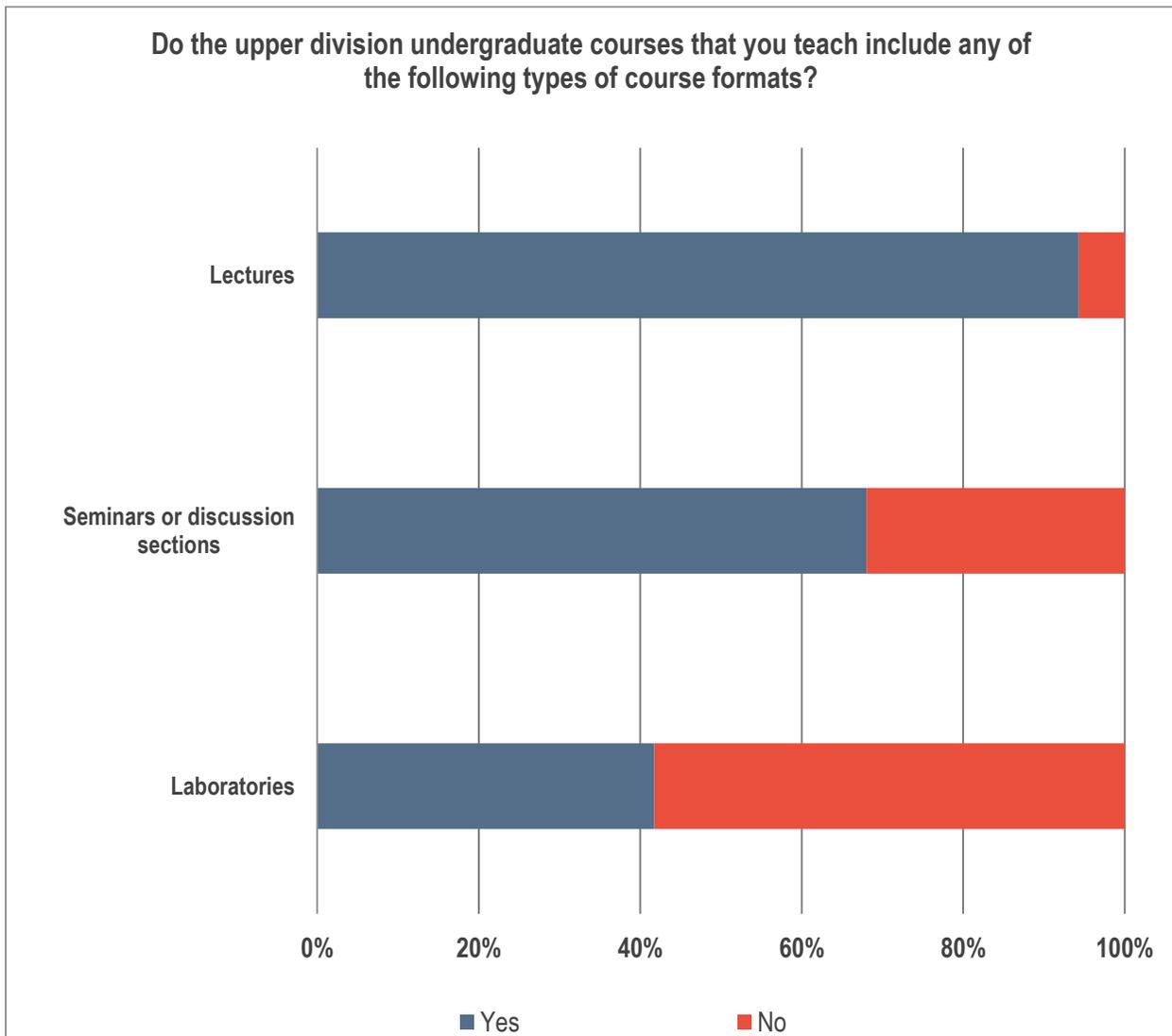
Do the upper division undergraduate courses that you teach include any of the following types of course formats?

UI9 [Contingent on SRS2]

How often do you assign each of the following types of coursework in the upper division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Problem sets	42.18%	17.01%	11.22%	29.59%	294
Responses to assigned readings	41.75%	30.30%	12.79%	15.15%	297
Research papers	38.44%	32.65%	15.65%	13.27%	294
Experiments or experiential learning	29.35%	25.60%	17.06%	27.99%	293
Presentations or multimedia projects	40.88%	29.05%	11.15%	18.92%	296

How often do you assign each of the following types of coursework in the upper division undergraduate courses you teach?

UI10 **[Contingent on SRS2]**

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your upper division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

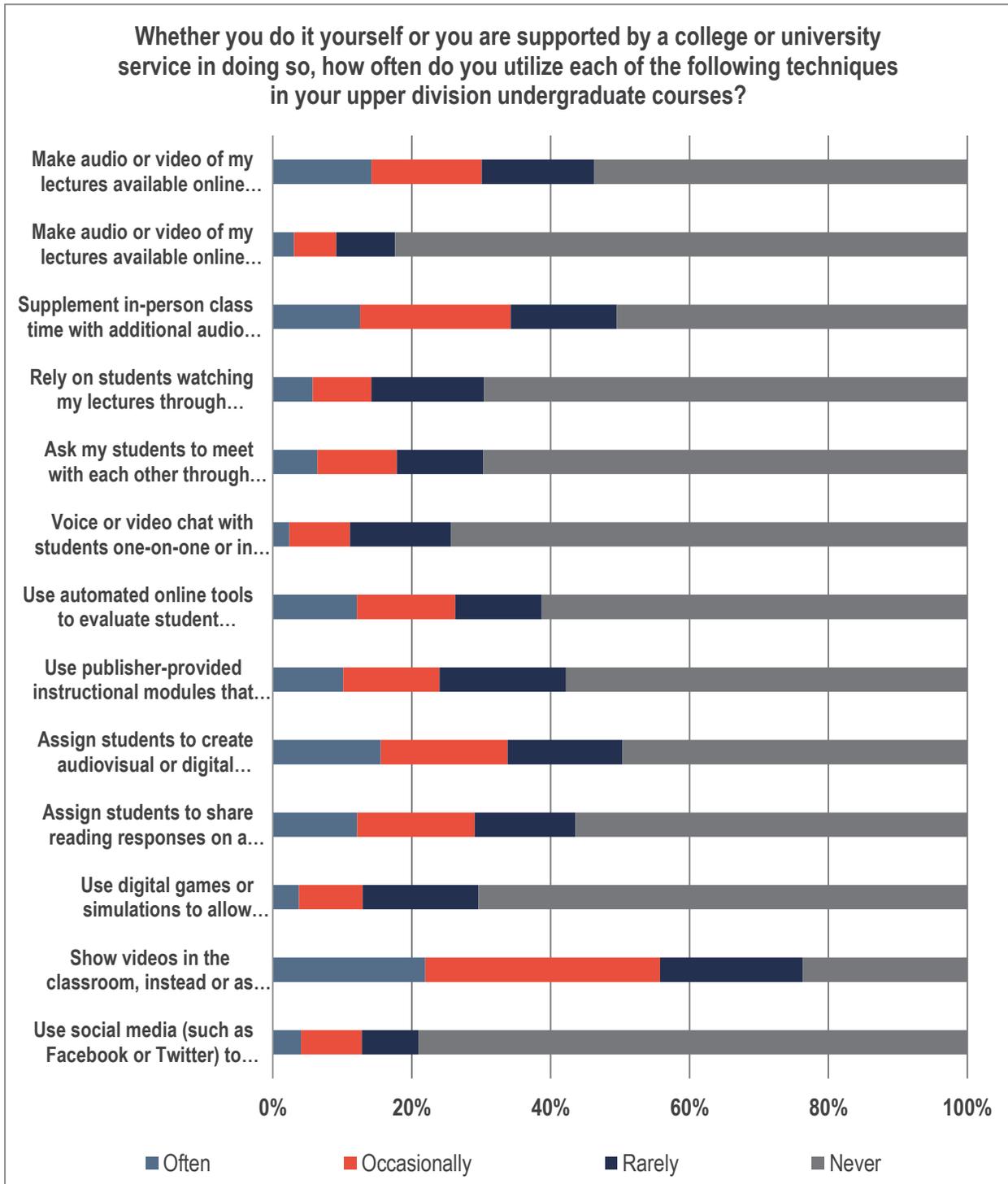|	Often	Occasionally	Rarely	Never	Response
Make audio or video of my lectures available online for my students to access	14.19%	15.88%	16.22%	53.72%	296
Make audio or video of my lectures available online for the general public to access	3.04%	6.08%	8.45%	82.43%	296
Supplement in-person class time with additional audio or video modules	12.54%	21.69%	15.25%	50.51%	295
Rely on students watching my lectures through recorded audio or video to reserve face to face time for other activities	5.74%	8.45%	16.22%	69.59%	296
Ask my students to meet with each other through voice or video chat for collaboration or discussion of course materials	6.40%	11.45%	12.46%	69.70%	297
Voice or video chat with students one-on-one or in small groups for "virtual office hours"	2.36%	8.75%	14.48%	74.41%	297
Use automated online tools to evaluate student problem sets and offer feedback or guidance in real time to students	12.12%	14.14%	12.46%	61.28%	297
Use publisher-provided instructional modules that accompany a textbook to assist students	10.14%	13.85%	18.24%	57.77%	296
Assign students to create audiovisual or digital media projects	15.54%	18.24%	16.55%	49.66%	296
Assign students to share reading responses on a course discussion board or a blog	12.16%	16.89%	14.53%	56.42%	296
Use digital games or simulations to allow students to explore concepts	3.74%	9.18%	16.67%	70.41%	294
Show videos in the classroom, instead or as one component of a lecture or discussion	21.96%	33.78%	20.61%	23.65%	296
Use social media (such as Facebook or Twitter) to keep in touch with students currently enrolled in your courses	4.05%	8.78%	8.11%	79.05%	296

UI10 **[Contingent on SRS2]**

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your upper division undergraduate courses - often, occasionally, rarely, or never? Please select one answer for each item.

Whether you do it yourself or you are supported by a college or university service in doing so, how often do you utilize each of the following techniques in your upper division undergraduate courses?

Legend: ■ Often ■ Occasionally ■ Rarely ■ Never

Categories (top to bottom):
- Make audio or video of my lectures available online…
- Make audio or video of my lectures available online…
- Supplement in-person class time with additional audio…
- Rely on students watching my lectures through…
- Ask my students to meet with each other through…
- Voice or video chat with students one-on-one or in…
- Use automated online tools to evaluate student…
- Use publisher-provided instructional modules that…
- Assign students to create audiovisual or digital…
- Assign students to share reading responses on a…
- Use digital games or simulations to allow…
- Show videos in the classroom, instead or as…
- Use social media (such as Facebook or Twitter) to…

UI11 **[Contingent on UI8]**

How often do you do each of the following in the upper division undergraduate courses you teach - often, occasionally, rarely, or never? Please select one answer for each item.

