

Replication Code for ‘Older Adults’ Attitudes Toward Virtual Volunteering During the COVID-19 Pandemic’

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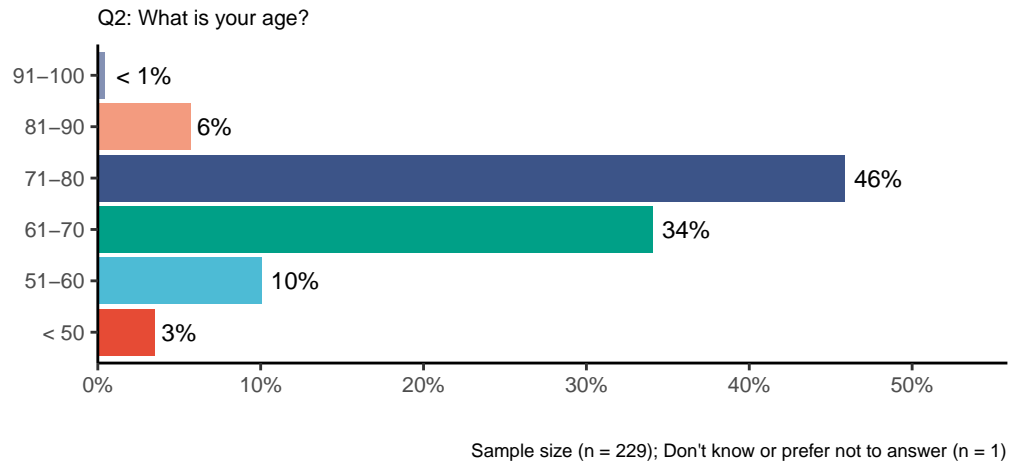
1 Descriptive Statistics

1.1 Table 2. Demographic Characteristics of Participants (N = 229)

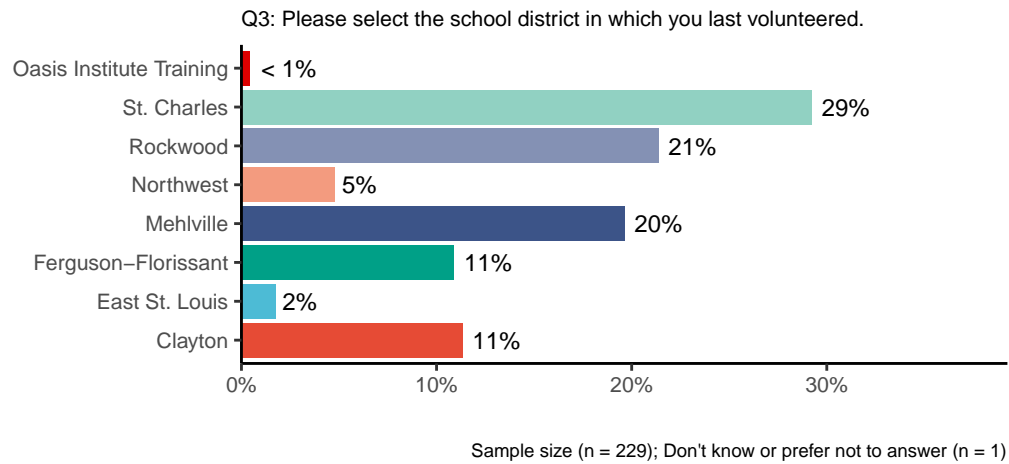
##		Overall
##	n	229
##	Age (%)	
##	< 50	8 (3.5)
##	51-60	23 (10.0)
##	61-70	78 (34.1)
##	71-80	105 (45.9)
##	81-90	13 (5.7)
##	91-100	1 (0.4)
##	Don't know or prefer not to answer	1 (0.4)
##	Gender = Female (%)	193 (84.3)
##	Race/Ethnicity (%)	
##	Hispanic/Latino	2 (0.9)
##	Black or African American	11 (4.8)
##	White	211 (92.1)
##	Two or more races	3 (1.3)
##	Don't know or prefer not to answer	2 (0.9)
##	Marital Status (%)	
##	Divorced	14 (6.1)
##	Married	168 (73.4)
##	Single	13 (5.7)
##	Widowed	29 (12.7)
##	Don't know or prefer not to answer	5 (2.2)
##	Highest Level of Education (%)	
##	High school	16 (7.0)
##	Some college	38 (16.6)
##	College degree	95 (41.5)
##	Post-graduate	80 (34.9)
##	Employment Status (%)	
##	Not working/retired	203 (88.6)
##	Looking for work	1 (0.4)
##	Working part time	17 (7.4)
##	Working full time	5 (2.2)
##	Don't know or prefer not to answer	3 (1.3)
##	Annual Household Income (%)	
##	< \$15,000	1 (0.4)
##	\$15,000 - \$24,999	5 (2.2)
##	\$25,000 - \$49,000	27 (11.8)
##	\$50,000 - \$74,999	43 (18.8)
##	> \$75,000	79 (34.5)
##	Don't know or prefer not to answer	74 (32.3)

1.2 Demographics

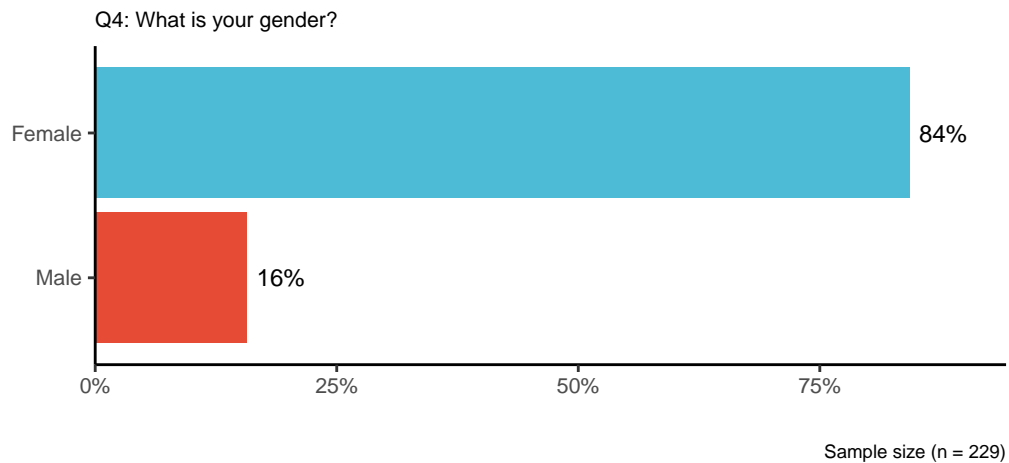
1.2.1 Age



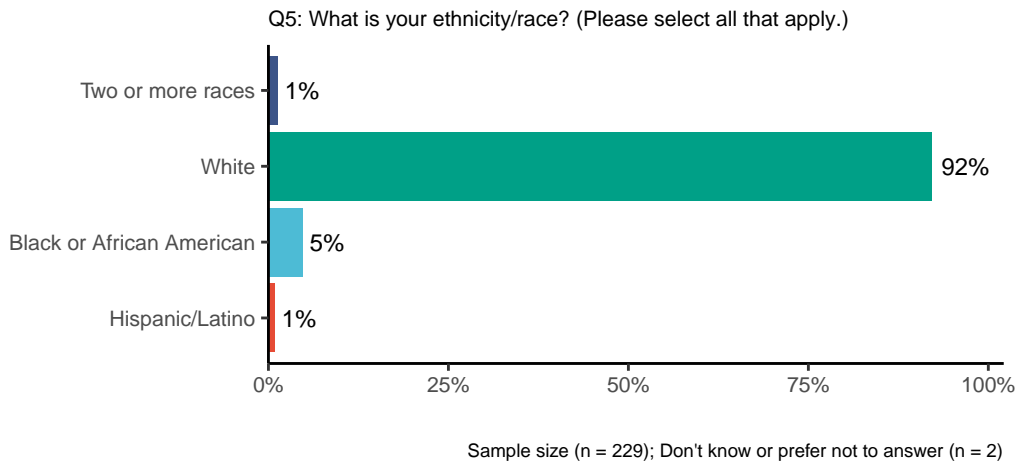
1.2.2 School District of Last Oasis Volunteer Experience



