

# Careers in Particle Physics: Scientists in Permanent Positions

**Jahresversammlung 2022 der deutschen Teilchenphysiker\*innen, Bad Honnef, 18 Nov 2022**

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# The Survey

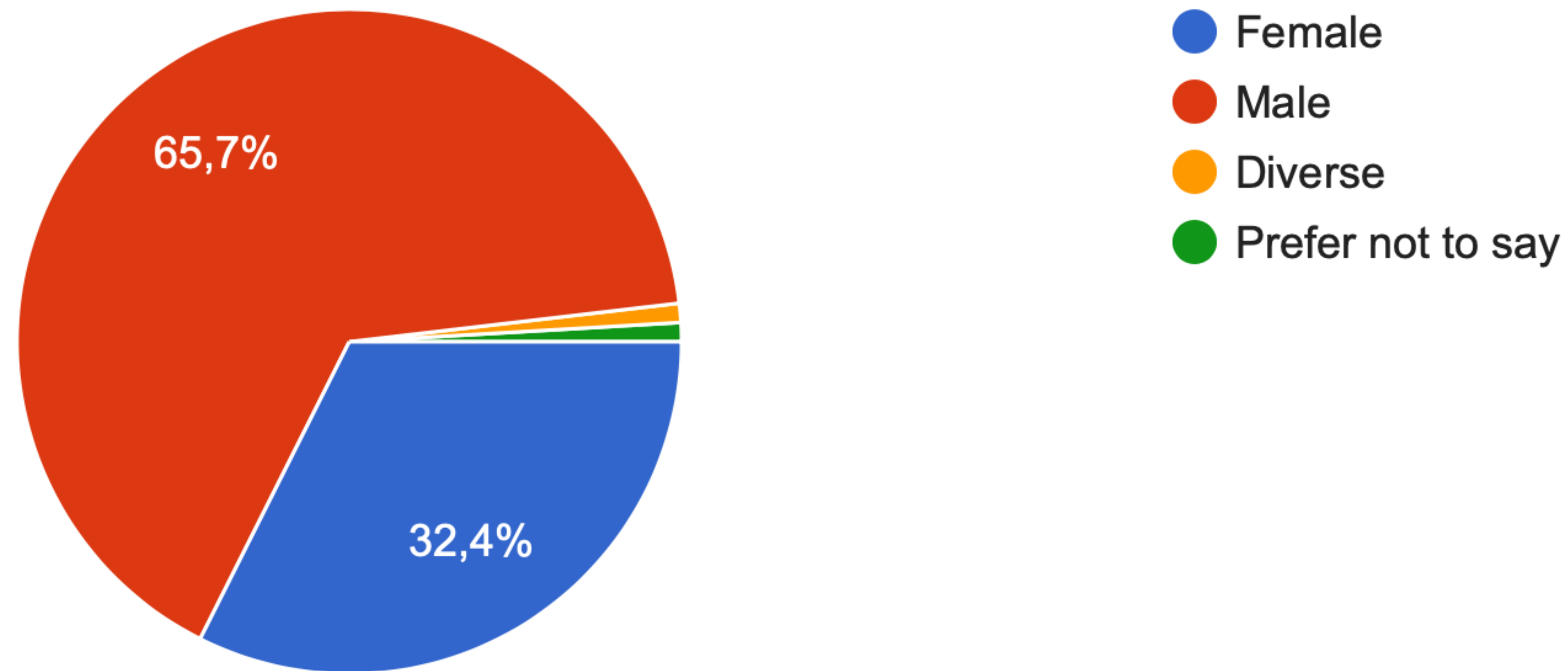
## Career Paths in Particle Physics

- Goal: **shedding light on career paths in particle physics**, both at universities and laboratories
- Target group: scientists who have **moved to permanent positions in particle physics in Germany since 2010**
  - About 250 candidates contacted through regional contact persons
- Survey:
  - Open from September 17 to October 12, 2022
  - 127 answers, **108 from target group** → at least 10 positions per year
  - Thank you very much!
- Today: **first glimpse** at the survey data

# Identification with Gender

To which gender identity do you identify most?

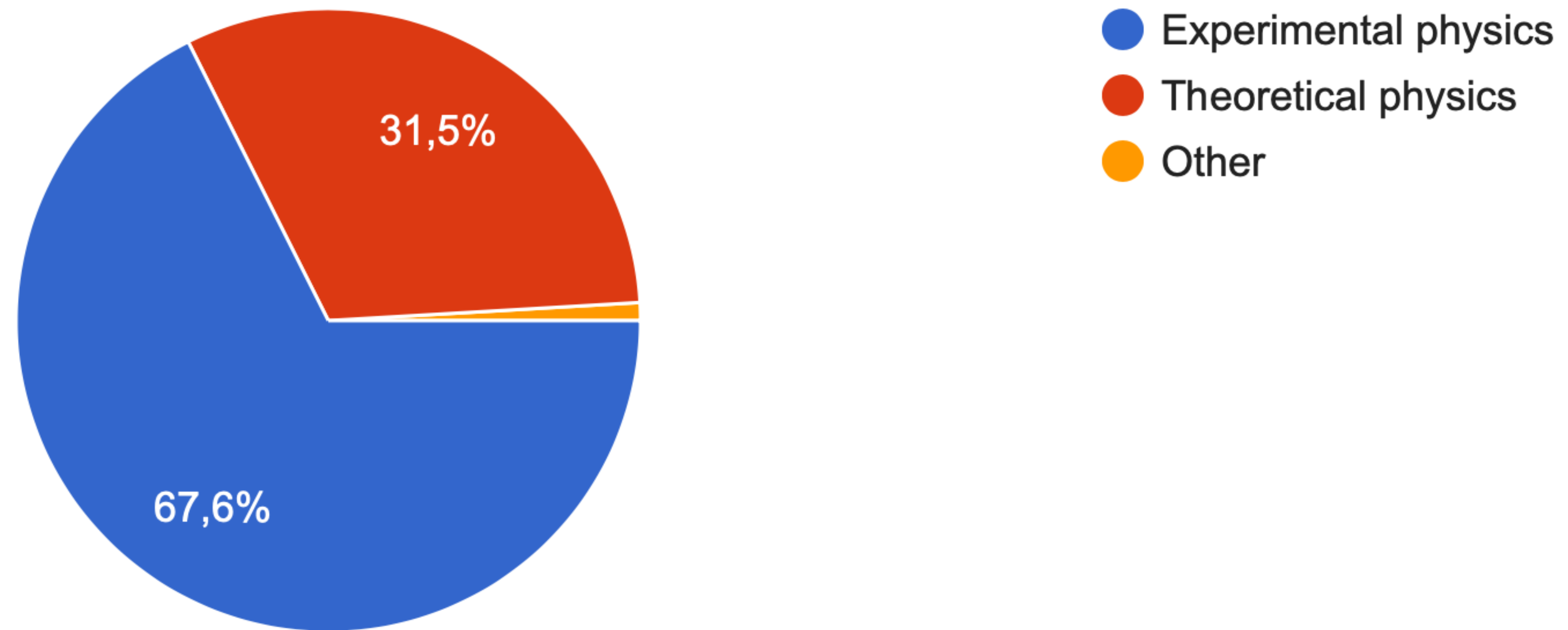
108 Antworten



# PhD in Theory/Experiment

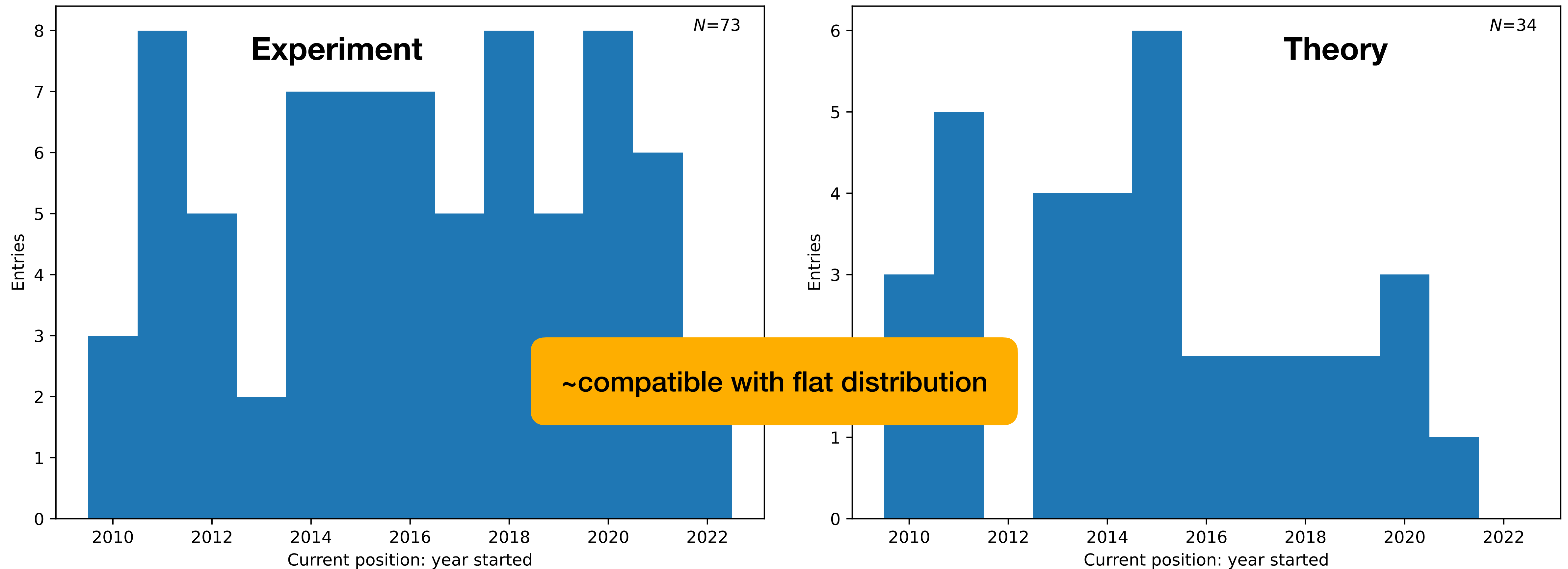
Did you work in experimental or theoretical physics during your doctorate?

