

Exploring Preferences in Selecting Dissertation Topics Among Ph.D. Students in Health Economics & Outcomes Research (HEOR) Fields in the United States

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BACKGROUND

- The process of choosing a dissertation topic for a Ph.D. student is often a challenging one. 1,2
- This process is particularly complex for Ph.D. students in Health Economics & Outcomes Research (HEOR), a dynamic and multifaceted field that encompasses a wide array of topics ranging from health policy analysis to economic evaluations of healthcare interventions.³
- As Ph.D. students in HEOR fields navigate the vast landscape of research opportunities, it's important that they are provided with a structured decision-making tool that offers flexibility to incorporate multiple criteria into their choice.
- To explore the preferences of Ph.D. students in Health Economics & Outcomes Research (HEOR) fields during the process of selecting dissertation topics. We focused on identifying commonly prioritized criteria, understanding shifts in importance over time, and examining the association between different perspectives and demographic characteristics.

METHODS

We identified 9 criteria pertinent to the selection of Ph.D. dissertation topics and ensured their comprehensibility through collaborative workshops involving Ph.D. students and faculty members from the University of Colorado Pharmaceutical Outcomes Research Ph.D. Program. A survey was then administered to current and former students in HEOR fields across the United States through the Qualtrics platform (N=30, Response Rate=8%). Participants were asked to rank and weigh the identified criteria, by allocating points based on perceived importance. Additional demographic and qualitative data were collected, capturing participants' insights into changing perceptions and considerations throughout and after their Ph.D. research journey.

RESULTS

Table 1: Characteristics of the Study Cohort

Characteristics	Participants (n=30)
Female (%)	16 (53.33)
Age (Mean, SD)	40.1 (13.33)
Age (%)	
18 - 29	6 (20)
30 - 40	15 (50)
50 - 64	7 (23.33)
65 - 79	2 (6.67)
PhD year of completion	
2020s	16 (53.33)
2010s	8 (26.67)
2000s	1 (3.33)
1990s	3 (10)
1980s	1 (3.33)
1970s	1 (3.33)
Duration of program completion in years	4.87 (0.88)
(Mean, SD)	4.07 (0.00)
HEOR Field (%)	
Health Economics & Outcomes Research	2 (6.67)
Pharmaceutical Outcomes Research	16 (53.33)
Health Economics	7 (23.33)
Health Services Research	3 (10)
Health Policy	1 (3.33)
Pharmacoepidemiology	1 (3.33)
Other Undergraduate or Graduate Studies (%	%) *
Pharmacy	15 (50)
Economics	4 (13.33)
Public Health	7 (23.33)
Biomedical Sciences	7 (23.33)
Biostatistics/Mathematics/Computer Science	5 (16.67)
Accounting and Finance	1 (3.33)
Health Administration	1 (3.33)
Epidemiology	1 (3.33)
Bioethics	1 (3.33)
Current Occupation (%)	
Ph.D. Student	14 (46.67)
Academia/ Higher Education	12 (40)
Pharmaceutical or Healthcare Industry	2 (6.67)
Government/ Regulatory Agency	1 (3.33)
Consulting/ Research Firm	1 (3.33)
First Occupation after PhD completion	
Academia/ Higher Education	10 (3.33)
Pharmaceutical or Healthcare Industry	1 (3.33)
Government/ Regulatory Agency	2 (6.67)
Consulting/ Research Firm	1 (3.33)
Non-profit/ NGO/ Healthcare Policy Organization	2 (6.67)
Not Applicable (still a student)	14 (46.67)
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(*): Some participants have multiple graduate or undergraduate studies



