

Supplementary Results and Log Files for:

Marc Höglinger, Ben Jann, Andreas Diekmann (2016). Sensitive Questions in Online Surveys: An Experimental Evaluation of the Randomized Response Technique and the Crosswise Model.

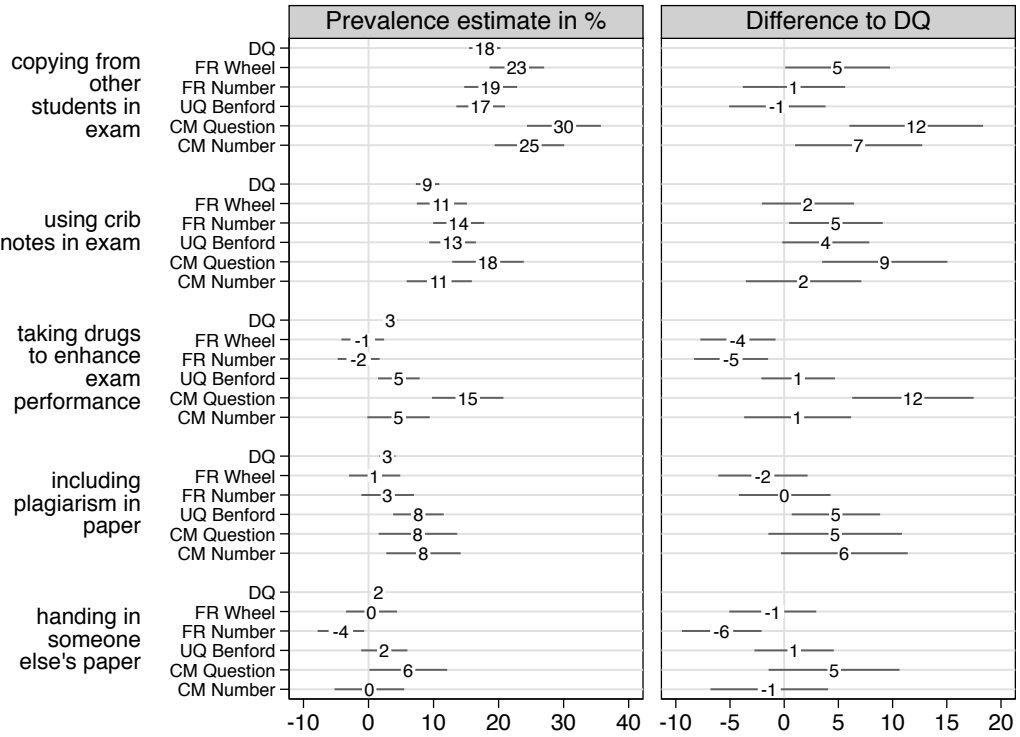
Contents

1	Main results	2
1.1	Prevalence estimates using least-squares estimation	2
1.2	Prevalence estimates using nonlinear least-squares estimation	4
1.3	Prevalence estimates using maximum-likelihood estimation	6
1.4	Quality criteria	8
2	Results including respondents with poor German skills	10
2.1	Prevalence estimates using least-squares estimation	10
2.2	Prevalence estimates using nonlinear least-squares estimation	12
2.3	Prevalence estimates using maximum-likelihood estimation	14
2.4	Quality criteria	16
3	Results excluding ETH Zurich pretest data	18
3.1	Prevalence estimates using least-squares estimation	18
3.2	Prevalence estimates using nonlinear least-squares estimation	20
3.3	Prevalence estimates using maximum-likelihood estimation	22
3.4	Quality criteria	24
4	Main analysis log file	26
4.1	Response rates	26
4.2	Overall response time	26
4.3	Selection of sample for analysis	27
4.4	Number of observations per item and technique	29
4.5	Question sensitivity	30
4.6	Prevalence estimates	32
4.7	Quality criteria	56
4.8	Correlation between protection level (design parameters) and trust	76
5	Extended analysis log file	78
5.1	Selection of sample for analysis	78
5.2	Effect of level of protection	80
5.3	Effect of yes/no dominance (CM Number)	83
5.4	Effects of respondents' evaluation	85
5.5	Subgroup differences	101
6	Graphs and tables log file	105
6.1	Graphs for prevalence estimates	105
6.2	Graphs for quality criteria	106
6.3	Tables for prevalence estimates	107
6.4	Tables for quality criteria	108