	Often	Occasionally	Rarely	Never	Response
Supplement in-person laboratory exercises with digital simulations of laboratory activities	11.02%	23.73%	17.80%	47.46%	118
Replace in-person laboratory exercises with digital simulations of laboratory activities	5.17%	13.79%	17.24%	63.79%	116

UI12 **[Contingent on SRS2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

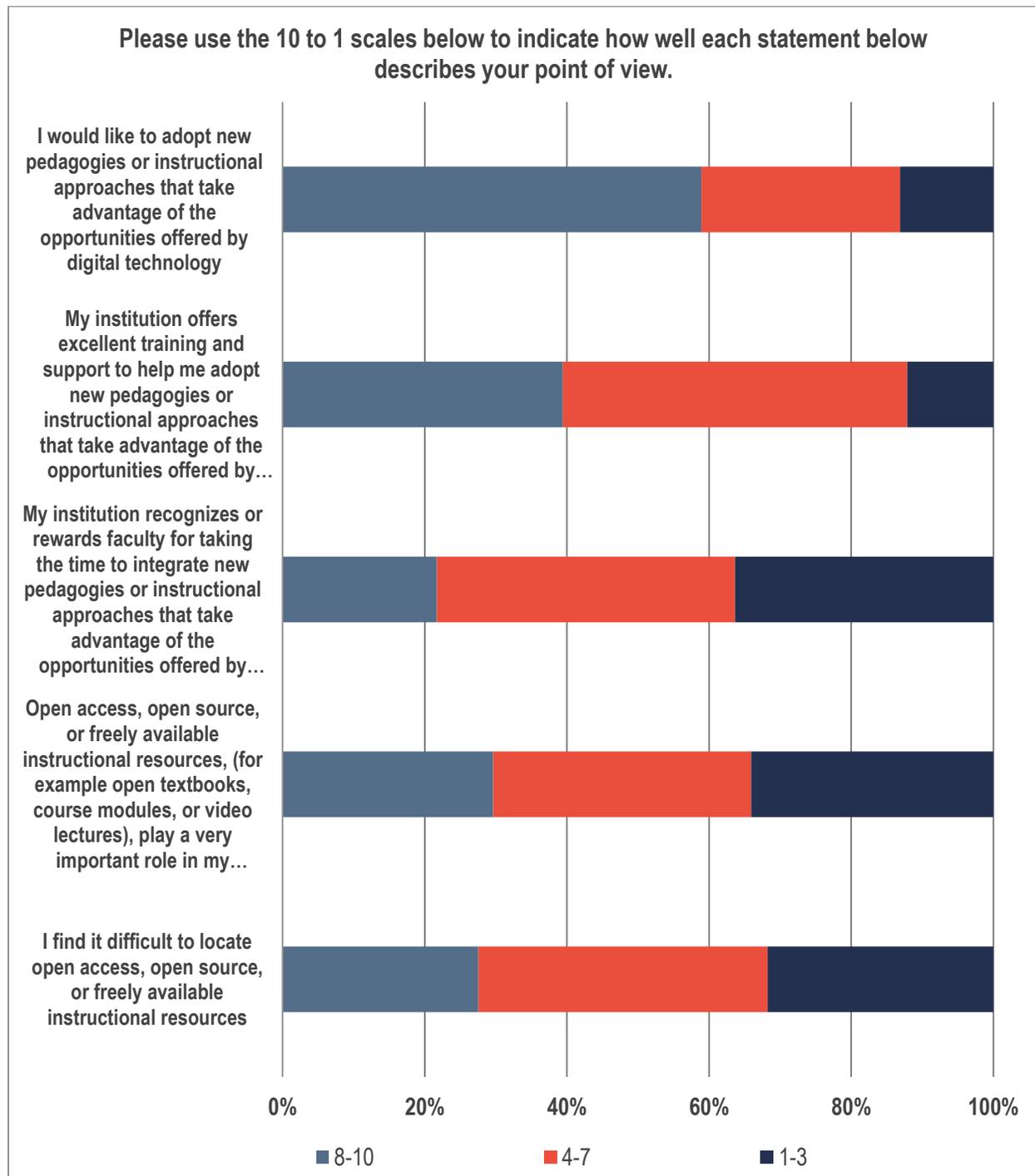|	8-10	4-7	1-3	Response
I would like to adopt new pedagogies or instructional approaches that take advantage of the opportunities offered by digital technology	58.94%	27.93%	13.13%	358
My institution offers excellent training and support to help me adopt new pedagogies or instructional approaches that take advantage of the opportunities offered by digital technology	39.44%	48.45%	12.11%	355
My institution recognizes or rewards faculty for taking the time to integrate new pedagogies or instructional approaches that take advantage of the opportunities offered by digital technology	21.69%	41.97%	36.34%	355
Open access, open source, or freely available instructional resources, (for example open textbooks, course modules, or video lectures), play a very important role in my teaching	29.61%	36.31%	34.08%	358
I find it difficult to locate open access, open source, or freely available instructional resources	27.53%	40.73%	31.74%	356

UI12 [Contingent on SRS2]
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.

UI13 **[Contingent on SRS2]**

Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology, where 10 equals "A great deal" and 1 equals "Not at all." Please select one answer for each item.

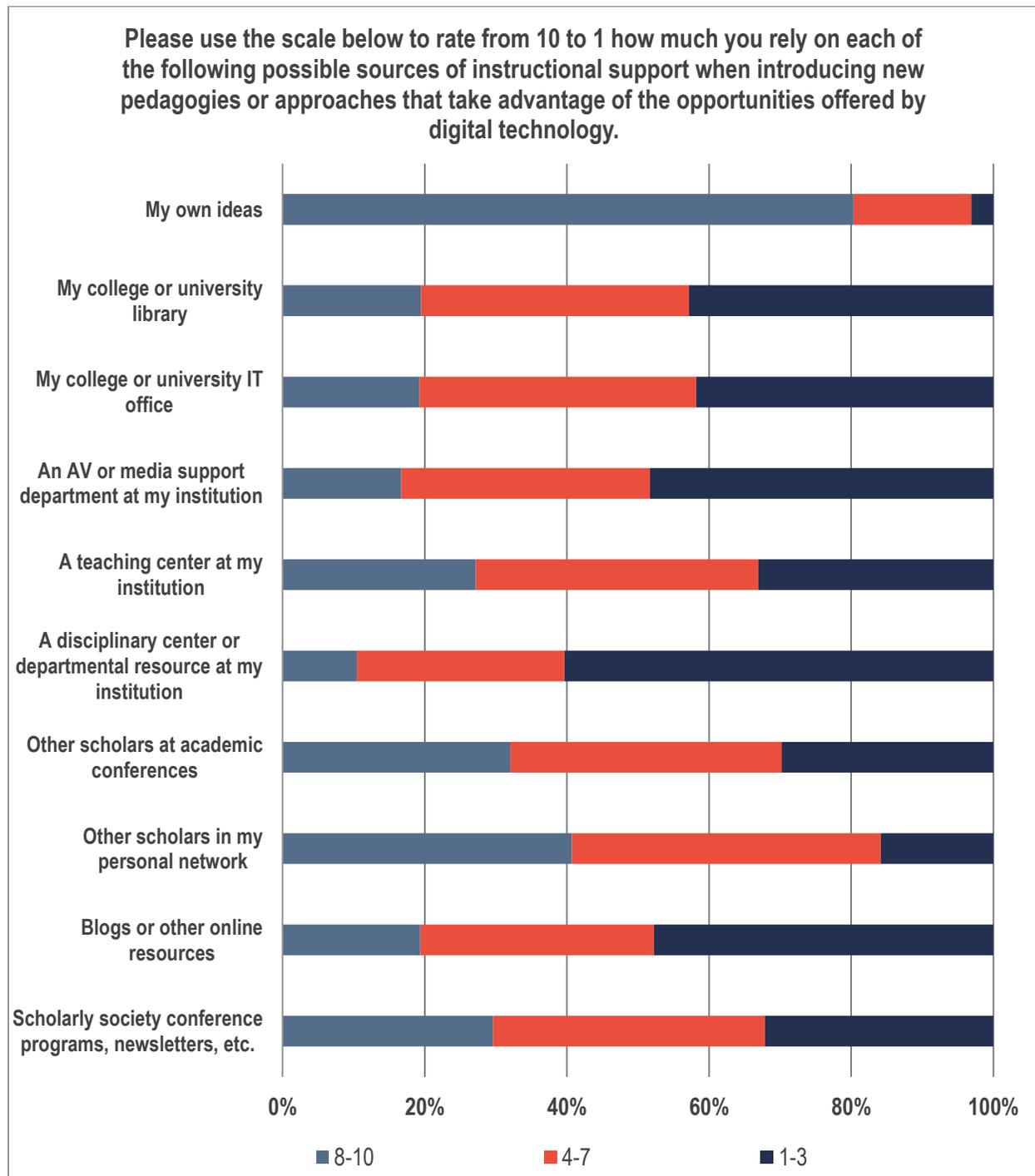|	8-10	4-7	1-3	Response
My own ideas	80.34%	16.57%	3.09%	356
My college or university library	19.44%	37.75%	42.82%	355
My college or university IT office	19.21%	38.98%	41.81%	354
An AV or media support department at my institution	16.67%	35.03%	48.31%	354
A teaching center at my institution	27.17%	39.78%	33.05%	357
A disciplinary center or departmental resource at my institution	10.48%	29.18%	60.34%	353
Other scholars at academic conferences	32.02%	38.20%	29.78%	356
Other scholars in my personal network	40.68%	43.50%	15.82%	354
Blogs or other online resources	19.38%	32.87%	47.75%	356
Scholarly society conference programs, newsletters, etc.	29.58%	38.31%	32.11%	355

UI13 **[Contingent on SRS2]**
Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology, where 10 equals "A great deal" and 1 equals "Not at all." Please select one answer for each item.

Please use the scale below to rate from 10 to 1 how much you rely on each of the following possible sources of instructional support when introducing new pedagogies or approaches that take advantage of the opportunities offered by digital technology.

Graduate Instruction

GI1

In the past two years, have you advised or mentored one or more graduate students on an individual basis (i.e. beyond your teaching responsibilities related to graduate courses or seminars)?

GI2

And, in the past two years, have you advised or mentored one or more doctoral students on an individual basis (i.e. as a dissertation chair or committee member)?

GI3 **[Contingent on GI1 and GI2]**

How many graduate students are you currently advising or mentoring?

GI4 **[Contingent on GI1 and GI2]**

At this institution, have you ever:

GI5 **[Contingent on GI1 and GI2]**

And, how important do you think it is professionally for graduate students to do each of the following before graduating from your program? Please use the scale below to rate from 6 to 1, where 6 equals "Very important" and 1 equals "Not at all important."

GI6 **[Contingent on GI1 and GI2]**

How often do you meet with your graduate student advisee(s) or mentee(s) to evaluate or supervise their progress?

GI7 **[Contingent on GI1 and GI2]**

Have you ever directed your graduate student advisee(s) or mentee(s) to consult with a subject librarian or departmental library liaison?

GI8 **[Contingent on GI7]**

Please use the 6 to 1 scale below to indicate the extent to which graduate students' interaction with subject or departmental liaison librarians at your college or university library helps them with their research projects, where a 6 equals "Helps significantly" and a 1 equals "Does not help at all".

