Comparing the Telephone to Web Data Collection Transition Between the 2021 NYC Community Health Survey (CHS) and the 2021 NYC KIDS Survey

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NYC CHS & KIDS Overview

- NYC Community Health Survey
  - Annual health surveillance survey conducted since 2002
  - Collects data from 10,000 randomly selected adult New Yorkers
  - Historically used RDD/CATI
  - Tracks the health of New Yorkers
  - Measures the extent to which diseases and risk factors occur at the neighborhood, borough, and city levels
- NYC KIDS Survey
  - Conducted every other year since 2017
  - Collects data from parent/guardian of 7,500 children residing in NYC ages 1 – 13
  - Historically used RDD/CATI
  - Helps understand and address the health and development of children
  - Data used to improve the health of children and to determine how to allocate resources for child programs and services

NYC CHS & KIDS Transitions

- CHS & KIDS were transitioned from phone to web data collection efforts in 2021
  - Conducted bridge study during initial 2021 data collection months to compare CATI and ABS push-to-web
  - Samples historically selected using RDD (2002-2020 studies) and CATI
  - ABS frame replaced RDD frames in designs – push-to-web for data collection
  - Monitor changes over time
- CHS design (completes during overlap period)
  - CATI bridge completes: 503 adults
  - Push-to-web completes: 3,214 adults
- KIDS design (completes during overlap period)
  - CATI bridge completes: 503 (adults took survey for the selected child ages 1-13)
  - Push-to-web completes: 902 (adults took survey for the selected child ages 1-13)

Bridge Study Methodology

- Subset to respondents that completed survey over same time period
- CATI and CAWI weighted independently to correct for differences in demographics to make estimates more representative of NYC
- Analyzed substantive variables (CHS=98; KIDS=104)
  - Used Rao Scott corrected F-statistics and two-sample t-tests when appropriate
  - Corrected for multiple comparisons using the false discovery rate (FDR) correction

CHS - Summary of Results

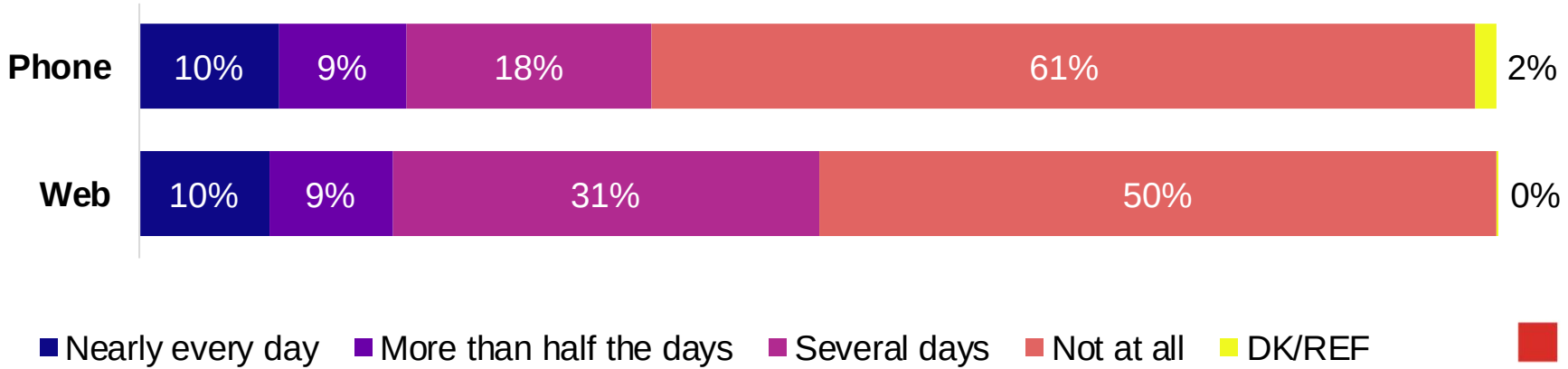
- 29 out of 98 items (30%) had significant differences across modes before adjusting for multiple comparisons
- After applying FDR correction, 9 out of 98 items (9%) had significant differences across modes
  - **Over 90% of substantive responses showed no differences**
- Mode effects found were classified into three categories
  1. Way questions were presented to respondents (5/9 items)
  2. Likely satisficing and social desirability (5/9 items*)
  3. Other issues (1/9 items)

