

# Science advice in the UK

*Dr Chris Tyler*  
*UCL STEaPP*



## HM Government



## Houses of Parliament





**HM Government**

**Houses of Parliament**



**Create policy**

**Enact laws**

**Fiscal management**

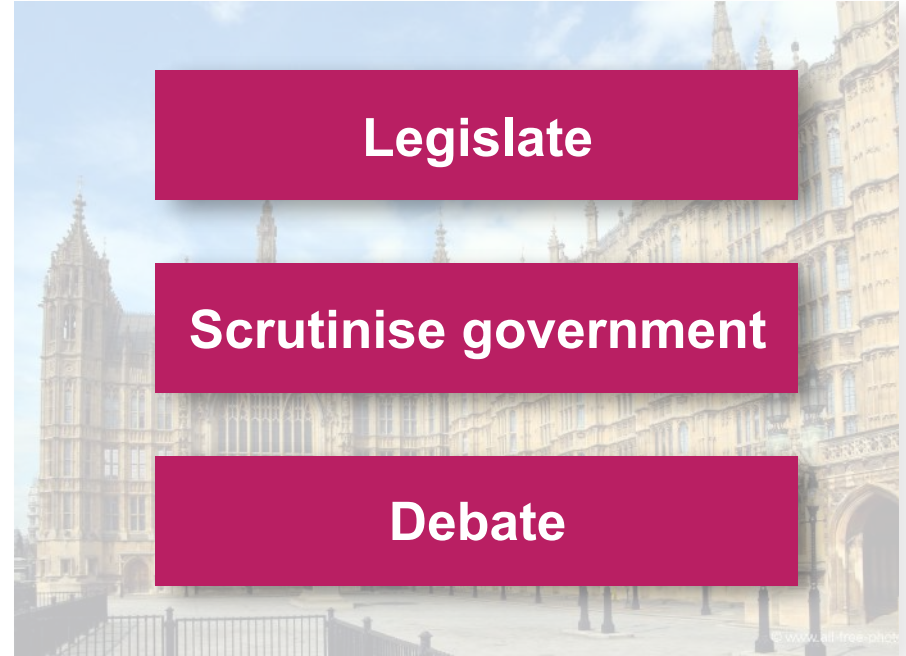
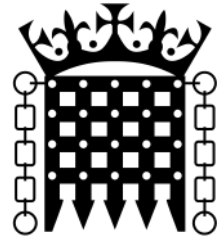






**HM Government**

**Houses of Parliament**



**Legislate**

**Scrutinise government**

**Debate**



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**Foresight**



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### Departmental Chief Scientific Advisers





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## Houses of Parliament




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# Houses of Parliament

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- Local Data
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### This week

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Policy analysis and statistical research for this week's debates



What would a no-deal Brexit mean for UK and EU defence cooperation?



Withdrawal Agreement Bill: Sovereignty, special status and the Withdrawal Agreement

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Withdrawal Agreement Bill: implications for devolved institutions



Withdrawal Agreement Bill: Sovereignty, special status and the Withdrawal Agreement  
October 22, 2019



Withdrawal Agreement Bill: Citizens' rights  
October 22, 2019



Withdrawal Agreement Bill: implementing the transition period  
October 22, 2019



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**Brexit**

**World Affairs**

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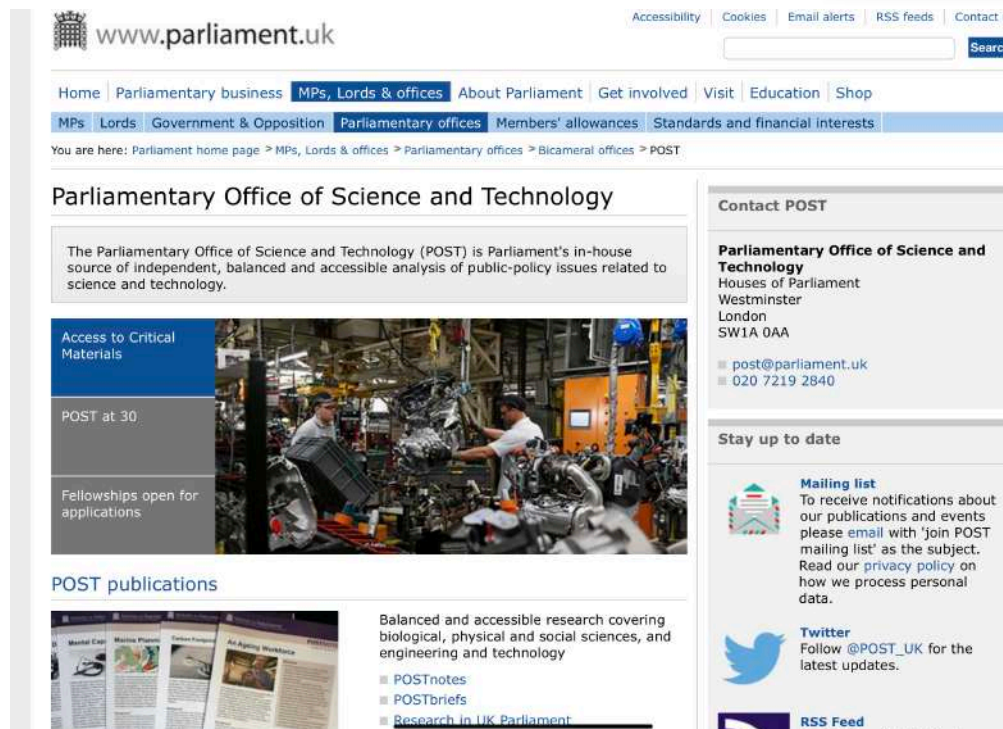
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# Houses of Parliament

