

The National Roll Out of the Municipal Innovation Maturity Index (MIMI)

Public Sector Innovation: Measurement

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Instructor Background

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Mehmet Akif Demircioglu is an Assistant Professor at the Lee Kuan Yew School of Public Policy (LKYSPP), National University of Singapore (NUS) and a research fellow at the Institute for Development Strategies, Indiana University-Bloomington. He holds MPA and Ph.D. degrees from Indiana University's School of Public and Environmental Affairs (SPEA) at Indiana University-Bloomington. He specializes in public management, public sector innovation, employee attitudes, governance reforms, and quantitative methods. He is particularly interested in the link between employee attitudes and innovative activities in the public sector. His recent articles have appeared at Research Policy, Journal of Technology Transfer, and Public Performance & Management Review, among others.



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- Faculty member at LKY School, National University of Singapore. Fellow at Arizona State University and Institute for Development Studies at Indiana University.
- Research & teaching interests: public sector innovation, entrepreneurship, good governance.
- BS: Turkey. MPA & PhD: O’Neill SPEA, Indiana University-Bloomington.
- Also trained in Germany, France, Italy, Mexico, and Syracuse University.
- Worked at Seoul City Hall, Urban Institute, Wilson Center, Turkey's Office of Personnel Management, Nord University, and Indiana Business Research Center.
- Visiting professor: University of Leiden, Sciences Po, Yonsei University, German University of Administrative Sciences, Nazarbayev University, and the University of Canberra.

1. Why public sector innovation (PSI)
2. PSI Research
3. Why to Measure PSI
4. How to Measure PSI
5. Examples: Conditions/Drivers for PSI
6. Lessons/Findings from the Australian Public Service
7. Introduction to OECD/OPSI and Case Submission

Definitions:

- - Public sector = government ownership and funding (excluding SOE); no aim to make a profit.
- - PSI = A new and novel idea or practice implemented by a public organization which is new to the organization (may not be new to the market/public service).

Quote

- “If the function of advising the emperors, kings, and sultans in the past can be considered a traditional kind of public policy analysis, then the study of public policy is almost **as old as the history itself** (Goldhamer, 1978, pp, 7–27). In its modern sense, as a multidisciplinary, multi-method, problem-focused, and action-oriented discipline (Parsons, 1995, pp. 1–16), the field of public policy is **relatively new compared to the other social science disciplines.**”

Source: Yildiz, M., Demircioğlu, M. A., & Babaoğlu, C. (2011). Teaching public policy to undergraduate students: Issues, experiences, and lessons in Turkey. *Journal of Public Affairs Education*, 17(3), 343-365.

- **Same logic:** innovation (including public sector innovation [PSI]) is as old as the history itself (military advancements, social issues), but as a multidisciplinary, multi-method, problem-focused, and action-oriented discipline, it is very new.

Why do we need PSI?

- Essential parts of our daily lives (e.g. education, health, and security to citizens).
- Efficiency, effectiveness, survival, legitimacy.
- Grand challenges, complexity (e.g. poverty, global warming).
- Spillover effect.

PSI: Public Sector Innovation.

What is innovation/PSI: A new/ novel idea & practice implemented by an organization which is new to the organization (may not be new to the market/public service).



PSI Research: Overview

- Early studies: Theory building: e.g. Wilson, 1966 “Innovation in organization: Notes toward a theory”; Downs & Mohr. 1979. "Toward a theory of innovation."
- Methodology: case studies (e.g. Borins’ innovation awards, 2001, 2014; interviews; mostly conceptual pieces (e.g. Albury 2005, 2011; Torfing & Sorensen, 2011).
- **What is new?** → the use of innovation surveys (see Arundel et al., 2019; Demircioglu & Audretsch, 2018; Gault, 2018; OECD/Eurostat 2018).
 - OECD Manual (2005, 2018), but not much public sector focus.
 - 2008-2009 Measuring Public Innovation in the Nordic Countries (MEPIN): the first large scale and representative survey (Bloch & Bugge, 2013)
 - European Innobarometer (2010-2011) (Clausen, Demircioglu, & Alsos, 2019; Demircioglu & Vivona, 2021)
 - Australian APSII survey (2012)
 - Australian Public Service Commission (APSC) Annual Survey/Census (2010-today) (Demircioglu; Torugsa & Arundel, 2016)

- Innovation as a dependent variable ($X \rightarrow$ Innovation [drivers or conditions of innovation]).
- Innovation as an independent variable (innovation $\rightarrow Y$ [outcomes of innovation; e.g. performance]).
- Sources of innovation (e.g. top-down vs. bottom-up, collaborative innovation).
- Types of innovation (e.g. product, process, marketing).
- Innovation climate (e.g. existing of established process).
- Others: Main target(s), barriers, overall development time, objectives
- **Measurement of innovation \rightarrow What, why, how, when, where, and so what?**

**Levels of Analysis*: individual, group, organizational/agency/ municipal government/ country*

Why To Measure PSI?