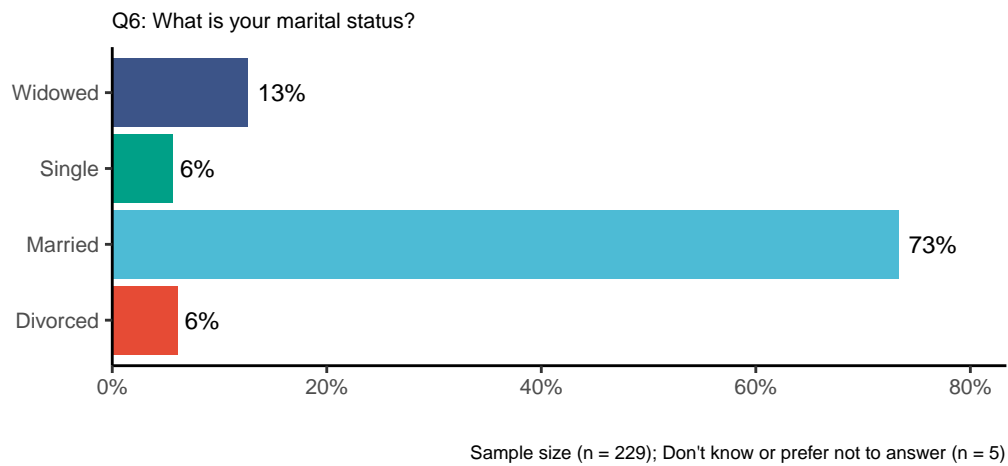
1.2.3 Gender



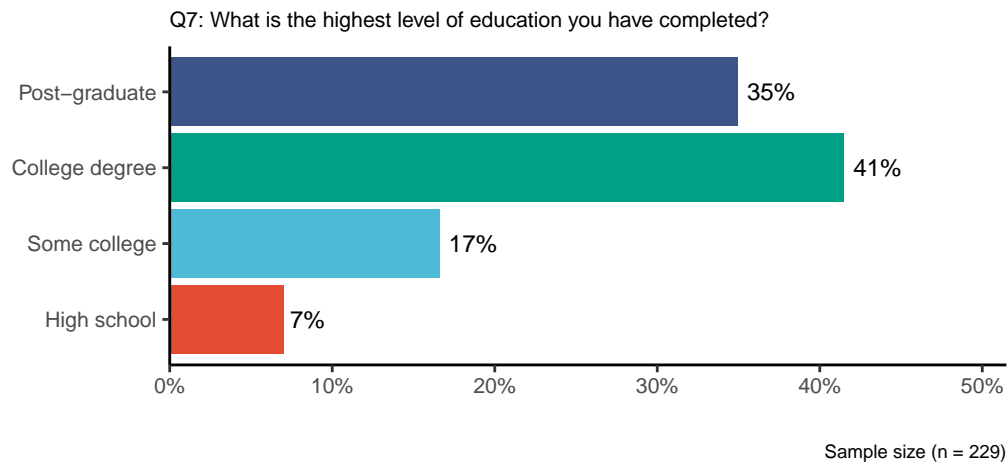
1.2.4 Ethnicity/Race



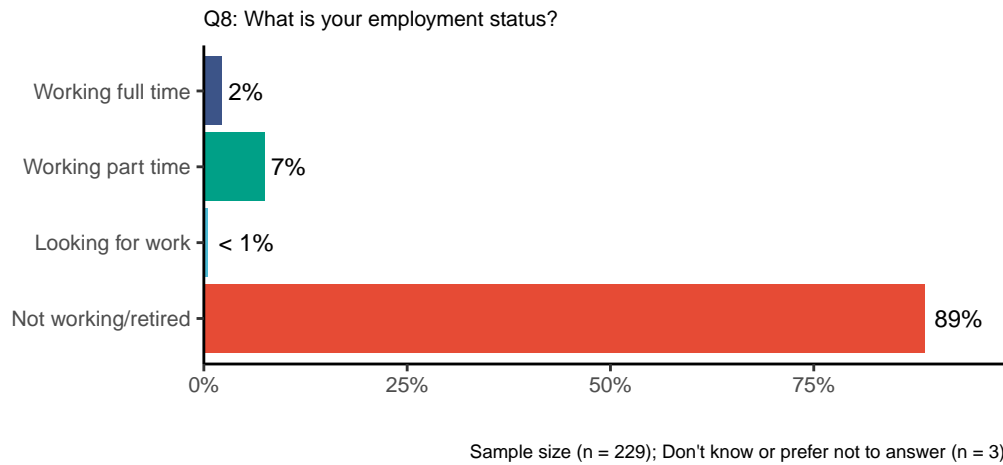
1.2.5 Marital Status



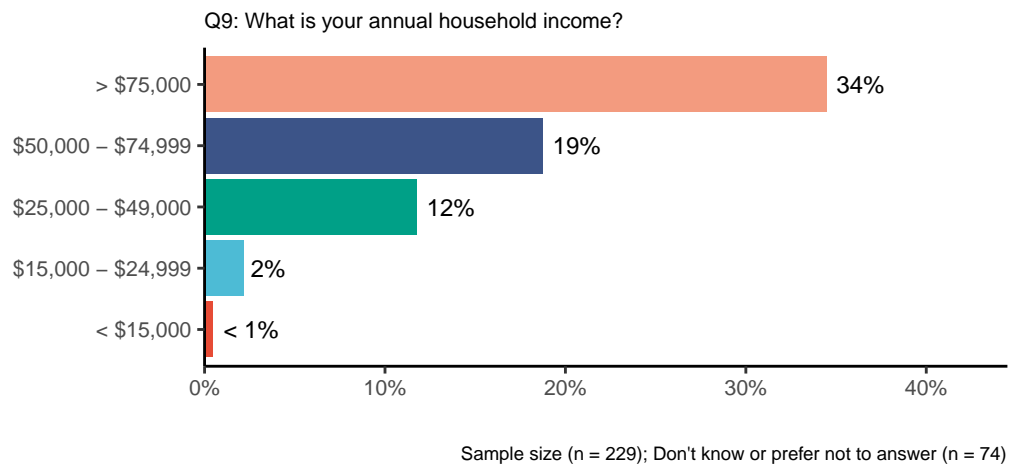
1.2.6 Education



1.2.7 Employment Status

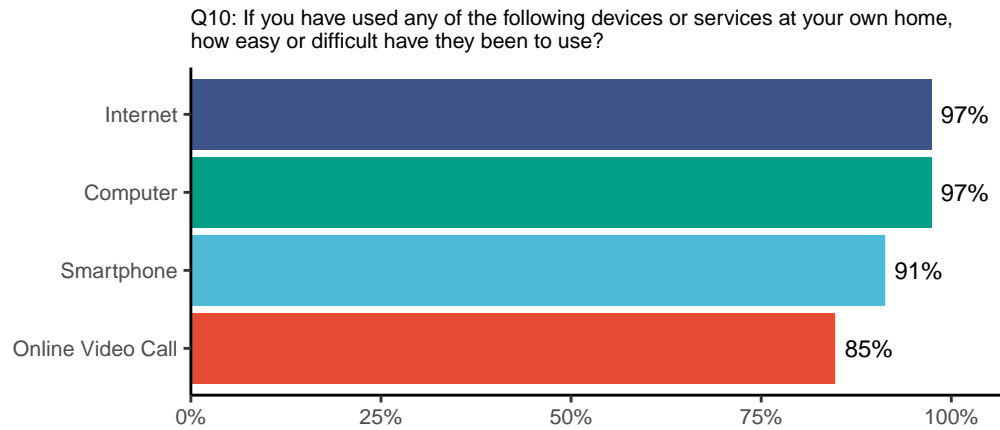


1.2.8 Annual Household Income



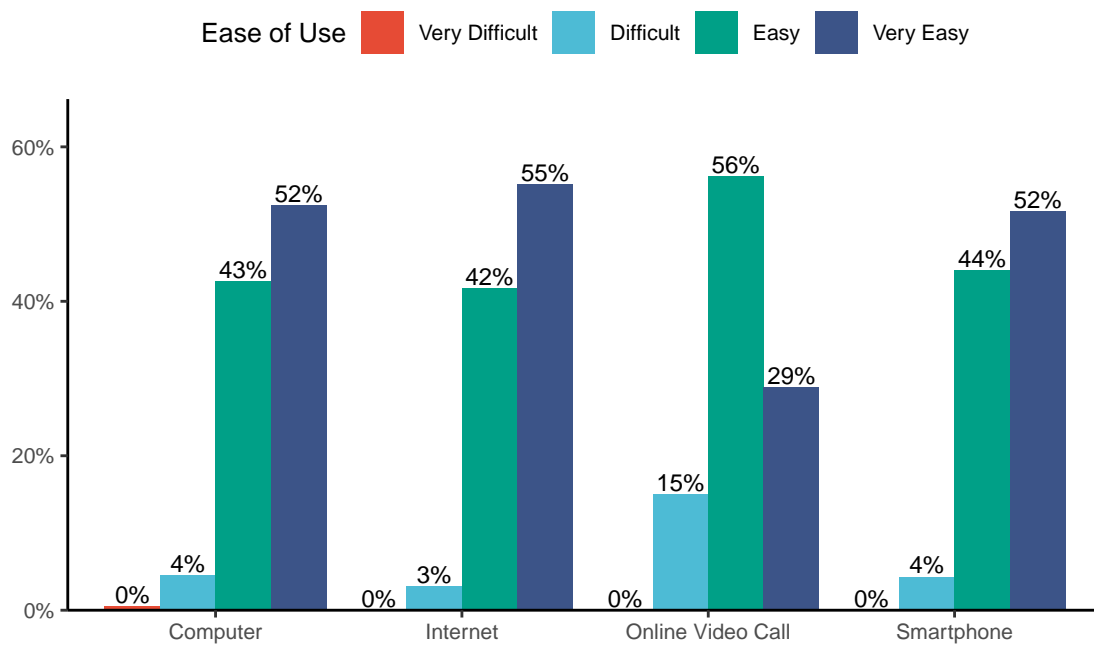
1.3 Technology

1.3.1 Use of Technology at Home



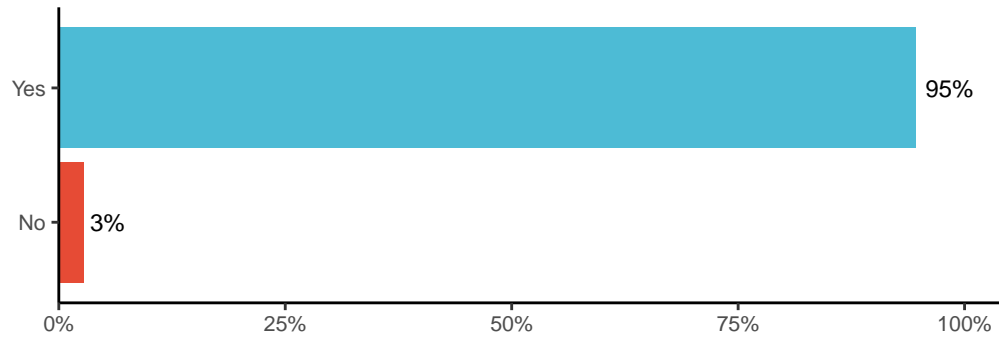
1.3.2 Ease of Technology Use

Q10: If you have used any of the following devices or services at your own home, how easy or difficult have they been to use?



1.3.3 Reliable Internet Connection

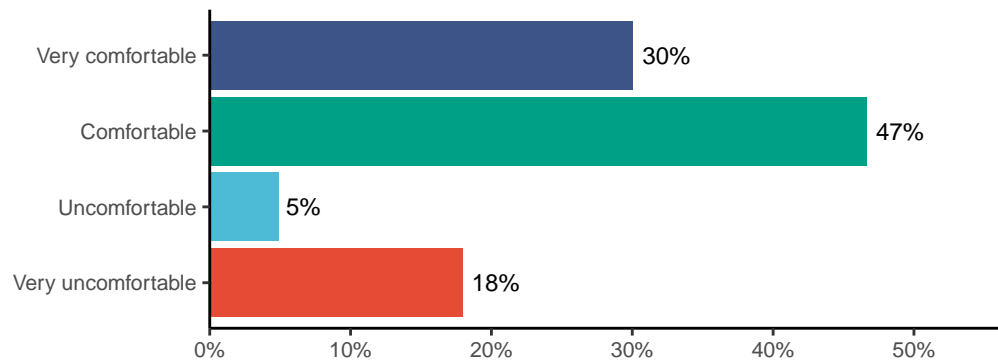
Q11: Is your Internet connection reliable (e.g., capable of watching videos smoothly; stable connection)?



Sample size (n = 223); Don't know or prefer not to answer (n = 6)

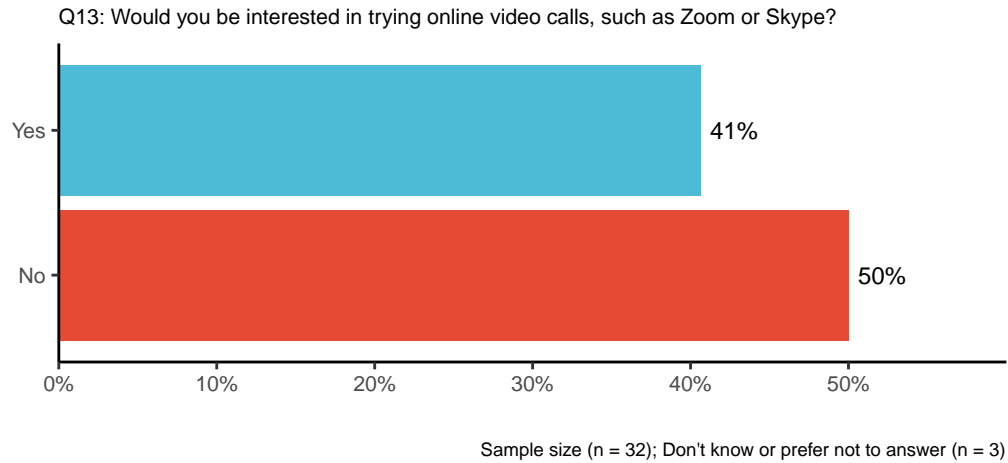
1.3.4 Level of Comfort Using the Internet

Q12: What is your level of comfort when using the Internet?

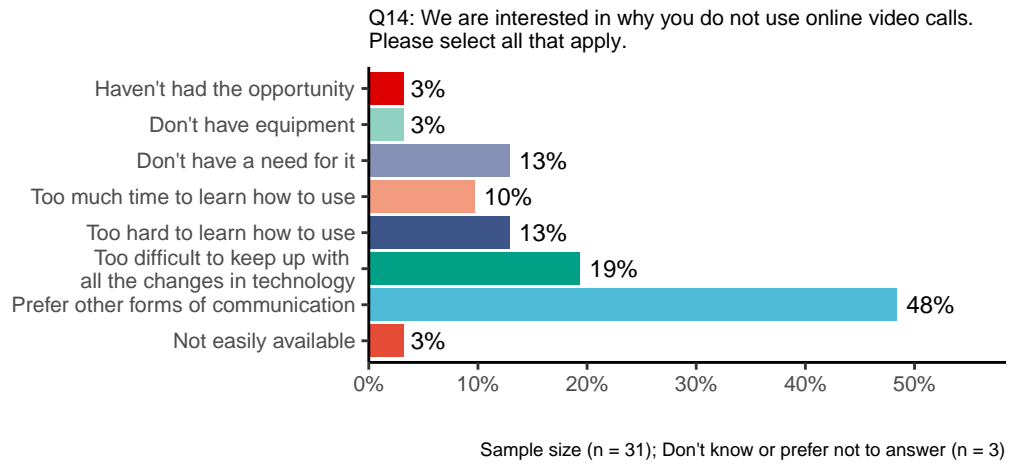


Sample size (n = 223); Don't know or prefer not to answer (n = 1)

1.3.5 Interest in Trying Online Video Calls

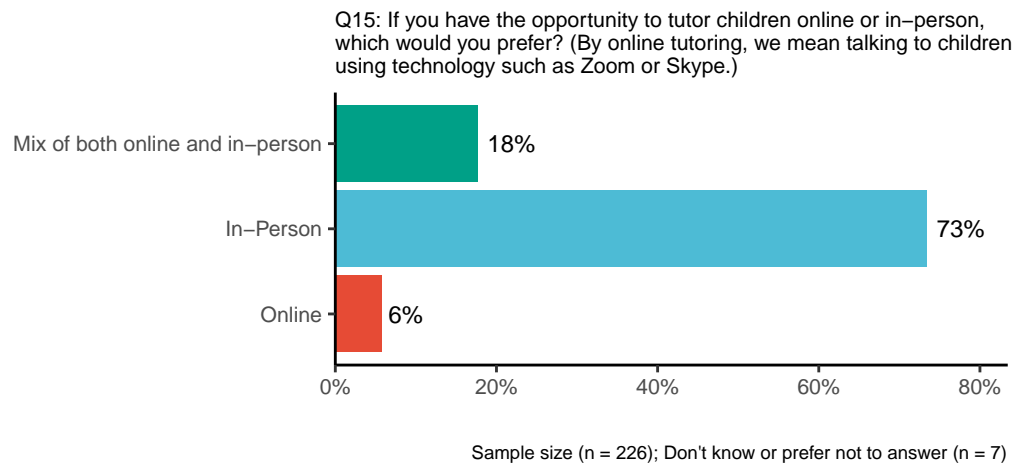


1.3.6 Reason for Not Using Online Video Calls

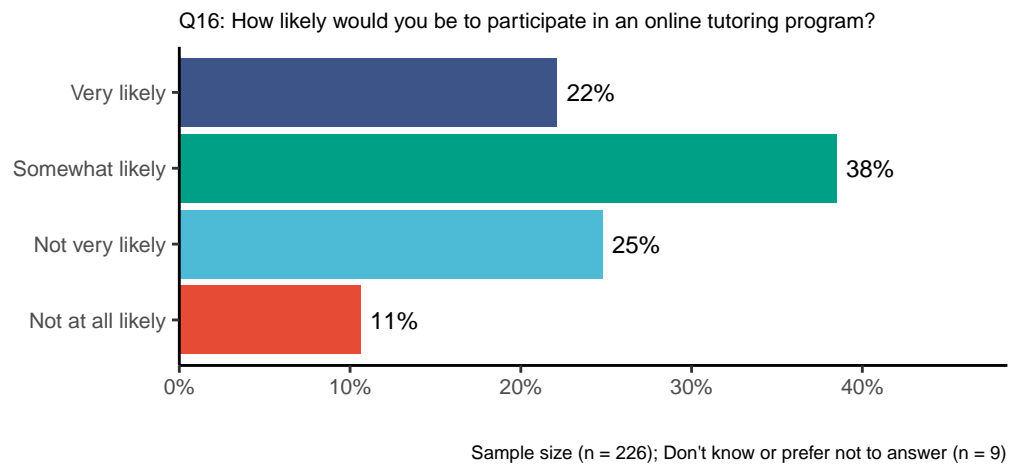


1.4 Online Tutoring

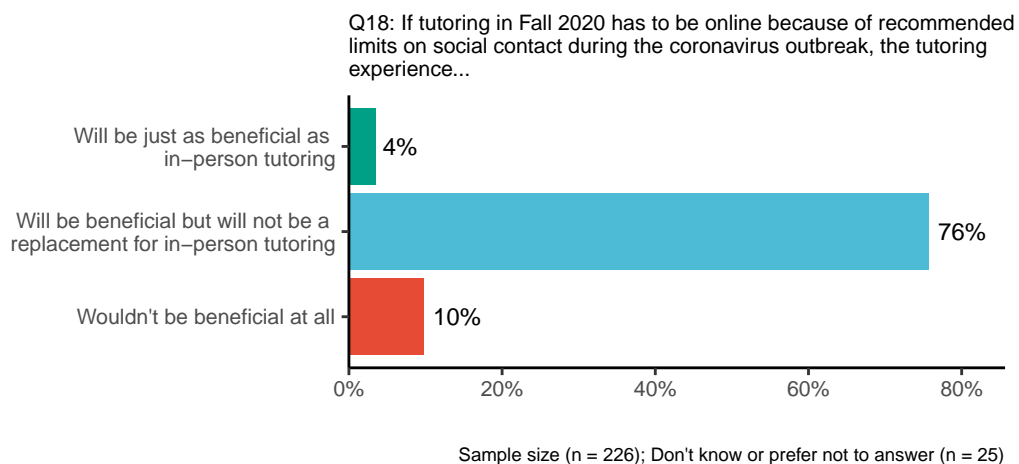
1.4.1 Preference for Online, In-Person, or Mix of Online and In-Person Tutoring



1.4.2 Likelihood of Participating in Online Tutoring Program

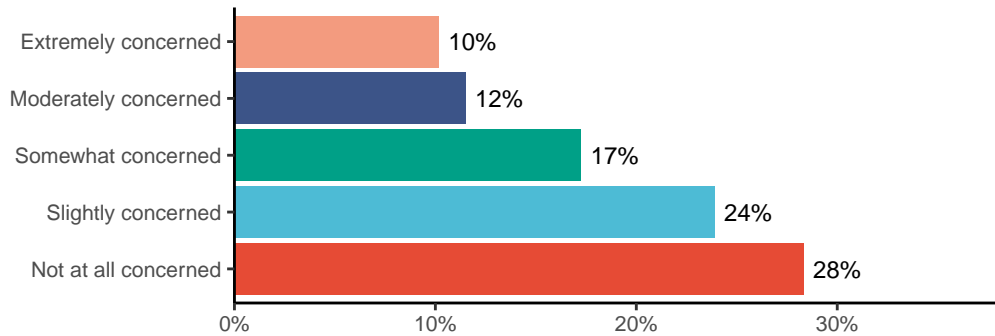


1.4.3 Comparison of Online vs. In-Person Tutoring Benefits



1.4.4 Concern for Oasis Resources for Online Tutoring

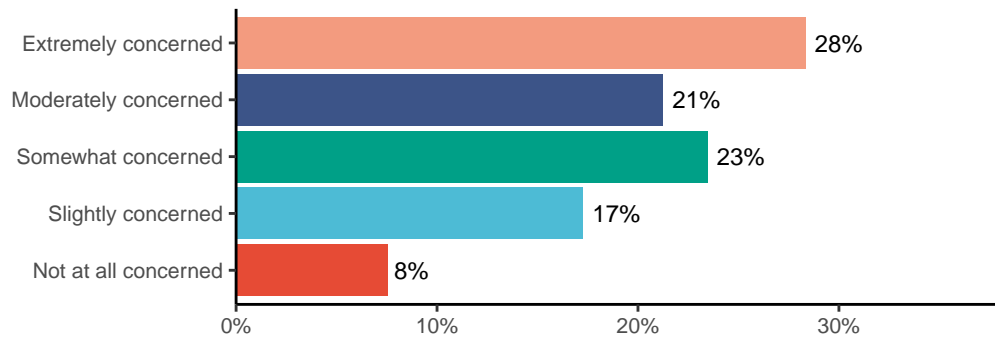
Q19: If tutoring in Fall 2020 is online, how concerned would you be about resources equipment, and support from Oasis?



