

WHAT CHALLENGES FOR UNIVERSITIES COMMUNICATING SCIENCE

MORE-PE: MOBILISATION OF RESOURCES FOR PUBLIC ENGAGEMENT – AN INTERNATIONAL STUDY (2016-2019)

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PHASE 1 – NATIONAL STUDY IN PT

- 2015 – Preliminary study in Portugal
 - *Portuguese national study*
 - Development of the questionnaire
 - Whole population survey to Research Institutes (RIs)

PHASE 2 – CROSS-NATIONAL STUDY

- April 2016- 2019 (cross national study)
 - FCT Project Grant (€240.000) – Fundacao para a Ciencia e Tecnologia
 - Implementation of the study in the UK, Italy, Germany, the Netherlands, and the USA.
 - Mainland China, Taiwan, Japan and Brazil
 - Coordination team in Lisbon

FCT Fundação
para a Ciência
e a Tecnologia



THE COMMUNICATION STRUCTURE OF UNIVERSITIES

RESPONSES TO PE DEMANDS

The mobilisation for public communication has occurred at several levels

- **Policy level** (mission & PE policies)
- **Macro/Central level (Universities)** – rise of PR offices/comms/marketing departments; media relations (Peters, 2010, Marcinkowski et al., 2014)
- **Meso-level** – emerging *RIs/units/centres (RIs)* (Entradas & Bauer, 2016) – independent from central
- **Micro-level** – individual scientists (e.g. Besley and Dudo, 2014, 2018; Peters et al., 2008) – behaviours and practices

What PE are RIs doing, why, for whom, and what resources are they mobilizing?

MORE-PE: MOBILISATION OF RESOURCES FOR PUBLIC ENGAGEMENT CROSS-NATIONAL STUDY

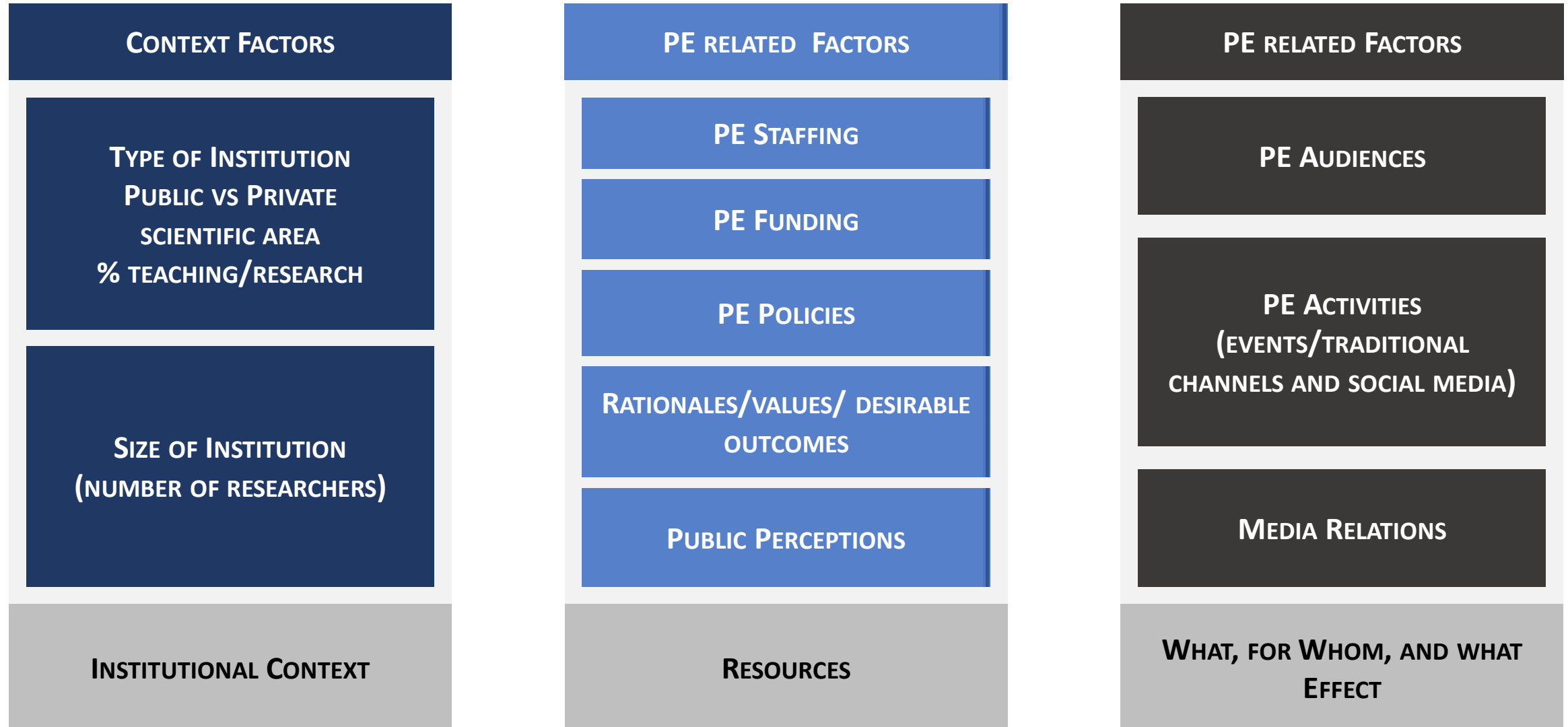
GOAL: MAPPING THE CULTURE OF PE AT RIs IN VARIOUS COUNTRIES

Aim 1 To characterise national contexts of institutional PE in different countries

Aim 2 To compare national structures and practices of communications at RIs

Aim 3 To define appropriate indicators for PE at the institutional level

MORE-PE: CONTEXTUAL MODEL



MORE-PE IMPLEMENTATION – COUNTRIES & REGIONS



MORE-PE PARTNERS

Europe: Portugal, Germany, Italy, UK, Netherlands

Americas: US, Brazil

Asia: Japan, Mainland China and Taiwan (China)

MORE-PE: ‘CORE’ PARTNERS (FCT FUNDING)

COUNTRY	INSTITUTION	TEAM MEMBERS
Portugal	ISCTE-IUL	Marta Entradas
United Kingdom	LSE	Martin Bauer
USA	Michigan State University & University of Texas	John Besley; Anthony Dudo
Netherlands	University of Leiden	Pedro Russo
Germany	University of Dusseldorf	Frank Marcinkowski
Italy	Observe ‘Science in Society’	Giuseppe Pellegrini; Massimiano Bucchi; Barbara Saracino

MORE-PE: 'AFFILIATED' PARTNERS

COUNTRY	INSTITUTION	TEAM MEMBERS
Mainland China	National Academy of Innovation Strategy (NAIS)	LIU Xuan
Taiwan, China	National Sun Yat-sen University	Yuh-Yuh Li (Luke)
Brazil	Museu da Vida, Casa de Oswaldo Cruz - Fiocruz	Luisa Massarani; Luis Amorim
Japan	National Graduate Institute for Policy Studies	Asako Okamura

METHODOLOGY: STRATIFIED PROBABILITY SAMPLE

SAMPLING FRAMES & SAMPLES	STEPS
<p>Step 1 - List All RIs in Each Country (Meso-Level) (Complete mapping: PT, NL, IT, JP) (Others - Representative samples of RIs in all disciplines)</p>	<ul style="list-style-type: none"> • Collect lists of RIs when existent; universities (RIs within research universities) • Classify each RI by Research Field (6 OECD FIELDS) • Give each RI a probability of selection
<p>Step 2 – Sample Stratification (Equal Size of RIs Per Stratum) - Nat Sci; Eng & Tech; Medical and Health Sci; Social Sciences; Humanities & Arts</p>	<ul style="list-style-type: none"> • Reduce each RF category to a target of N=200 • Initial sample: 1200 RIs (to contact)
<p>Step 3 – Further Info on Each RI Sampled</p>	<ul style="list-style-type: none"> • Year of creation • Size (number of Researchers) • Name, Email and Phone of contact person • Type of RIs (public vs private) • Website address • Contact point: Person most likely to be able to talk about RIs PE effort: PR/science communicators/Administrator, Director/Head, etc.

