



Demographic and Response Comparisons of Participants Selecting Different Device Types for Survey Completion

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Presentation Overview

- Samples
- Devices used to complete the surveys
- Compare participants by device used
 - Demographics
 - Abortion knowledge
 - Abortion attitudes
 - Item nonresponse
 - Reliability (test-retest)
- Implications for future data collections





Samples

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Election Study Data (2020-2021)

- IPSOS® KnowledgePanel (ABS probability sample)
 - Online only; panel members are provided internet access and hardware when needed
- Four waves of data collected

• Wave 1 (September 2 – 28, 2020)	N = 919	[English = 867; Spanish = 52]
• Wave 2 (October 22 – November 4, 2020)	N = 711	[English = 674; Spanish = 37]
• Wave 3 (December 3 - 22, 2020)	N = 637	[English = 607; Spanish = 30]
• Wave 4 (February 13 – March 8, 2021)	N = 576	[English = 549; Spanish = 27]
- Weights calculated using probability-proportion-to-size with address-based sample and raking (iterative proportional fitting) to geodemographic distributions of US adult population using March 2020 Current Population Survey supplement (and 2018 American Community Survey for language proficiency benchmarks); monetary incentives used



Abortion Complexity Study (2021)

- NORC Amerispeak[®] Panel (ABS probability sample)
 - Online only
 - N = 1,025 (English = 821; Spanish = 204)
 - 4,092 sample units in panel for 25% completion rate; Weighted household recruitment was 19.1% (with 75% weighted household retention rate)
- July 2021 – September 2021
 - Weights calculated using probability-proportion-to-size with an address-based sample and age, race / Hispanic ethnicity, education and gender as sampling strata. A random within-household sampling procedure was used. Included an oversample of Hispanic Spanish-preference panelists. Cash incentives provided to participants.





Devices Used by Participants

Devices Used by Participants

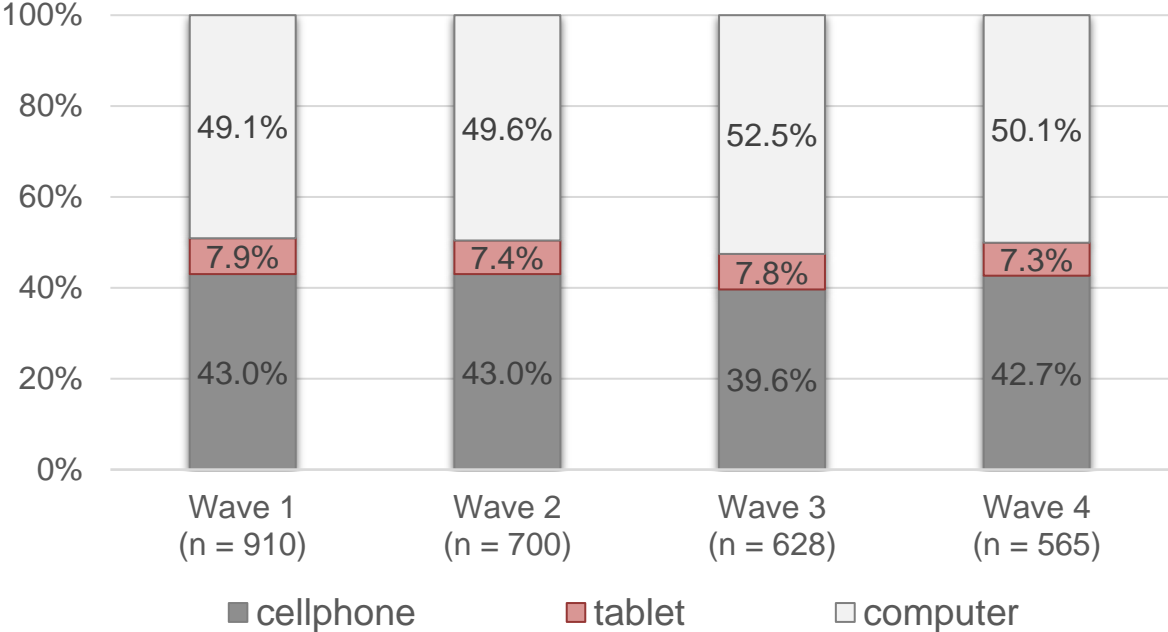
Nine types of devices were recorded for the Election Study. Three for Abortion Complexity Screener (ACS). Devices were grouped into three categories:

Device	Election Study (wave 1)		Abortion Complexity Screener	
	Unweighted	Weighted	Unweighted	Weighted
Cellphone	40.2%	42.5%	62.0%	62.0%
iPad / Tablet	7.9%	7.8%	1.4%	1.4%
Computer / Laptop	50.6%	48.6%	36.6%	36.6%
Other	0.5%	0.4%	-	-
Multiple device types	0.8%	0.7%	-	-
Total	<i>n = 919</i>	<i>n = 919</i>	<i>n = 1,025</i>	<i>n = 1,025</i>



* All percentages are weighted

Devices Used by Participants Across Waves in Election Study Data





Participant Characteristics by Device Used

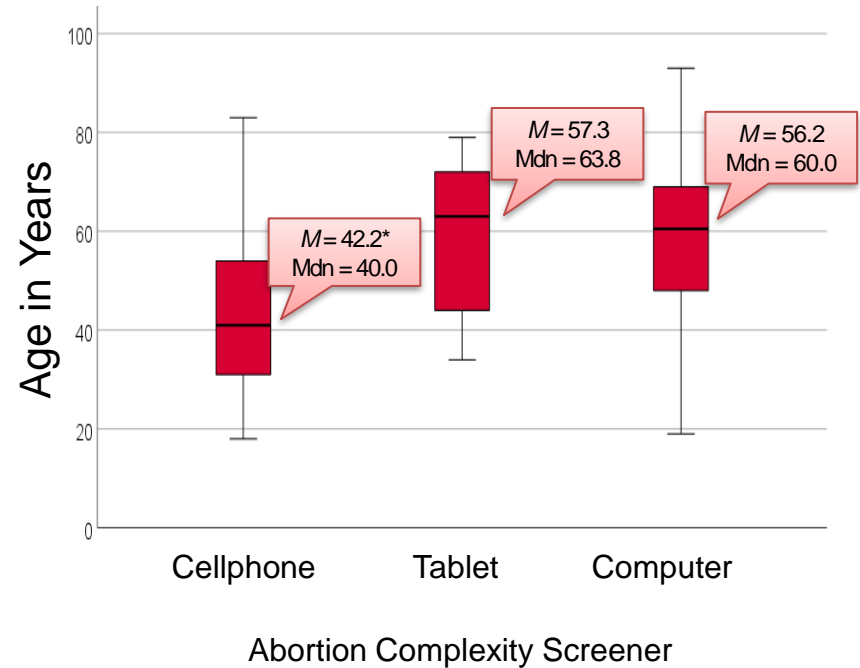
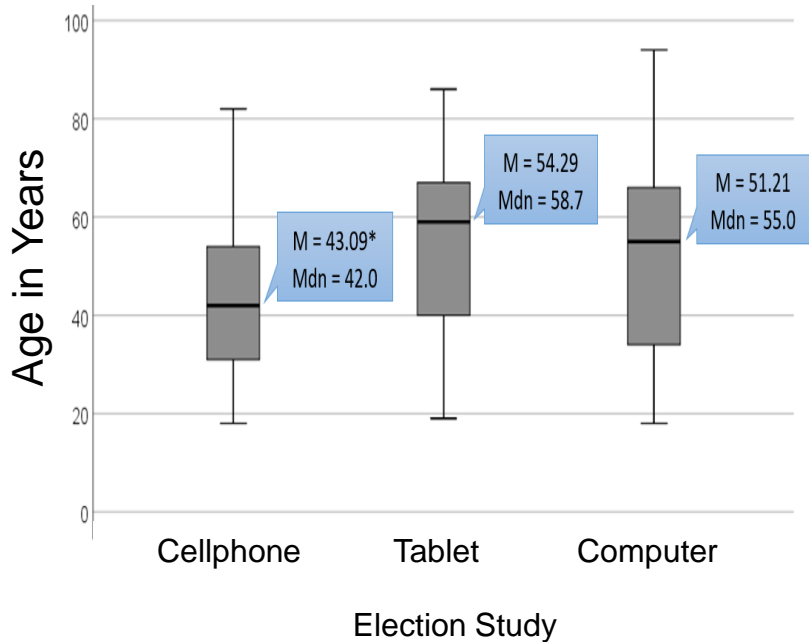
Devices Used by Participant Demographics