Sample size (n = 226); Don't know or prefer not to answer (n = 20)

1.4.5 Concern for In-Person Tutoring During Coronavirus Outbreak

Q20: If tutoring in Fall 2020 is in-person and tutoring takes place inside schools, how concerned would you be given that COVID-19 may still be an issue?



Sample size (n = 226); Don't know or prefer not to answer (n = 5)

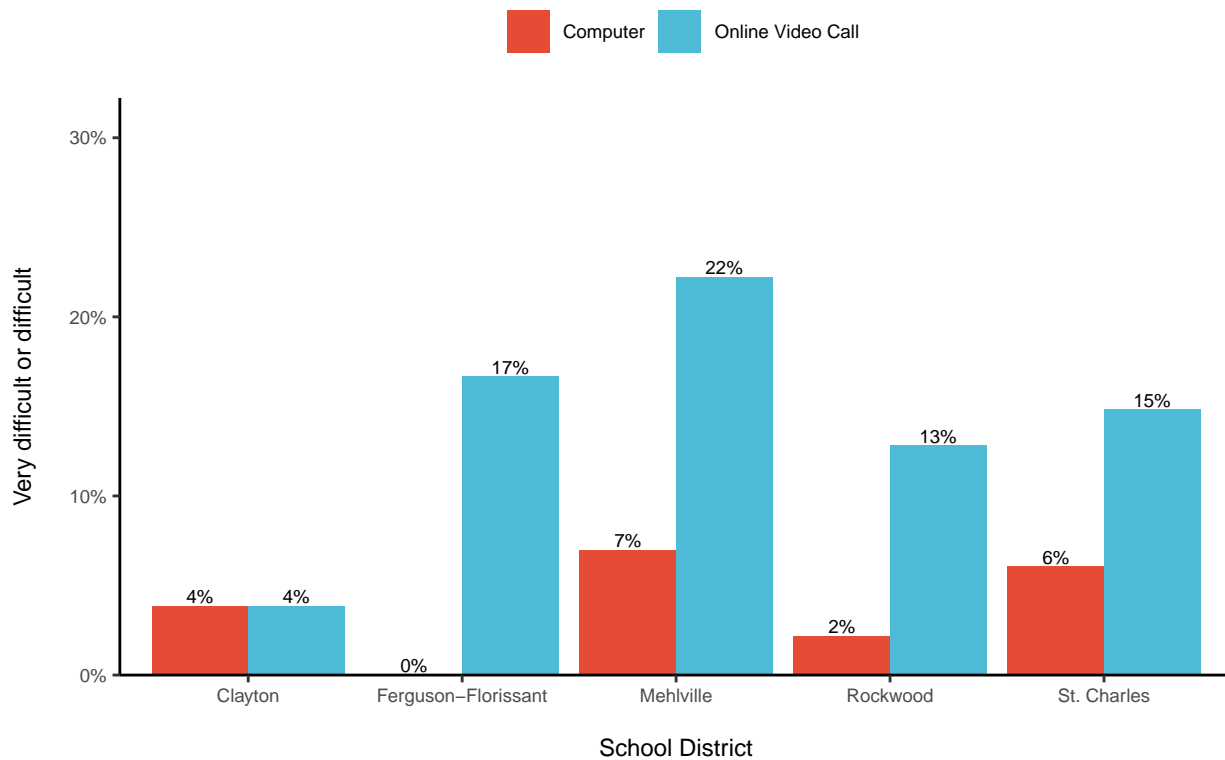
2 Bivariate Analyses

2.1 Combined Use of Technology at Home

A total of 205 (90%) respondents have used the Internet, computer, and smartphone before at home.

A total of 180 (79%) respondents have used the Internet, computer, smartphone, and online video calls before at home.

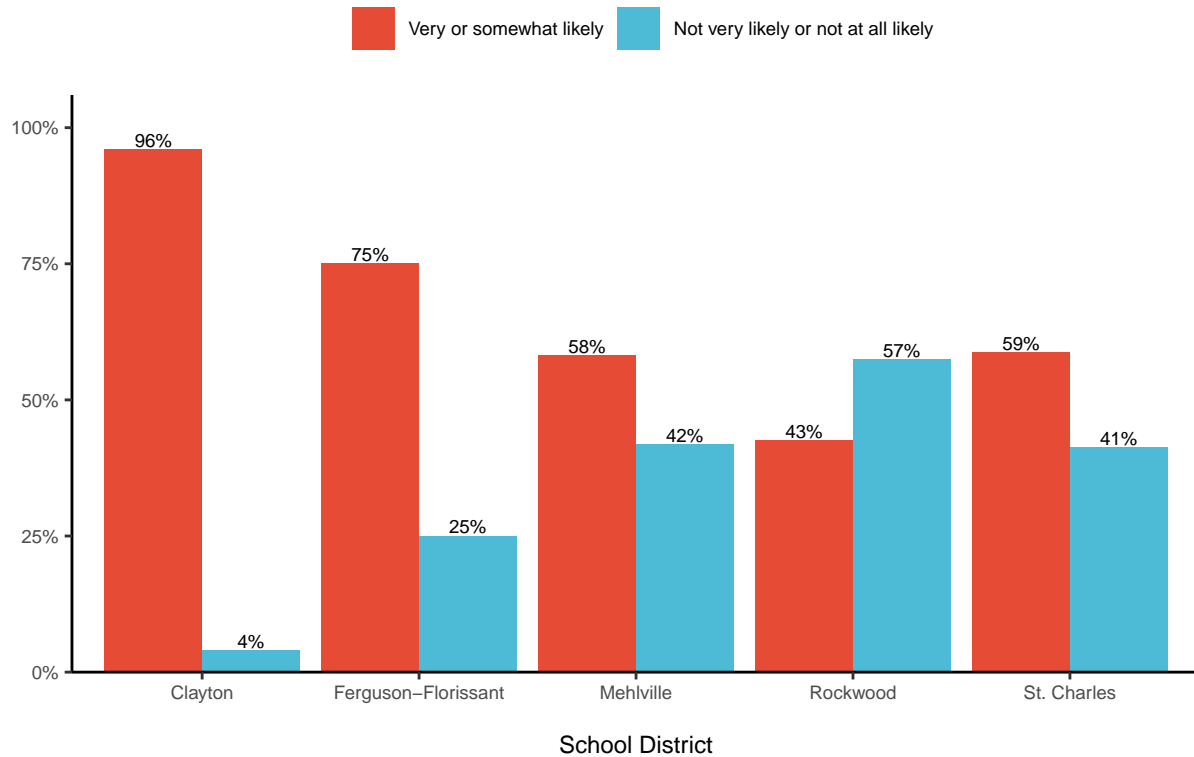
2.2 Difficulty of Technology Use by School District



Due to small sample sizes, Oasis Institute Training, East St. Louis, and Northwest are omitted in the above figure.

2.3 Likelihood of Tutoring Online by School District

Q16: How likely would you be to participate in an online tutoring program?



Due to small sample sizes, Oasis Institute Training (n = 1), East St. Louis (n = 4), and Northwest (n = 9) are omitted in the above figure.

Table 1: Total Respondents by School District

School District	Total Respondents
Clayton	25
Ferguson-Florissant	24
Mehlville	43
Rockwood	47
St. Charles	63

2.4 Likelihood of Tutoring Online by Education Level

Q16: How likely would you be to participate in an online tutoring program?

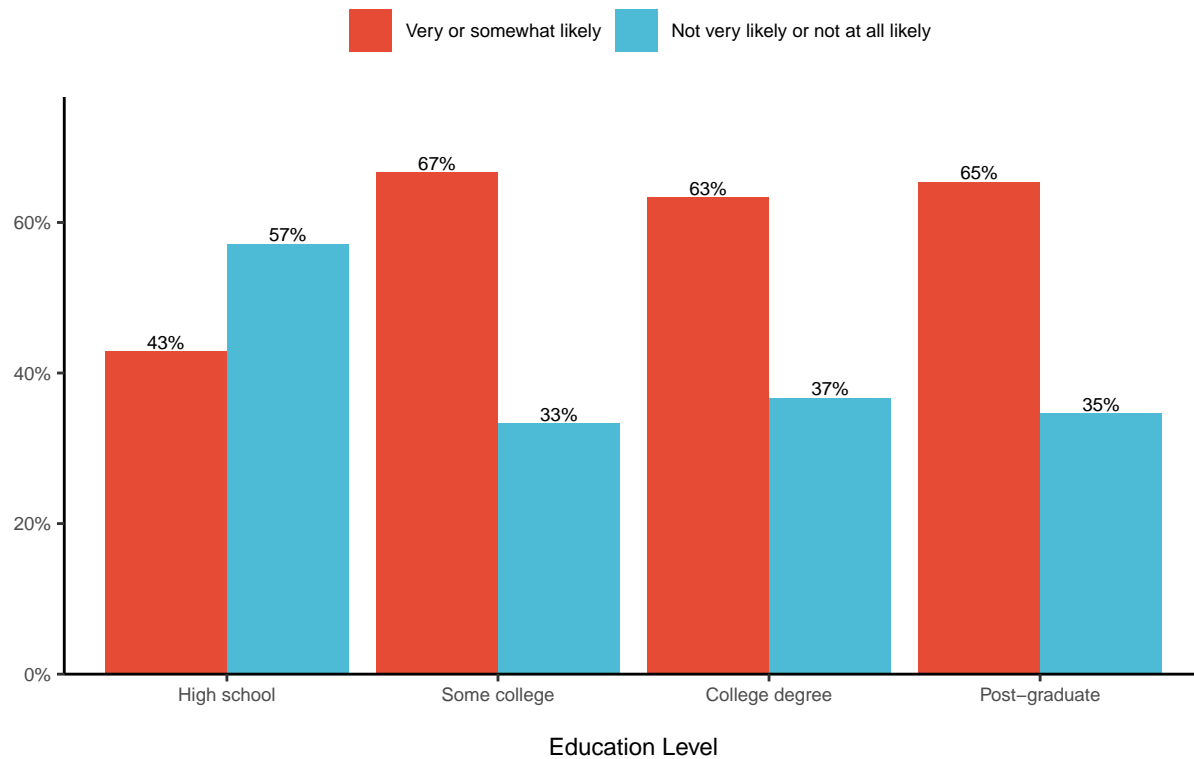
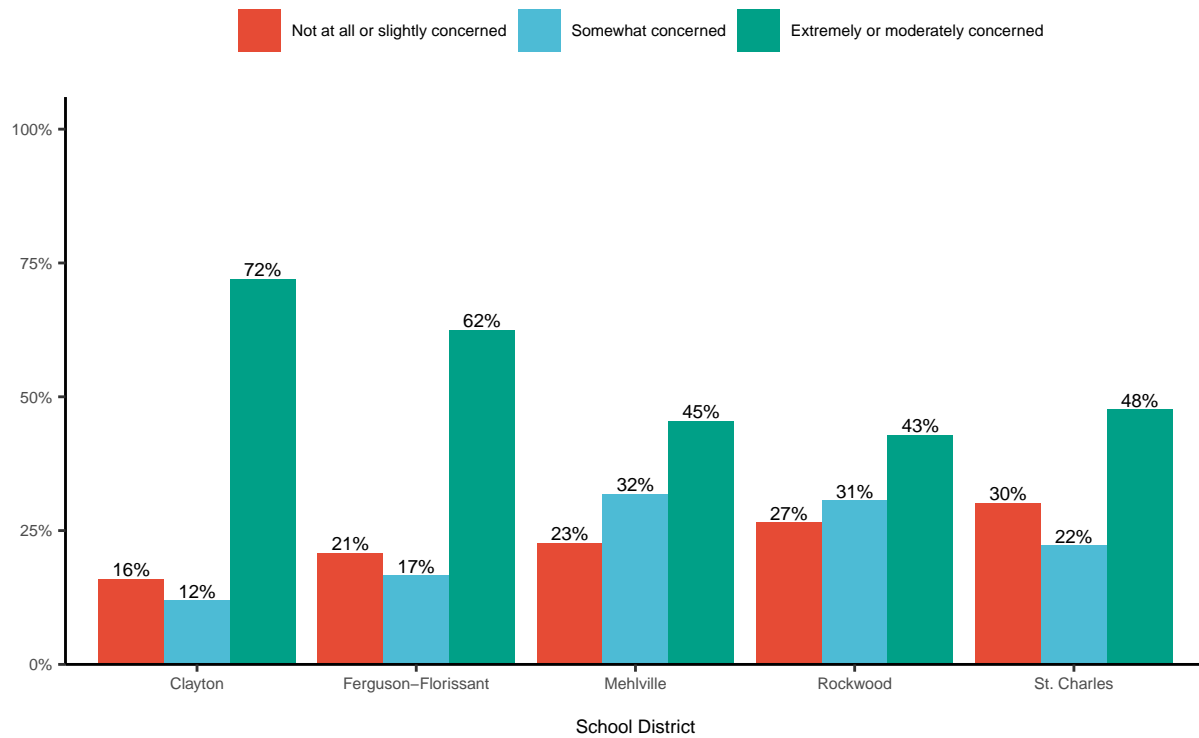


Table 2: Total Respondents by Education Level

Education Level	Total Respondents
High school	14
Some college	33
College degree	90
Post-graduate	78

2.5 Concern for In-Person Tutoring by School District

Q20: If tutoring in Fall 2020 is in-person and tutoring takes place inside schools, how concerned would you be given that COVID-19 may still be an issue?



Due to small sample sizes, Oasis Institute Training (n = 1), East St. Louis (n = 4), and Northwest (n = 9) are omitted in the above figure.

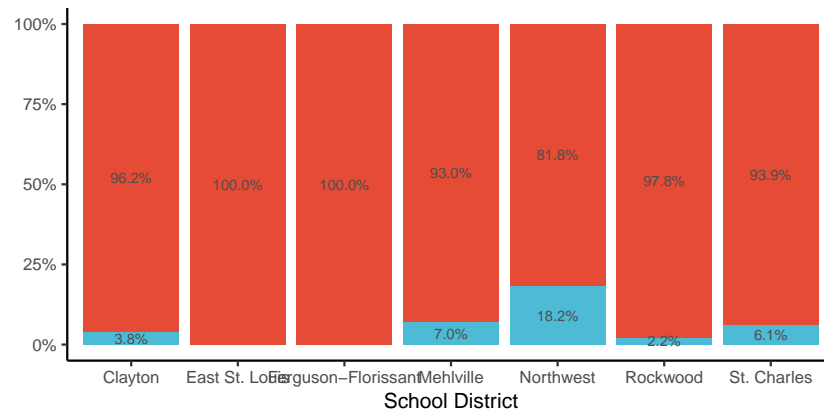
2.6 Table 3. Tests of Associations Between Demographics and Attitudes Toward Technology and Tutoring.

