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Who is attending pedagogical workshops? Applying the Innovation Diffusion to Characterize Faculty Attendees

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Who is attending pedagogical workshops? Applying the Innovation Diffusion to Characterize Faculty Attendees

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Introduction

- Workshops have been the main strategy used to disseminate instructional innovations.
- Many studies have characterized the overall impact of these workshops based on participants' awareness and adoption of these innovations.
- Few studies have explored how individual participants interact with these workshops.
- Moreover, few studies have explored the extent to which the feature of the innovations being taught attract different types of participants and differentially impact the level of adoption of the innovations.

Rogers' Innovation Diffusion Model

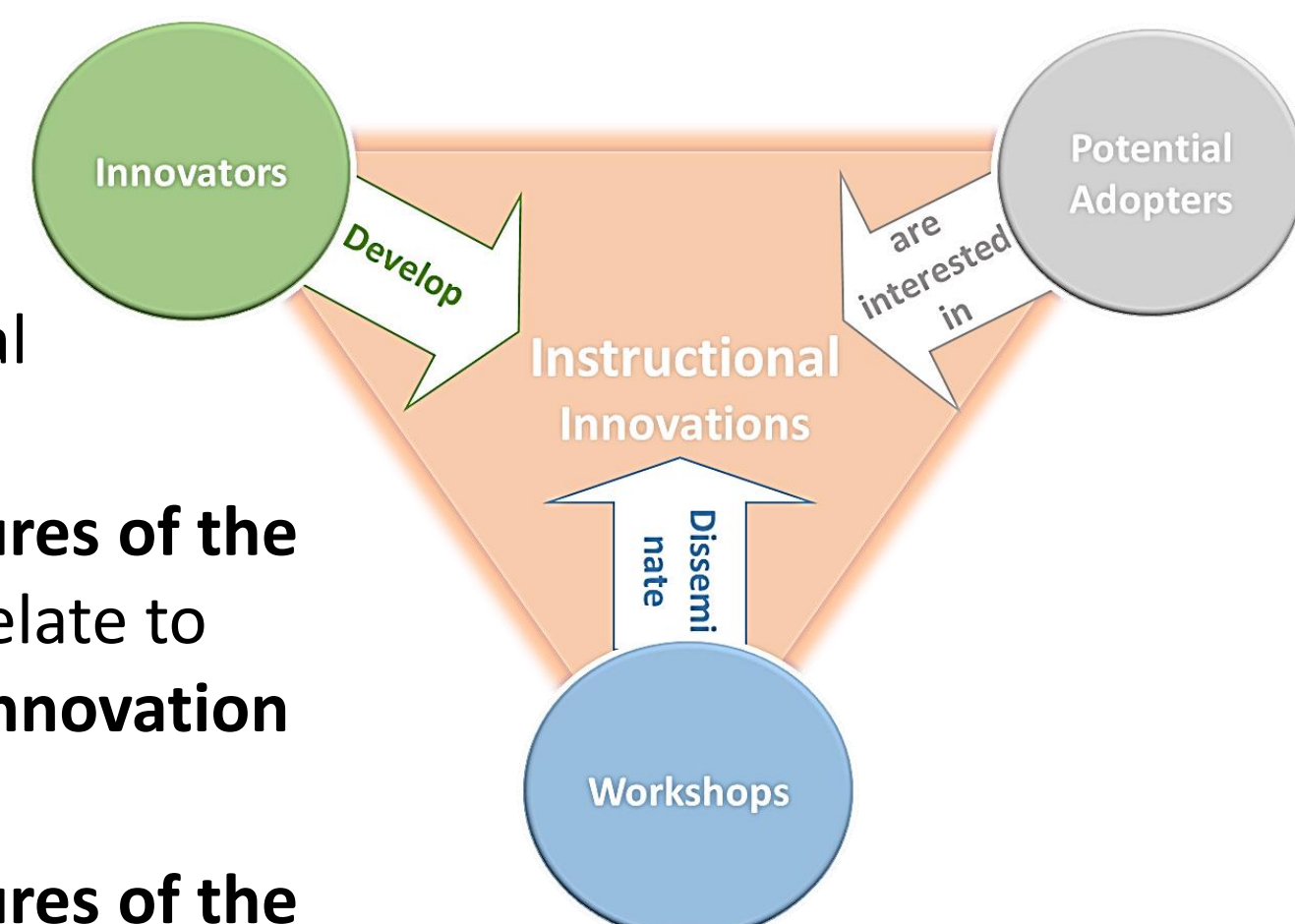
Type of adopters:
Innovators
Early adopters
Early majority
Late majority
Laggards