## Parliamentary Office of Science and Technology



The screenshot shows the website for the Parliamentary Office of Science and Technology (POST) on www.parliament.uk. The page includes a navigation menu with categories like 'MPs, Lords & offices', 'Government & Opposition', and 'Parliamentary offices'. The main content area features a description of POST as an in-house source of independent analysis, a section for 'Access to Critical Materials' with a video thumbnail, and 'POST publications' which are described as balanced research covering biological, physical, and social sciences. A right-hand sidebar contains contact information for POST, including an email address (post@parliament.uk) and phone number (020 7219 2840), along with a mailing list sign-up and social media links for Twitter (@POST\_UK) and an RSS feed.







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## Houses of Parliament

### Science and Technology Committees





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# The Role of Research in the UK Parliament

## The Role of Research in the UK Parliament



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STEaPP and Head of the Social  
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of POST

**Dr Jason Blackstock**  
Head of Department, UCL STEaPP  
and Principal Investigator

**Volume one**



HOUSES OF PARLIAMENT  
PARLIAMENTARY OFFICE OF SCIENCE & TECHNOLOGY

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## Aims

How are research and evidence defined in Parliament?

How does research feed into Parliament?

What factors shape the use of research in Parliament?

Processes

Mechanisms

Cultures

## Survey and interview samples

Method	MPs	Peers	MPs' staff	Parliamentary staff			Total
				Commons	Lords	Anon	
Survey and interviews	24	0	35	27	16	23	125
Case-study interviews	12	16	0	4	0	-	32
<b>Total</b>	<b>36</b>	<b>16</b>	<b>35</b>	<b>31</b>	<b>16</b>	<b>23</b>	<b>157</b>

## Key findings

### Definitions

Usefulness of research

Types of research

Sources of research

Purpose of research use

Factors affecting use

### Research

### Evidence

## Key findings

Definitions

**Usefulness of research**

Types of research

Sources of research

Purpose of research use

Factors affecting use

***98% of survey respondents strongly agreed or agreed that research was useful to their parliamentary work.***

n=83/85: 11 MPs, 24 MP staff, 50 parli staff

## Key findings

Definitions

Usefulness of research

**Types of research**

Sources of research

Purpose of research use

Factors affecting use

***MPs and MPs' staff selected statistics most frequently. Parliamentary staff selected expert opinion most frequently.***