		No significant association					Significant association*	
Survey Response	Virtual Tutoring Not Beneficial	11.09	7.30	4.09	8.35* (0.20) Male (24.2%) (+) Female (8.3%) (-)	56.70* (0.38) White (2.2%) (-)	8.51	
	Number of Technology Devices	9.57	20.39	31.72* (0.21) High School (50.0%) (=)	14.75* (0.25) Male (58.3%) (-) Female (82.9%) (+)	2.50	74.15* (0.40) \$15k–\$25k (40.0%) (-)	
	Likely to Tutor Virtually	21.92* (0.33) Clayton (96.0%) (+) Rockwood (42.6%) (-)	6.03	1.95	0.99	6.52	5.52	
	Difficulty of Computer Use	2.84	11.56* (0.23) Age 81–90 (25.0%) (=)	10.67* (0.22) High School (21.4%) (+)	0.43	0.90	24.82* (0.40) < \$15k (100.0%) (+)	
	Concern for Oasis Resources for Virtual Tutoring	9.97	8.30	2.66	1.64	4.75	9.08	
	Concern for In–Person Tutoring	8.34	6.99	8.18	3.45	2.03	6.58	
	Uncomfortable Using Internet	14.23	10.79	8.95	0.13	5.39	39.00* (0.29) < \$15k (100.0%) (+)	
		School District	Age	Education	Gender	Race	Income	
Survey Respondent Demographics								

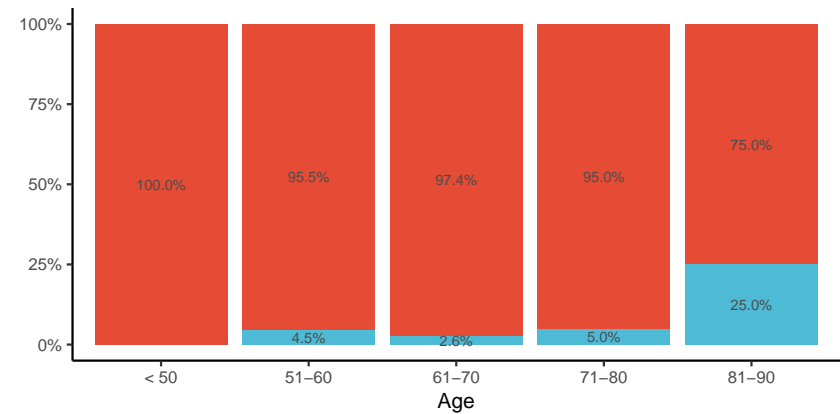
3 Stacked Bar Plots

Difficulty of Computer Use

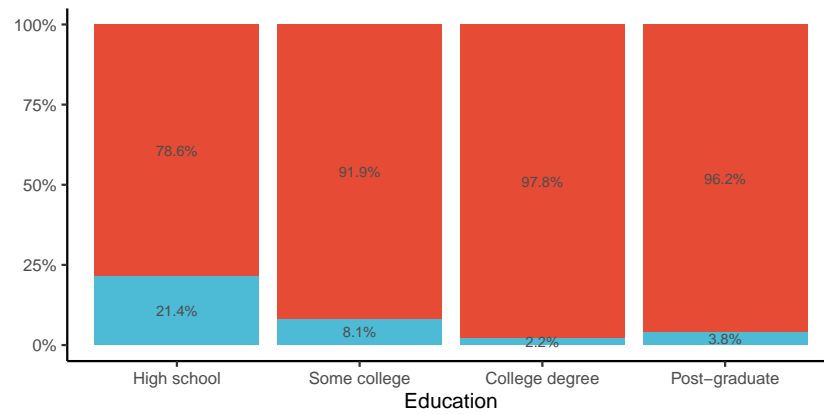
Very easy or easy Very difficult or difficult



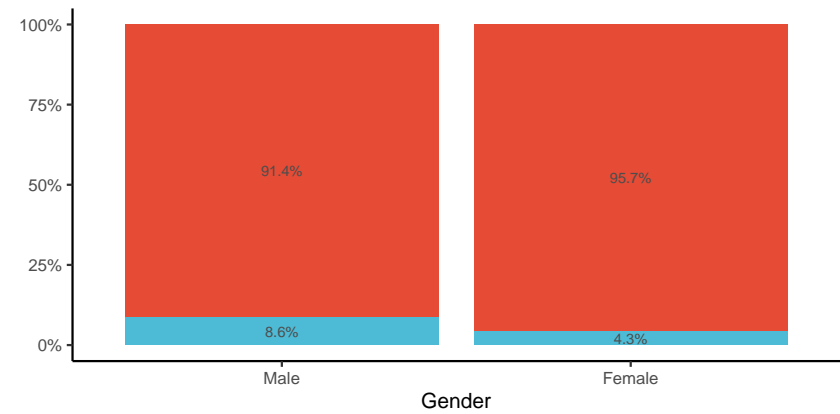
Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 43), Northwest (n = 11), Rockwood (n = 46), St. Charles (n = 66); p = 0.33



< 50 (n = 8), 51-60 (n = 22), 61-70 (n = 78), 71-80 (n = 101), 81-90 (n = 12); p = 0.02



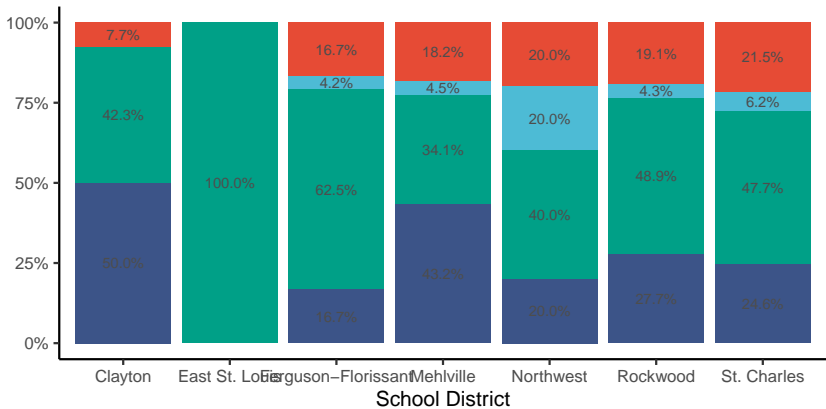
High school (n = 14), Some college (n = 37), College degree (n = 93), Post-graduate (n = 79); p = 0.01



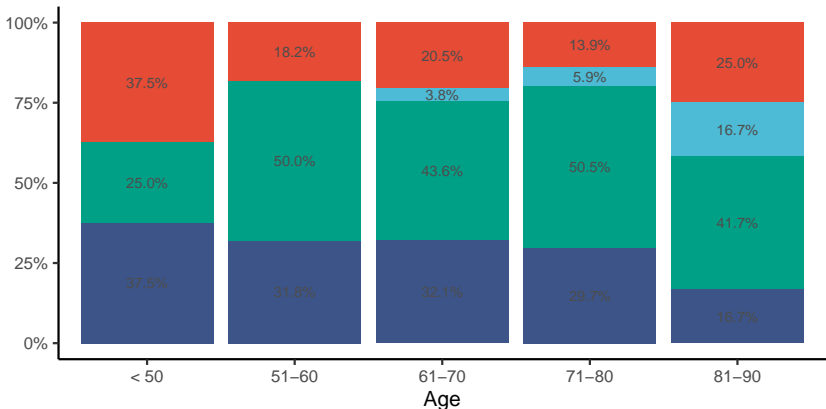
Male (n = 35), Female (n = 188); p = 0.51

Uncomfortable Using Internet

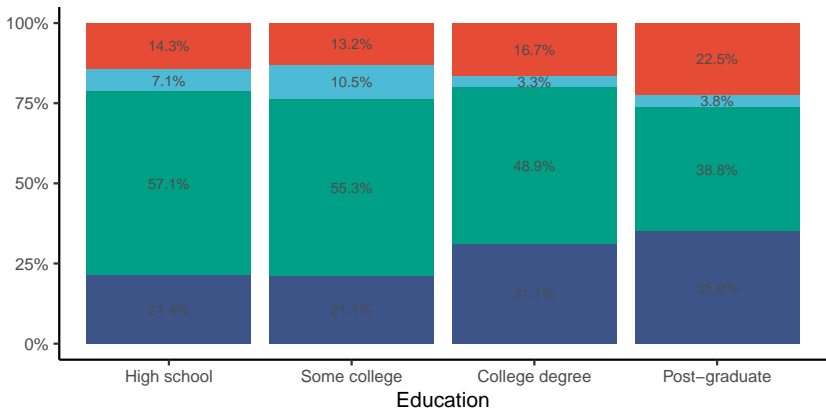
Very uncomfortable Uncomfortable Comfortable Very comfortable



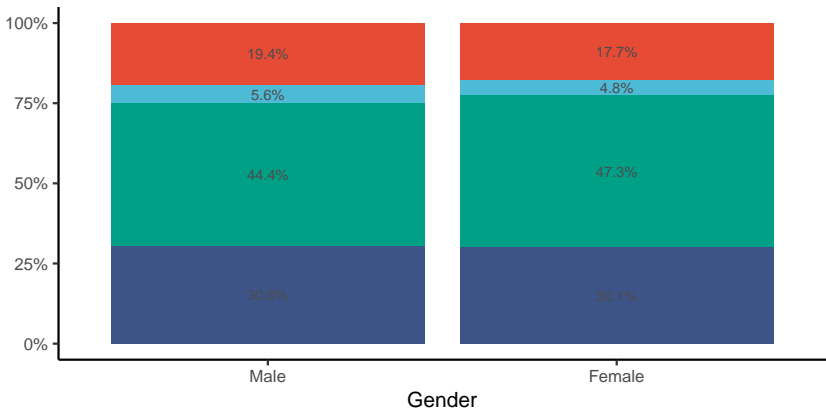
Louis (n = 4), Ferguson-Florissant (n = 24), Mehlville (n = 44), Northwest (n = 10), Rockwood (n = 47), St. Charles (n = 65); p = 0.15



< 50 (n = 8), 51-60 (n = 22), 61-70 (n = 78), 71-80 (n = 101), 81-90 (n = 12); p = 0.55



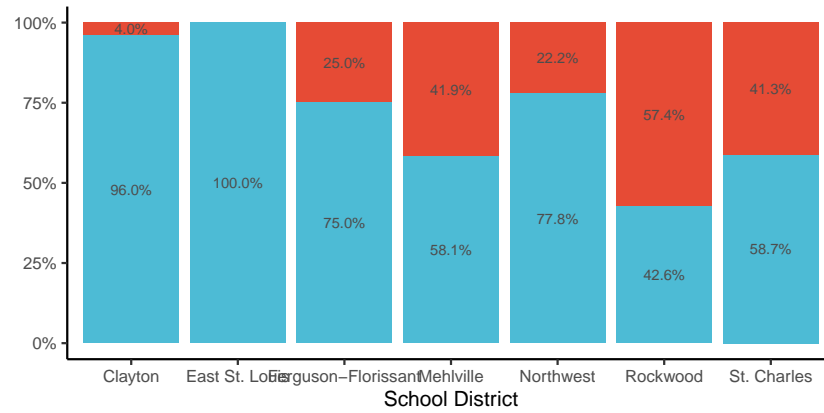
High school (n = 14), Some college (n = 38), College degree (n = 90), Post-graduate (n = 80); p = 0.44



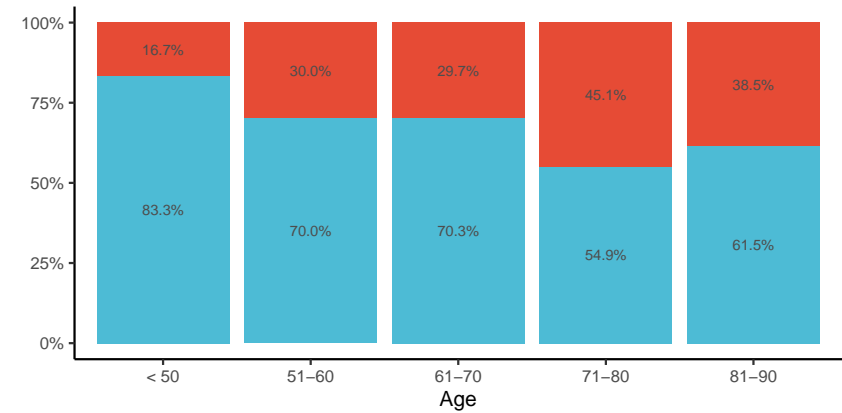
Male (n = 36), Female (n = 186); p = 0.99

Likely to Tutor Virtually

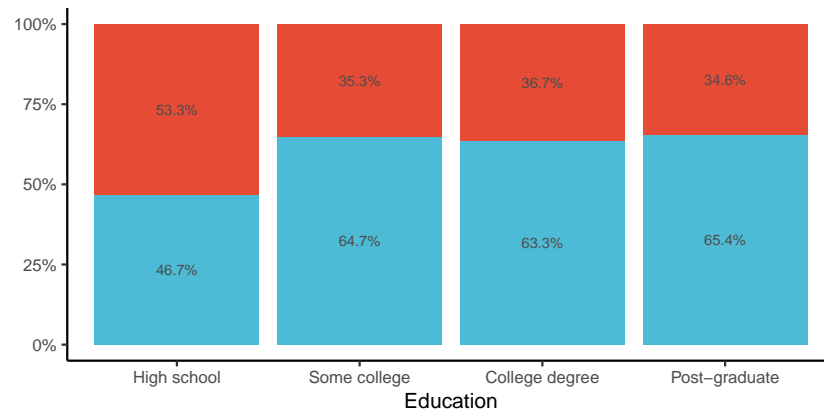
Not very or not at all likely Very or somewhat likely



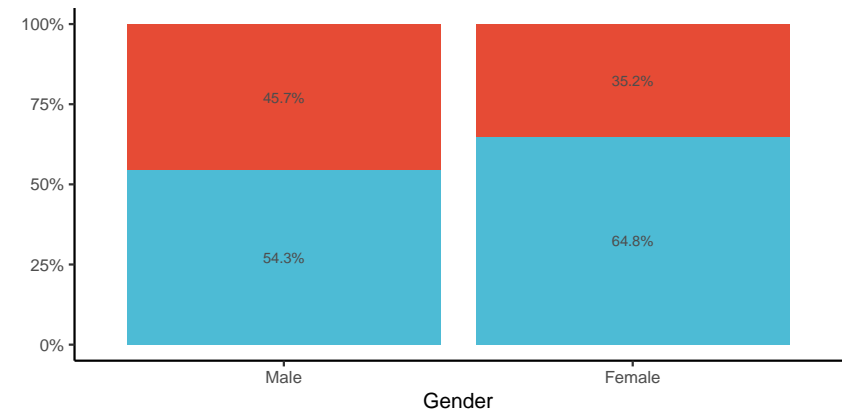
. Louis (n = 4), Ferguson-Florissant (n = 24), Mehlville (n = 43), Northwest (n = 9), Rockwood (n = 47), St. Charles (n = 63); p = 0.00



< 50 (n = 6), 51-60 (n = 20), 61-70 (n = 74), 71-80 (n = 102), 81-90 (n = 13); p = 0.20



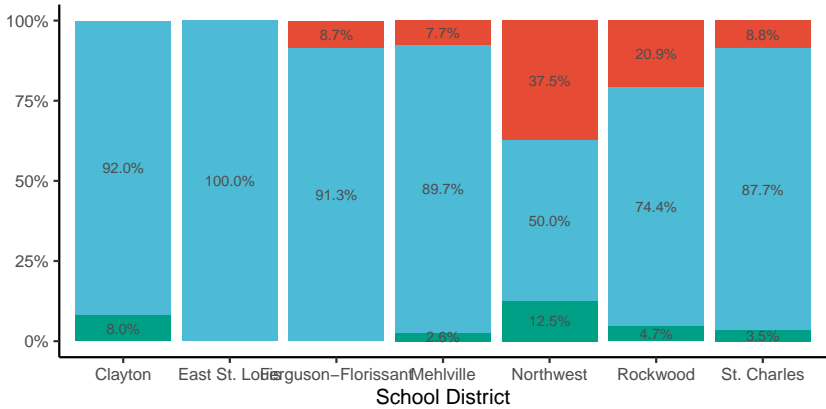
High school (n = 15), Some college (n = 34), College degree (n = 90), Post-graduate (n = 78); p = 0.58