1 Main results

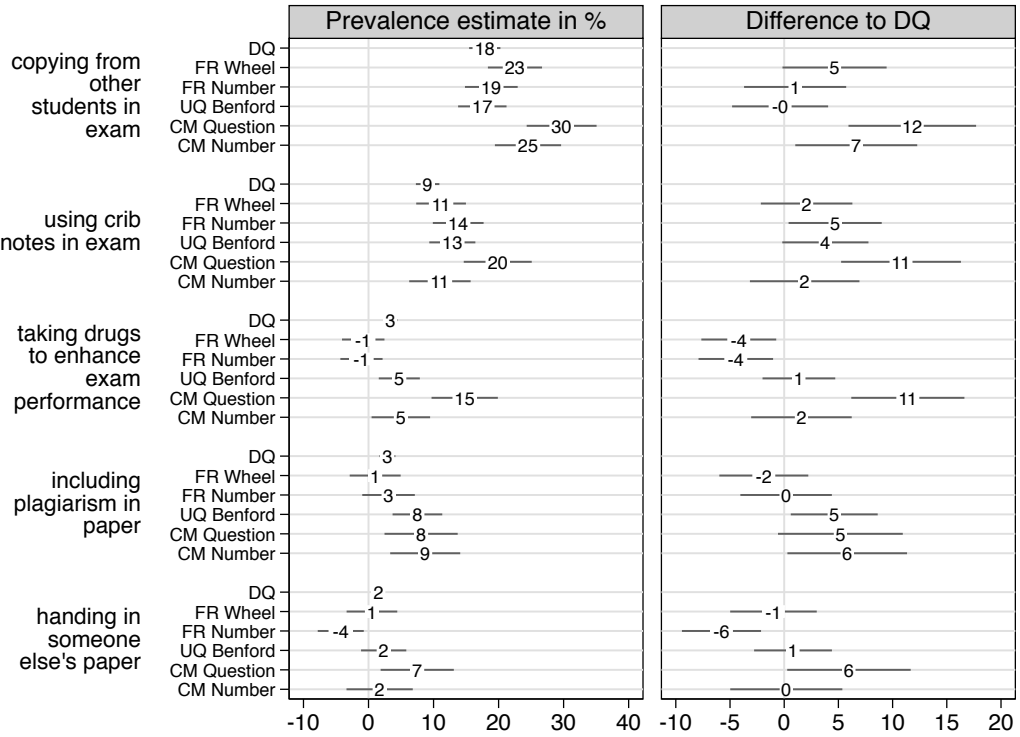
1.1 Prevalence estimates using least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.88 (1.23)	9.09 (0.92)	3.38 (0.58)	2.90 (0.62)	1.52 (0.45)
FR Wheel	22.80 (2.14)	11.28 (1.96)	-0.89 (1.67)	0.94 (2.01)	0.46 (2.00)
FR Number	18.78 (2.08)	13.86 (2.00)	-1.52 (1.64)	2.95 (2.07)	-4.25 (1.82)
UQ Benford	17.24 (1.91)	12.93 (1.83)	4.67 (1.63)	7.68 (1.98)	2.43 (1.81)
CM Question	30.06 (2.90)	18.37 (2.80)	15.26 (2.80)	7.61 (3.08)	6.12 (3.05)
CM Number	24.74 (2.73)	10.88 (2.56)	4.62 (2.45)	8.45 (2.92)	0.14 (2.73)
<i>Differences</i>					
FR Wheel – DQ	4.93 (2.47)	2.19 (2.17)	-4.27 (1.77)	-1.96 (2.10)	-1.06 (2.05)
FR Number – DQ	0.90 (2.41)	4.77 (2.20)	-4.90 (1.74)	0.04 (2.16)	-5.77 (1.88)
UQ Benford – DQ	-0.63 (2.27)	3.84 (2.05)	1.29 (1.73)	4.77 (2.08)	0.91 (1.87)
CM Question – DQ	12.18 (3.15)	9.28 (2.95)	11.88 (2.86)	4.70 (3.14)	4.60 (3.08)
CM Number – DQ	6.87 (2.99)	1.79 (2.72)	1.24 (2.52)	5.55 (2.99)	-1.38 (2.77)
<i>N</i>	5859	5847	5827	4318	4311



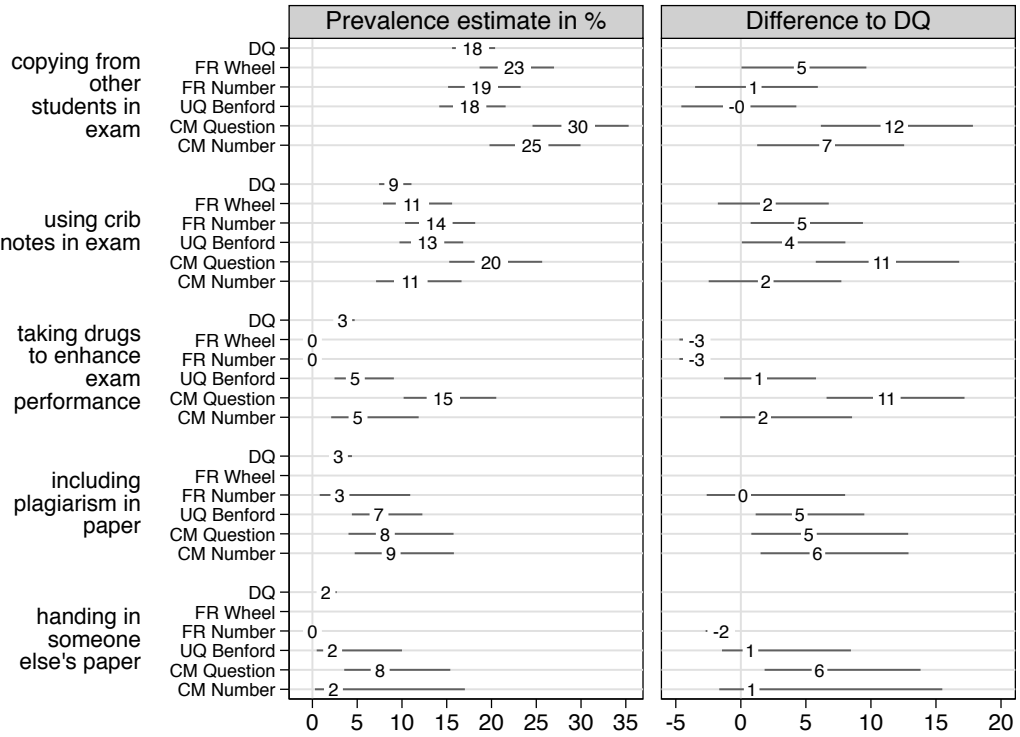
1.2 Prevalence estimates using nonlinear least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.88 (1.23)	9.09 (0.92)	3.38 (0.58)	2.90 (0.62)	1.52 (0.45)
FR Wheel	22.52 (2.12)	11.16 (1.95)	-0.81 (1.66)	1.02 (2.00)	0.53 (1.99)
FR Number	18.88 (2.07)	13.79 (1.99)	-1.08 (1.66)	3.08 (2.06)	-4.27 (1.81)
UQ Benford	17.50 (1.90)	12.89 (1.81)	4.74 (1.61)	7.52 (1.95)	2.33 (1.77)
CM Question	29.69 (2.74)	19.87 (2.67)	14.79 (2.60)	8.09 (2.87)	7.49 (2.87)
CM Number	24.52 (2.60)	10.98 (2.41)	4.97 (2.29)	8.72 (2.75)	1.71 (2.60)
<i>Differences</i>					
FR Wheel – DQ	4.64 (2.45)	2.07 (2.15)	-4.19 (1.76)	-1.88 (2.09)	-0.99 (2.04)
FR Number – DQ	1.01 (2.40)	4.70 (2.19)	-4.47 (1.75)	0.18 (2.15)	-5.79 (1.86)
UQ Benford – DQ	-0.38 (2.26)	3.80 (2.03)	1.35 (1.71)	4.62 (2.05)	0.81 (1.83)
CM Question – DQ	11.82 (3.00)	10.78 (2.82)	11.41 (2.66)	5.18 (2.94)	5.97 (2.91)
CM Number – DQ	6.65 (2.87)	1.89 (2.58)	1.59 (2.37)	5.81 (2.82)	0.19 (2.64)
<i>N</i>	5859	5847	5827	4318	4311



