

## Enhancing Productivity and Efficiency in Higher Education: A Study on the Integration of Artificial Intelligence (AI) Applications by Instructors

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### INTRODUCTION & AIM

Artificial intelligence (AI) tools are rapidly expanding across higher education. This study examined how faculty members use AI, their perceptions of AI integration, and whether years of teaching experience influence adoption, confidence, and attitudes toward AI.

### METHOD

- Anonymous faculty survey conducted at Saint Peter's University in Fall 2025
- 55 full- and part-time faculty respondents
- Examined AI use, confidence, productivity, and concerns
- Faculty grouped by years of experience
- Likert-scale responses analyzed
- Open-ended and multi-select responses were also analyzed for faculty perceptions and AI use trends

**83%**

AI use among  
0-5 year faculty

**2x**

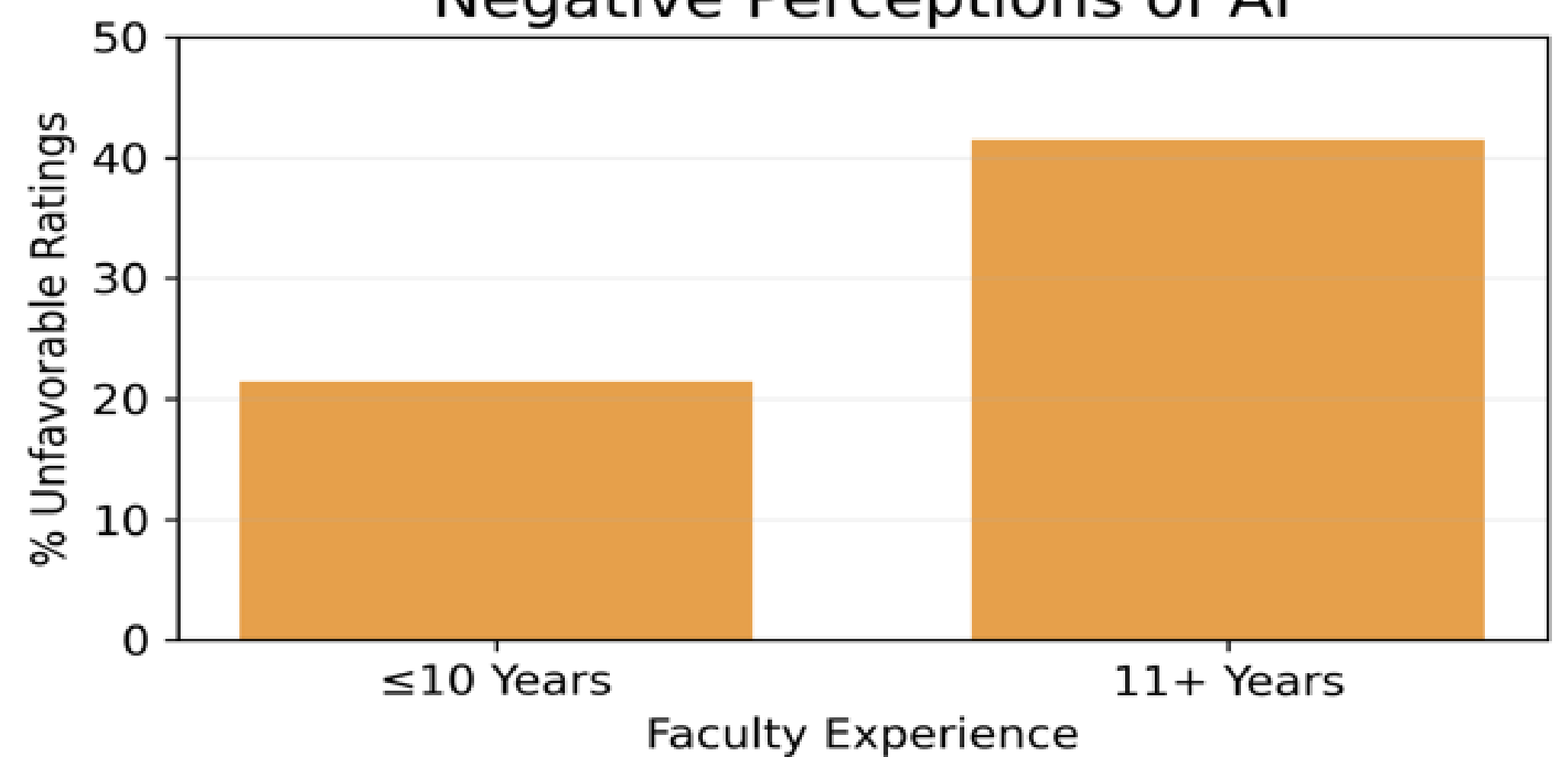
Higher negative  
perceptions among  
11+ year faculty

### RESULTS & DISCUSSION

Faculty with fewer years of experience consistently reported greater AI use, confidence, and willingness to integrate AI into teaching and workflow tasks. Favorable ratings toward AI were relatively similar across groups; however, more experienced faculty were substantially more likely to report lower confidence or unfavorable perceptions.

Faculty commonly described AI as useful for efficiency, brainstorming, grading assistance, and content generation, while major concerns included academic integrity, misinformation, overreliance, and ethical uncertainty.

Negative Perceptions of AI



### CONCLUSION

AI integration is already occurring across higher education regardless of faculty experience level. However, experienced faculty demonstrated substantially greater skepticism and lower confidence toward AI adoption. Overall, there appeared to be a clear push-and-pull dynamic surrounding the integration of AI in higher education.

### FUTURE WORK / REFERENCES

Future work will compare AI perceptions across academic disciplines and explore similar trends, attitudes, and concerns among university students.

AI Use by Years of Experience