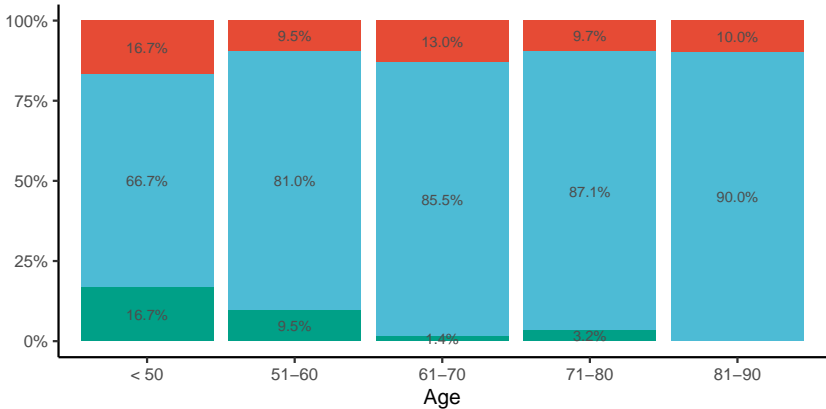
Male (n = 35), Female (n = 182); p = 0.32

Virtual Tutoring Not Beneficial

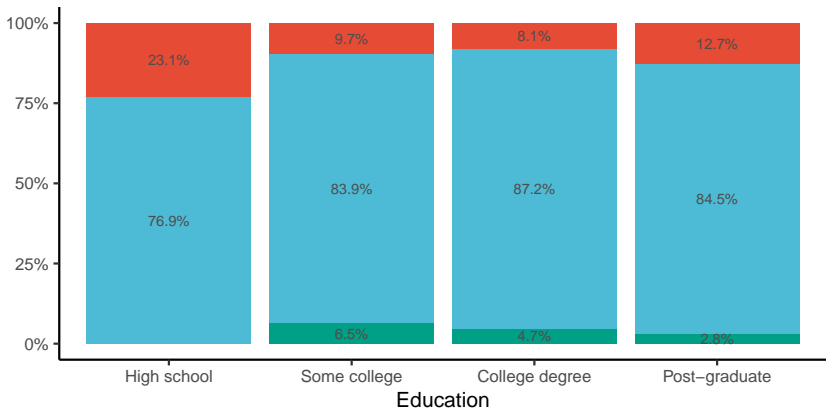
Virtual not beneficial Virtual beneficial, but not replacement of in-person Virtual just as beneficial as in-person



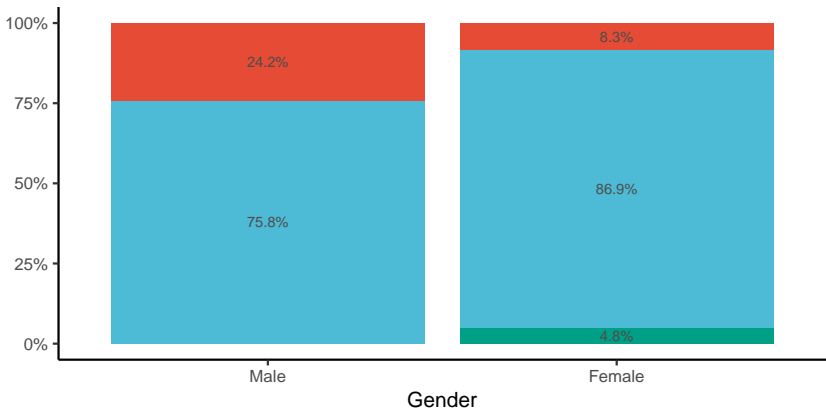
. Louis (n = 4), Ferguson-Florissant (n = 23), Mehlville (n = 39), Northwest (n = 8), Rockwood (n = 43), St. Charles (n = 57); p = 0.09



< 50 (n = 6), 51-60 (n = 21), 61-70 (n = 69), 71-80 (n = 93), 81-90 (n = 10); p = 0.50



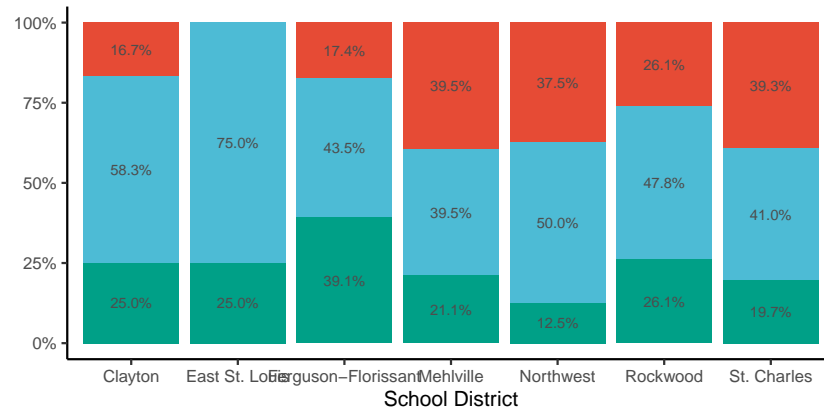
High school (n = 13), Some college (n = 31), College degree (n = 86), Post-graduate (n = 71); p = 0.66



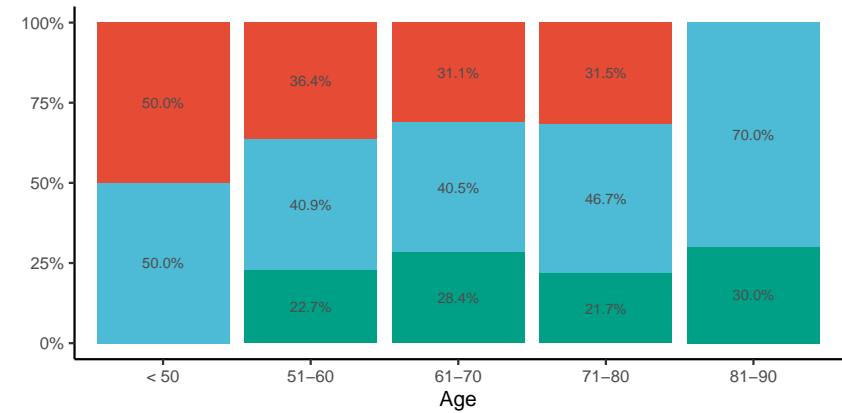
Male (n = 33), Female (n = 168); p = 0.02

Concern for Oasis Resources for Virtual Tutoring

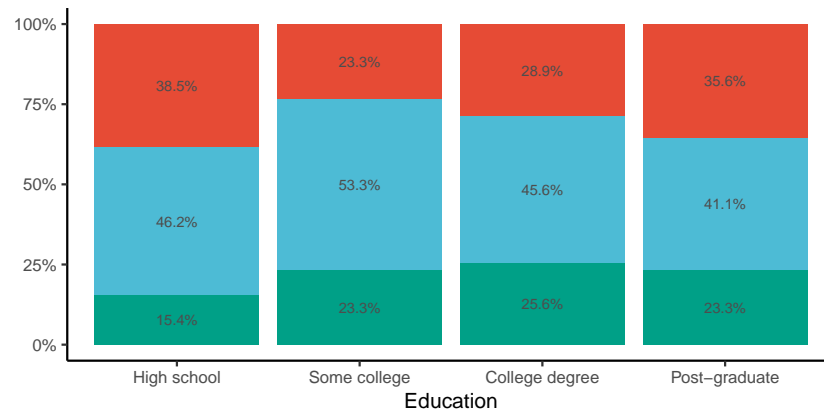
Not at all concerned Somewhat or slightly concerned Extremely or moderately concerned



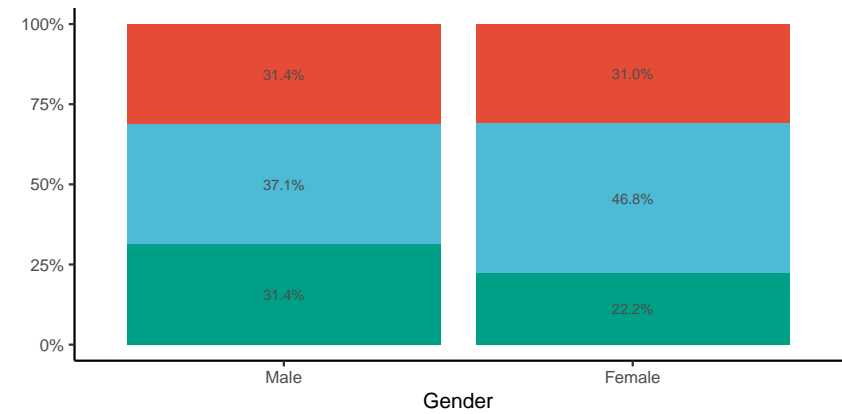
. Louis (n = 4), Ferguson-Florissant (n = 23), Mehlville (n = 38), Northwest (n = 8), Rockwood (n = 46), St. Charles (n = 61); p = 0.39



< 50 (n = 6), 51-60 (n = 22), 61-70 (n = 74), 71-80 (n = 92), 81-90 (n = 10); p = 0.40



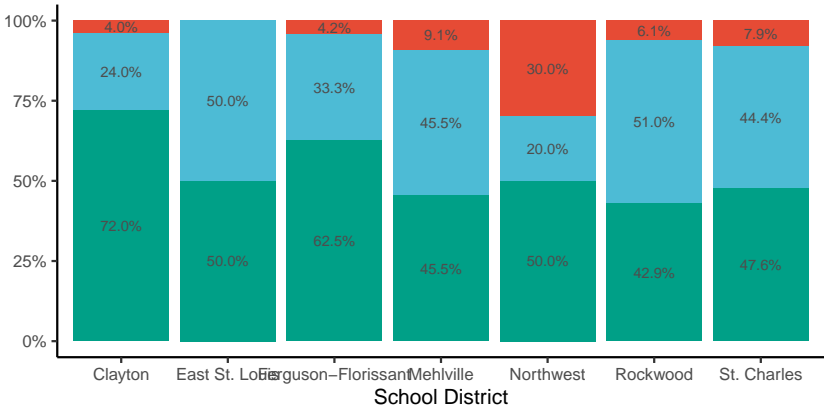
High school (n = 13), Some college (n = 30), College degree (n = 90), Post-graduate (n = 73); p = 0.85



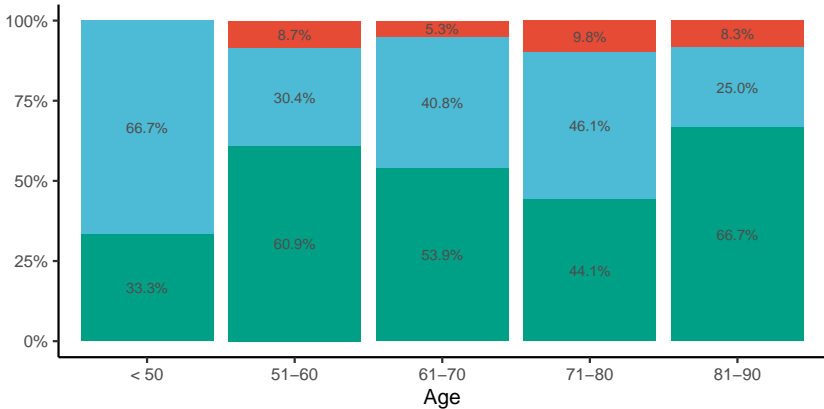
Male (n = 35), Female (n = 171); p = 0.44

Concern for In-Person Tutoring

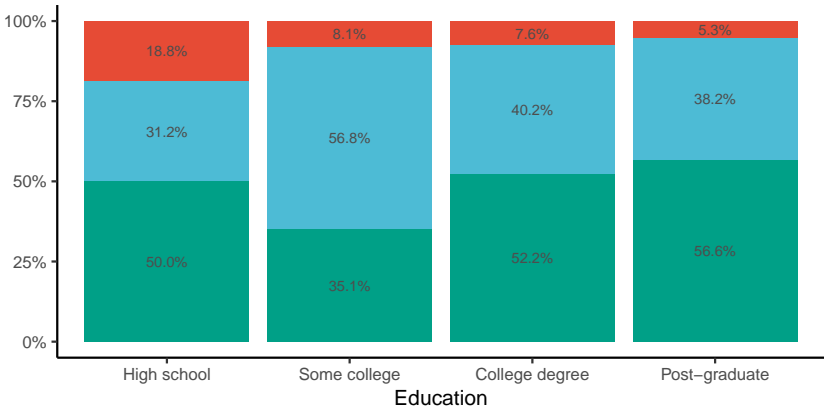
Not at all concerned Somewhat or slightly concerned Extremely or moderately concerned



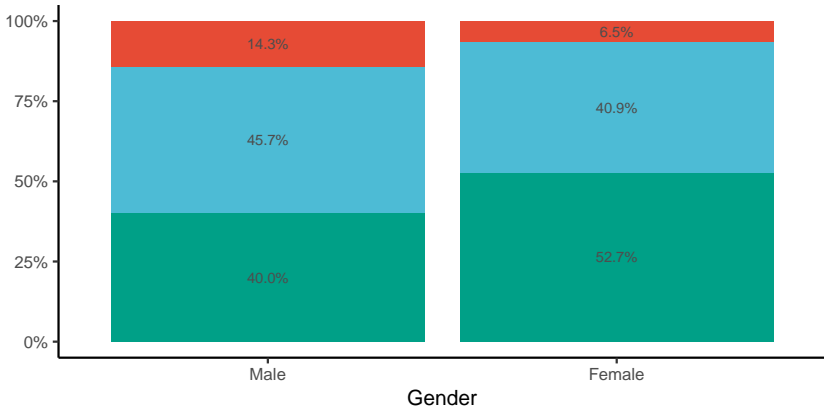
Louis (n = 4), Ferguson-Florissant (n = 24), Mehlville (n = 44), Northwest (n = 10), Rockwood (n = 49), St. Charles (n = 63); p = 0.17



< 50 (n = 6), 51-60 (n = 23), 61-70 (n = 76), 71-80 (n = 102), 81-90 (n = 12); p = 0.54

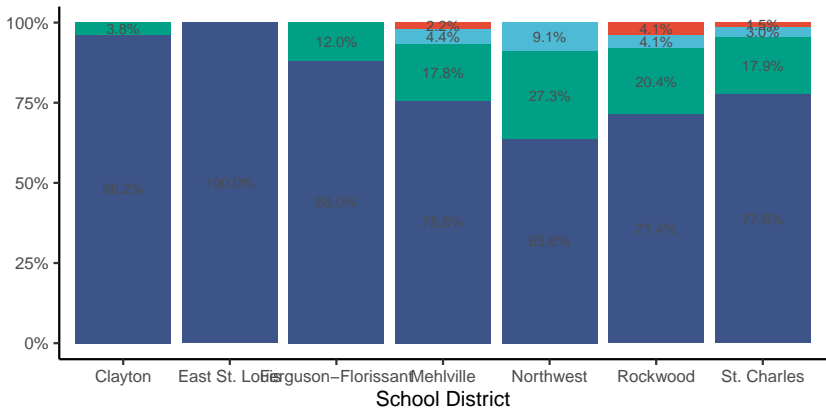


High school (n = 16), Some college (n = 37), College degree (n = 92), Post-graduate (n = 76); p = 0.23

