### The Lifecycle of a Probability Panelist

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AmeriSpeak after Five Years 03.09.21

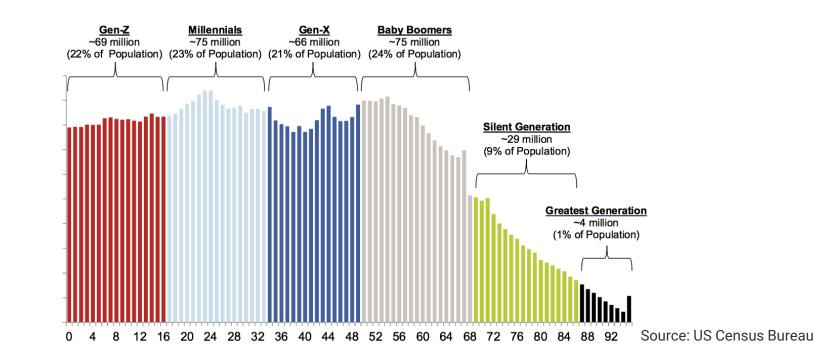
David Dutwin Ipek Bilgen



#### The Concept of Lifecycle

#### Panels are not static.

- Panels are like the human race: there are generations
  - New generations are "born"
  - Old generations "fade away"
  - As such, the loss in older generations and the insertion of new generations will change the makeup of the overall entity. (For example: Americans are more Hispanic today than a generation ago).



### Agenda

01 A look at AmeriSpeak over time

**02** Is over-time participatory decline systematic?

**03** The ebb and flow of attrition and recruitment

**04** Can we predict panel nonresponse?

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## A look at AmeriSpeak over time

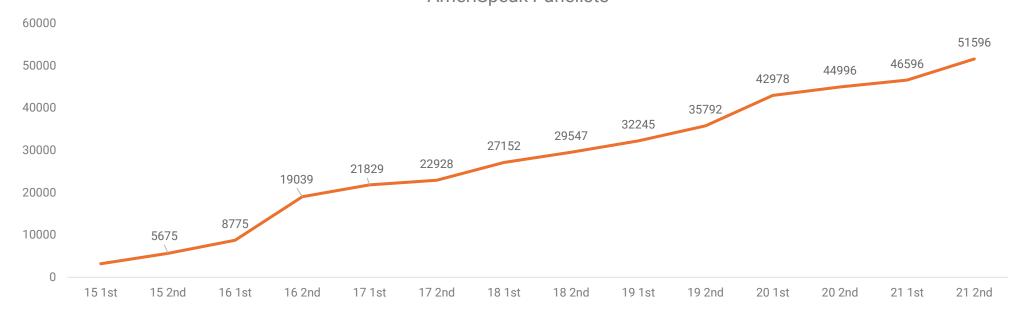


#### The AmeriSpeak Probability Based Panel

#### The Panel Build

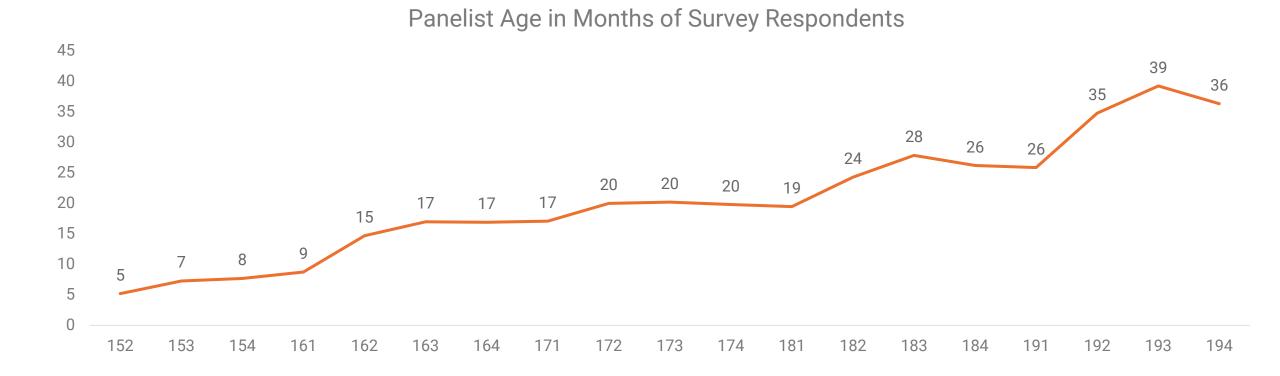
#### • Typically, Area Probability National Sample