GI9 **[Contingent on GI1 and GI2]**

In general, how would you rate the proficiency level of incoming graduate students to your department or program in each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Excellent" and 1 equals "Poor."

GI10 **[Contingent on GI1 and GI2]**
To what extent are you responsible for helping your graduate student advisee(s) or mentee(s) to develop each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Completely responsible" and 1 equals "Not at all responsible."

GI11 **[Contingent on GI1 and GI2]**
Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

GI1

In the past two years, have you advised or mentored one or more graduate students on an individual basis (i.e. beyond your teaching responsibilities related to graduate courses or seminars)?

	Response	Percent
Yes	340	74.40%
No	117	25.60%
	457	100.00%
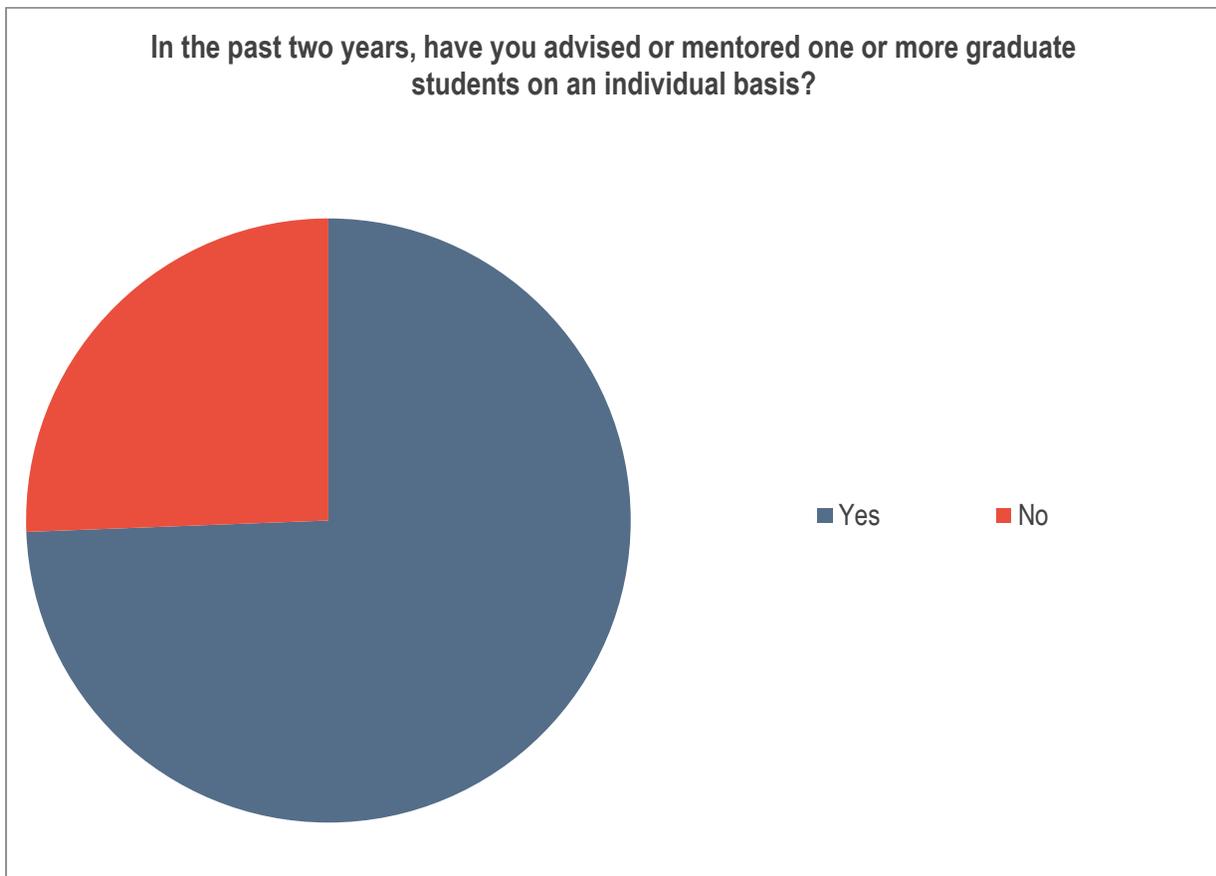
In the past two years, have you advised or mentored one or more graduate students on an individual basis?

■ Yes   ■ No

GI2

And, in the past two years, have you advised or mentored one or more doctoral students on an individual basis (i.e. as a dissertation chair or committee member)?

	Response	Percent
Yes	281	61.22%
No	178	38.78%
	459	100.00%
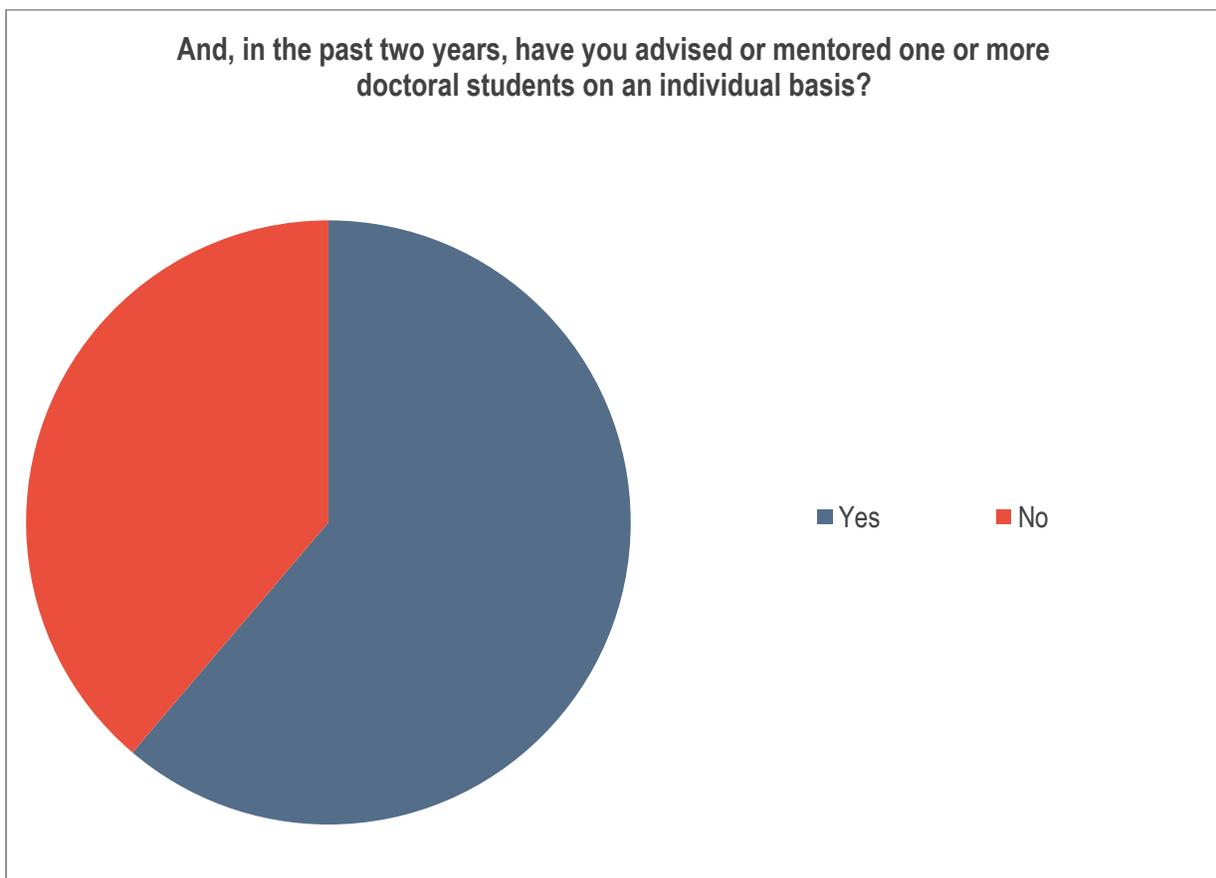
And, in the past two years, have you advised or mentored one or more doctoral students on an individual basis?

■ Yes   ■ No

GI3 **[Contingent on GI1 and GI2]**

How many graduate students are you currently advising or mentoring?

	Response	Percent
1 - 5	250	72.89%
6 - 10	59	17.20%
11 - 15	20	5.83%
16 - 20	5	1.46%
More than 20	9	2.62%
	343	100.00%

How many graduate students are you currently advising or mentoring?
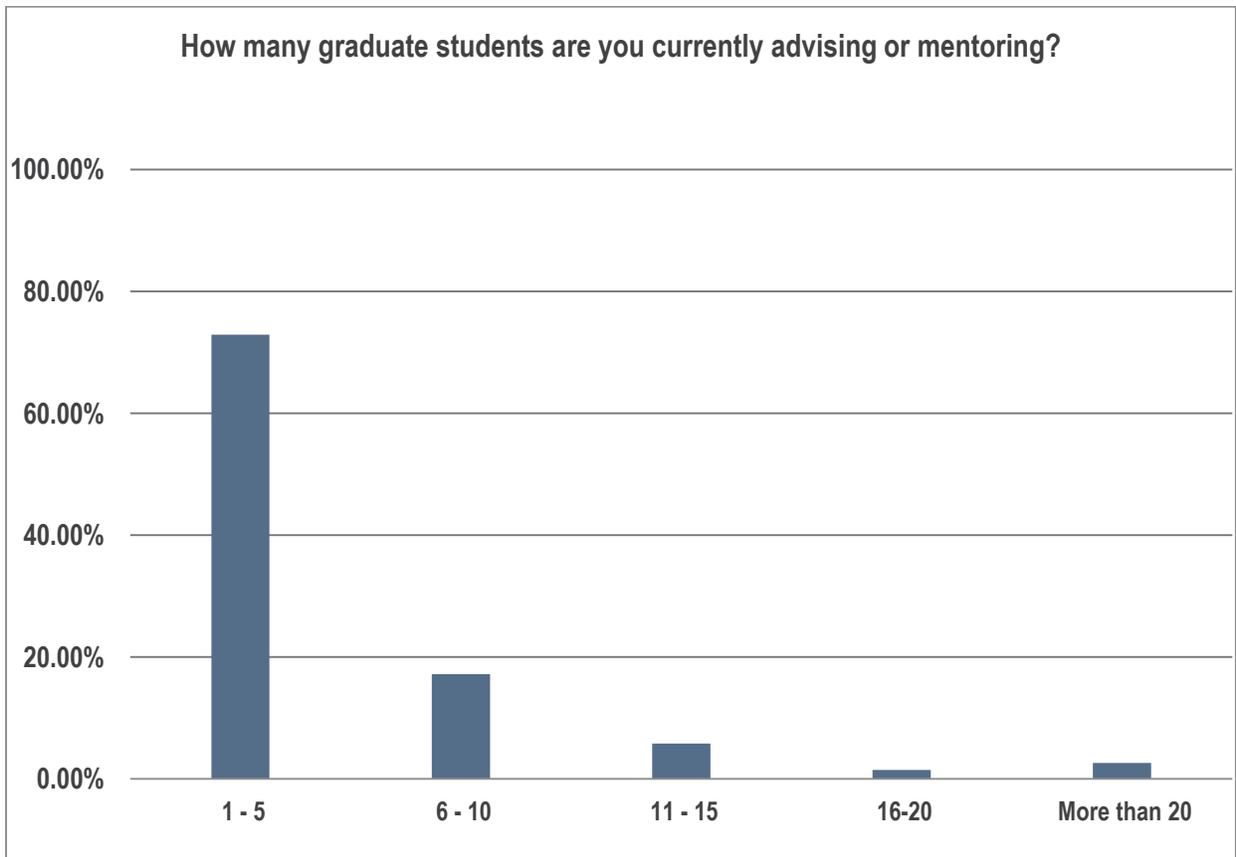
GI4 **[Contingent on GI1 and GI2]**