- Age^{E,A}
- Gender^{E,A}
- Race^{E,A}
- Education^{E,A}
- Language Used^{E,A}
- Political Party^E

^E $p < .01$ for Election Study; ^A $p < .01$ for Abortion Complexity Screener

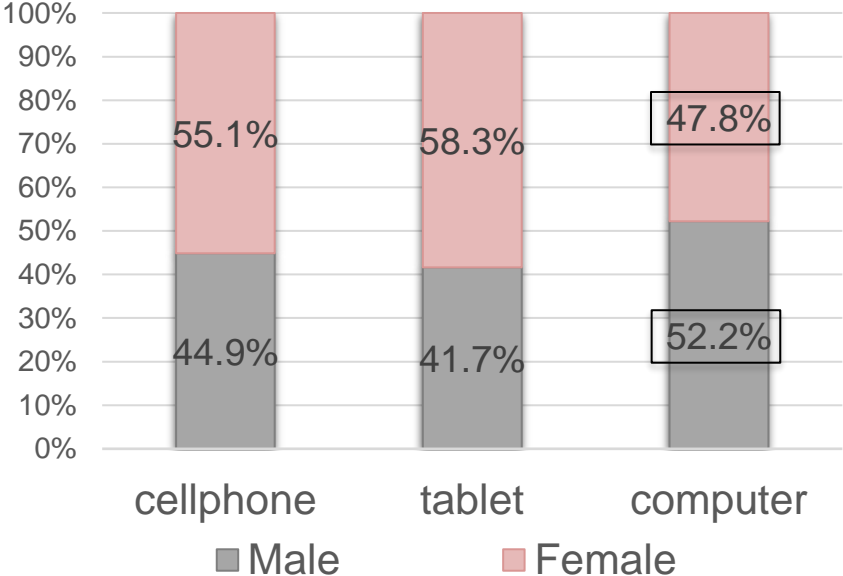


Devices Used by Participant Age^{E,A}

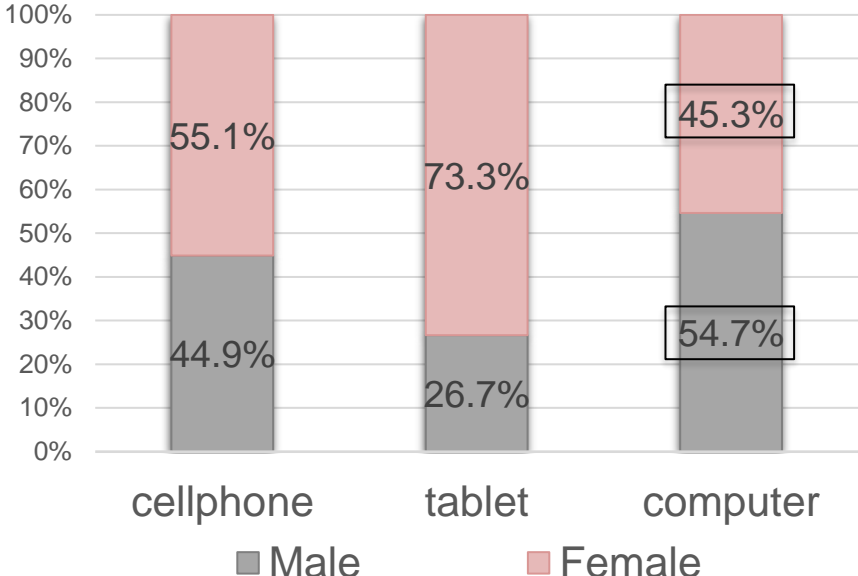


Devices Used by Gender^{E,A}

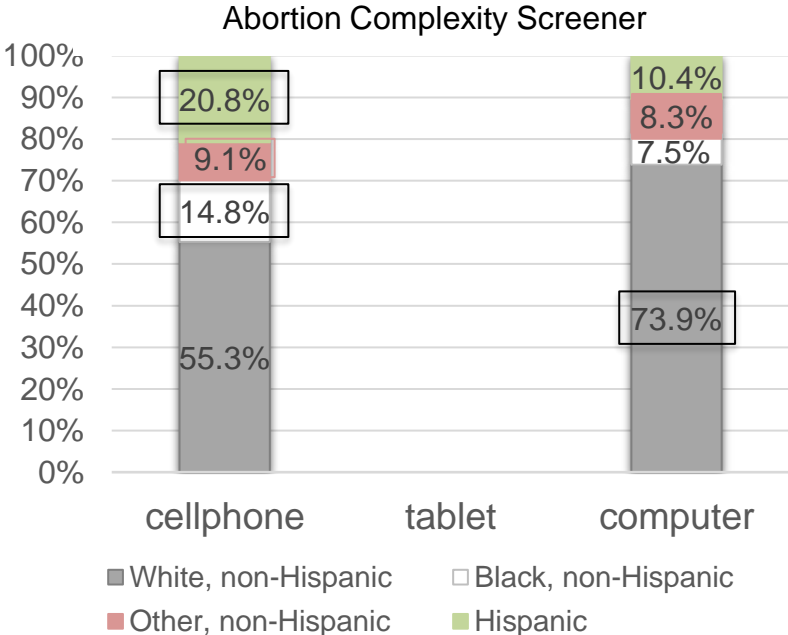
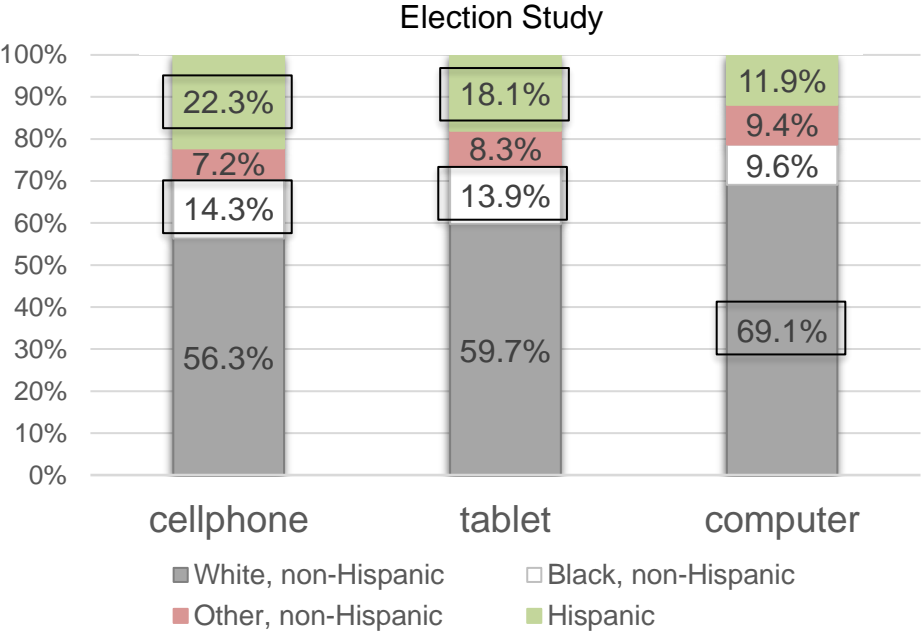
Election Study



