A TA-selection Process that Increases Representation of Women

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SIGCSE 2021

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Design Goals

- Scalability: 100-200 applicants/semester

- Consistency: 4-6 faculty involved each semester

- Effectiveness: evaluate teaching ability, not academic performance

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Two-phase Hiring Process

1. Applicants submit teaching videos (~200 new applicants)

Applications with teaching videos

⬇

Faculty review videos

Two-phase Hiring Process

1. Applicants submit teaching videos
   (~200 new applicants)

2. Best applicants interviewed in person
   (~30 interviews)

3. New TAs hired
   (~15)

1 → Applications with teaching videos

↓

Faculty review videos
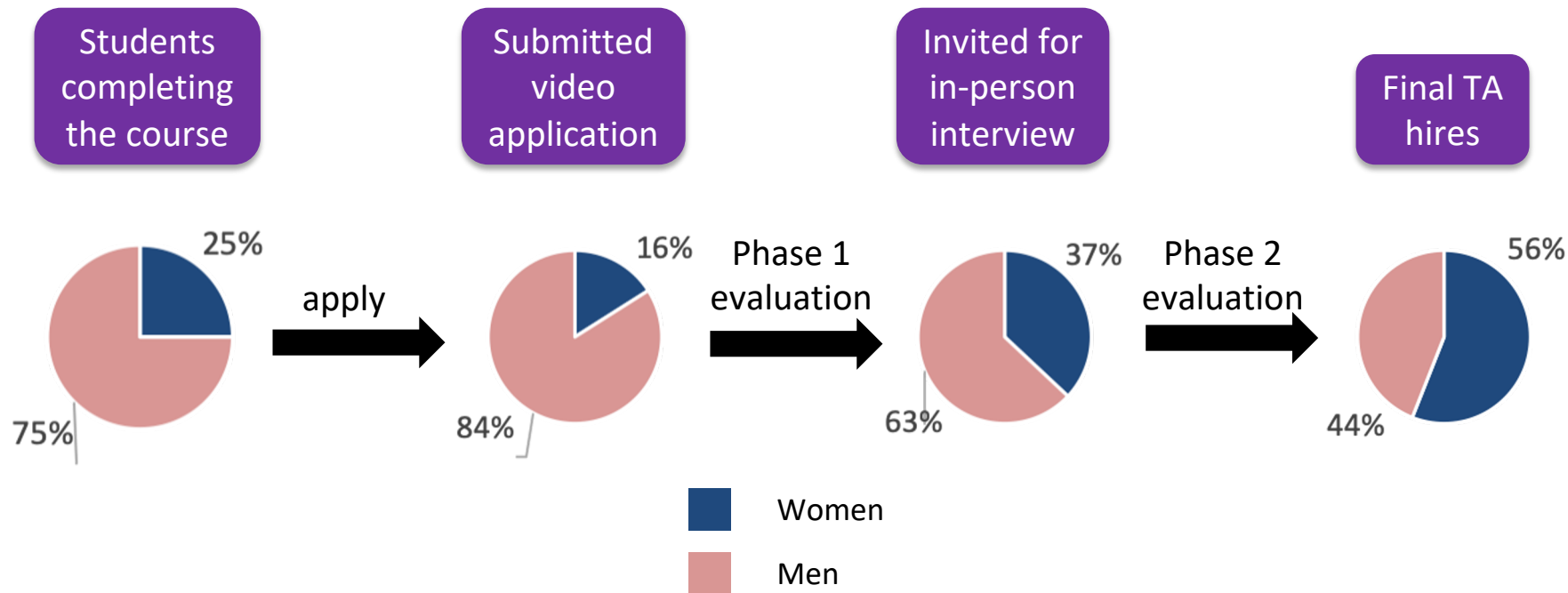
↓

2 → In-person interviews

↓

TAs hired

Application-review Criteria

- Faculty watch videos (at 2x speed), rate them on 5-point scale

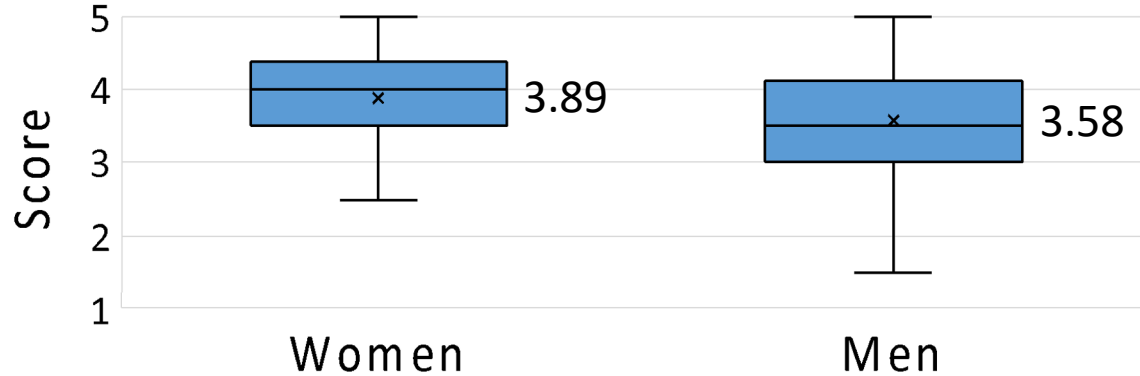- **We do not consider GPA or grade in deciding who to interview**