- 4 Mailing with preincentive main recruiting design
- Door to door non-response follow up for 1/5 of those invited
- 2015-19 recruiting rate of 35%

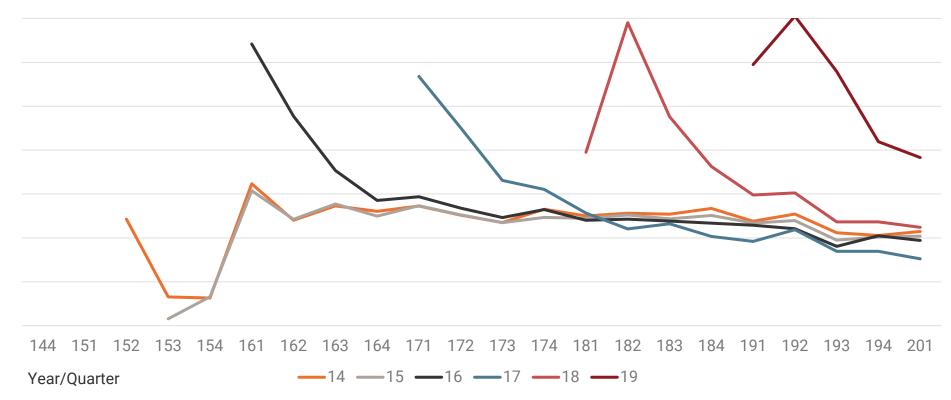


#### AmeriSpeak Panelists

#### The typical respondent has now been in the panel for three years.



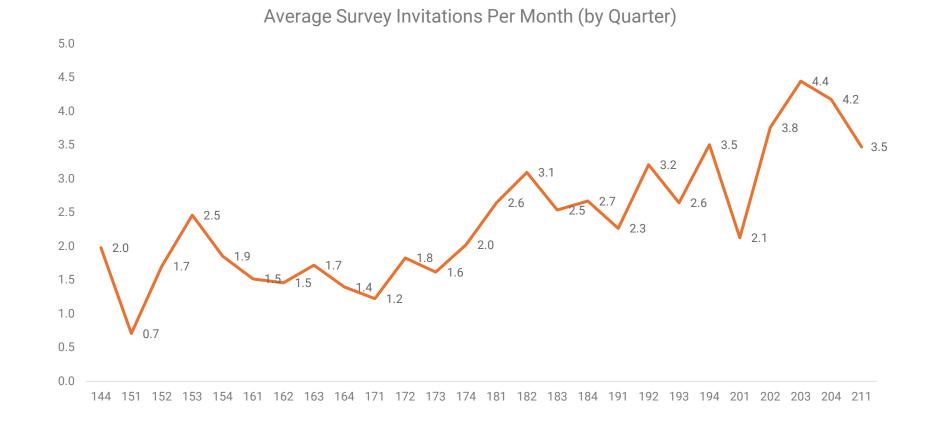
- Panelists have a "honeymoon" period that lasts about 6-9 months
- There is then a slower decline in participation over time that is markedly flat
  - Indeed, the participation rate of 2015 panelists today is about the same as 2018 panelists!



