

Examination of Panelists' Reported Satisfaction, Response, and Retention over Time in a Multi-Purpose Probability Sample Panel

76th Annual AAPOR Conference

May 13, 2021

Ipek Bilgen
David Dutwin
Poulami Maitra
Susan Paddock
J. Michael Dennis



Overview

01 Study Background & Purpose

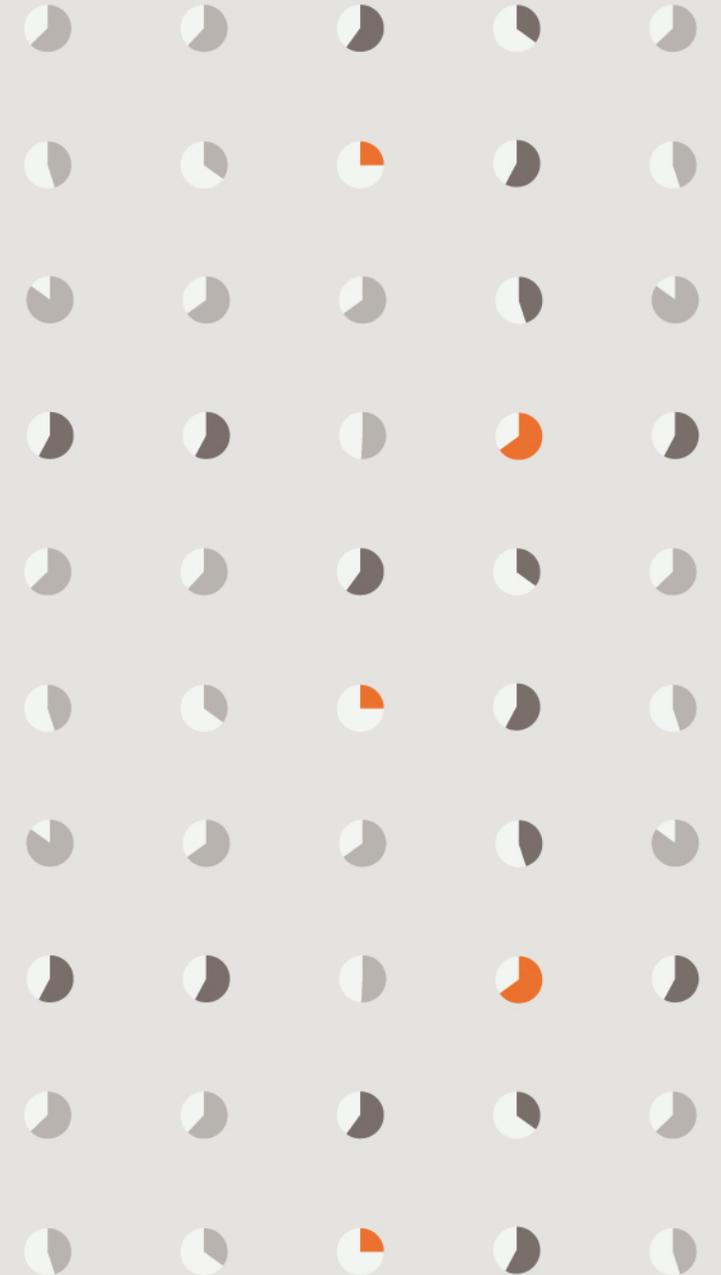
02 Data: AmeriSpeak Panel

03 Self-Reported Survey Satisfaction

04 Overall Results: panelist activity and self-reported satisfaction relationship

05 Trend Analyses Results: Panelist activity and self-reported satisfaction over time

06 Conclusion and Discussion



- In both online panels and longitudinal surveys, panel attrition and low participation rates impact survey estimates, total survey error, as well as panel operation costs
- Panel retention and high survey cooperation rates are also crucial to support studies of lower incidence populations and to potentially minimize nonresponse bias
- One of the potential indicators of low participation and panel attrition/turnover is panelist dissatisfaction

Big Picture Research Questions

- Is it feasible to predict panel attrition and nonresponse to subsequent surveys using overall and over time panelist satisfaction scores?
- Who has lower panelist satisfaction scores?
 - If (and how) their panelist satisfaction scores change over time?
- How do survey intervention trends relate to panelist satisfaction and cooperation?

Predict panelist activity and propensity to respond to subsequent surveys using:

- Overall self-reported panelist satisfaction and change in survey-level satisfaction items (asked at the end of each subsequent survey) over time
- Survey-level characteristics and interventions such as incentive amount, fielding period, survey length, etc.