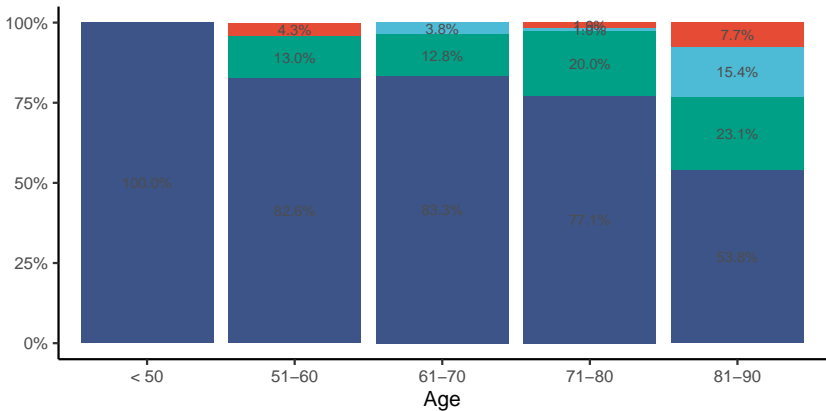


Male (n = 35), Female (n = 186); p = 0.18

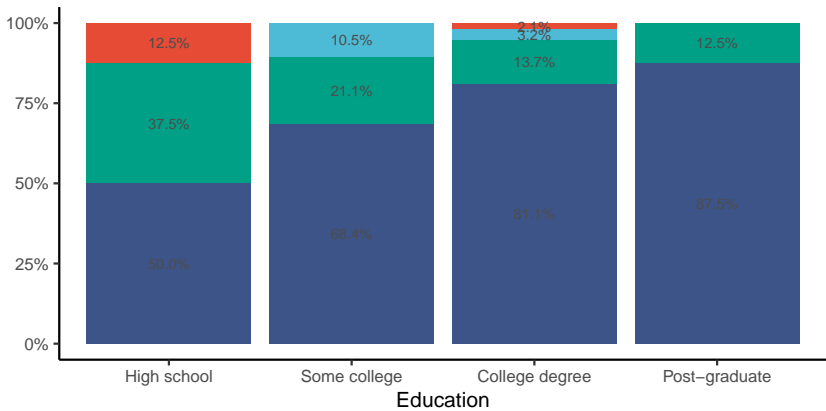
Number of Technology Devices



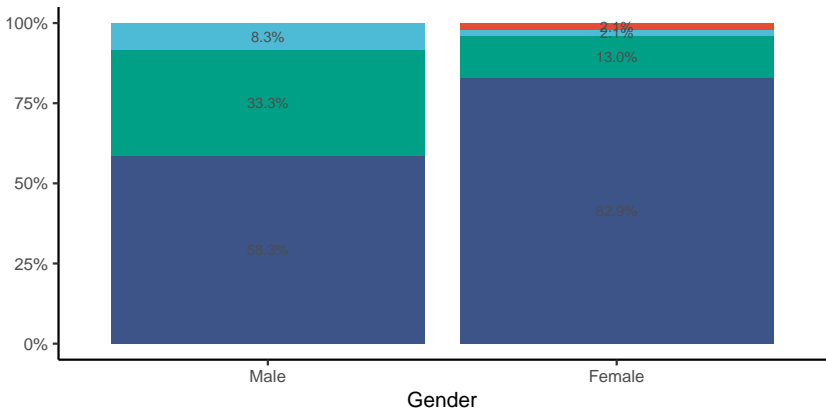
Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 45), Northwest (n = 11), Rockwood (n = 49), St. Charles (n = 67); p = 0.78



< 50 (n = 8), 51-60 (n = 23), 61-70 (n = 78), 71-80 (n = 105), 81-90 (n = 13); p = 0.06



High school (n = 16), Some college (n = 38), College degree (n = 95), Post-graduate (n = 80); p = 0.00



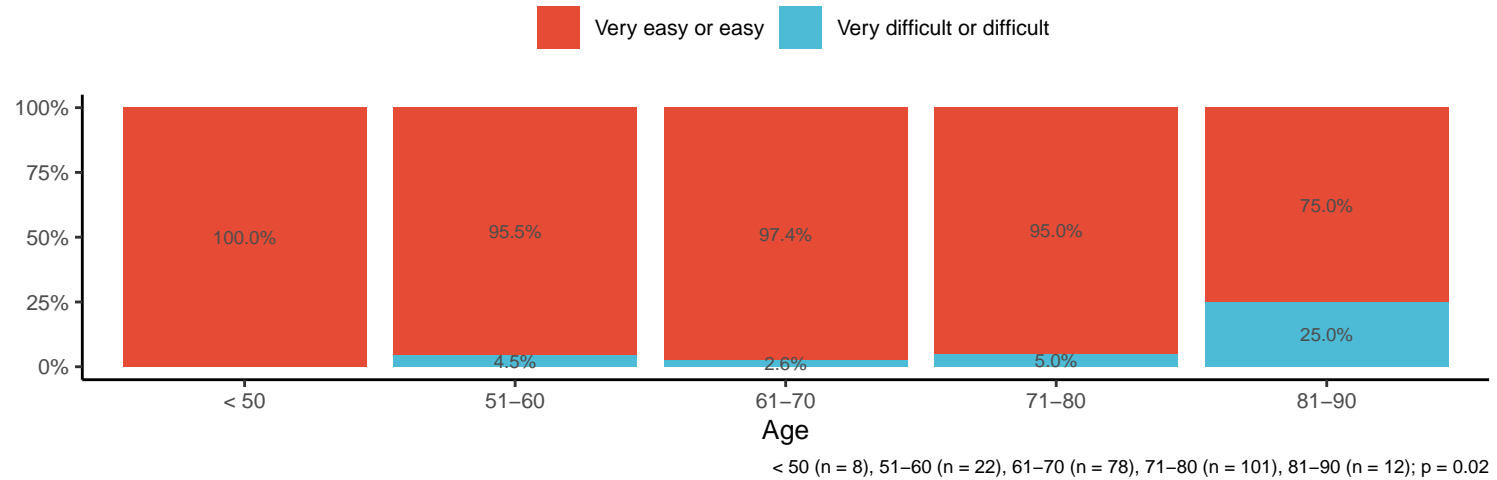
Male (n = 36), Female (n = 193); p = 0.00

Dimension	Value	Very easy or easy	Very difficult or difficult
< 50	Residuals	0.66	-0.66
< 50	p values	1	1
51-60	Residuals	0.1	-0.1
51-60	p values	1	1
61-70	Residuals	1.22	-1.22
61-70	p values	1	1
71-80	Residuals	0.02	-0.02
71-80	p values	1	1
81-90	Residuals	-3.28	3.28
81-90	p values	0.01*	0.01*

4 Bonferroni Post-Hoc Tests

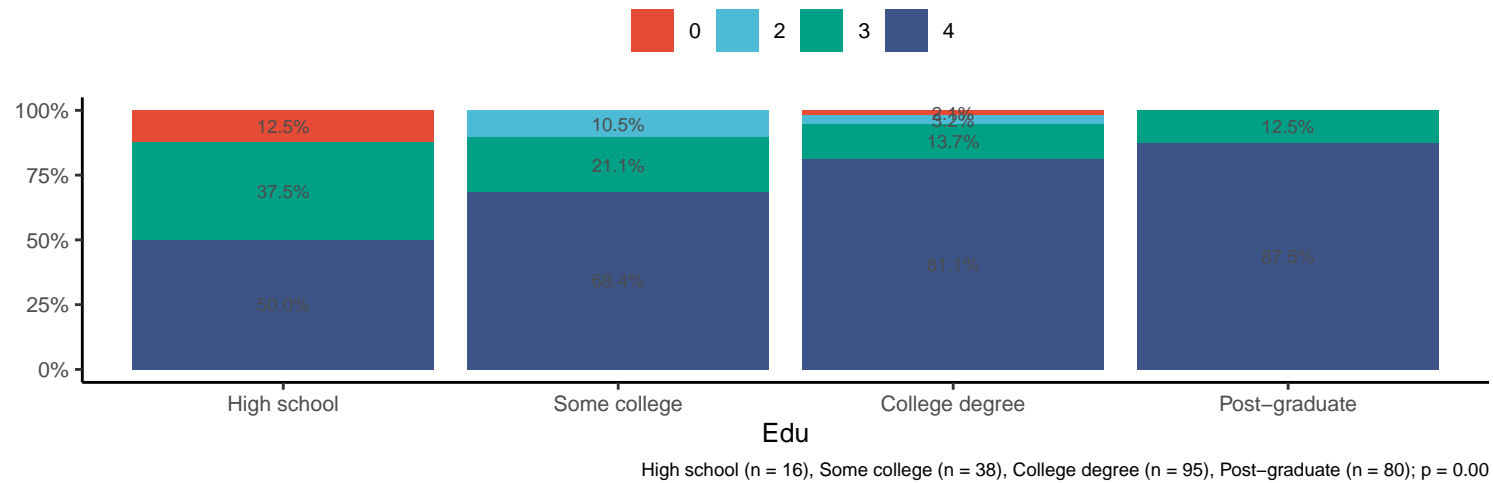
P-values of post-hoc z -tests using the Bonferroni method for multiple comparisons are reported below for statistically significant chi-square test of independence results. Note: * $p < 0.05$

4.1 Age * Ease of Computer Use



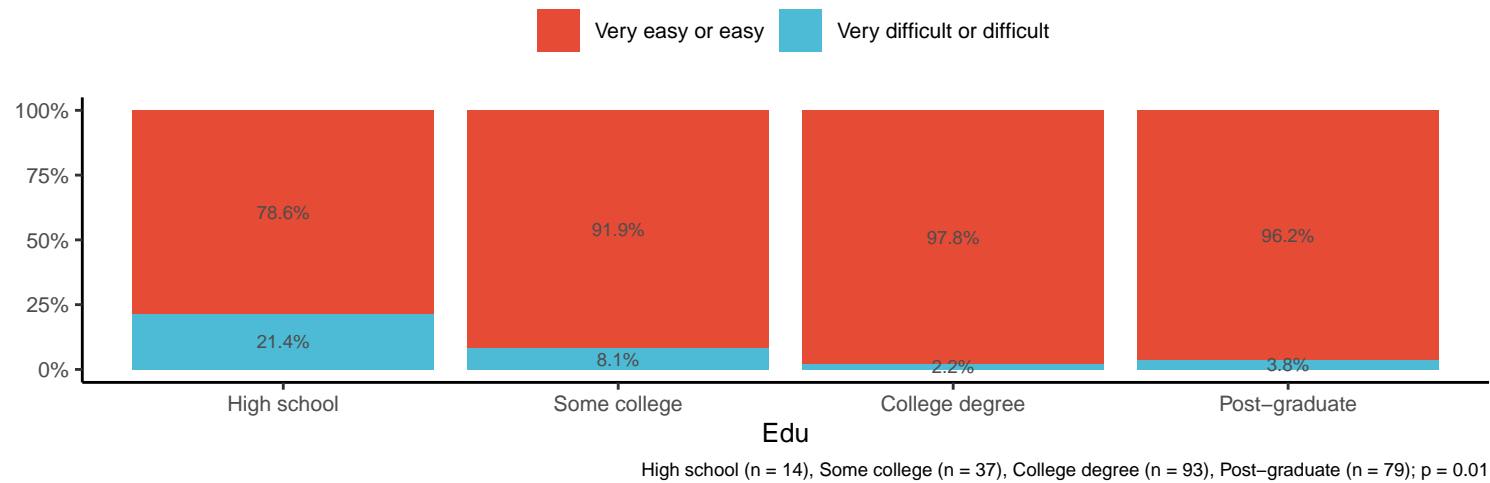
Dimension	Value	0	2	3	4
High school	Residuals	3.4	-0.74	2.41	-2.96
High school	p values	0.01*	1.00	0.26	0.05*
Some college	Residuals	-0.9	2.93	0.90	-1.76
Some college	p values	1	0.05	1.00	1
College degree	Residuals	0.35	0.07	-0.86	0.63
College degree	p values	1	1.00	1.00	1
Post-graduate	Residuals	-1.48	-1.97	-1.10	2.3
Post-graduate	p values	1	0.78	1.00	0.34

4.2 Education * Technology Devices at Home



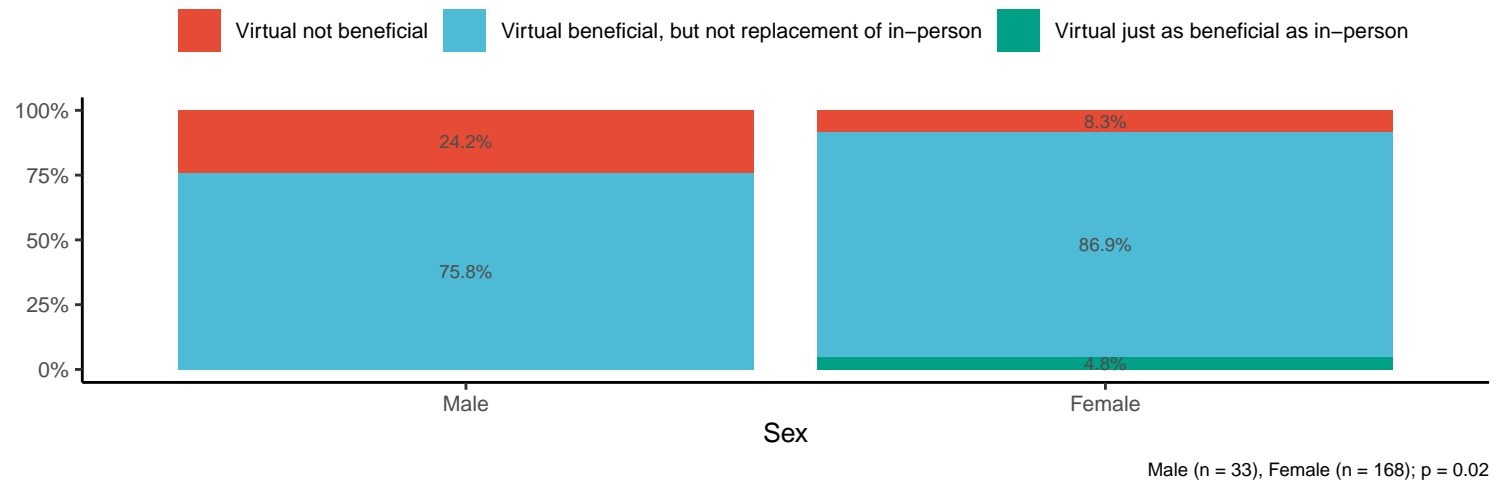
Dimension	Value	Very easy or easy	Very difficult or difficult
High school	Residuals	-2.94	2.94
High school	p values	0.03*	0.03*
Some college	Residuals	-0.98	0.98
Some college	p values	1	1
College degree	Residuals	1.62	-1.62
College degree	p values	0.84	0.84
Post-graduate	Residuals	0.58	-0.58
Post-graduate	p values	1	1