108 Antworten

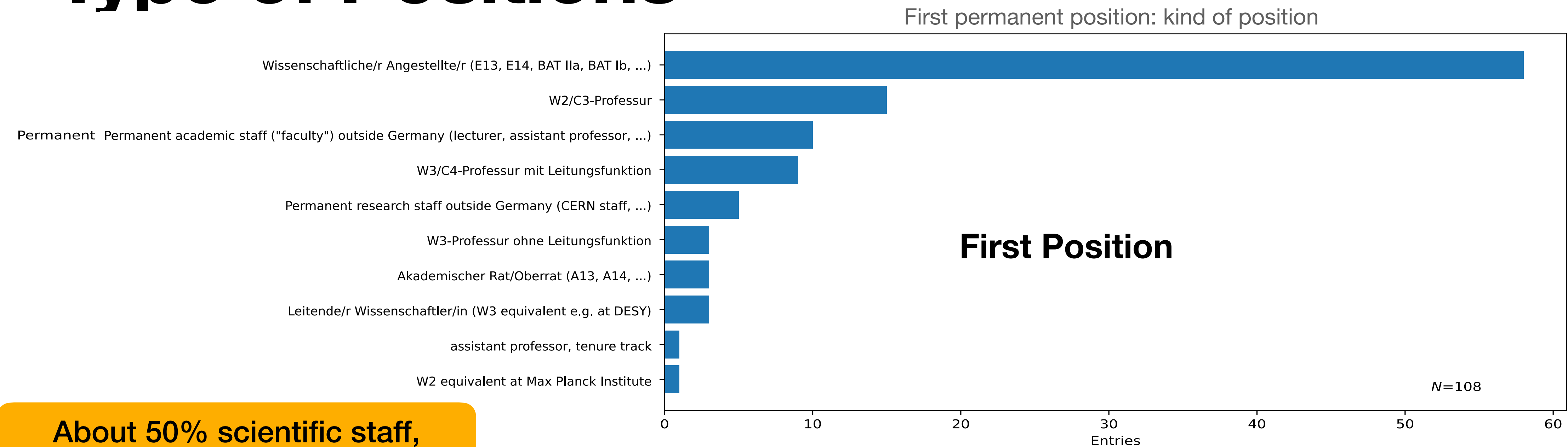


# Positions over Time

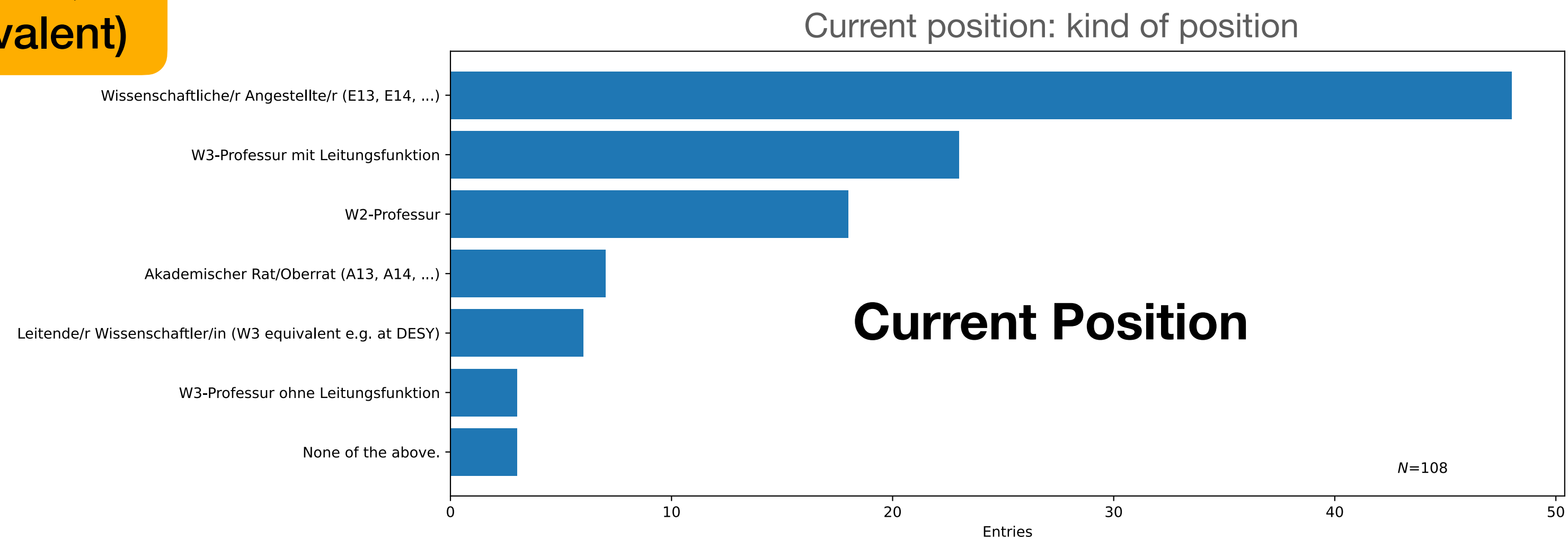
## Separately for experiment/theory



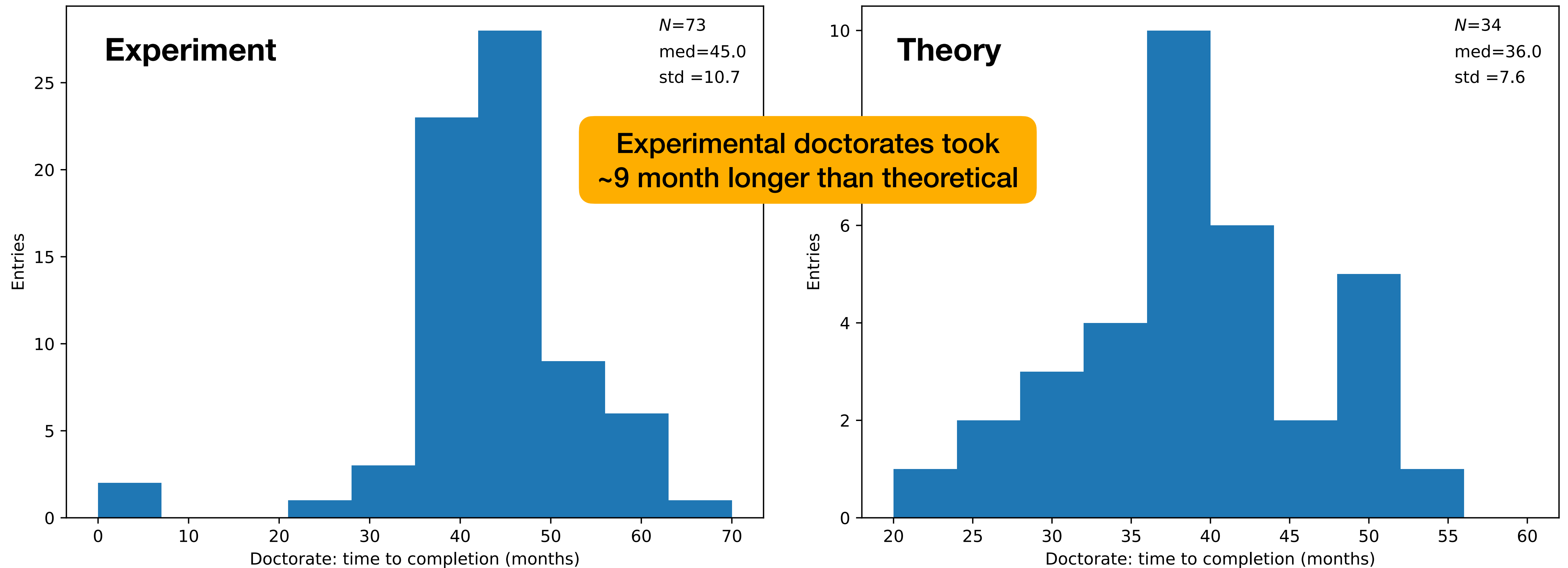
# Type of Positions



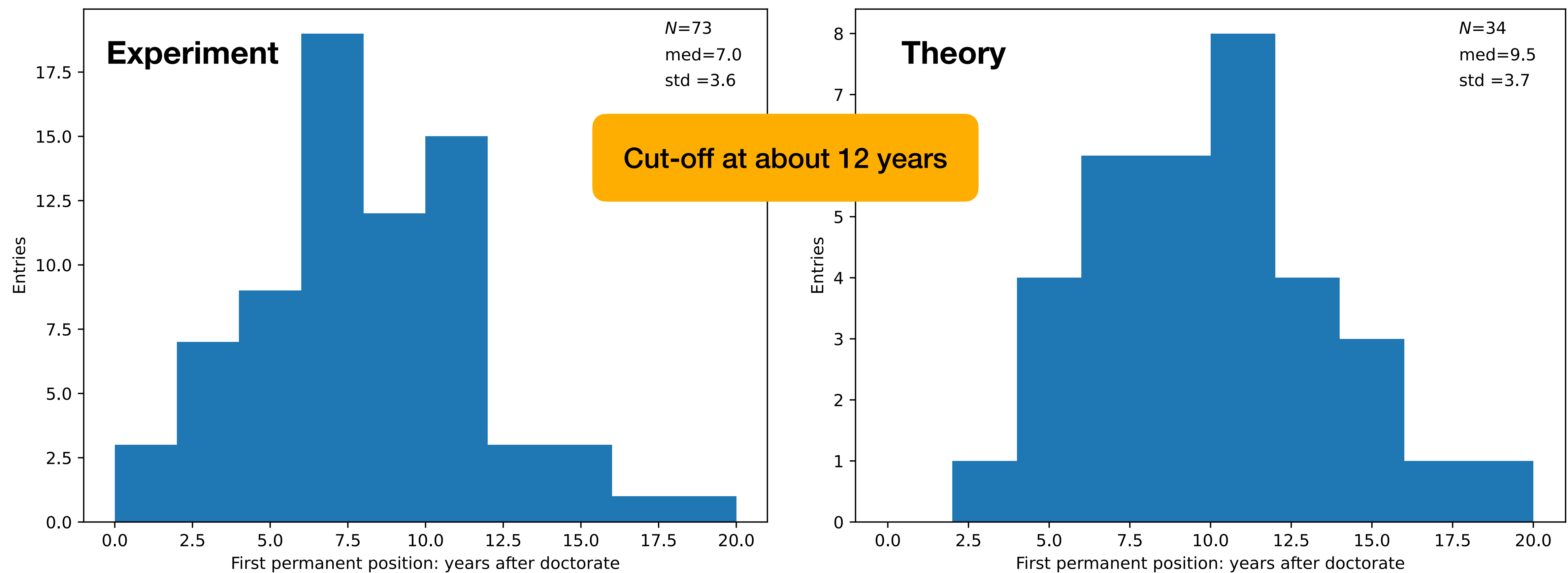
About 50% scientific staff,  
50% professors (or equivalent)



