



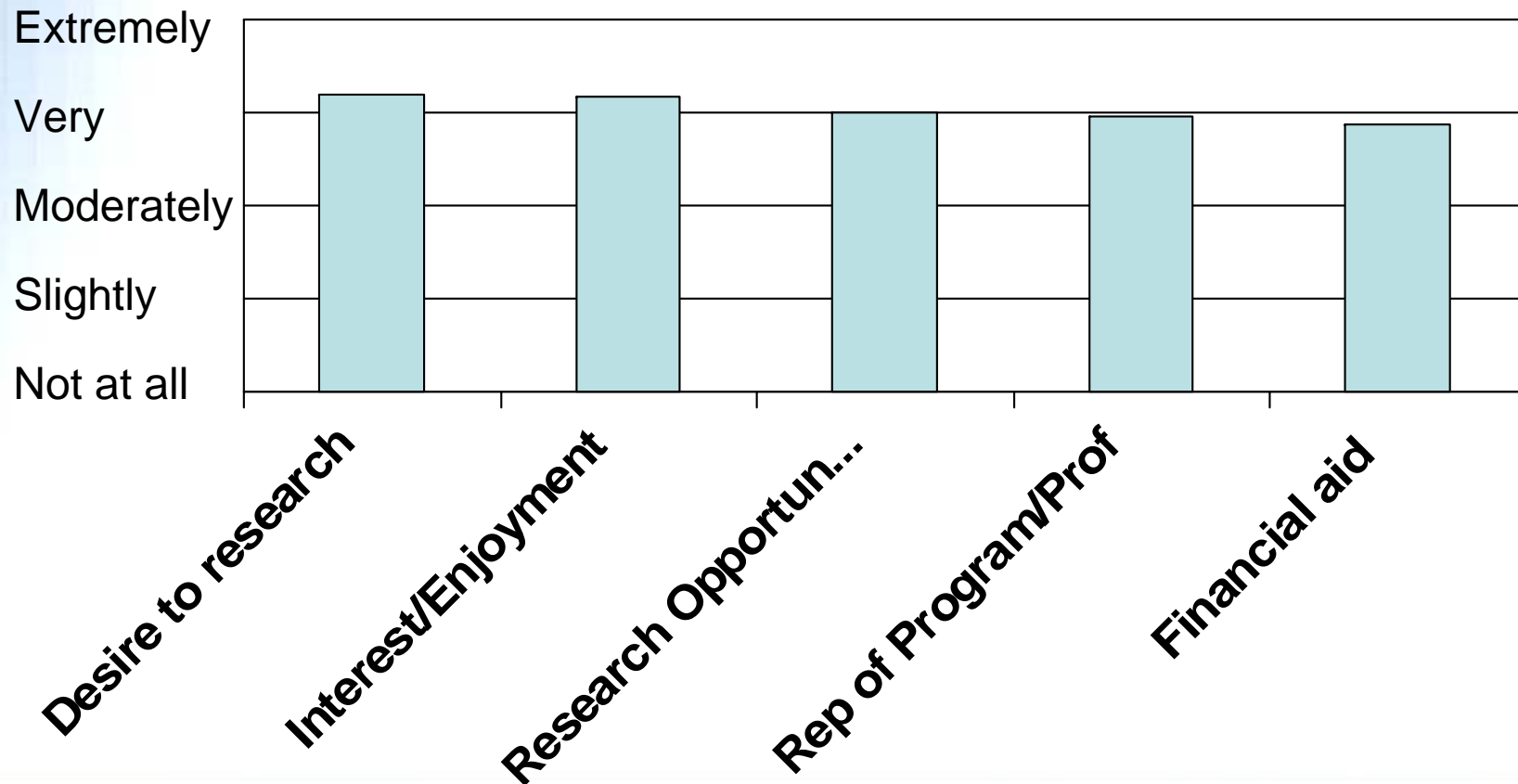
Women's Entry to Graduate Study

in Postsecondary Computer Science and
Computer Engineering in the United States

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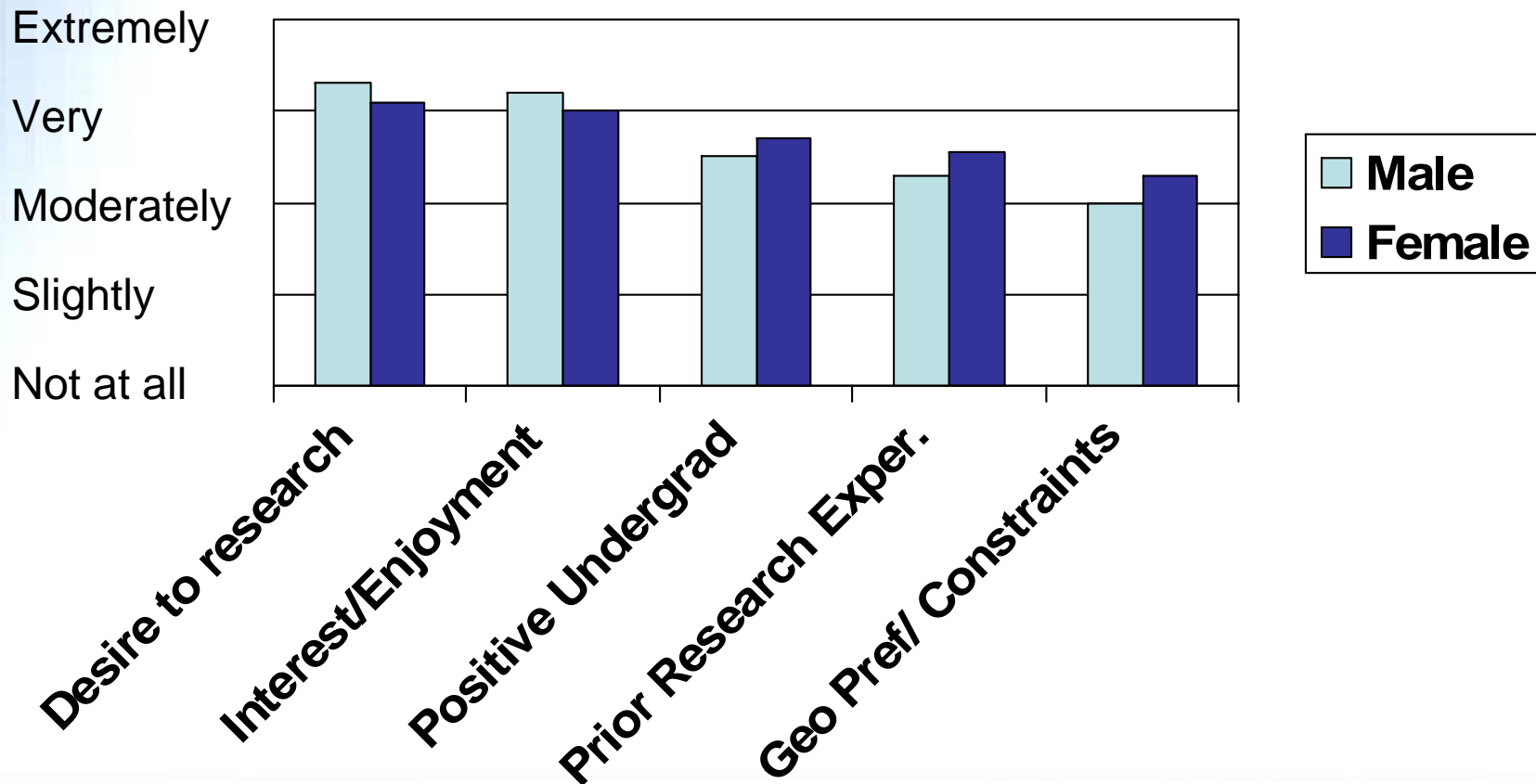
Strongest Influences on Student Decisions

Important Factors in Decisions about CSE Doctoral Education



Gender Differences in Influences

Significant Differences in Important Influences on Students in Doctoral Track



Where The Women Are

- Investigated many factors
 - Desire to teach, advance non-academic career, participation in special programs
 - Influential people
 - Reputation, expense, opportunities, institution size
 - Impression of students, faculty, department culture
 - Women faculty or students

More Factors Investigated

- Student background
- Program characteristics
- Recruitment practices
- Admission criteria

Where the Women Are

- Doctoral program with
 - Flexible timetables for degree progress
 - Research Assistantships
- $R^2 = .24$, significant at .01 level

Faculty Justification for Flexible Timetables

- *[Students] have a lot of responsibilities, they have children, they have spouses. They're like professional people already, so for them to make it work, we have to adjust.* – Male faculty member
- *People go through a lot of life experiences during this period. And some people finish faster than others. ... To some degree, you have to understand.* – Male faculty member

Flexible Timetables Allow Outside Commitments

- *I needed to figure out a schedule that would work with my life.* - Woman doctoral Student

Inflexible Timetables Can Mean Loss of Funding

- *Ph.D. level, that [sigh], that's gets tougher. Real tough is third year. The PI might not have money for a third year student. ... Are [the students] good enough to keep the TA going, even though that means we can't get new blood into the program?* - Male faculty member

Flexible Timetables Do Not Slow Progress

- *I'm older, and I don't have a lot of time to fiddle around with nonsense.* – Woman doctoral who is a parent, on why she chose a well-organized program

Research Assistantships

- RAs more common in
 - Top-ranked programs
 - Programs with more FT students
 - Neither aspect is related to women's enrollment

Preference Queues & Resources

- Generous resources provide opportunities for women
 - Time and money
- Scarce resources may activate preference queues

Conclusion

- Strong similarity in male & female influencers
- Women's representation in doctoral programs is associated with
 - Flexible timetables for degree progress
 - Research assistantships
- Identified no generally effective recruiting or admissions practices

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