In-person Interviews

- 30-minute slot, 2 faculty members

- Question and answer, including question on diversity and inclusion

- Teaching demo

Gender Breakdown at Each Step

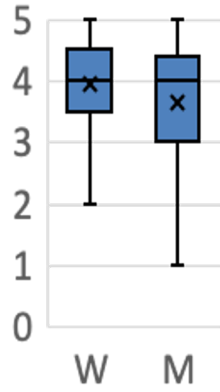**Students completing the course**

Submitted video application

Invited for in-person interview

Final TA hires

25%

75%

apply

16%

84%

Phase 1 evaluation

37%

63%

Phase 2 evaluation

56%

44%

■ Women

■ Men

Evaluation of Videos

- Women do significantly better than men

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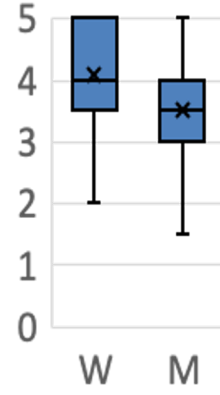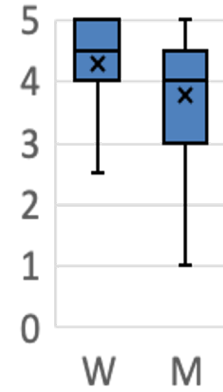
Evaluation of Interviews

Clarity ✓
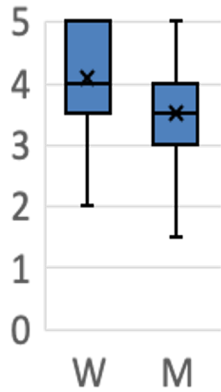
Technical Proficiency

Use of Whiteboard ✓

Responsiveness to Students ✓

- Women rate significantly better than men in 3 of the 4 categories

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Course Evaluations
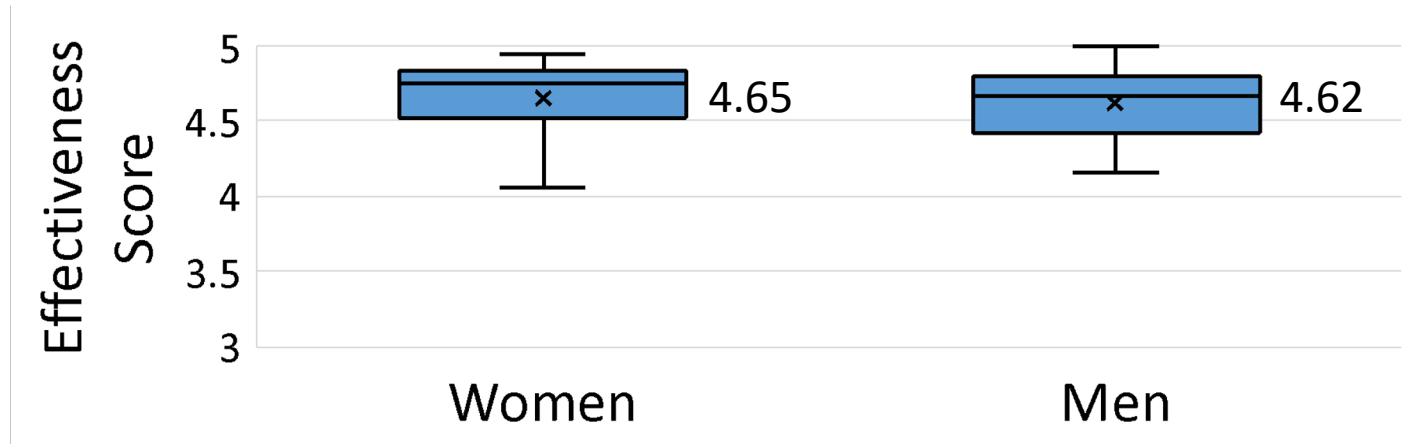
- Women and men TAs are equally effective

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Summary

- Two-phase interview process scales, produces staff where half the TAs are women

- **No significant correlation between TA's GPA or grade and performance on any metric**

- See SIGCSE'19 paper for full details

http://bit.ly/TAhiring