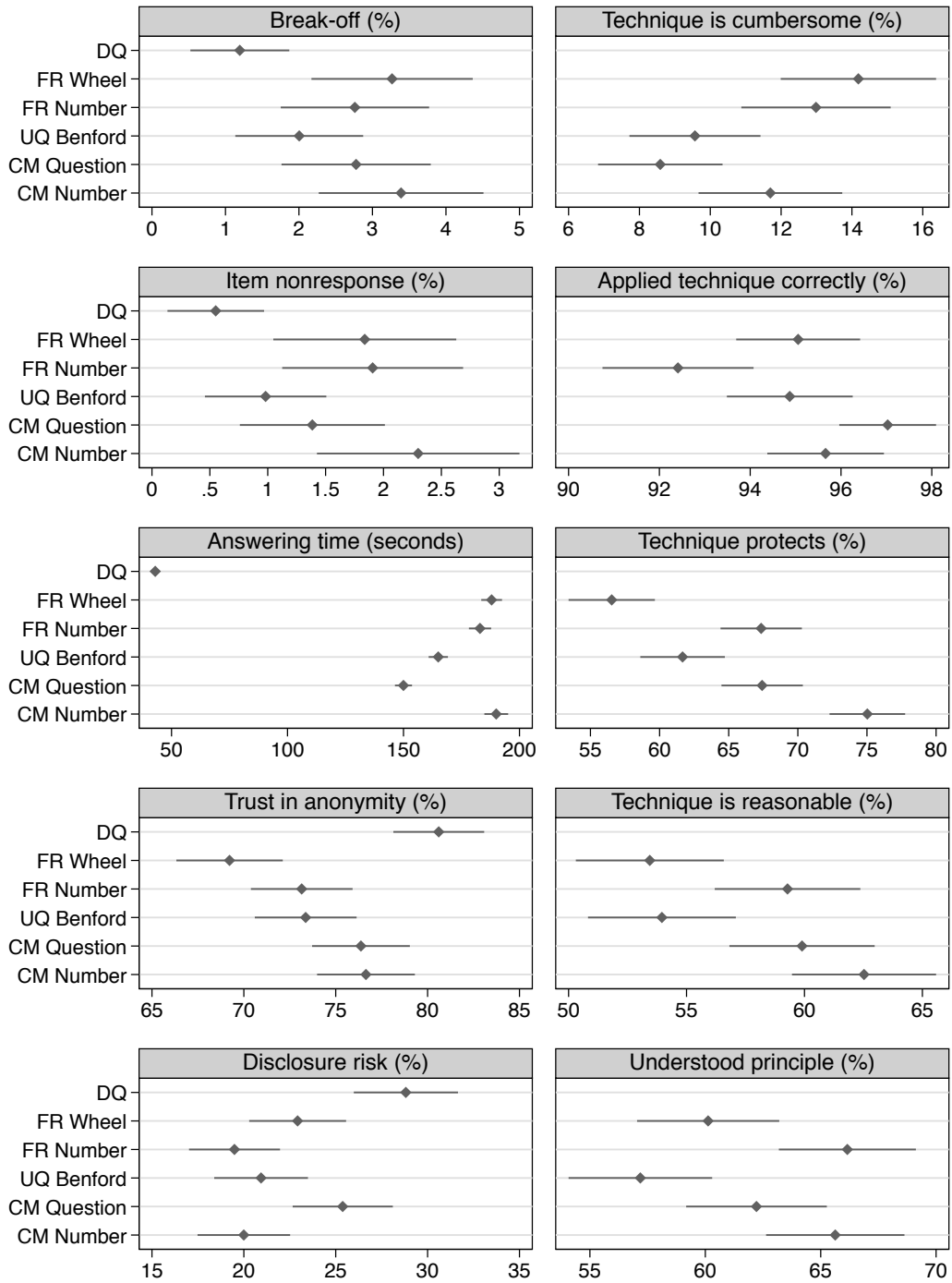
1.3 Prevalence estimates using maximum-likelihood estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	-1.525 (0.083)	-2.303 (0.111)	-3.353 (0.177)	-3.509 (0.221)	-4.173 (0.304)
FR Wheel	-1.234 (0.121)	-2.073 (0.196)	-18.045 (2.054)	-4.573 (1.971)	-5.244 (3.796)
FR Number	-1.459 (0.135)	-1.832 (0.167)	-18.269 (1.527)	-3.451 (0.690)	-17.756 (0.424)
UQ Benford	-1.546 (0.130)	-1.913 (0.161)	-2.989 (0.351)	-2.522 (0.283)	-3.769 (0.802)
CM Question	-0.863 (0.132)	-1.388 (0.166)	-1.765 (0.210)	-2.423 (0.381)	-2.503 (0.408)
CM Number	-1.125 (0.140)	-2.090 (0.245)	-2.925 (0.469)	-2.339 (0.340)	-3.727 (1.093)
<i>Differences</i>					
FR Wheel – DQ	0.291 (0.147)	0.229 (0.226)	-14.692 (2.062)	-1.063 (1.983)	-1.071 (3.808)
FR Number – DQ	0.066 (0.159)	0.471 (0.201)	-14.917 (1.537)	0.059 (0.725)	-13.583 (0.522)
UQ Benford – DQ	-0.021 (0.155)	0.390 (0.196)	0.363 (0.393)	0.988 (0.360)	0.404 (0.858)
CM Question – DQ	0.662 (0.156)	0.914 (0.199)	1.587 (0.275)	1.086 (0.441)	1.671 (0.508)
CM Number – DQ	0.400 (0.163)	0.212 (0.269)	0.428 (0.502)	1.170 (0.406)	0.446 (1.135)
<i>N</i>	5859	5847	5827	4318	4311