***Parliamentary staff draw on the broadest range of types of research. MPs draw on the smallest.***

n=95: 12 MPs, 33 MPs' staff, 49 parliamentary staff

## Key findings

Definitions

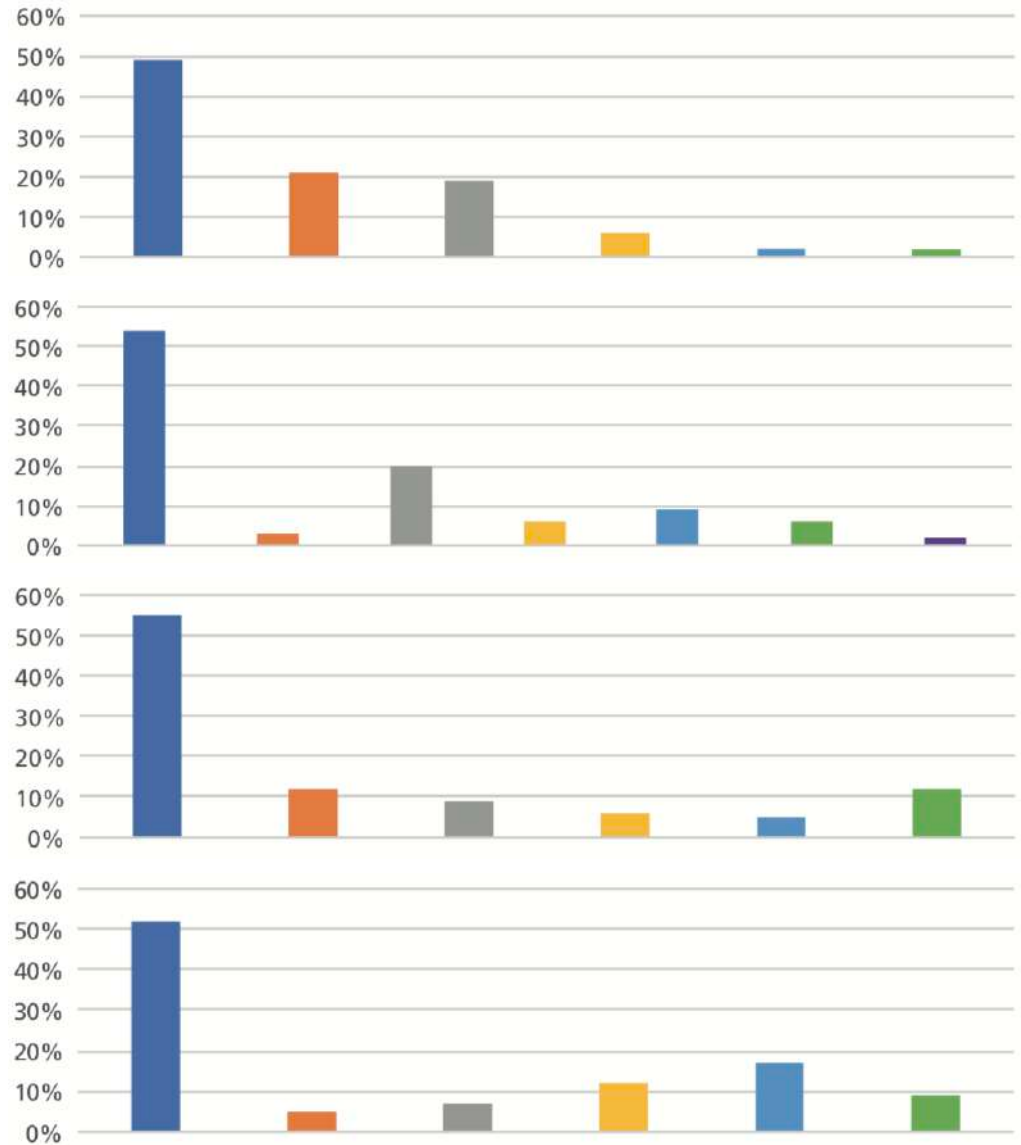
Usefulness of research

Types of research

Sources of research

Purpose of research use

Factors affecting use





## Key findings

Definitions

▸ *Support scrutiny*

Usefulness of research

▸ *Background knowledge*

Types of research

▸ *Inform opinions*

Sources of research

▸ *Provide balance*

Purpose of research use

▸ *Provide credibility*

Factors affecting use

▸ *Substantiate pre-existing views*

▸ *Score political points*

## Key findings

Definitions

Usefulness of research

Types of research

Sources of research

Purpose of research use

Factors affecting use

### ► Timing

*Interviewees suggested that research communicated at the start of an inquiry had a greater chance of being influential.*

*Research was often consulted by public bill committees after the ‘battle lines’ between Government and Opposition Members had been drawn.*

*Academics are “never able to turn something around in 24 hours... It is a real mismatch.”*