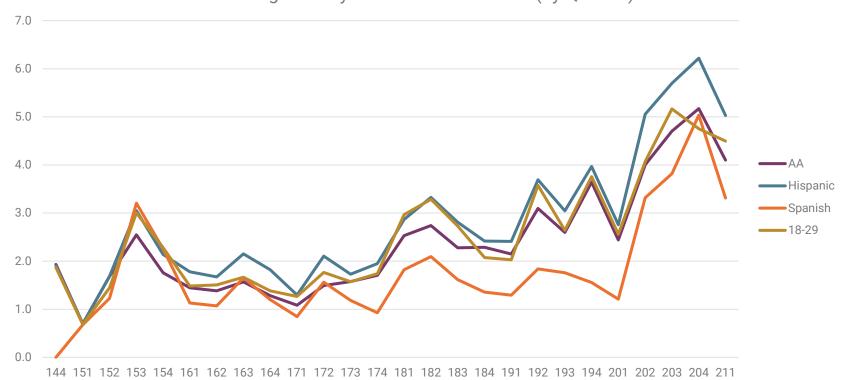
Participation Rates By Annual Panelist

#### The AmeriSpeak Probability Based Panel

- On average AmeriSpeak panelists are invited to a survey once a week
  - Our goal has always been at the once per week level, but it took years to attain it
  - A noticeable "Covid peak" in early 2020, but regression to the mean since then



- Some groups are invited more than others
  - Currently over-recruiting Hispanics to lighten their burden
  - Generally, however, there is low variable in group invitation burden, ranging in 2020 from 3 to 6 per week

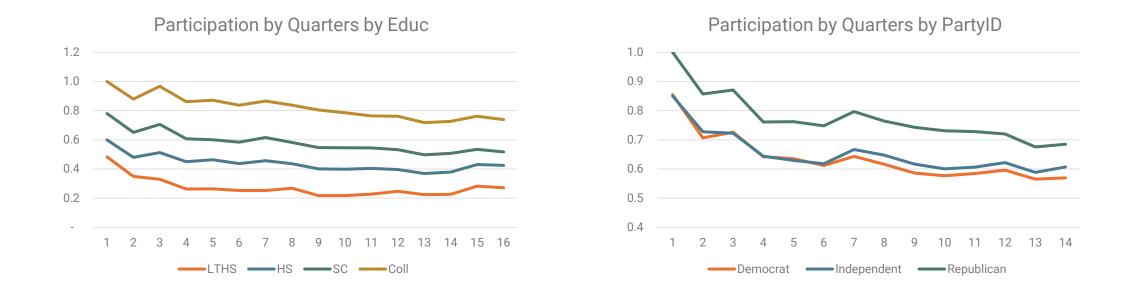


Average Survey Invitations Per Month (by Quarter)

## Is over-time participatory decline systematic?

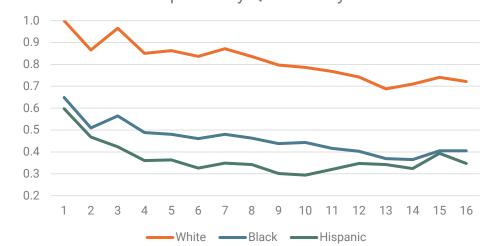


- The following charts show panelists in their "x" quarter of membership, regardless of when they joined.
- Many metrics like education and income (not shown) show little change.
- Republicans participate more, but again, with no relative change over time.



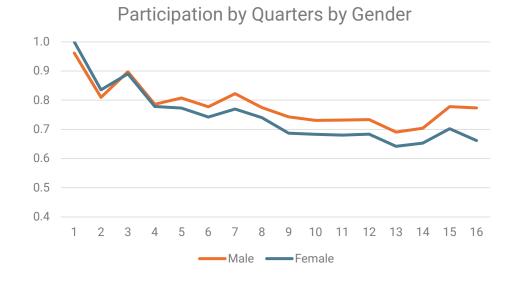
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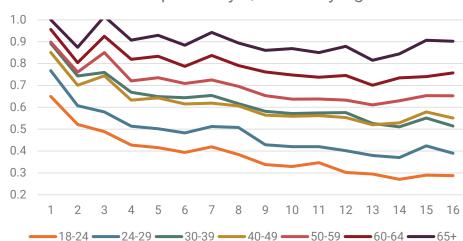
- There are insignificant differences in participation by race over time.
- Hispanic participation has in fact slightly increased over time, likely due to more focused efforts to maintain their engagement.