# Duration of Doctorate

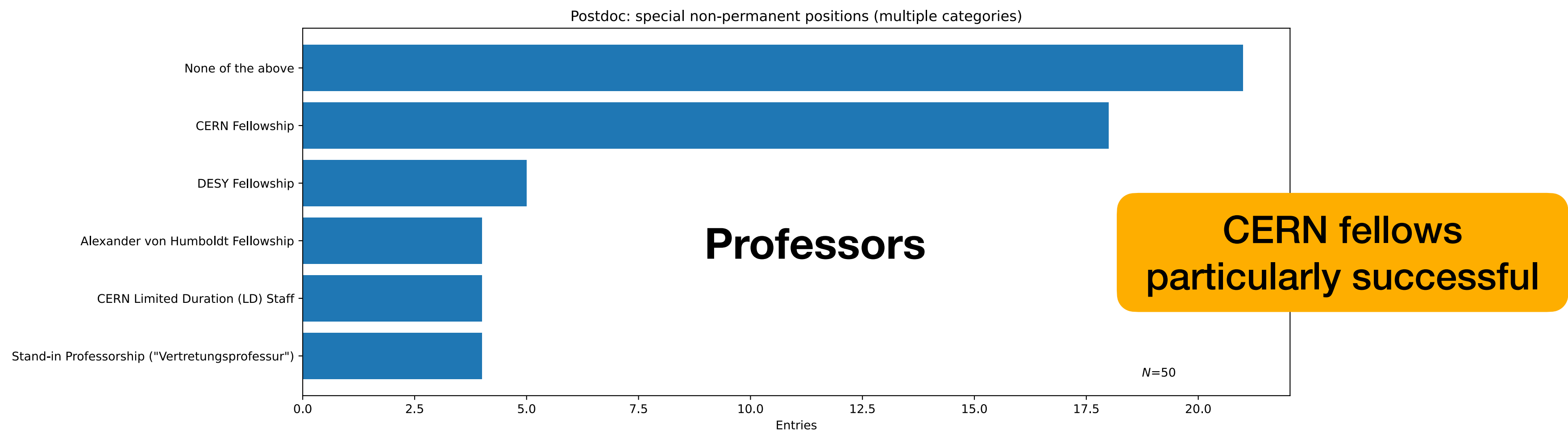
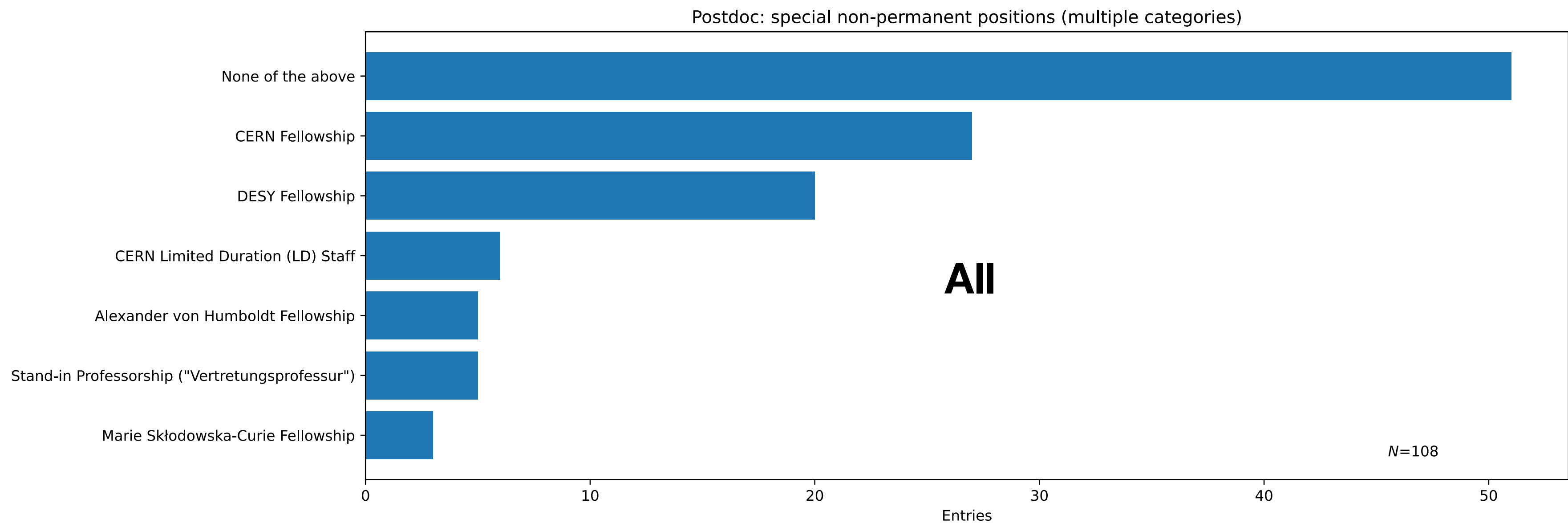