## Key findings

Definitions

Usefulness of research

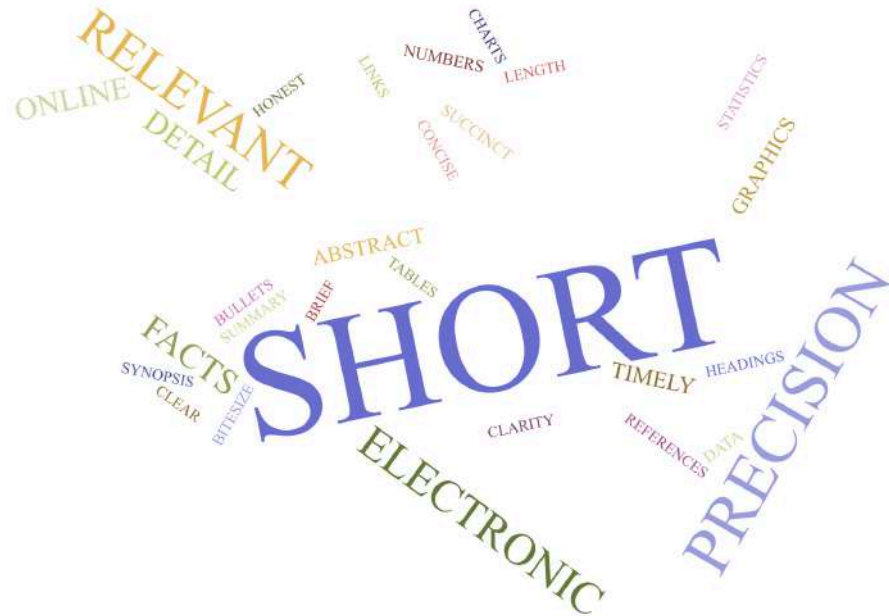
Types of research

Sources of research

Purpose of research use

Factors affecting use

### ► Presentation style



### ► Time

*MPs say that they do not have enough time to find and use research. The same was true for half of MPs' staff and two thirds of parliamentary staff.*

n=82: 11 MPs, 10/24 MPs' staff and 30/47 parliamentary staff

## Key findings

### Definitions

### Usefulness of research

### Types of research

### Sources of research

### Purpose of research use

### Factors affecting use

#### ▸ Skills

*A quarter of survey respondents felt that they were either 'averagely' or 'not' confident in appraising research.*

n=78: 11 MPs, 22 MPs' staff and 45 parliamentary staff

#### ▸ Source

*The credibility of the source of research was overall ranked as the most important factor in determining use.*

n=88: 22 MPs, 20 MPs' staff and 46 parliamentary

#### ▸ Availability and accessibility

#### ▸ Awareness

#### ▸ Relevance

#### ▸ Attitudes, experience and expertise

#### ▸ Topic area

#### ▸ Alignment with other sources

#### ▸ Understanding

## Insights

### Higher education sector

### Parliament

### Future research

- **Better communication and presentation of research**
- **Understanding of, and engagement in, legislative processes**
- **Incentives to engage**
- **Provision of relevant research**
- **Enhance credibility**

## Insights

Higher education sector

**Parliament**

Future research

- ▶ **Communicate what scientific evidence is and why it is important**
- ▶ **Training for politicians, political staff, parliamentary staff**
- ▶ **Improve balance of sources for formal written and oral evidence**