- If we can measure → we can understand, manage, and lead.
- Compare different organizations/municipalities.
- Innovation may be linked to success.
- Increase performance; HRM (e.g. promotion).

How to Measure PSI?

- First steps. Deciding...
 - Unit of analysis: individual, group, organizational, local governments, country. Examples:
 - Country level: innovation inputs (e.g. R&D) vs. innovation outputs.
 - Municipal government level: e-government, technological/process innovations.
 - Organizational level: budget changes, existing of a department/unit, collaboration.
 - Group level: cooperation for innovations, leadership support.
 - Individual level: innovative work behavior, creativity, motivation to innovate.
 - The most significant innovation (MSI) vs. other measure(s).
 - Time horizon (e.g. the last 12 months, the last 3 years).
- Methodology/Data collection: Surveys, interviews, case studies, conceptual pieces, theory building.

How to Measure PSI?

- What to be included?
 - Sources
 - Conditions
 - Drivers/conditions
 - Main target(s)
 - Types
 - Implementation
 - Barriers
 - Overall development time
 - Objectives
 - Outcomes

How to Measure PSI?

- Context/cultural context: National, social, organizational, and demographic
 - National/society level: power distance index, individualism vs. collectivism, uncertainty avoidance, masculinity vs. femininity, long-term orientation vs. short-term orientation, indulgence vs. restraint (Hofstede et al., 2010).
 - Organizational level: Production culture, bureaucratic culture, and professional culture (Jones, 1983).
 - Organizational level: Process-Oriented vs. Results-Oriented; Employee-Oriented vs. Job-Oriented; Parochial vs. Professional; Open System vs. Closed System; Loose Control vs. Tight Control; Pragmatic vs. Normative (Hofstede et al., 1990; Hofstede, 1998).

How to Measure PSI?

- Innovation Types
 - Product, process, policy, marketing, communications, organizational.
- Outcomes/Benefits of Innovation
 - Focusing on the most significant innovation (MSI)
 - Increasing quality, reducing cost, improving process, increasing employee job satisfaction; sustainability of innovation; the significance of innovation (e.g. radical vs. incremental); invented vs. ingested; ethical aspects.
- **Main Target (MSI)**
 - **Your workgroup, department or agency; government ministers; individual citizens.**
- Objective: e.g. reducing cost, improving the quality, enhance citizen satisfaction.

Remember: PSI Research

- **Innovation as a dependent variable ($X \rightarrow$ Innovation [drivers or conditions of innovation]). (Examples, next slides)**
- Innovation as an independent variable (innovation \rightarrow Y [outcomes of innovation; e.g. performance]).
- Sources of innovation (e.g. top-down vs. bottom-up, collaborative innovation).
- Types of innovation (e.g. product, process, marketing).
- Innovation climate (e.g. existing of established process).
- Others: Main target(s), barriers, overall development time, objectives
- Measurement of innovation \rightarrow What, why, how, when, where, and so what?

**Levels of Analysis*: individual, group, organizational/agency/ municipal government/ country*

Conditions for PSI

Context (e.g. national, cultural, organizational) always matter!