METHODOLOGY: SURVEY DISTRIBUTION

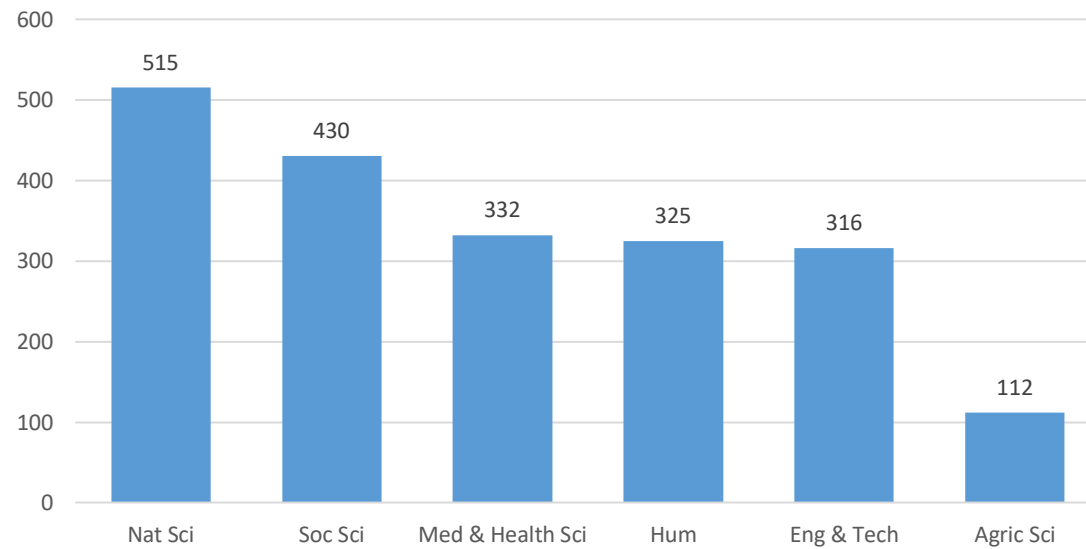
NATIONAL SURVEYS' DISTRIBUTION

- Centrally distributed by Lisbon
 - 14 Individual Surveys (2 DE, JP)
 - 50 reminders (M=4 per country)
- Personalized contact
 - Letter addressed with person's name & name of RI (*pre contact as well*)
- National languages
 - English
 - German
 - Portuguese
 - Japanese
 - Chinese
- Logo of partner institutions and national contact; signed by partners, plus logos of coordinating institutions & funding bodies
- Survey open:
 - June 2017 – October 2017
- Follow up calls (varied by country)
 - January 2018 – May 2018

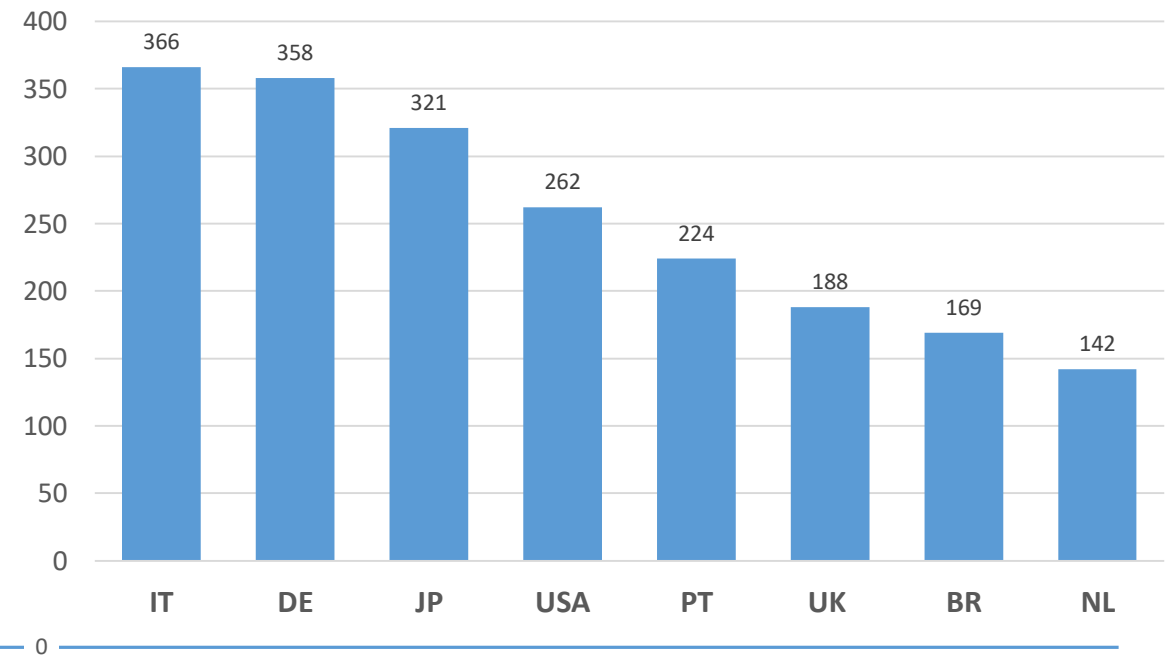
NATIONAL SAMPLES – NUMBER OF RIS

NUMBER OF RIS

NUMBER OF RIS PER AREA OF RESEARCH



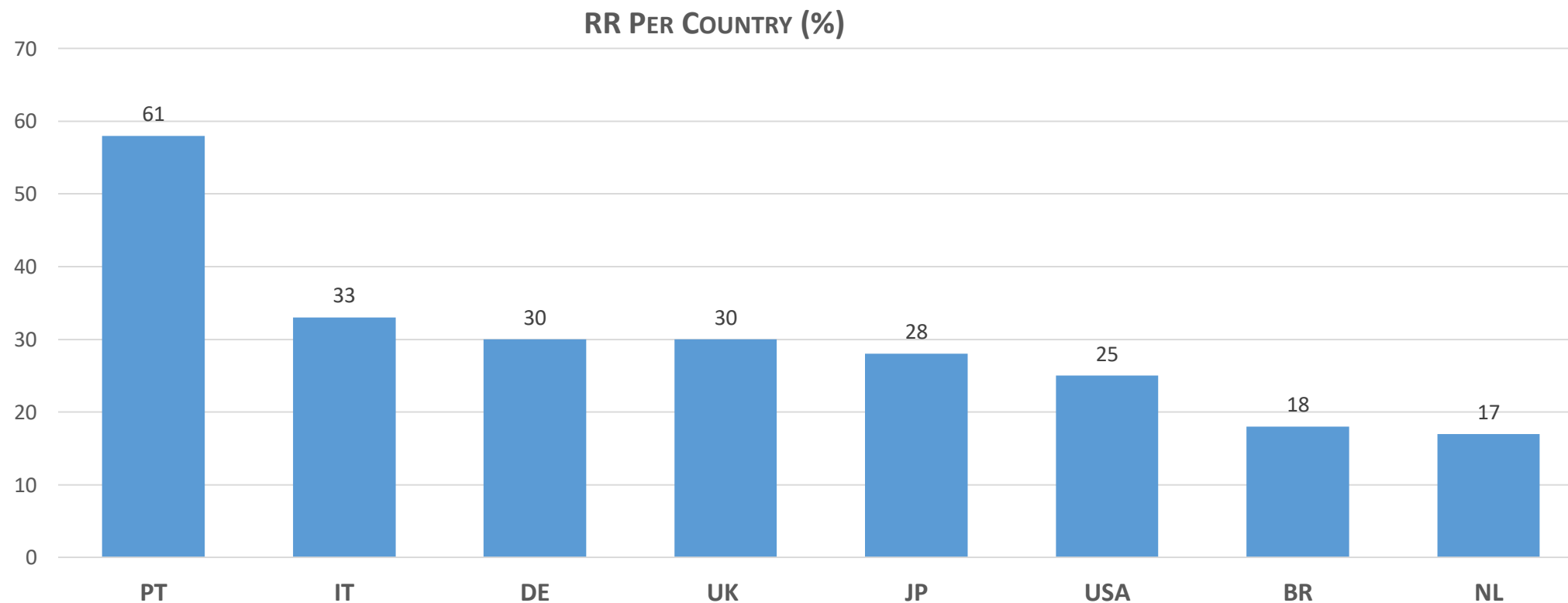
NUMBER OF RIS PER COUNTRY



N=2030

NATIONAL SAMPLES – RESPONSE RATES

RESPONSE RATES PER COUNTRY



WHEN: PE PRACTICE AND EVOLUTION

Q. In the last 12 months, have you undertaken any public communication activities for non-specialist publics

PE: e.g. maintaining a social media presence, giving public lectures, participating in public debates, activities for schools, science weeks, responding to media enquiries, and so on.