Innovation-decision process:
Knowledge
Persuasion
Decision
Implementation
Confirmation

Five features of innovations:
Relative advantage
Compatibility
Complexity
Triability
Observability

Research Questions

- What are the **types of adopters** attending a semester-long workshop focused on one instructional innovation?
- To what extent do the **features of the instructional innovations** relate to adopters' progress on the **innovation decision process**?
- To what extent do the **features of the instructional innovations** relate to the **types of adopters**?



Methods

Context

- Semester-long workshops
- Each workshop targets one instructional innovation:
 - Peer Instruction (PI)
 - Just-in-Time Teaching (JiTT)

Study Participants

- Forty-nine faculty from Biology, Chemistry, Physics, and other STEM fields at UNL

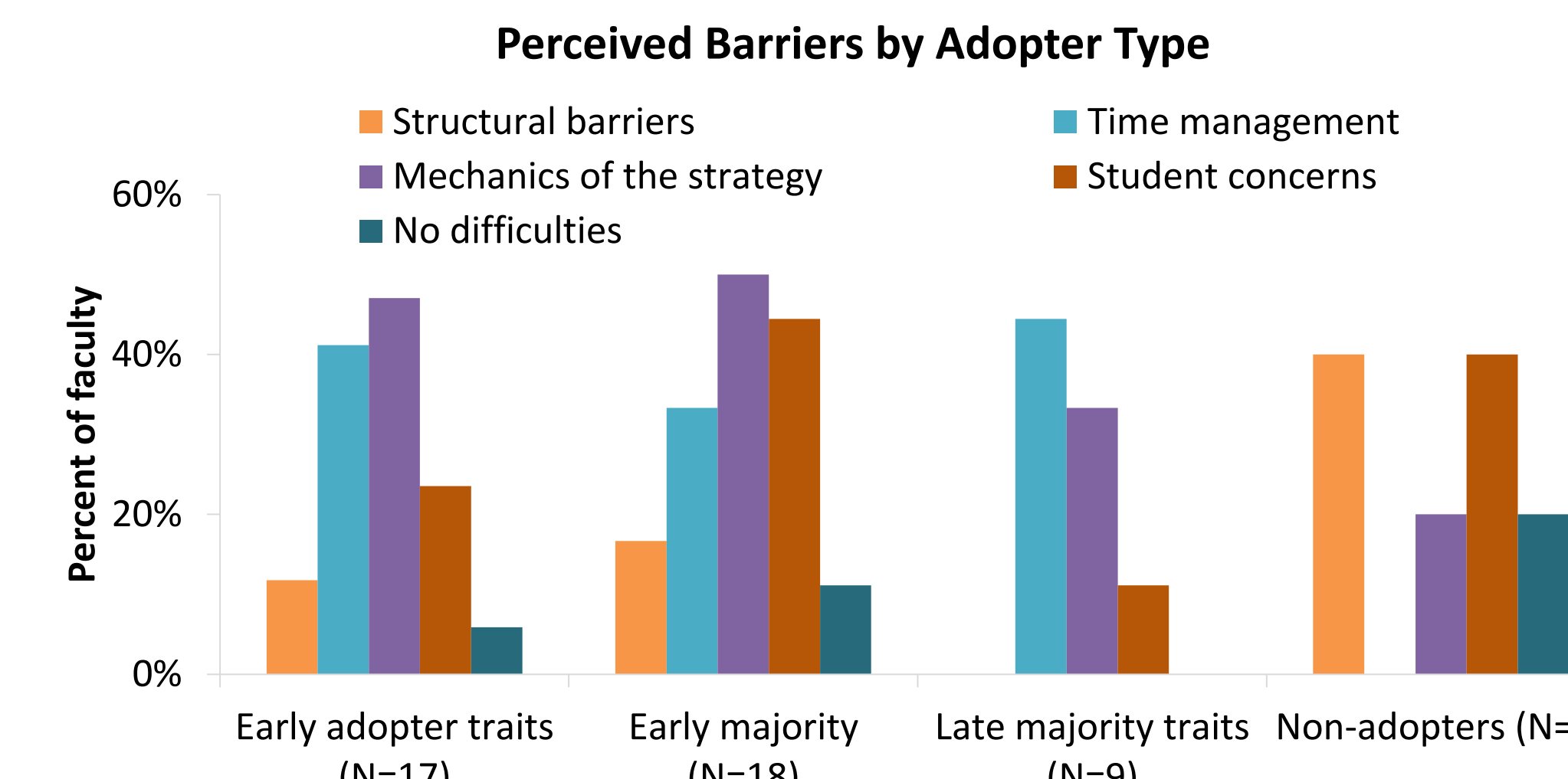
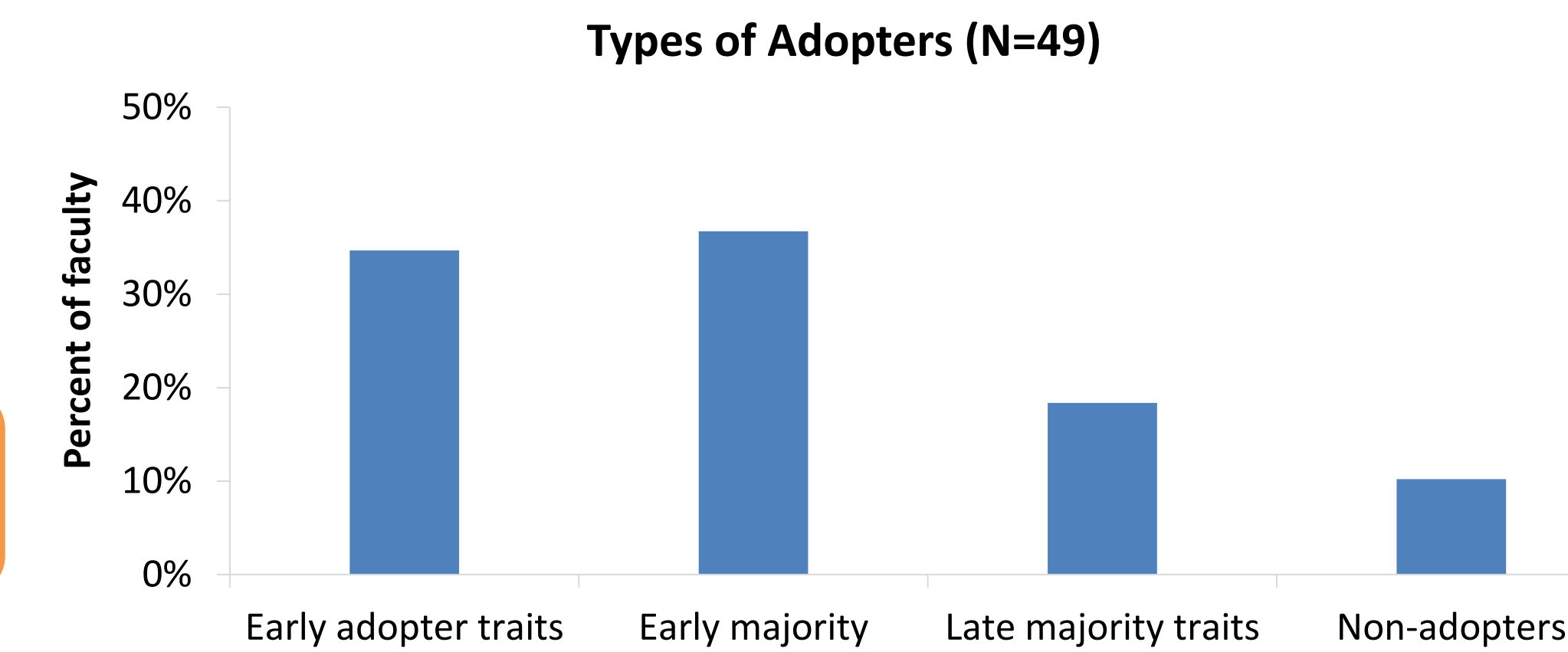
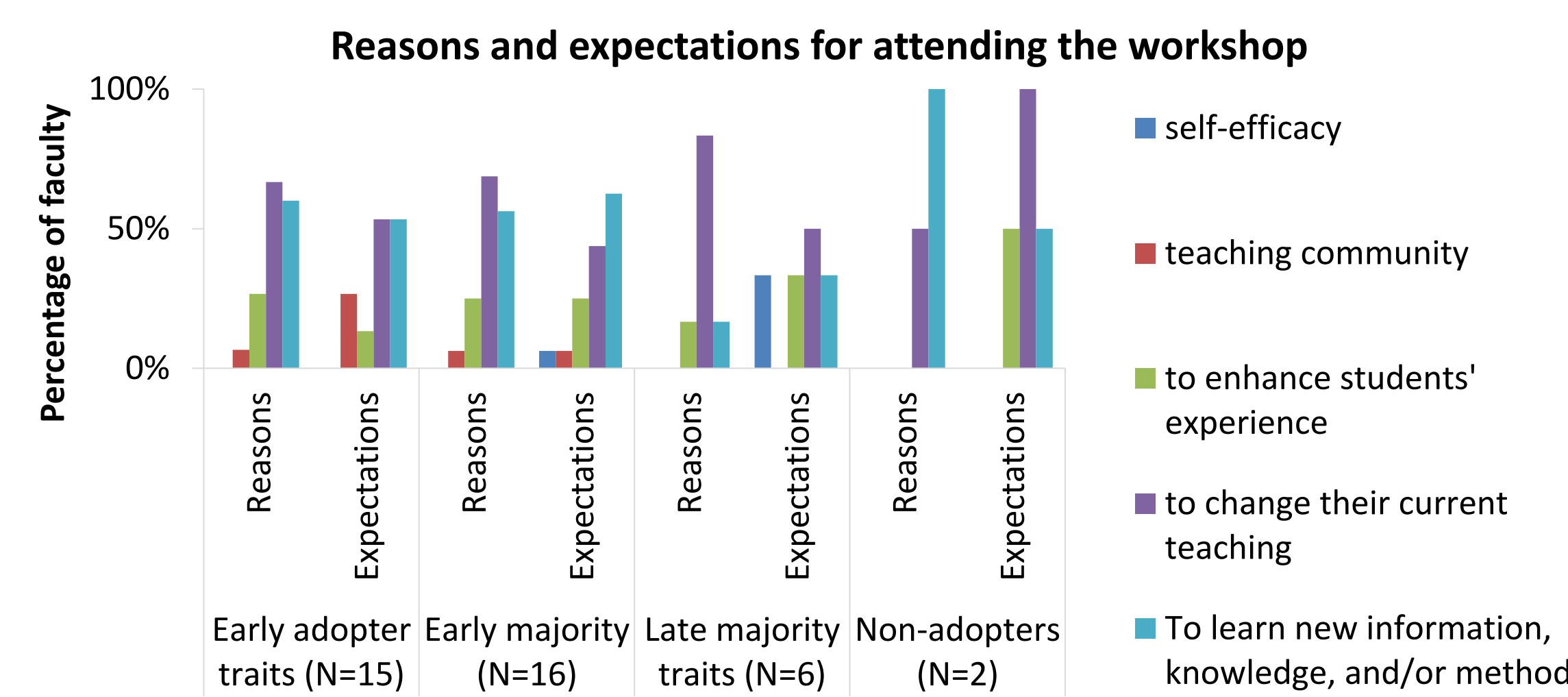
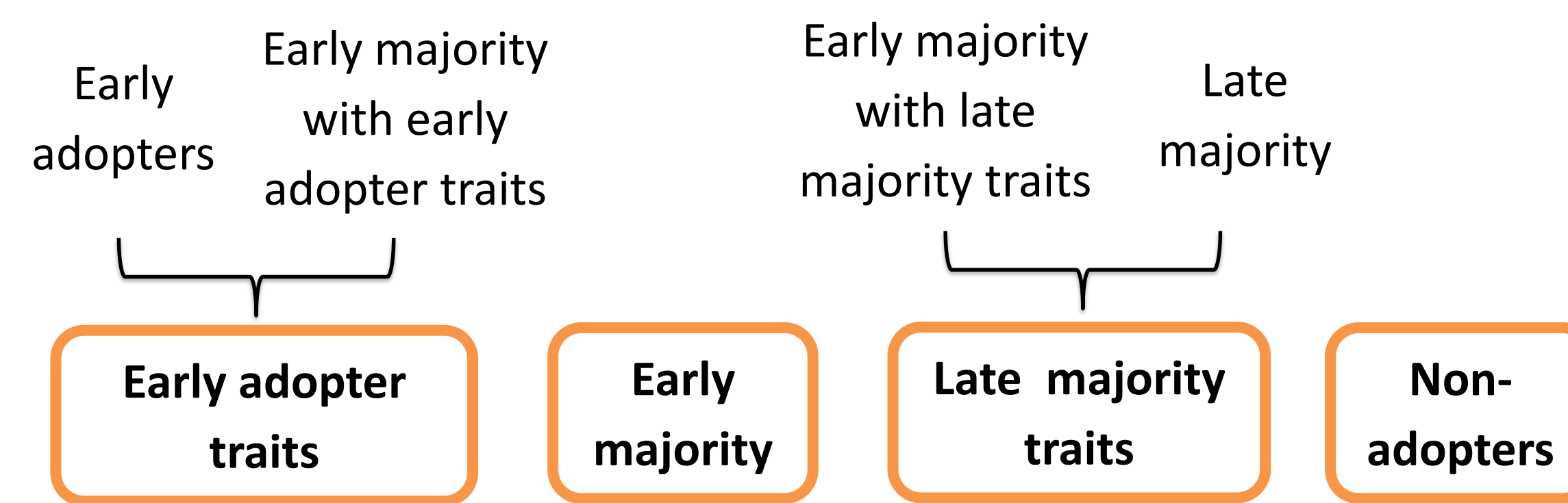
Data collected