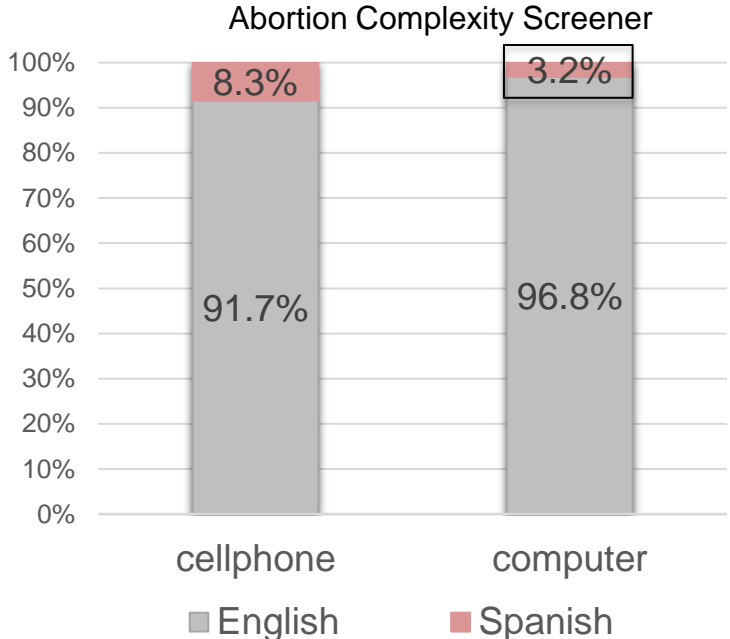
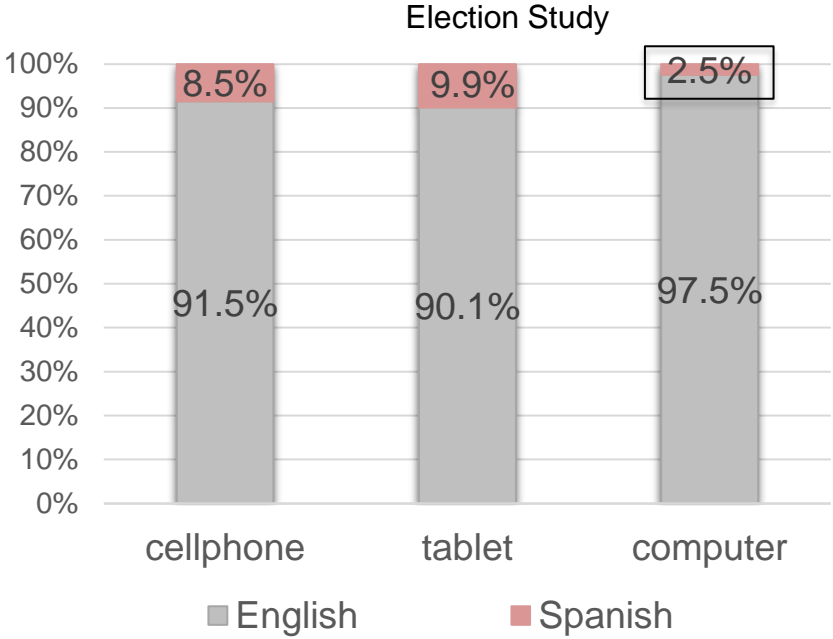
Abortion Complexity Screener



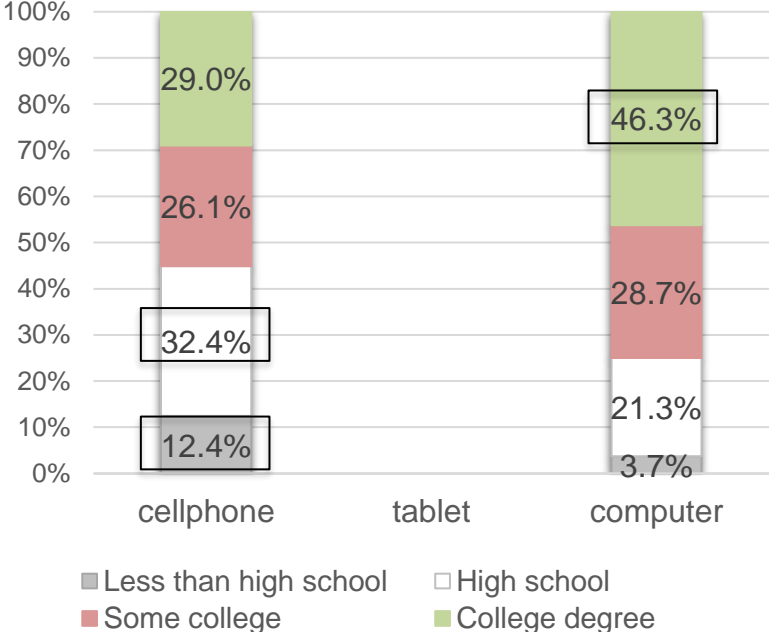
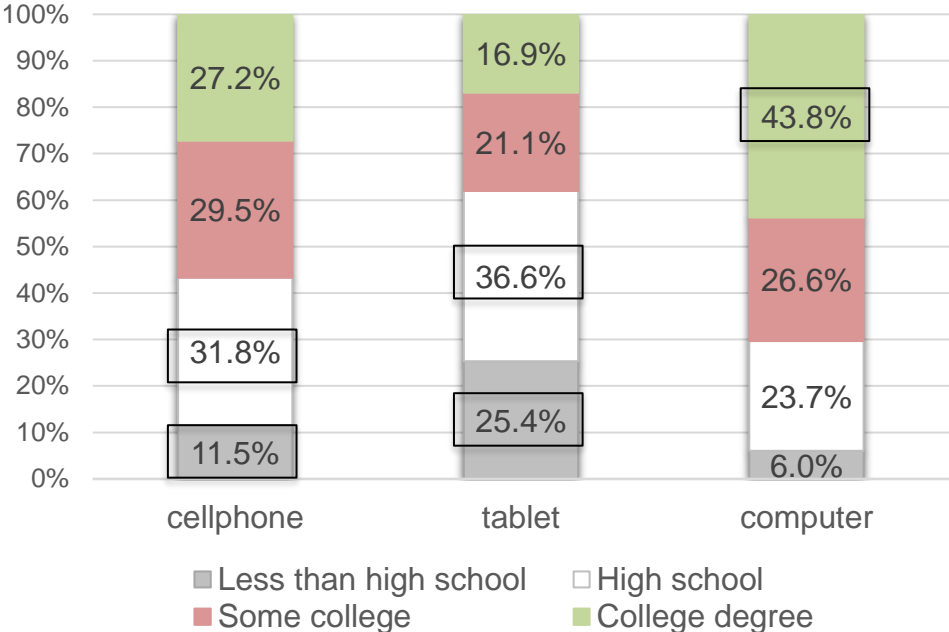
Devices Used by Race / Ethnicity^{E,A}