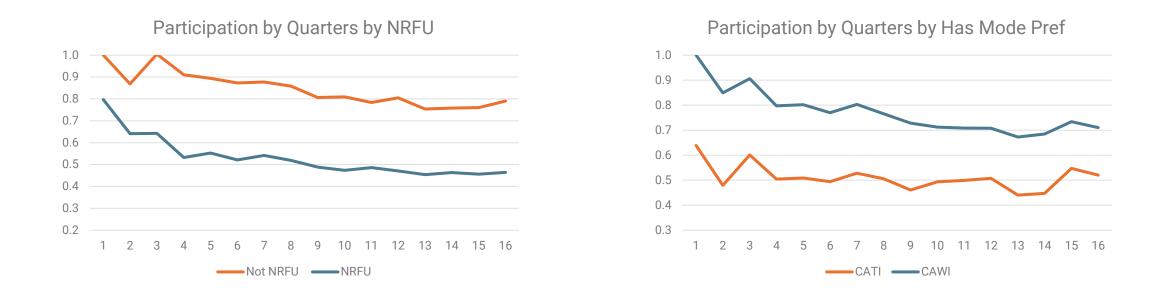
#### • Some metrics exhibit some "spread" over time



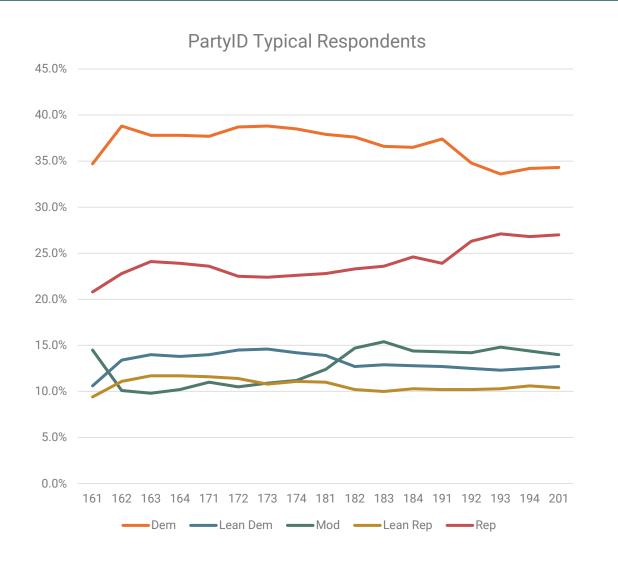


Participation by Quarters by Age

• Generally insignificant differences over time for NRFU status and mode status.



- Taking a different perspective on panel makeup is shifting the x-axis to year-quarters. This will blend systematic nonresponse over time as well as the impact of fresh recruiting on a given cross section.
- AmeriSpeak is more representative by PartyID than ever before

