

How to Write a Successful Aging Grant Application to NIH: Hints and Tips

Fredda Blanchard-Fields
Georgia Institute of Technology

Representative Sampling

- Have a plan
- Take it seriously
- Understand sampling issues beyond college students

Importance of Representative Sampling

- College students vs. Community living middle-aged and older adults
- Heterogeneity of middle-aged and older adults samples
 - Health
 - Education
 - Diversity
 - SES

Hints and Tips

- Random sampling
 - Survey sampling groups
- Maximize response rate (e.g. hard to obtain populations) and increase diversity
 - Testing at home, workplace, lab
- Provide rationale for procedure

An Illustrative Rationale

- Draw from listed telephone numbers rather than RDD
 - Stratify by age group
 - Obtain names/addresses
 - Target ethnic minority subgroups
 - Additional demographic information from Dept. of Motor Vehicles, voter registration

Explain drawbacks

- Example:
 - Very high, very low income individuals, and minorities more likely to have unlisted phone numbers
 - Weaknesses made up for by achieving higher rate of minority inclusion due to oversampling
 - Participants receive a letter legitimizing study

Bottom Line

Sampling strategy and testing in homes/workplaces will result in a sample that is more diverse in terms of educational level, SES, and minority and ethnic membership

Homogeneity of Samples

- Establish phenomenon
- Extreme age group designs

Example

- We used extreme age group designs for very specific reasons. We are establishing a phenomenon in older adults that they are more effective at emotion regulation and exploring the degree to which there are costs to the motivation to engage in emotion regulation. Thus, theoretically we chose a comparison group that represents an extreme divergence in a) motivation to down regulate negative emotion (young adults) and b) cognitive capacity (young adults). When we have more definitively established the phenomenon in older adults, we will be very interested in exploring the developmental trajectory of this phenomenon by including middle-aged adults and possibly conducting a short-term longitudinal design

Age: Continuous vs. Categorical

We selected to use categorical age groups in order to examine possible curvilinear relationships and age threshold effects (e.g., variable relationships could occur for one age group and not other age groups). In addition, **we did not expect to observe significant age-related phenomenon over the 10 year period separating the age groups.** Having said this, the reviewer raises a very good point regarding the treatment of age as continuous. Thus, **in addition to modifying the age range for middle adults, we will conduct supplementary analyses using age as a continuous variable.**

Cohort differences and sampling representativeness

... make sure that all **age groups are comparable** in as many variables as possible with one's sampling procedure. ...use the **same recruitment mechanism for all age groups** to reduce the possibility of amplified cohort differences that are typically exacerbated by differential recruitment techniques for different age groups (e.g., sampling from the university for young adults, senior citizen centers for older adults). In our sampling section, we will apply the same recruitment techniques and obtain comparable SES distributions across age groups

Recruitment of Older Adults

- Recruitment Sources
 - Organizations
 - Newspaper ads
 - Newsletters
 - Professional recruitment companies
 - Community talks
 - Snowballing
- Compensation for participation
- Peer recruiters and testers
- On- vs. Off campus testing issues
- Background assessments (e.g., what to include)

Creating and maintaining a participant data set

- Computer data base
- Call backs (phone protocols, phone screening, etc.)
- Feedback to participants
- Lab web pages

Participant Etiquette (Guidelines for Interacting with Older Participants)

- Dress, addressing older adults
- Scheduling time for establishing rapport and debriefing
- Attend to hearing and vision needs
- No elderspeak
- Giving breaks

Environmental Conditions

- Parking
- Creating stimuli
- Lighting issues
- Noise/distractions
- Other special concerns for the elderly

Cognitive Functioning

- High vs. low cognitive functioning
 - Cognitive batteries
- Cognitive vs. other mechanisms
- Inclusion/Exclusion
 - When to exclude low functioning older adults
 - College students tend to be uniformly high in cognitive functioning in some universities

Health Implications

- Watch levels of analysis
- Biomarkers
- Screening

What is aging-relevant research?

- Focus on older adults vs. age comparisons vs. perceptions of older adults
- Developmental perspective
- Not simply adding age as a variable
 - Age-related variables

Choosing age groups

- Theoretically based rationale for including an age group
- The Fourth Age
- Example: Why include midlife adults?
 - Some aspects of variable of interest show changes in midlife
 - Provide clues regarding prevention of aging-related changes

Theory and Literature Review

- Mainstream theory/literature vs. aging theory/literature
- Each informs the other
- Example:
 - Social Cognition and Aging

Miscellaneous Items

- The research team: Use your resources well
 - Consultants
- Feasibility Issues with Older Adults
 - Examples: PDA, Transportation issues
- Measurement Issues