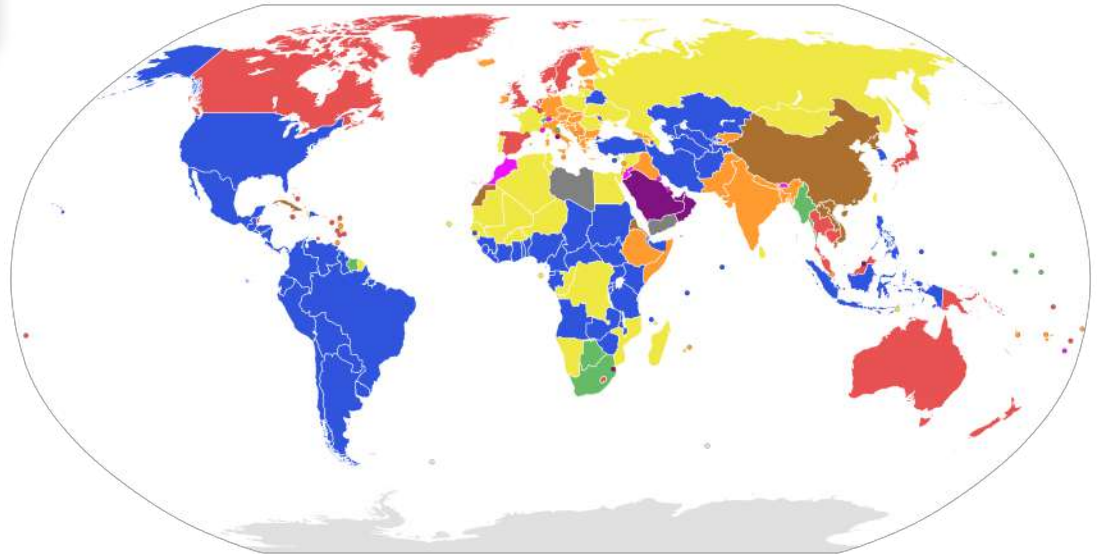
## Insights

Higher education sector

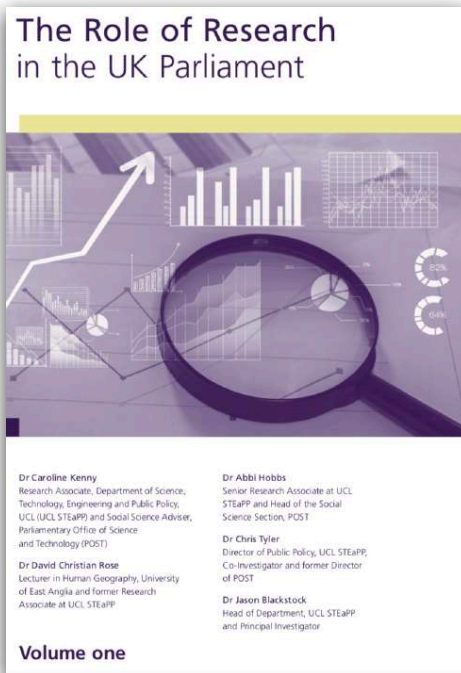
Parliament

Future research

- ▶ **Research supply-side of evidence**
- ▶ **Comparative research**
  - **Apply the same methodology to other legislatures**
  - **Needs a co-designed research agenda**



# Publications



**Rose et al. (in press) Improving the use of evidence in legislatures: the case of the UK Parliament, Evidence & Policy**

**Kenny et al. (2017) The Role of Research in the UK Parliament, Houses of Parliament**

**Kenny et al. (2017) Legislative science advice in Europe: the case for international comparative work, Palgrave Communications**

**Kenny & Tyler (2015) The role of research evidence in improving parliamentary democracy. In The Next Horizon of Technology Assessment, PACITA**

## Contact

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## Co-designed research questions on legislative science advice



## Co-designed research questions on legislative science advice

### SURVEY

183 respondents

50 countries

254 questions

### WORKSHOP

36 participants

17 countries

160+ questions

### RANKING

64 participants

31 countries

50 questions

# Co-designed research questions on legislative science advice

## The research questions

Information/Evidence Use | Whether legislative use of scientific evidence improves the implementation and outcome of social programs and policies

Polymakers | Under what conditions legislators and staff seek out scientific information or use what is presented to them

Communication | How different communication channels—hearings, face-to-face meetings, email, social media, etc.—affect informational trust and use

Polymakers | How legislators and their staff assess the credibility of scientific information

Information/Evidence Use | Under which conditions the use of scientific information changes the framing of policy debates

Intermediaries and brokers | What role intermediaries and research brokers play in getting scientific information before legislators and their staff

Polymakers | The factors that legislators weigh in deciding whether to accept or reject a scientific recommendation

System design | How the design of new structures, processes, and systems can increase legislative capacity for science use

Information/Evidence Use | How the formal and informal practices of legislatures influence the consideration and use of scientific information

Evidence Development | How policymakers and researchers work together in defining problems and processes for generating evidence

Scientists | What individual and institutional factors motivate scientists to share their research with legislators and their staff

Polymakers | What value legislators and staff place on scientific evidence, as opposed to other types

Institutions and organizations | How different institutional approaches to legislative science advice influence its nature, quality and relevance

Information/Evidence Use | What incentives motivate or compel legislatures to use scientific information

Institutions and organizations | What institutional approaches for legislative science advice are instructive for other countries

Communication | How risk and uncertainty can be communicated comprehensibly to legislators and staff

The public | How public participation affects legislative processes in which scientific information may be considered

Institutions and organizations | How legislative research departments synthesize and translate scientific information for legislators

Evidence Development | How the scientific topics most relevant to the public and policymakers can be determined to inform research

Scientists | Which behaviors of scientists and other advisers increase the likelihood of evidence use