Data & Methods

Panelists rated their survey experience during each survey after recruitment, using NORC's AmeriSpeak probability-based panel

- Survey completion mode after recruitment = Web and Phone
- N = 30,259 panelists
 - At least one completed survey w/ satisfaction items
- Self-reported satisfaction items are asked after recruitment at the end of each subsequent survey administered during panelists' tenure
 - Survey satisfaction rating
 - 7-point response scale from Poor to Excellent
 - Identification of a technical issue
 - Open-ended feedback

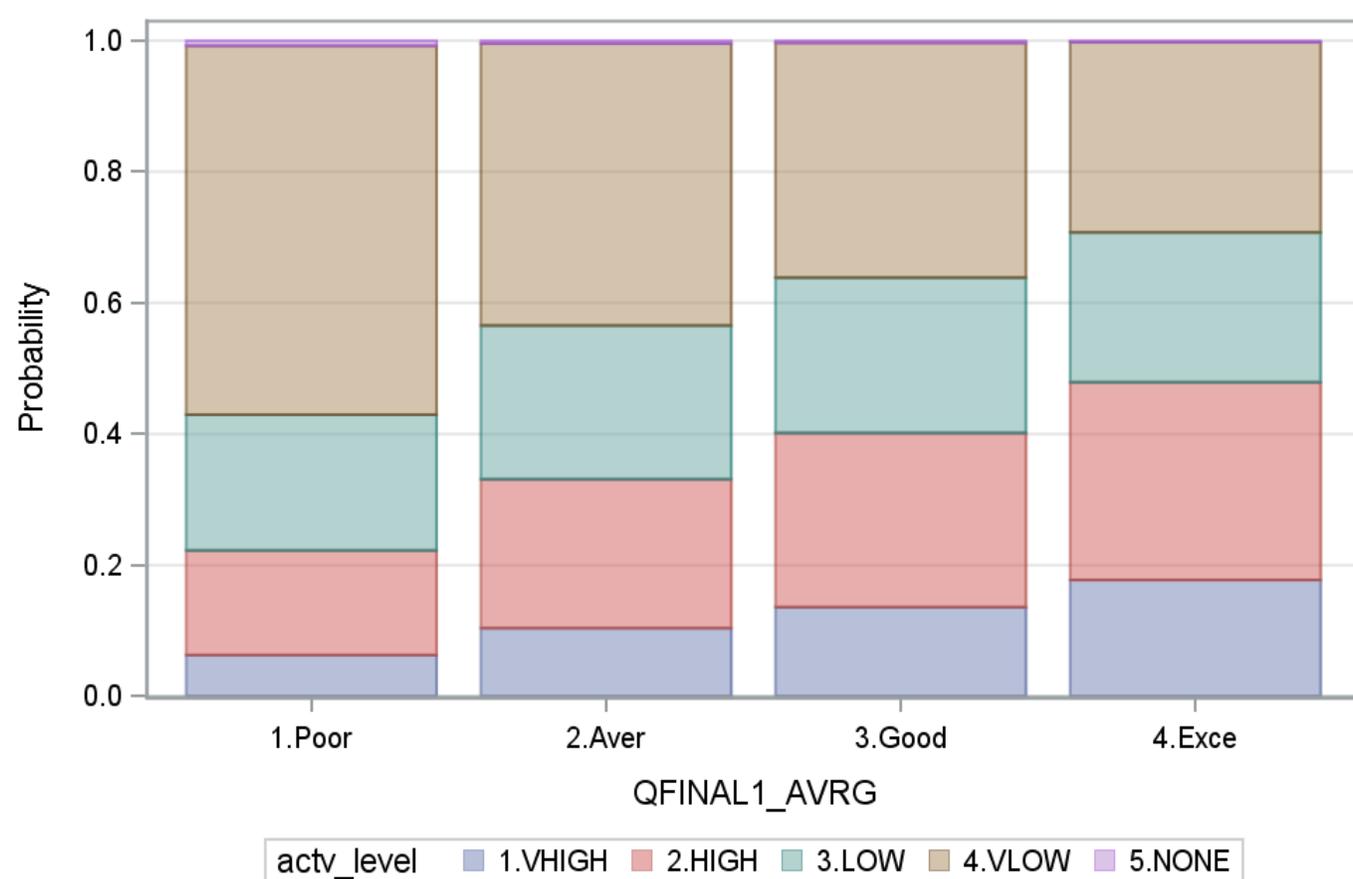
In this presentation, we are specifically focusing on survey satisfaction rating asked at the end of each survey.

