Science Media Centre

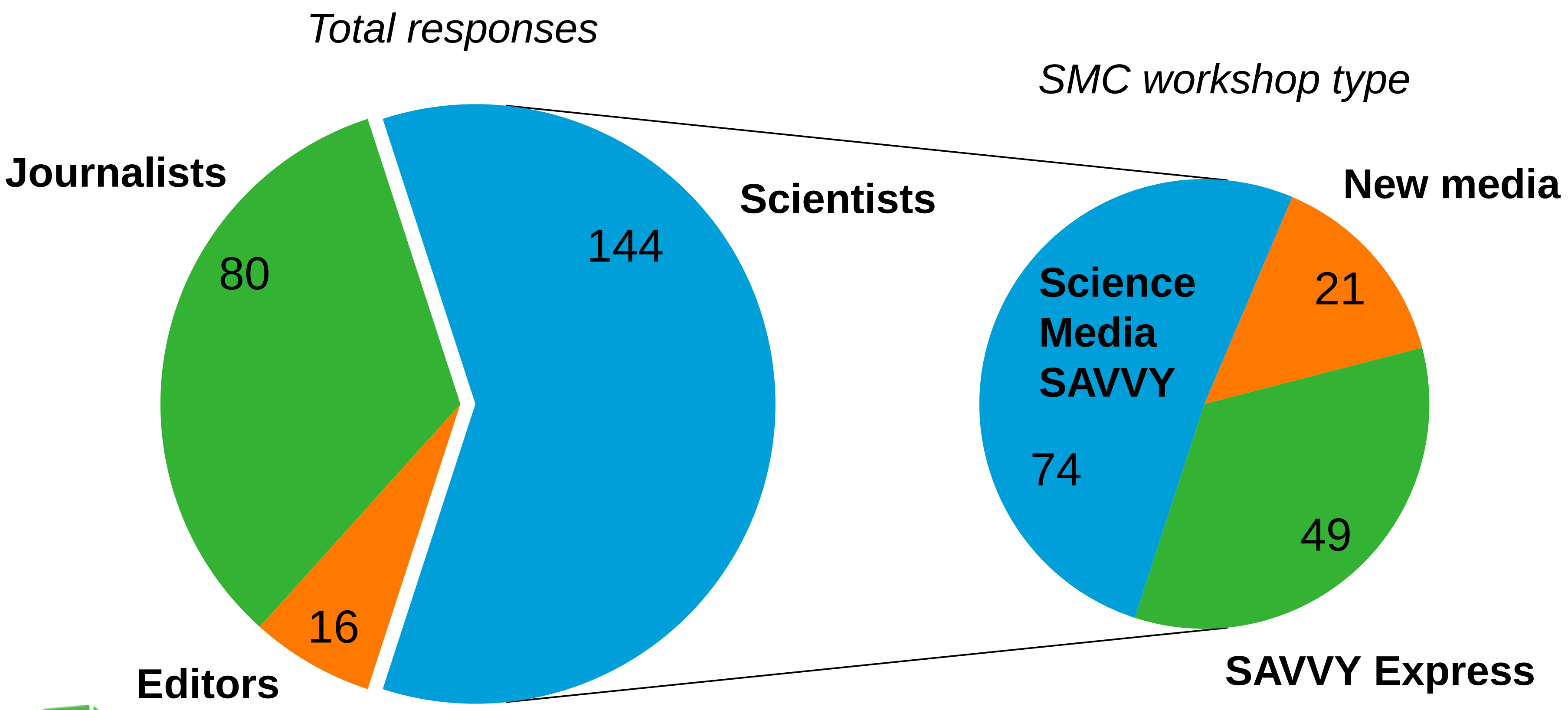
Dacia Herbulock, Senior Media Advisor

2016 Evaluation survey results

2016 Evaluation of SMC activities

- Survey targeted scientists, journalists and editors
- Previous contact with SMC: participants in our training and registered users
- Aim: to evaluate impact, effectiveness, and influence of SMC resources

Survey responses



What we found

- SMC training improves scientists' confidence and willingness to engage with media
- Journalists use and value SMC resources; most do so irregularly ($\leq$1/mo.)
- Positive attitudes to science from media and demand for free, exclusive content

Survey overview: Scientists

- Focus on Science Media SAVVY training workshop impacts:
  - Full workshop – (2-day)
  - Express – (15 min)
  - New media (video, animation, podcast, blog)
- + Broader attitudes to media, communicating research to public

Media training for scientists

TVNZ newsroom visit
Science Media SAVVY
workshop Auckland Sep 2016

SCIENCE MEDIA | SAVVY

Science Media SAVVY - workshop overview

Day One

Communication skills and media training

Welcome and introduction

Experiences -- media encounters, impressions, stereotypes

Using clear, compelling language

Breaking free of jargon
Your science in a soundbite

Distilling your message

What does your audience care about?

Presence and performance

Overcoming nerves

Turning on your 'elevated self'

Handling the first phone call

Getting a read on the media agenda

Giving an effective interview

On-camera practice, feedback

When the interview gets challenging…

How to respond effectively

Practicing your media pitch

Day Two

Behind the scenes: news and social media

New Zealand's changing media landscape

Inside the news media

How journalists work, news cycle demands

Newsroom tour

New media opportunities

Blogging and social media for scientists

Producing your own online content

Your science media toolbox

Working with your press office

Online tools to help you stay savvy

Visiting media panel - Q&A

Journalists from television, radio, newspaper and magazines offer their perspectives and answer your questions

Media pitch session

Put your new skills to the test, panel of visiting media "judges" offer feedback

SMC NZ Science Media Centre

Media coverage frequently results from contacts made during SAVVY workshops

Long-term relationships: In-depth articles may appear years later as direct result of SAVVY workshop media pitch

FIGHT FOR LIFE

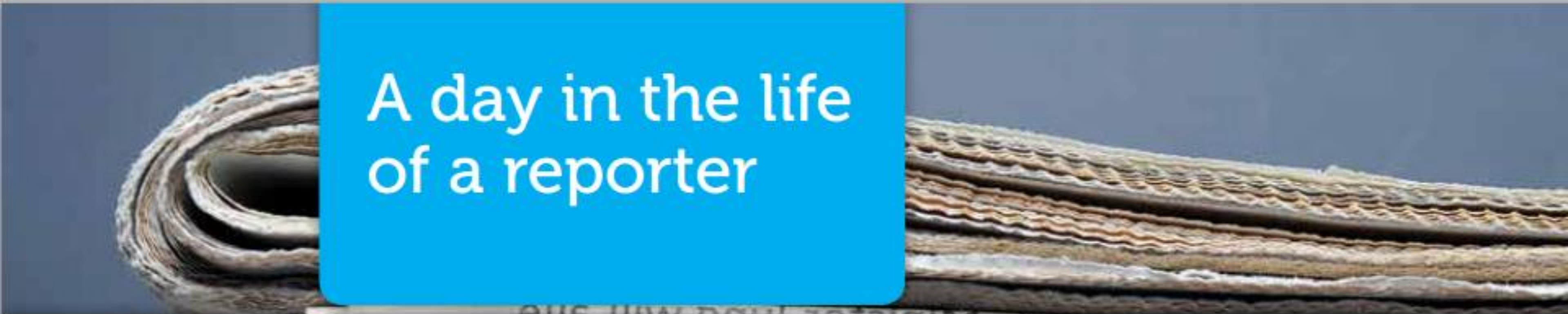
Neurobiologist Melanie Cheung (right) discusses a brain scan with radiographer Andrea Champion at the University of Auckland's Centre for Advanced MRI.

Fifteen years ago, Melanie Cheung was a university dropout struggling to find a sense of direction in her life. Now she's leading a world-first research project giving hope to people who are slowly losing themselves to Huntington's disease.

JOANNA WANE IS NORTH & SOUTH'S DEPUTY EDITOR. PHOTOGRAPHY BY ADRIAN MALLOCH.

SAVVY Express training
NZ Marine Science Society
conference 2015

Resources for scientists



A day in the life of a reporter

JAMIE MORTON
New Zealand Herald
Science reporter

New Zealand Herald Science reporter Jamie Morton plots the development of a story through the day from idea to finished product...

8.30am
I sit down at my desk and read the paper. I want to see how my stories were treated, how I can improve. I catch up on news that broke overnight, browsing science sections of overseas media and check the debates running on Sciblogs.

Press releases from universities or research institutes will be waiting in my inbox. Whatever turns up, via releases or news tips, I ask myself a few questions: Is it new, a world-first? Why should a reader care about it? Will it have some significant impact on their life? Or is it simply interesting or quirky enough to make the grade?

9.30am
The first general news meeting is held in the newsroom. I'll pitch my stories to the morning duty chief reporter, and hopefully I'll have chosen them well enough that they'll sell themselves.

10am
I hit the phone, lining up interviews. The key is to get quotes from key sources in the bag as early as possible. I'll think about photos, graphics, factboxes. Do we need them? If so, I'll let the photography and graphics teams know early. The middle part of the day is research and writing, maybe a site visit or coffee catch-up on a slow news day.

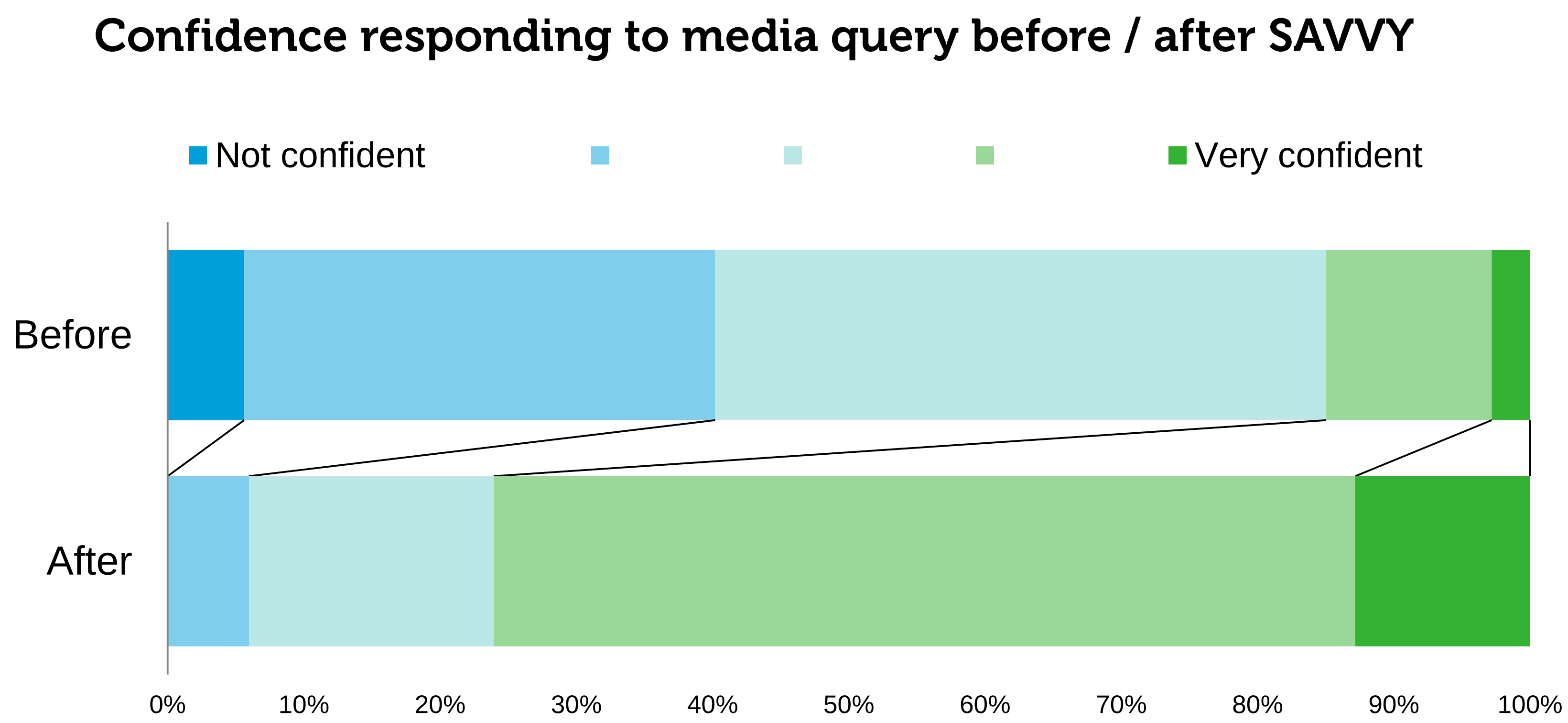
2.30pm
The afternoon chief reporter will ask how my story is tracking. If it is looking good, they'll add it to the newslist for the editorial heads to consider at the afternoon general news meeting. My bosses will make suggestions or query the research. They want to make sure it's a strong story.

4.30pm
For anything other than breaking news, the story has to be finished by this time. I'll file my article in our system and it will be picked up, sub-edited, and placed on a designated page.

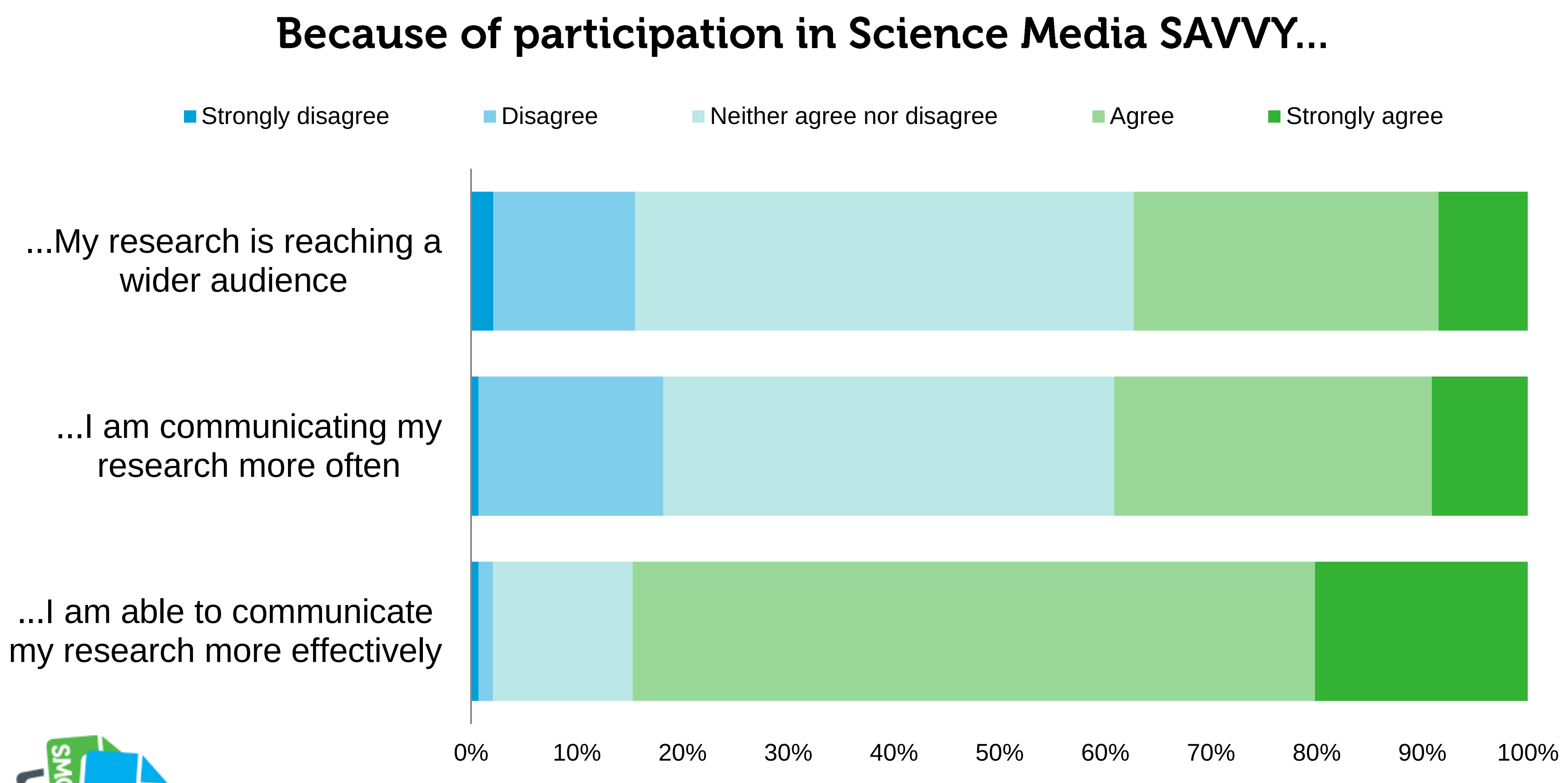
5.30pm
The final newslist is sent out to all reporters and I'll finally be able to see what page my story is destined f But I don't see exactly how it will look, the layout team will work into the night. I check my inbox and science websites one last time and head home.