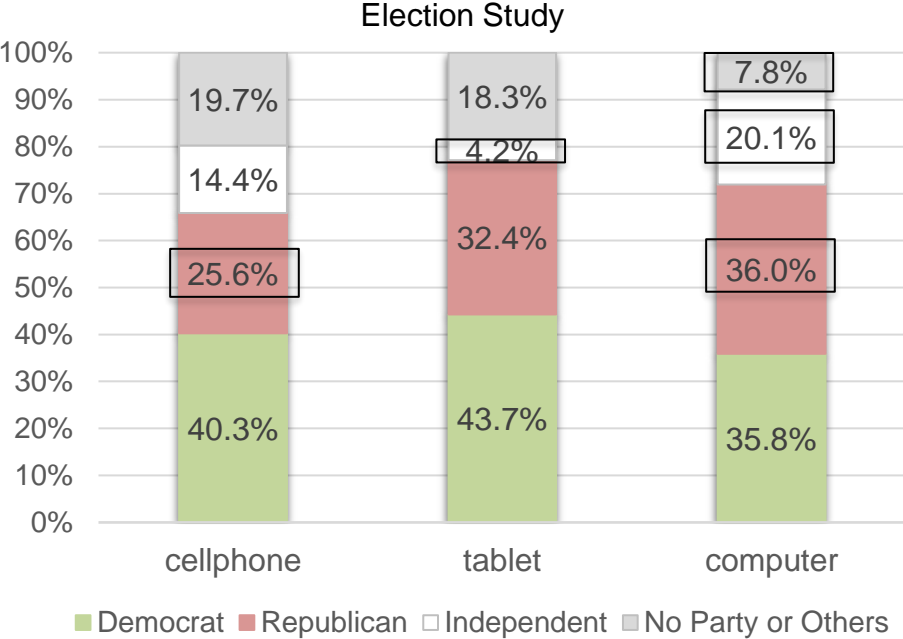
Devices Used by Language Selected^{E,A}



Devices Used by Educational Level^{E,A}



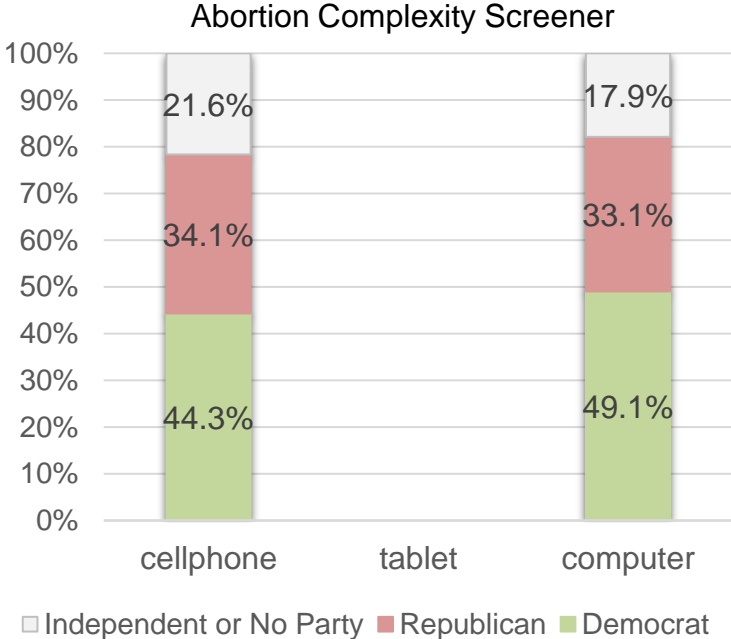
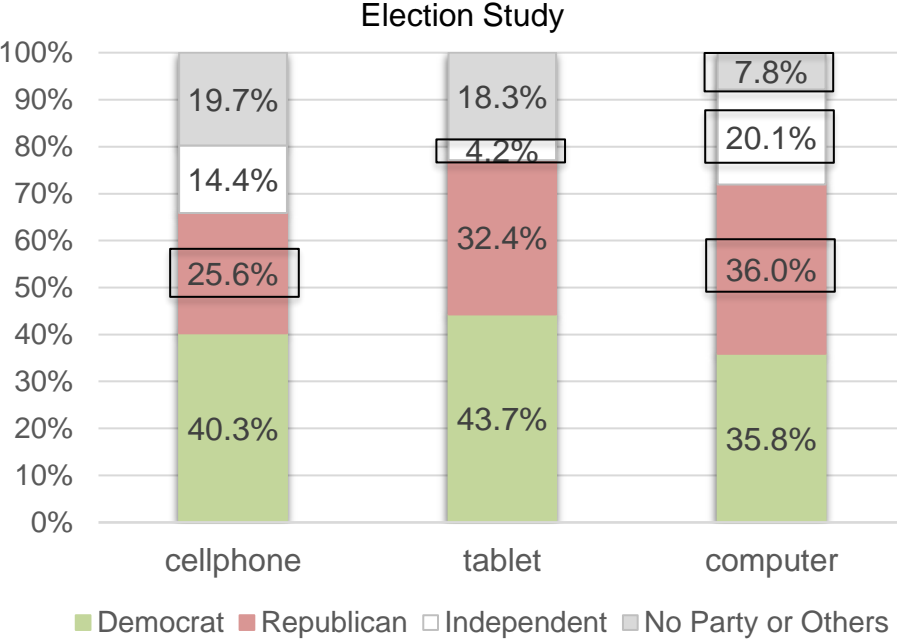
Devices Used by Political Party^E