Models used for the analyses

- **Overall panelist activity and self-reported satisfaction relationship**
 - Multinomial logistic regression
- **Trend Analyses: Panelist activity and self-reported satisfaction over time**
 - Multi-level/Hierarchical logistic regression models
 - Level 1 = Time point for each survey; Level 2 = Panelist

Results

Predicted Cumulative Probabilities for Participation Activity Level



Fit computed at QFINAL1_SD=0.805 GENDER_I=1.612 agegrp=4.611 Racethnicity=1.774 EDUC=3.063 INCOME=2.907 EMPLOY_I=2.888 MARITAL_I=2.664 DIVISION=5.269 METRO_I=0.845 INTERNET_I=0.823 Child=1.711 HOUSING_I=1.406 HHSIZE_I=2.946

Average survey satisfaction rating during panelists' tenure

Rating: 1-2 ("Poor")

Rating: 3-4 ("Average")

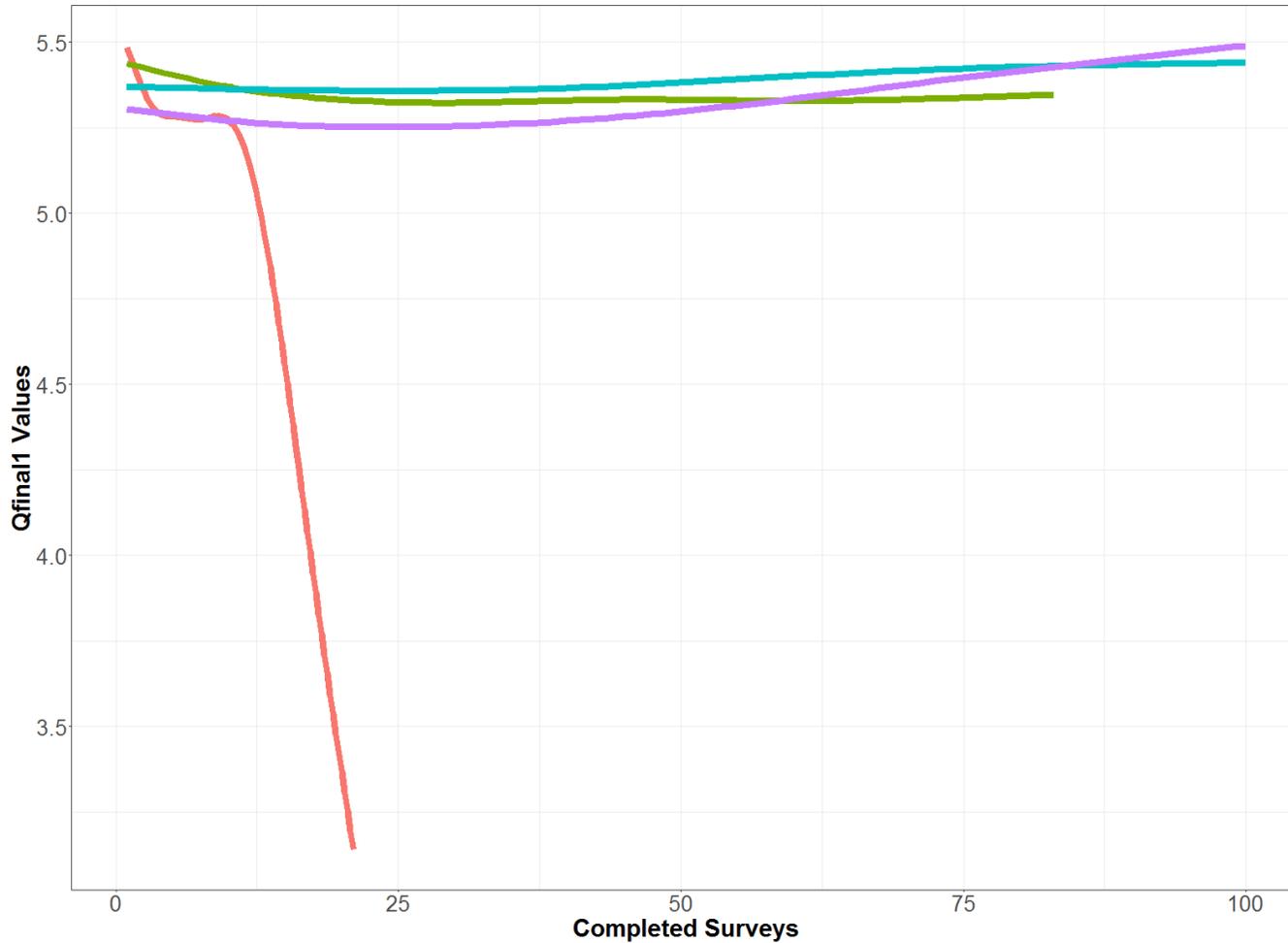
Rating: 5-6 ("Good")

Rating: 7 ("Excellent")



Overall, panelists w/ lower ratings are less likely to participate in surveys.

