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ACCESSIBILITY IN HIGH ENERGY PHYSICS: LESSONS FROM THE SNOWMASS PROCESS

Accessibility in High Energy Physics: Lessons from the Snowmass Process

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INTRODUCTION

- ▶ Accessibility directly affects our community members and their ability to participate in science
- ▶ Barrier - 'anything that prevents or makes substantially more difficult to actively participate in physics activities'
- ▶ Scope
 - ▶ Experienced and observed barriers of Snowmass members
 - ▶ Recommendations for alleviating barriers
 - ▶ Discussion of resources and funding necessary for access



EXPERIENCED/OBSERVED BARRIERS

- ▶ Two community surveys during Snowmass2021
 - ▶ *Accessibility of Snowmass* - June 2020
 - ▶ Intended to effect current Snowmass process
 - ▶ 152 respondents
 - ▶ *Updated Accessibility Survey* - March 2022
 - ▶ Build upon first survey and provide data to analyze
 - ▶ Incorporated questions about conference formats
 - ▶ 173 respondents

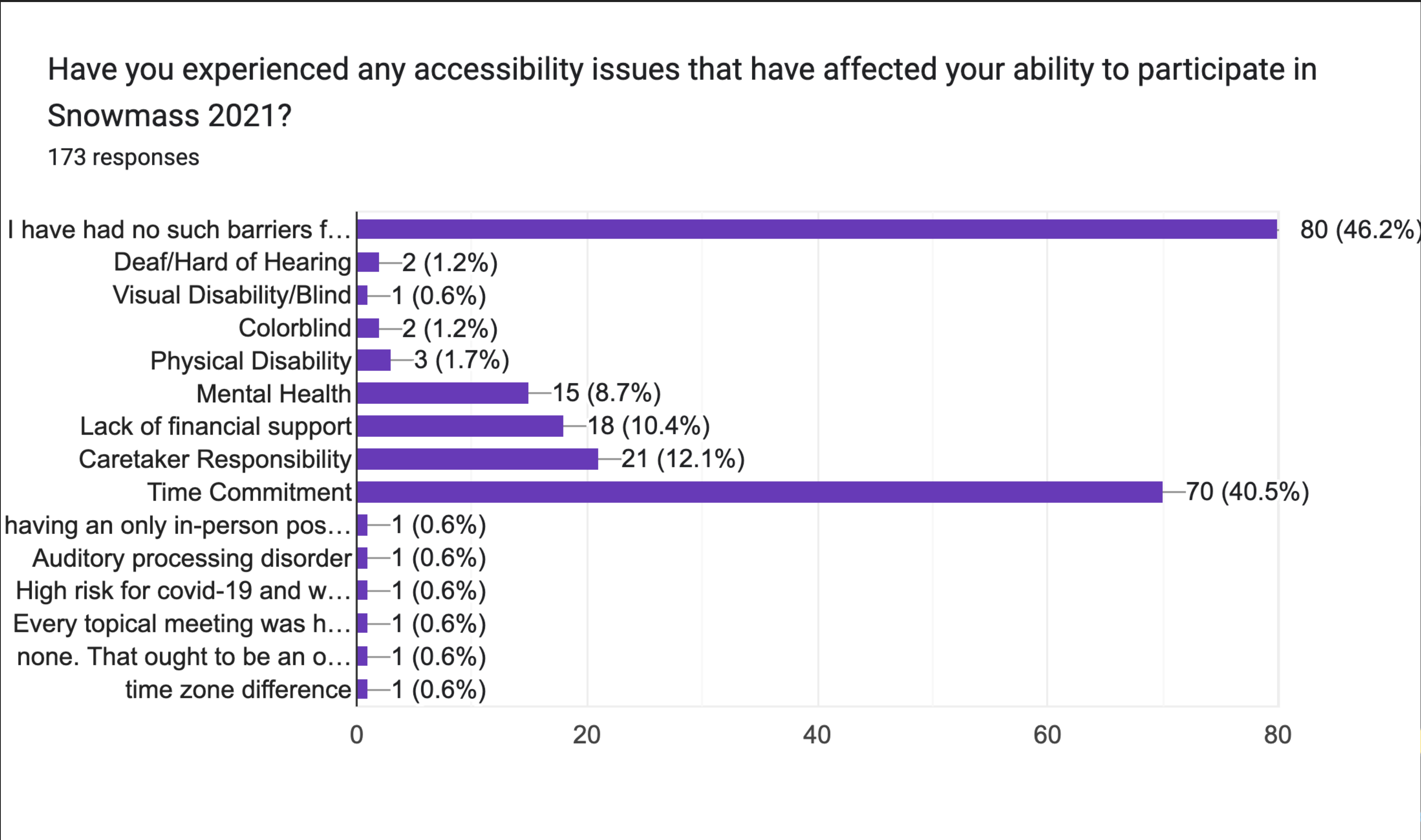
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EXPERIENCED/OBSERVED BARRIERS