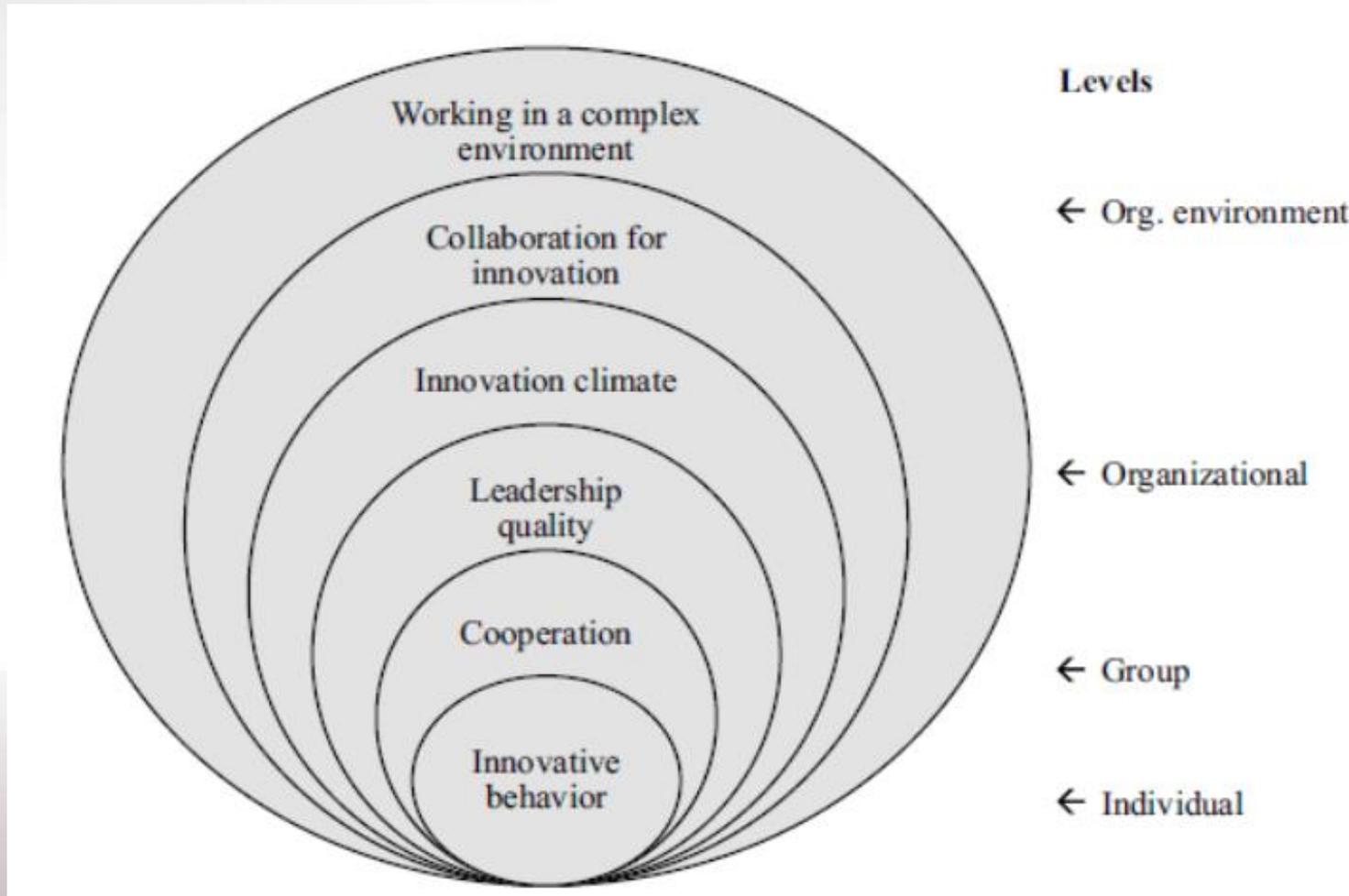
- 1. Experimentation (+)
- 2. Responding to low performers (+)
- 3. Feedback (+)
- 4. Motivation to improve performance (+)
- 5. Budget constraints (no effect)

Source: Demircioglu, Mehmet A., and David B. Audretsch. 2017. "Conditions for innovation in public sector organizations." *Research Policy* 46 (9):1681-1691.

- **Right time/place/conditions/incentives matter!** (Remember picturephone (1960s by the AT&T))