Q. In the last 5 years, the number of public communication activities has ...

Percentage of Respondents (%)

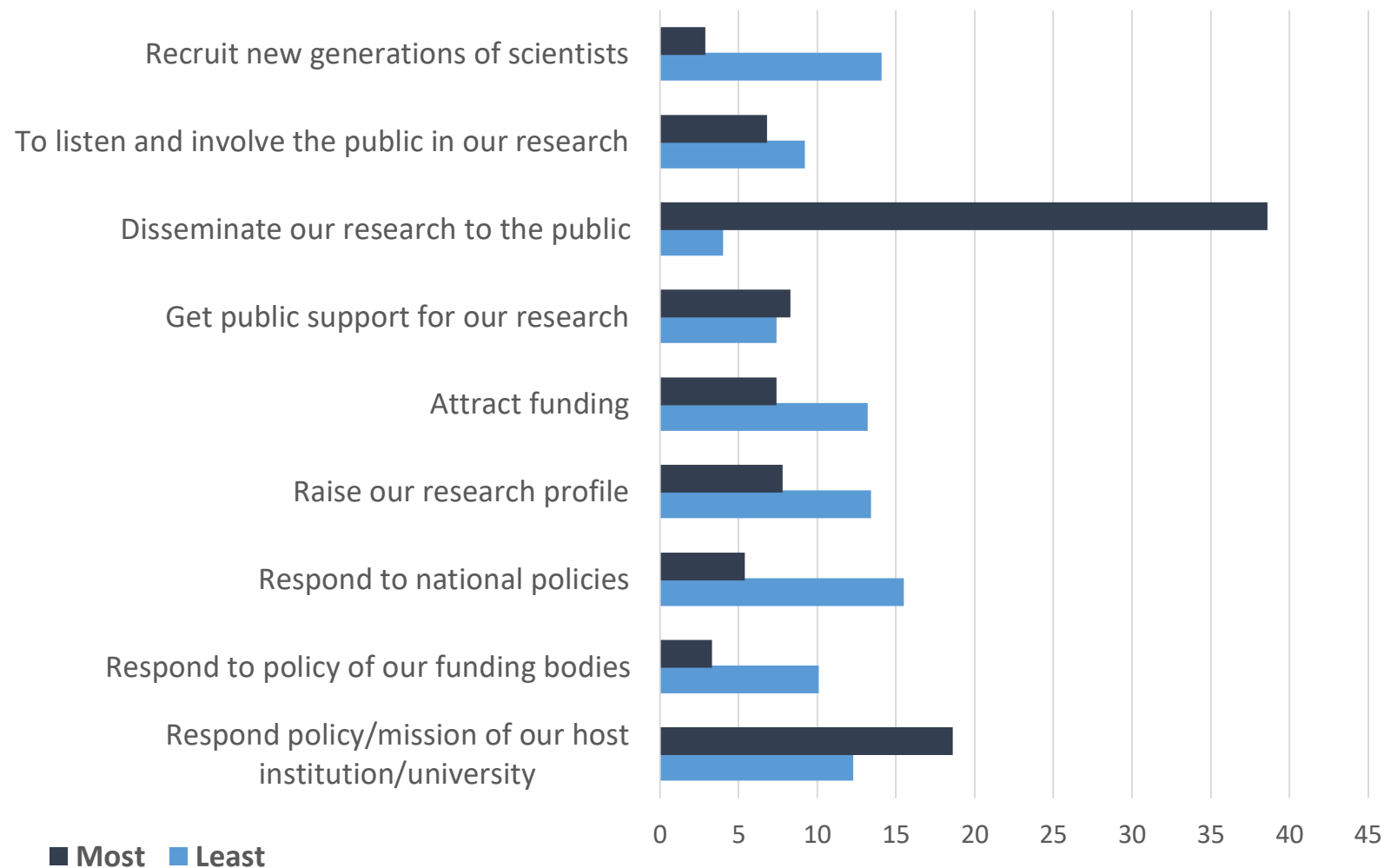
Increased	60.6%
Stayed same/kept constant	26%
Decreased	5%
Did not know/did not respond	8.4%
Total (N=2030)	100%

Q. For how long has the research unit been conducting communication activities for non-academic audiences?

Percentage of Respondents (%)

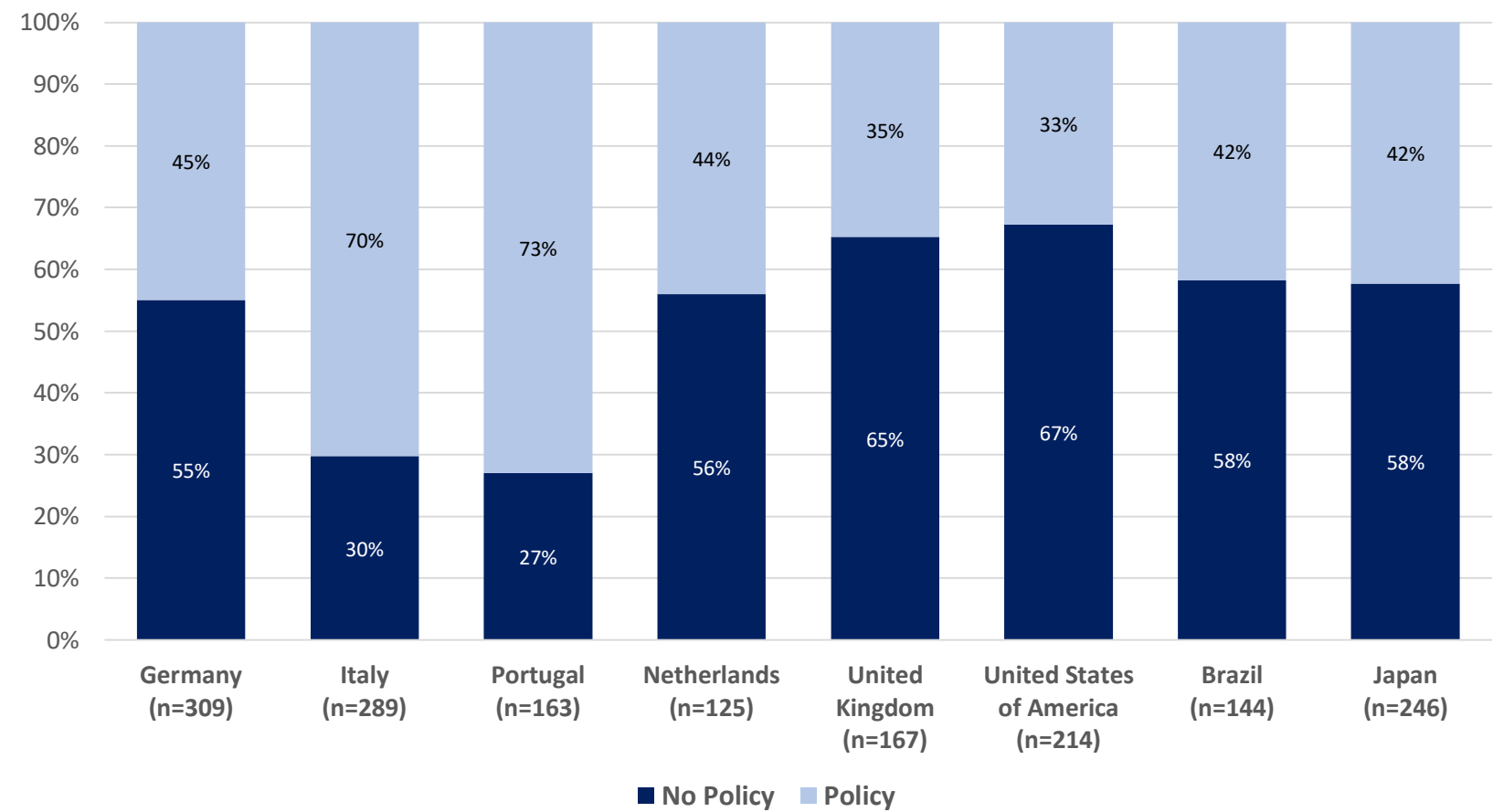
Less than one year	2.7%
Between 1 and 5 years	20.8%
More than 5 years	64.4%
Did not know/did not respond	12.1%
Total (N=2030)	100%