4.3 Education * Ease of Computer Use



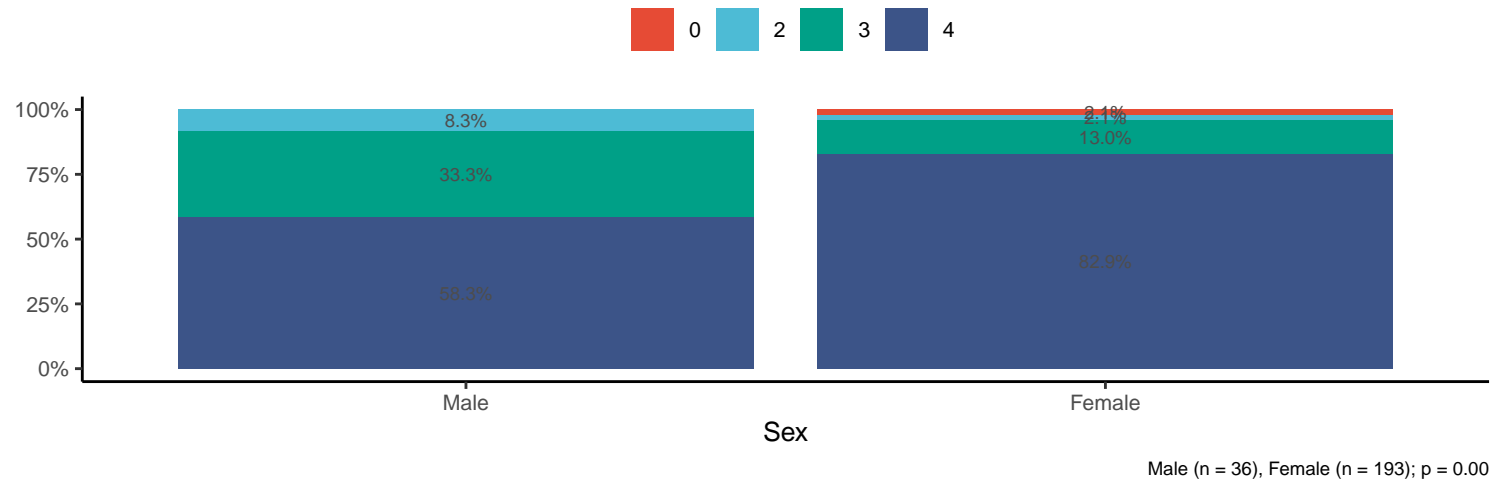
Dimension	Value	Virtual not beneficial	Virtual beneficial, but not replacement of in-person	Virtual just as beneficial as in-person
Male	Residuals	2.68	-1.64	-1.28
Male	p values	0.04*	0.60	1.00
Female	Residuals	-2.68	1.64	1.28
Female	p values	0.04*	0.60	1.00

4.4 Gender * Virtual vs. In-Person Benefits



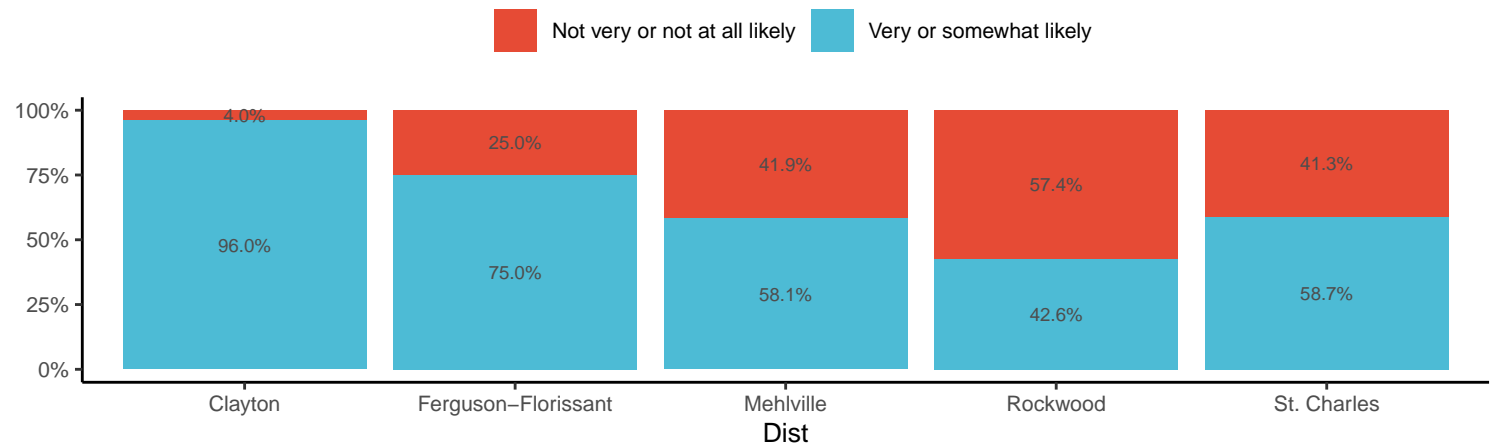
Dimension	Value	0	2	3	4
Male	Residuals	-0.87	2.00	3.05	-3.32
Male	p values	1.00	0.36	0.02*	0.01*
Female	Residuals	0.87	-2.00	-3.05	3.32
Female	p values	1.00	0.36	0.02*	0.01*

4.5 Gender * Technology Devices at Home



Dimension	Value	Not very or not at all likely	Very or somewhat likely
Clayton	Residuals	-3.8	3.8
Clayton	p values	0*	0*
Ferguson-Florissant	Residuals	-1.46	1.46
Ferguson-Florissant	p values	1	1
Mehlville	Residuals	0.49	-0.49
Mehlville	p values	1	1
Rockwood	Residuals	3.03	-3.03
Rockwood	p values	0.02*	0.02*
St. Charles	Residuals	0.52	-0.52
St. Charles	p values	1	1

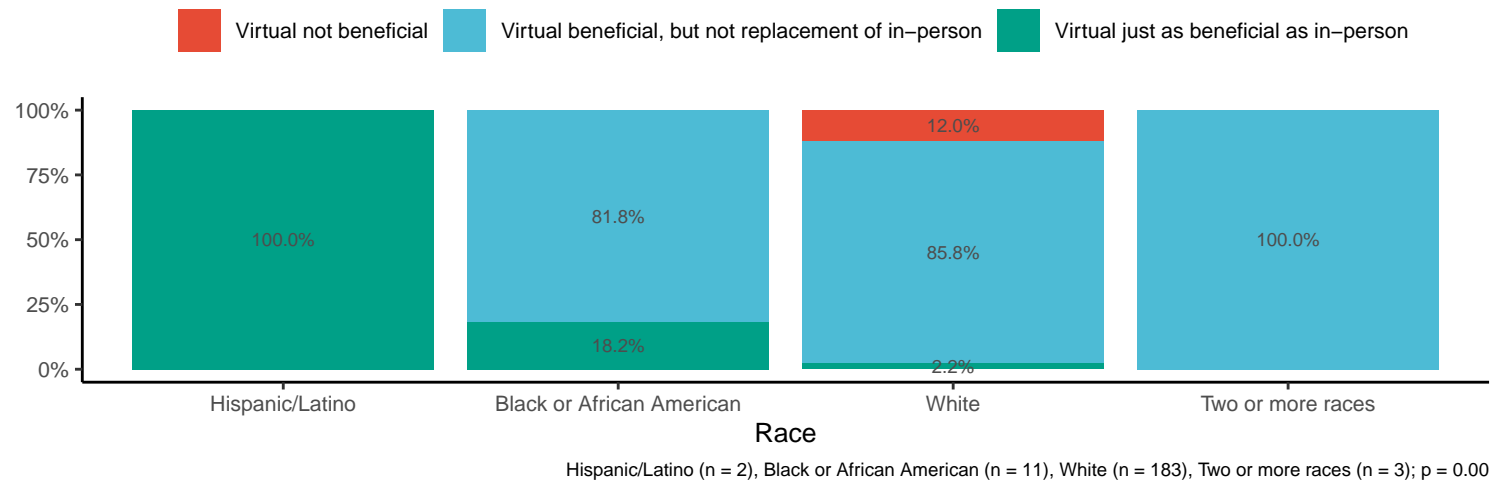
4.6 School District * Likelihood of Virtual Tutoring



Clayton (n = 25), Ferguson-Florissant (n = 24), Mehlville (n = 43), Rockwood (n = 47), St. Charles (n = 63); p = 0.00

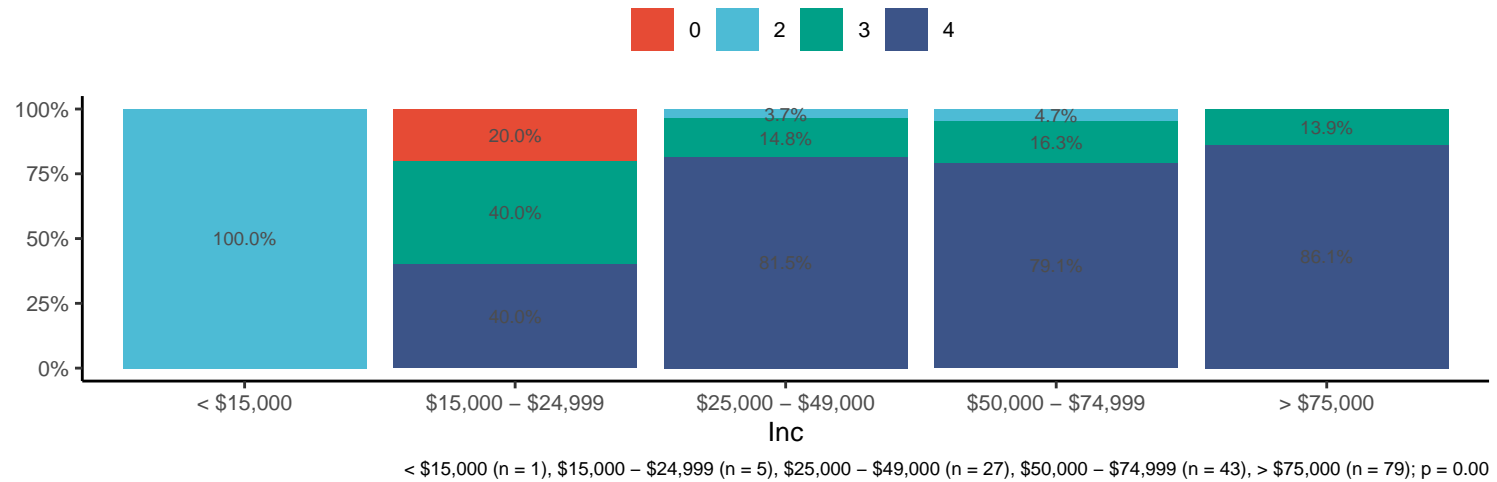
Dimension	Value	Virtual not beneficial	Virtual beneficial, but not replacement of in-person	Virtual just as beneficial as in-person
Hispanic/Latino	Residuals	-0.50	-3.37	6.95
Hispanic/Latino	p values	1.00	0.01*	0*
Black or African American	Residuals	-1.20	-0.3	2.46
Black or African American	p values	1.00	1	0.17
White	Residuals	1.47	1.16	-4.46
White	p values	1.00	1	0*
Two or more races	Residuals	-0.62	0.74	-0.36
Two or more races	p values	1.00	1	1

4.7 Race * Virtual vs. In-Person Benefits



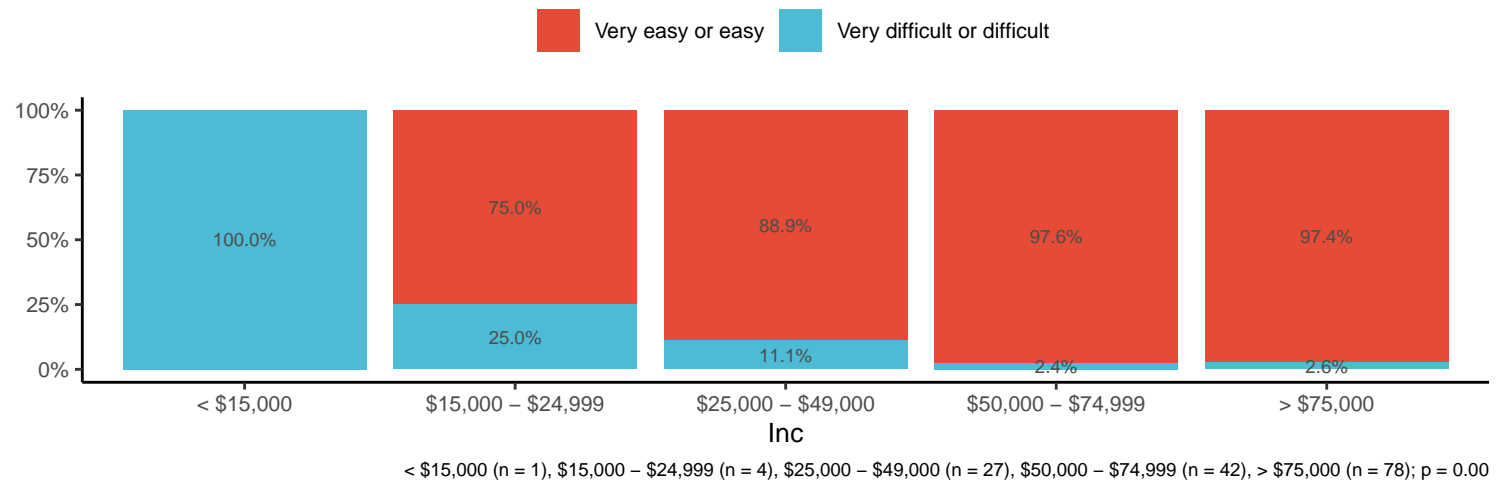
Dimension	Value	0	2	3	4
< \$15,000	Residuals	-0.08	6.16	-0.43	-2.09
< \$15,000	p values	1	0*	1.00	0.73
\$15,000 - \$24,999	Residuals	5.49	-0.37	1.54	-2.41
\$15,000 - \$24,999	p values	0*	1	1.00	0.32
\$25,000 - \$49,000	Residuals	-0.46	0.41	-0.11	0.03
\$25,000 - \$49,000	p values	1	1	1.00	1.00
\$50,000 - \$74,999	Residuals	-0.62	1.01	0.17	-0.44
\$50,000 - \$74,999	p values	1	1	1.00	1.00
> \$75,000	Residuals	-1.02	-2.07	-0.55	1.56
> \$75,000	p values	1	0.78	1.00	1.00

4.8 Income * Number of Tech Devices



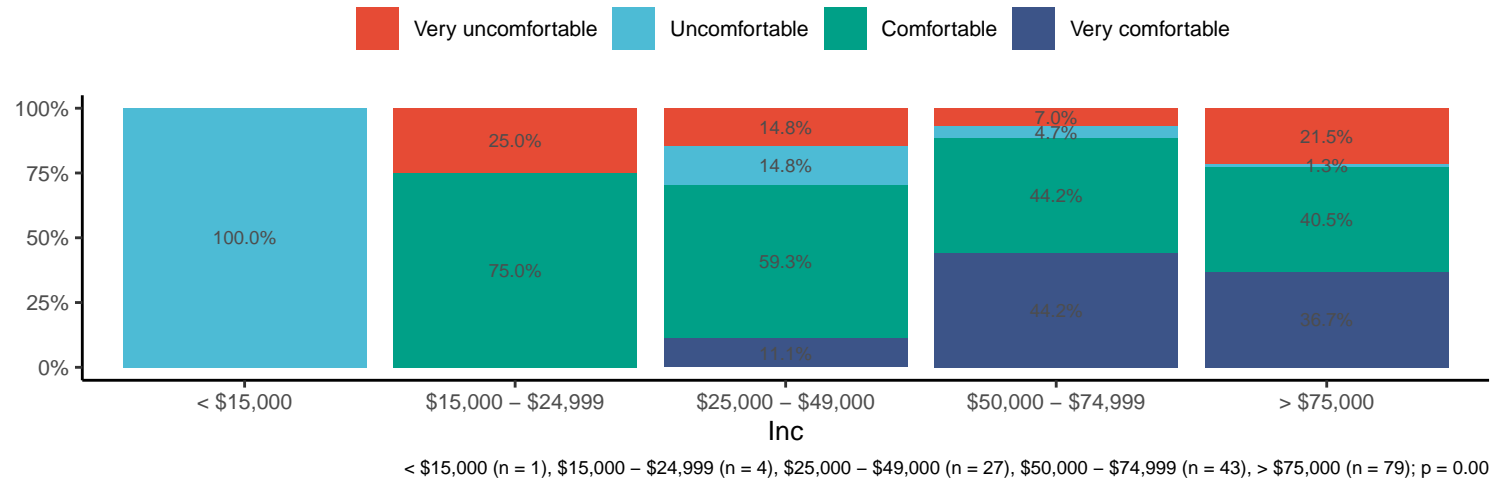
Dimension	Value	Very easy or easy	Very difficult or difficult
< \$15,000	Residuals	-4.26	4.26
< \$15,000	p values	0*	0*
\$15,000 - \$24,999	Residuals	-1.79	1.79
\$15,000 - \$24,999	p values	0.73	0.73
\$25,000 - \$49,000	Residuals	-1.5	1.5
\$25,000 - \$49,000	p values	1	1
\$50,000 - \$74,999	Residuals	0.98	-0.98
\$50,000 - \$74,999	p values	1	1
> \$75,000	Residuals	1.53	-1.53
> \$75,000	p values	1	1