# Duration from Doctorate to First Permanent Position



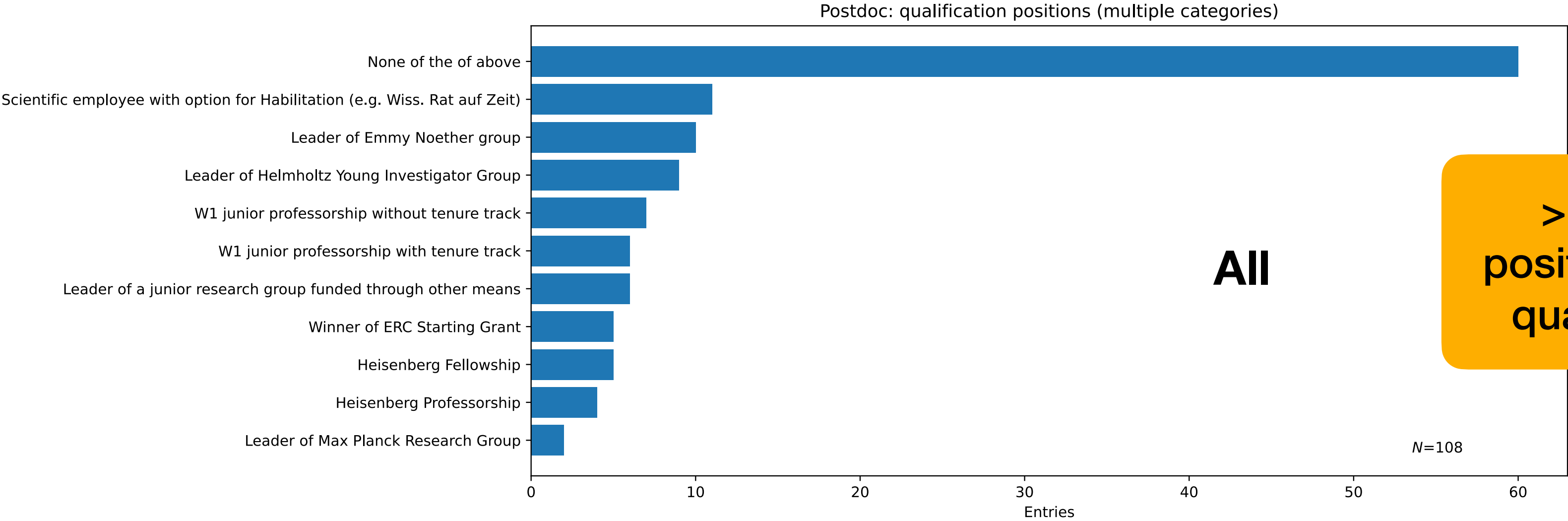


# Special Positions: Fellowships, ...

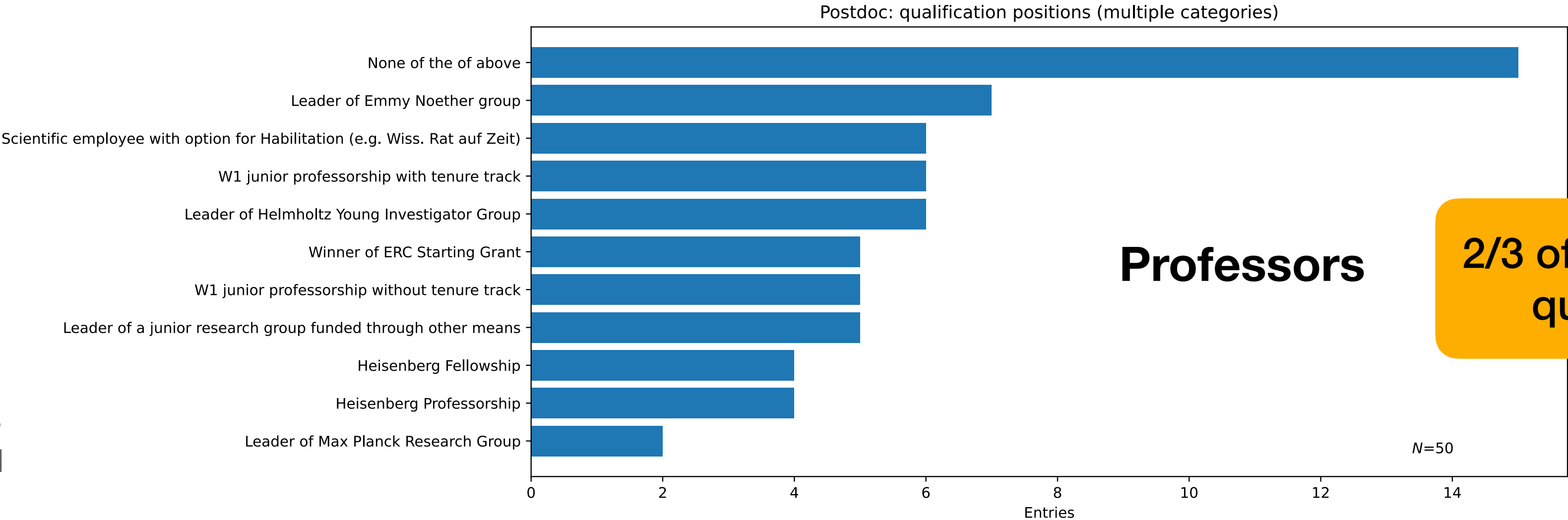


Multiple entries possible  
→ number of entries ≠ N

# Special Qualification Positions



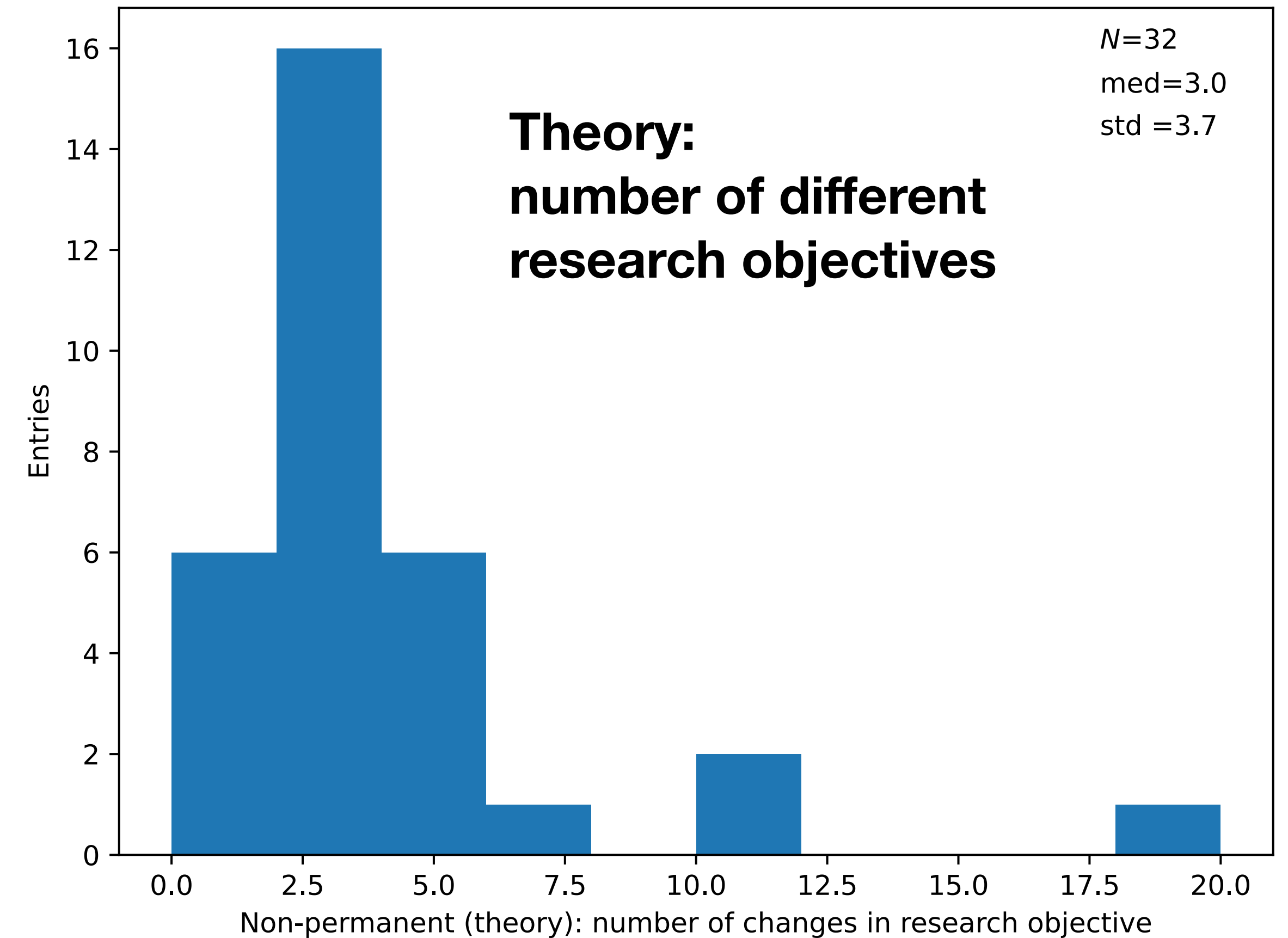
