



Does polycentric governance really improve adaptability? A comparative study of U.S. Midwest lake governance systems

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Motivation

- Earth's ecosystems are in a precarious state
- Governance systems should be adaptive
- Polycentric governance systems (PGS) may increase adaptability via experimentation and learning
- PGS structure may influence the adaptability
- Not all PGS are adaptive
- Are PGS helping organizations adapt to environmental change?

Constructs

- Polycentric governance system (PGS) = multiple, independent, overlapping, coherent decision-making centers ^{1,2}
- Adaptability = learning + experimentation _{4,5}
- PGS have different structures: centralized, fragmented, and delegated ^{5,6}

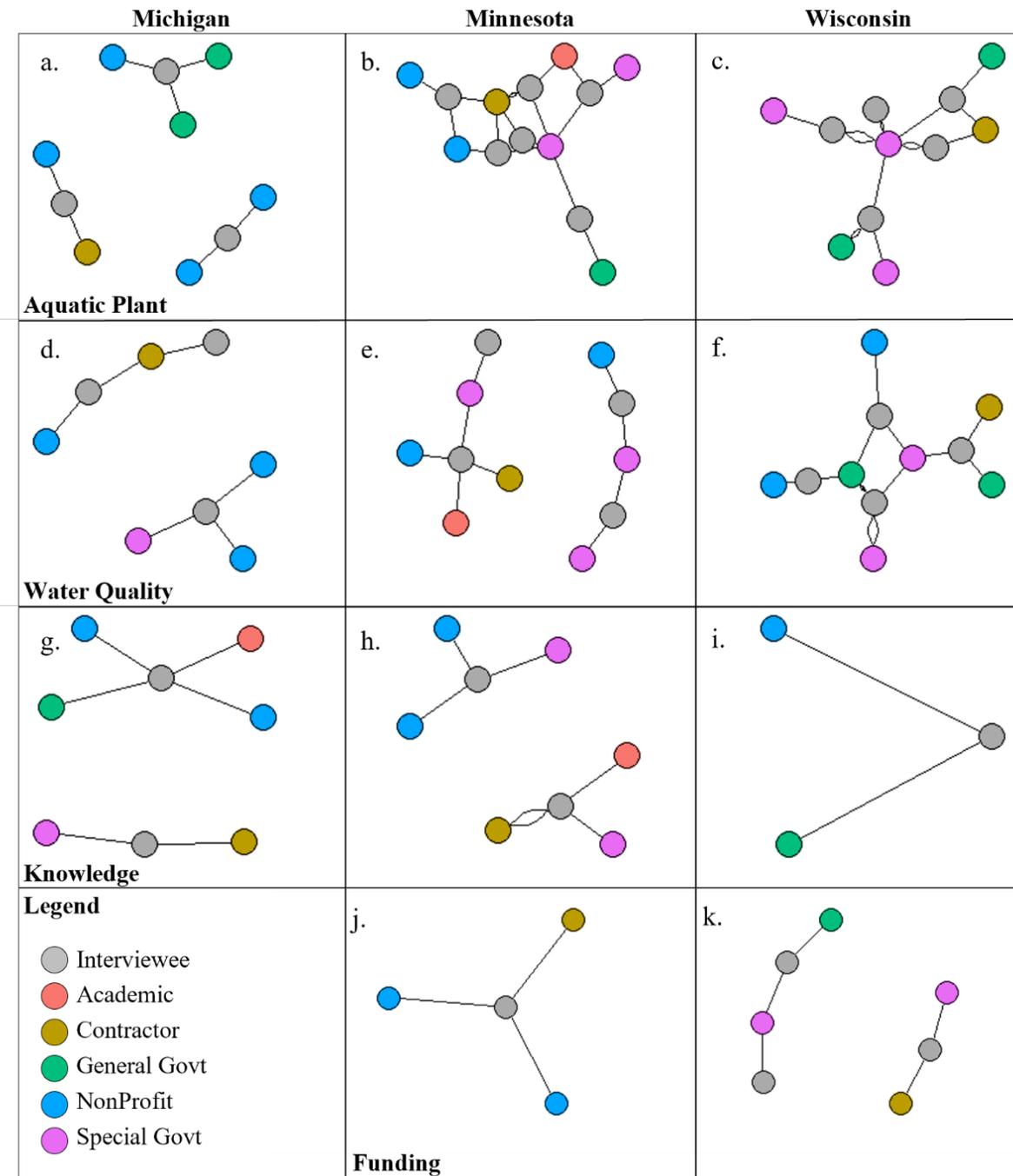


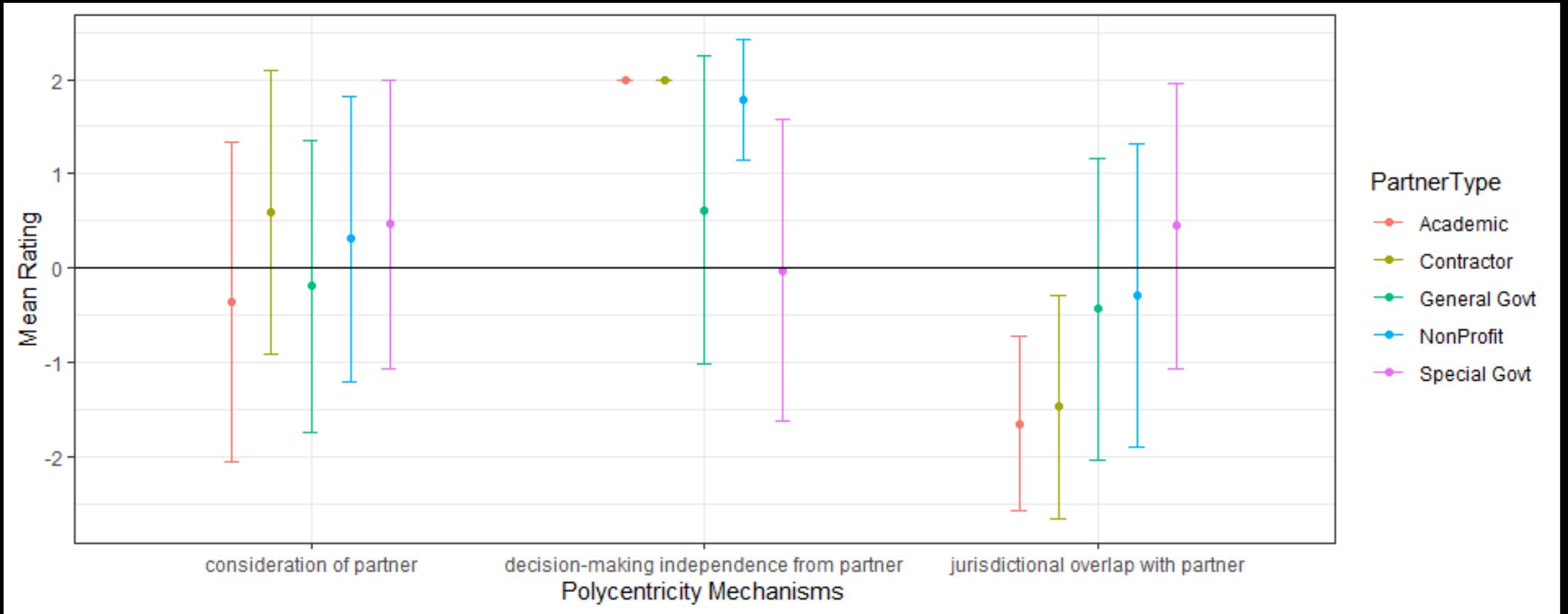
Methods

- 18 interviews—lake & watershed organizations in Michigan, Minnesota, Wisconsin
- Primary, self-reported data
- Challenges? Partners? Helpful partners?
- Ranked and rated
- Data visualization of qualitative data