Self Reported Satisfaction

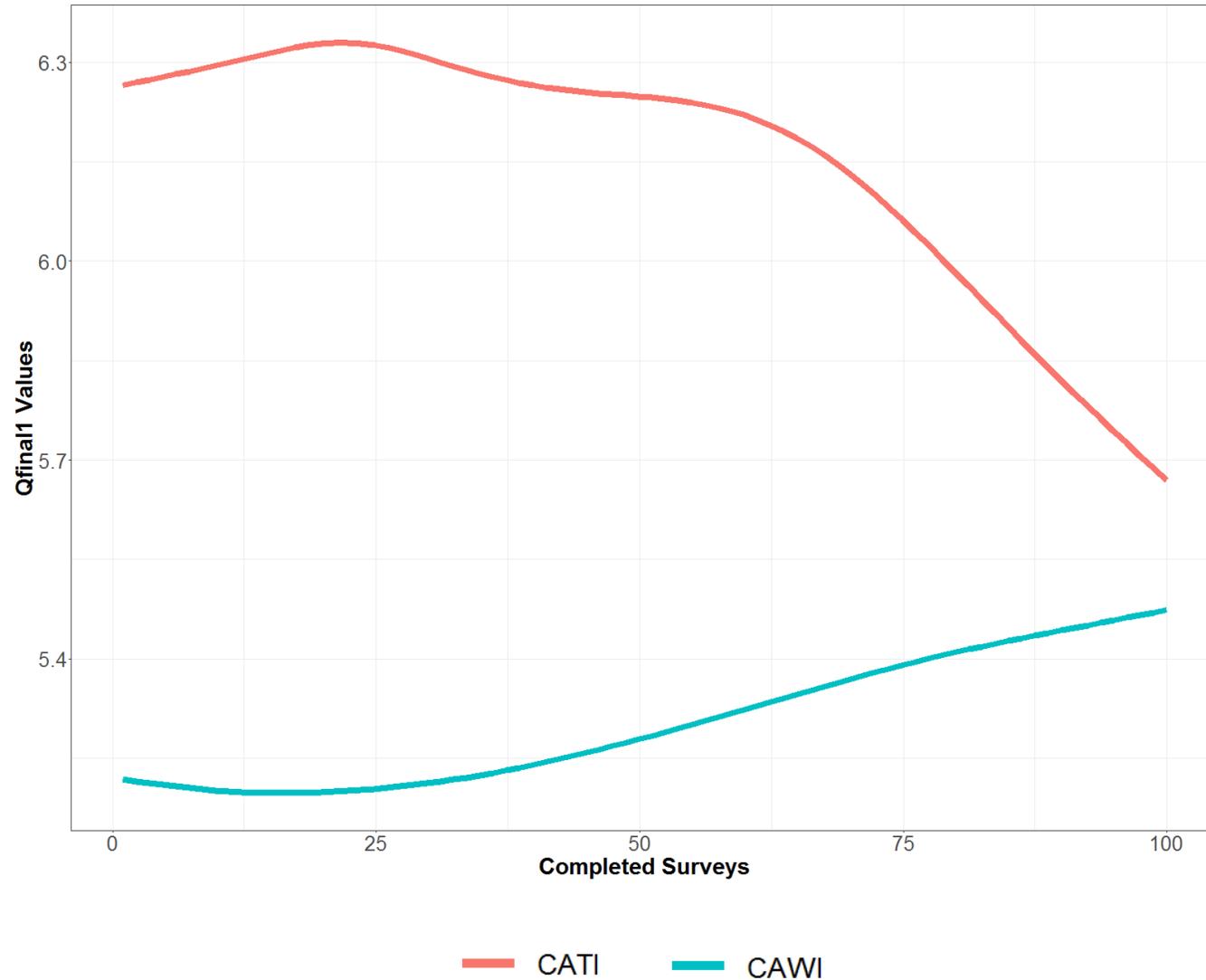


- Less than 25th Percentile
- Between 25th and 50th Percentile
- Between 50th and 75th Percentile
- Greater than the 75th Percentile