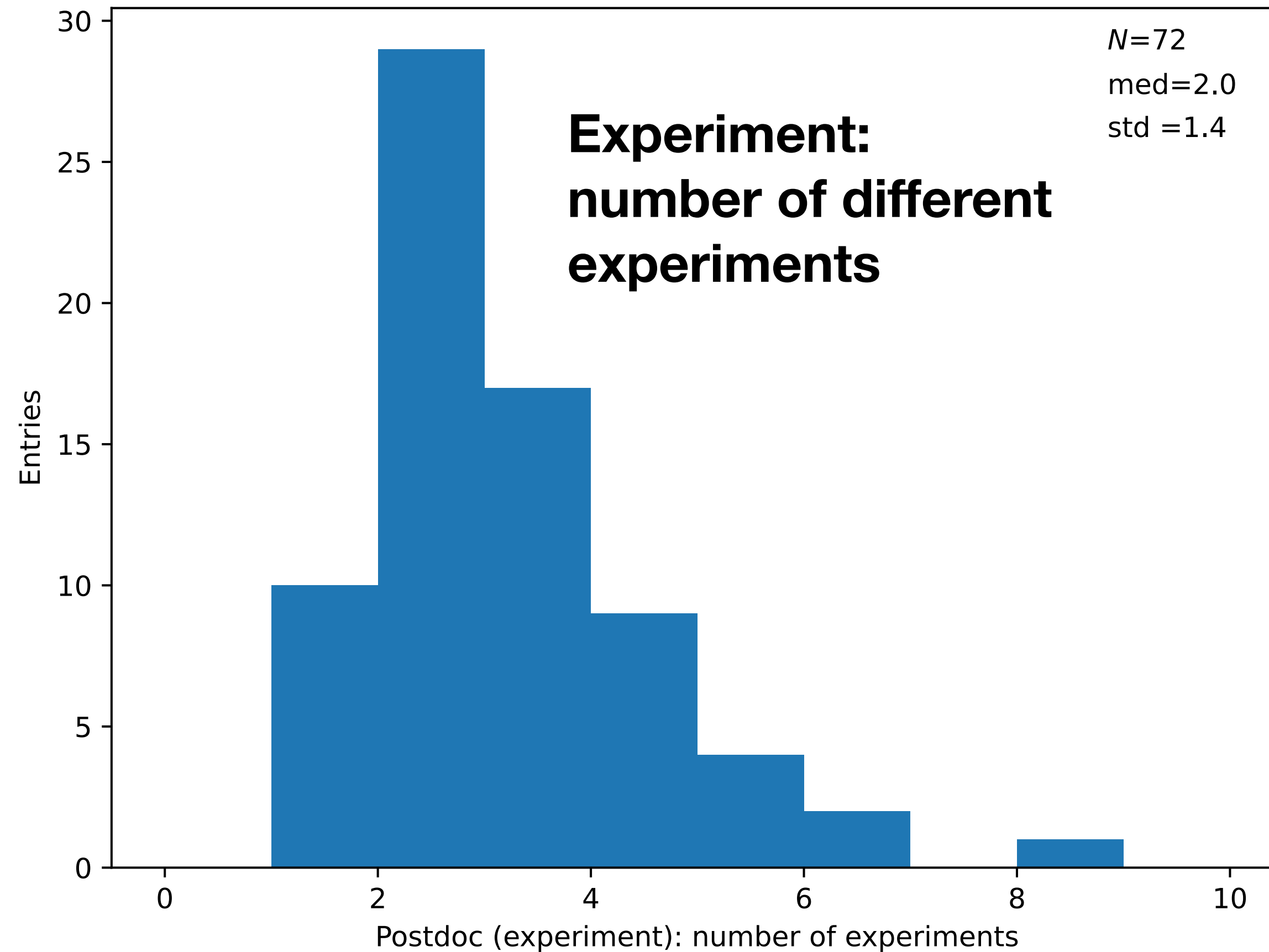
>half of permanent positions without special qualification positions



2/3 of professors had special qualification positions

Multiple entries possible  
→ number of entries ≠ N

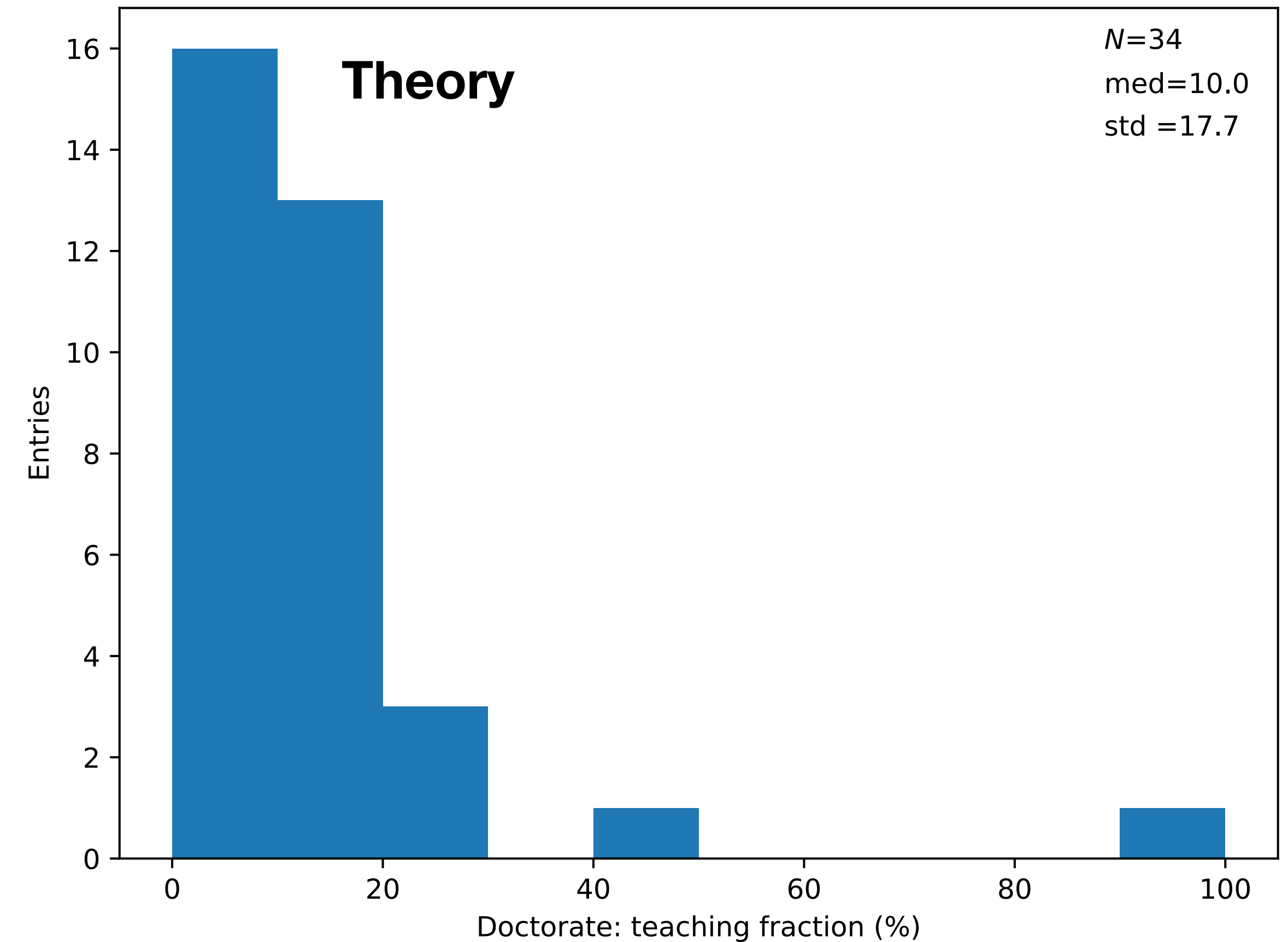
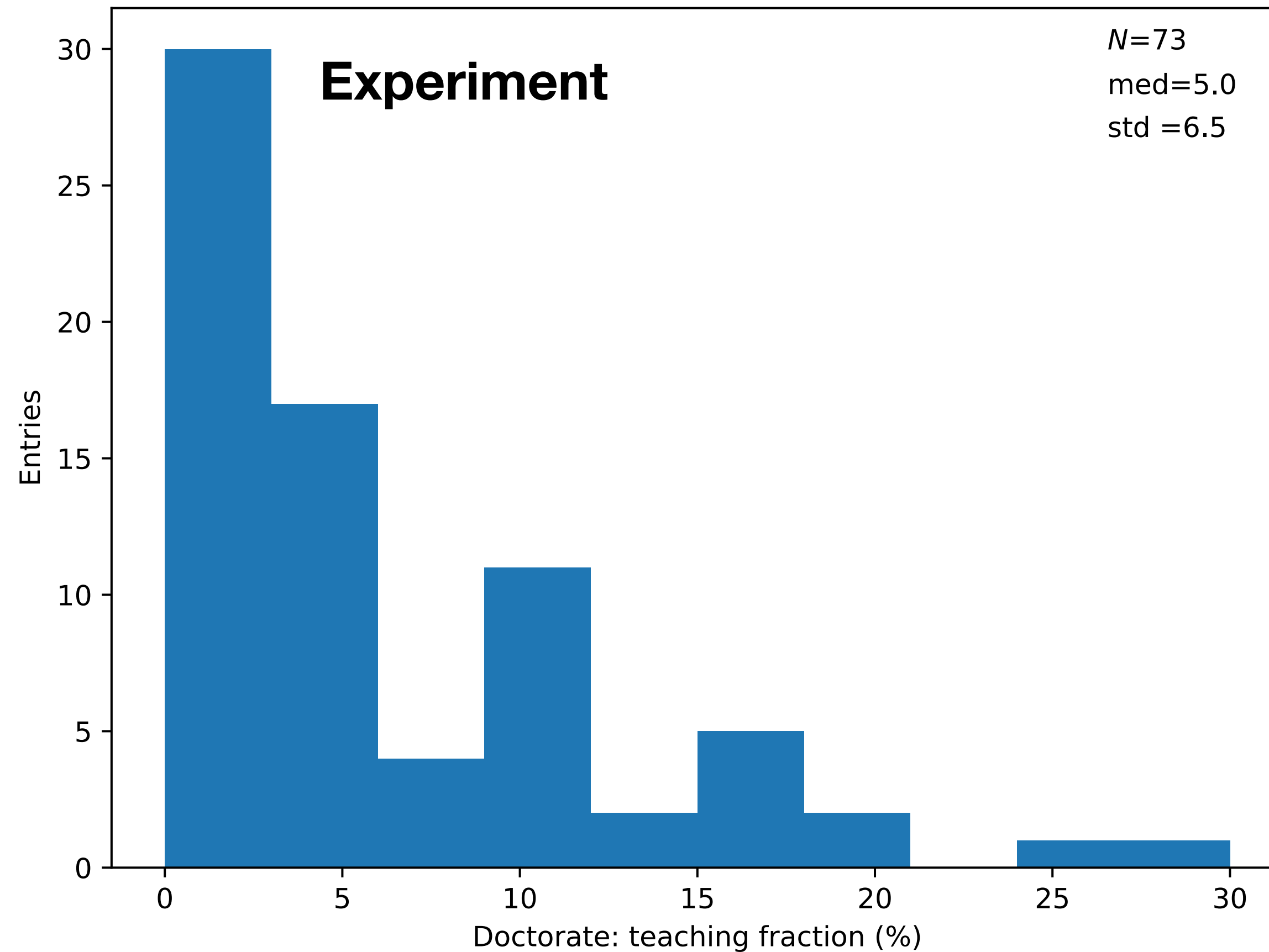
# Number of Different Settings