9pm
My mobile phone rings - a sub editor wants to check a fact. I talk her through it, she tweaks the sentence. The story is finally put to bed and within a couple of hours will be rolling off the presses.

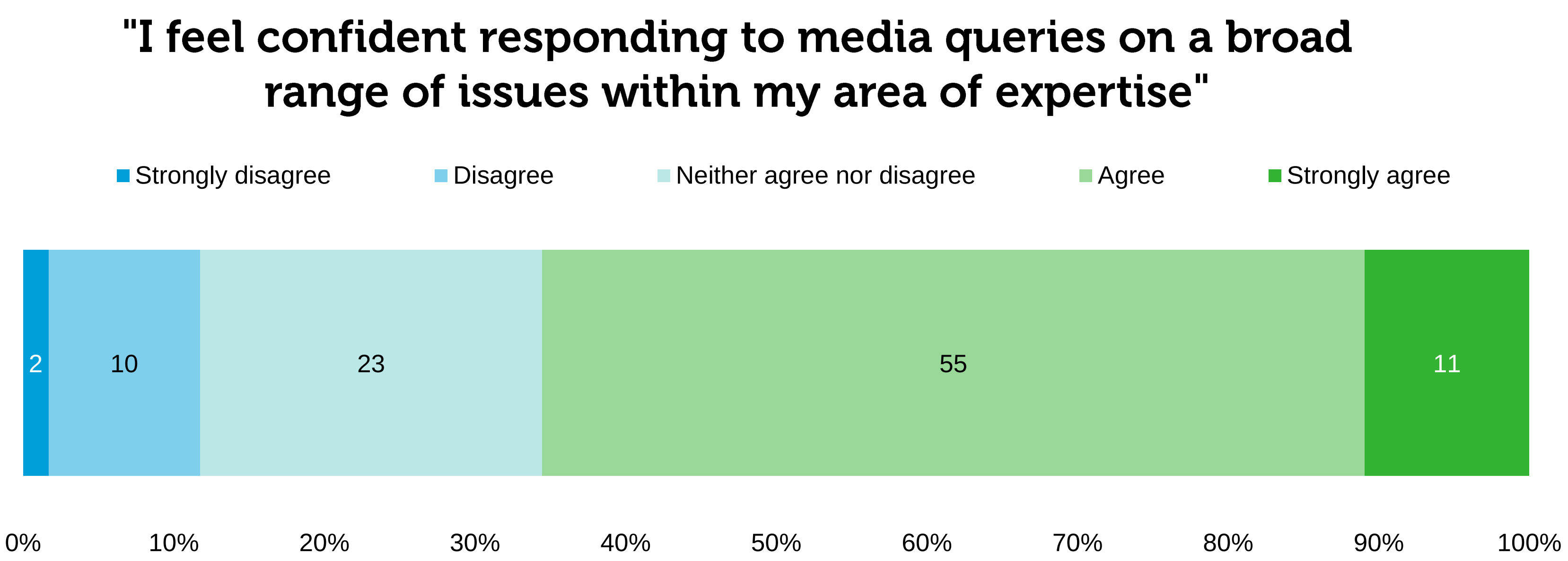
Survey results: Scientists



Scientists

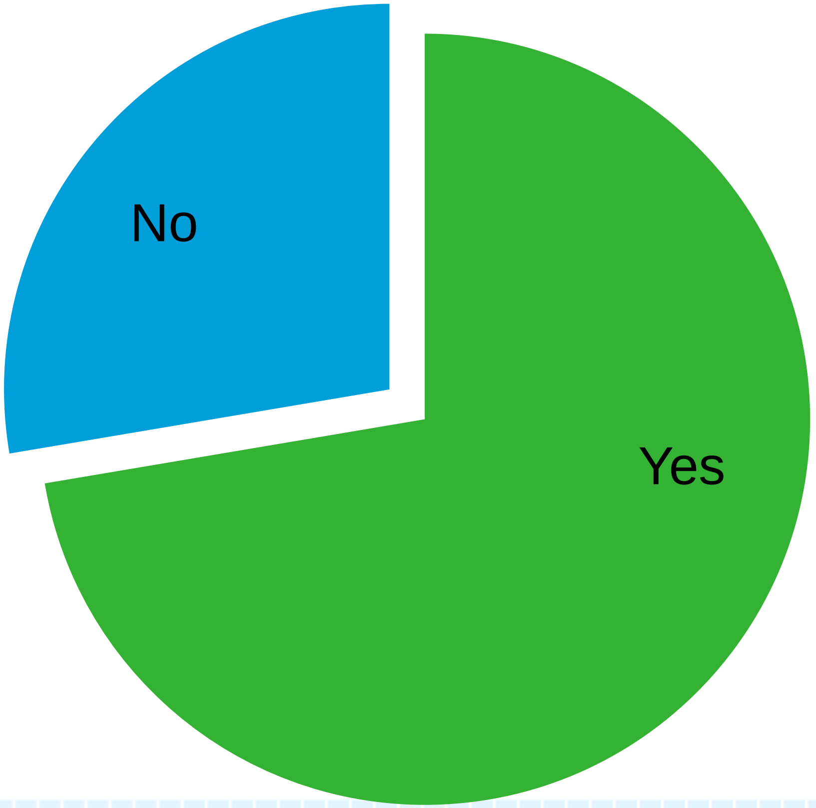

Because of participation in Science Media SAVVY...
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree
...My research is reaching a wider audience
...I am communicating my research more often
...I am able to communicate my research more effectively
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists

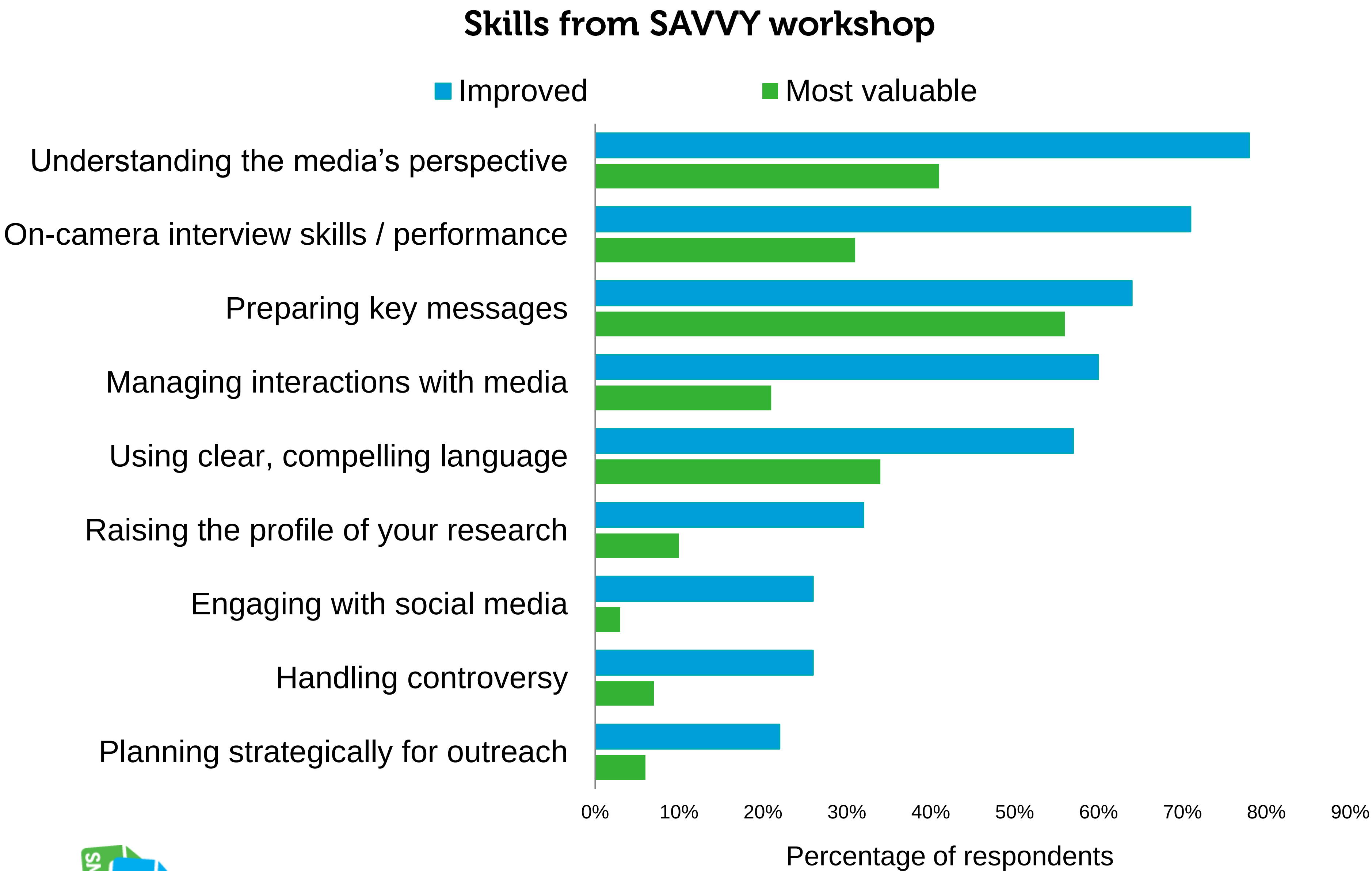

"I feel confident responding to media queries on a broad range of issues within my area of expertise"
Strongly disagree
Disagree
Neither agree nor disagree
Agree
Strongly agree
2
10
23
55
11
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists

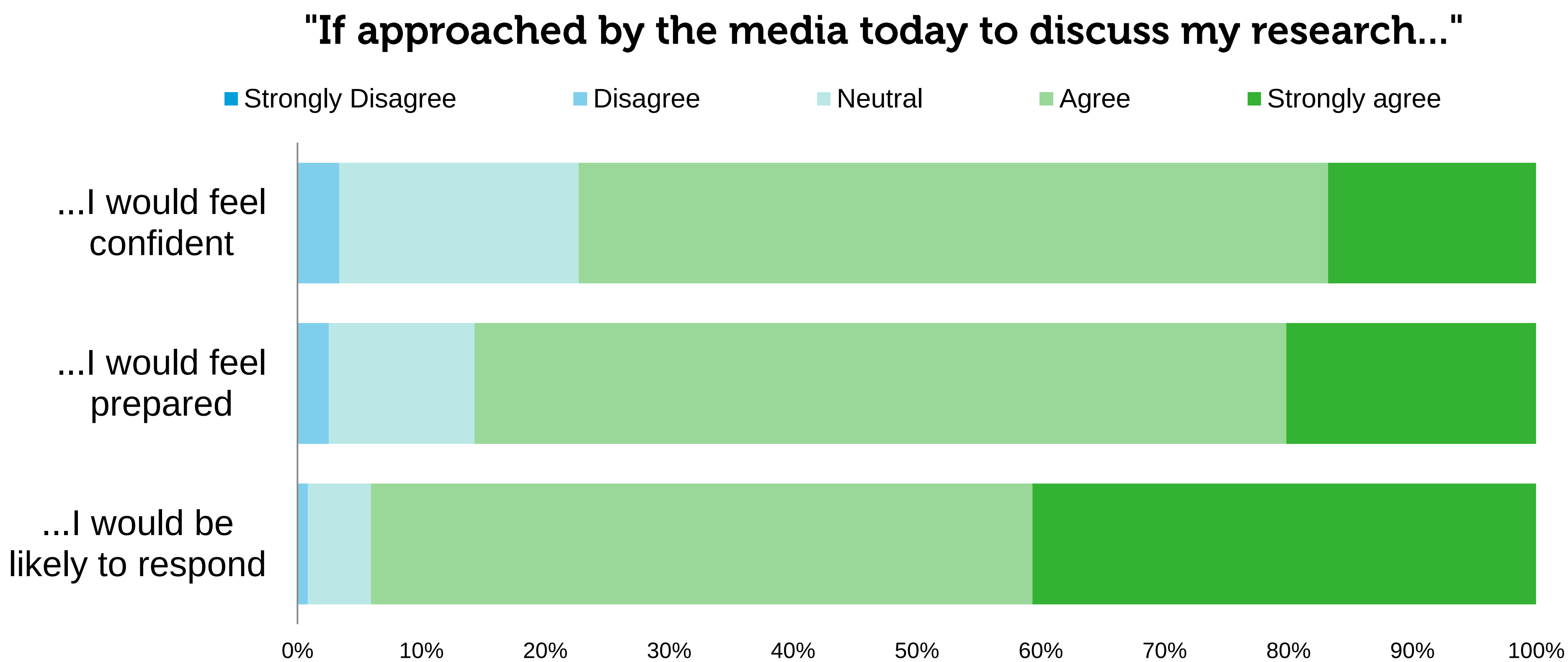
Did **SAVVY Express** lead to any changes in the way you prepare to communicate your research?