Significant differences in panel satisfaction change among panelists w/ lowest completion rates (less than 25th percentile)

Self Reported Satisfaction



CATI panelists have overall higher satisfaction scores

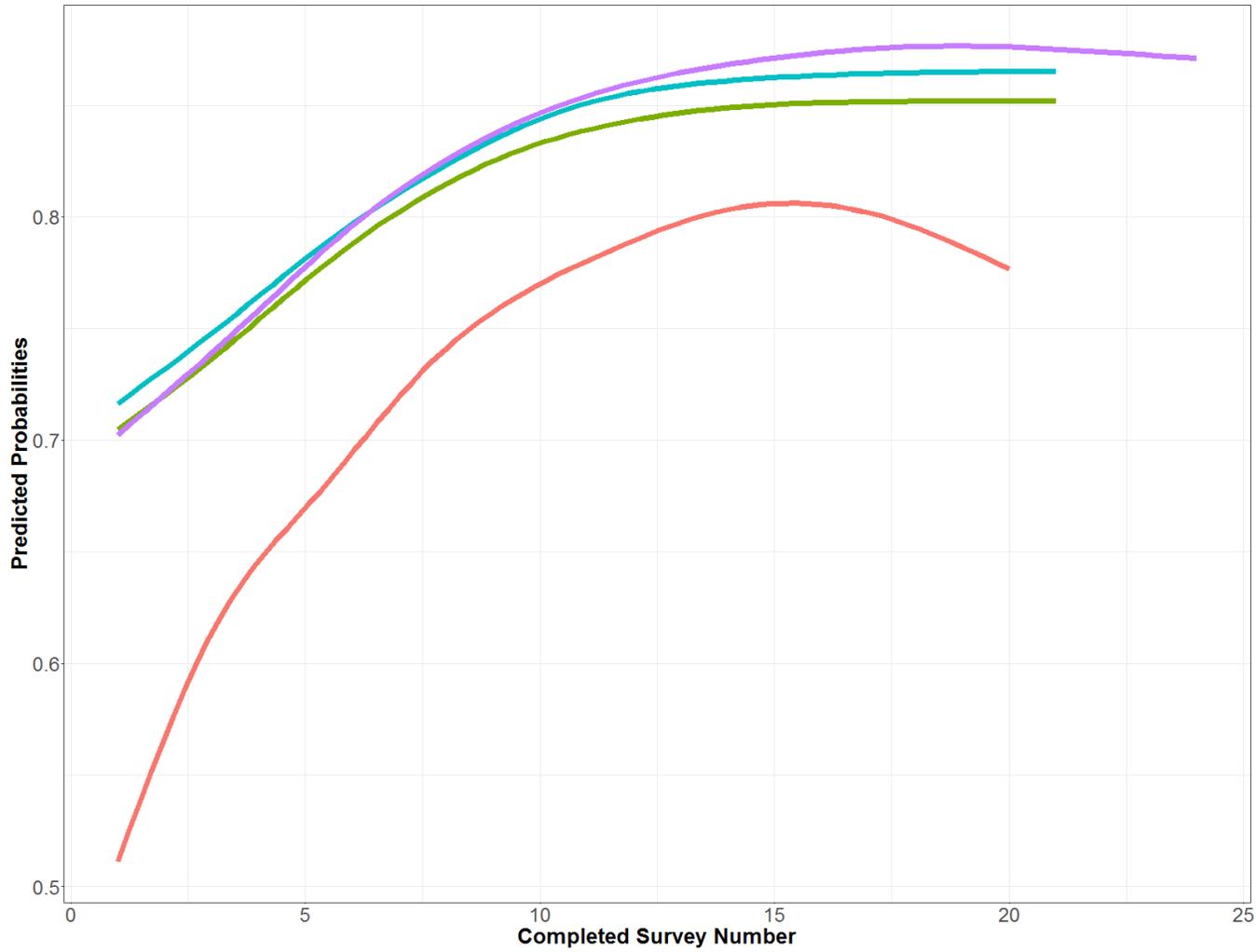
CATI: Decline over time

CAWI: Increase over time

No large differences in panel satisfaction change over time among panelists w/ different demographics

- **Education**
 - Higher education group has overall lower satisfaction scores, which slightly increases over time.
- **Race/ethnicity**
 - Non-Hispanic White group has overall lower satisfaction scores, which slightly increases over time
- **Age: Slight increase among ages 35-49 and 50-64 over time**
- **Gender: Slight decline among women's satisfaction scores over time**
- **Initial respondents versus NRFU**
 - Overall lower satisfaction scores among NRFU