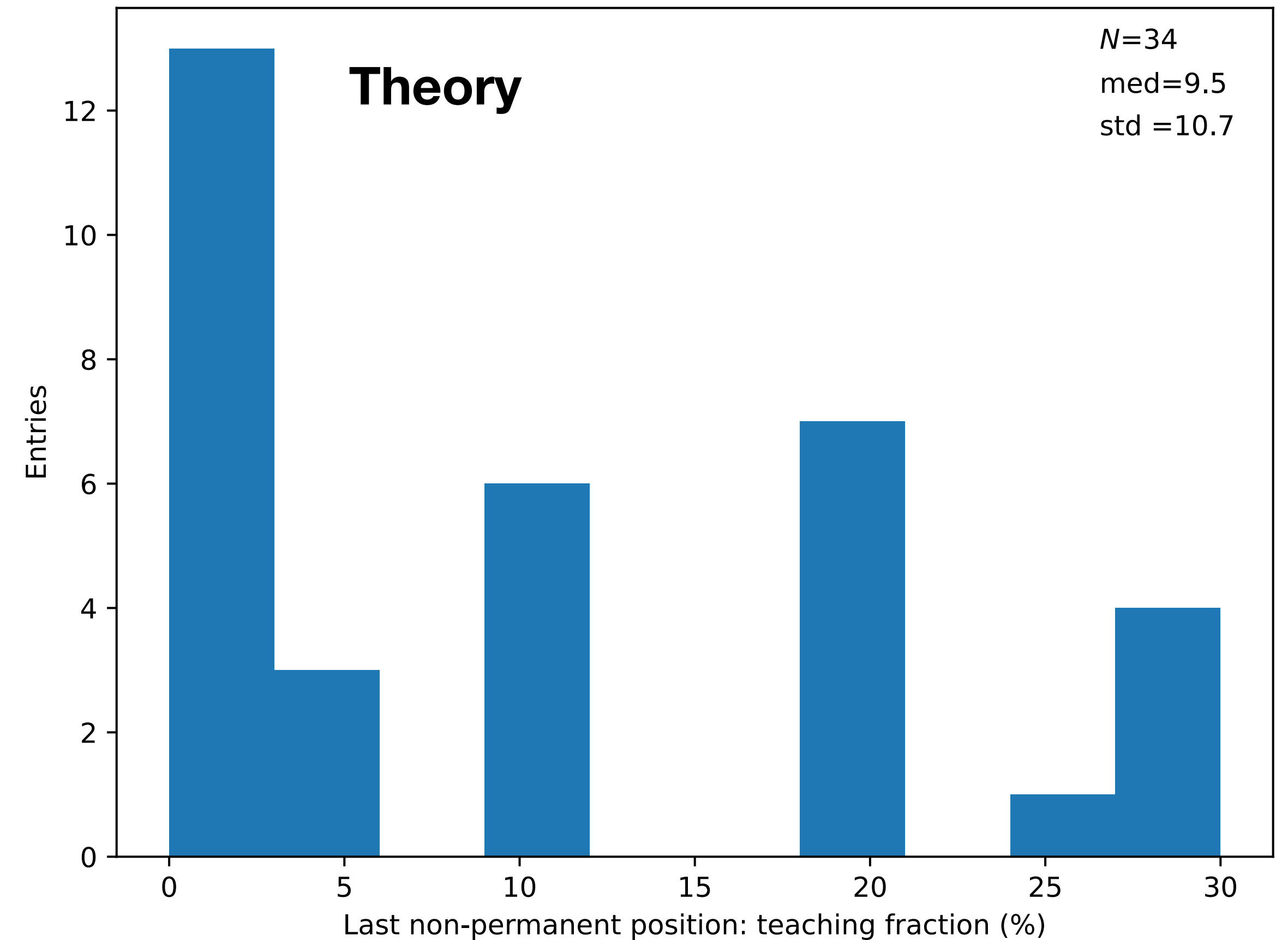
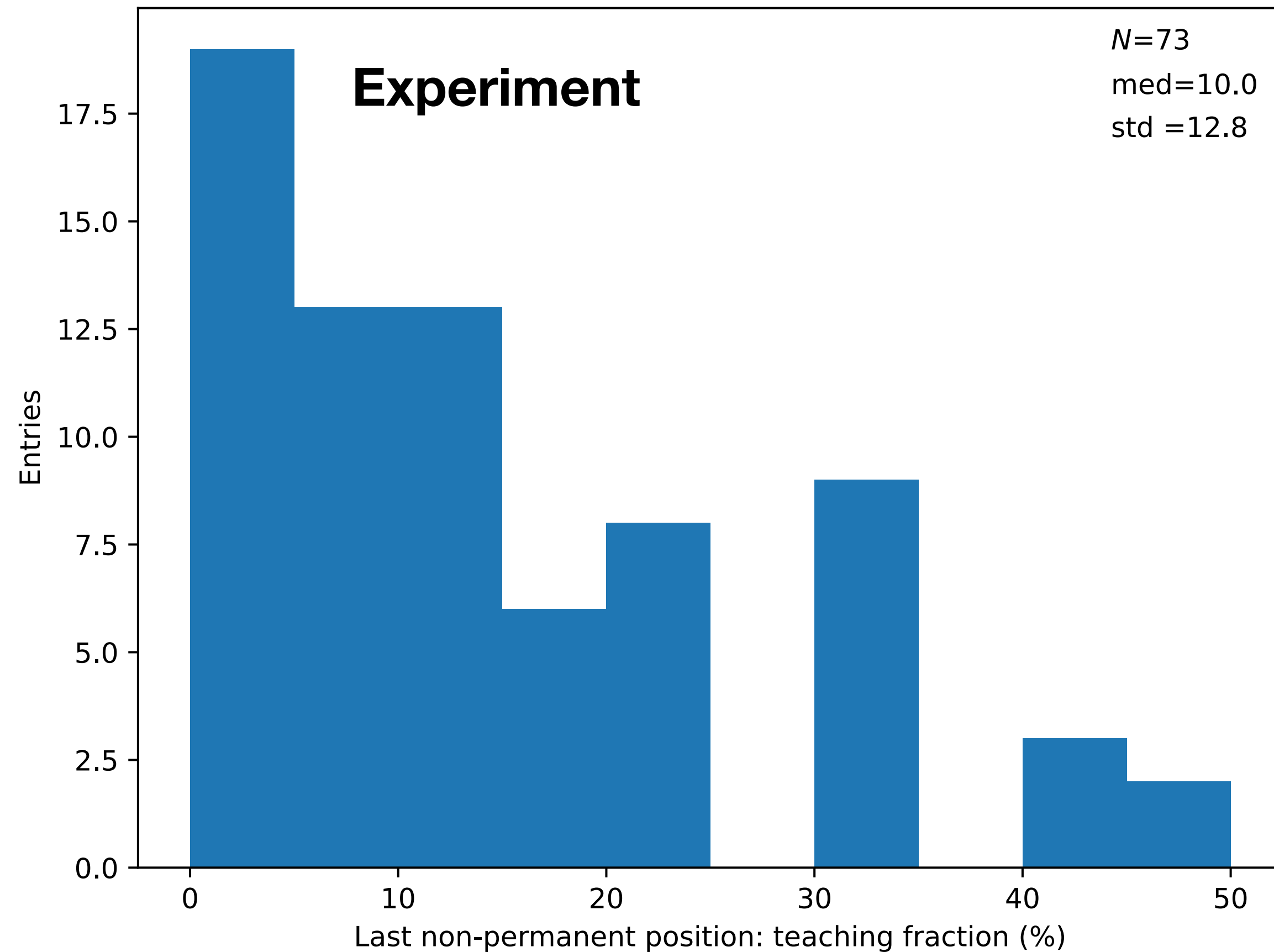