Abortion Complexity Screener



Devices Used by Political Party^E



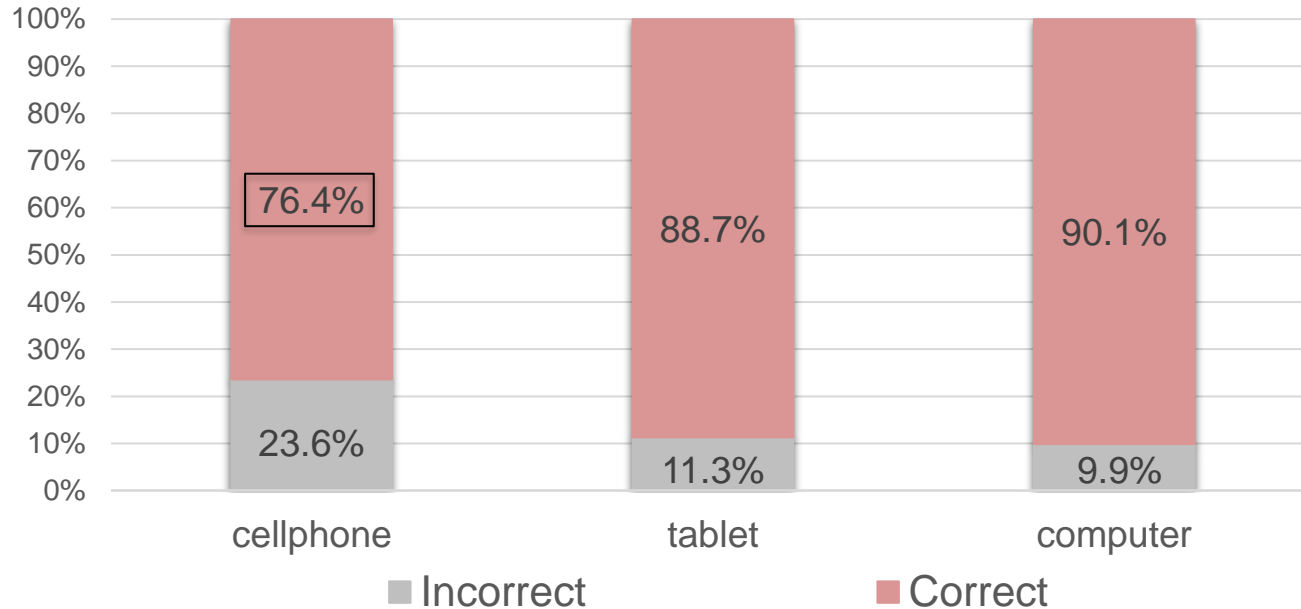


Abortion Knowledge by Device Used

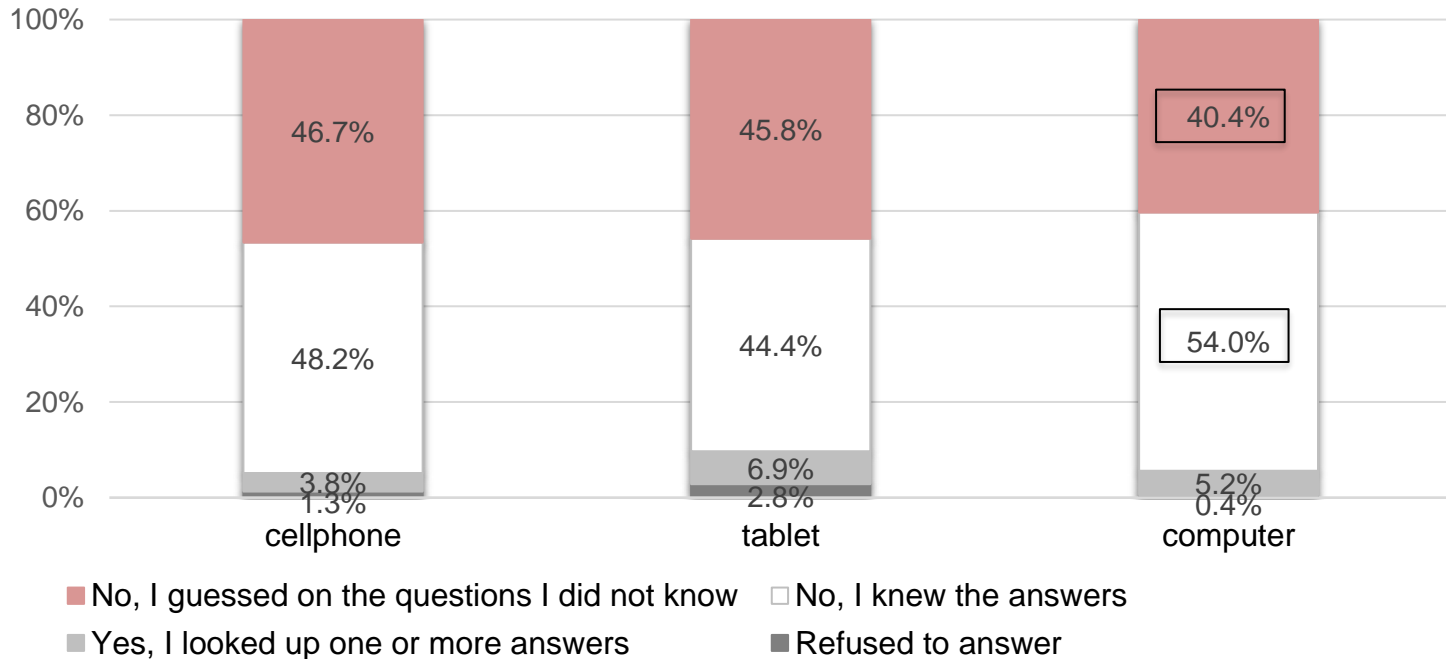
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Knowledge of Roe v. Wade by Device Used to Complete the Survey^E



Reported Checking Answers before Responding^E





Abortion Attitudes by Device Used (Composite Score Comparisons)