WHY: MOST AND LEAST IMPORTANT REASONS



WHAT RESOURCES: POLICY BY COUNTRY

PE POLICY



Q. Does your research unit has a policy for public outreach/engagement?

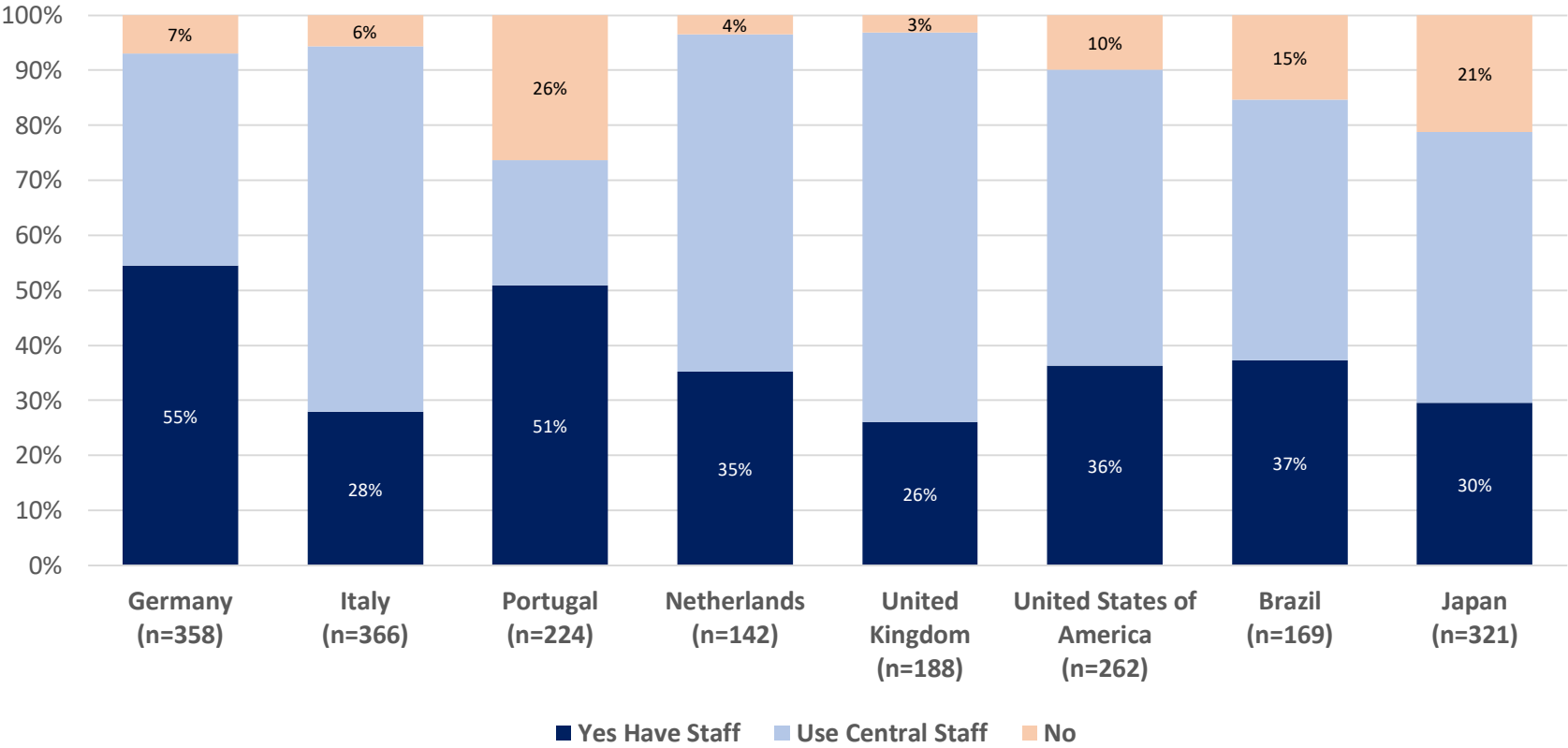
Yes= 48.8%

No = 51.2%

Pearson Chi-square = 0.000

WHAT RESOURCES: PE STAFF BY COUNTRY

PE STAFF (YES/CENTRAL/NO)