1.4 Quality criteria

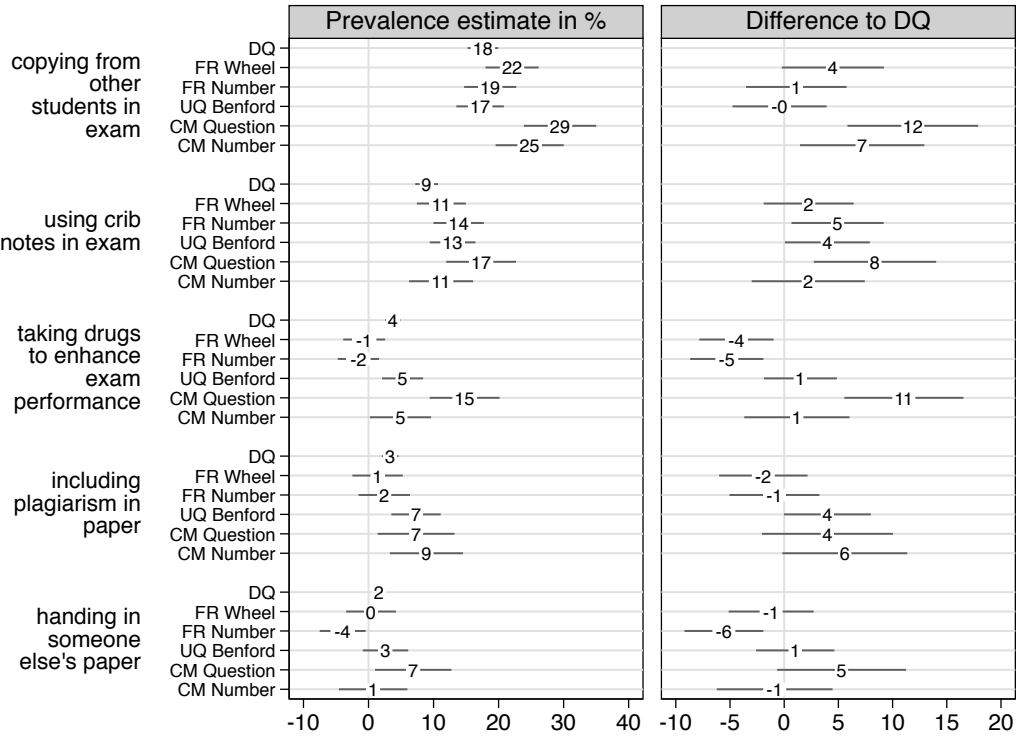
	Break-off (%)	Item nonresponse (%)	Answering time (seconds)	Trust in anonymity (%)	Disclosure risk (%)
Direct questioning	1.20 (0.34)	0.55 (0.21)	43.00 (0.73)	80.61 (1.26)	28.82 (1.45)
FR Wheel	3.27 (0.56)	1.84 (0.40)	188.00 (2.28)	69.22 (1.48)	22.93 (1.35)
FR Number	2.76 (0.51)	1.91 (0.40)	183.00 (2.44)	73.15 (1.41)	19.49 (1.26)
UQ Benford	2.00 (0.44)	0.98 (0.27)	165.00 (2.12)	73.37 (1.41)	20.94 (1.30)
CM Question	2.78 (0.52)	1.39 (0.32)	150.00 (1.87)	76.37 (1.36)	25.38 (1.39)
CM Number	3.39 (0.57)	2.30 (0.45)	190.00 (2.61)	76.65 (1.36)	20.00 (1.28)
<i>N</i>	6037	6037	5961	5884	5874
	Technique is cumbersome (%)	Applied technique correctly (%)	Technique protects (%)	Technique is reasonable (%)	Understood principle (%)
FR Wheel	14.18 (1.12)	95.06 (0.70)	56.54 (1.59)	53.44 (1.60)	60.12 (1.57)
FR Number	12.99 (1.08)	92.41 (0.85)	67.35 (1.50)	59.28 (1.57)	66.16 (1.51)
UQ Benford	9.57 (0.94)	94.87 (0.71)	61.66 (1.56)	53.96 (1.60)	57.19 (1.59)
CM Question	8.59 (0.90)	97.03 (0.54)	67.42 (1.50)	59.90 (1.57)	62.22 (1.55)
CM Number	11.70 (1.03)	95.66 (0.66)	75.03 (1.39)	62.53 (1.56)	65.63 (1.53)
<i>N</i>	4867	4865	4862	4862	4865