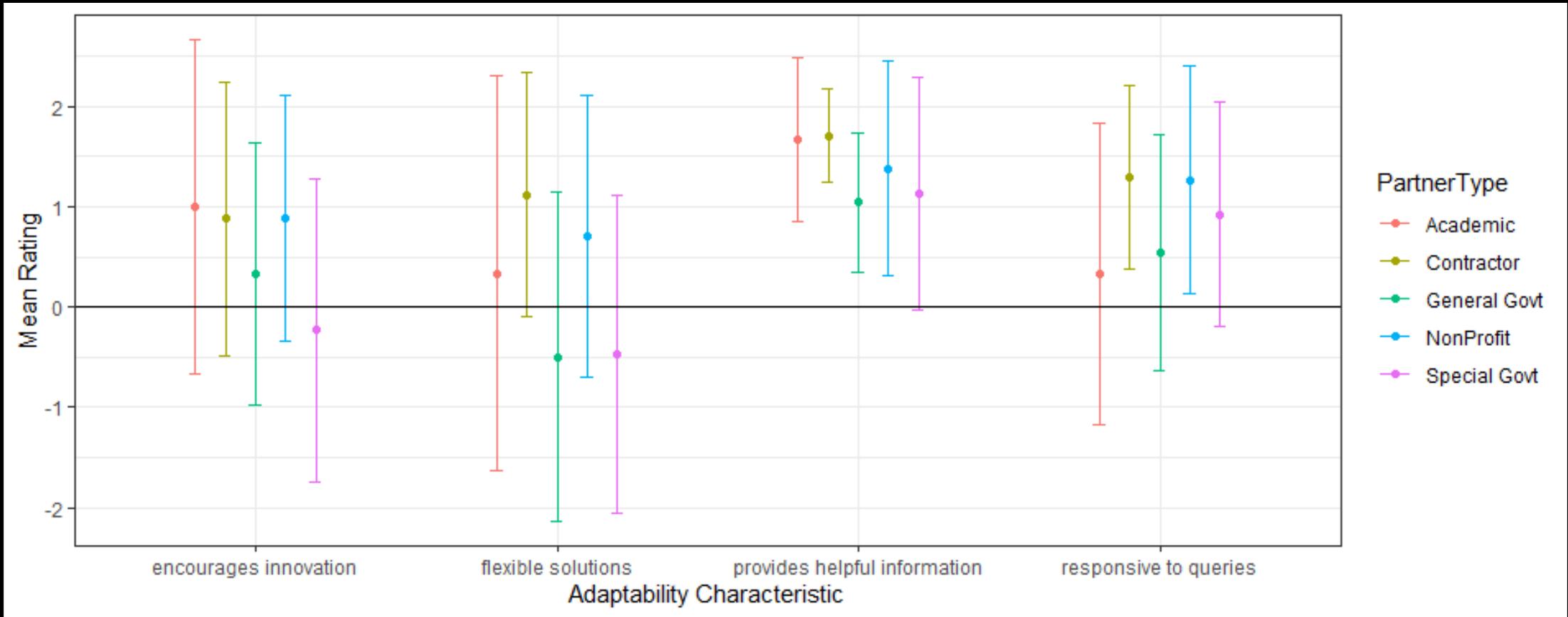
Results

- Common challenges were aquatic plant management, water quality, knowledge sharing, and funding.
- The structure varied by state and by challenge.
- Aquatic plant management and water quality were particularly well developed for.





- Substantial variation among partner types for independence from and jurisdictional overlap with partners
- Considered ideas and best practices from all partner types in making decisions about their governance challenges



- Partners provided helpful information and responded to queries
- Government partners not always encouraging of innovation and flexible with solutions



Discussion

- Governance systems emerge in response to a challenge
- Develop complexity as that challenge becomes widespread
- Adaptability is hard to assess—multiple actors, sectors, jurisdictional levels
- Learning networks were well developed for common challenges
- Balancing control and experimentation
- Distant partners bring new ideas

Conclusion

- How to share the burden?
- Higher-resourced partners can help
- Learning and experimentation are critical as we adapt to climate change



Thank you!

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