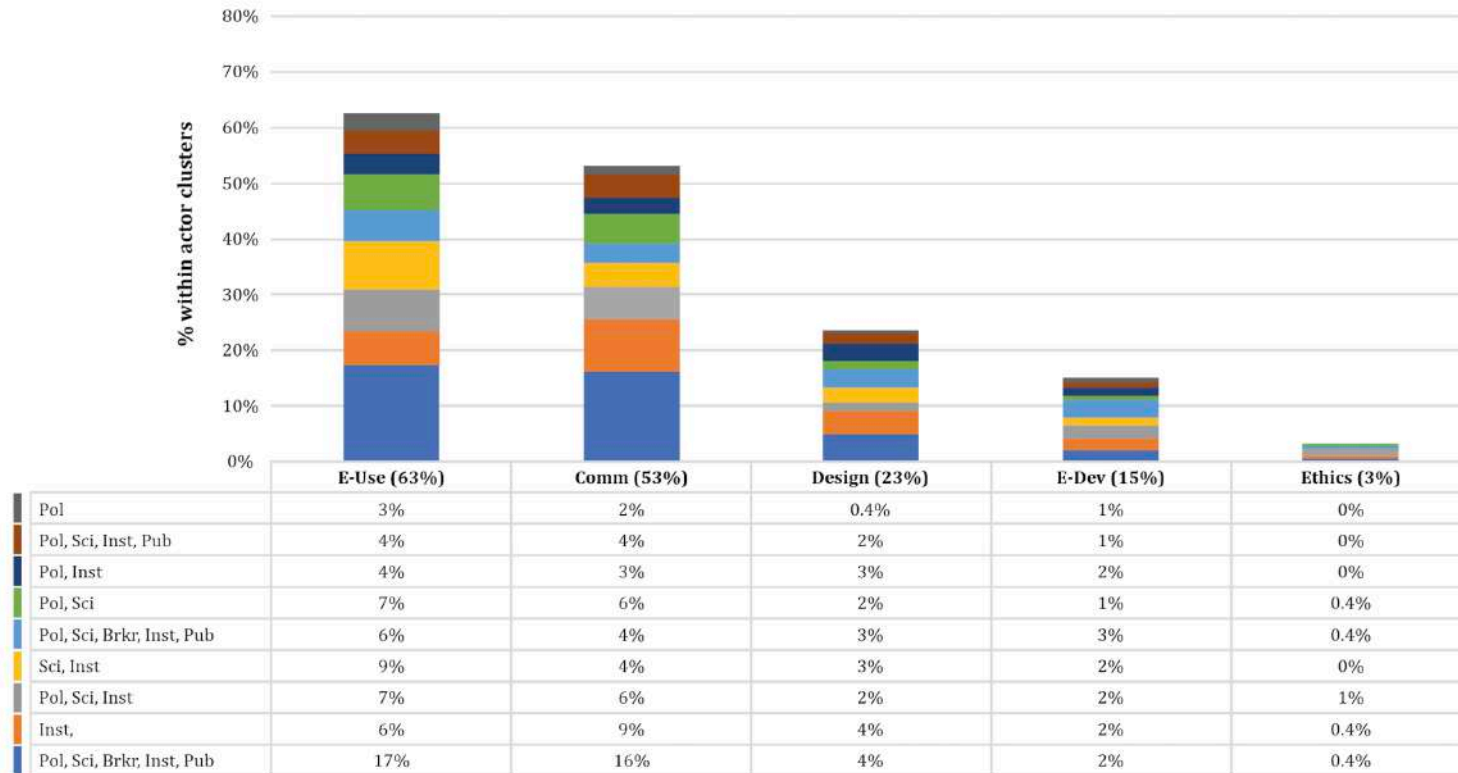
Polymakers | Whether training for legislators and/or staff can increase their use of scientific information

Information/Evidence Use | What types of scientific information are used in legislatures



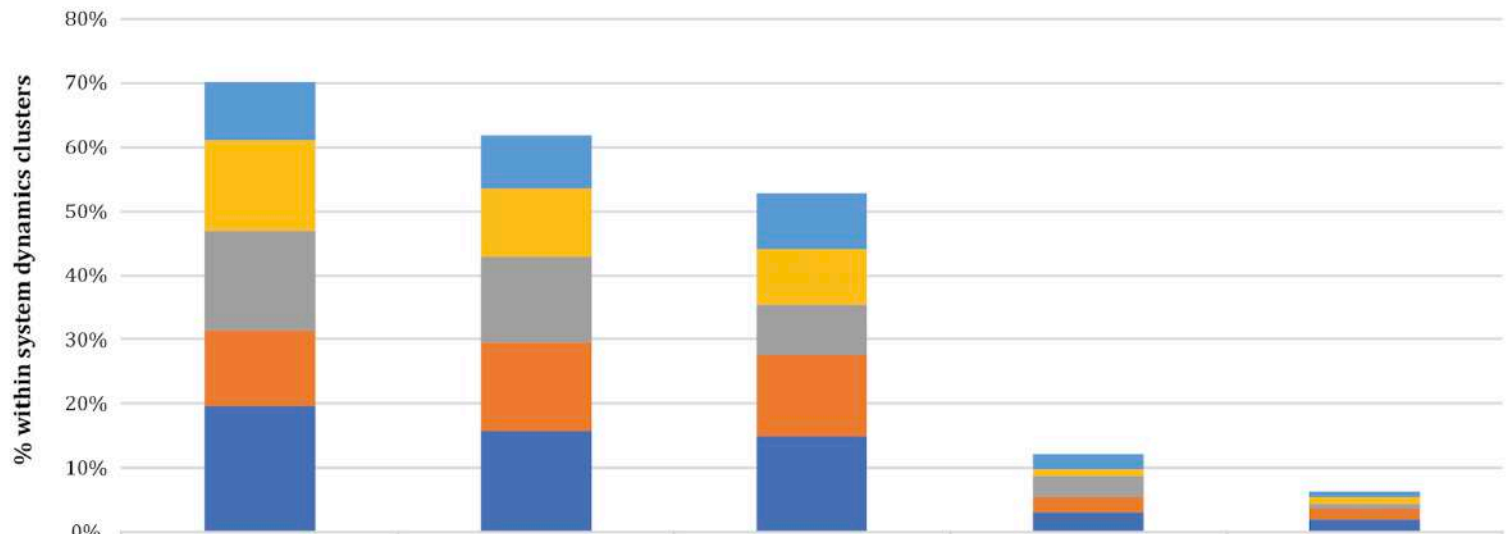
# Co-designed research questions on legislative science advice