*Includes 2 items that also had presentation issues

Presentation differences (5/9 items)

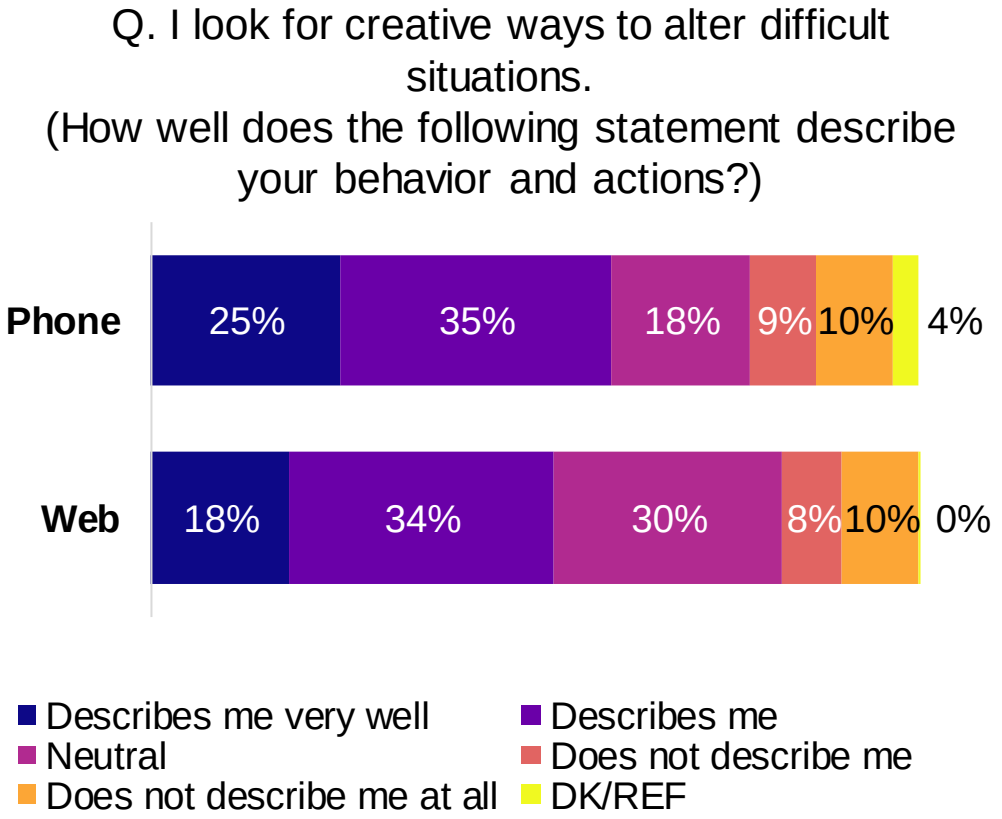
- Differences in item nonresponse
- Recency/primacy effects
  - Phone respondents more likely to choose last option heard than Web respondents