# Doctorate: Fraction of Time Spent on Teaching

## Only Classroom Teaching



# Postdoc: Fraction of Time Spent on Teaching Classroom Teaching and Undergraduate Supervision

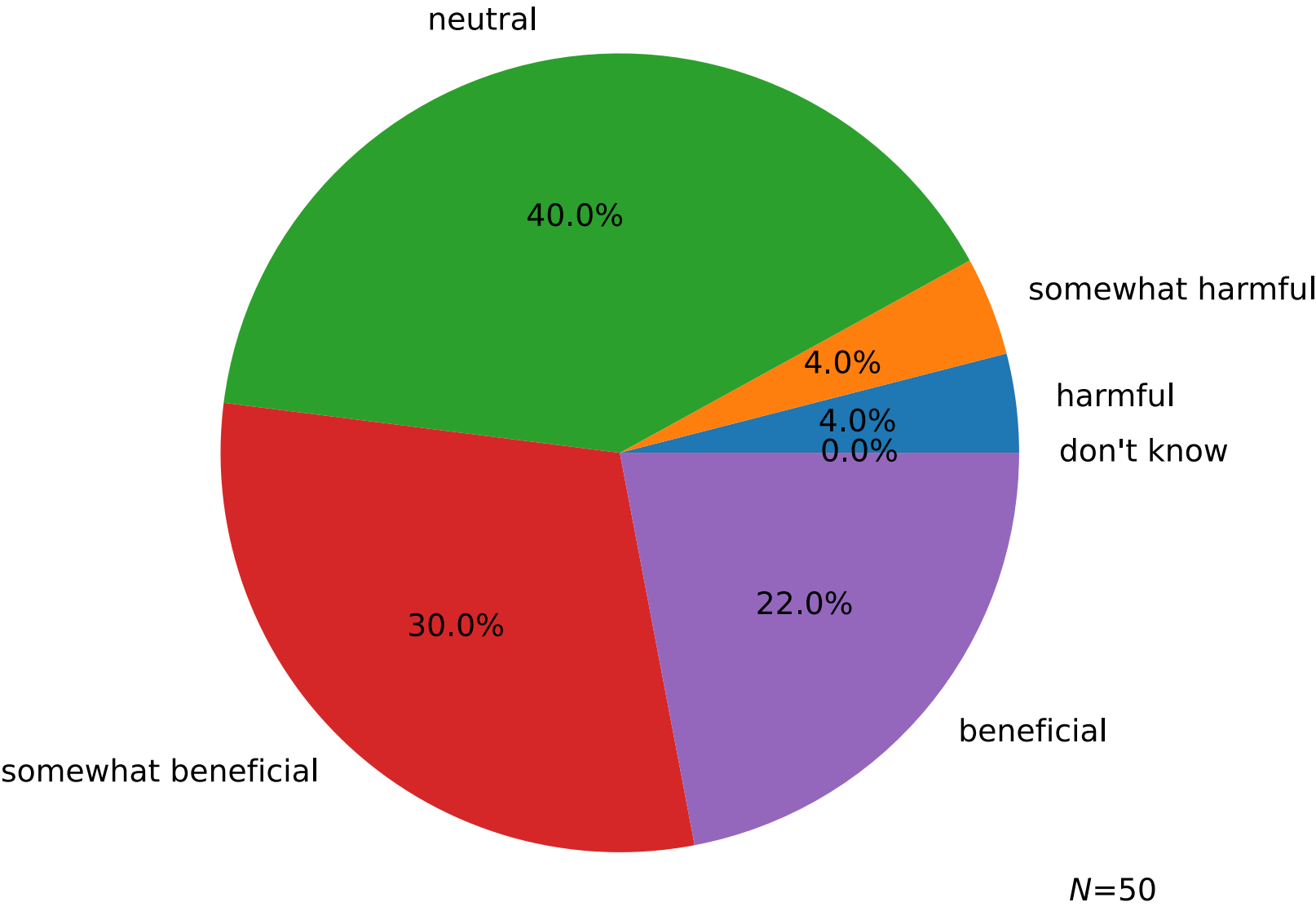


# Benefit of Teaching as PhD/Postdoc

... for career in general

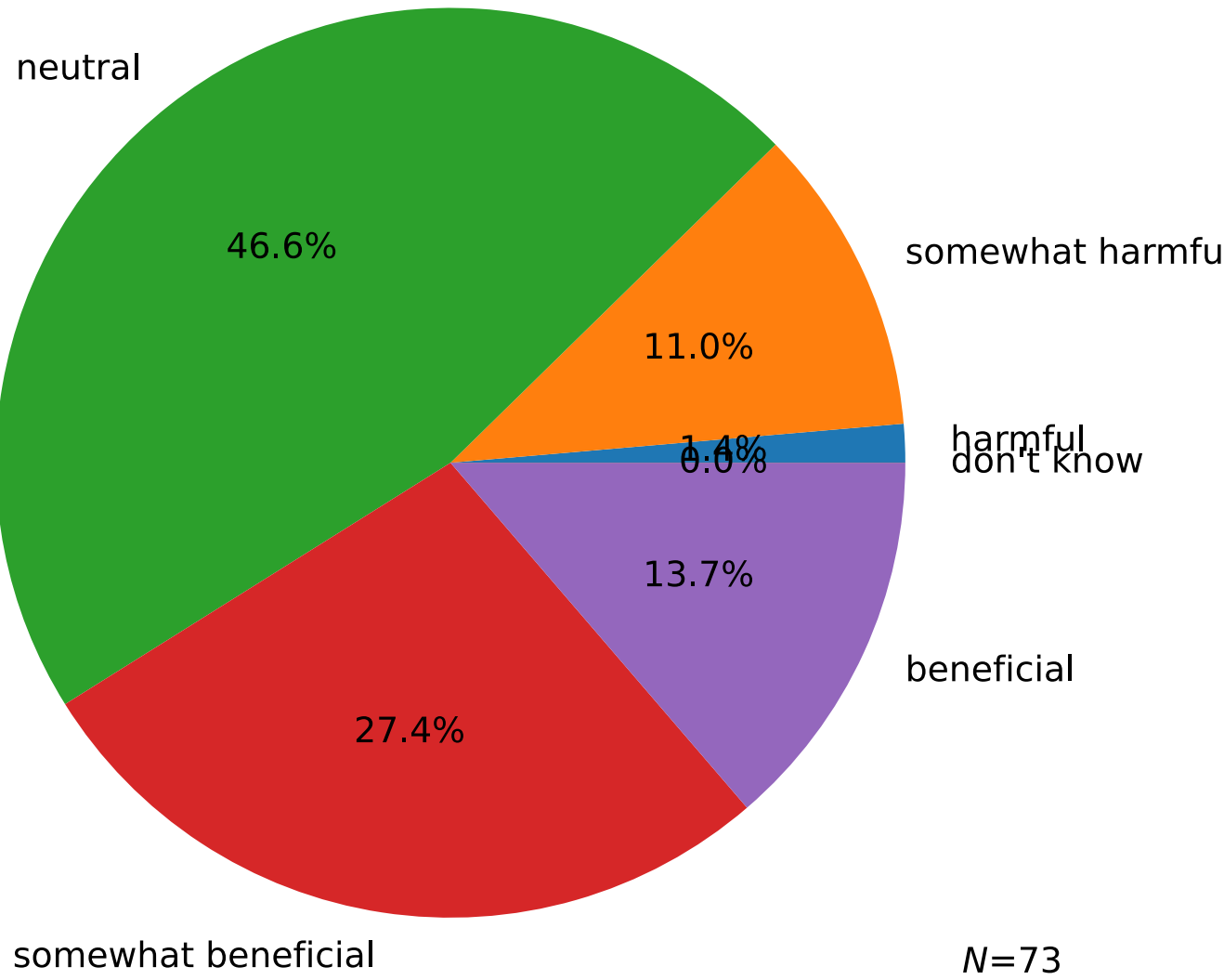
## Professors

Last non-permanent position: teaching beneficial?



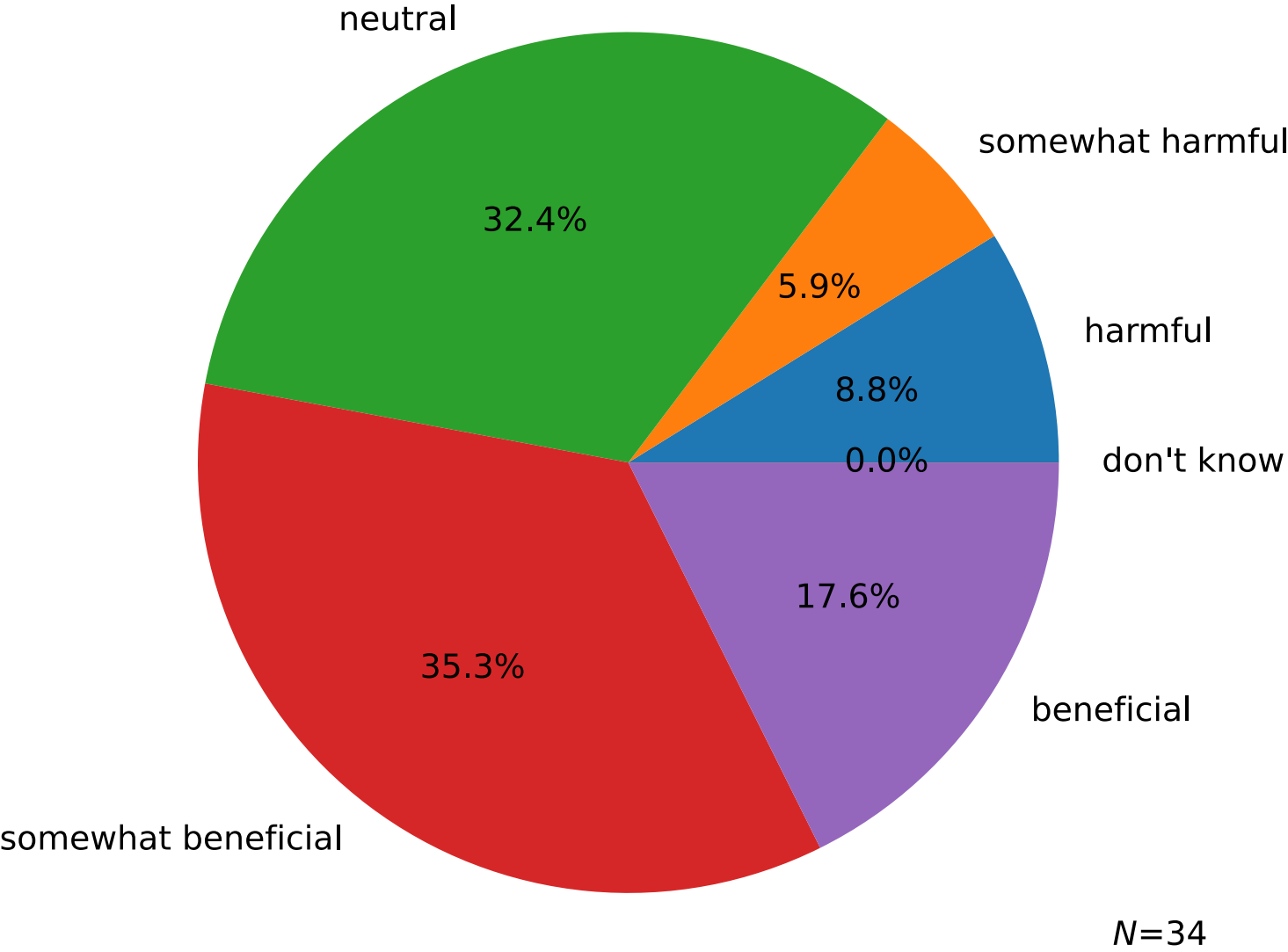
## Experiment

Last non-permanent position: teaching beneficial?