Composite Scores

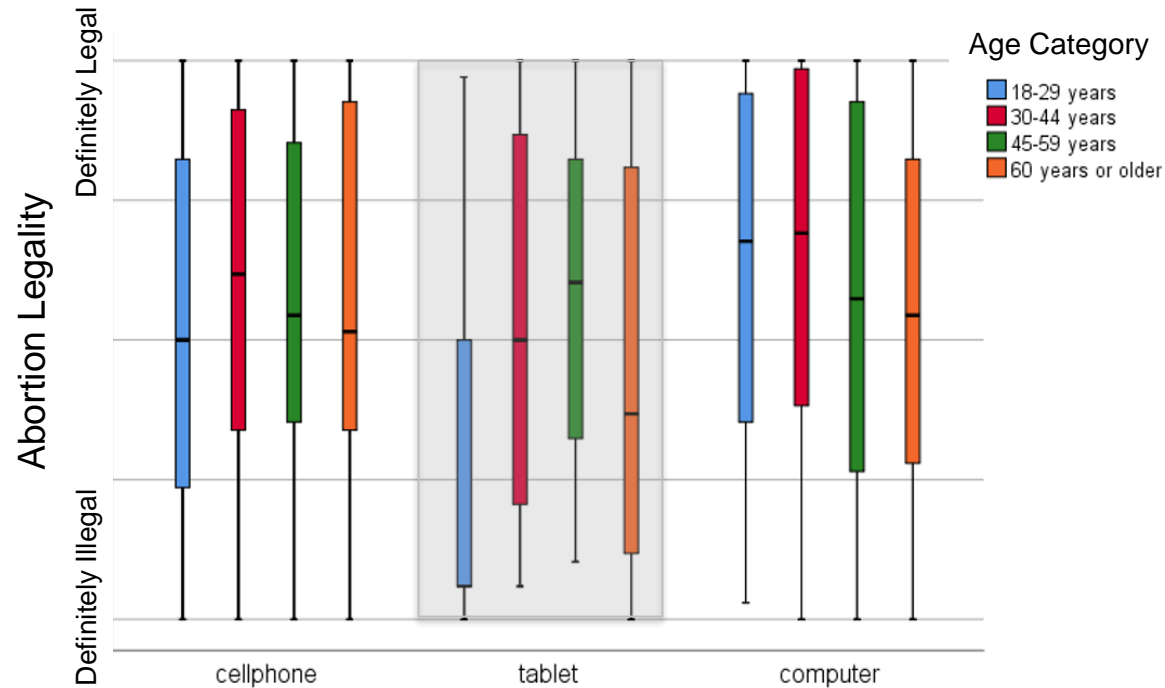
Abortion Legality [Should abortion be legal or illegal in the following circumstances?]

Abortion Morality [Is abortion moral or immoral in the following circumstances?]

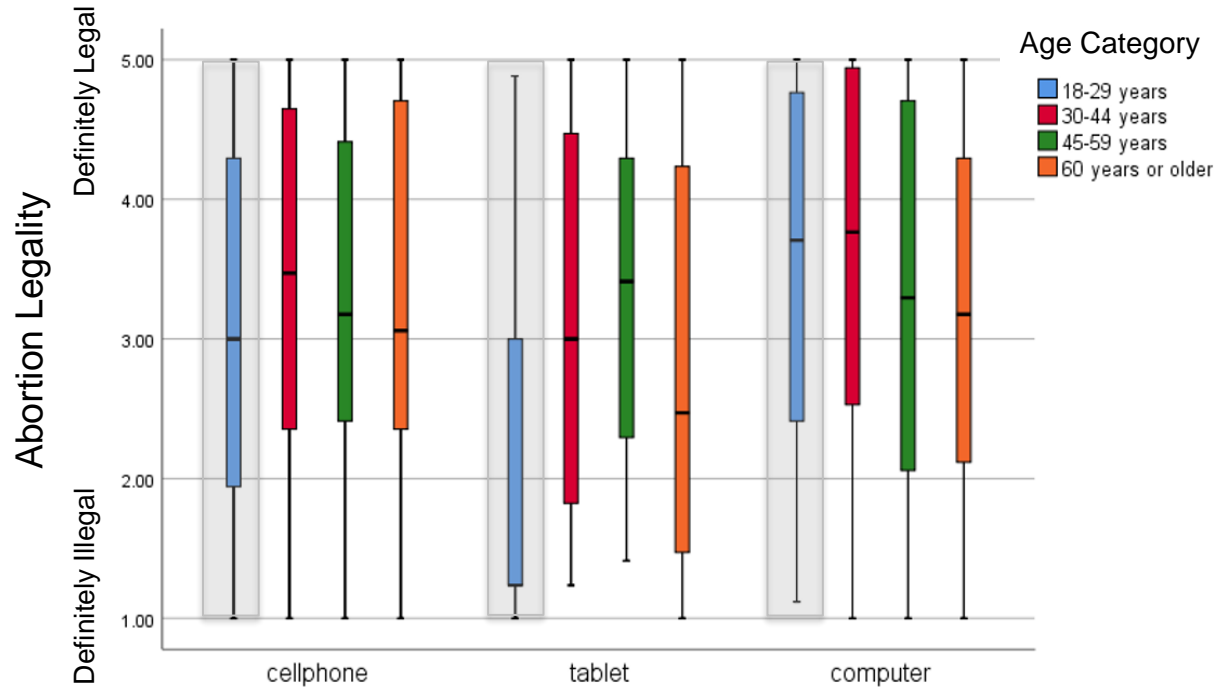
Gestational Age of Abortion [How far into a pregnancy should it be possible for a woman to get an abortion?]