15 min intervention


Skills from SAVVY workshop
Improved
Most valuable
Understanding the media's perspective
On-camera interview skills / performance
Preparing key messages
Managing interactions with media
Using clear, compelling language
Raising the profile of your research
Engaging with social media
Handling controversy
Planning strategically for outreach
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
Percentage of respondents

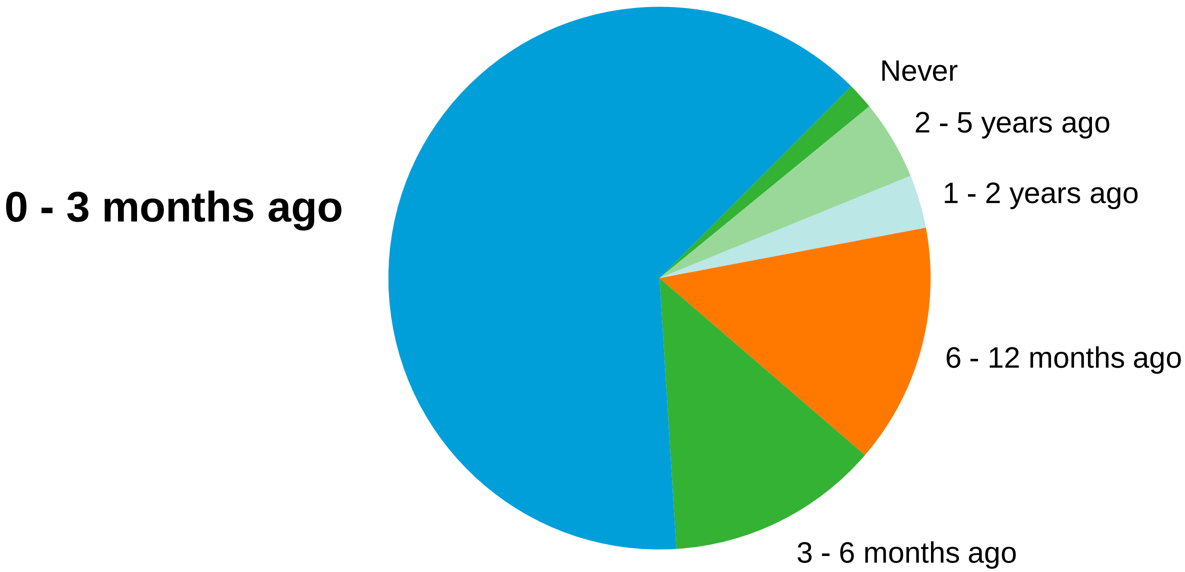
Scientists



"If approached by the media today to discuss my research..."
Strongly Disagree
Disagree
Neutral
Agree
Strongly agree
...I would feel confident
...I would feel prepared
...I would be likely to respond
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

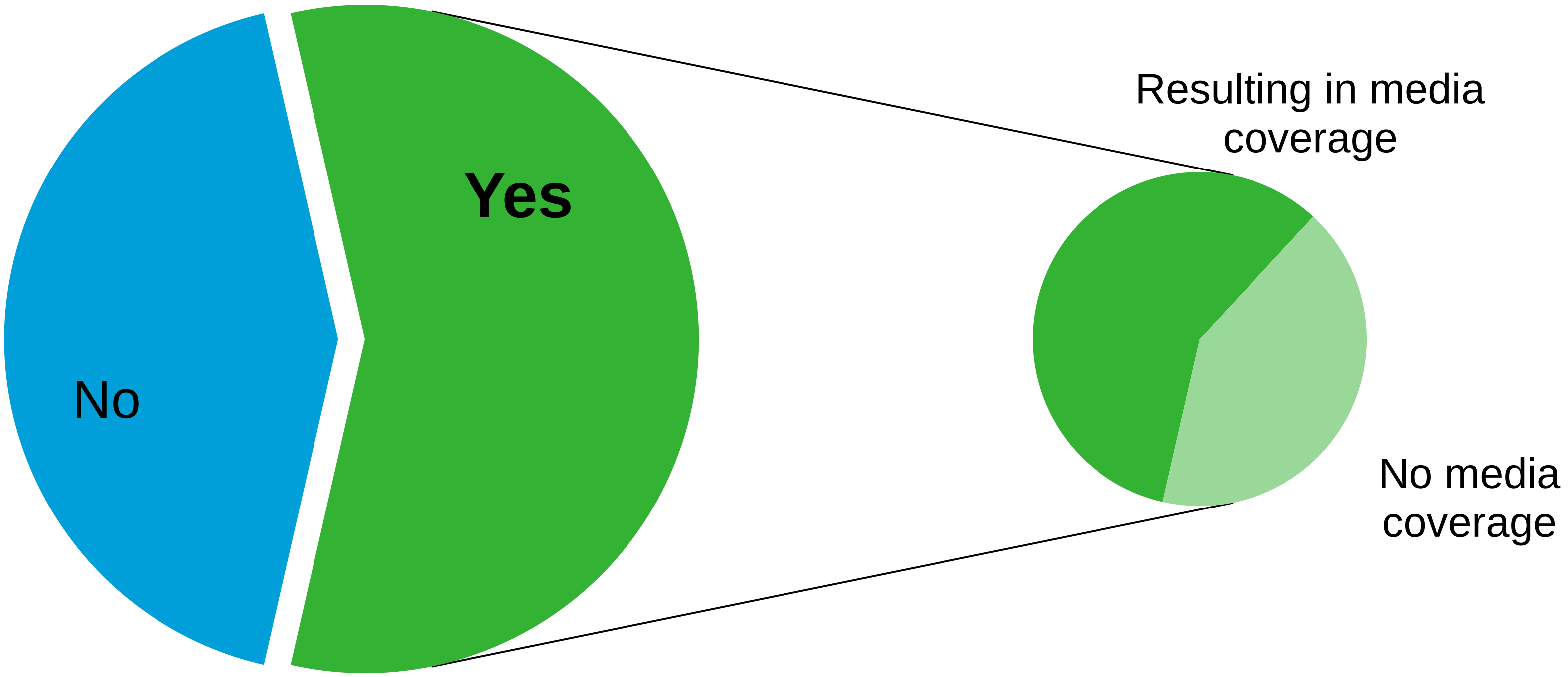
Scientists

When did you last respond to a media query or make a media appearance?

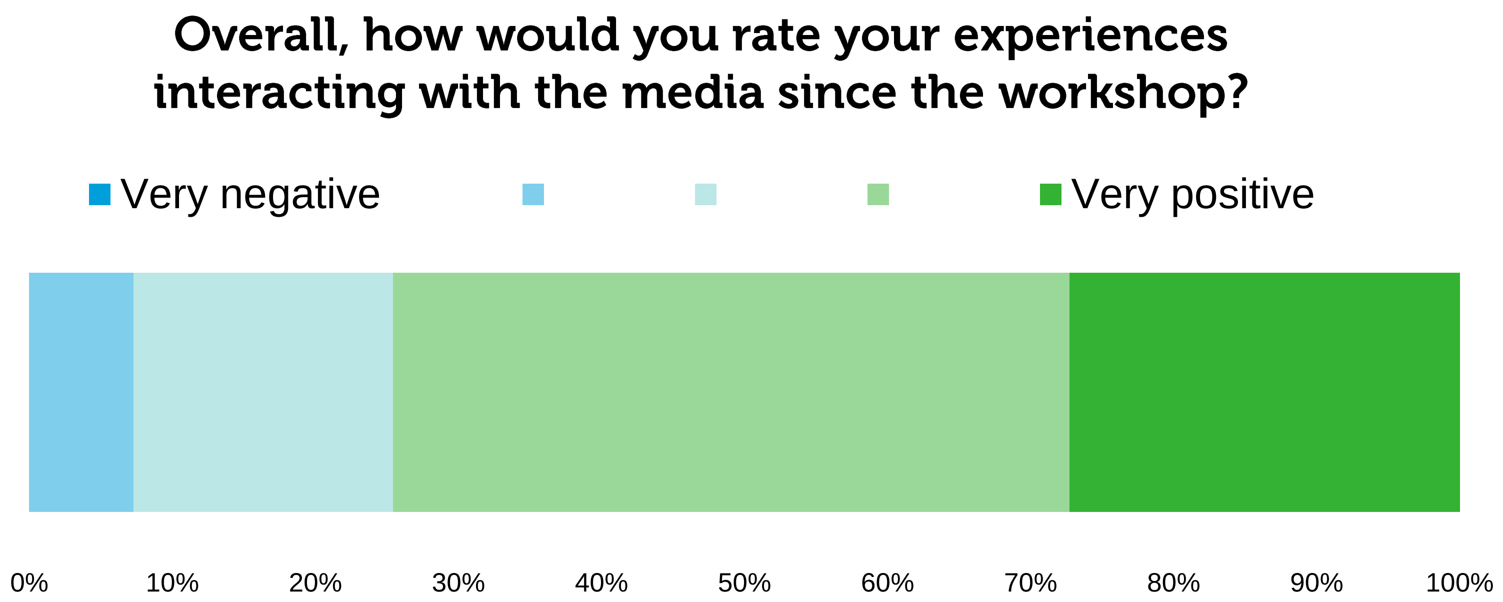


Scientists

Following the SAVVY workshop, did you have further contact with journalists you met during the workshop?

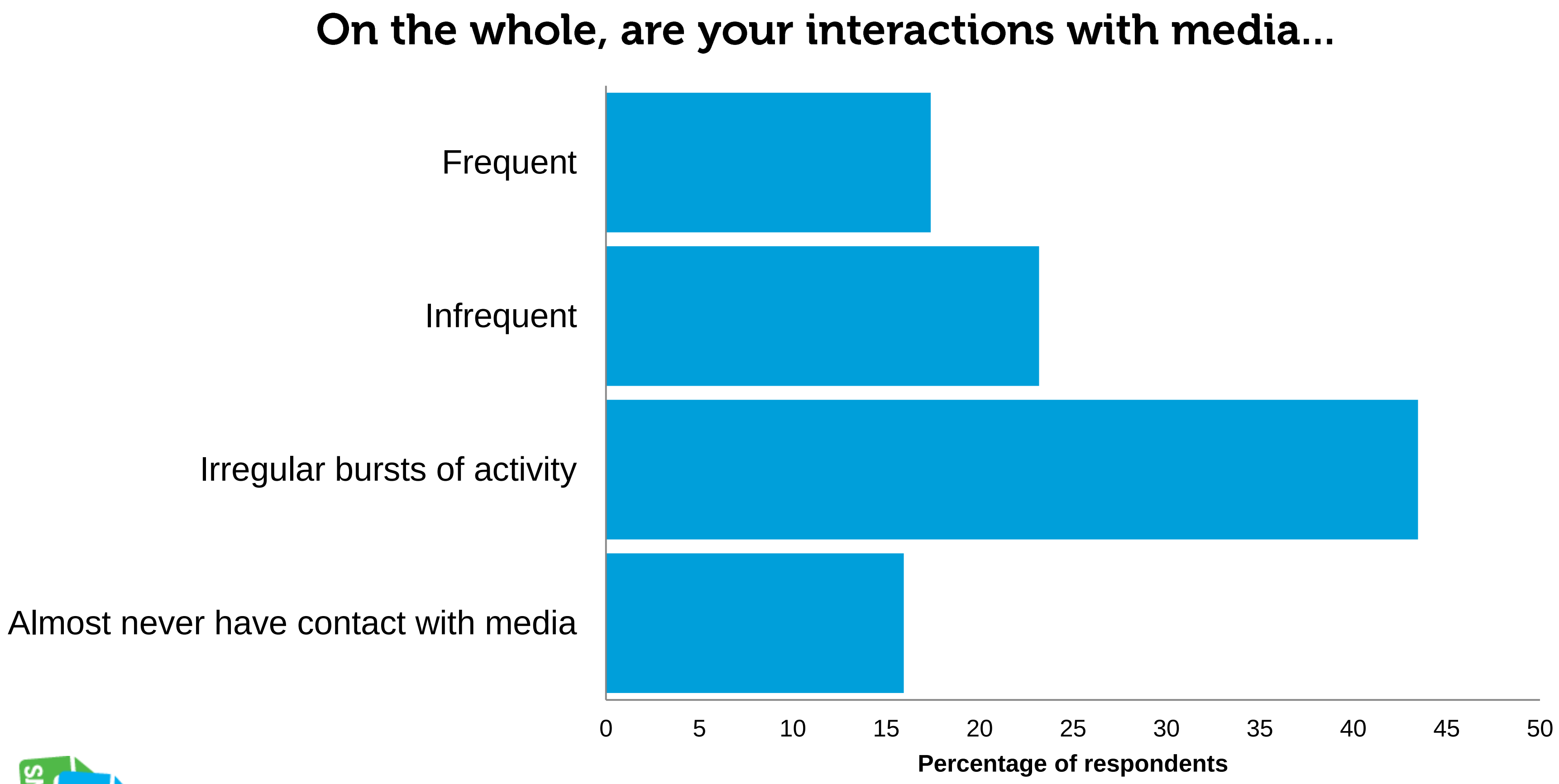


Scientists

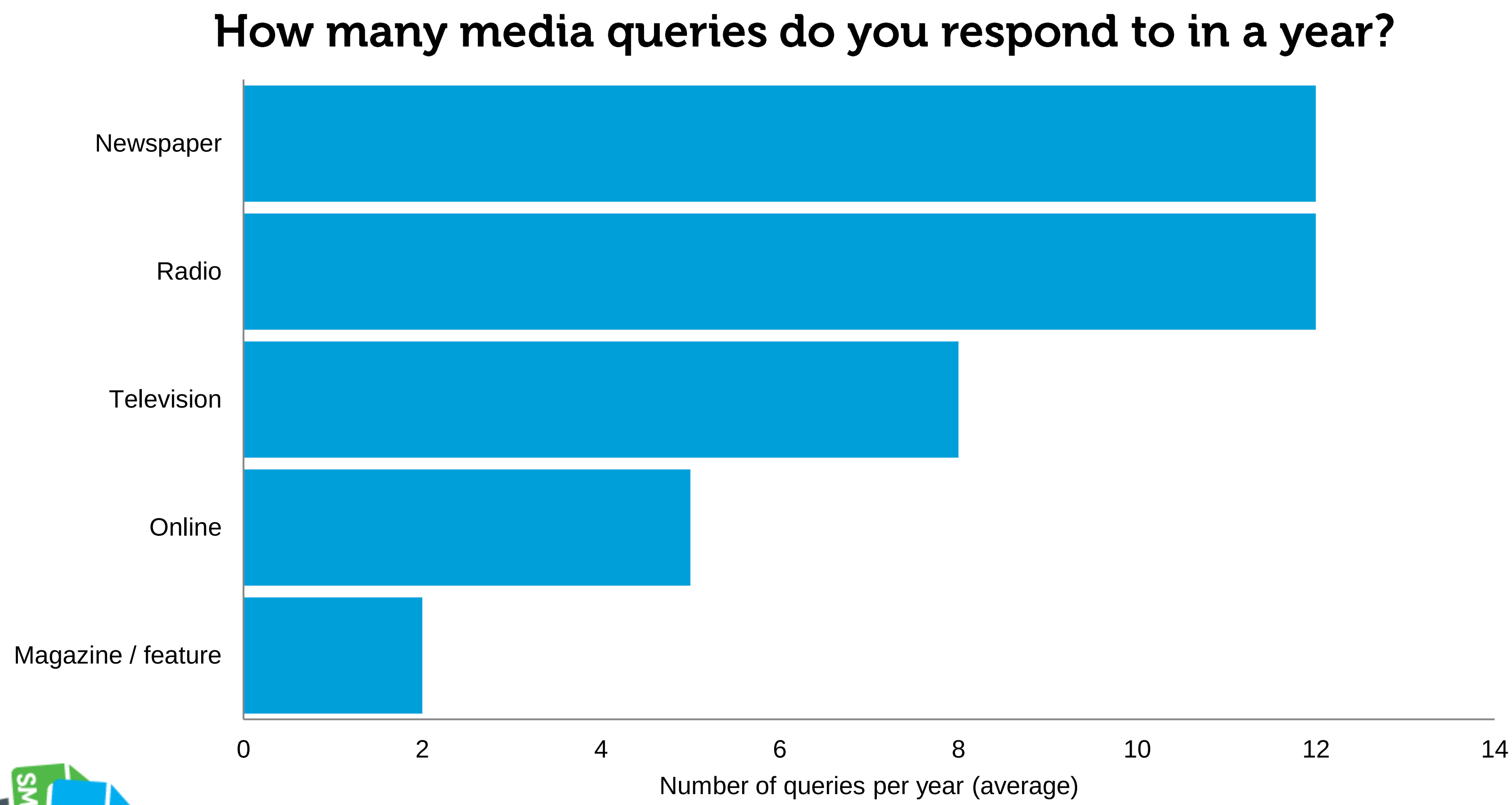


Overall, how would you rate your experiences interacting with the media since the workshop?
Very negative
Very positive
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists

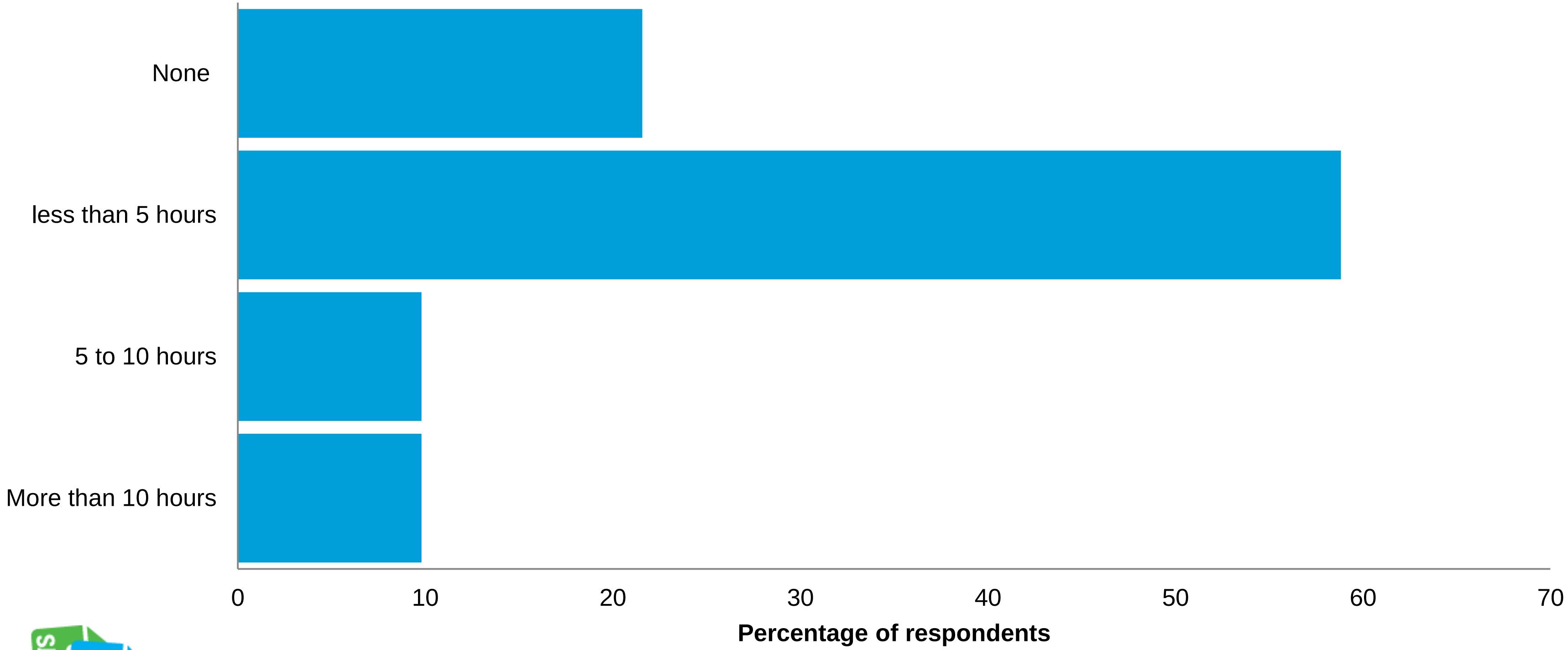

On the whole, are your interactions with media...
Frequent
Infrequent
Irregular bursts of activity
Almost never have contact with media
0
5
10
15
20
25
30
35
40
45
50
Percentage of respondents

Scientists

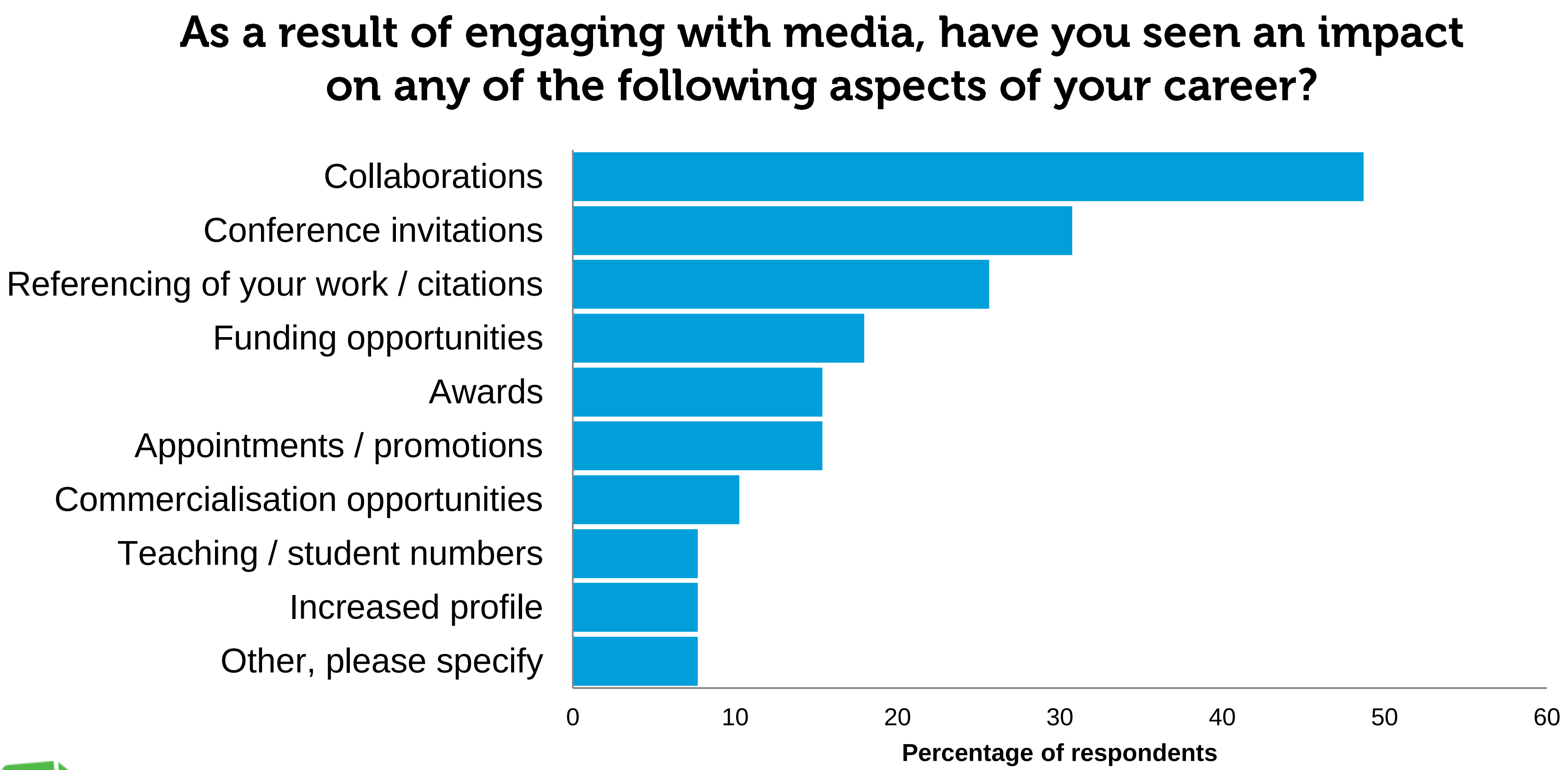

How many media queries do you respond to in a year?
Newspaper
Radio
Television
Online
Magazine / feature
0
2
4
6
8
10
12
14
Number of queries per year (average)

Scientists

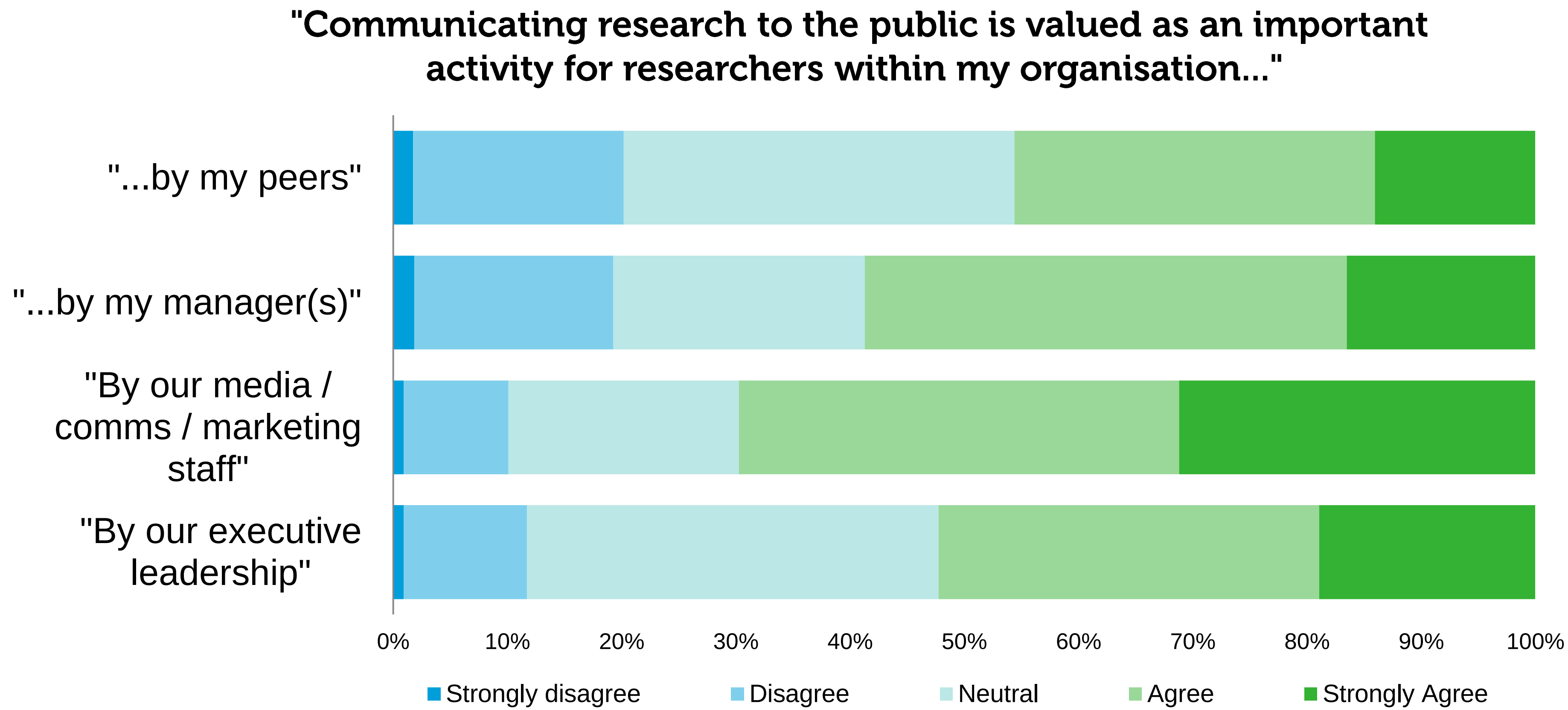
In your current role, how many hours a week do you typically spend on public science communication activities?



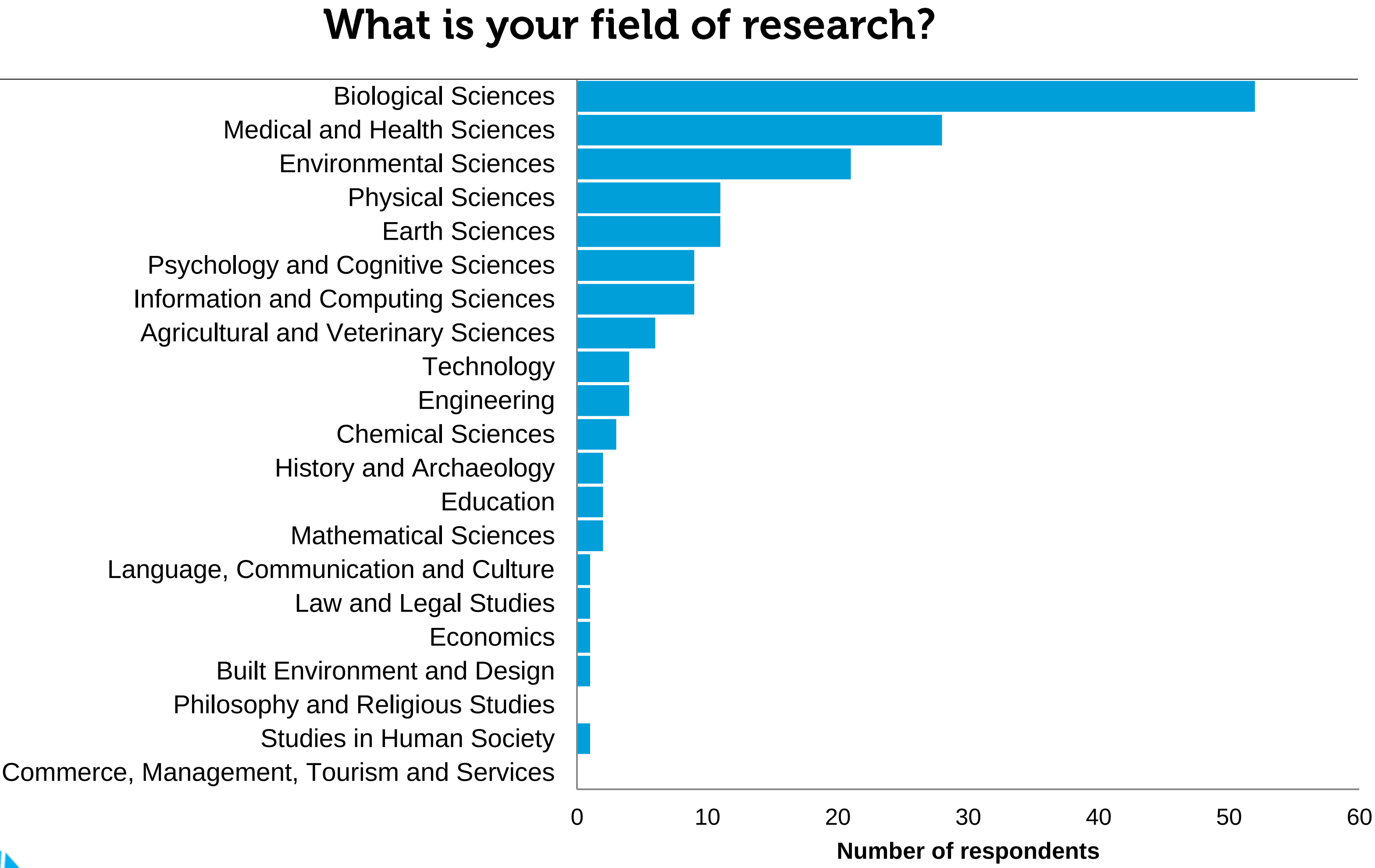
Scientists


As a result of engaging with media, have you seen an impact on any of the following aspects of your career?
Collaborations
Conference invitations
Referencing of your work / citations
Funding opportunities
Awards
Appointments / promotions
Commercialisation opportunities
Teaching / student numbers
Increased profile
Other, please specify
0
10
20
30
40
50
60
Percentage of respondents

Scientists


"Communicating research to the public is valued as an important activity for researchers within my organisation..."
"...by my peers"
"...by my manager(s)"
"By our media / comms / marketing staff"
"By our executive leadership"
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Strongly disagree
Disagree
Neutral
Agree
Strongly Agree