Q. (Over the past 2 weeks), how often have you been bothered by…Trouble falling or staying asleep, or sleeping too much?



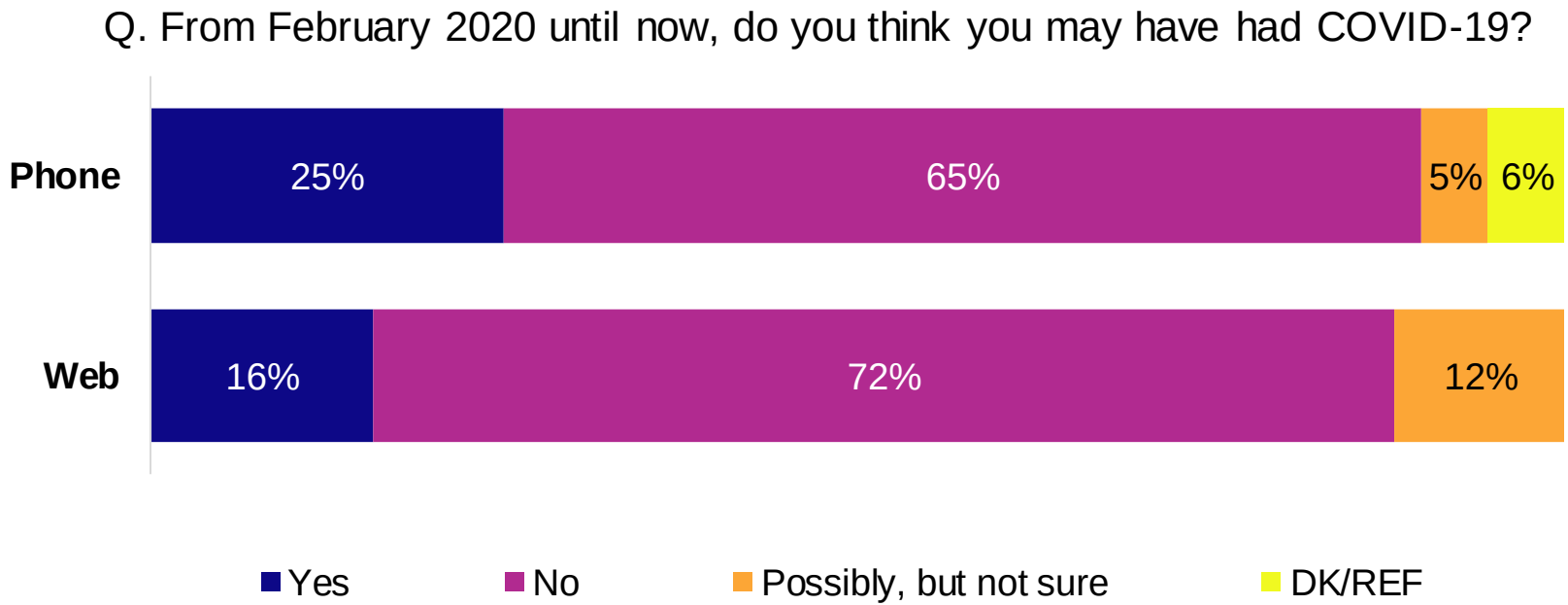
Likely satisficing or social desirability (5/9 items)

- Satisficing in web survey
  - More neutral responses when available
- Acquiescence bias in phone
  - More positive responses
- Likely social desirability in phone compared to web
  - More extremely positive responses



Other mode effects (1/9 items)

Higher rates of **item nonresponse** found from phone respondents, but web respondents were more likely to select "**possibly, but not sure**"