- ▶ Analysis of *Updated Accessibility Survey* process:
 - ▶ Ran 2-sample statistical analysis between subsets of respondents
 - ▶ Small numbers would give biased overall distributions
 - ▶ Determines if distributions come from same population
 - ▶ Subset analysis:
 - ▶ Experience barriers (except exclusively *Time Commitment*) vs doesn't experience barriers [**bar** - **nobar**]
 - ▶ Experience barriers (except exclusively *Time Commitment*) vs only Time Commitment [**bar** - **time**]
 - ▶ Only Time Commitment vs doesn't experience barriers [**nobar** - **time**]
- ▶ All conclusions based on standard 95% confidence level

EXPERIENCED/OBSERVED BARRIERS



EXPERIENCED/OBSERVED BARRIERS

Have you experienced any accessibility issues that have affected your ability to participate in Snowmass 2021?

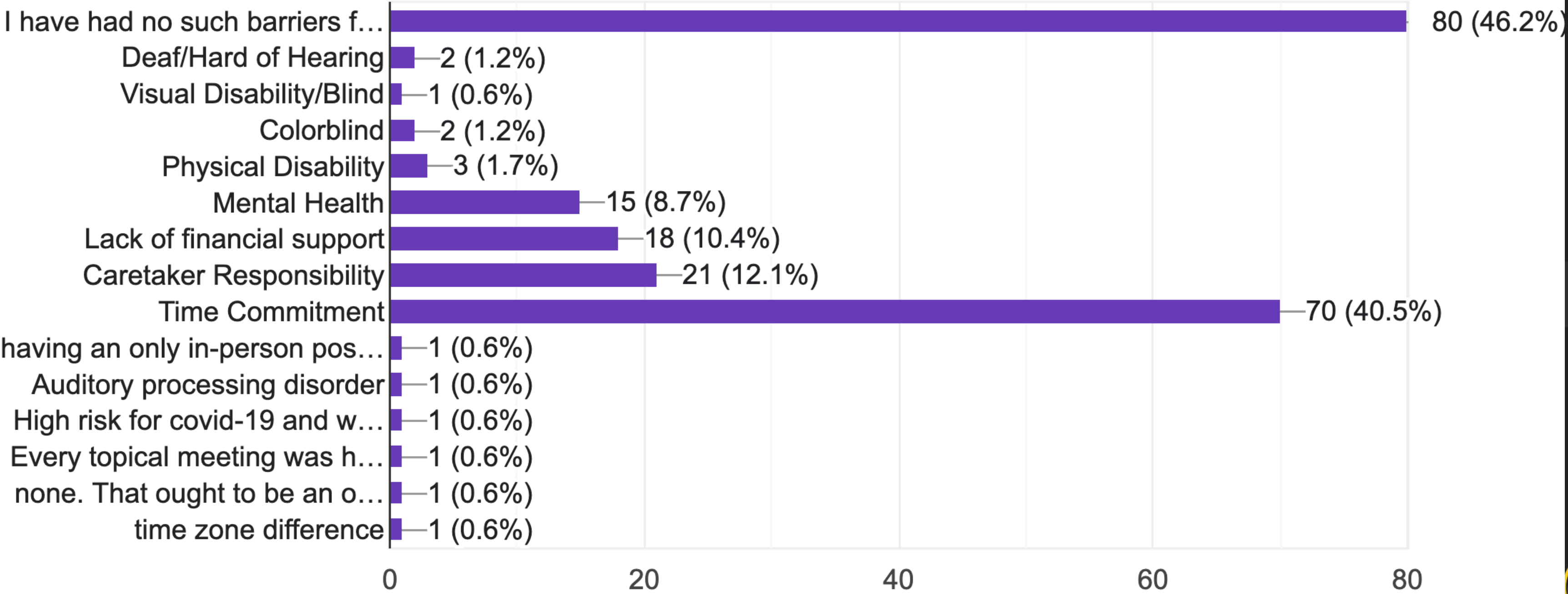
173 responses

No barrier

Barrier

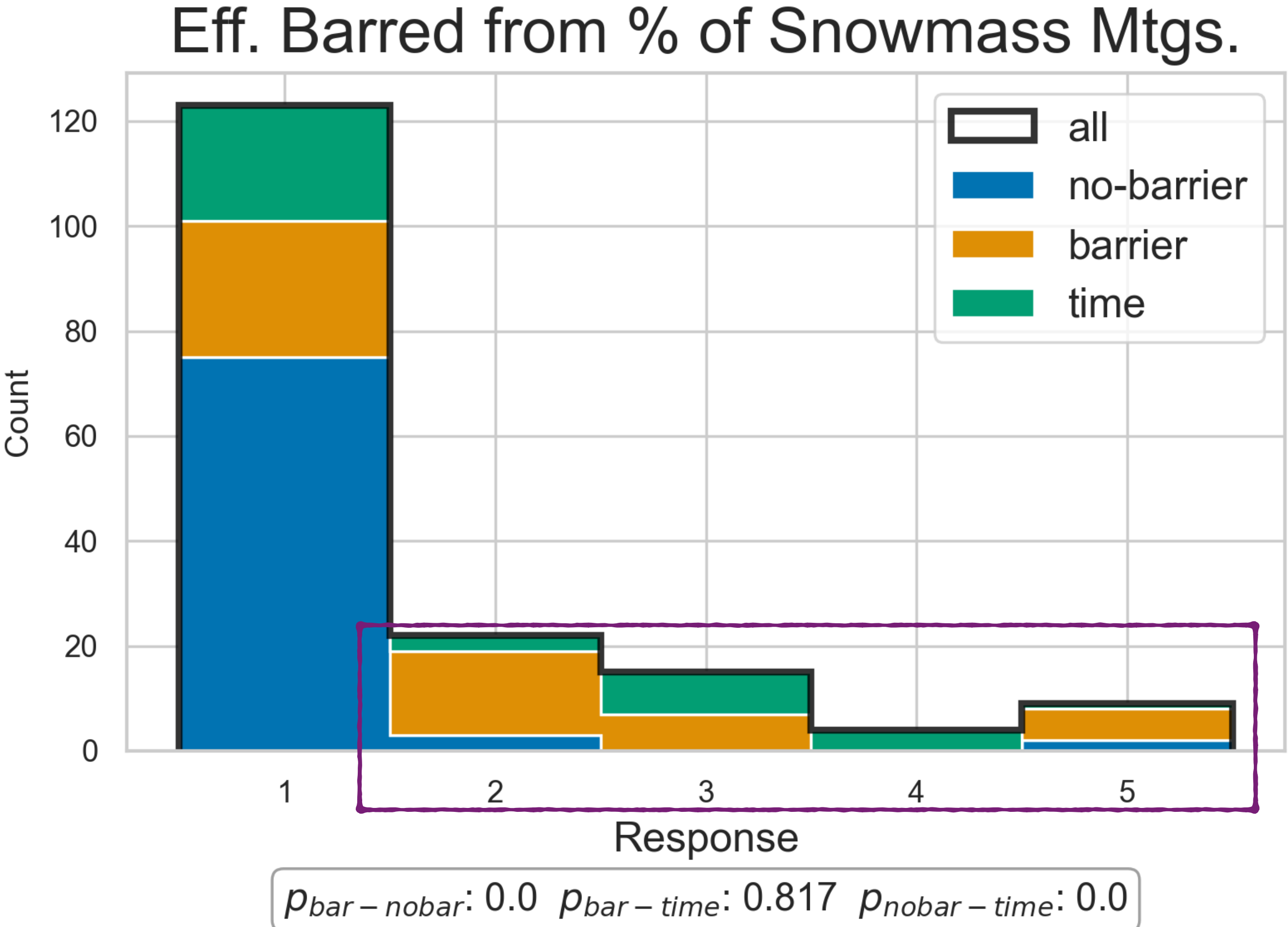
Time

Barrier



EXPERIENCED/OBSERVED BARRIERS

Not addressing accessibility actively bars community members from participating



Response Markers

1: < 20%

2: 20-40%

3: 40-60%

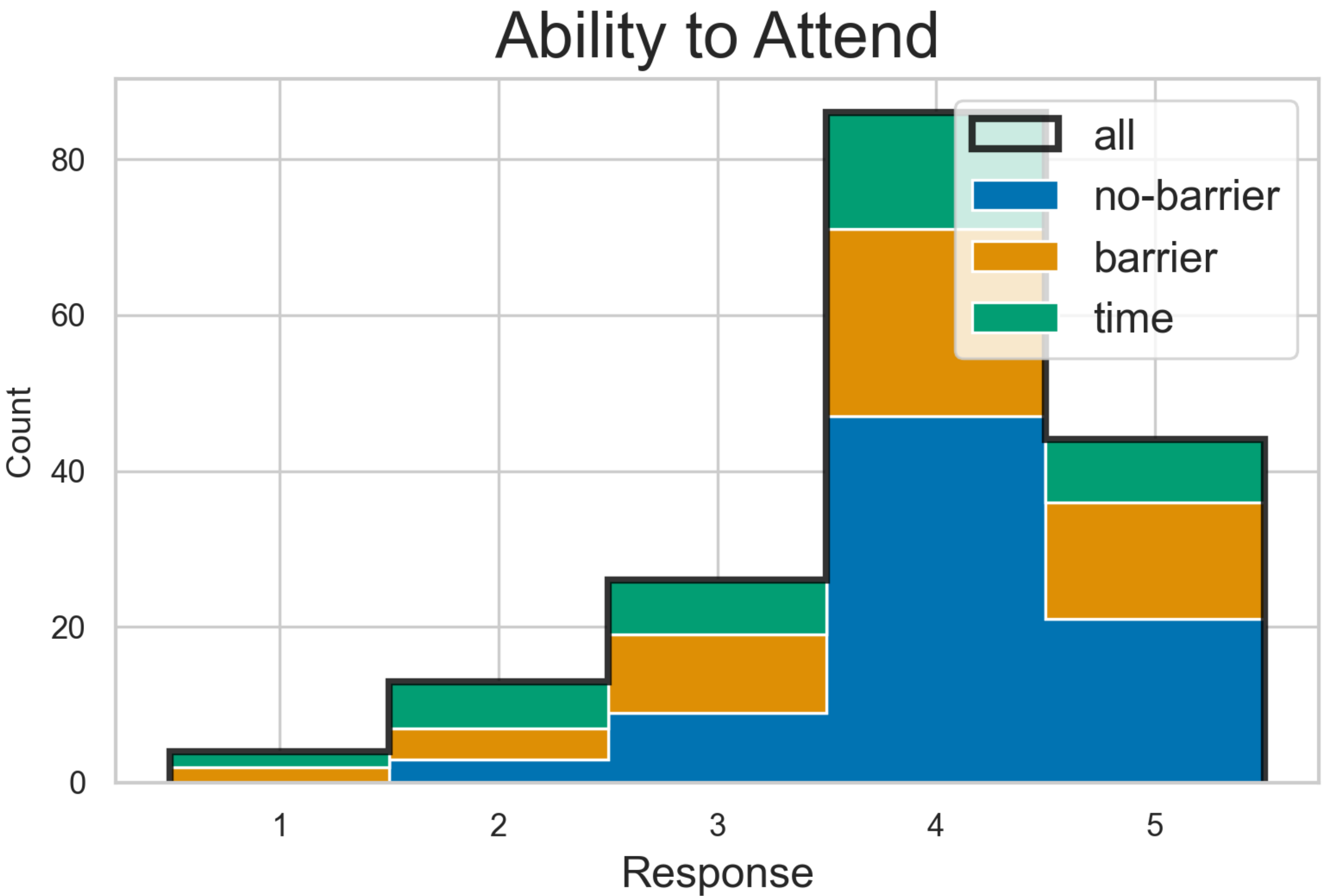
4: 60-80%

5: > 80%

EXPERIENCED/OBSERVED BARRIERS

Rating aspects of virtual conferences:

- ▶ Ability to Attend
- ▶ Cost
- ▶ Content
- ▶ Ability to Contribute
- ▶ Energy requirement
- ▶ Socializing/Networking



$p_{bar - nobar}: 0.114$ $p_{bar - time}: 0.215$ $p_{nobar - time}: 0.003$

Response Markers

1: Awful

2: Poor

3: Neutral

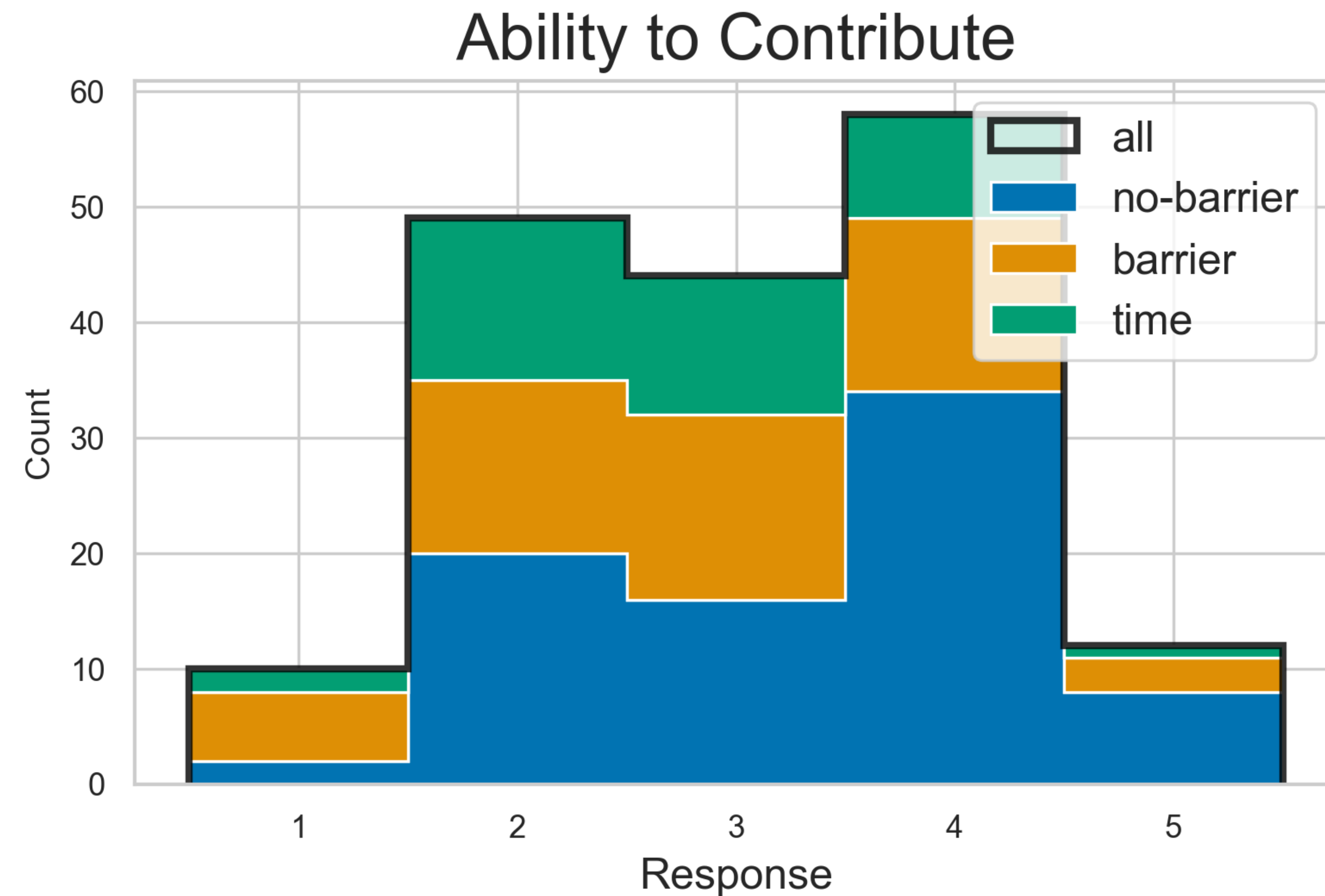
4: Good

5: Amazing

EXPERIENCED/OBSERVED BARRIERS

Rating aspects of virtual conferences:

- ▶ Ability to Attend
- ▶ Cost
- ▶ Content
- ▶ Ability to Contribute
- ▶ Energy requirement
- ▶ Socializing/Networking



$p_{bar - nobar}: 0.02$ $p_{bar - time}: 0.733$ $p_{nobar - time}: 0.011$

Response Markers

1: Awful

2: Poor

3: Neutral

4: Good

5: Amazing

RECOMMENDATIONS FOR ALLEVIATING BARRIERS

- ▶ Whitepaper provides detailed recommendations for a number of barriers
- ▶ Recommendations based on community members' lived experiences and professional resources (US ATLAS Annual Meeting Checklist)
- ▶ Conference organizers should refer to recommendations to sufficiently budget and plan in advance
- ▶ Provided recommendations are neither exhaustive nor absolute
- ▶ **Always defer to person in need when providing accommodations!**



RECOMMENDATIONS FOR ALLEVIATING BARRIERS

- ▶ Recommendation highlights:
 - ▶ Financial - provide travel grants and sliding-scale conference registration fees for those in need (particularly useful for EC members)
 - ▶ Caretaking Responsibilities - provide childcare support or accompanying caregiver travel (disproportionately affects EC with young children)
 - ▶ Mental Health - quiet rooms, cutting unnecessary meetings, provide a welcoming intellectual space, abide by a Code of Conduct



RECOMMENDATIONS FOR ALLEVIATING BARRIERS

- ▶ Recommendation highlights:
 - ▶ **Physical** - seating at all breaks and social events, no construction around buildings, hold events in ADA compliant buildings, designate conference contact