2 Results including respondents with poor German skills

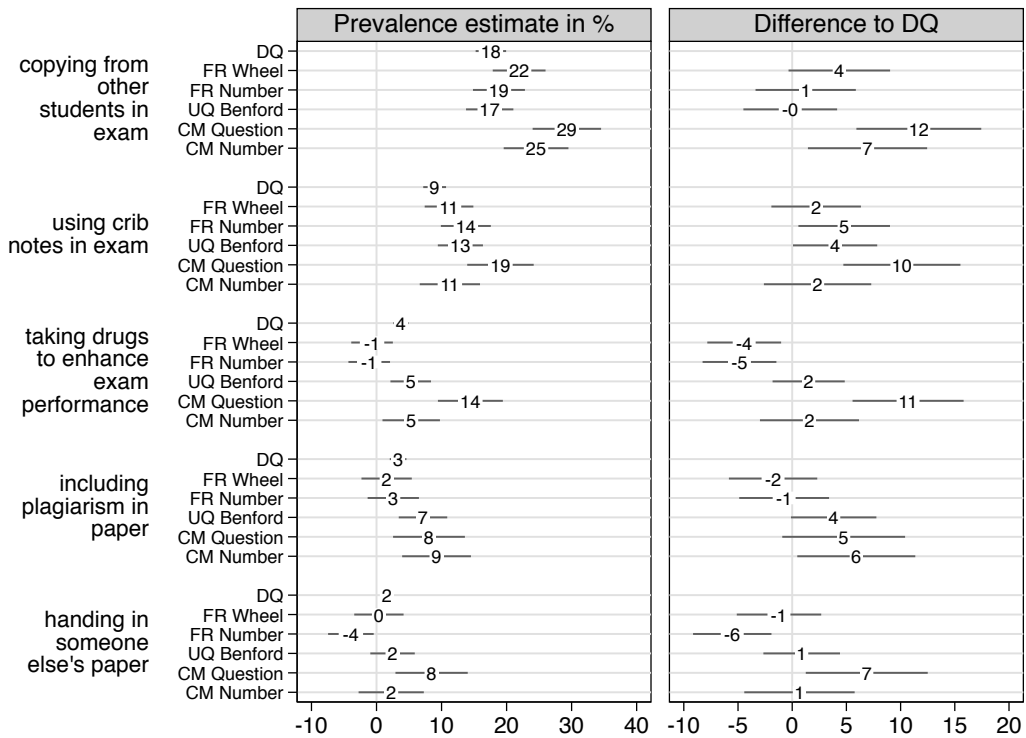
2.1 Prevalence estimates using least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.58 (1.19)	8.94 (0.89)	3.74 (0.60)	3.32 (0.65)	1.59 (0.46)
FR Wheel	22.08 (2.08)	11.20 (1.92)	-0.66 (1.64)	1.39 (1.98)	0.39 (1.95)
FR Number	18.70 (2.04)	13.86 (1.98)	-1.55 (1.62)	2.42 (2.01)	-3.97 (1.80)
UQ Benford	17.16 (1.86)	12.92 (1.79)	5.23 (1.61)	7.31 (1.94)	2.61 (1.78)
CM Question	29.45 (2.83)	17.32 (2.74)	14.78 (2.74)	7.31 (3.01)	6.88 (3.00)
CM Number	24.78 (2.67)	11.16 (2.51)	4.91 (2.40)	8.91 (2.87)	0.71 (2.69)
<i>Differences</i>					
FR Wheel – DQ	4.49 (2.40)	2.26 (2.12)	-4.41 (1.75)	-1.93 (2.08)	-1.20 (2.00)
FR Number – DQ	1.12 (2.37)	4.92 (2.17)	-5.29 (1.72)	-0.90 (2.12)	-5.56 (1.86)
UQ Benford – DQ	-0.42 (2.21)	3.98 (2.00)	1.49 (1.72)	3.99 (2.04)	1.02 (1.84)
CM Question – DQ	11.87 (3.08)	8.38 (2.88)	11.04 (2.80)	3.99 (3.08)	5.29 (3.03)
CM Number – DQ	7.19 (2.93)	2.22 (2.66)	1.17 (2.47)	5.59 (2.94)	-0.88 (2.72)
<i>N</i>	6094	6078	6057	4491	4487



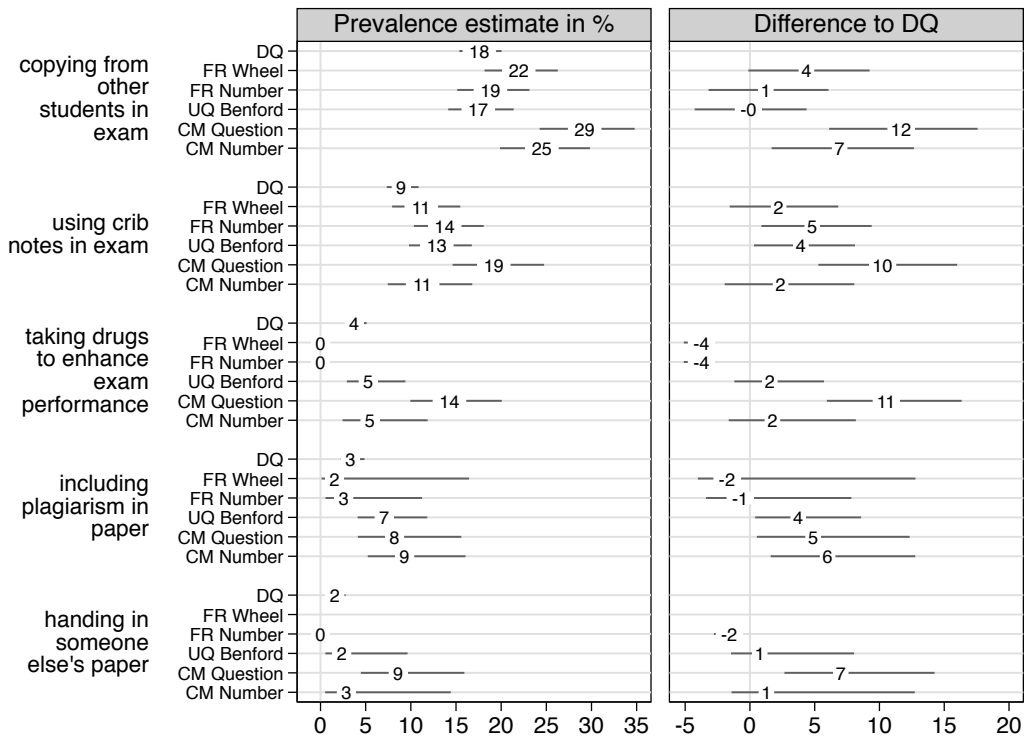
2.2 Prevalence estimates using nonlinear least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.58 (1.19)	8.94 (0.89)	3.74 (0.60)	3.32 (0.65)	1.59 (0.46)
FR Wheel	21.93 (2.07)	11.15 (1.91)	-0.68 (1.63)	1.56 (1.97)	0.37 (1.93)
FR Number	18.83 (2.04)	13.74 (1.96)	-1.12 (1.63)	2.58 (2.01)	-3.94 (1.79)
UQ Benford	17.40 (1.85)	12.90 (1.77)	5.26 (1.59)	7.15 (1.90)	2.46 (1.74)
CM Question	29.27 (2.68)	19.06 (2.61)	14.43 (2.54)	8.07 (2.82)	8.47 (2.83)
CM Number	24.53 (2.54)	11.28 (2.36)	5.34 (2.25)	9.23 (2.70)	2.26 (2.56)
<i>Differences</i>					
FR Wheel – DQ	4.35 (2.39)	2.21 (2.11)	-4.43 (1.74)	-1.76 (2.08)	-1.22 (1.99)
FR Number – DQ	1.24 (2.36)	4.80 (2.15)	-4.86 (1.74)	-0.74 (2.11)	-5.53 (1.84)
UQ Benford – DQ	-0.18 (2.21)	3.96 (1.98)	1.52 (1.70)	3.83 (2.01)	0.87 (1.80)
CM Question – DQ	11.68 (2.94)	10.12 (2.76)	10.69 (2.61)	4.75 (2.89)	6.88 (2.87)
CM Number – DQ	6.95 (2.81)	2.34 (2.53)	1.59 (2.33)	5.91 (2.78)	0.67 (2.60)
<i>N</i>	6094	6078	6057	4491	4487