Conditions for Innovation



Findings from APS

Figure 9.1 Sources of new ideas and information, 2010–11

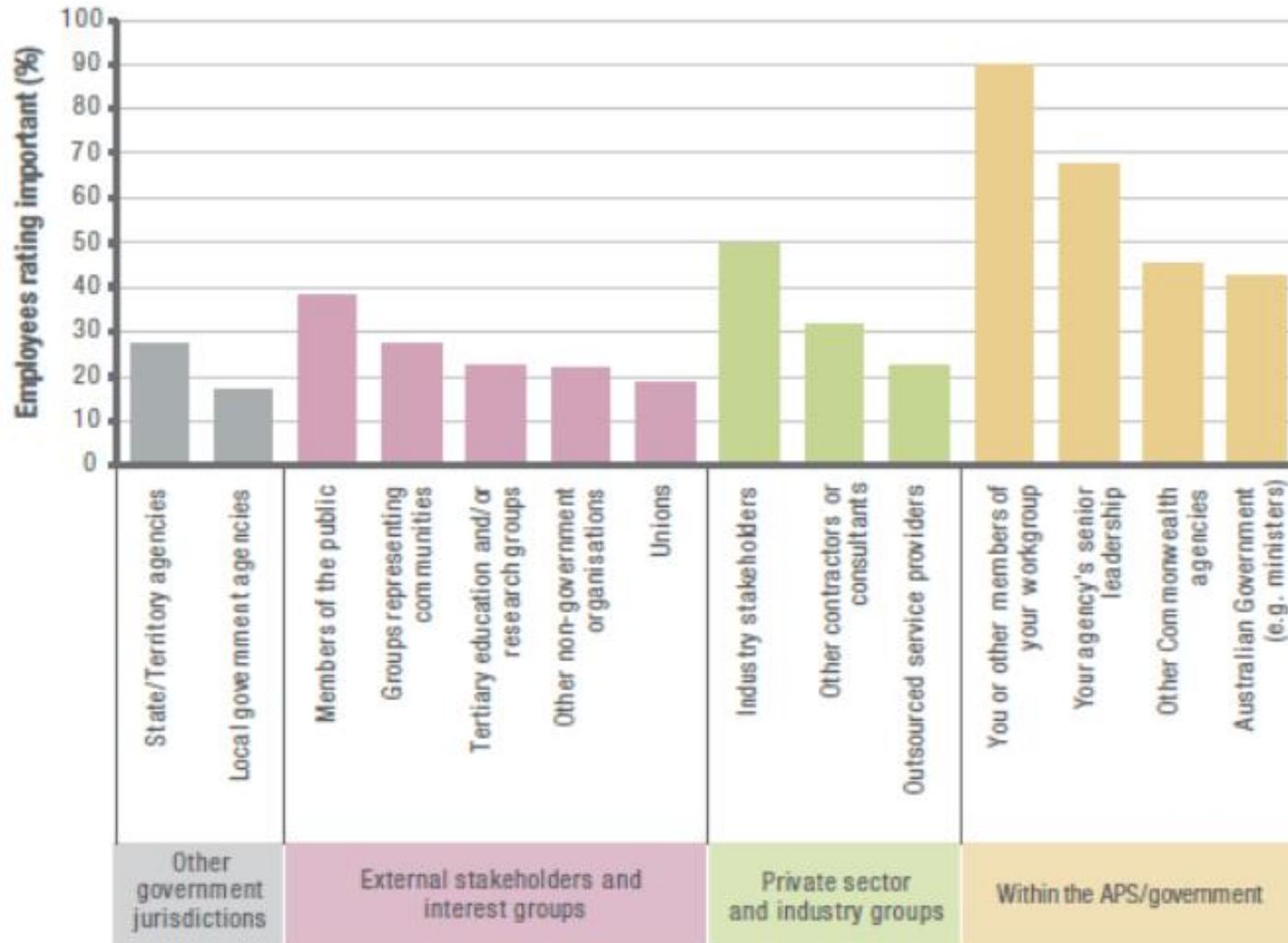


Figure 9.2 Employee views on the workplace climate for innovation, 2010–11

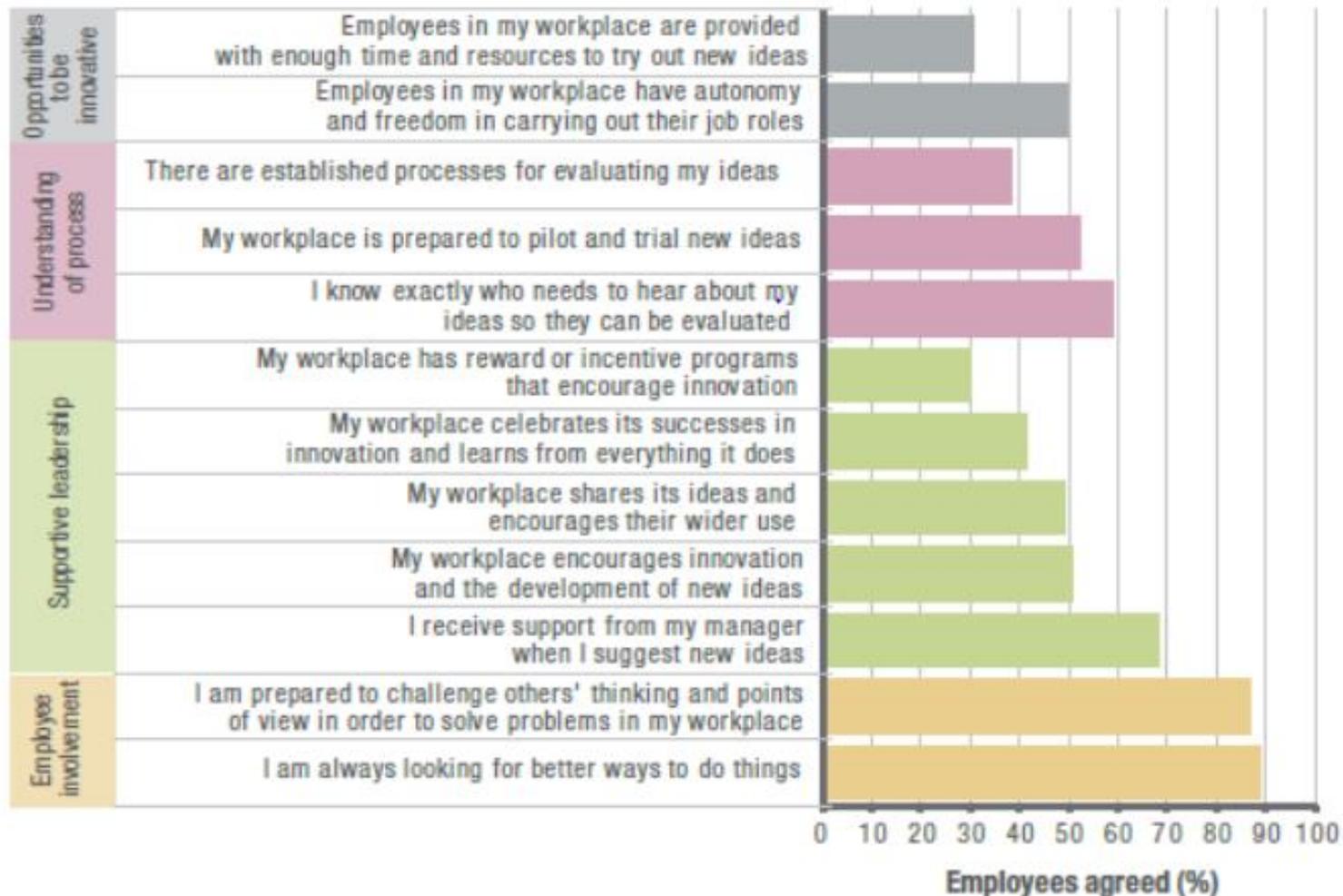


Figure 9.4 Employee views on support and encouragement for innovation by classification, 2010–11