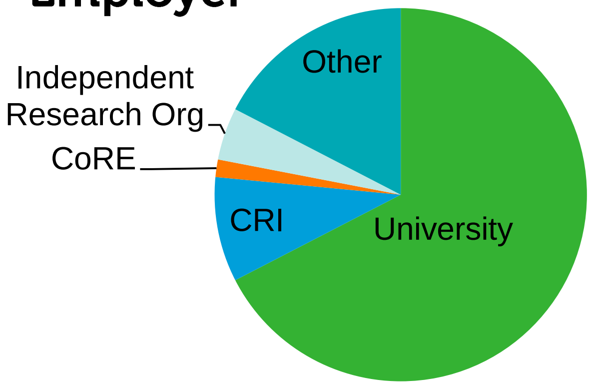
Scientists



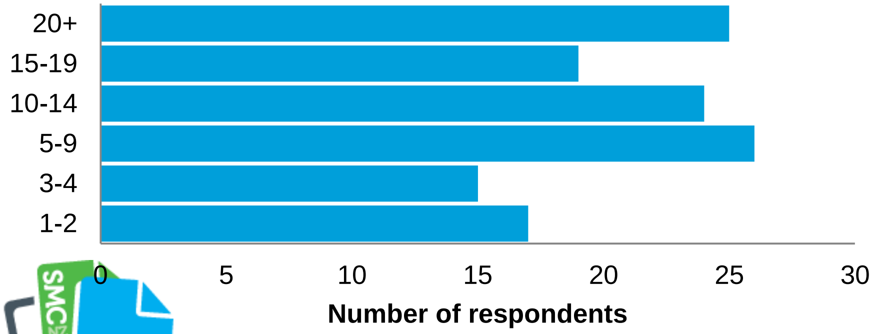
What is your field of research?
Biological Sciences
Medical and Health Sciences
Environmental Sciences
Physical Sciences
Earth Sciences
Psychology and Cognitive Sciences
Information and Computing Sciences
Agricultural and Veterinary Sciences
Technology
Engineering
Chemical Sciences
History and Archaeology
Education
Mathematical Sciences
Language, Communication and Culture
Law and Legal Studies
Economics
Built Environment and Design
Philosophy and Religious Studies
Studies in Human Society
Commerce, Management, Tourism and Services
0
10
20
30
40
50
60
Number of respondents

Scientists

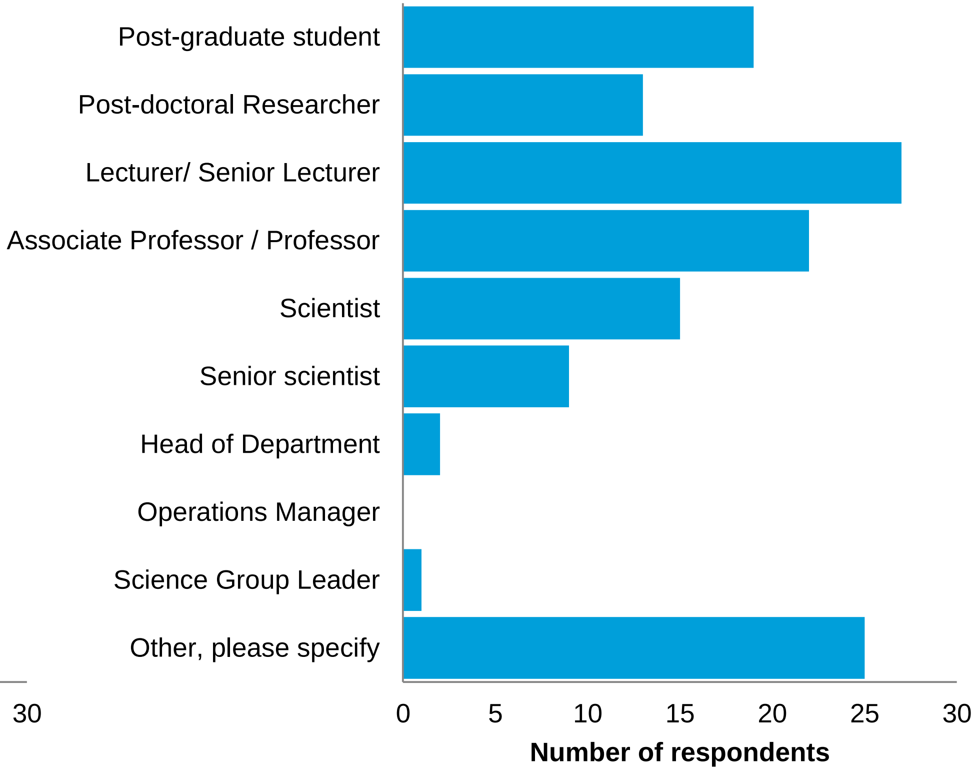
Employer



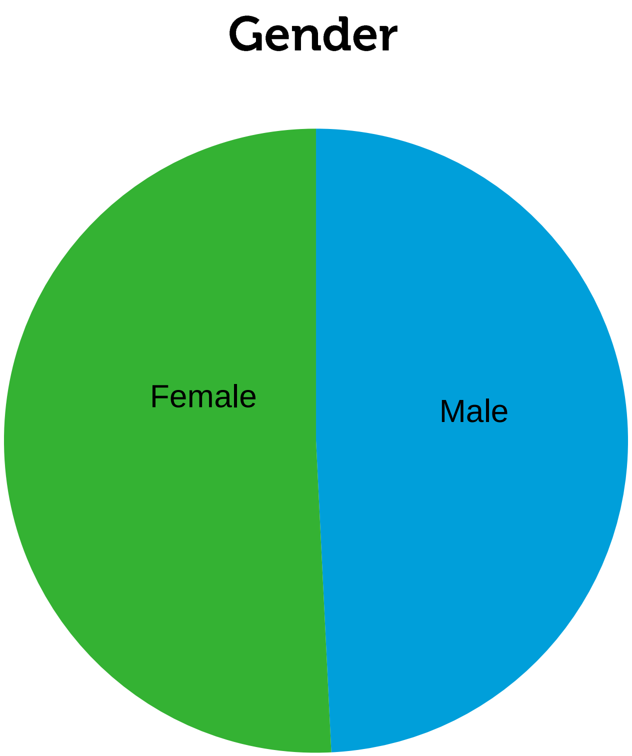
Years research experience

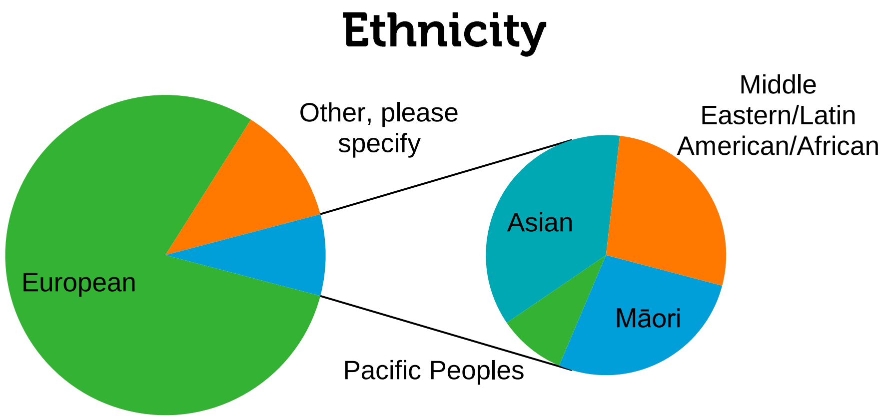


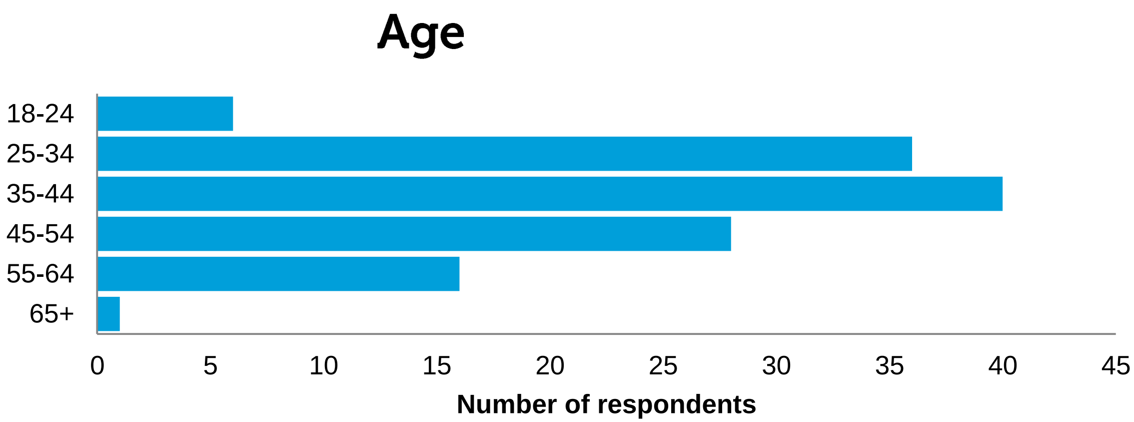
Professional position



Scientists


Gender
Female
Male


Ethnicity
European
Other, please specify
Middle Eastern/Latin American/African
Asian
Māori
Pacific Peoples


Age
18-24
25-34
35-44
45-54
55-64
65+
0
5
10
15
20
25
30
35
40
45
Number of respondents

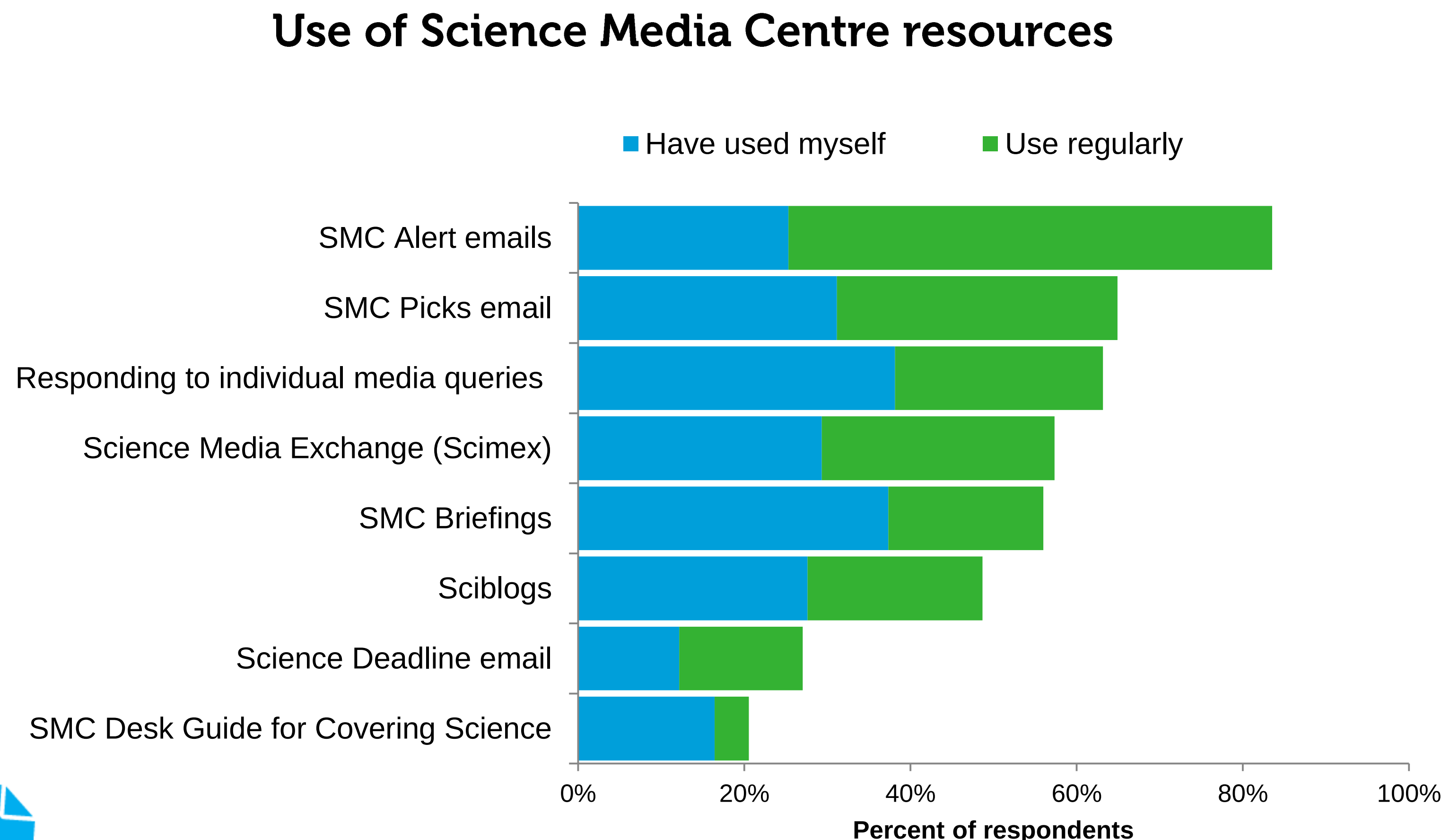
MEDIA SKILLS FOR MĀORI RESEARCHERS

Kimihia ngā mōhiotanga o te ao pāpāho

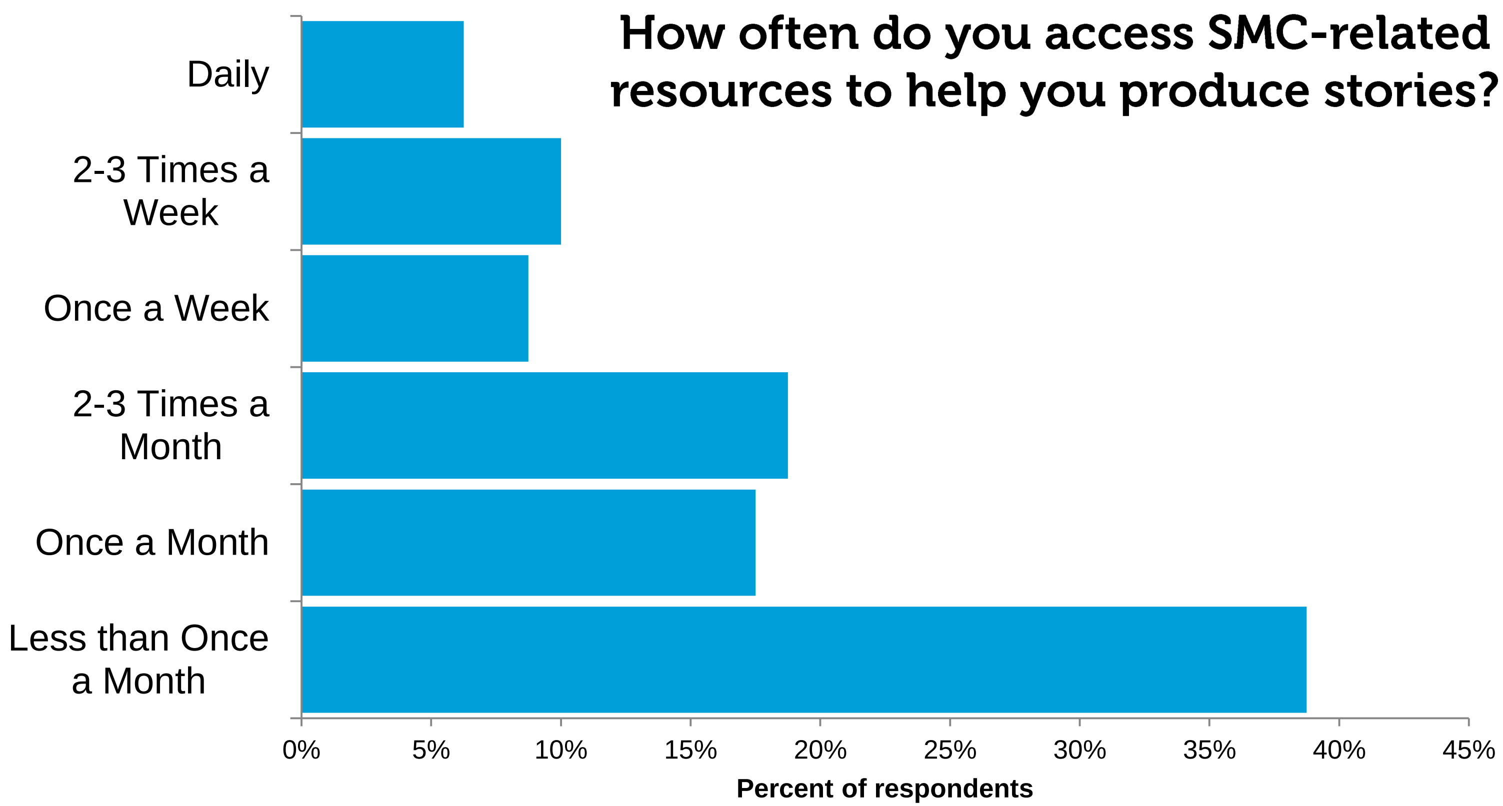
SMC NZ Science Media Centre.