Q. Does your research unit has a staff dedicated to public communication tasks?

Yes= 37.6%

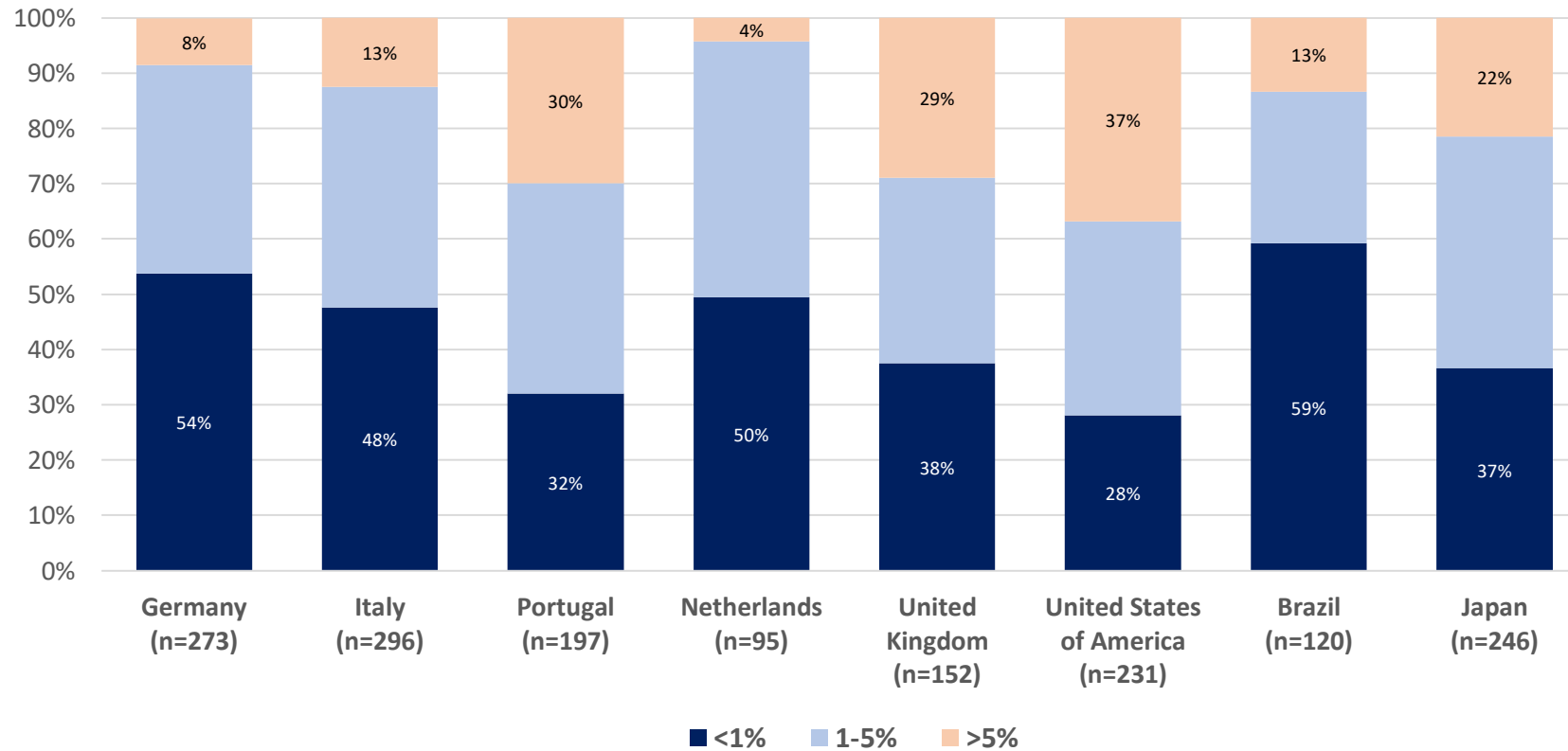
No, but central = 50.8%

No = 11.6%

Pearson Chi-square = 0.000

WHAT RESOURCES: PE FUNDING BY COUNTRY

PE FUNDING



Q. Roughly, how much of your unit's research budget was allocated gto public communication activities?

None – 11%

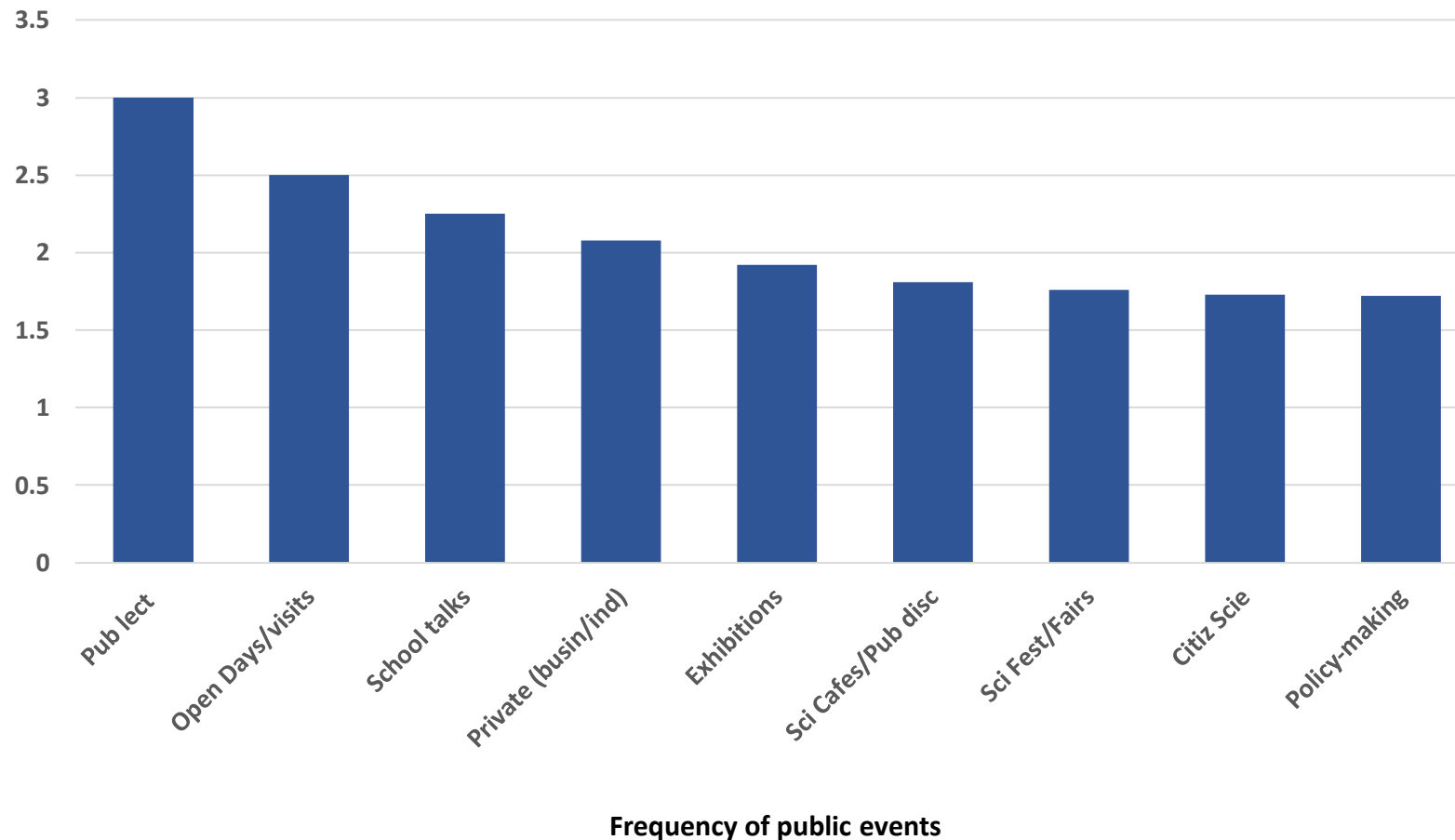
<1% - 31%

1-5% - 38%

>5% - 20%

Pearson C hi-square = 0.000

MEANS COMPARISONS



Q. Roughly, how frequently in the past 12 months has your research unit engaged in the following events either as organiser or contributor?

(1) Never

(2) Annually (1 time)

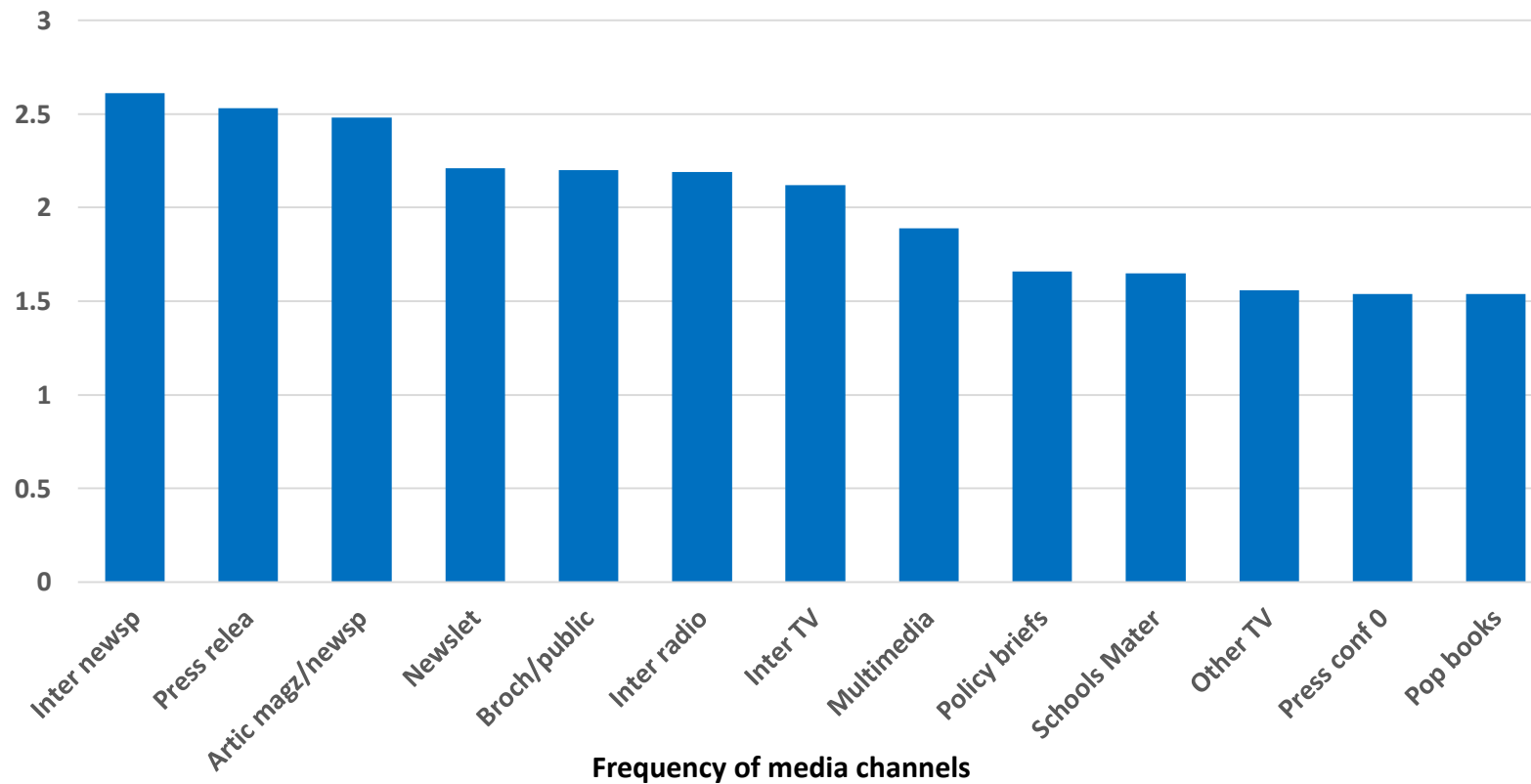
(3) Quarterly (2-6 times)

(4) Monthly (7-20)

(5) Weekly (>20 times)

PRACTICE – TRADITIONAL MEDIA CHANNELS BY COUNTRY

MEANS COMPARISONS



Q. Roughly, how frequently in the past 12 months has your research unit produced or used the following media channels to engage with non-specialist audiences?