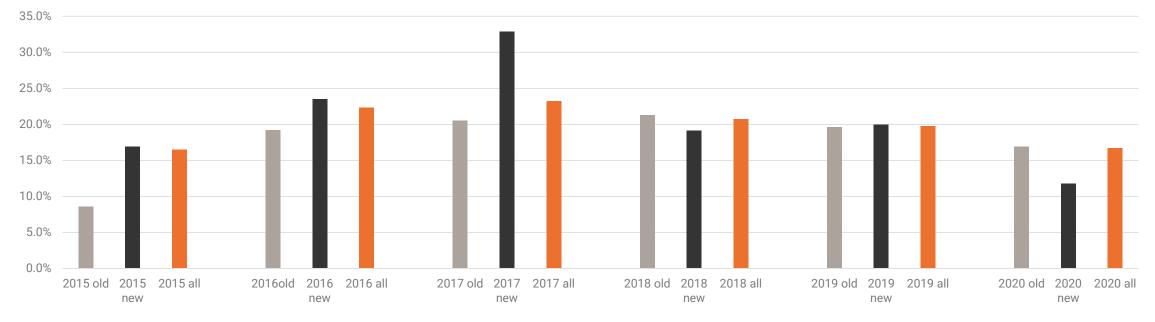


# The ebb and flow of attrition and recruitment



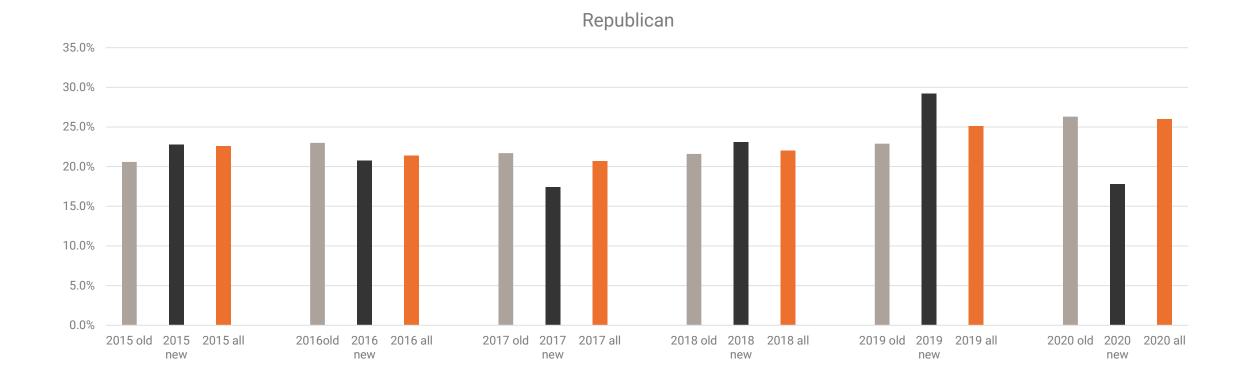
#### Panelists decline in participation, but are "replaced" by new recruits

- Each year the "old" panelists decline to some degree in participation
- New recruits keep the balance
- Below: "effective" panelists, that is, panelists \* their participation rate, in aggregate



Income Under \$25,000

**Another Example:** 



18

## Can we predict panel nonresponse?



#### Can we Predict Who Will Become a Panelist?

- Big Data provides a wealth of data on both panelists and non-panelists with which to explore potential patterns of nonresponse
  - Consumer behavior
  - Voter behavior
  - Census data
  - Auto and housing purchase data
  - Financial data

- Positive Predictive Rate = 11%
- Panelists Correctly Classified = 6%

#### **Can we Predict Who Will Become Less Active?**

#### In short, not well...and this is a great thing!

- Regression models and panelist demographics explain less than 5% of variance.
- Big data models do not do much better

		Predicted	
		Not VL	Very Low
Actual	Not VL	5170	5362
	Very Low	3304	4501

		Predicted	Predicted	
		Active	None	
Actual	Active	17740	587	
	Nones	3839	169	

Low Participators

- Positive Predictive Rate = 58%
- Very Low Classified = 46%

#### **Recent Nones**

- Positive Predictive Rate = 42%
- Nones Correctly Classified = 22%

#### What do lifecycle analyses tell us?

- Panel refreshing should NOT be simple random samples. If it were, over time, the sample would become less representative. Panel refreshing should be *responsive and reactive* to changes in effective panel participation.
- The biggest decline in panel participation occurs in the first 6 months. This is the best time for interventions to minimize declines.
- People stick with AmeriSpeak. We keep our panelist engaged by offering them a survey each week. We are able to keep our panelists for 3 years in the panel. Our other engagement efforts (such as newsletters, social media presence, etc.) also maybe helping this.
- We do not see a huge systematic participation decline over time, largely thanks to the fact that AmeriSpeak has periodically made adjustments to its sample to account for over-time systematic nonresponse. This is mainly due to our panel upkeep/big investment on annual recruitment.
- Systematic nonresponse both in AmeriSpeak recruiting and in panel attrition is, at worst, weak. Still, the lesson of the panel lifecycle is that nonresponse can *compound* over time, thereby still requiring strategic efforts to minimize and mitigate.

+NORC

## Thank you.

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