 - ▶ **Auditory** - provide live captioning for events, generate transcripts for recorded meetings (includes case studies and cost analysis for recent HEP events)
 - ▶ **Visual** - require presentations have colorblind-friendly palettes, translate LaTeX for use with screen readers, ensure websites are screen reader-friendly



RESOURCES AND FUNDING FOR ACCESS

- ▶ Authors argue that conference/workshop organizers responsible to ask and provide support
- ▶ Americans with Disabilities Act (ADA) - entities that are considered “public accommodations” *must* provide reasonable accommodations for individual with disabilities
- ▶ Public accommodations - facilities, both public and private, that are used by the public

IF YOUR ORGANIZATION IS OPEN TO THE PUBLIC, EVEN IF YOU HAVE "QUALIFICATIONS" FOR MEMBERSHIP, THEN IT IS LIKELY THAT YES YOUR ORGANIZATION IS A PUBLIC ACCOMMODATION

US Department of Justice

RESOURCES AND FUNDING FOR ACCESS

- ▶ Who should provide funding for accommodations? Source of contention and distress
- ▶ *“any program or activity receiving federal financial assistance or under any program or activity conducted by any Executive agency or by the USPS”*
Sec. 504 Rehabilitation Act of 1973
- ▶ NSF and DOE should clarify roll in accordance with ADA and the *Rehabilitation Act of 1973*
 - ▶ Some funding avenues exist
 - ▶ Facilitation Awards for Scientists and Engineers with Disabilities (FASSED)



RESOURCES AND FUNDING FOR ACCESS

- ▶ We provide a list of Bare Minimum Conference Best Practices for community use
 - ▶ Budget for Accommodations
 - ▶ Plan Ahead
 - ▶ Have a Single Point of Contact
 - ▶ Educate Yourself About Etiquette
 - ▶ Solicit and Respect the Input of the People who Need Accommodations