(1) Never

(2) Annually (1 time)

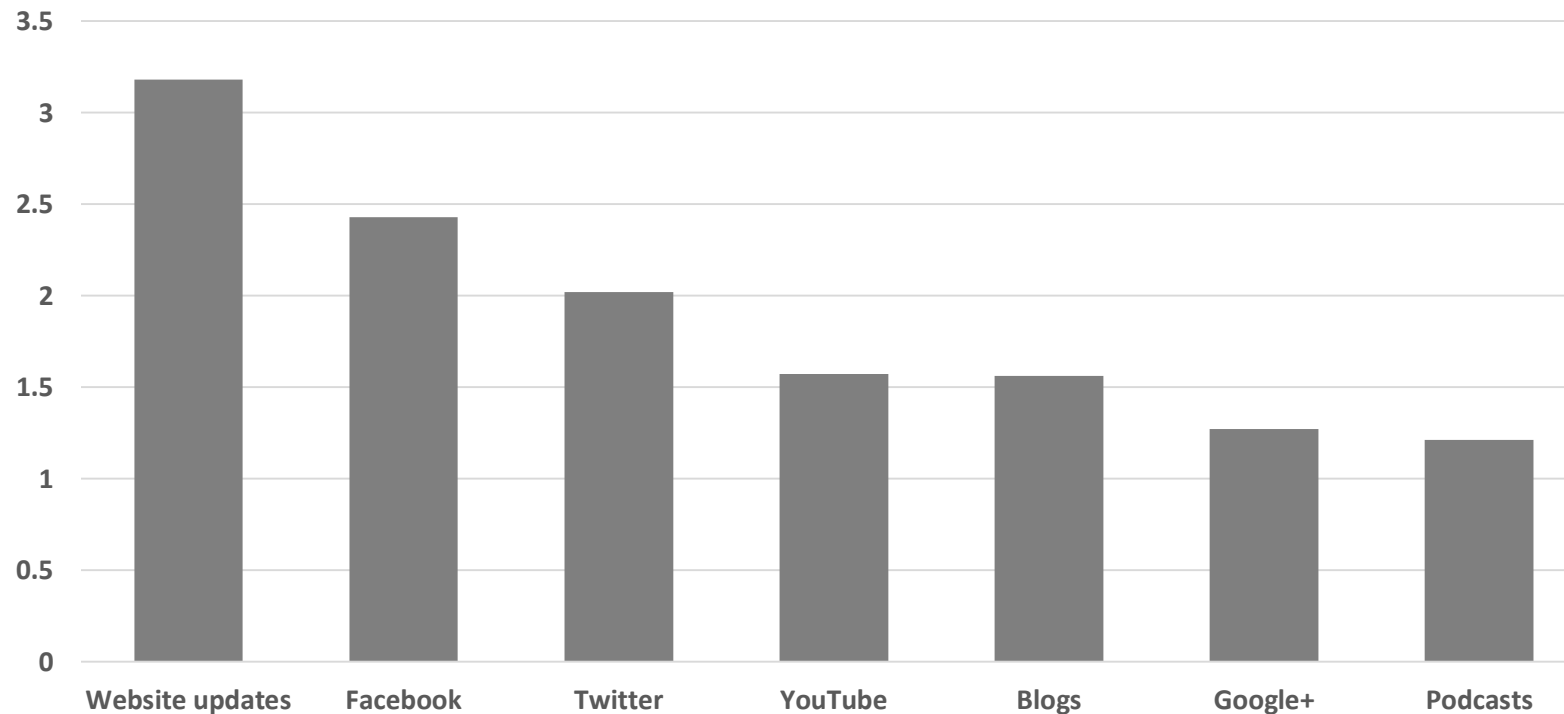
(3) Quarterly (2-6 times)

(4) Monthly (7-20)

(5) Weekly (>20 times)

PRACTICE – SOCIAL MEDIA CHANNELS

MEANS COMPARISONS



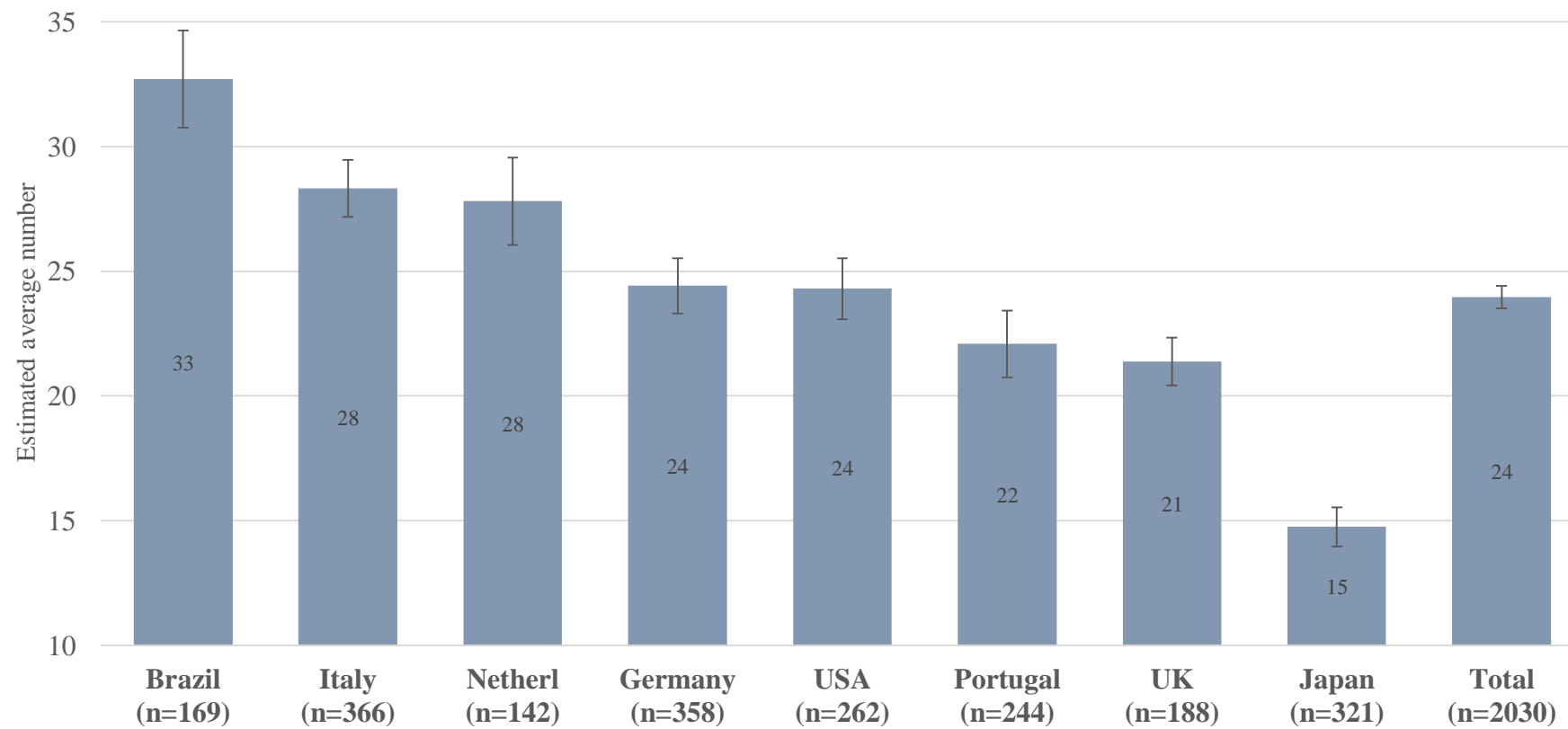
Frequency of online interactions

Q. Roughly, how frequently in the past 12 months has your research unit produced or used the following social media channels to engage with non-specialist audiences?

- (1) Never
- (2) Quarterly (2-6 times)
- (3) Monthly (7-20)
- (4) Weekly (20-40 times)
- (5) Daily (>40)