At this institution, have you ever:

	Yes	No	Response
Collaborated on a research project with one or more graduate students	88.05%	11.95%	343
Co-authored a scholarly publication with one or more graduate students	76.61%	23.39%	342
Employed a graduate student as a research assistant	84.21%	15.79%	342
Given acknowledgment to one or more graduate students for contributions in your published work(s)	80.12%	19.88%	342
Presented research or a paper at an academic conference with one or more graduate students	79.18%	20.82%	341
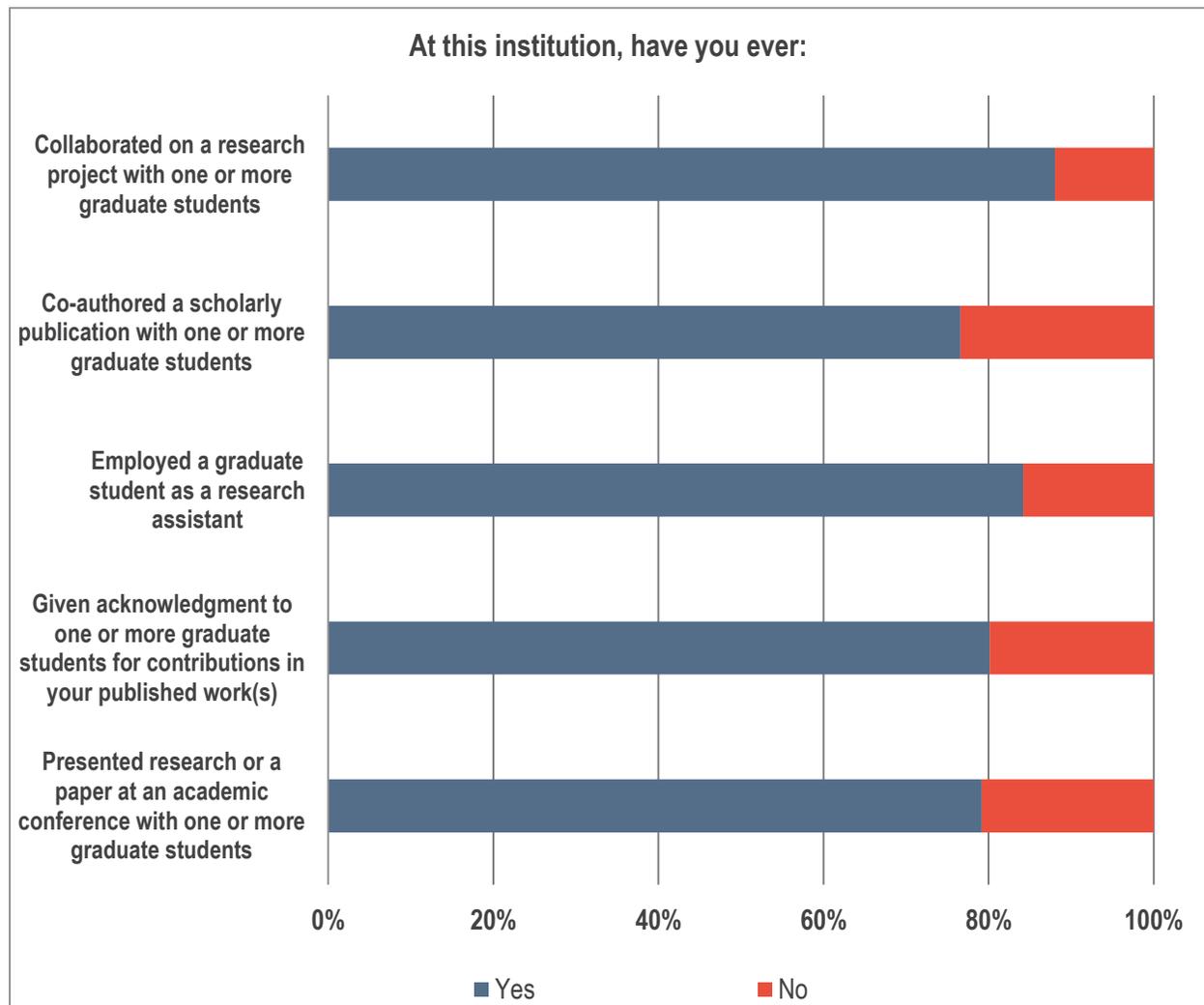
GI5 **[Contingent on GI1 and GI2]**

And, how important do you think it is professionally for graduate students to do each of the following before graduating from your program? Please use the scale below to rate from 6 to 1, where 6 equals "Very important" and 1 equals "Not at all important."

	5-6	3-4	1-2	Response
Co-author scholarly publications with their faculty advisor(s) or mentor(s)	90.67%	5.60%	3.73%	268
Publish scholarly research as the sole author	37.08%	24.72%	38.20%	267
Present scholarly research at an academic conference	94.40%	5.22%	0.37%	268
Collaborate on a research project with one or more faculty members	85.77%	10.49%	3.75%	267
Hold a position as a graduate research assistant	74.25%	21.27%	4.48%	268
Collaborate on a research project with one or more other graduate students	64.93%	25.75%	9.33%	268
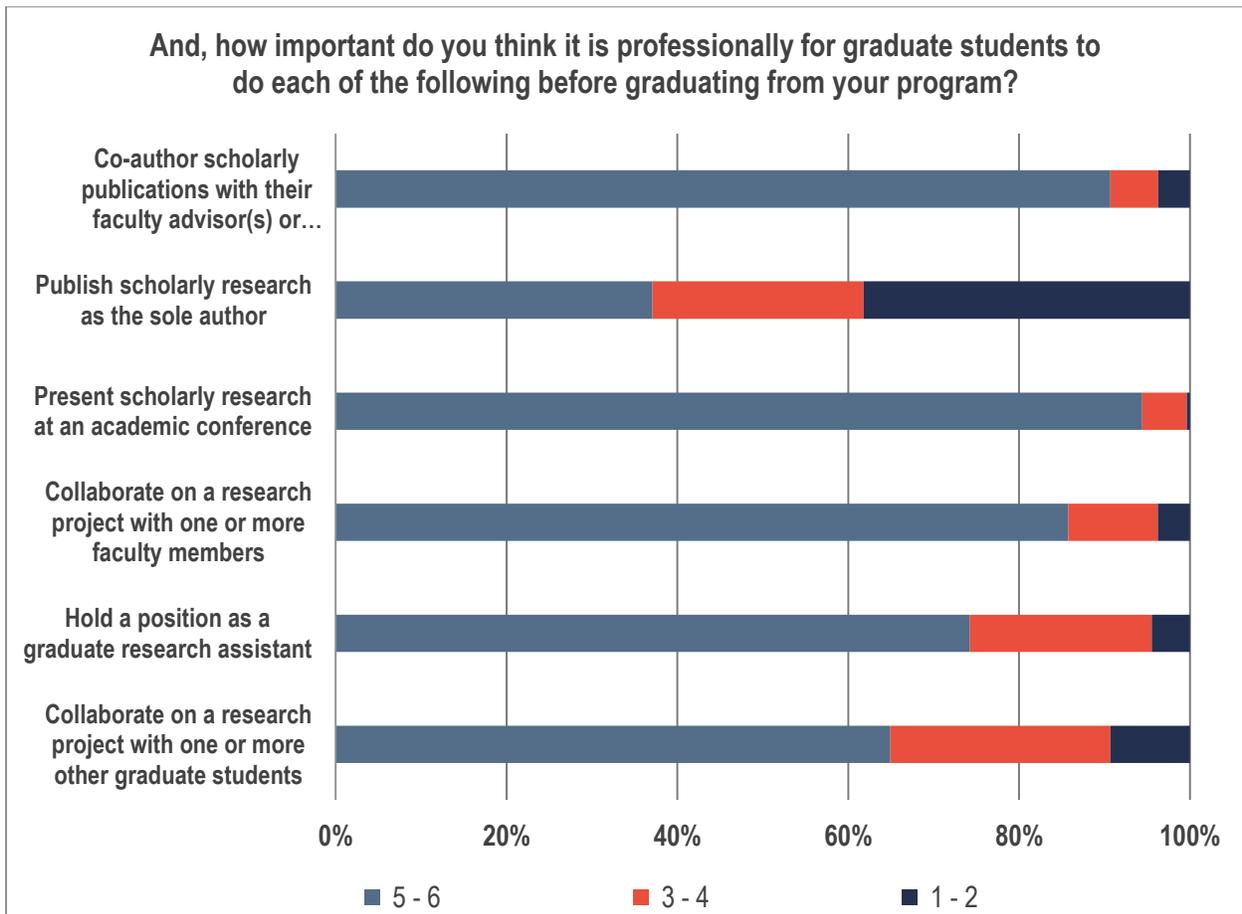
And, how important do you think it is professionally for graduate students to do each of the following before graduating from your program?

GI6 **[Contingent on GI1 and GI2]**
How often do you meet with your graduate student advisee(s) or mentee(s) to evaluate
or supervise their progress?