KIDS - Summary of Results

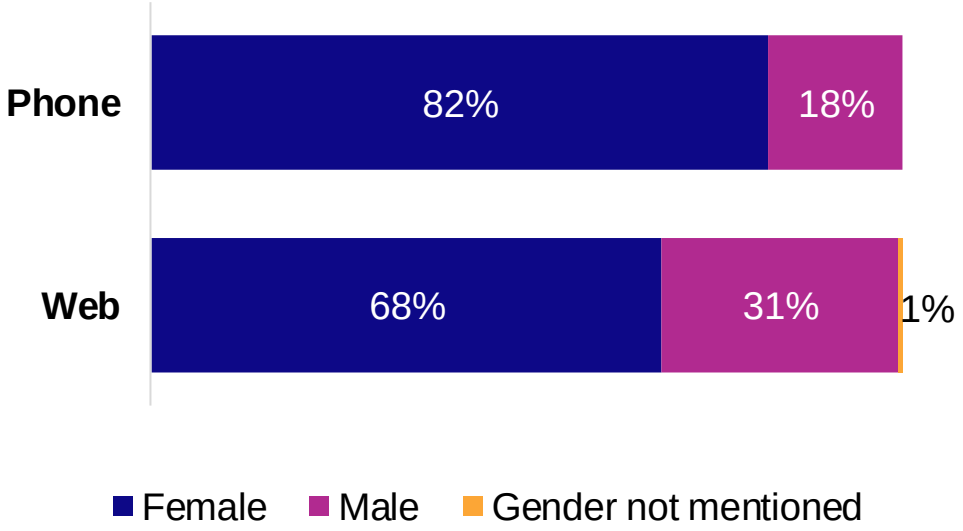
- 22 out of 104 items (21%) had significant differences across modes before adjusting for multiple comparisons
- After applying FDR correction, 12 out of 104 items (12%) had significant differences across modes
  - **88% of questions showed no differences across modes**
- Categorized mode effects found into four categories
  1. Proxy reporter differences (4/12 items)
  2. Way questions were presented to respondents (3/12 items)
  3. Cognitive shortcuts (2/12 items)
  4. Other differences (3/12 items)

Proxy reporter differences (4/12 items)

- Gender differences
  - Majority responded female regardless of mode though males more likely to complete web survey
- Ethnicity differences*
  - Hispanic/Latino parents/guardians more likely to complete web survey (29% versus 15%)

*Even after weighting to race/ethnicity of child

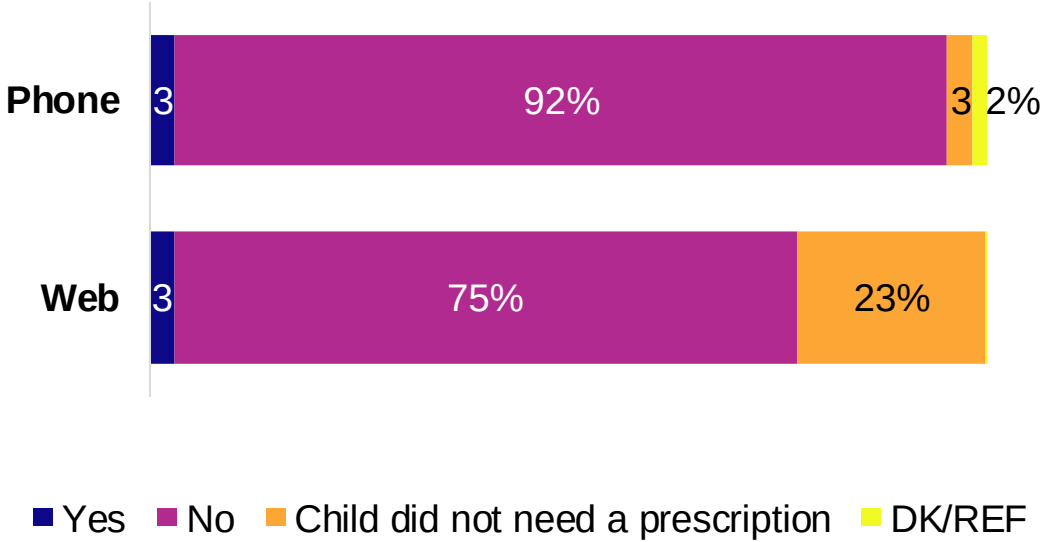
Q. For statistical purposes, we'd like to confirm your gender. Are you female or male?



Presentation differences (3/12 items)

- Additional response option on web
  - Refer to child by name/nickname, by age, or (web only) neither
- Recency/primacy effects
  - Phone shows primacy effect (responding “no” before hearing “Child did not need a prescription) while seeing all options on web may have impacted results

Q. During the past 12 months, was there any time when a prescription for medication for [child] was not filled or was delayed because of the cost?