Predicted Response Propensity

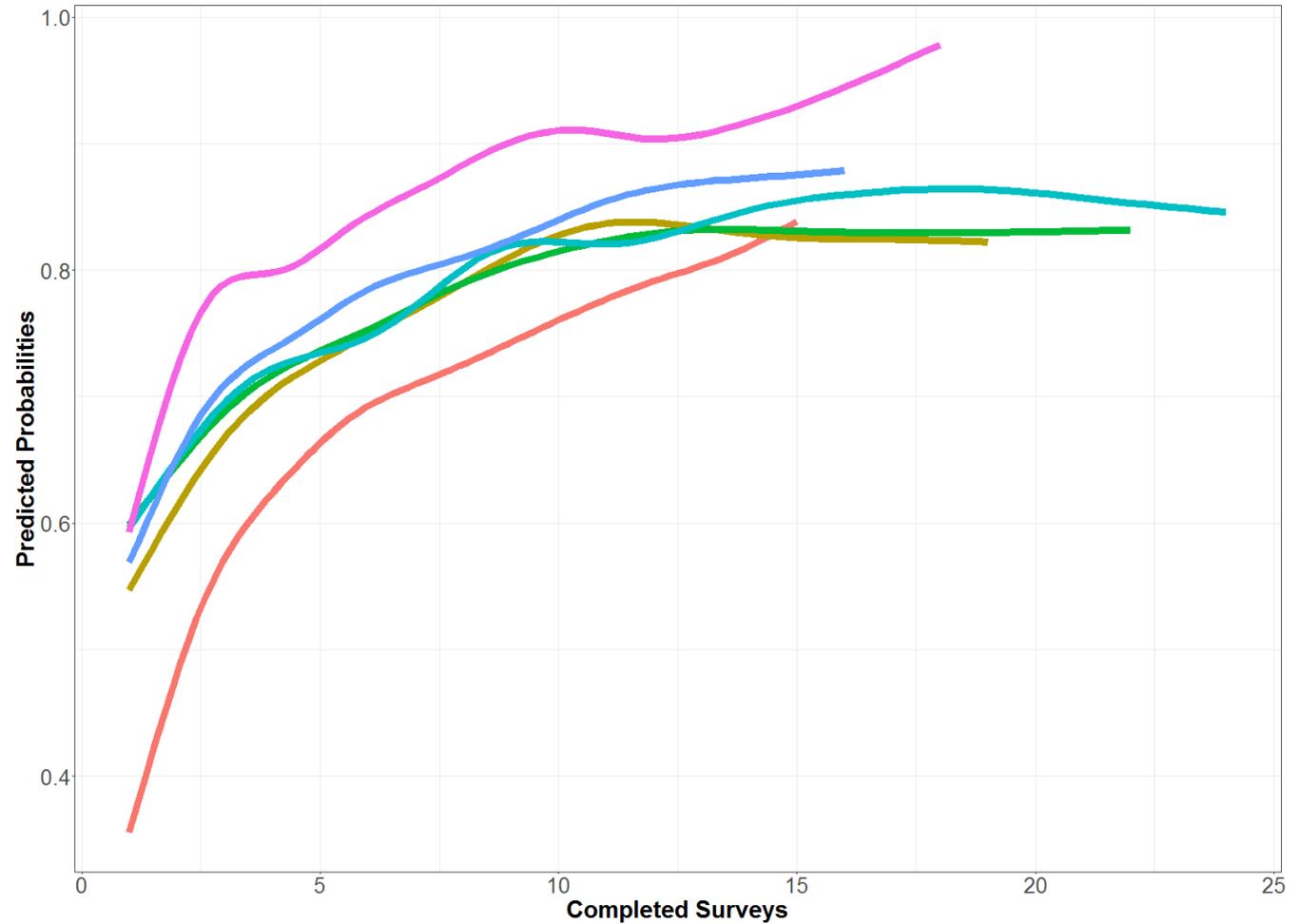


Qfinal1 Scores Groups 0 - 4 5 6 7



More steep increase in propensity scores over time among panelists w/ low satisfaction scores.