	Response	Percent
Often	269	78.89%
Occasionally	64	18.77%
Rarely	5	1.47%
Never	3	0.88%
	341	100.00%
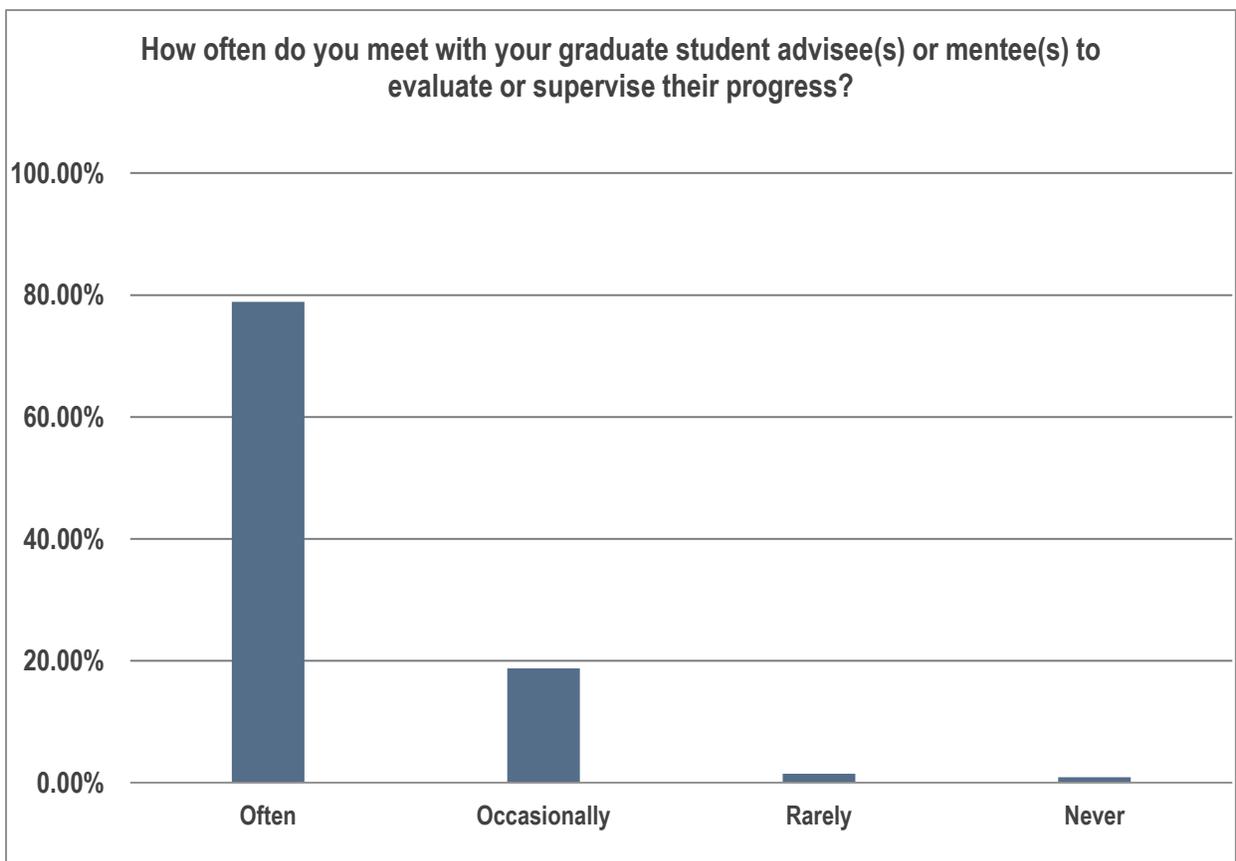
How often do you meet with your graduate student advisee(s) or mentee(s) to evaluate or supervise their progress?

GI7 [Contingent on GI1 and GI2]
Have you ever directed your graduate student advisee(s) or mentee(s) to consult with a subject librarian or departmental library liaison?

	Response	Percent
Yes	145	43.41%
No	189	56.59%
	334	100.00%
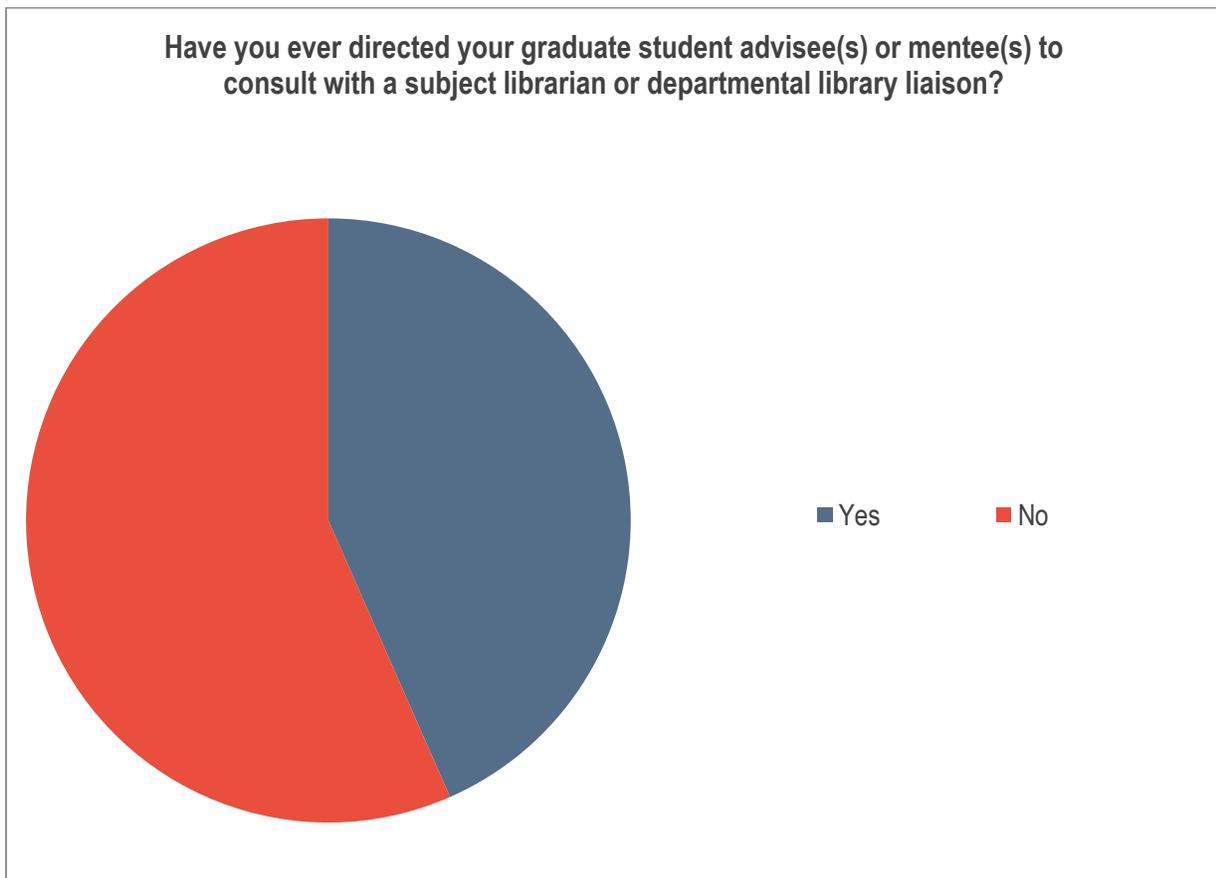
Have you ever directed your graduate student advisee(s) or mentee(s) to consult with a subject librarian or departmental library liaison?

■ Yes   ■ No

GI8 **[Contingent on GI7]**
Please use the 6 to 1 scale below to indicate the extent to which graduate students' interaction with subject or departmental liaison librarians at your college or university library helps them with their research projects, where a 6 equals "Helps significantly" and a 1 equals "Does not help at all".

	Response	Percent
5 – 6	82	60.74%
3 – 4	45	33.33%
1 – 2	8	5.93%
	135	100.00%
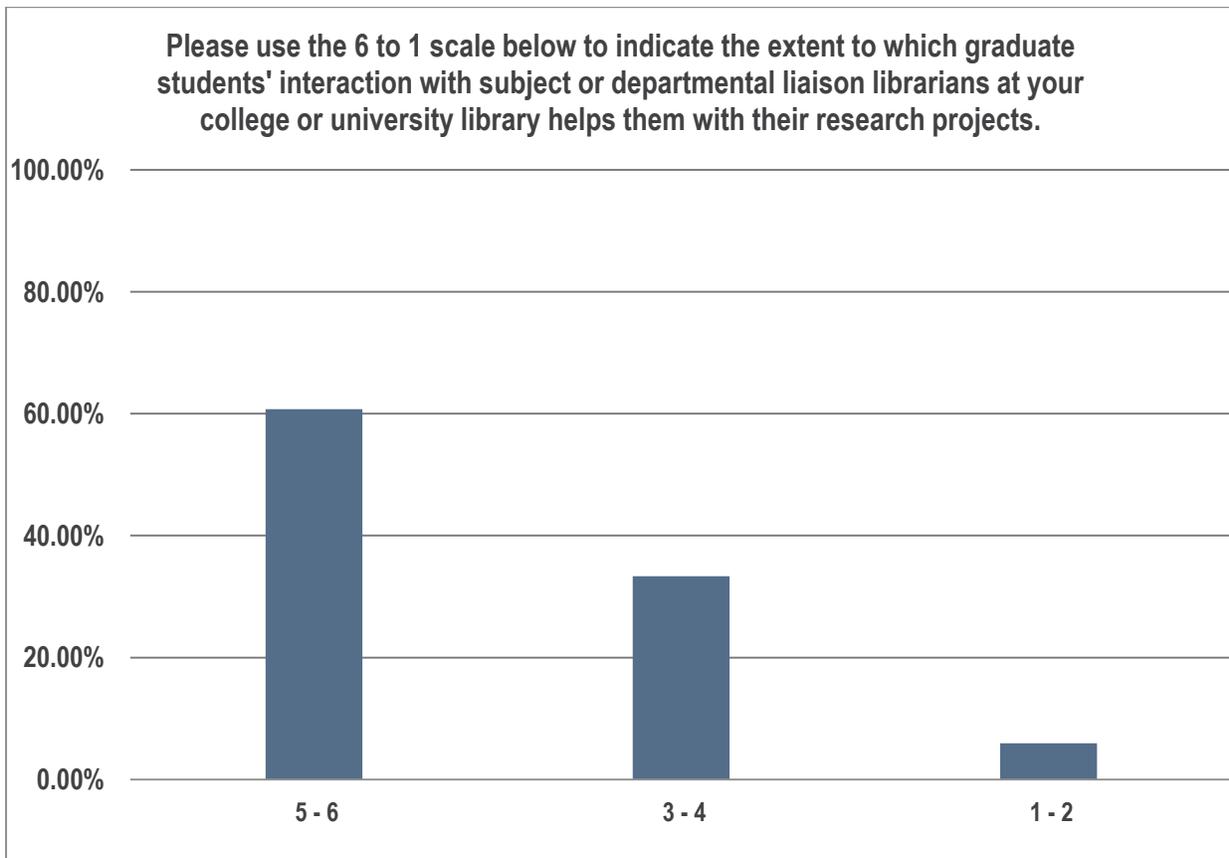
Please use the 6 to 1 scale below to indicate the extent to which graduate students' interaction with subject or departmental liaison librarians at your college or university library helps them with their research projects.

GI9 **[Contingent on GI1 and GI2]**

In general, how would you rate the proficiency level of incoming graduate students to your department or program in each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Excellent" and 1 equals "Poor."