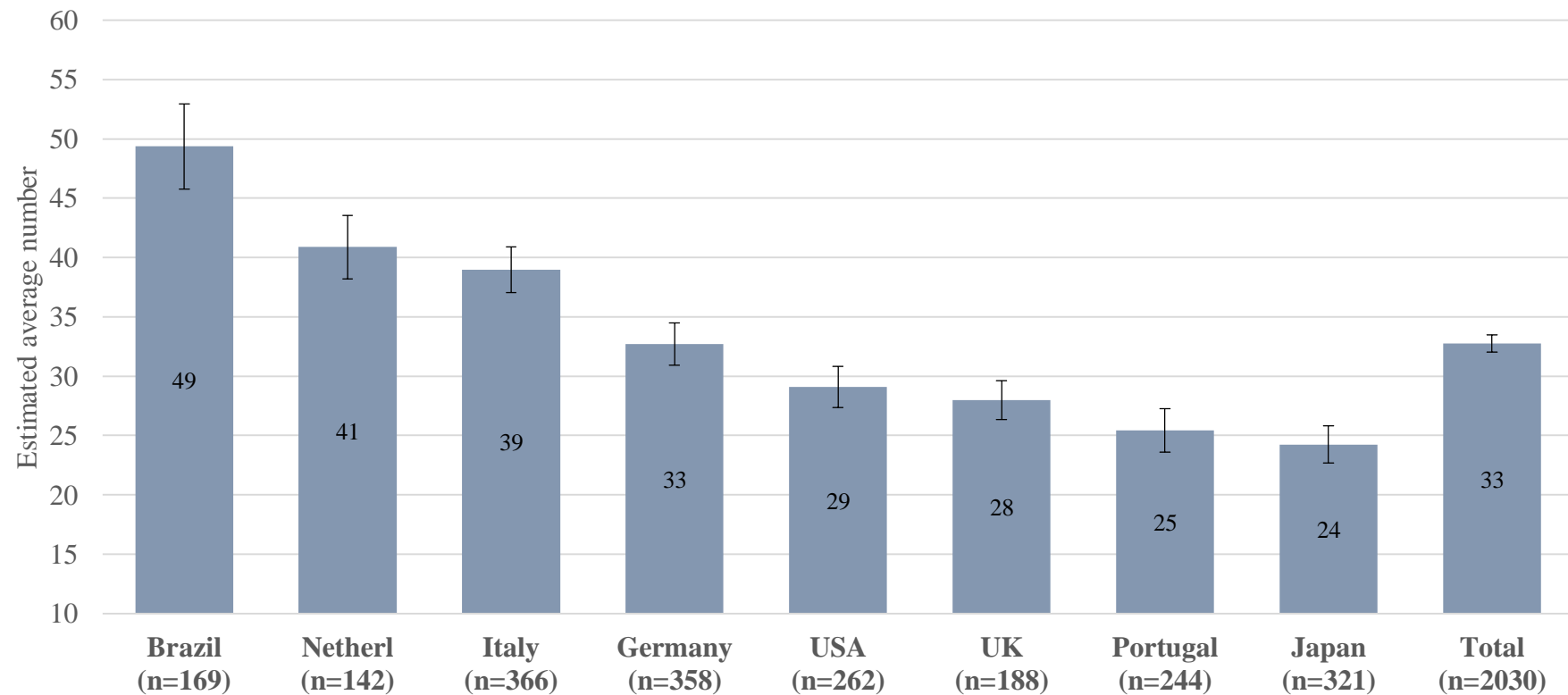
INTENSITY – PUBLIC EVENTS BY COUNTRY

ESTIMATED NUMBER OF PUBLIC EVENTS



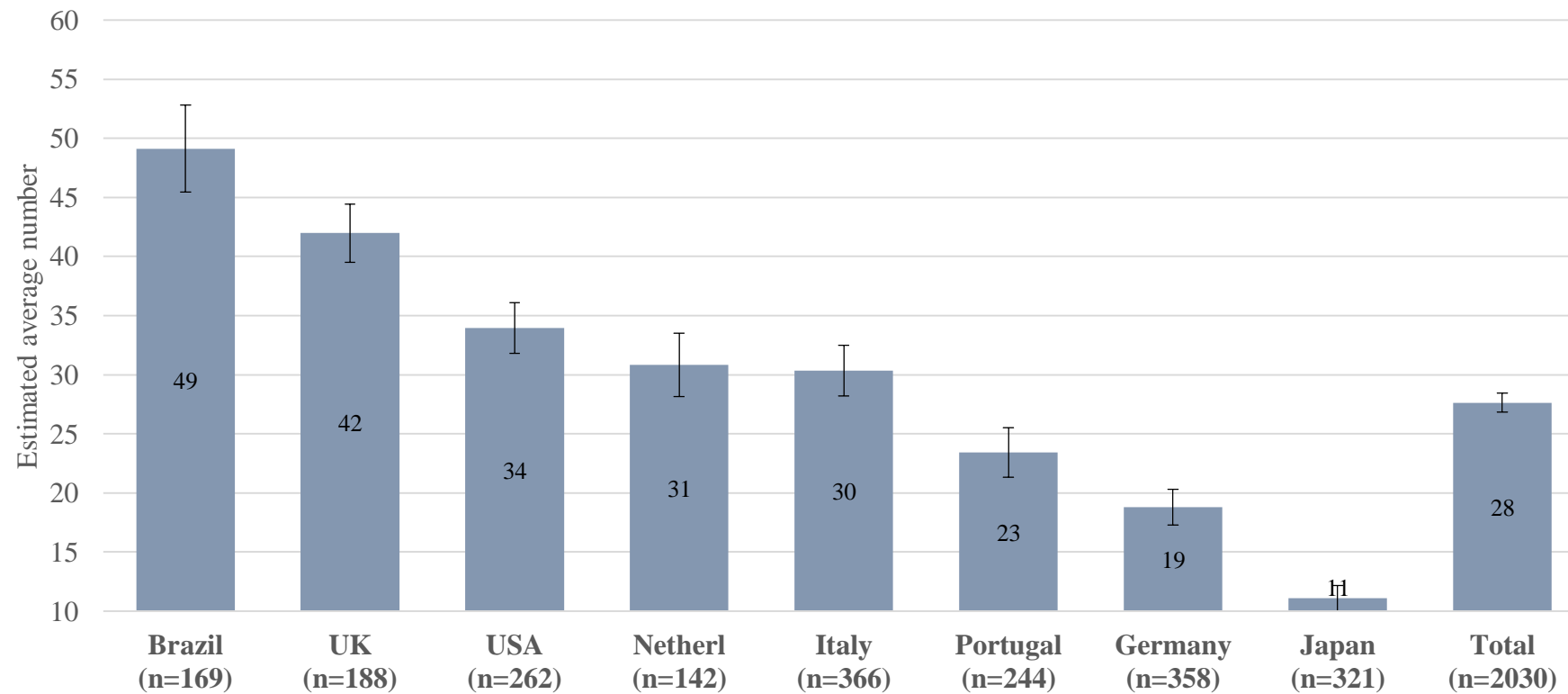
INTENSITY –TRADITIONAL MEDIA BY COUNTRY

ESTIMATED NUMBER OF TRADITIONAL MEDIA

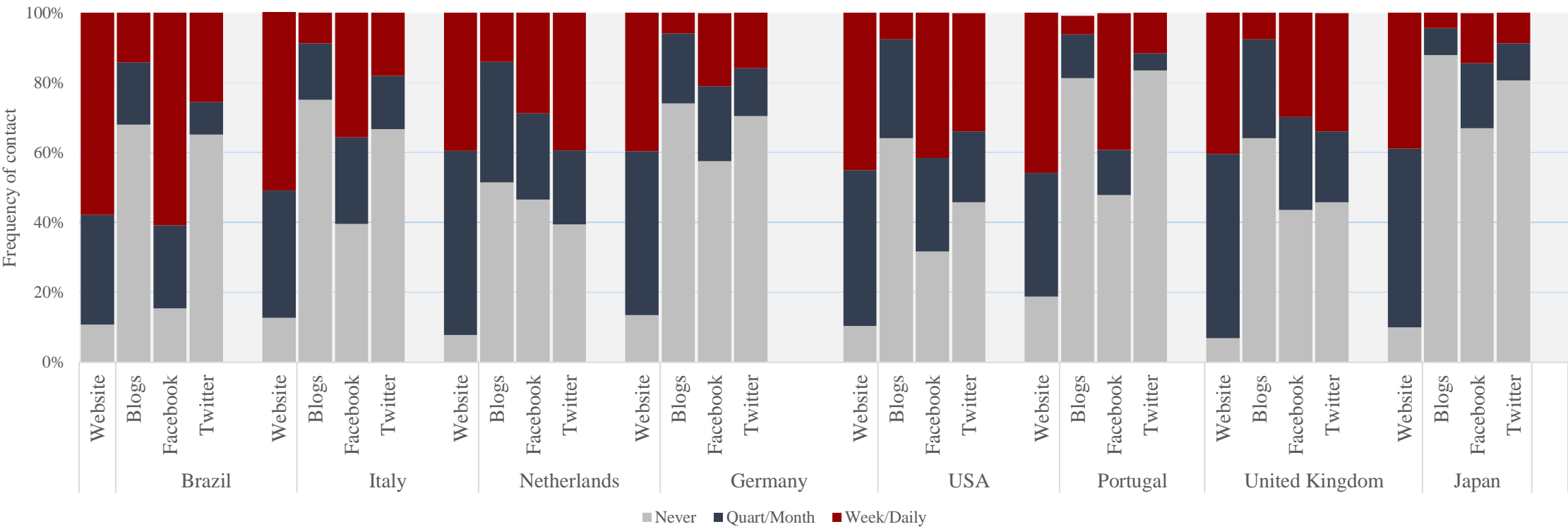


INTENSITY – ONLINE MEDIA BY COUNTRY

ESTIMATED NUMBER OF ONLINE INTERACTIONS



ONLINE INTERACTIONS BY COUNTRY



PUBLIC COMMUNICATION ACTIVITY – MEASURES

WHAT EXPLAINS VARIATION IN ACTIVITY ACROSS INSTITUTES

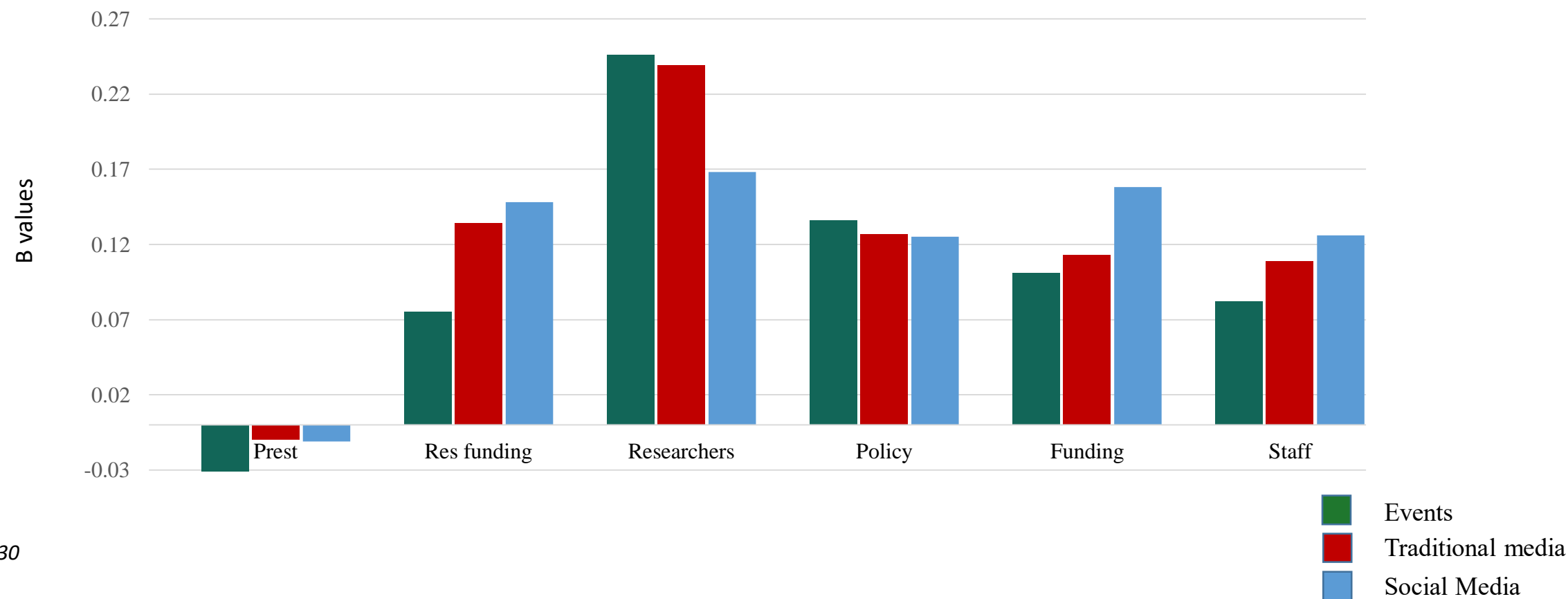
INDEPENDENT VARIABLES		DEPENDENT VARIABLES
Context variables (control)	PE–related variables (main interest)	Public communication activity
<ul style="list-style-type: none">CountryResearch areaLevel of Excellency% Research funding	<ul style="list-style-type: none">PE Staff (bi)Level of fundingPE policy (bi)% researchers involved in PE	<ul style="list-style-type: none">Indices of activity: CFA scores for 3 DV
<ul style="list-style-type: none">Hierarchical multiple regression models for 3 DV (3 steps)		

PC variables

Context
variables

PC activity
Events
Trad channels
New media

WHAT EXPLAINS VARIATION ACROSS INSTITUTES

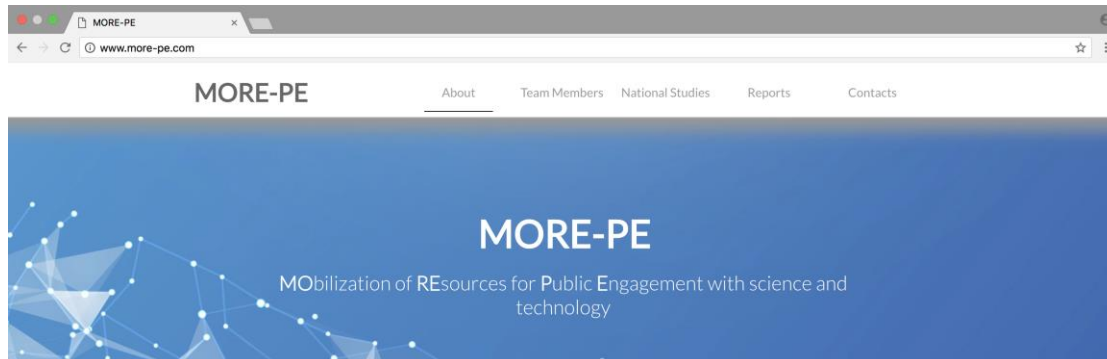


MORE-PE: WHAT IT ADDS

- PE is becoming a widespread activity in RIs across countries
- It is at early stages – lacking resources & professionalization
- Similar types of communications across countries
- Intensity of activity is influenced by: percentage of active researchers, policy and communications staff most important - potential indicators of PE