Abortion Legality Composite Score by Age and Device Used



Abortion Legality Composite Score by Age and Device Used

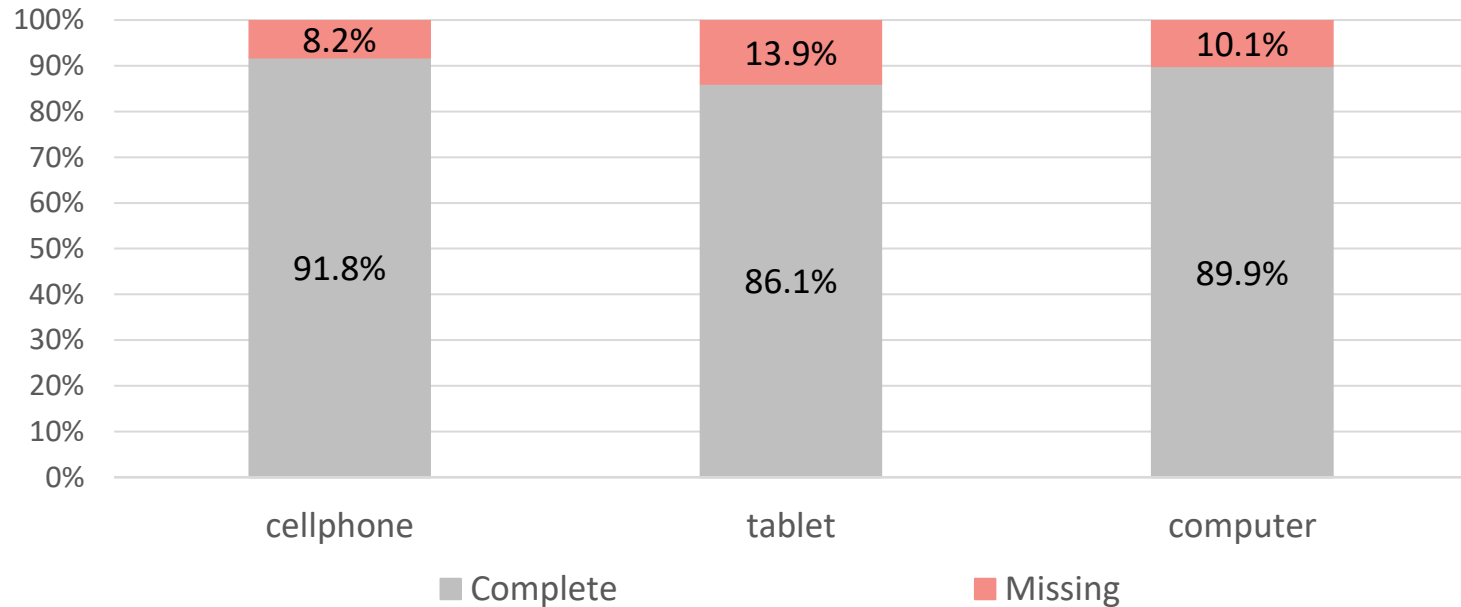




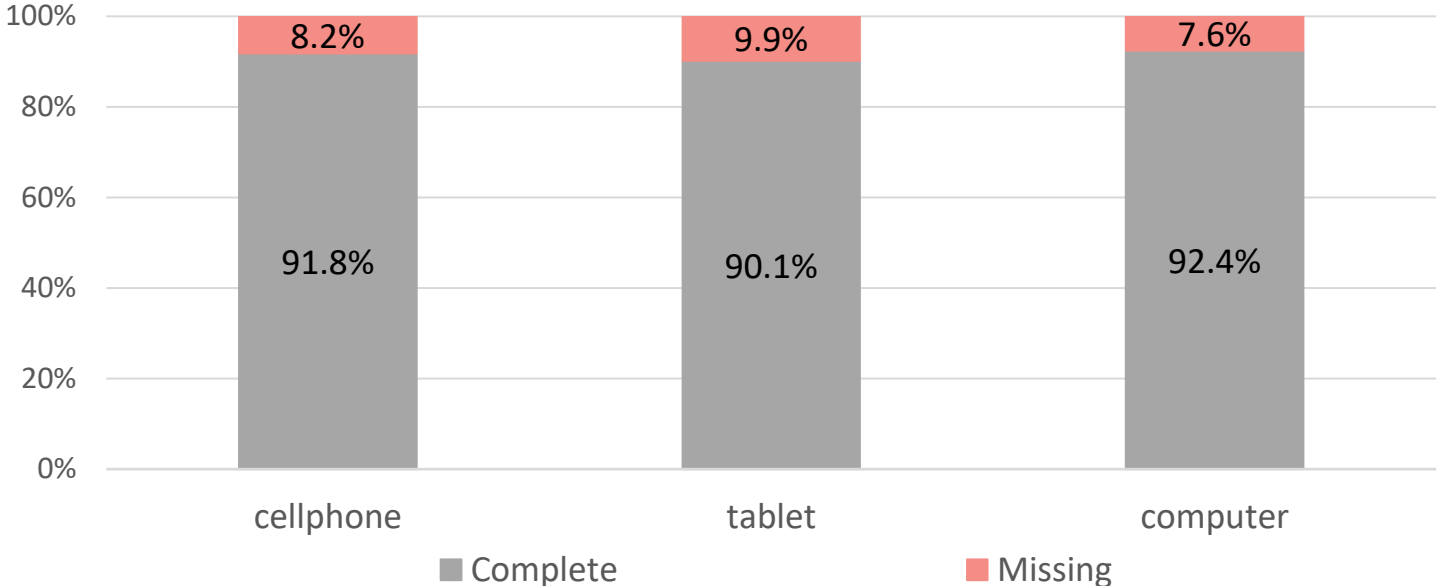
Item Nonresponse by Device

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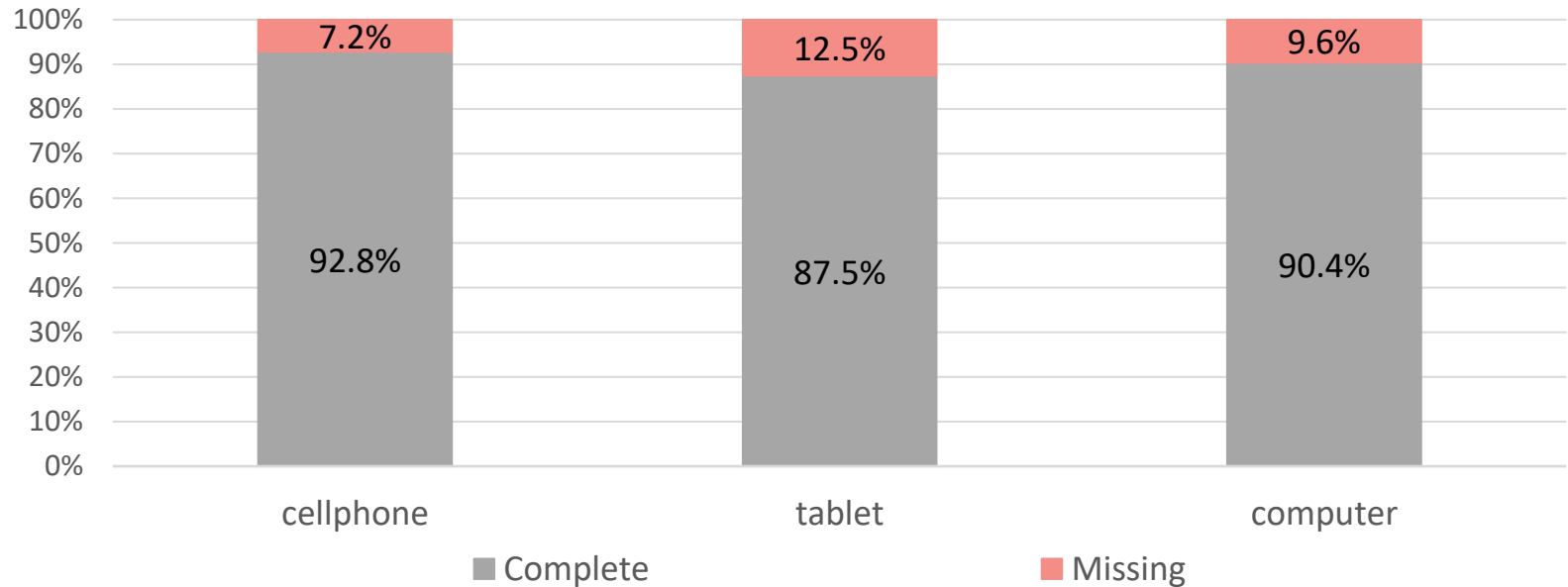
Percent of Participants with One or More Missing Responses on Abortion Legality Items by Device



Percent of Participants with One or More Missing Responses on Abortion Morality Items by Device



Percent of Participants with One or More Missing Responses on Gestational Age Items by Device

