

# Social network and radical innovation: evidence from the U.S. pharmaceutical and biotechnology industry

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#### Stellingen

### Behorende bij het proefschrift

## Social network and radical innovation: Evidence from the U.S. pharmaceutical and biotechnology industry

- 1. The informational advantages of structural holes can be mobilized if there are strong ties for mitigating the relational disadvantages of structural holes. Similarly, network cohesion is needed for mobilizing informational advantages of weak ties. (Chapter 2)
- 2. Different types of innovation need different network conditions for diffusion. (Chapter 3)
- 3. Radical innovation is a complex and composite concept, and explicitly differentiating its dimensions is essential for a better understanding of it. (Chapter 4)
- 4. Destructiveness and dissimilarity have different effects on patent private value. (Chapter 4)
- 5. Innovation is a key driving force of economic growth and social progress.
- 6. Social network theory provides an interesting lens for studying innovation research.
- 7. The same social structure (i.e., weak tie, structural hole) that is conducive for producing a creative idea might hamper its diffusion.
- 8. While weak ties and structural holes provide access to more diverse knowledge, they present challenges in transferring and integrating this knowledge for producing radical innovation.
- 9. Patent data is an ideal setting to investigate firm R&D locations, their collaboration networks, and innovation outputs.
- 10. Joy resides in every step of growth.

Jia Zhang Leiden, 24-04-2024