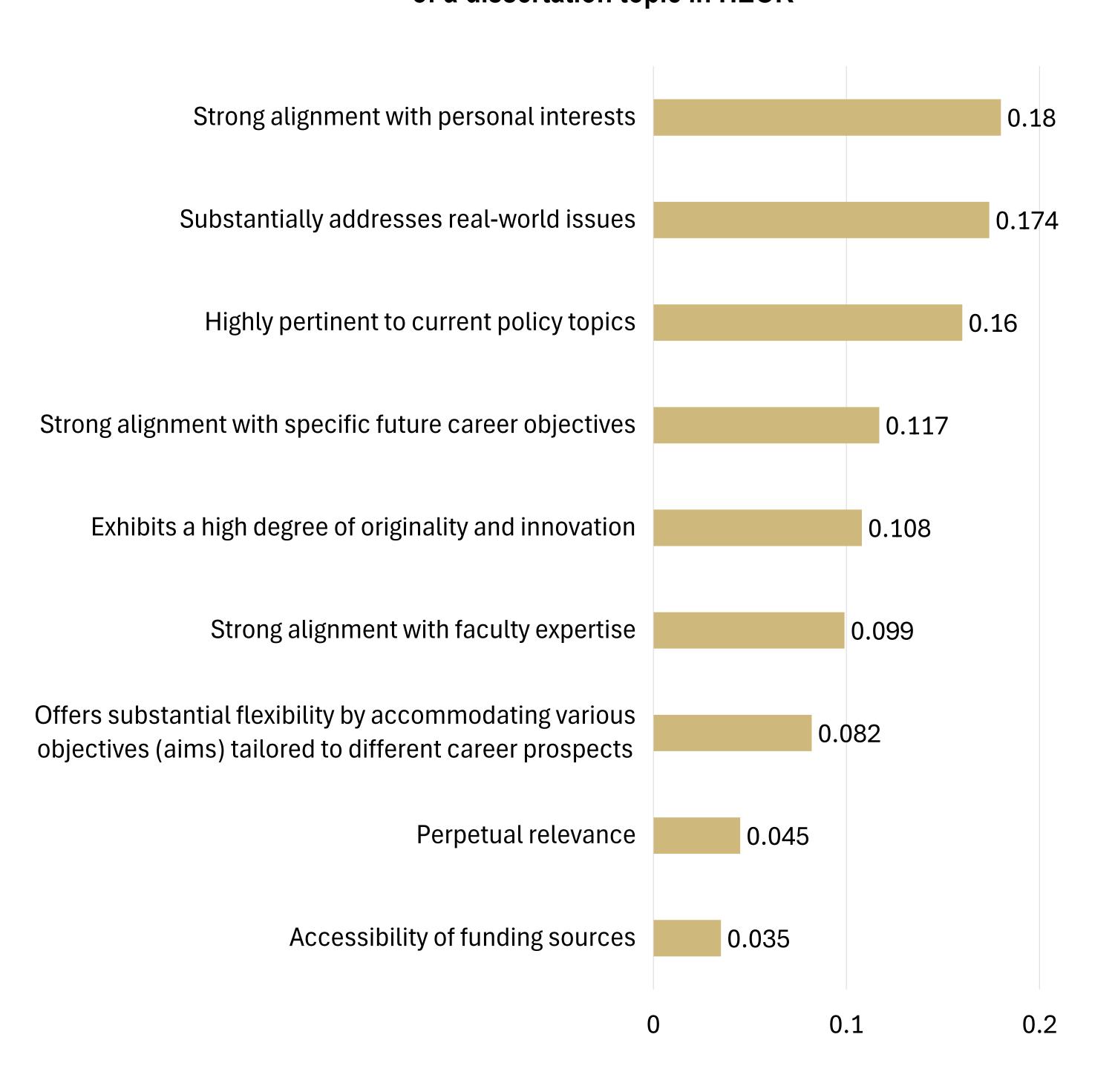
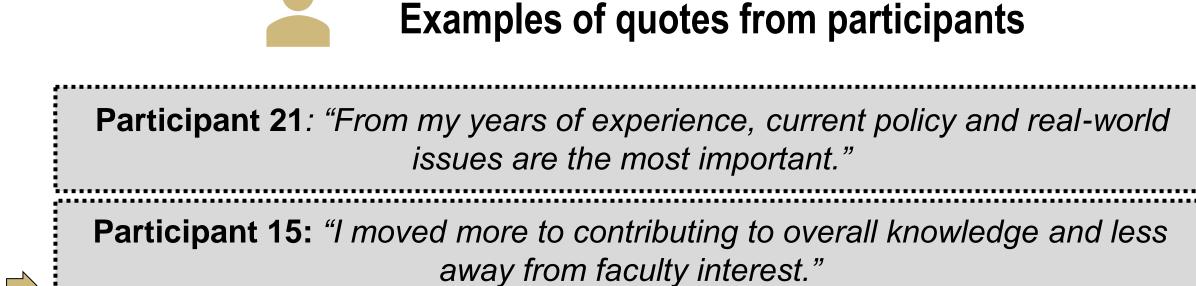


Figure 2: Emerging themes from qualitative data



Participant 26: "Access to independent funding was initially very important, but that has decreased over time. I've become less anxious about producing fundable research as I've learned about alternative funding pathways and developed grant-writing skills."

Participant 2: "It seems now that accessibility of funding sources drives most of PhD research, which unfortunately has the unintended consequence of forcing people to work only on the "topic du jour" - and this is unfortunately often driven by political, as opposed to pure scientific inquiry, motives."

Participant 19: "One thing I have learned is how difficult it often is to get access to data, so if it turns out that no one in your institute has access to 20-100% Medicare Claims data (C,D), then you could be looking at the need for significant funding to request the data from CMS or must find an external collaborator, which has its own set of issues."

Participant 30: "As a faculty member my view is somewhat different now. In my own research I didn't realize the importance of having faculty expertise on a topic to ensure the projects' success, or funding sources. I see this now occasionally a barrier for students completing their projects in a timely way."

Participant 24: "My advisor taught me that relevant policy is more interesting than doing research for the sake of it."

Immediate career contexts impact the perceived importance of criteria Role of mentors

Themes

Maturation of priorities

Political Motives & Funding sources

Data Accessibility

CONCLUSION

We hope that our findings could be integrated into a structured deliberation process by current and future Ph.D. students in HEOR when selecting a dissertation topic. Ph.D. supervisors should recognize the critical role of the prioritized criteria while providing support, particularly in navigating funding and data accessibility challenges, to alleviate some of the burdens associated with selecting a dissertation topic.

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