NGĀ PAE O TE MĀRAMATANGA

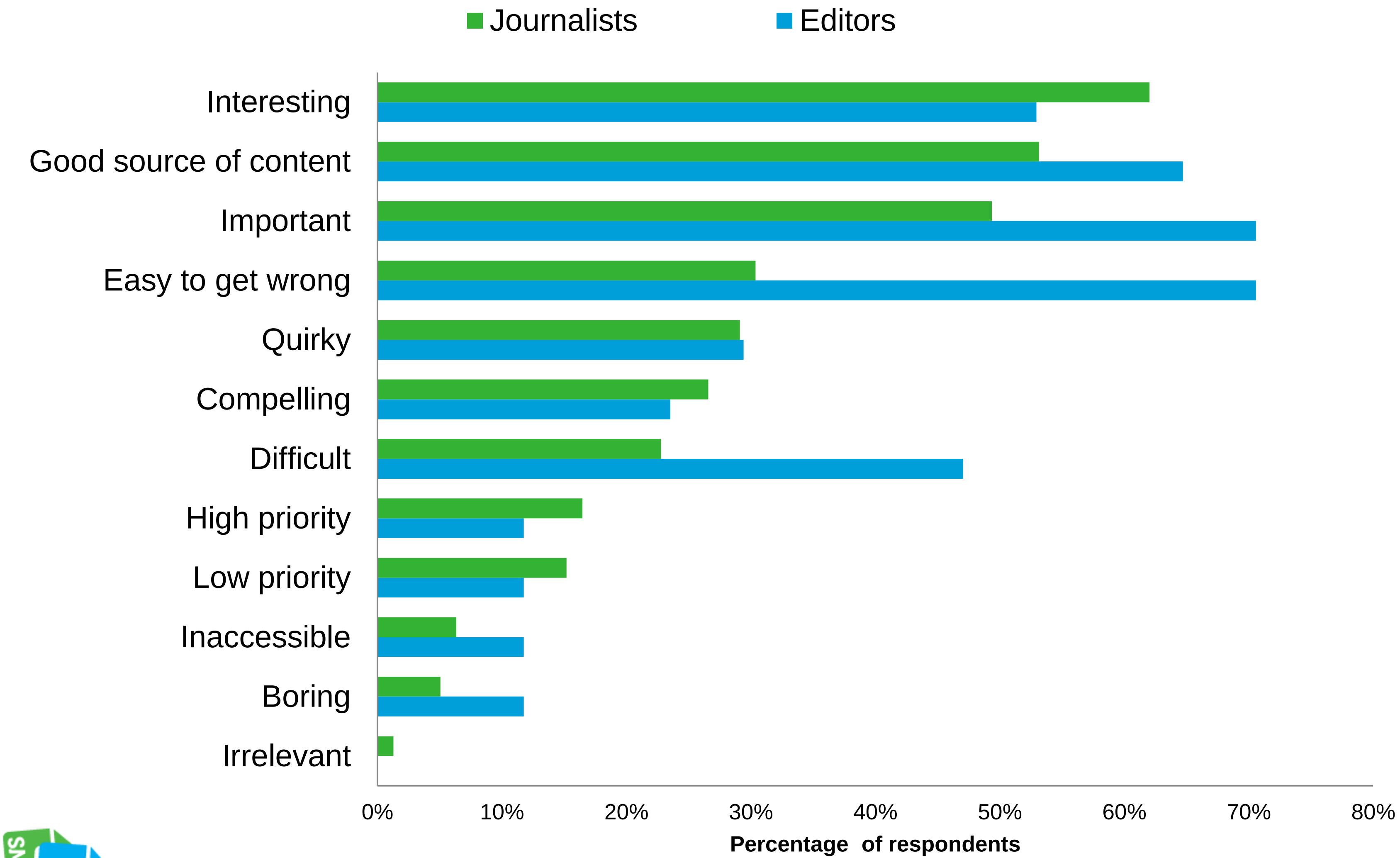
Survey results: Journalists



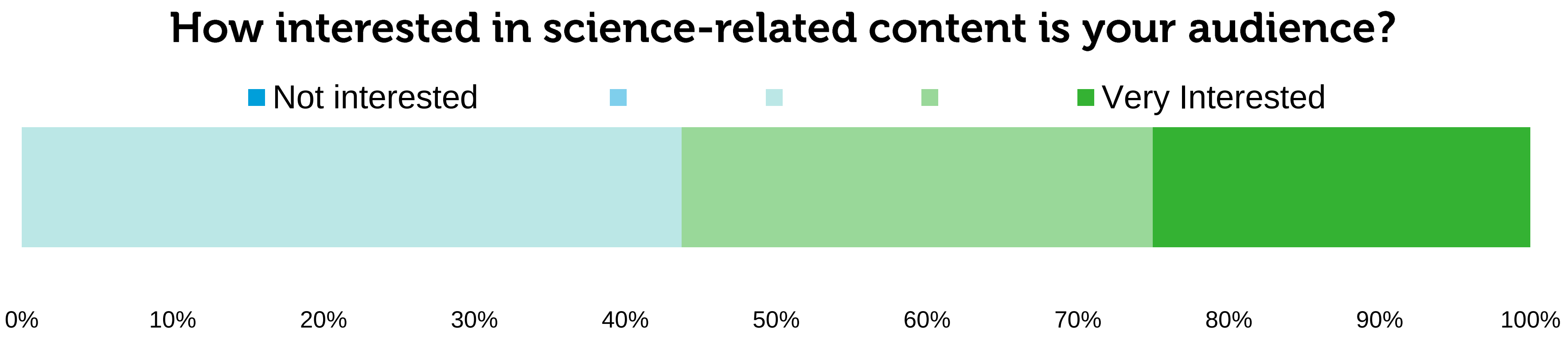
Journalists



Within your media organisation, how would you characterise the way science is usually perceived?

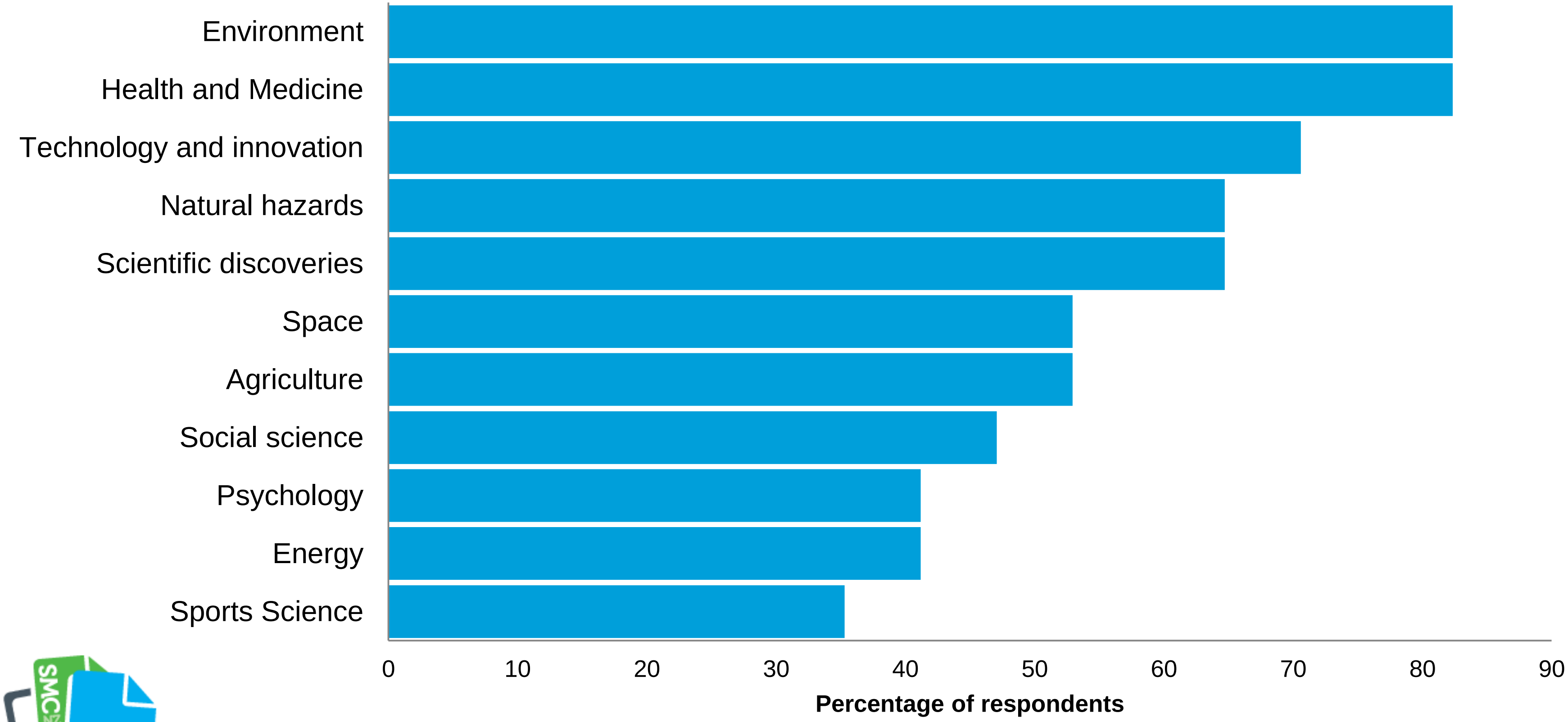


Survey results: Editors



Editors

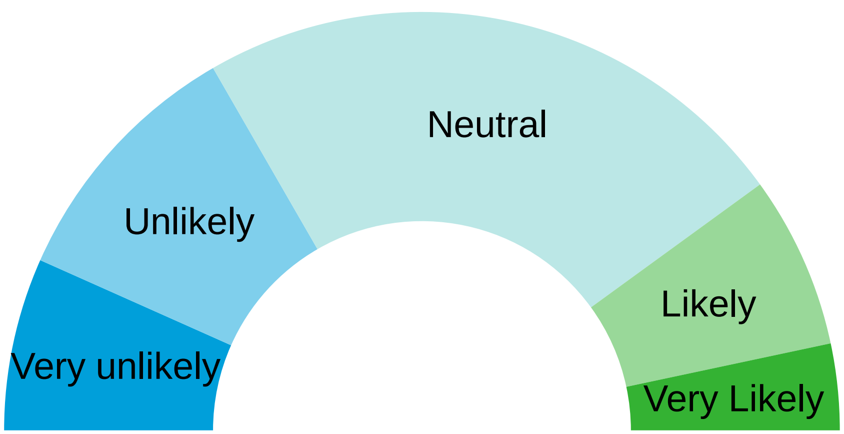
Which areas of science is your audience mainly interested in?



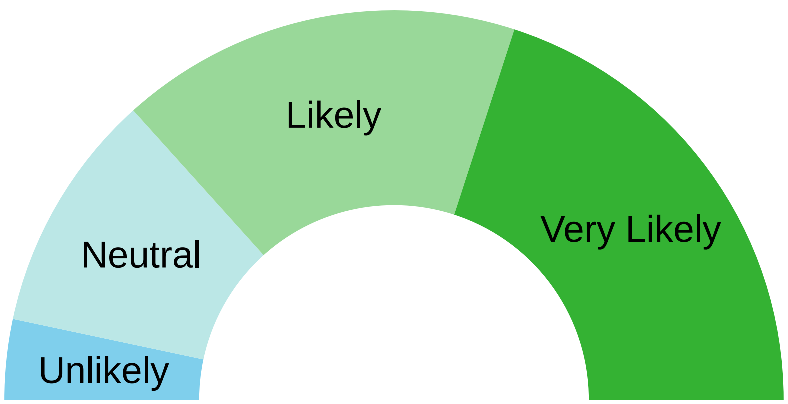
Editors

If an external independent organisation offered to supply high-quality science news content for New Zealand media, how likely would you be to use this service?

If it were made available to all media?



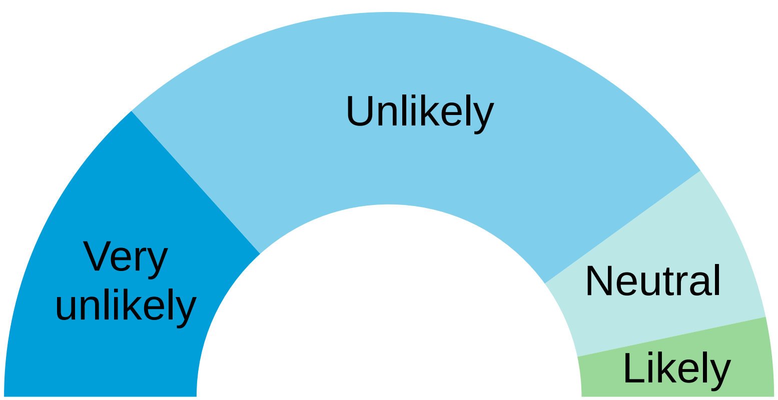
If it were customised / exclusive?



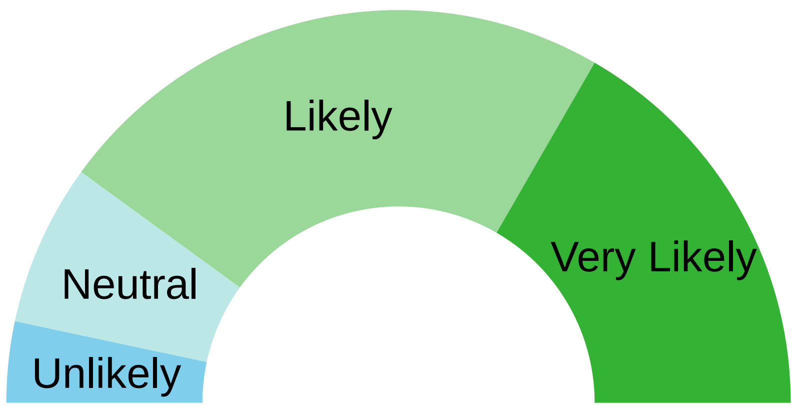
Editors

If an external independent organisation offered to supply high-quality science news content for New Zealand media, how likely would you be to use this service?

If it were a paid-for service?

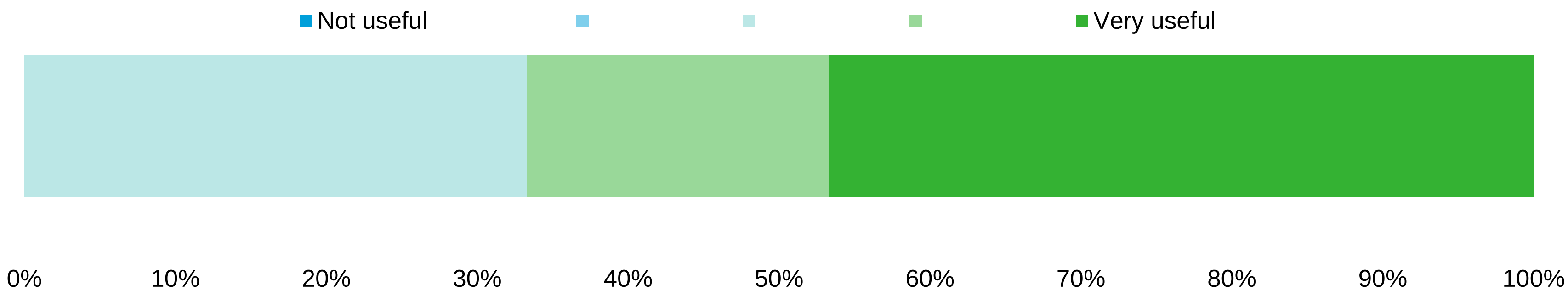


If it were free?

