

Survey Methodological Considerations:

Older Adults

✓ Survey research of older adults faces some unique challenges due to the strong associations between age, cognition, and health status.

- Even if health status is not a research variable under consideration, it is essential to consider potential age-related modifying variables including chronic illness, use of medications, institutional residency, etc.

Recommendation: Capturing even cursory health information enables researchers to examine it for potential as a confounding variable.

Recommendation: Capture health information in a survey with other demographic information and be clear about how private information will be protected.

- Age-related declines in working memory lead to potential problems where they must hold, manipulate, and integrate moderate amounts of data over short time spans such as with complex sentences in telephone surveys.

Recommendation: Paying attention to question complexity and wording in the survey design process will pay off in higher quality and reliability.

- Age-related declines in episodic memory lead to increased challenges remembering where or when older adults experienced an event or learned a fact.

Recommendation: Restating the general context for a set of questions can be particularly helpful. It is important to consider the importance of specifics of time and place as these may be potential sources of error.

✓ Using age as a demographic marker to segment out these issues has challenges as age can be a conflated variable that often represents three time-related dimensions:

- **Aging Effect** – Physical and cognitive changes associated with aging.
- **Period Effect** – Consequence of influences that occur across time that tends to be uniform across cohorts.
- **Cohort Effect** – Consequence of influences that result from the unique social-historical time at which a group of individuals is born.

✓ The choice of survey modality is also a consideration with older adult populations.

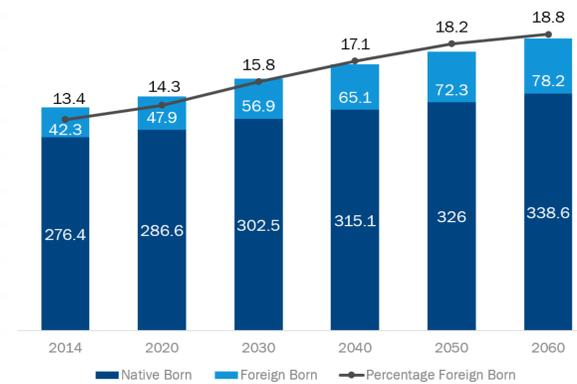
- With increase in internet panels, online surveys, and mobile surveys, adequate and appropriate representation of older adults in overall general population surveys is an increasing challenge.

Recommendation: Evaluate potential bias at each stage of the research process including particular focus on coverage bias and overall & item nonresponse bias.

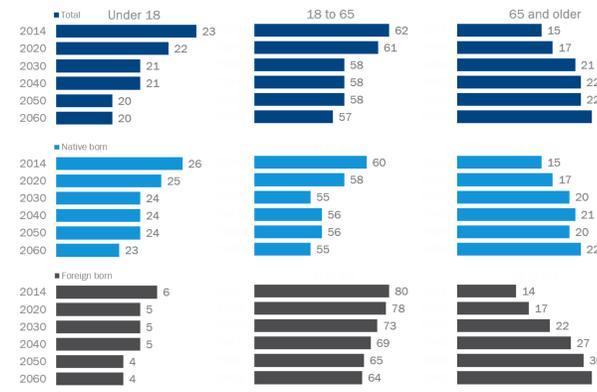
Recommendation: With online or mobile surveys, use high contrast colors, large fonts, and button sizes that are larger than usual.

The Changing US Landscape

US Population by Nativity: 2014 to 2060



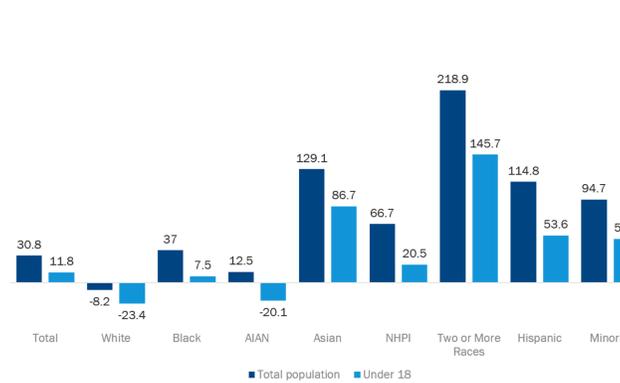
Age Distribution of the Population by Nativity: 2014 to 2060