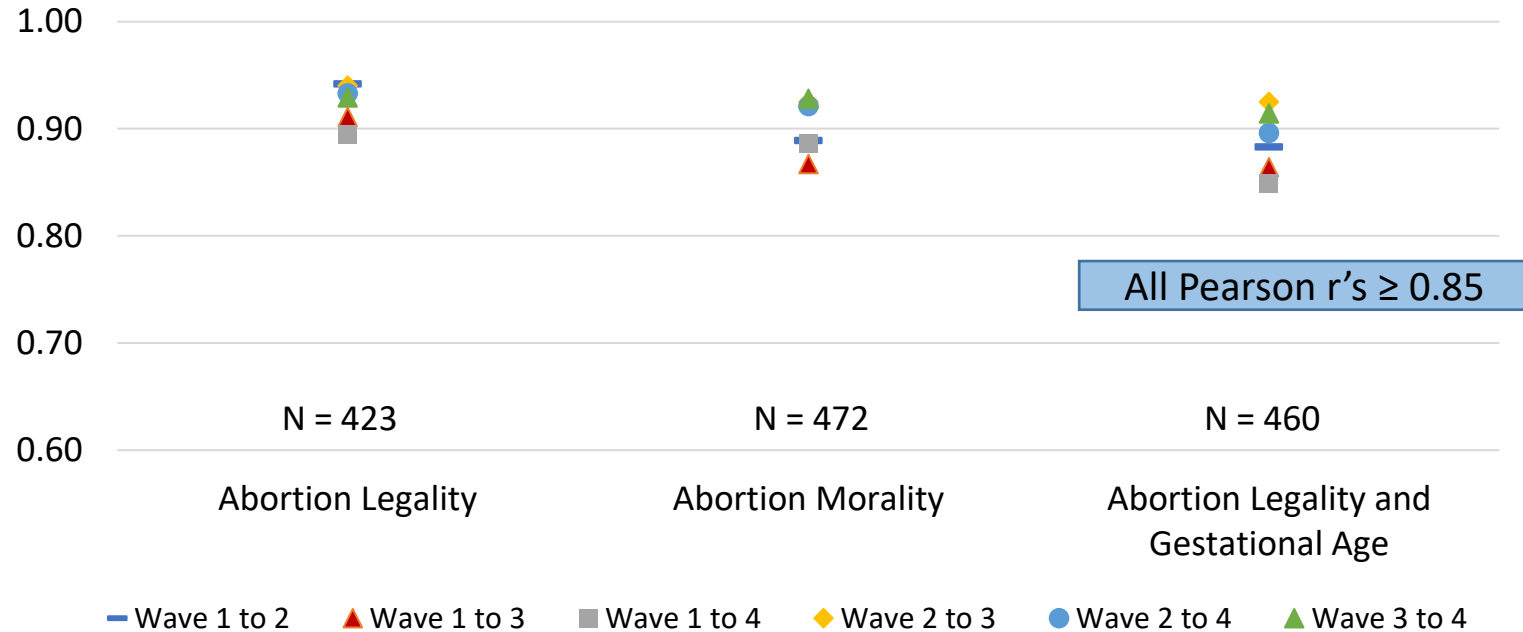




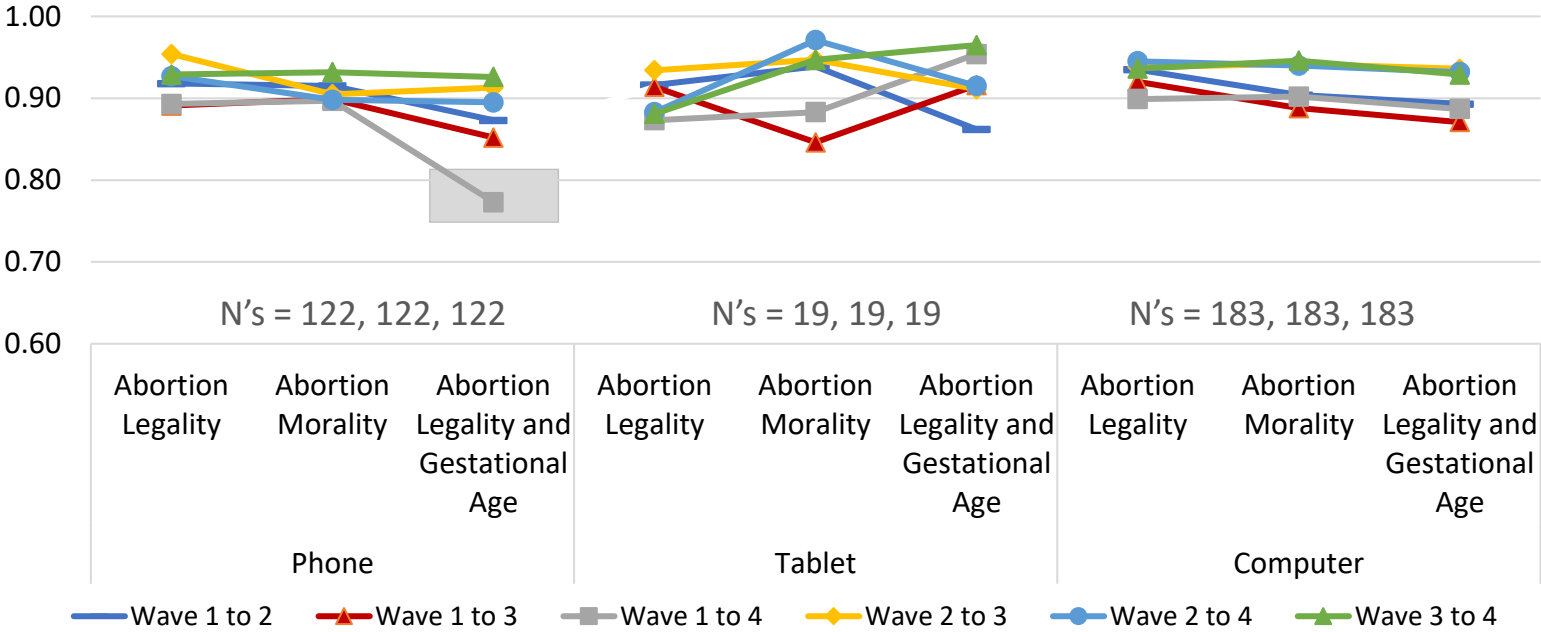
Test-Retest Reliability across Waves by Device

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Reliability of Abortion Composite Scores across Waves



Reliability of Abortion Composite Scores across Waves by Device





Summary / Feedback

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Summary – Demographics by Device

Participants using Computers:

- Larger % males, whites, Independents, college degrees
- Smaller % those without a political party

Participants using Tablets:

- Older, lower education, larger % minority race/ethnicity, and those not identifying with a political party

Participants using Cell Phones:

- Younger, larger % females, larger % minority race/ethnicity



Summary – Abortion-Related Variables

Participants using Computers:

- Higher level of knowledge of Roe v. Wade
- More supportive of abortion legality

Participants using Tablets:

- Higher level of knowledge of Roe v. Wade
- Less supportive of abortion legality; abortion should be legal within a shorter timeframe of a pregnancy

Participants using Cell Phones:

- Lower level of knowledge of Roe v. Wade



Summary – Nonresponse and Reliability by Device

No significant differences in initial non-response comparisons

Test-retest reliability was similar across type of device

One instance of lower reliability from wave 1 to wave 4 for cellphone group



What is important for us to consider?

- Demographic characteristics appear different for those who use phones vs tablets vs computers.
 - Questions need to function equally well for different devices, but especially so if participants using different devices tend to represent different subpopulations
- Although we did not observe different nonresponse rates across device when looking at the person-level, there may be nonresponse rate differences when comparing the percent of items with missing responses.
- In general, test-retest reliability did not seem to be impacted by device used for this dataset.





Thank you

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