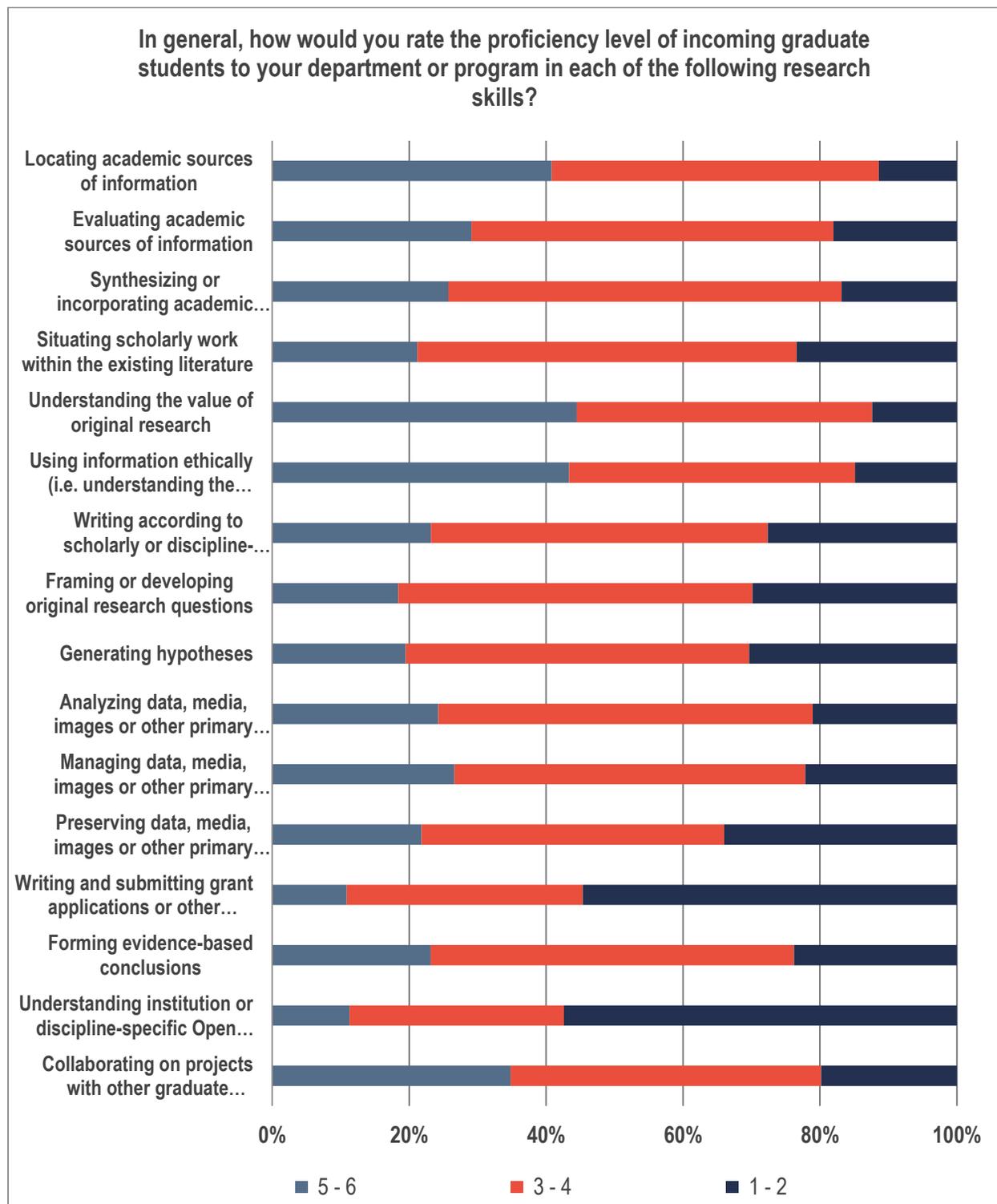|	5-6	3-4	1-2	Response
Locating academic sources of information	40.82%	47.78%	11.39%	316
Evaluating academic sources of information	29.11%	52.85%	18.04%	316
Synthesizing or incorporating academic information into research papers or projects	25.71%	57.46%	16.83%	315
Situating scholarly work within the existing literature	21.20%	55.38%	23.42%	316
Understanding the value of original research	44.44%	43.17%	12.38%	315
Using information ethically (i.e. understanding the concept of intellectual property, copyright issues, and/or legal and ethical standards for the conduct of scholarly research)	43.35%	41.77%	14.87%	316
Writing according to scholarly or discipline-specific conventions	23.17%	49.21%	27.62%	315
Framing or developing original research questions	18.41%	51.75%	29.84%	315
Generating hypotheses	19.49%	50.16%	30.35%	313
Analyzing data, media, images or other primary source materials	24.27%	54.69%	21.04%	309
Managing data, media, images or other primary source materials	26.60%	51.28%	22.12%	312
Preserving data, media, images or other primary source materials for the long-term	21.79%	44.23%	33.97%	312
Writing and submitting grant applications or other funding proposals	10.86%	34.50%	54.63%	313
Forming evidence-based conclusions	23.15%	53.05%	23.79%	311
Understanding institution or discipline-specific Open Access publishing conventions	11.29%	31.29%	57.42%	310
Collaborating on projects with other graduate students and/or instructors	34.82%	45.37%	19.81%	313

GI9 **[Contingent on GI1 and GI2]**

In general, how would you rate the proficiency level of incoming graduate students to your department or program in each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Excellent" and 1 equals "Poor."

In general, how would you rate the proficiency level of incoming graduate students to your department or program in each of the following research skills?

Categories (top to bottom):
- Locating academic sources of information
- Evaluating academic sources of information
- Synthesizing or incorporating academic…
- Situating scholarly work within the existing literature
- Understanding the value of original research
- Using information ethically (i.e. understanding the…
- Writing according to scholarly or discipline-…
- Framing or developing original research questions
- Generating hypotheses
- Analyzing data, media, images or other primary…
- Managing data, media, images or other primary…
- Preserving data, media, images or other primary…
- Writing and submitting grant applications or other…
- Forming evidence-based conclusions
- Understanding institution or discipline-specific Open…
- Collaborating on projects with other graduate…

Legend: ■ 5 - 6   ■ 3 - 4   ■ 1 - 2

GI10 **[Contingent on GI1 and GI2]**

To what extent are you responsible for helping your graduate student advisee(s) or mentee(s) to develop each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Completely responsible" and 1 equals "Not at all responsible."

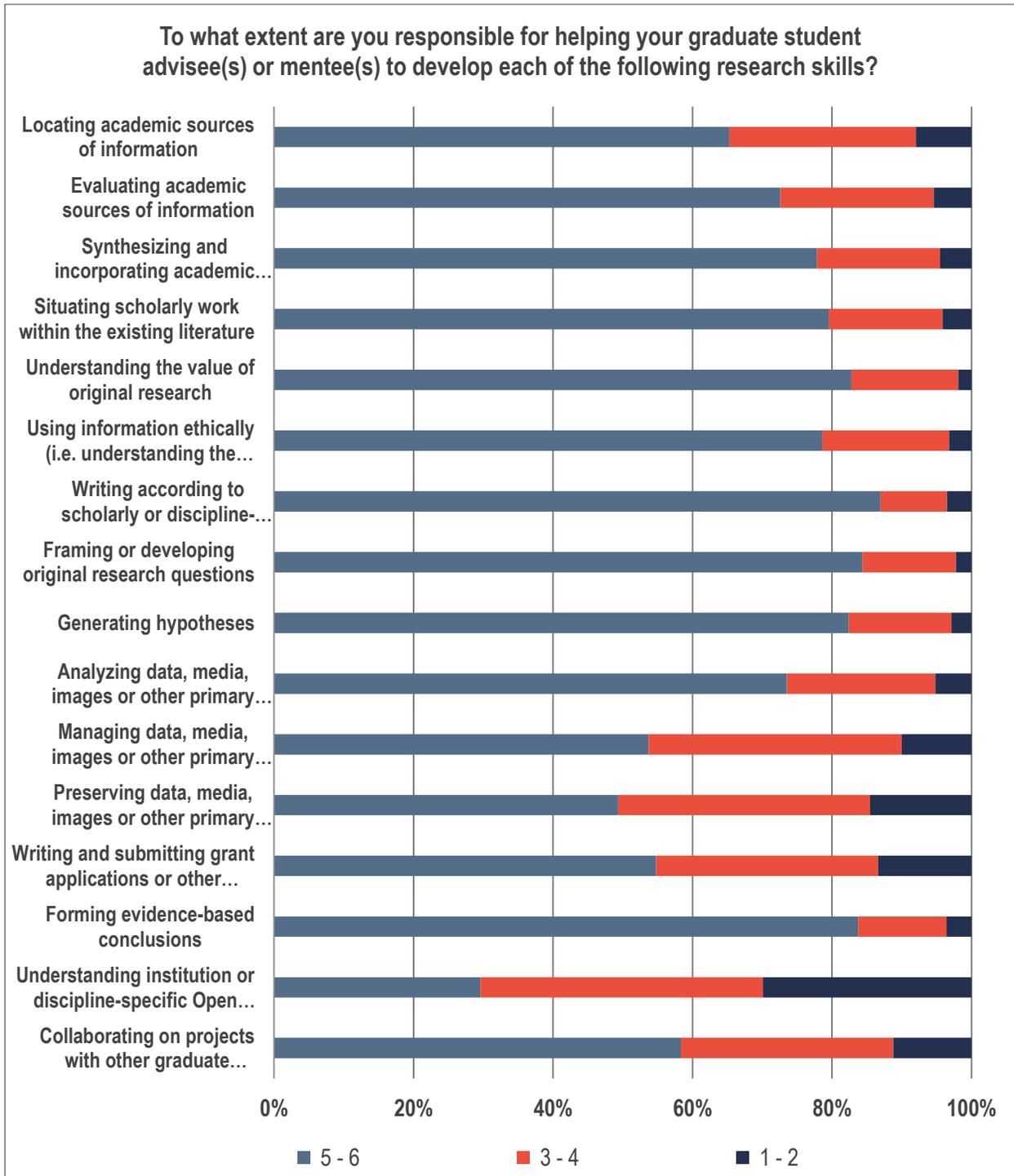|	5-6	3-4	1-2	Response
Locating academic sources of information	65.29%	26.75%	7.96%	314
Evaluating academic sources of information	72.61%	21.97%	5.41%	314
Synthesizing and incorporating academic information into research papers or projects	77.88%	17.63%	4.49%	312
Situating scholarly work within the existing literature	79.55%	16.29%	4.15%	313
Understanding the value of original research	82.80%	15.29%	1.91%	314
Using information ethically (i.e. understanding the concept of intellectual property, copyright issues, and/or legal and ethical standards for the conduct of scholarly research)	78.59%	18.21%	3.19%	313
Writing according to scholarly or discipline-specific conventions	86.94%	9.55%	3.50%	314
Framing or developing original research questions	84.39%	13.38%	2.23%	314
Generating hypotheses	82.43%	14.70%	2.88%	313
Analyzing data, media, images or other primary source materials	73.55%	21.29%	5.16%	310
Managing data, media, images or other primary source materials	53.70%	36.33%	9.97%	311
Preserving data, media, images or other primary source materials for the long-term	49.35%	36.13%	14.52%	310
Writing and submitting grant applications or other funding proposals	54.78%	31.85%	13.38%	314
Forming evidence-based conclusions	83.77%	12.66%	3.57%	308
Understanding institution or discipline-specific Open Access publishing conventions	29.58%	40.51%	29.90%	311
Collaborating on projects with other graduate students and/or instructors	58.33%	30.45%	11.22%	312

GI10 **[Contingent on GI1 and GI2]**

To what extent are you responsible for helping your graduate student advisee(s) or mentee(s) to develop each of the following research skills? Please use the scale below to rate from 6 to 1, where 6 equals "Completely responsible" and 1 equals "Not at all responsible."

To what extent are you responsible for helping your graduate student advisee(s) or mentee(s) to develop each of the following research skills?