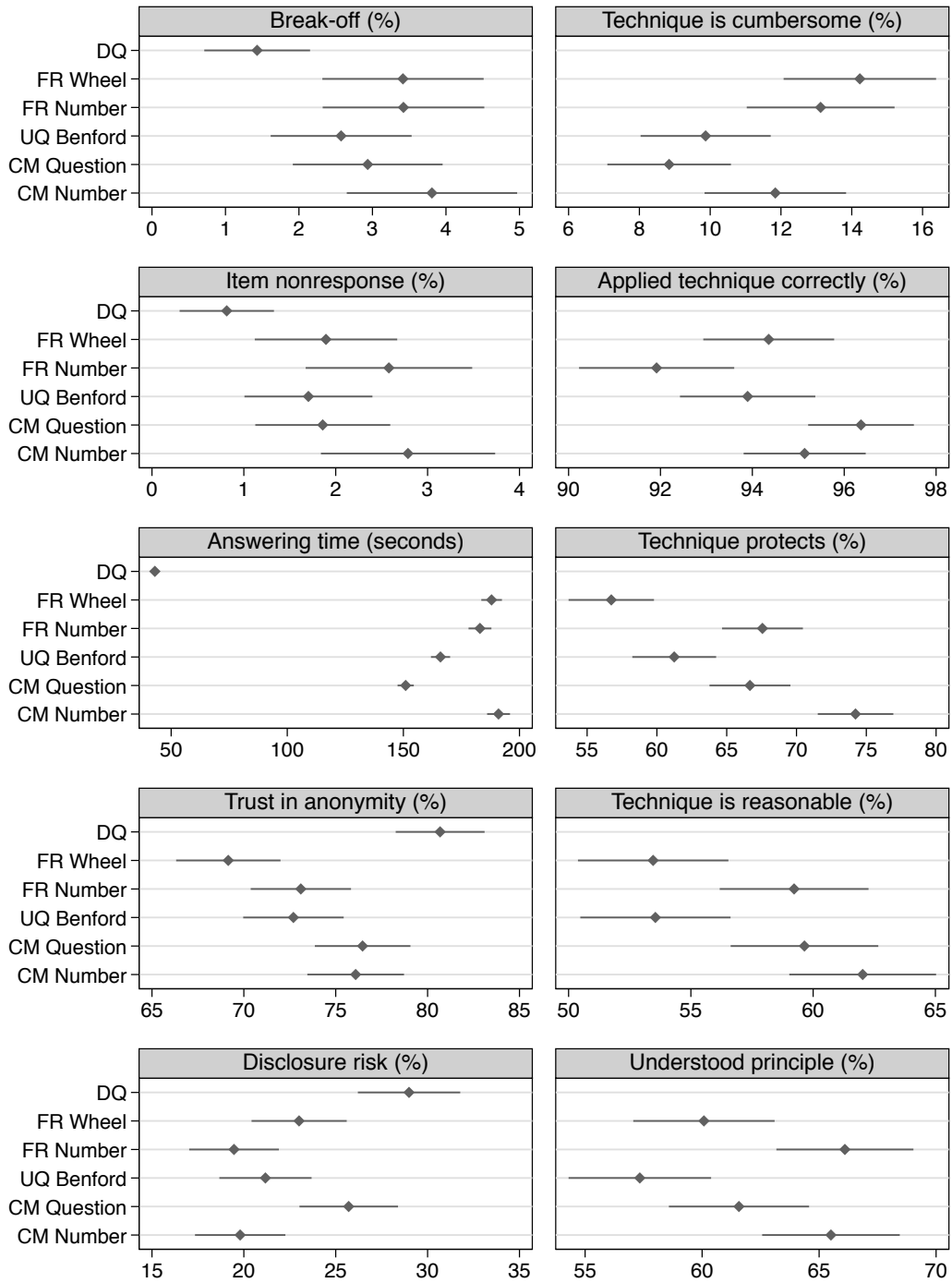
2.3 Prevalence estimates using maximum-likelihood estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	-1.545 (0.082)	-2.321 (0.110)	-3.247 (0.165)	-3.371 (0.203)	-4.126 (0.291)
FR Wheel	-1.269 (0.121)	-2.075 (0.193)	-17.561 (2.385)	-4.149 (1.287)	-5.597 (5.250)
FR Number	-1.462 (0.133)	-1.836 (0.165)	-18.065 (1.457)	-3.635 (0.800)	-16.852 (0.455)
UQ Benford	-1.553 (0.128)	-1.912 (0.157)	-2.886 (0.316)	-2.579 (0.290)	-3.728 (0.760)
CM Question	-0.883 (0.130)	-1.438 (0.167)	-1.793 (0.209)	-2.416 (0.371)	-2.363 (0.357)
CM Number	-1.125 (0.137)	-2.060 (0.235)	-2.847 (0.430)	-2.275 (0.317)	-3.524 (0.889)
<i>Differences</i>					
FR Wheel – DQ	0.276 (0.146)	0.246 (0.222)	-14.314 (2.391)	-0.778 (1.303)	-1.471 (5.258)
FR Number – DQ	0.083 (0.157)	0.485 (0.198)	-14.818 (1.466)	-0.263 (0.826)	-12.727 (0.540)
UQ Benford – DQ	-0.008 (0.152)	0.409 (0.192)	0.361 (0.357)	0.792 (0.355)	0.398 (0.814)
CM Question – DQ	0.661 (0.154)	0.883 (0.200)	1.454 (0.267)	0.956 (0.423)	1.763 (0.461)
CM Number – DQ	0.420 (0.160)	0.262 (0.259)	0.400 (0.460)	1.096 (0.377)	0.602 (0.936)
<i>N</i>	6094	6078	6057	4491	4487