Predicted Response Propensity



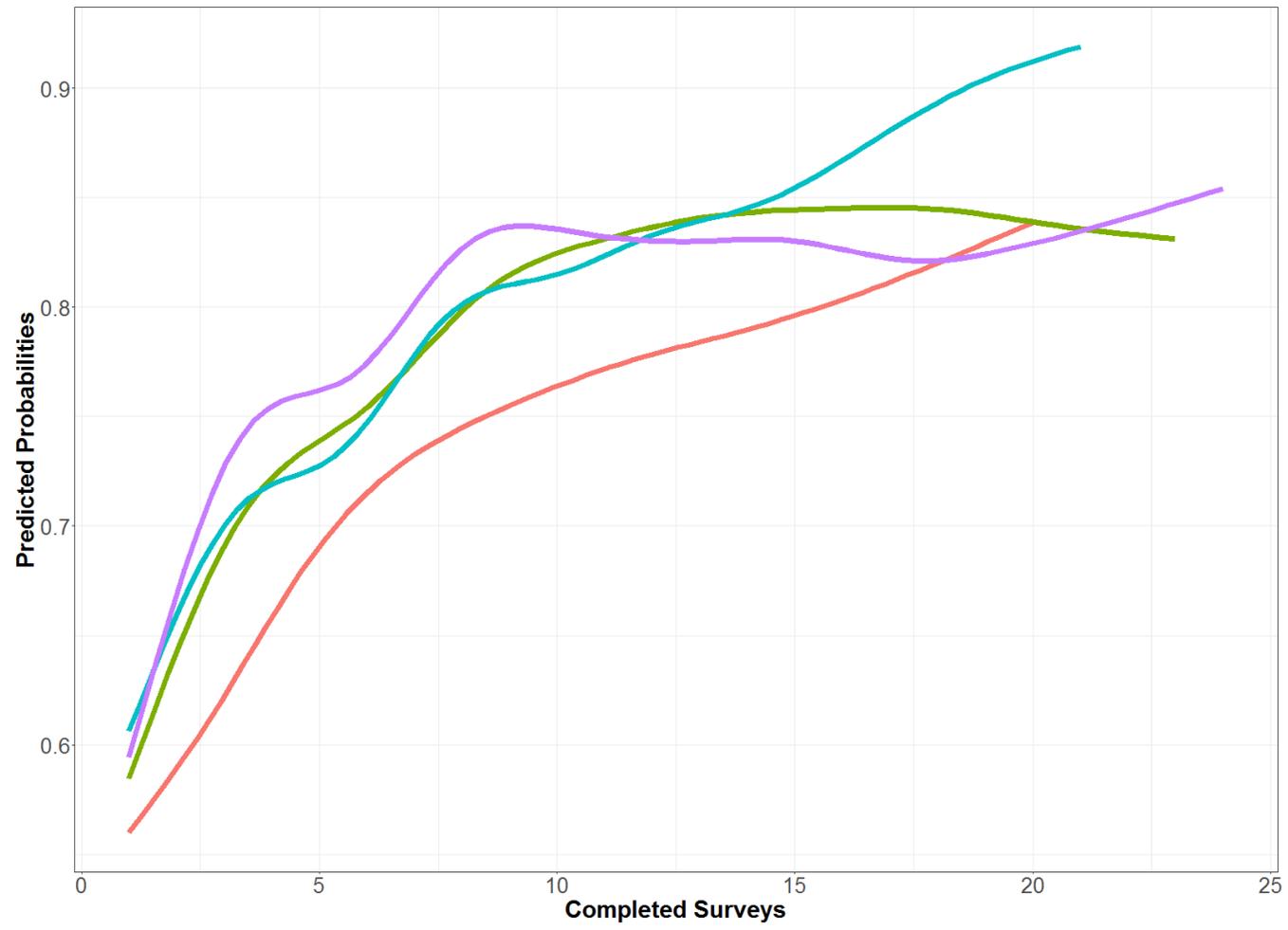
Incentive Differences

- \$11 & lower
- Between -\$6 and -\$10
- Between -\$5 and \$0
- Between \$0 and \$5
- Between \$6 and \$10
- \$11 & above



Changes less than \$10 do not make a significant difference in predicted response propensity scores in subsequent surveys.