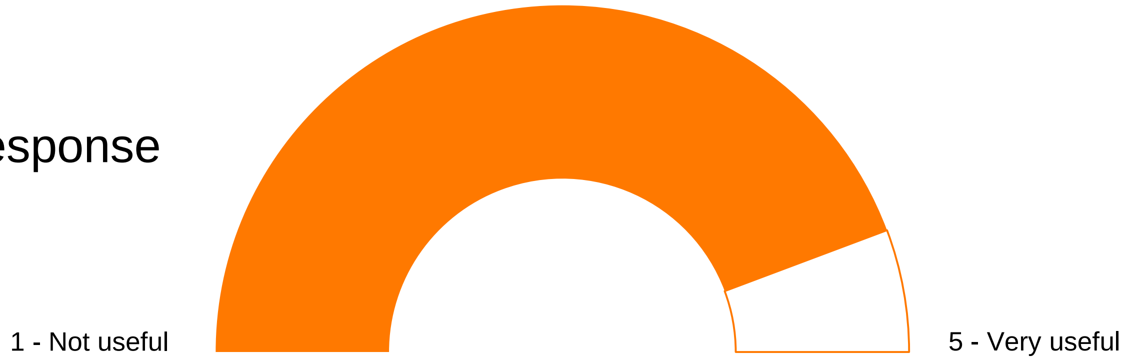


Editors

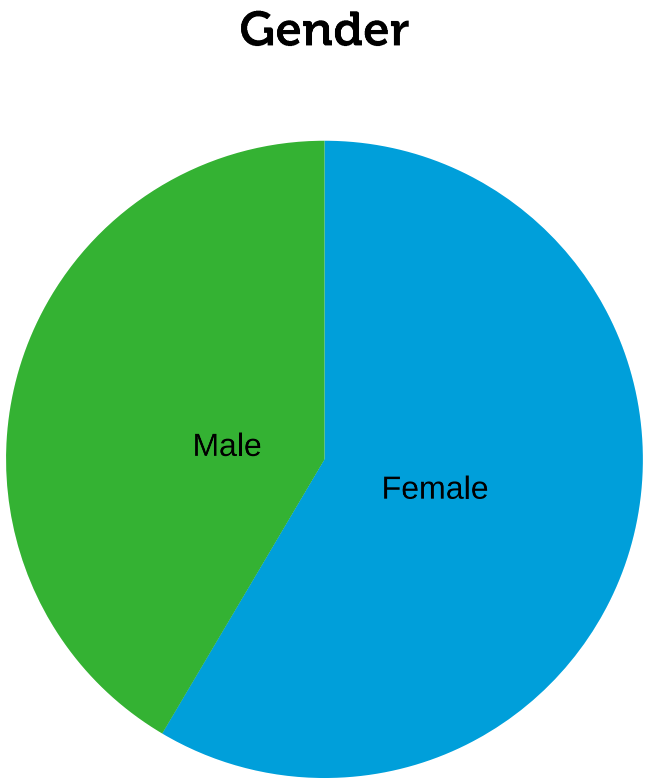
How useful is the Science Media Centre and its resources to your staff when writing science-related stories?

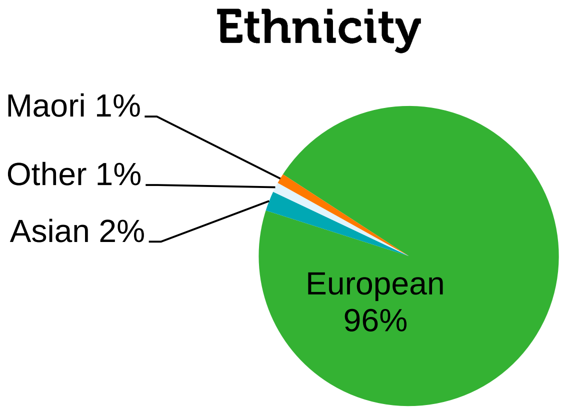


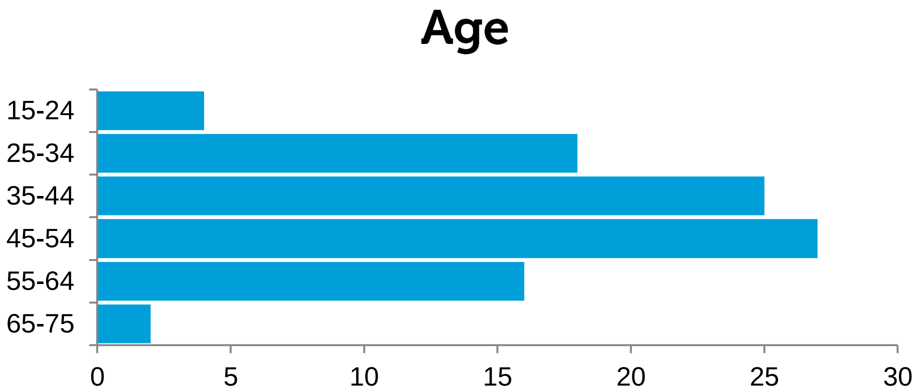
Mean response



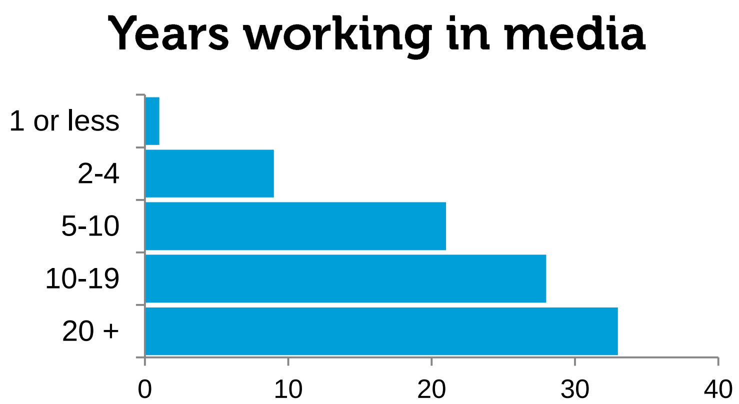
Media – Journalists & Editors

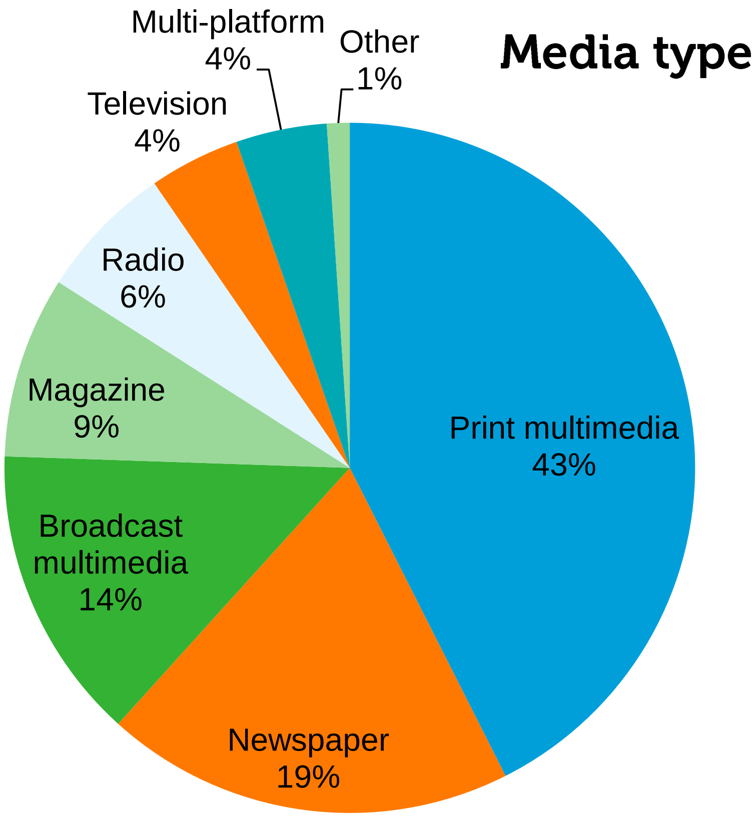




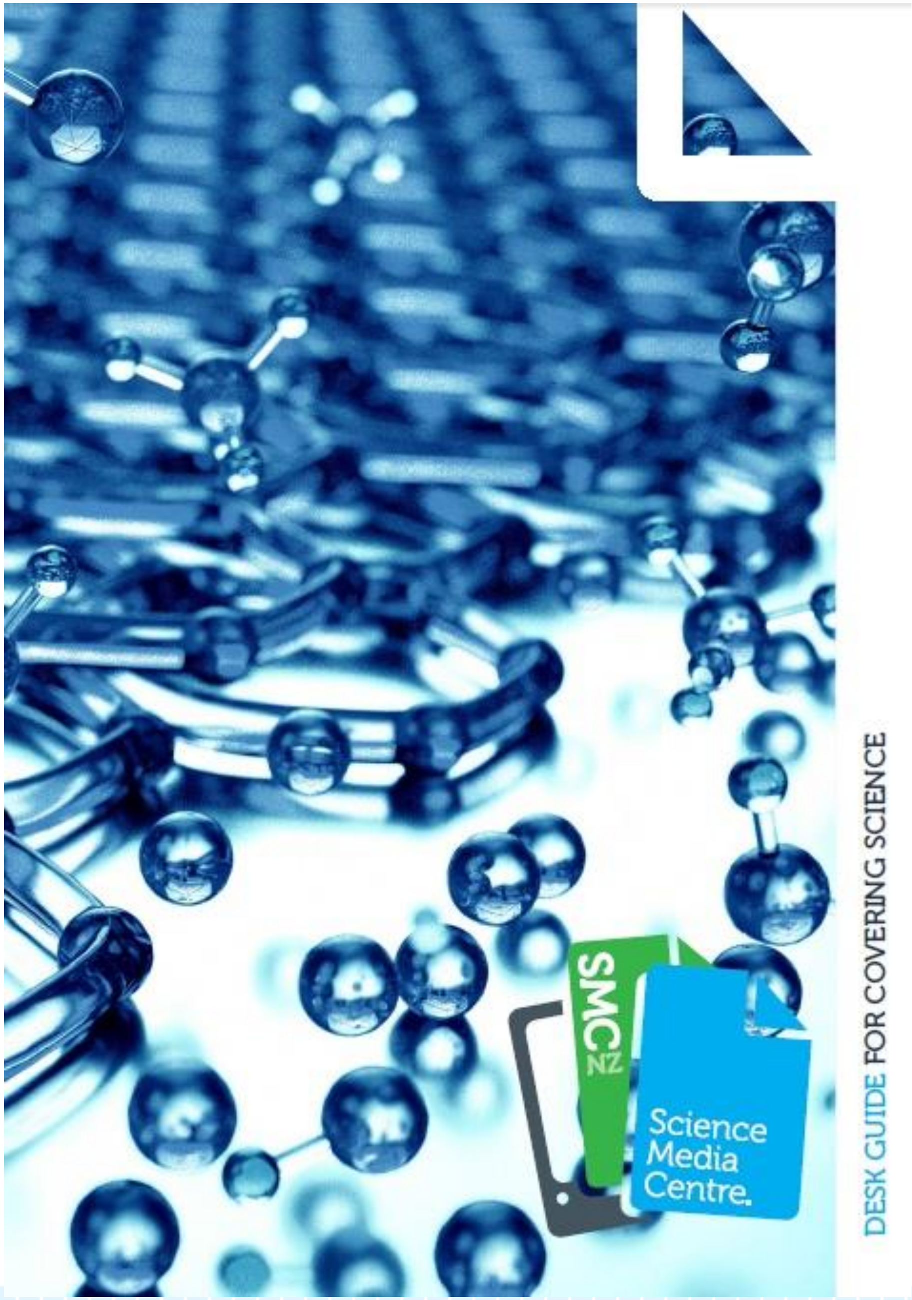


Media – Journalists & Editors





Resources for journalists



Types of scientific evidence

Being able to evaluate the evidence behind a claim is important, but scientific evidence comes in a variety of forms. Here, different types of scientific evidence are ranked and described, particularly those relevant to health and medical claims.

INCREASING STRENGTH OF EVIDENCE

ANECDOTAL & EXPERT OPINIONS

Anecdotal evidence is a person's own personal experience or view, not necessarily representative of typical experiences. An expert's stand-alone opinion, or that given in a written news article, are both considered weak forms of evidence without scientific studies to back them up.

ANIMAL & CELL STUDIES (experimental)

Animal research can be useful, and can predict effects also seen in humans. However, observed effects can also differ, so subsequent human trials are required before a particular effect can be said to be seen in humans. Tests on isolated cells can also produce different results to those in the body.

CASE REPORTS & CASE SERIES (observational)

A case report is a written record on a particular subject. Though low on the hierarchy of evidence, they can aid detection of new diseases, or side effects of treatments. A case series is similar, but tracks multiple subjects. Both types of study cannot prove causation, only correlation.

CASE-CONTROL STUDIES (observational)

Case control studies are retrospective, involving two groups of subjects, one with a particular condition or symptom, and one without. They then track back to determine an attribute or exposure that could have caused this. Again, these studies show correlation, but it is hard to prove causation.

COHORT STUDIES (observational)

A cohort study is similar to a case-control study. It involves selection of a group of people sharing a certain characteristic or treatment (e.g. exposure to a chemical), and compares them over time to a group of people who do not have this characteristic or treatment, noting any difference in outcome.

RANDOMISED CONTROLLED TRIALS (experimental)

Subjects are randomly assigned to a test group, which receives the treatment, or a control group, which commonly receives a placebo. In 'blind' trials, participants do not know which group they are in; in 'double blind' trials, the experimenters do not know either. Blinding trials helps remove bias.

SYSTEMATIC REVIEW

Systematic reviews draw on multiple randomised controlled trials to draw their conclusions, and also take into consideration the quality of the studies included. Reviews can help mitigate bias in individual studies and give us a more complete picture, making them the best form of evidence.

Note that in certain cases, some of these types of evidence may not be possible to procure, for ethical or other reasons.

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Newsroom workshops for journalists

"Spotting Bad Science" workshop
Fairfax Media, Wellington Oct 2016

"Spotting Bad Science" workshop
RNZ Auckland Wellington May 2016

Summary – Media

- Journalists identify most popular SMC resources as:
  - SMC alerts – rounding up expert comment on breaking news
  - Responding to individual media queries
  - Highlighting embargoed research of interest to media through SMC picks email and Science Media Exchange (Scimex)
- Most respondents value our activities highly but use them only sporadically
- Largely positive attitudes to science and demand for more science-related content within newsrooms
- Environment, health and technology/innovation are largest areas of interest; high interest in science-related content overall

Summary - Scientists

- Scientists surveyed felt they were more effective and confident communicators, even after just 15 min of training (SAVVY Express)
- Participants in longer workshops improved attitude towards media, able to see things from media's perspective
- Lasting effects – most surveyed 1 – 2 years post workshop
- Currently likely to respond to media queries, on a broad range of issues in area of expertise as well as own research
- Ongoing contact with media, most experiences positive (74%)
- Positive career impacts identified by many, including new research collaborations

Thank you!

Alexander Heyes
John Kerr
Rhian Salmon

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI
VICTORIA
UNIVERSITY OF WELLINGTON

SMC NZ
Science Media Centre.