Most Qs were about evidence use and comms (system dynamics)...



# Co-designed research questions on legislative science advice

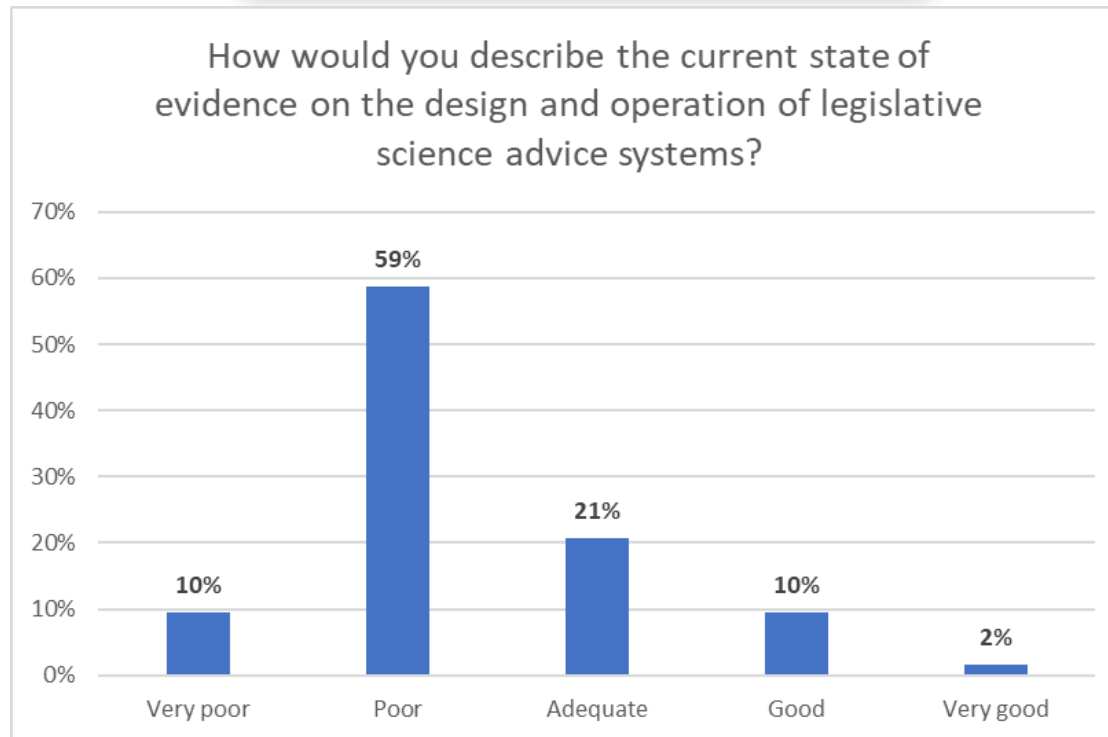
## ... and policymakers, institutions and scientists (actors)



	Pol (70%)	Inst (62%)	Sci (53%)	Pub (12%)	Brkr (6%)
E-Use, E-Dev, Comm, Design	9%	8%	9%	2%	1%
Comm, Ethics	14%	11%	9%	1%	1%
E-Use, Ethics	15%	13%	8%	3%	1%
E-Use, Comm, Design, Ethics	12%	14%	13%	2%	2%
E-Use, Comm, Ethics	20%	16%	15%	3%	2%