- Surveys collected immediately before (Pre) and after (Post) participation in the workshop as well as one year later (Follow-up).
- Questions include Likert scales and open-ended format.

Data analysis

- Design and implement rubric based on Roger's model:
 - Familiarity with PI & JiTT
 - Likelihood to implement
 - Departmental values
 - Previous pedagogical training

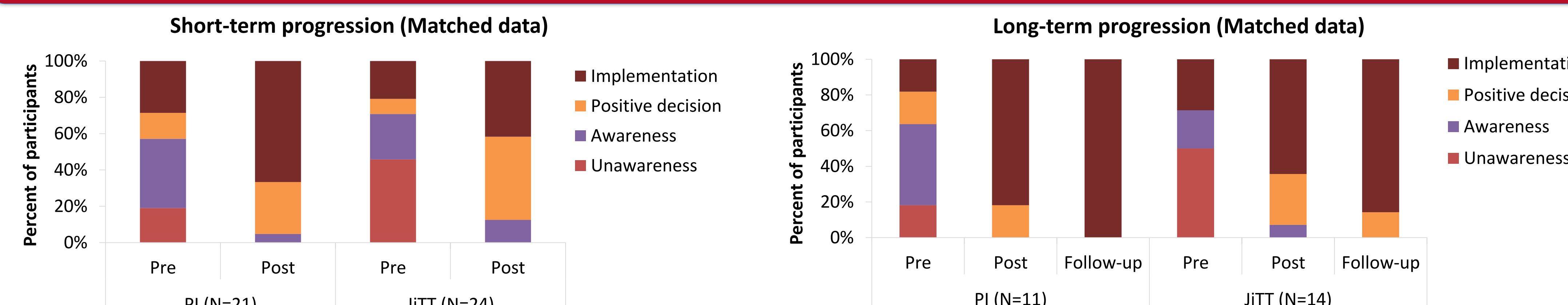
What Type of Adopters Attends Pedagogical Workshops?