Predicted Response Propensity

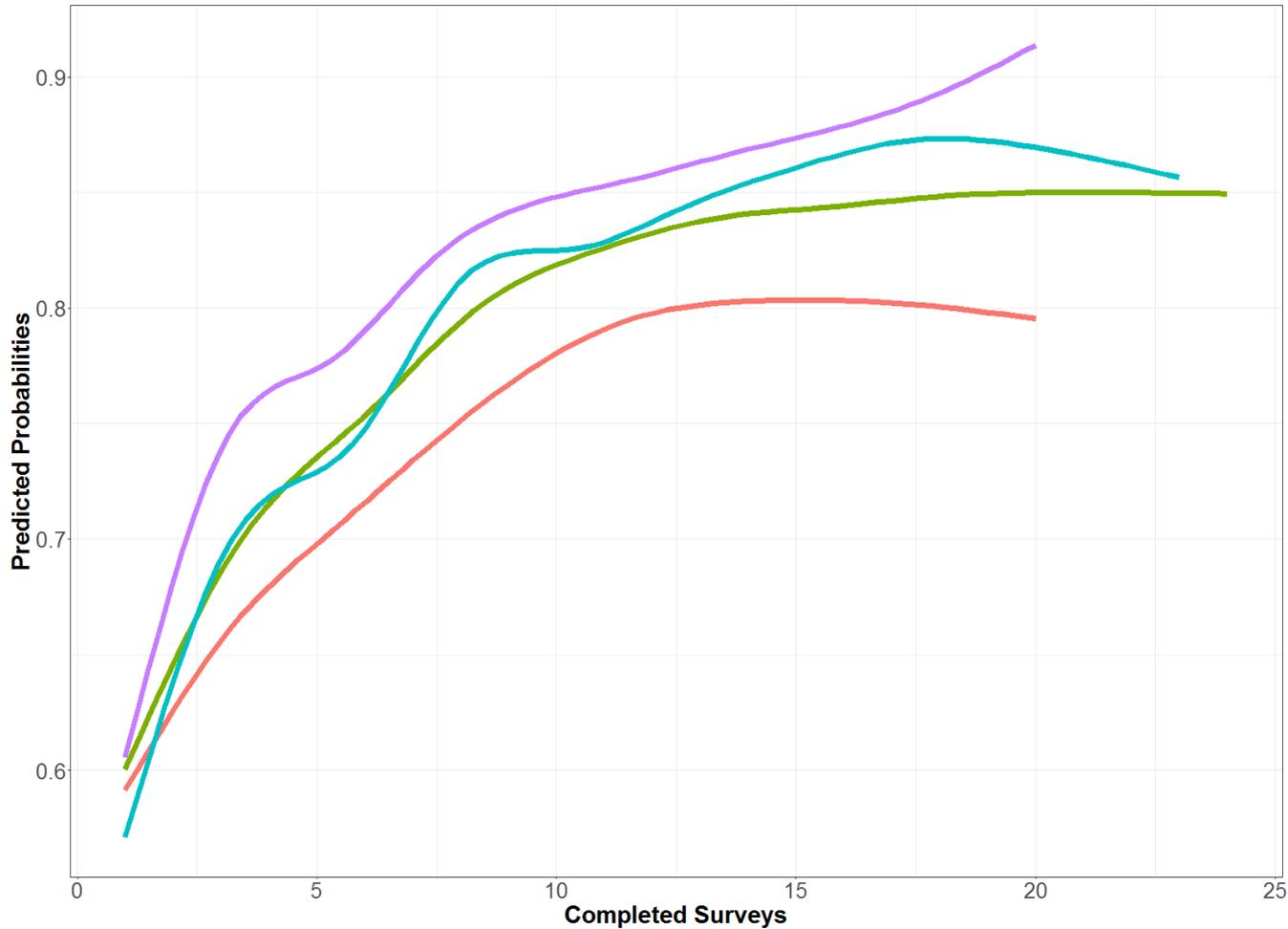


Changes in survey length are not associated with predicted response propensity scores in subsequent surveys.

Survey Length Differences

- Decreased by more than 15 mins
- Increases by less than 15 mins
- Decreased by less than 15 mins
- Increases by more than 15 mins

Predicted Response Propensity



Drastic survey fielding length changes (more than 2 weeks) are significantly associated with predicted response propensity scores in subsequent surveys.

Fielding Period Differences

- Decreases by more than 2 weeks
- Increases by Less than/ equal to 2 weeks
- Decreases by Less than/ equal to 2 weeks
- Increases by Greater than 2 weeks

Conclusion & Discussion

Early drop-outs and panelists w/ overall low participation rates can be identified using the satisfaction score change within the 6 months of panelists joining the panel.

- Our predictive models show that our typical interventions (increasing incentives + fielding periods and decreasing questionnaire length) are not too effective unless we make drastic changes.

Next steps:

- In-depth interviews w/ panelists whose satisfaction scores decrease drastically in the first 6 months.
- Other potential forecasting measures?
 - Implementation of “Future Likelihood of Participation” item.

Thank you.

Ipek Bilgen
Senior Research Methodologist
bilgen-ipek@norc.org

 Research You Can Trust™

 **NORC** at the
University of
Chicago