## Theory

Last non-permanent position: teaching beneficial?



>40% find teaching at least “somewhat beneficial” for their careers

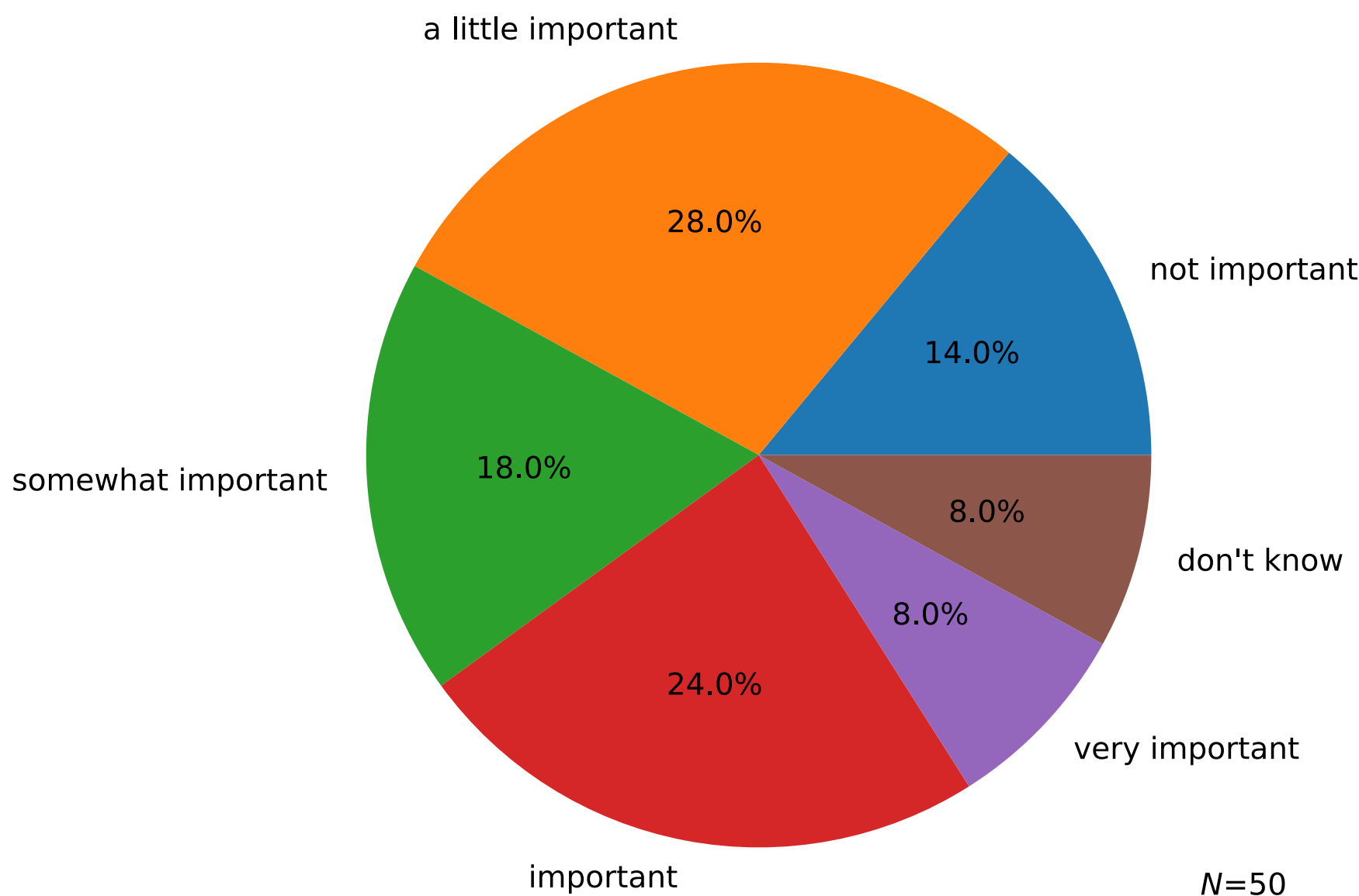


# Subjective Importance of Teaching

... for first permanent position

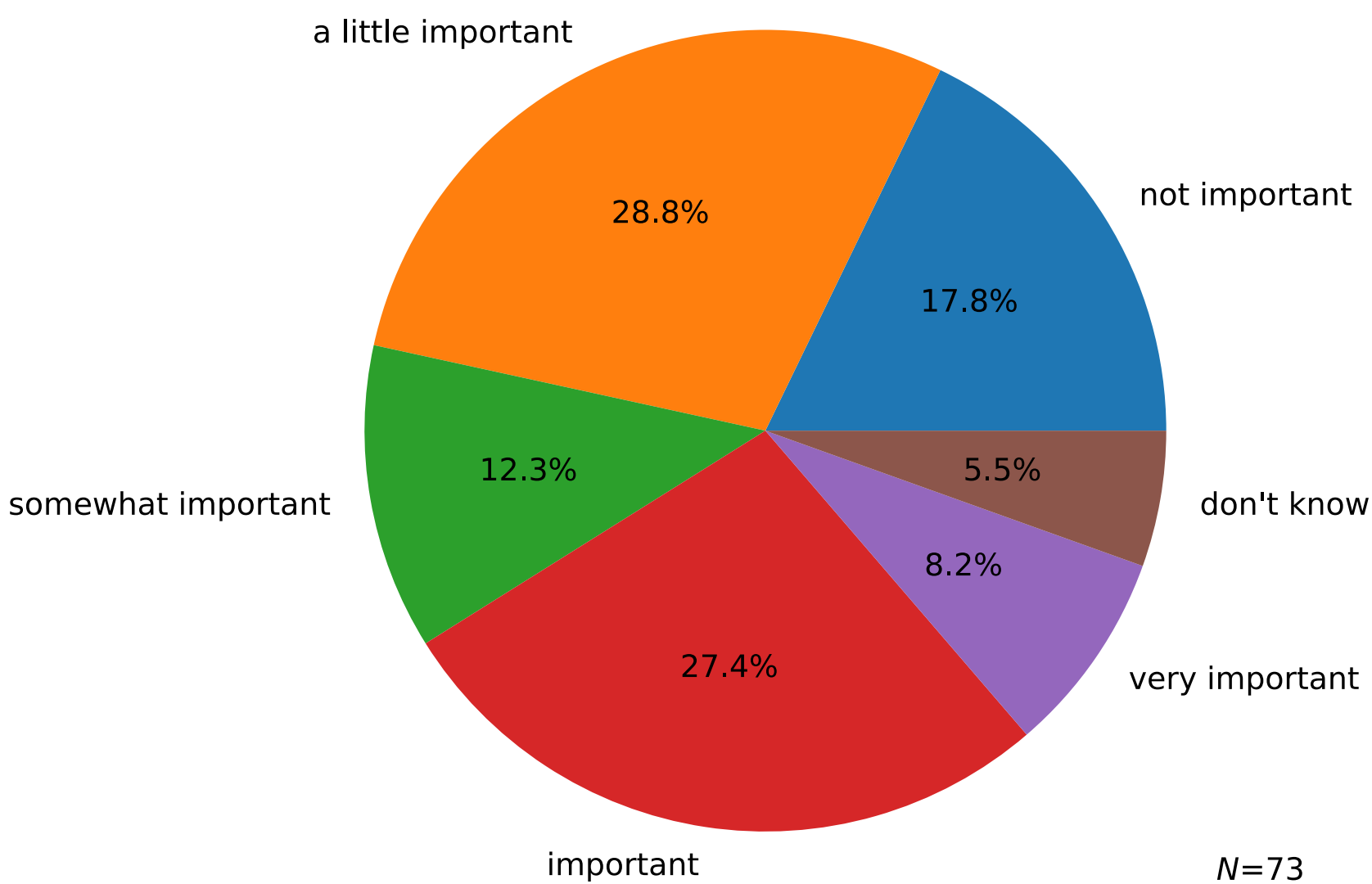
## Professors

Importance: teaching



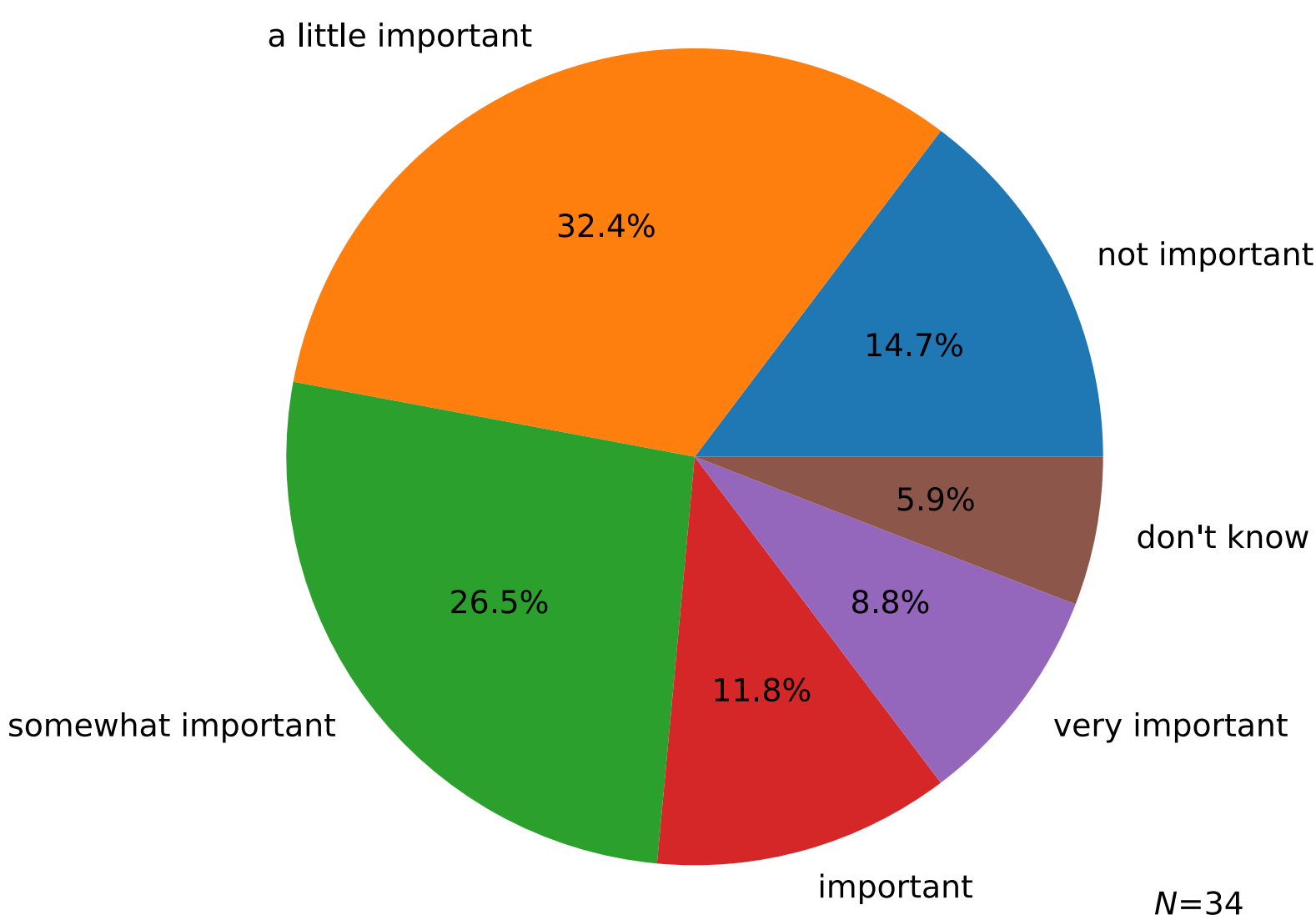
## Experiment

Importance: teaching



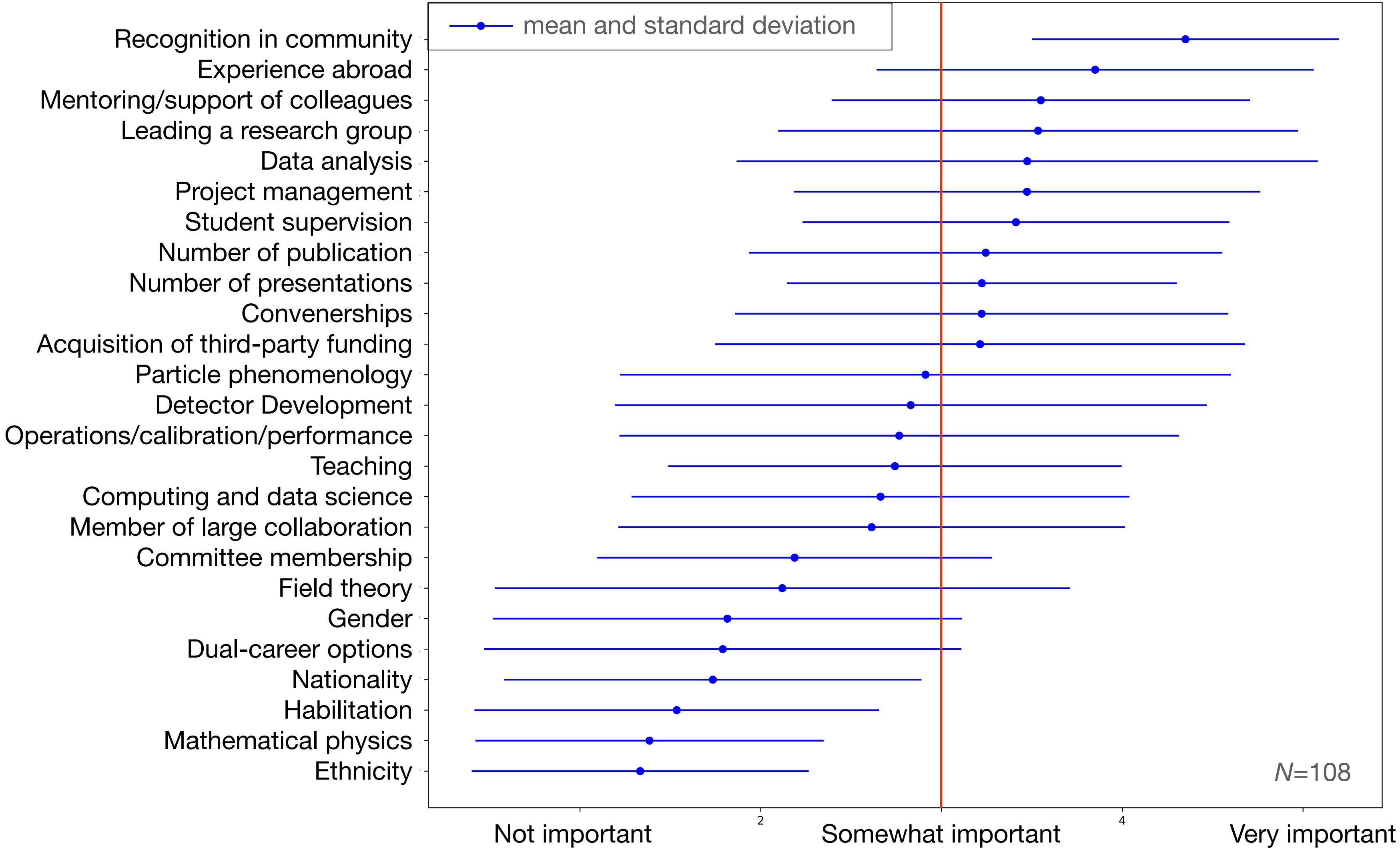
## Theory

Importance: teaching



**~50% find teaching at least “somewhat important” for their first permanent position**

# Subjective Importance: Summary



# Outlook

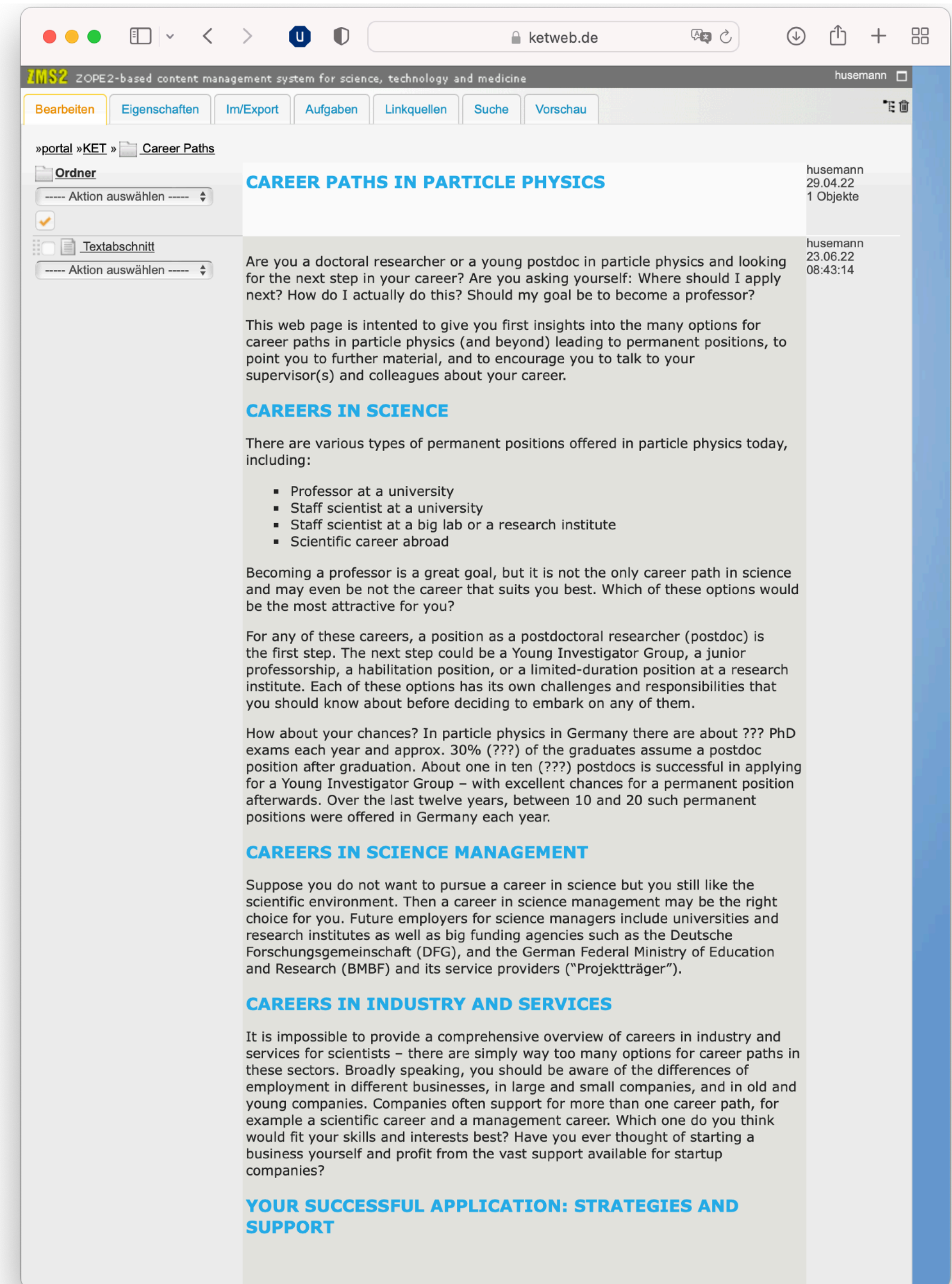
- Warning: this is a snapshot of the last decade → what has worked for careers in the past decade may not be working any more in the future
- There is more to be analyzed – ideas welcome



# Outlook

## Plans for Web Site

- Concept for informing/educating early-career researchers about career paths:
  - Address target group directly/personally
  - Give concise overview of all options
  - Point readers to additional information (including survey on career path)
- Started to create subpage on ketweb.de (so far: hidden)



# Backup Slides

# Correlations

## Heatmap