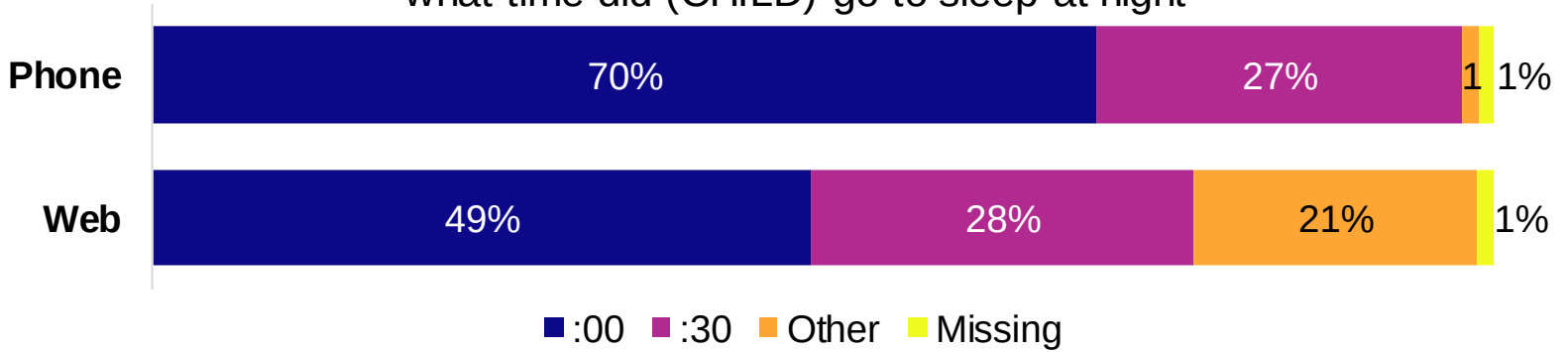
Cognitive shortcuts (2/12 items)

Question	Web	Phone
On a typical weekday in the past 7 days, how much time did (CHILD) spend watching TV, or using a cell phone, tablet, or computer? ___Hours* [RANGE 01-12]:___Minutes [RANGE 0-55]	9.2 (Minutes)	2.8 (Minutes)
On a typical weeknight in the past 7 days, what time did (CHILD) go to sleep at night? ___Hours** [RANGE 01-12]:___Minutes [RANGE 0-55]	13.7 (Minutes)	8.6 (Minutes)

*No differences in hours and total screen time

** No differences in hours and overall bedtime

Respondents who provided the minutes of **:00**, **:30**, or something else for the question of what time did (CHILD) go to sleep at night



Other differences (3/12 items)

- Questions with detailed response options had mode effects
  - Family living situation
- Definitions within questions showed mode effects
  - Definition of well-child care embedded in question

Does your family currently live…	Web	Phone
In the home of a friend, family member, or other person because of loss of housing or as a result of economic hardship	2%	0%
In a shelter or emergency housing	0%	4%
In a car, park, campground, trailer park, abandoned building, street, or other public place	0%	0%
A private home or apartment	**85%**	**63%**
None of these	**12%**	**32%**
DK/REF	1%	1%

Mode effects across CHS and KIDS

- Mode effects on levels of item nonresponse found for CHS but not KIDS
- Social desirability more likely to be influencing CHS responses but not KIDS
- Selecting a response other than yes/no was more likely to occur on the web for both surveys (possibly but not sure; did not need prescription)

Conclusion

- Vast majority of substantive questions had no significant mode effects (91% CHS; 88% KIDS)
- Mode effects caused by presentation differences found on both CHS and KIDS
- Mode effects witnessed on CHS were consistent with survey method research
  - Differences in levels of item nonresponse and recency/primacy effects
  - Social desirability, satisficing, and acquiescence bias
- Mode effects on KIDS could be due to differences from proxy reporter
  - Different proxy reporter demographics; levels of cognitive burden

BOLD THINKERS DRIVING REAL-WORLD IMPACT

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