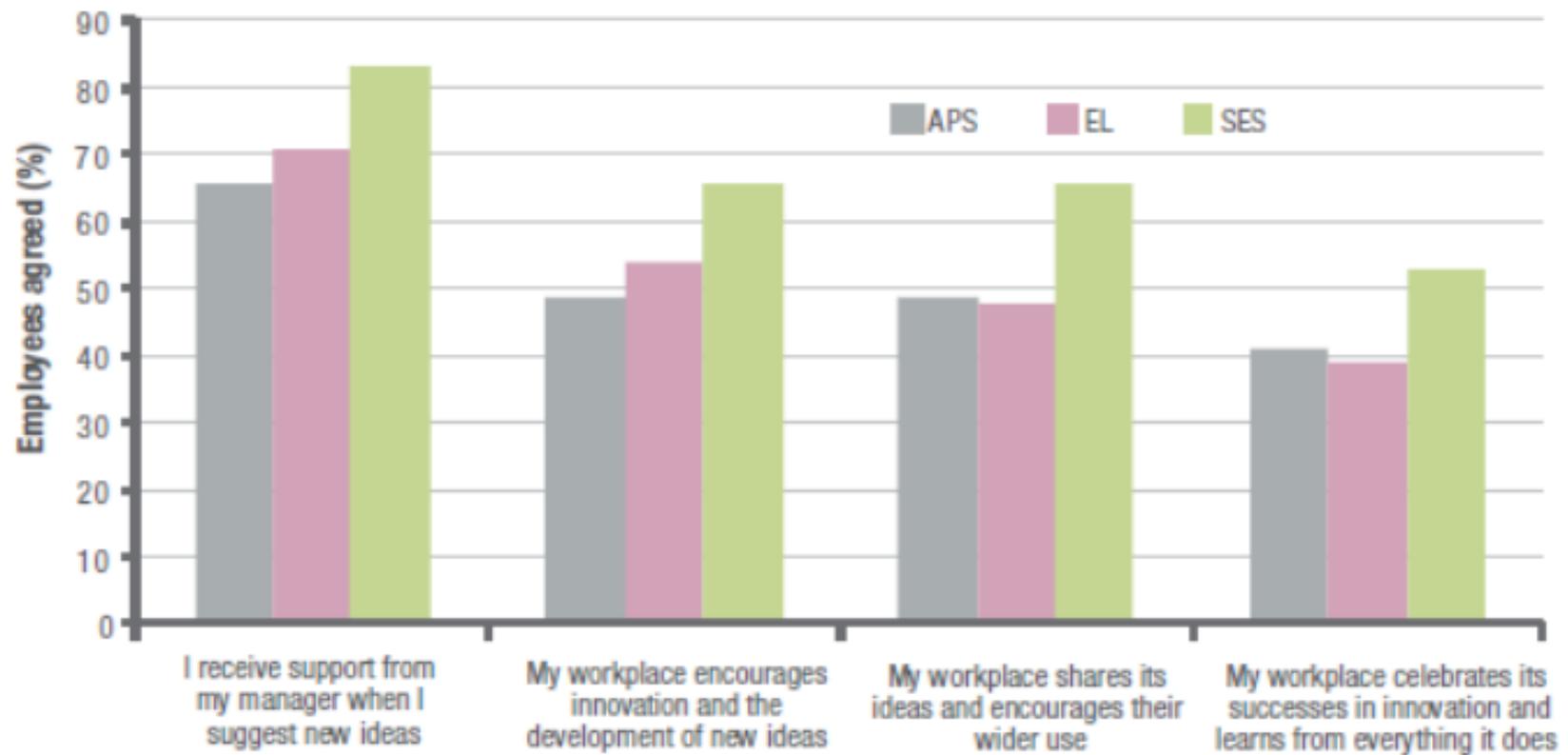


Figure 9.10

Employee perceptions of barriers to implementing innovations in the workplace by classification, 2010–11