Categories (top to bottom):
- Locating academic sources of information
- Evaluating academic sources of information
- Synthesizing and incorporating academic…
- Situating scholarly work within the existing literature
- Understanding the value of original research
- Using information ethically (i.e. understanding the…
- Writing according to scholarly or discipline-…
- Framing or developing original research questions
- Generating hypotheses
- Analyzing data, media, images or other primary…
- Managing data, media, images or other primary…
- Preserving data, media, images or other primary…
- Writing and submitting grant applications or other…
- Forming evidence-based conclusions
- Understanding institution or discipline-specific Open…
- Collaborating on projects with other graduate…
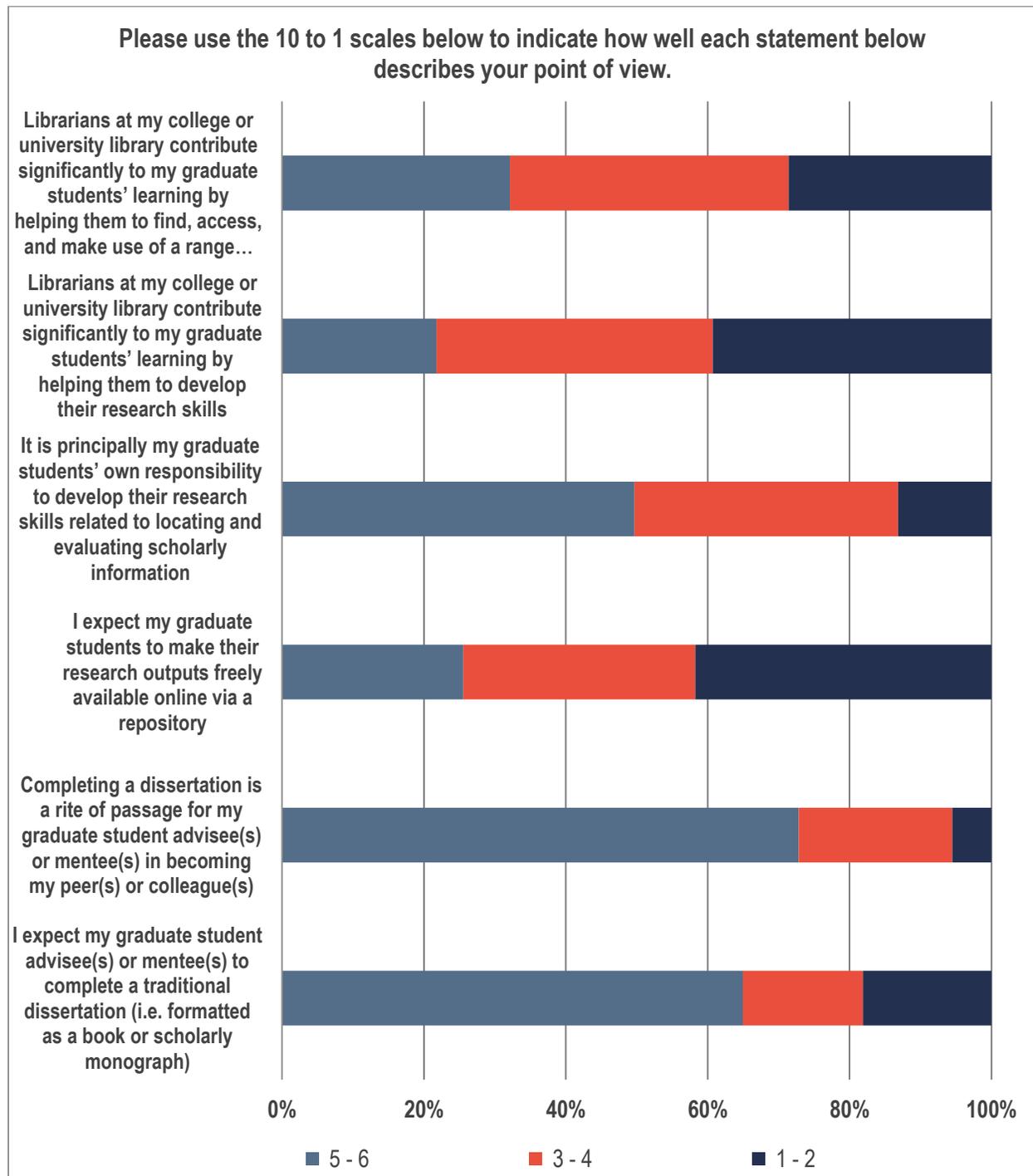
Legend: ■ 5 - 6   ■ 3 - 4   ■ 1 - 2

GI11 **[Contingent on GI1 and GI2]**

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

	5-6	3-4	1-2	Response
Librarians at my college or university library contribute significantly to my graduate students' learning by helping them to find, access, and make use of a range of secondary and primary sources in their coursework	32.14%	39.29%	28.57%	308
Librarians at my college or university library contribute significantly to my graduate students' learning by helping them to develop their research skills	21.75%	38.96%	39.29%	308
It is principally my graduate students' own responsibility to develop their research skills related to locating and evaluating scholarly information	49.68%	37.18%	13.14%	312
I expect my graduate students to make their research outputs freely available online via a repository	25.57%	32.69%	41.75%	309
Completing a dissertation is a rite of passage for my graduate student advisee(s) or mentee(s) in becoming my peer(s) or colleague(s)	72.83%	21.65%	5.51%	254
I expect my graduate student advisee(s) or mentee(s) to complete a traditional dissertation (i.e. formatted as a book or scholarly monograph)	64.96%	16.93%	18.11%	254

GI11 [Contingent on GI1 and GI2]

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view – a 10 equals "Extremely well" and a 1 equals "Not at all well." You may pick any number on the scale. The higher the number, the better you think the statement describes your point of view. The lower the number, the less you think the statement describes your point of view.

Please use the 10 to 1 scales below to indicate how well each statement below describes your point of view.

- Librarians at my college or university library contribute significantly to my graduate students' learning by helping them to find, access, and make use of a range…
- Librarians at my college or university library contribute significantly to my graduate students' learning by helping them to develop their research skills
- It is principally my graduate students' own responsibility to develop their research skills related to locating and evaluating scholarly information
- I expect my graduate students to make their research outputs freely available online via a repository
- Completing a dissertation is a rite of passage for my graduate student advisee(s) or mentee(s) in becoming my peer(s) or colleague(s)
- I expect my graduate student advisee(s) or mentee(s) to complete a traditional dissertation (i.e. formatted as a book or scholarly monograph)

Legend: ■ 5 - 6   ■ 3 - 4   ■ 1 - 2

Demographics

D1

Do you think of yourself primarily as a researcher, primarily as a teacher, or somewhere in between?
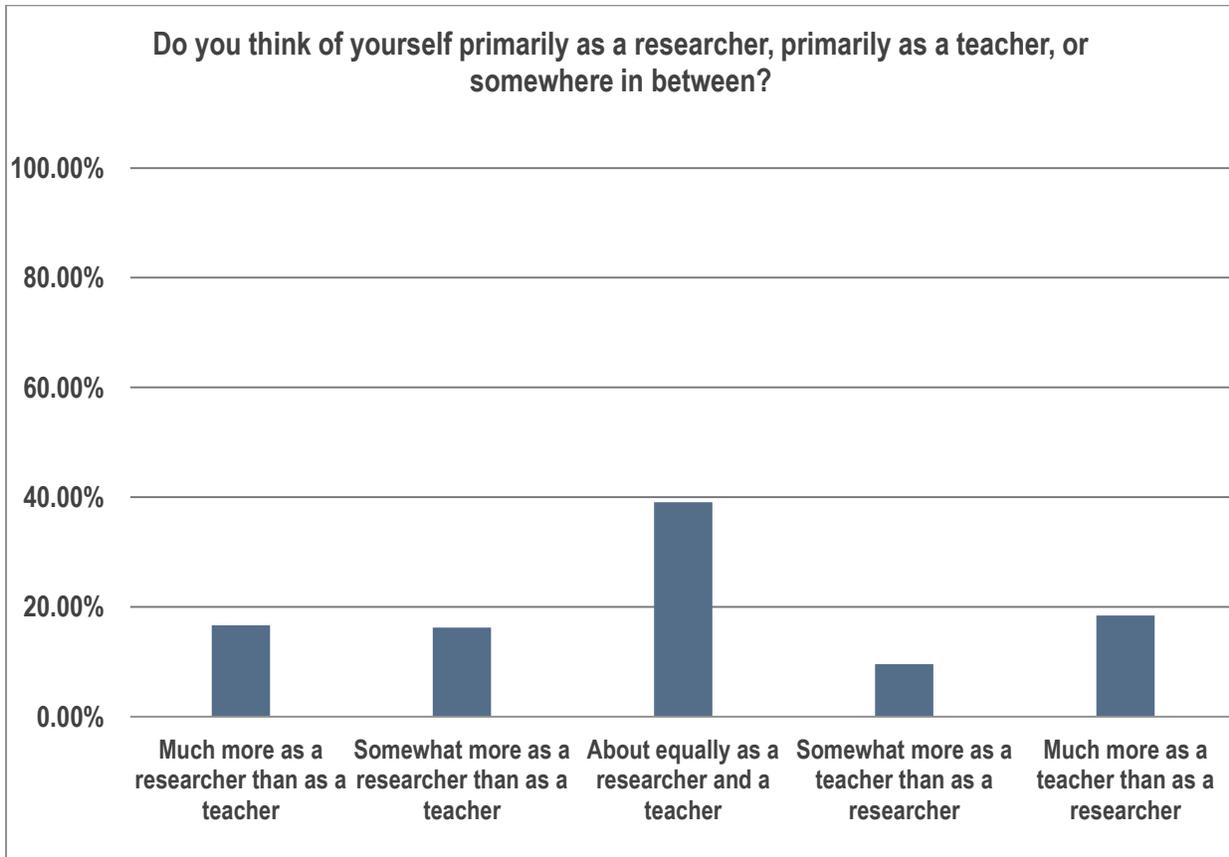
D2

Faculty members teach courses both in traditional face-to-face classroom settings and using a variety of distance education models. Do you teach courses primarily face-to-face, primarily remotely, or somewhere in between?

D1
Do you think of yourself primarily as a researcher, primarily as a teacher, or somewhere in between?

	Response	Percent
Much more as a researcher than as a teacher	75	16.67%
Somewhat more as a researcher than as a teacher	73	16.22%
About equally as a researcher and a teacher	176	39.11%
Somewhat more as a teacher than as a researcher	43	9.56%
Much more as a teacher than as a researcher	83	18.44%
	450	100.00%

Do you think of yourself primarily as a researcher, primarily as a teacher, or somewhere in between?

D2
Faculty members teach courses both in traditional face-to-face classroom settings and using a variety of distance education models. Do you teach courses primarily face-to-face, primarily remotely, or somewhere in between?