4.9 Income * Difficulty of Computer Use

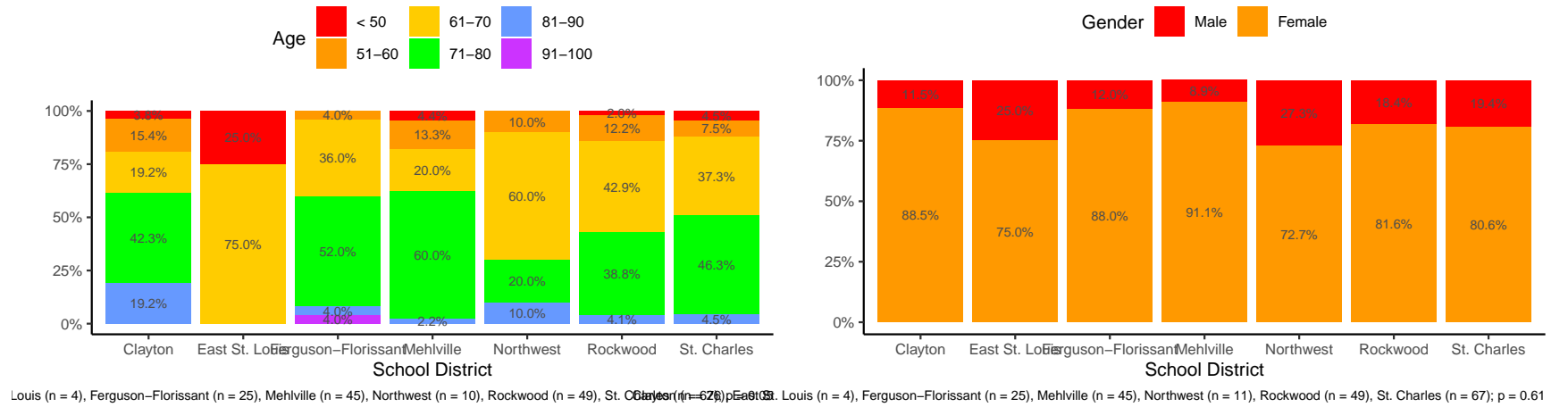


Dimension	Value	Very uncomfortable	Uncomfortable	Comfortable	Very comfortable
< \$15,000	Residuals	-0.44	4.29	-0.92	-0.71
< \$15,000	p values	1.00	0*	1.00	1.00
\$15,000 - \$24,999	Residuals	0.48	-0.47	1.20	-1.43
\$15,000 - \$24,999	p values	1.00	1	1.00	1.00
\$25,000 - \$49,000	Residuals	-0.22	2.48	1.59	-2.68
\$25,000 - \$49,000	p values	1.00	0.26	1.00	0.15
\$50,000 - \$74,999	Residuals	-1.94	-0.19	-0.20	1.82
\$50,000 - \$74,999	p values	1.00	1	1.00	1.00
> \$75,000	Residuals	1.83	-2.25	-1.27	0.97
> \$75,000	p values	1.00	0.48	1.00	1.00

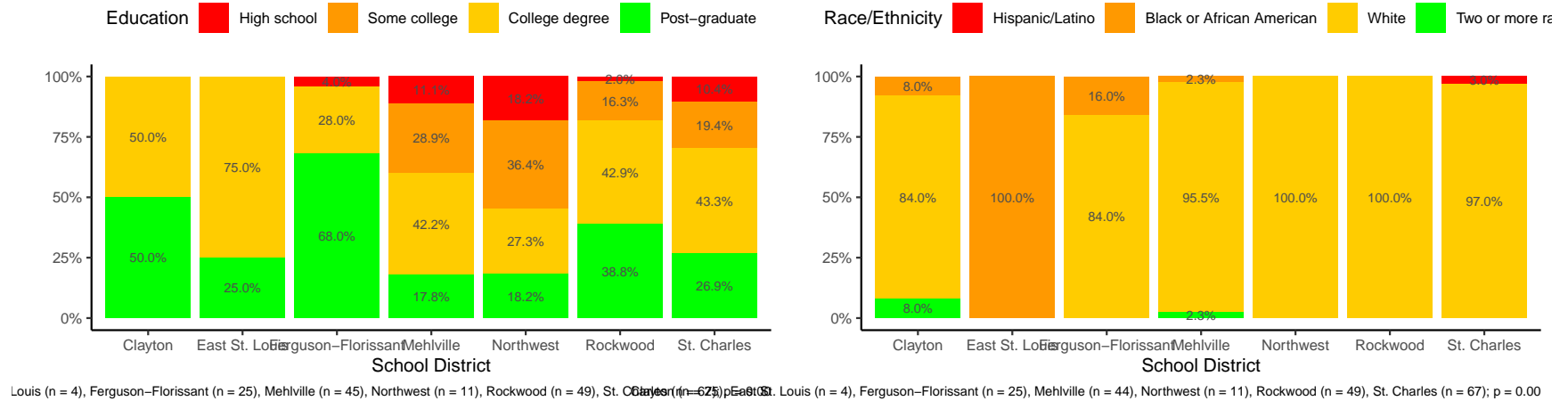
4.10 Income * Comfort Using Internet

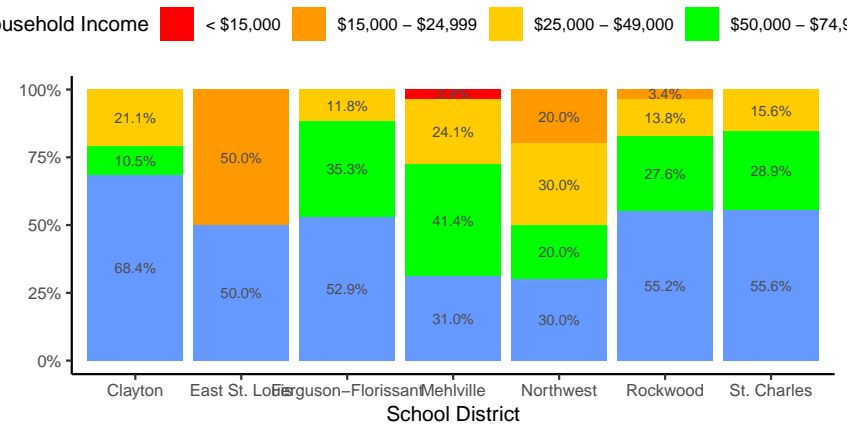
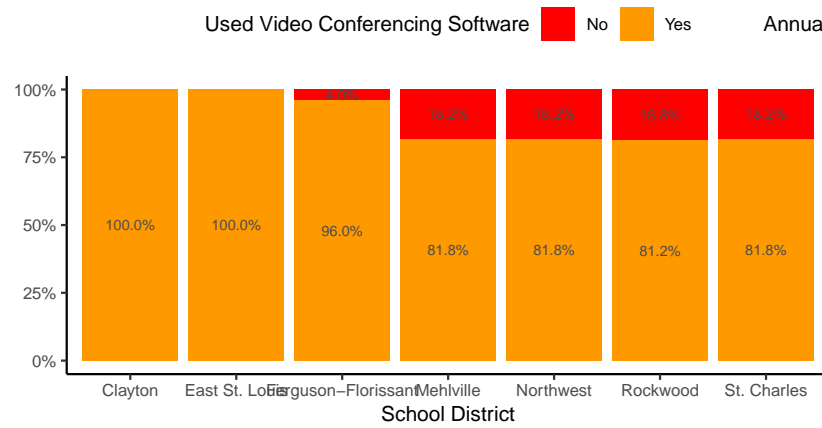


5 Respondent Characteristics by School District

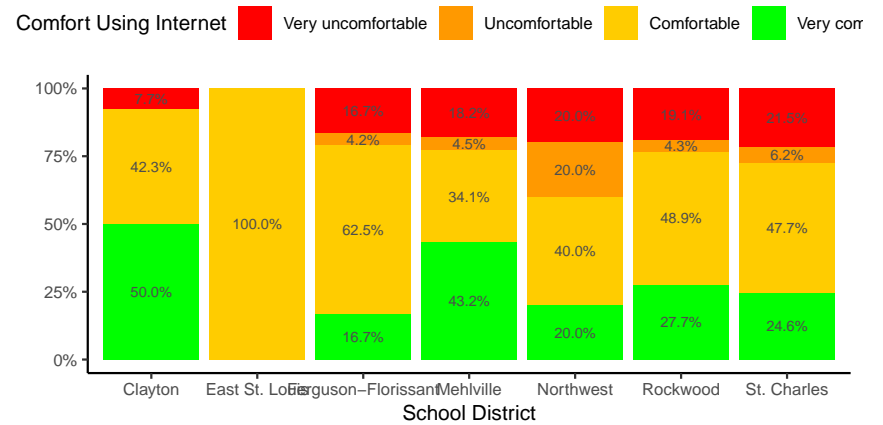
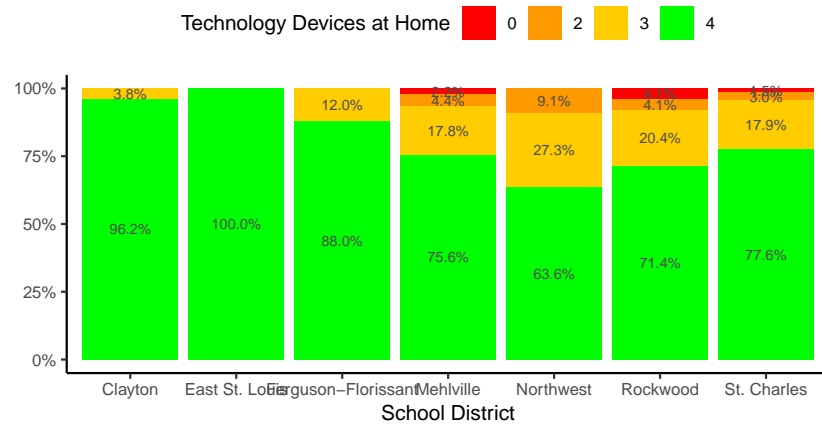


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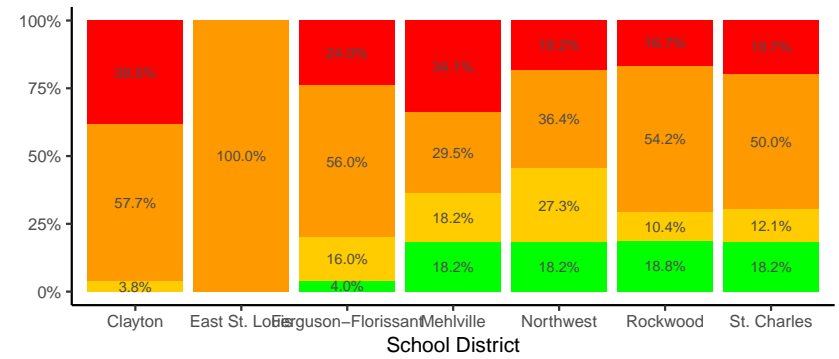
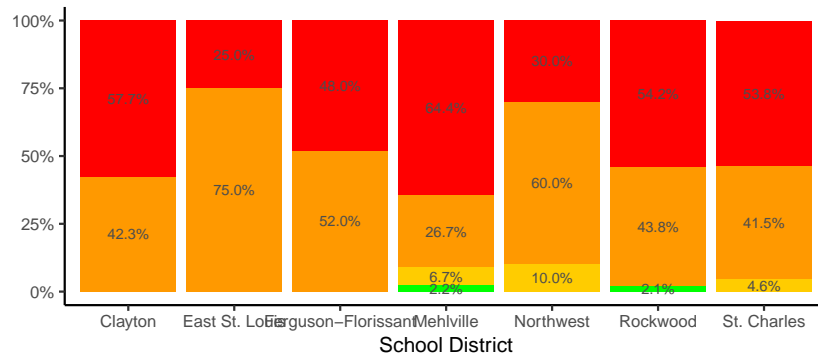


Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 44), Northwest (n = 11), Rockwood (n = 48), St. Charles (n = 65), East St. Louis (n = 65); p = 0.00



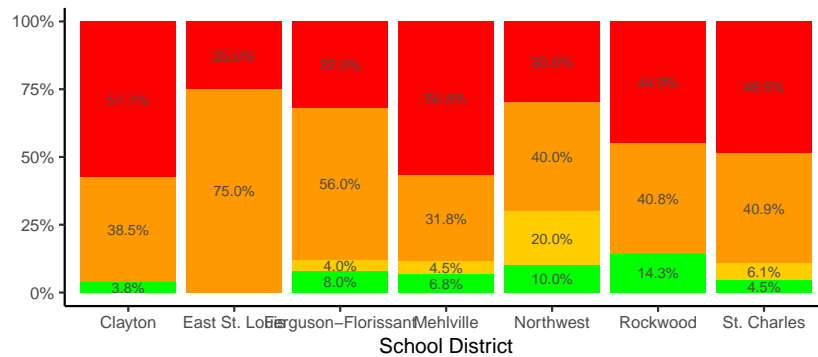
Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 45), Northwest (n = 11), Rockwood (n = 49), St. Charles (n = 65), East St. Louis (n = 65); p = 0.15

Ease of Internet Use Very Easy Easy Difficult Have not used before or do not have access Ease of Video Conferencing Software Use Very Easy Easy Difficult Have not used before or do not have access



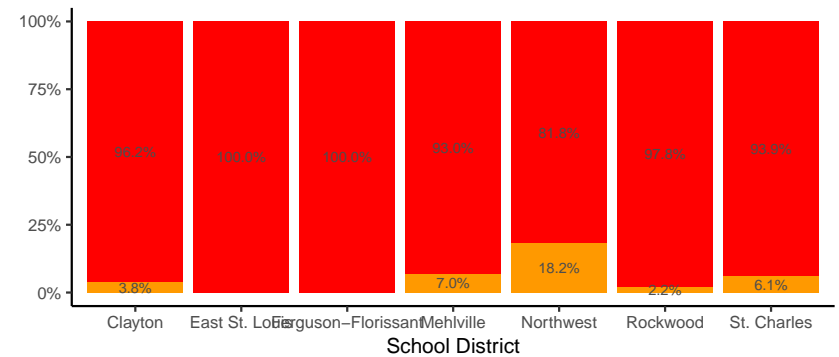
Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 45), Northwest (n = 10), Rockwood (n = 48), St. Charles (n = 66), East St. Louis (n = 4); p = 0.08

Ease of Smartphone Use Very Easy Easy Difficult Have not used before or do not have access



Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 44), Northwest (n = 10), Rockwood (n = 49), St. Charles (n = 66), East St. Louis (n = 4); p = 0.23

Ease of Computer Use Very easy or easy Very difficult or difficult



Louis (n = 4), Ferguson-Florissant (n = 25), Mehlville (n = 43), Northwest (n = 11), Rockwood (n = 46), St. Charles (n = 66); p = 0.33