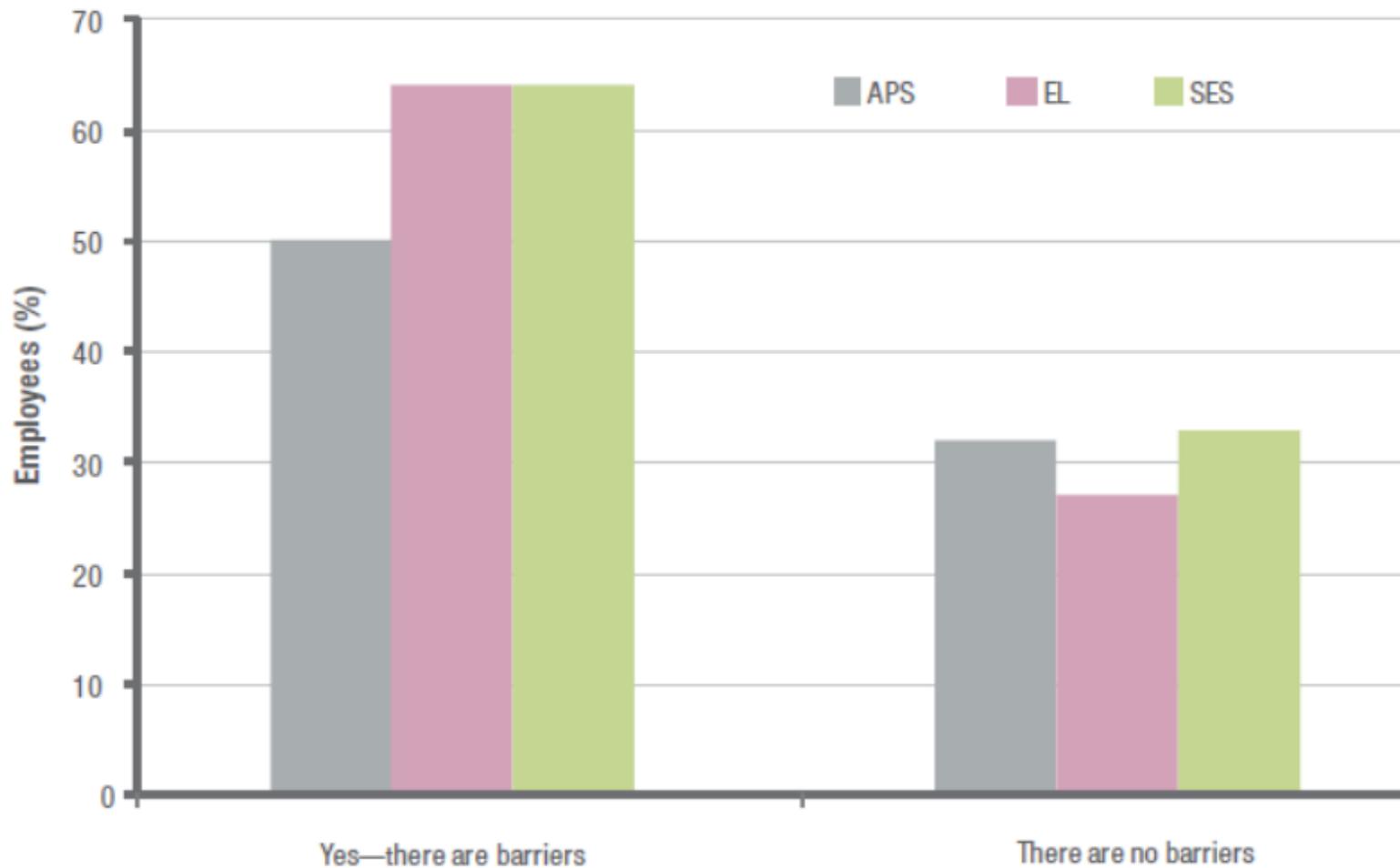
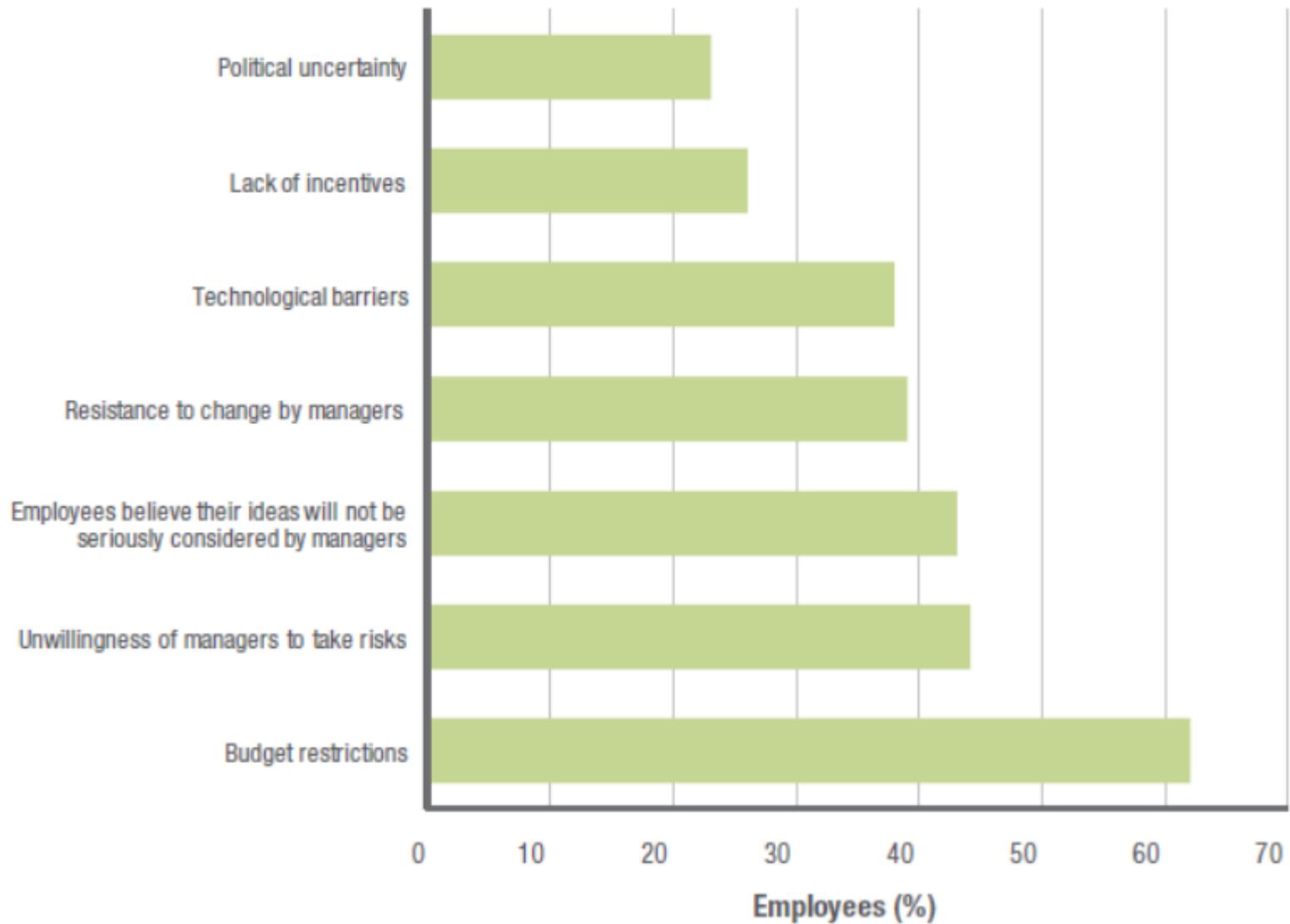