2.4 Quality criteria

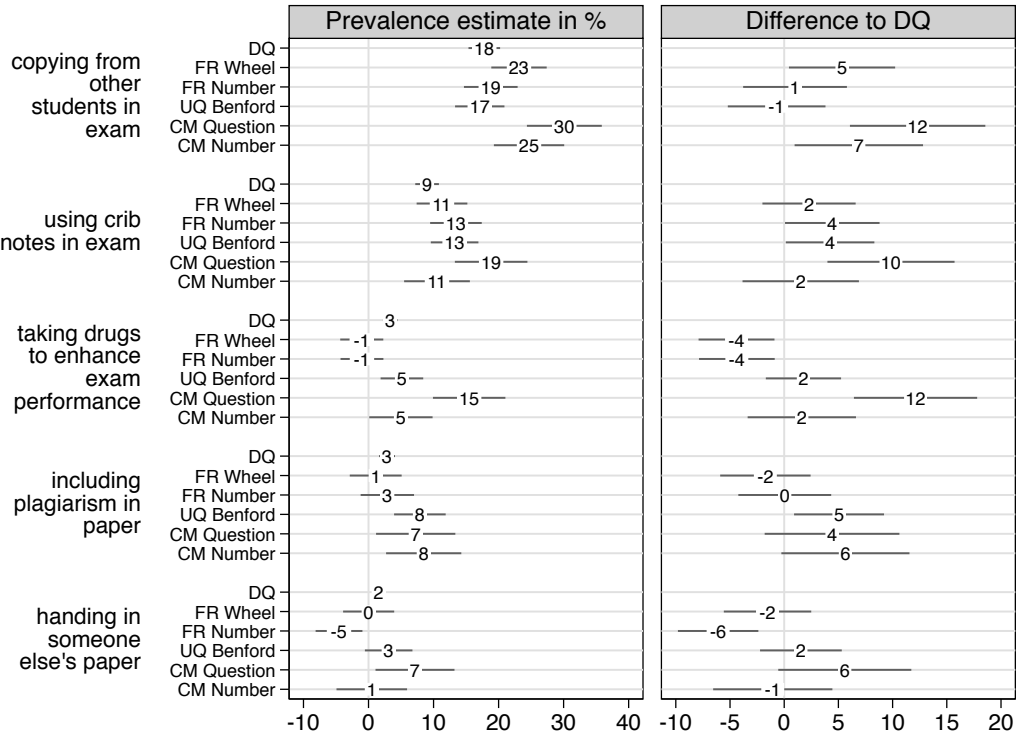
	Break-off (%)	Item nonresponse (%)	Answering time (seconds)	Trust in anonymity (%)	Disclosure risk (%)
Direct questioning	1.43 (0.37)	0.81 (0.26)	43.00 (0.65)	80.68 (1.23)	28.99 (1.42)
FR Wheel	3.42 (0.56)	1.89 (0.40)	188.00 (2.27)	69.16 (1.45)	23.01 (1.32)
FR Number	3.42 (0.56)	2.58 (0.46)	183.00 (2.51)	73.10 (1.39)	19.47 (1.25)
UQ Benford	2.57 (0.49)	1.70 (0.36)	166.00 (2.10)	72.70 (1.39)	21.18 (1.28)
CM Question	2.94 (0.52)	1.86 (0.37)	151.00 (1.78)	76.46 (1.33)	25.71 (1.37)
CM Number	3.81 (0.59)	2.79 (0.48)	191.00 (2.51)	76.09 (1.34)	19.80 (1.25)
<i>N</i>	6309	6309	6213	6116	6103
	Technique is cumbersome (%)	Applied technique correctly (%)	Technique protects (%)	Technique is reasonable (%)	Understood principle (%)
FR Wheel	14.23 (1.10)	94.36 (0.73)	56.73 (1.56)	53.46 (1.57)	60.08 (1.54)
FR Number	13.12 (1.07)	91.92 (0.86)	67.56 (1.48)	59.22 (1.55)	66.10 (1.49)
UQ Benford	9.87 (0.94)	93.90 (0.75)	61.24 (1.53)	53.55 (1.57)	57.34 (1.55)
CM Question	8.84 (0.89)	96.37 (0.59)	66.67 (1.48)	59.65 (1.54)	61.58 (1.53)
CM Number	11.84 (1.02)	95.14 (0.68)	74.23 (1.38)	62.03 (1.53)	65.51 (1.50)
<i>N</i>	5054	5054	5051	5051	5054



3 Results excluding ETH Zurich pretest data

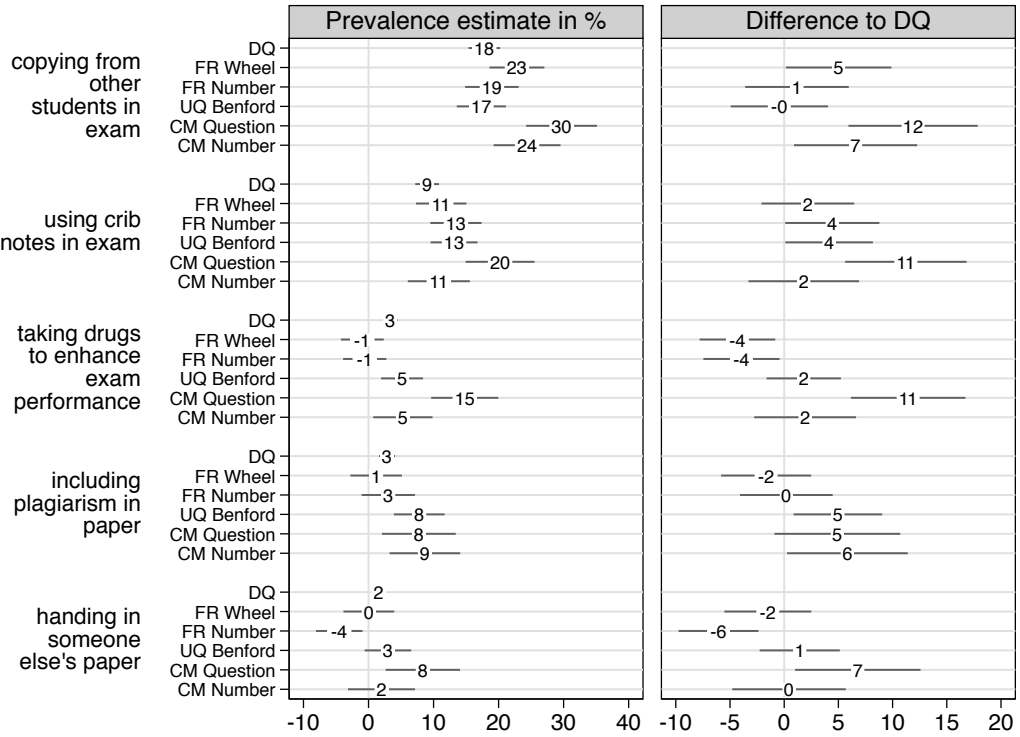
3.1 Prevalence estimates using least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.80 (1.24)	9.01 (0.93)	3.36 (0.58)	2.84 (0.63)	1.56 (0.47)
FR Wheel	23.14 (2.17)	11.30 (1.99)	-1.04 (1.69)	1.10 (2.03)	0.02 (2.00)
FR Number	18.80 (2.10)	13.44 (2.02)	-1.01 (1.68)	2.89 (2.09)	-4.54 (1.84)
UQ Benford	17.10 (1.94)	13.24 (1.87)	5.14 (1.67)	7.90 (2.02)	3.10 (1.87)
CM Question	30.11 (2.94)	18.86 (2.84)	15.48 (2.84)	7.25 (3.11)	7.15 (3.10)
CM Number	24.68 (2.76)	10.53 (2.58)	4.98 (2.48)	8.49 (2.95)	0.50 (2.77)
<i>Differences</i>					
FR Wheel – DQ	5.34 (2.50)	2.29 (2.19)	-4.40 (1.79)	-1.74 (2.13)	-1.54 (2.06)
FR Number – DQ	1.00 (2.44)	4.44 (2.23)	-4.37 (1.78)	0.05 (2.19)	-6.09 (1.89)
UQ Benford – DQ	-0.70 (2.30)	4.23 (2.08)	1.77 (1.77)	5.06 (2.12)	1.54 (1.92)
CM Question – DQ	12.31 (3.19)	9.85 (2.99)	12.12 (2.90)	4.41 (3.17)	5.59 (3.13)
CM Number – DQ	6.88 (3.02)	1.52 (2.74)	1.62 (2.55)	5.65 (3.01)	-1.05 (2.81)
<i>N</i>	5704	5694	5674	4208	4201