- Centralisation versus decentralisation (?)

PUBLICATIONS

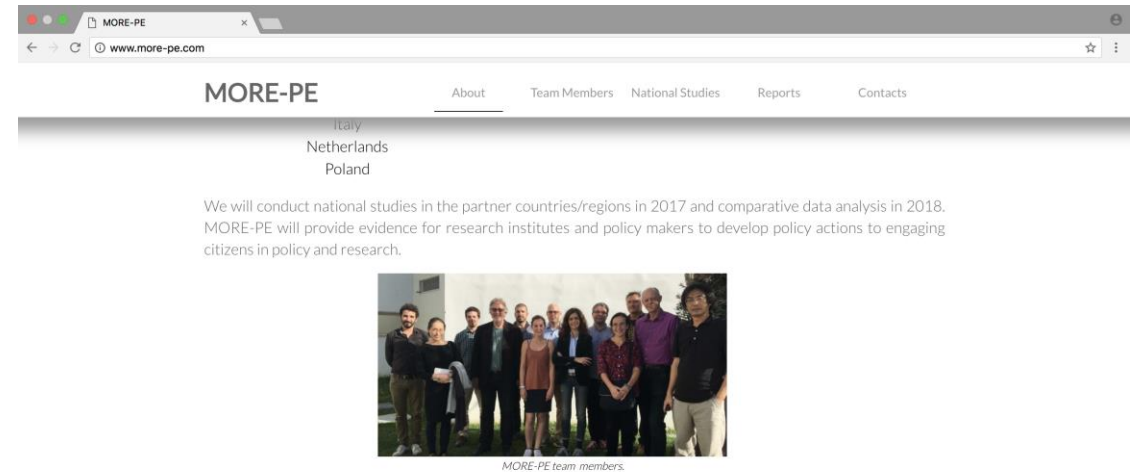
- Entradas, M. & Bauer, M. W. (2017). *Mobilisation for Public Engagement: Benchmarking the Practices of Research Institutes*. Public Understanding of Science.
- Entradas, M. and Bauer, M. W. (2018). *The Research Field of University Communication* in Shafer, M., Birte Fähnrich, B., Metag, J., and Senja Post, S. 'Hochschulkommunikation', Springer VS.
- Entradas, M. (2015). *Envolvimento societal pelos centros de I&D*. in Maria de Lurdes Rodrigues e Manuel Heitor (org.) "40 Anos de Políticas de Ciência e de Ensino Superior", Almedina, Portugal.



MORE-PE is an international project (2016-2018) aimed at mapping the culture of public engagement at research institutes (RIs). It aims to assemble a database of comparable data on aspects of public engagement (PE) at the institutional level in:

Europe	Americas	Asia
Portugal	United States	Taiwan
UK	Brazil	Japan
Germany		China
Italy		
Netherlands		
Poland		

We will conduct national studies in the partner countries/regions in 2017 and comparative data analysis in 2018. MORE-PE will provide evidence for research institutes and policy makers to develop policy actions to engaging citizens in policy and research.



MORE-PE team members.

The project has received funding from Fundação para a Ciência e Tecnologia (FCT), Portugal, and Marie Curie Programme, European Commission.

FCT Fundação para a Ciência e a Tecnologia
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