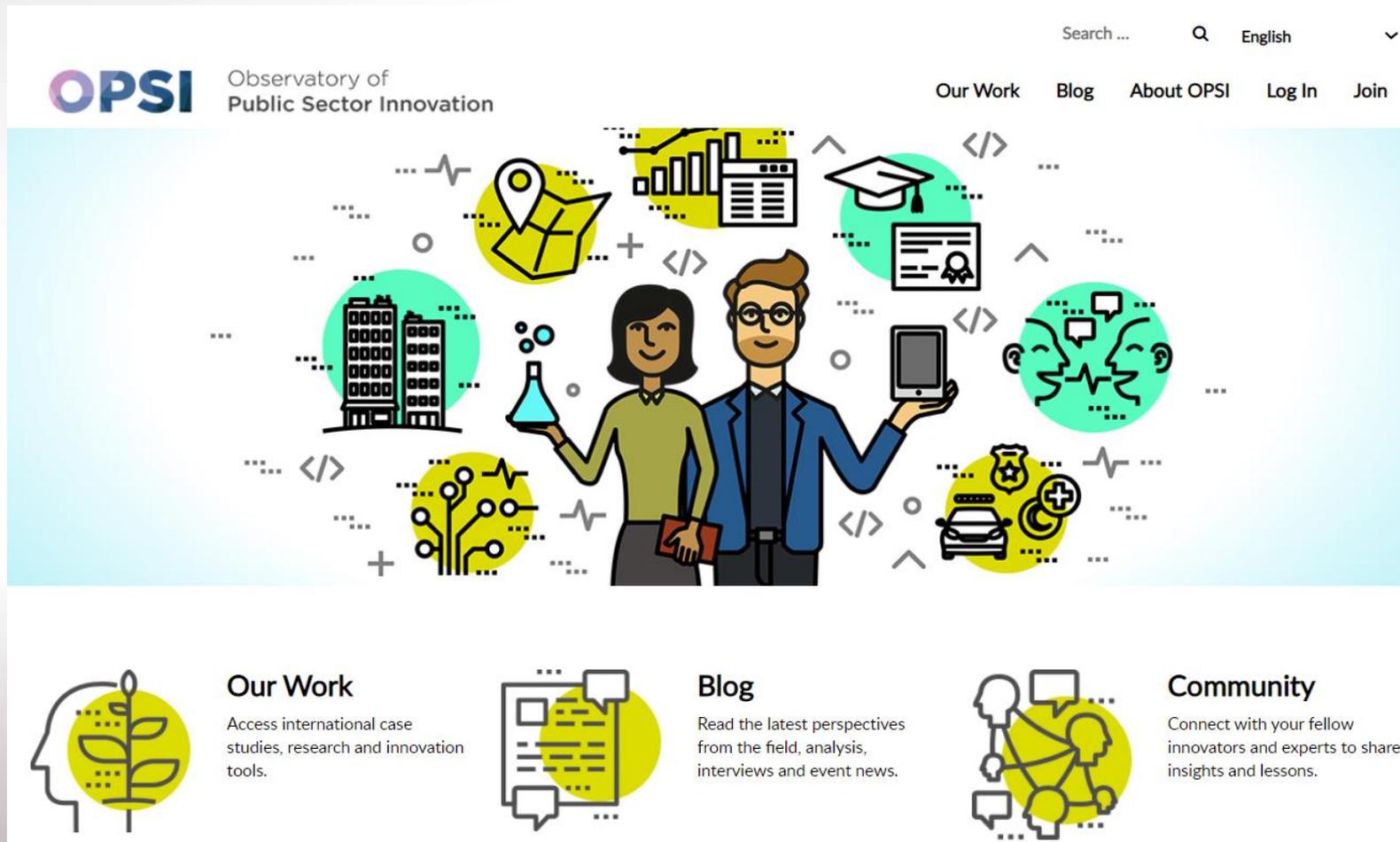