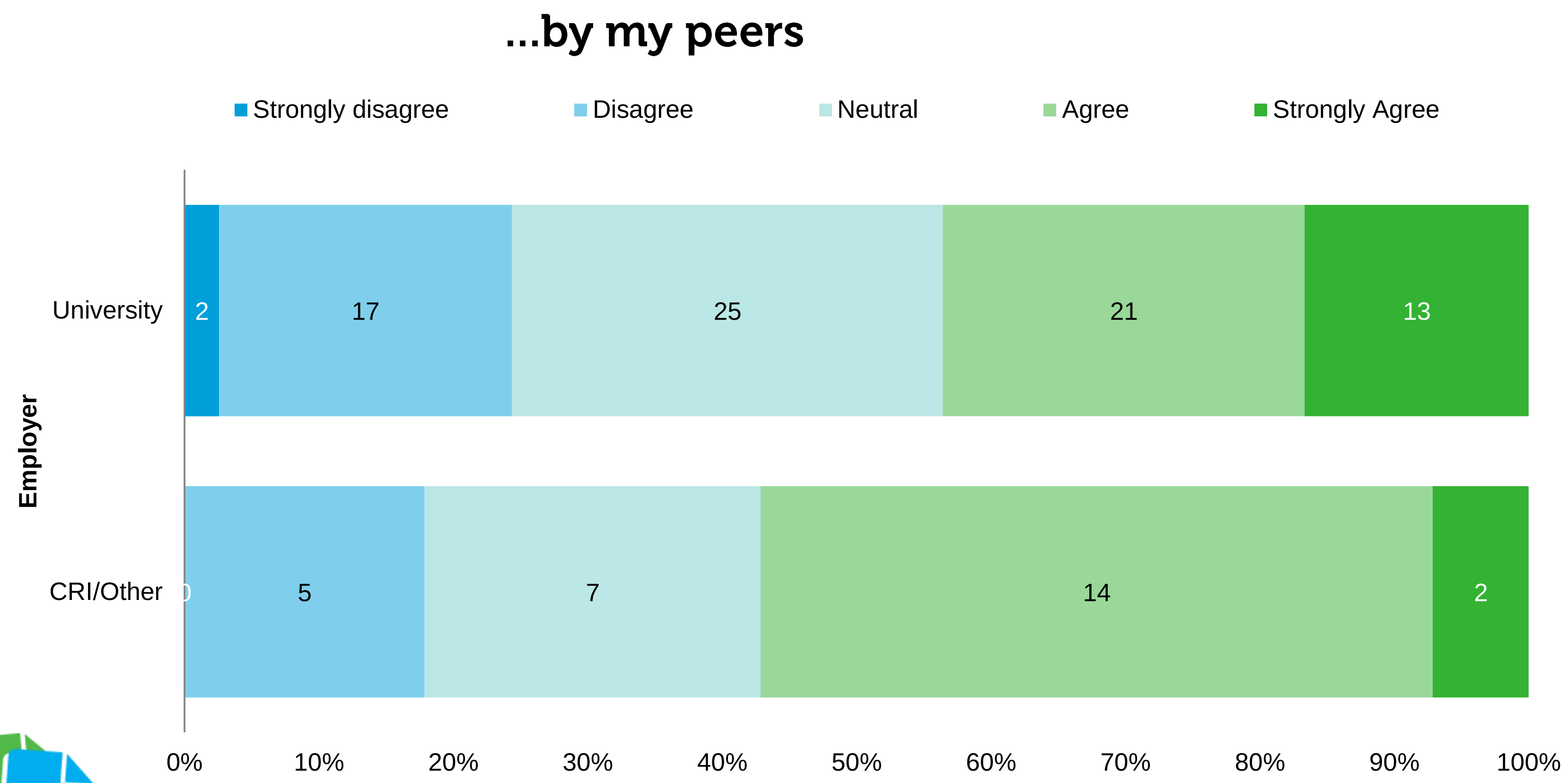
Scientists

"Communicating research to the public is valued as an important activity for researchers within my organisation..."

Results broken down by employer type on next slides...

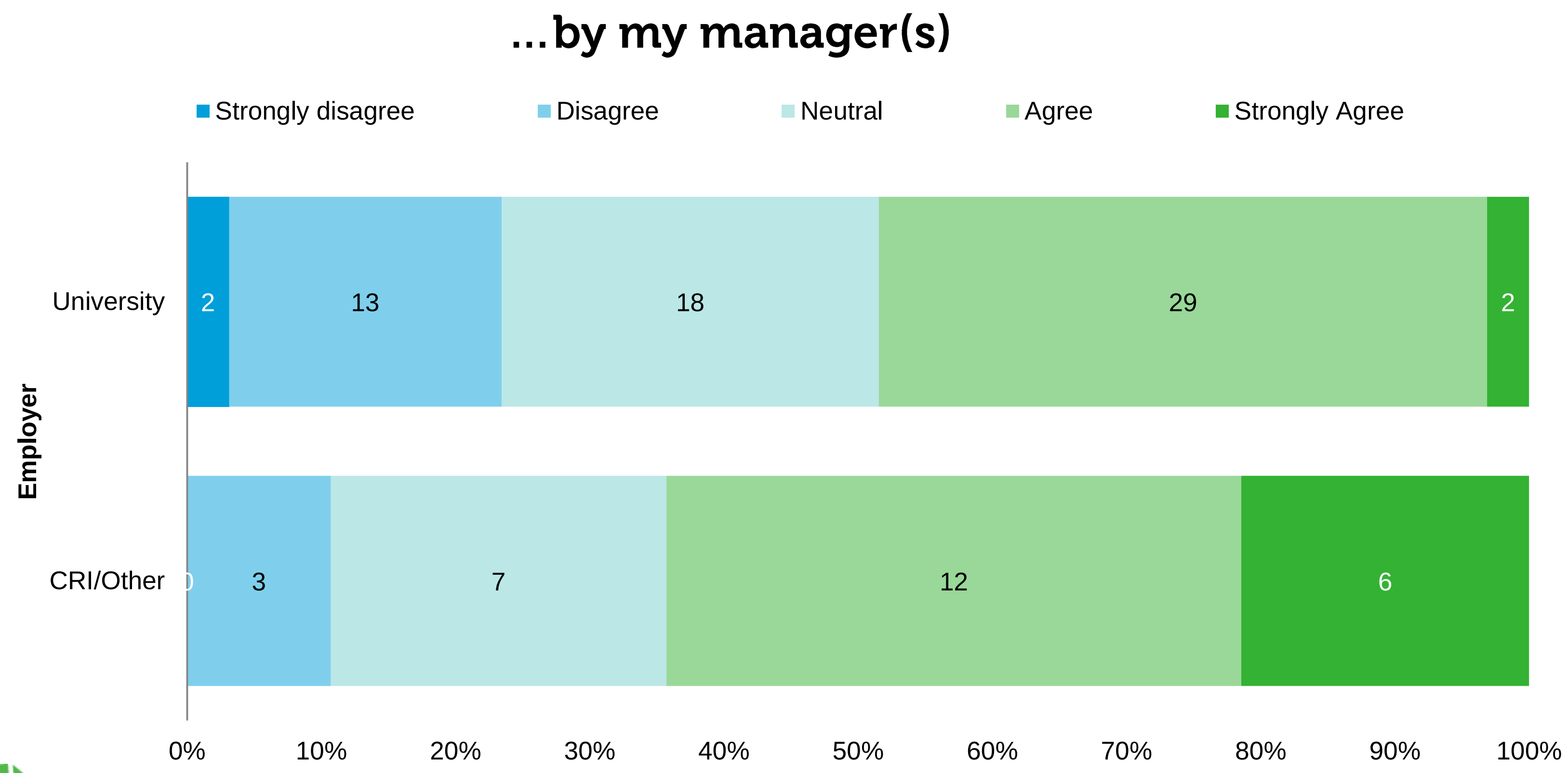
(Universities compared with Crown Research Institutes, local government, private research orgs and other similar)

Scientists



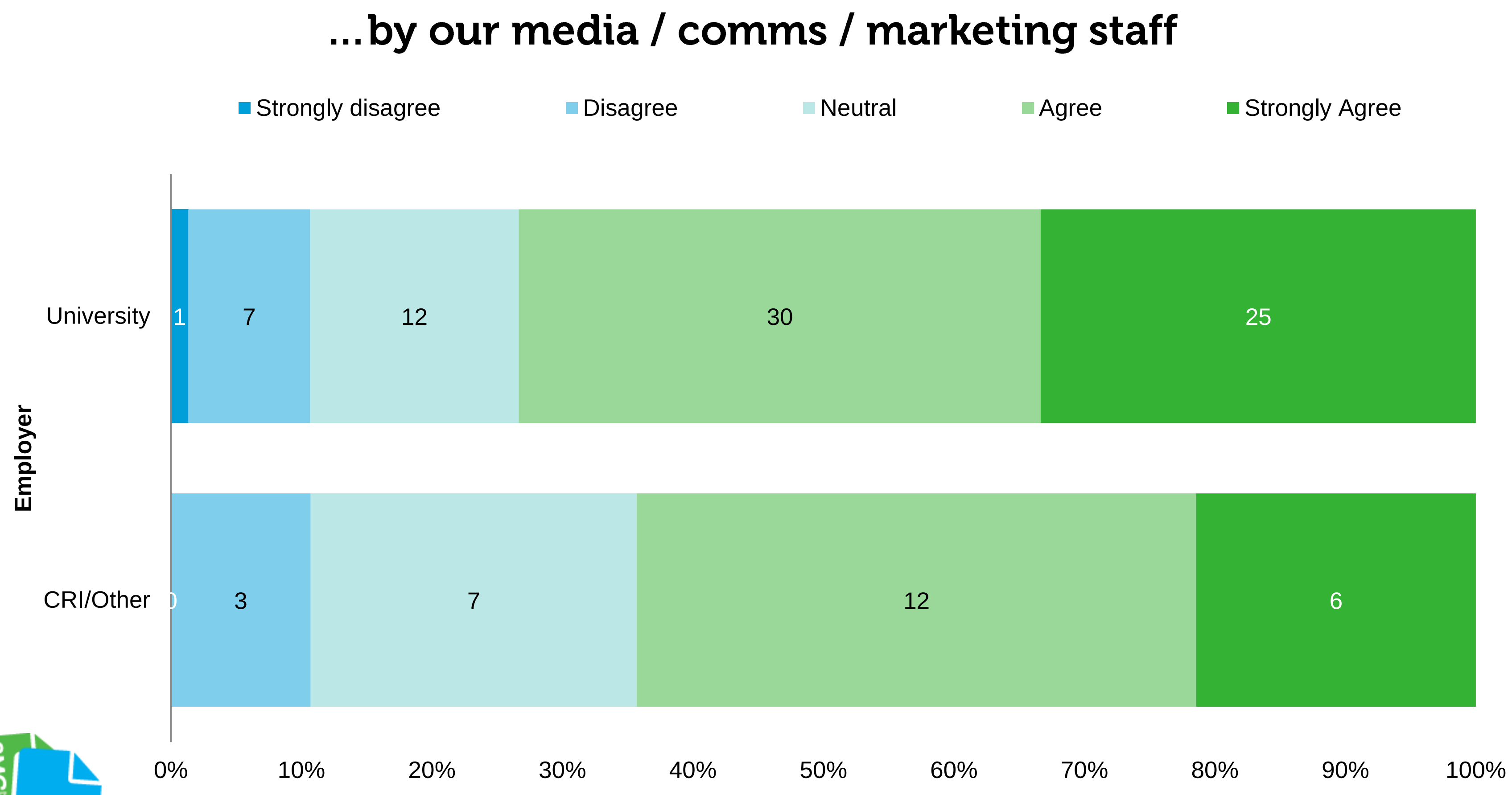
...by my peers
Strongly disagree
Disagree
Neutral
Agree
Strongly Agree
Employer
University
2
17
25
21
13
CRI/Other
0
5
7
14
2
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists



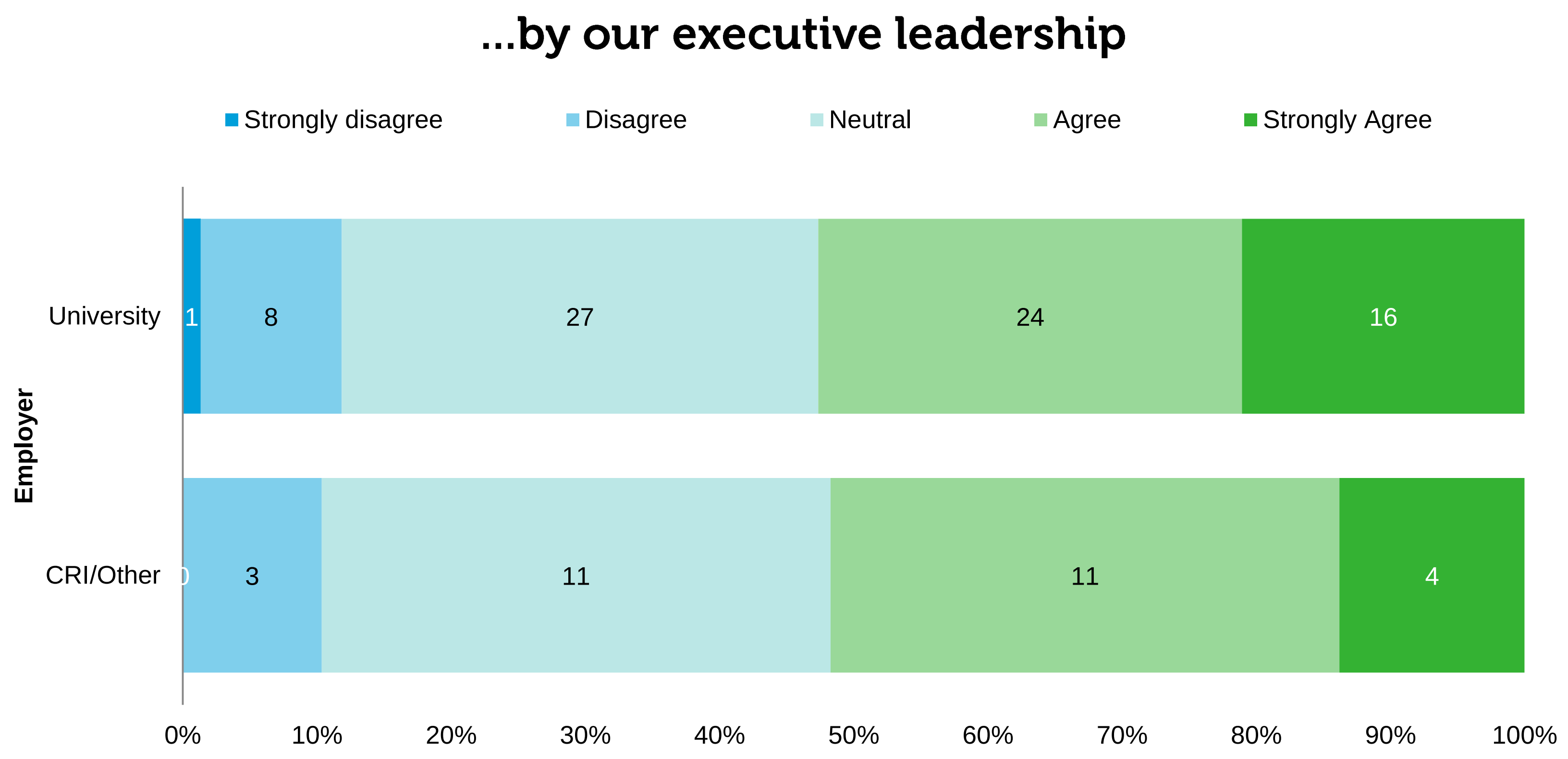
...by my manager(s)
Strongly disagree
Disagree
Neutral
Agree
Strongly Agree
University
CRI/Other
Employer
2
13
18
29
2
0
3
7
12
6
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists



...by our media / comms / marketing staff
Strongly disagree
Disagree
Neutral
Agree
Strongly Agree
Employer
University
1
7
12
30
25
CRI/Other
0
3
7
12
6
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

Scientists



...by our executive leadership
Strongly disagree
Disagree
Neutral
Agree
Strongly Agree
Employer
University
1
8
27
24
16
CRI/Other
0
3
11
11
4
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%