	Response	Percent
Primarily teach face-to-face	383	85.87%
About equally face-to-face and at a distance	49	10.99%
Primarily teach at a distance	14	3.14%
	446	100.00%

Do you teach courses primarily face-to-face, primarily remotely, or somewhere in between?
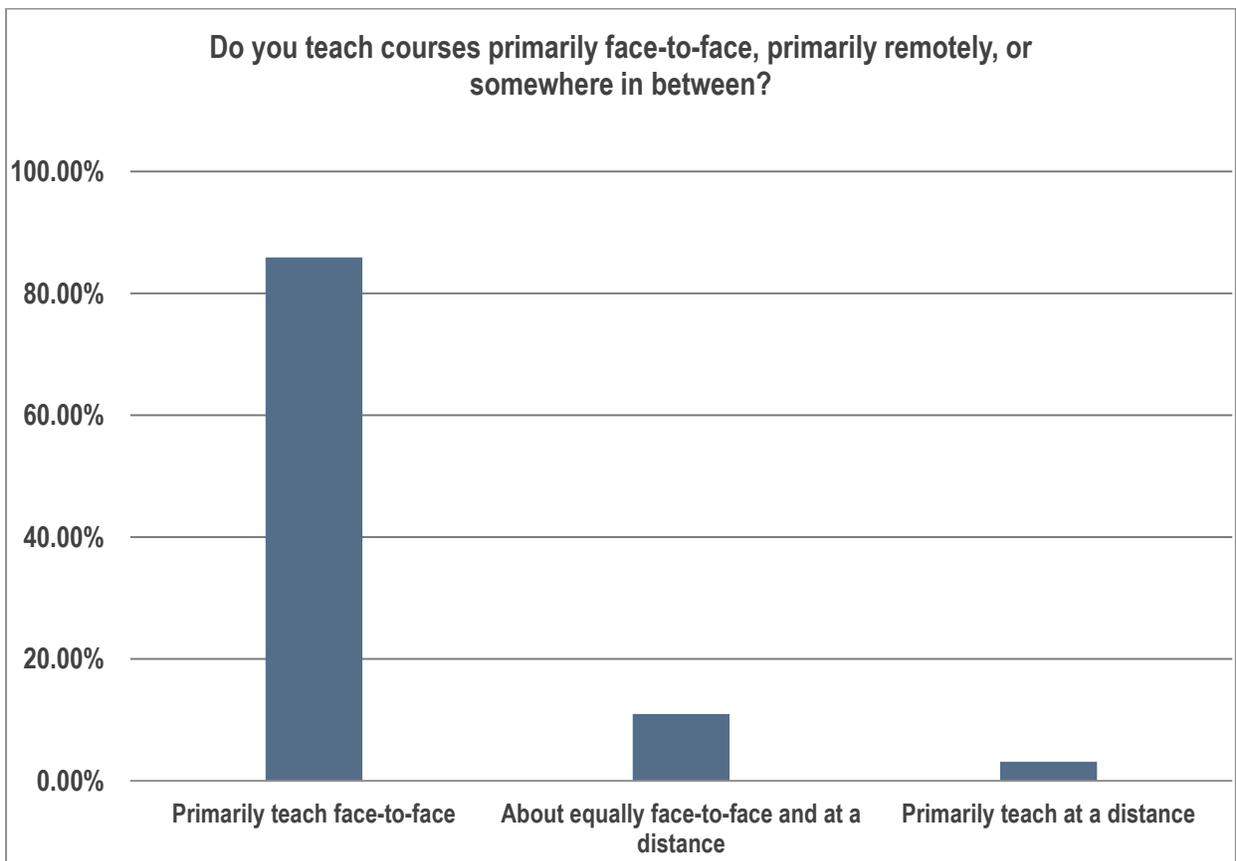
Embedded Data

For reasons concerning space, embedded data for department, age, and years at ISU are not included in this report. These embedded data are included in the dataset file of findings.
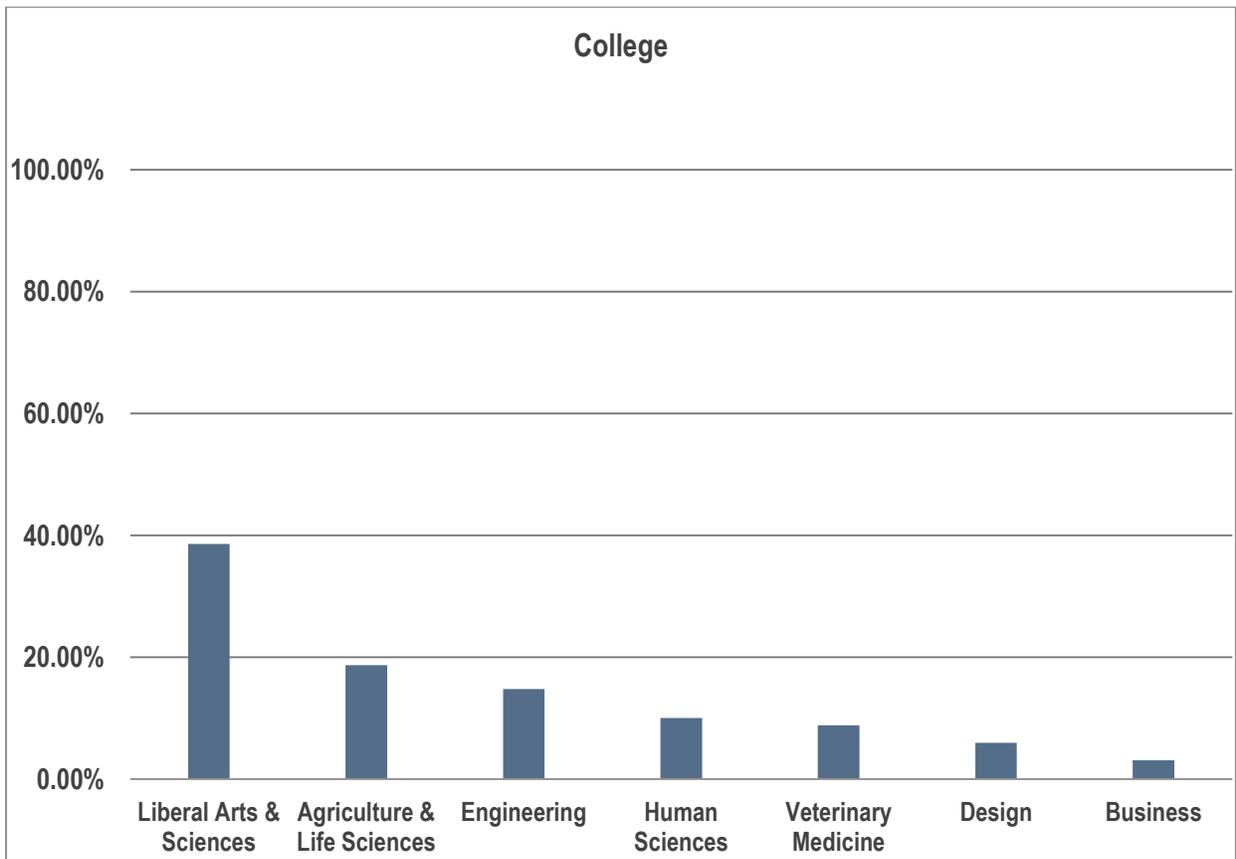
ED1
Department

ED2
College

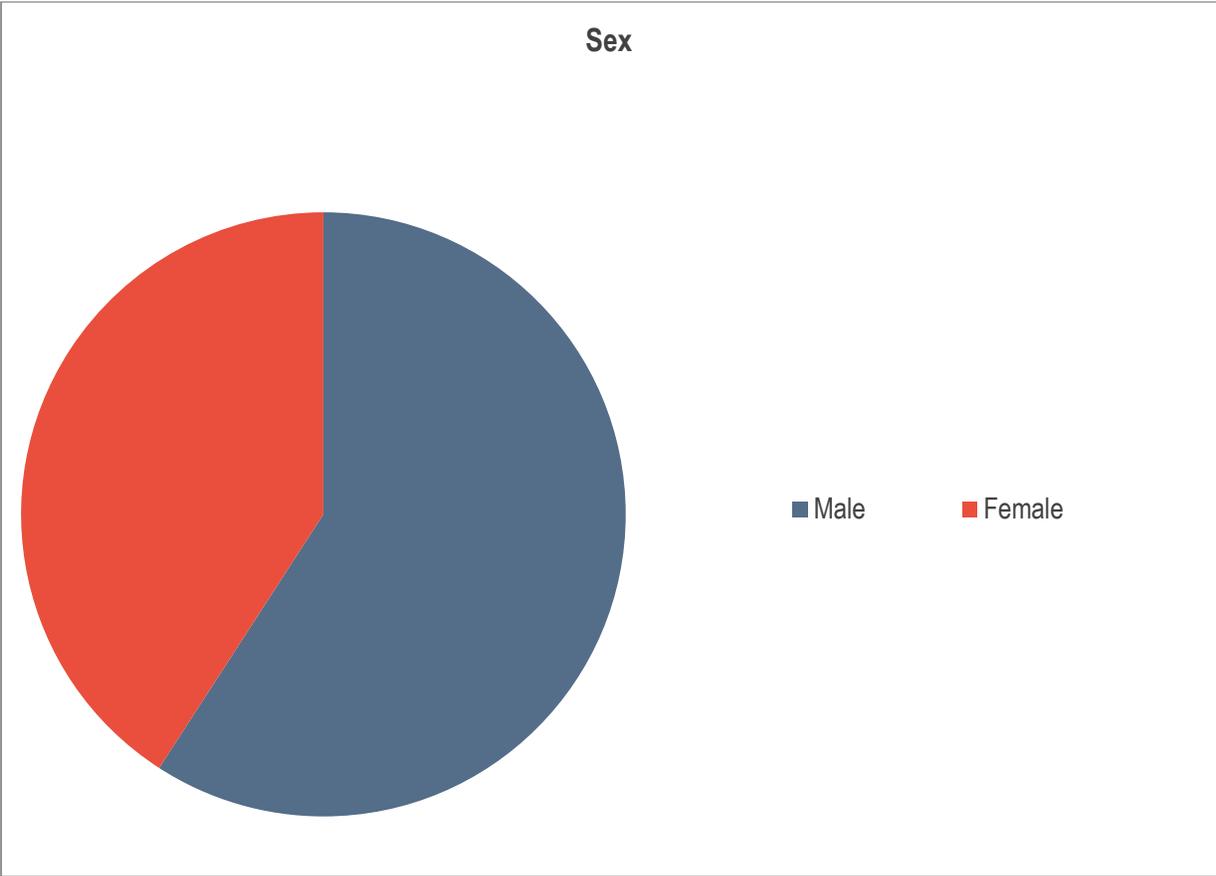ED3
Sex

ED4
Age

ED5
Tenure Status

ED6
Years at ISU

ED2
College

	Response	Percent
Liberal Arts & Sciences	188	38.60%
Agriculture & Life Sciences	91	18.69%
Engineering	72	14.78%
Human Sciences	49	10.06%
Veterinary Medicine	43	8.83%
Design	29	5.95%
Business	15	3.08%
	487	100.00%

College

ED3
Sex

	Response	Percent
Male	288	59.14%
Female	199	40.86%
	487	100.00%

Sex

Male   Female

ED5
Tenure Status

	Response	Percent
Tenured	271	55.65%
Non-Tenured	116	23.82%
Tenure-Eligible	100	20.53%
	487	100.00%

Tenure Status