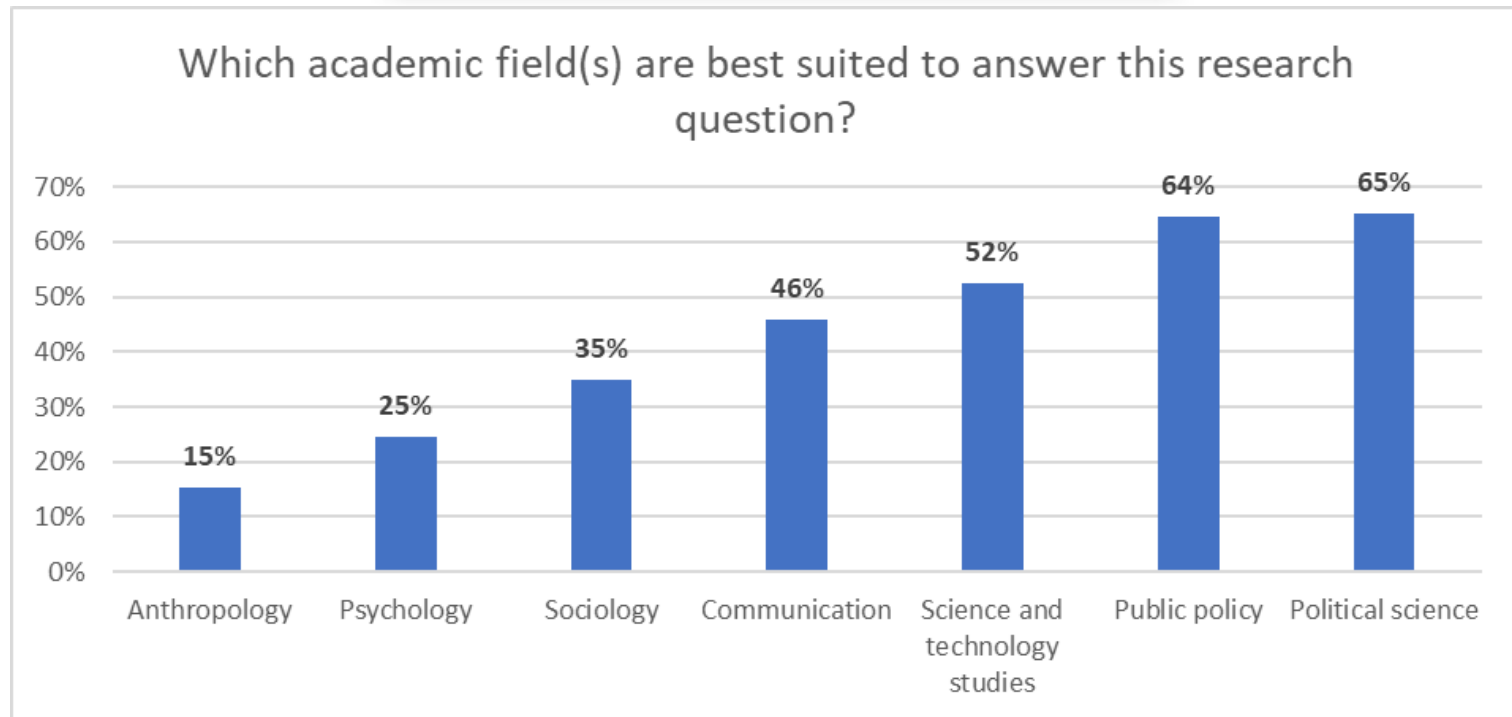
## Co-designed research questions on legislative science advice

### Poor state of evidence



## Co-designed research questions on legislative science advice

### Need for interdisciplinarity



## Publications



Tyler & Akerlof, 2019, Three secrets of survival in science advice, Nature

Akerlof, Tyler et al. (in press) A collaboratively-derived research agenda on legislative science advice, Palgrave Communications

Akerlof, Tyler et al. (in prep) International differences in prioritizing research needs for legislative science advice, to be submitted to Science and Public Policy

Tyler et al. (in prep) Establishing legislative science advisory systems in developing countries

**Policy**

**POST III**

**INGSA Parliamentary Chapter**

**Policy Impact Unit**





## Policy

### POST III

INGSA Parliamentary Chapter

Policy Impact Unit

- **Embed the social sciences in POST and Parliament**
- **Improve the use of research evidence in Parliament**
- **Make POST the lead body in Parliament for academic knowledge exchange**

## Policy

POST III

**INGSA Parliamentary Chapter**

Policy Impact Unit

- **International Network for Government Science Advice**
- **Legislative interest group**
- **Online and local gatherings of people interested in legislative science advice (policymakers, intermediaries, academics)**
- **Connected to EPTA**

## Policy

POST III

INGSA Parliamentary Chapter

Policy Impact Unit

- **Co-design of research proposals**
- **Policy engagement**
  - **Briefings**
  - **Events**
  - **Global Policy Fellows**
- **Monitoring and evaluation**

Contact

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