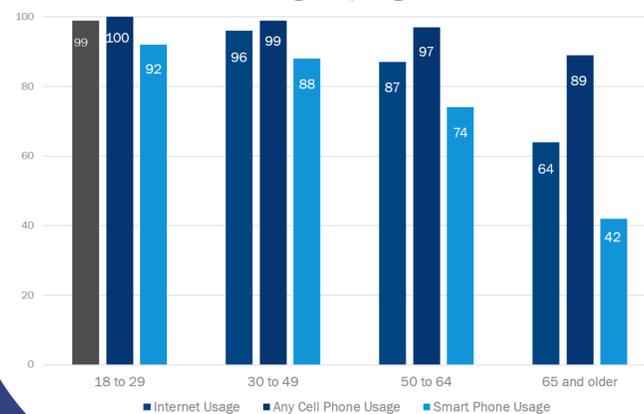
Change in US Population by Nativity and Age: 2014 - 2060



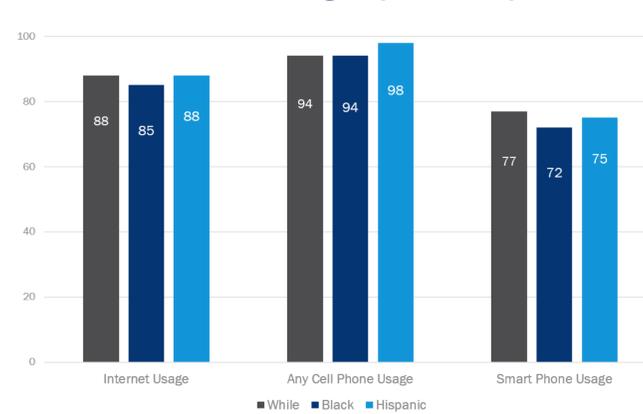
Change in Total Population Under 18 by Race and Hispanic Origin



US Adult Internet and Cell Phone Usage by Age Group



US Adult Internet and Cell Phone Usage by Ethnicity



Sources: Colby, Sandra L. and Jennifer M. Ortman, Projections of the Size and Composition of the U.S. Population: 2014 to 2060, Current Population Reports, P25-1143, U.S. Census Bureau, Washington, DC, 2014.
Pew Research Center, Internet/Broadband Fact Sheet, January 12, 2017, Retrieved from: <http://www.pewinternet.org/fact-sheet/internet-broadband/>

Survey Methodological Considerations:

Diverse Populations

✓ Language translation is only the tip of the iceberg. Well translated survey instruments possess:

- **Semantic Equivalence Across Language** – Refers to the words and sentence structure in the translated instrument expressing the same meaning as the source.
- **Conceptual Equivalence Across Cultures** – Refers to when the concept being measured is the same across groups, although wording may be different.
- **Normative Equivalence to the Source Survey** – Refers to the ability of the translated instrument to address social norms that differ across cultures.

Recommendation: Use at least three linguistically distinct measures (each item using different terms for the same construct) to help discern if the constructs works equivalently across different languages.

Recommendation: Using a numerical scale can increase equivalency across groups. However, people tend to use only a small percentage of the numbers on the scale; in some cultures specific numbers are considered lucky or unlucky; and, numerical scales still need to be anchored by a verbal term that translates across languages.

Recommendation: Cognitive pretesting should be used as a necessary first step in the translation of multi-language instruments.

✓ Studies of attitudes using Likert-scale questions are prone to response style differences across cultures. Findings may be due to differences in how people take surveys as opposed to differences in the constructs being studied. Response styles impacted include:

- **Acquiescence** – Tendency to agree or disagree with survey items regardless of their content.
- **Extreme Response Styles (ERS)** – Tendency to use the extreme categories on rating scales.
- **Middle Response Styles (MRS)** – Tendency to use the middle categories on rating scales.

Recommendation: Use Likert Scales with a greater number of categories to mediate the impact of ERS.

Recommendation: Reduce use of “strongly agree” to “strongly disagree” scales to reduce acquiescence challenges.

✓ Several methods exist for translating and assessing the quality of translation of survey instruments. These include:

- **Decentering** – Items and concepts are paraphrased and translations are made based on the paraphrased items to ensure natural language and concept equivalency.
- **Direct Translation** – Close literal translations can be effective, but care must be taken to ensure appropriate terms are used for the constructs to be tested and to ensure that items still sound natural in the target language.