Figure 9.11 Barriers to implementing innovation, 2010–11



Check—OECD/OPSI

- <https://oecd-opsi.org/>



The screenshot shows the OPSI website homepage. At the top right, there is a search bar with the text "Search ..." and a magnifying glass icon, followed by "English" and a dropdown arrow. Below this are navigation links: "Our Work", "Blog", "About OPSI", "Log In", and "Join". The OPSI logo is on the left, with the text "Observatory of Public Sector Innovation" next to it. The main visual is a large illustration of a man and a woman surrounded by various icons representing innovation, technology, and public services. Below this illustration are three columns of content:

- Our Work**: Access international case studies, research and innovation tools. (Icon: A head profile with a plant growing inside.)
- Blog**: Read the latest perspectives from the field, analysis, interviews and event news. (Icon: A document with a speech bubble.)
- Community**: Connect with your fellow innovators and experts to share insights and lessons. (Icon: A network of people.)

Brainstorming & Discussion

- Discuss innovative activities in your organization. Any issues?
- Articulate and examine how innovation can be applied in the context of your workplace?
- Construct and develop scalable and implementable solutions and action items to address different challenges faced by the sectors you represent. Then, discuss whether/how innovative activities can be solution for these problems.

Thank you

- *You May Submit Your Case:*
- <https://oecd-opsi.org/submit-a-case-study/>

- **Questions- Comments?**
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