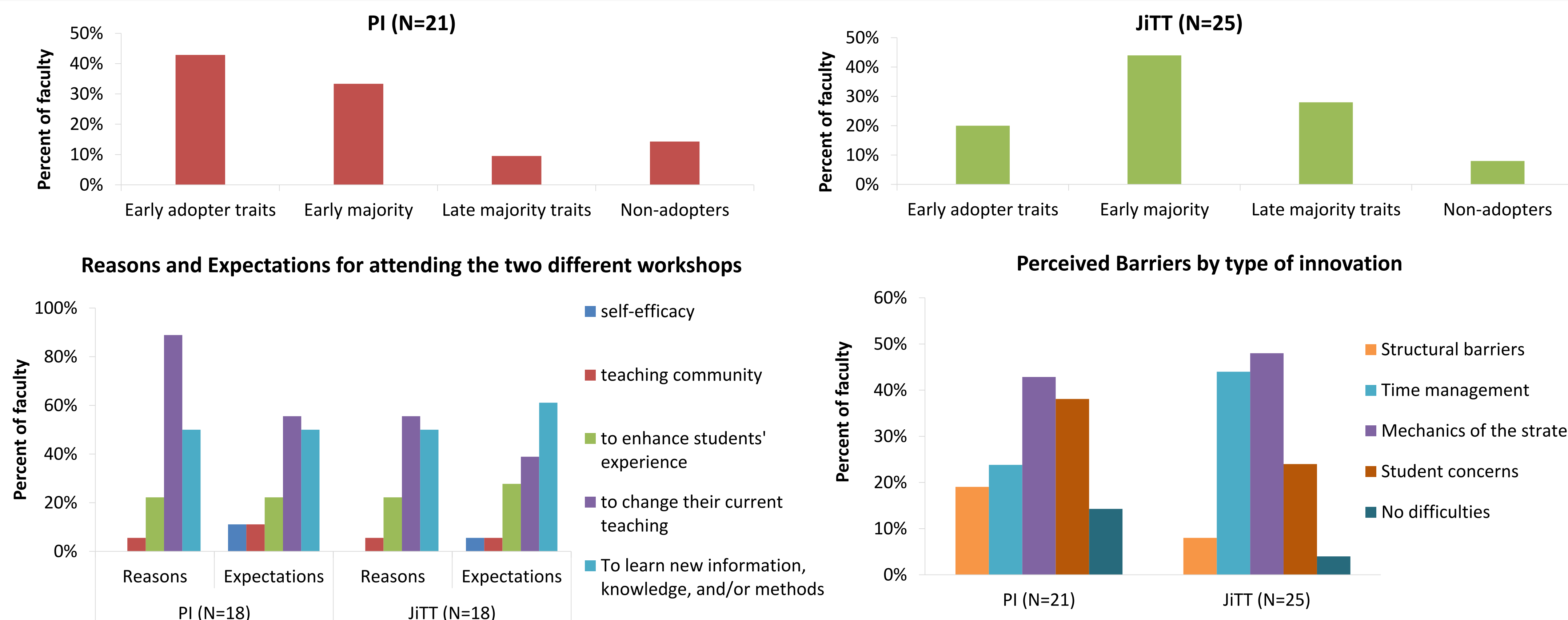
Results

- Workshop participants can mostly be categorized as Early Adopter Traits and Early Majority.
 - The two main reasons for attending the workshop put forwards by these adopters were: to change their current teaching and to learn new teaching related information.
 - Interestingly, fewer expected to change their teaching practice as a result of their participation.
 - Both groups saw mechanics of the strategy as the primary barrier to adoption; Early Adopters Traits also included time management and Early Majority were concerned about students reactions to the innovation.
- Faculty moved at different pace through the decision process depending on the type of innovation: PI attendees moved slightly faster than JiTT. However, the long-term adoption level was high for both strategies.
- PI attendees were primarily Early Adopters Traits and Early Majority; JiTT attendees were Early Majority and Late Majority Traits.
- Most PI attendees identified changing their current teaching as their reason for attending but the corresponding expectation was not mentioned by as many.
- Mechanics of the innovation were a concern for both PI and JiTT attendees; student concerns was raised by PI attendees while time management was raised by JiTT attendees.

Progression through the Innovation Decision Process by Type of Innovation



Type of Adopters by Type of Innovation



Discussion and Implications

- Faculty participating in pedagogical workshops have different characteristics, reasons for attending, and expectations for these workshops.
 - Innovators and workshop facilitators should characterize faculty attendees prior to the start of the workshop and integrate this information in their design of the workshop.
- Different instructional innovations attract different types of adopters and result in different pace of adoption.
 - Innovators and workshop facilitators need to take into account the features of the innovation in order to anticipate implementation challenges that attendees may experience or perceive.

Conclusion

This study demonstrates that moving beyond measures of overall impact of pedagogical workshops towards characterizing how individual faculty interact with the workshops and its features can provide insightful knowledge about characteristics of effective pedagogical programs.

Reference

Rogers, E. M., *Diffusion of innovations*. 5th ed.; Free Press: New York, 2003

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