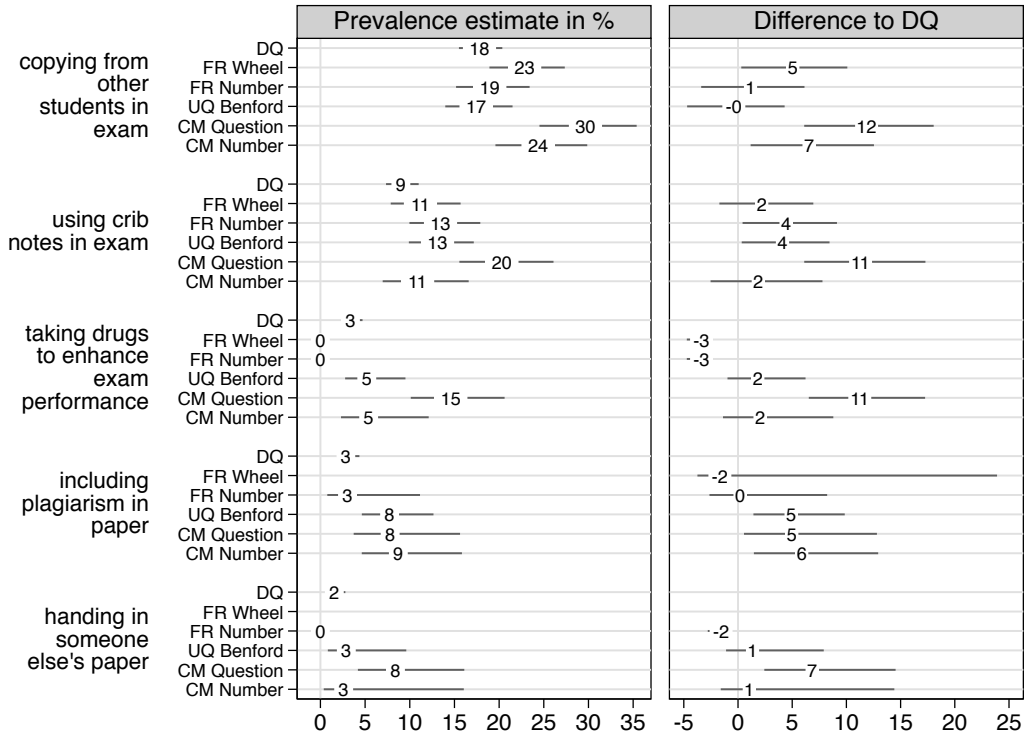
3.2 Prevalence estimates using nonlinear least-squares estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	17.80 (1.24)	9.01 (0.93)	3.36 (0.58)	2.84 (0.63)	1.56 (0.47)
FR Wheel	22.82 (2.15)	11.18 (1.97)	-0.95 (1.68)	1.17 (2.02)	0.05 (1.99)
FR Number	18.98 (2.10)	13.44 (2.01)	-0.58 (1.69)	3.04 (2.09)	-4.50 (1.82)
UQ Benford	17.35 (1.93)	13.15 (1.84)	5.16 (1.65)	7.80 (1.99)	2.99 (1.83)
CM Question	29.69 (2.78)	20.23 (2.70)	14.80 (2.63)	7.74 (2.89)	8.35 (2.92)
CM Number	24.39 (2.62)	10.81 (2.43)	5.29 (2.32)	8.67 (2.77)	2.00 (2.63)
<i>Differences</i>					
FR Wheel – DQ	5.02 (2.48)	2.18 (2.18)	-4.31 (1.78)	-1.67 (2.12)	-1.51 (2.05)
FR Number – DQ	1.18 (2.44)	4.44 (2.22)	-3.94 (1.79)	0.20 (2.18)	-6.06 (1.88)
UQ Benford – DQ	-0.45 (2.29)	4.14 (2.06)	1.80 (1.75)	4.96 (2.09)	1.43 (1.89)
CM Question – DQ	11.89 (3.04)	11.22 (2.86)	11.44 (2.70)	4.90 (2.96)	6.79 (2.95)
CM Number – DQ	6.58 (2.90)	1.80 (2.60)	1.93 (2.40)	5.83 (2.84)	0.44 (2.67)
<i>N</i>	5704	5694	5674	4208	4201



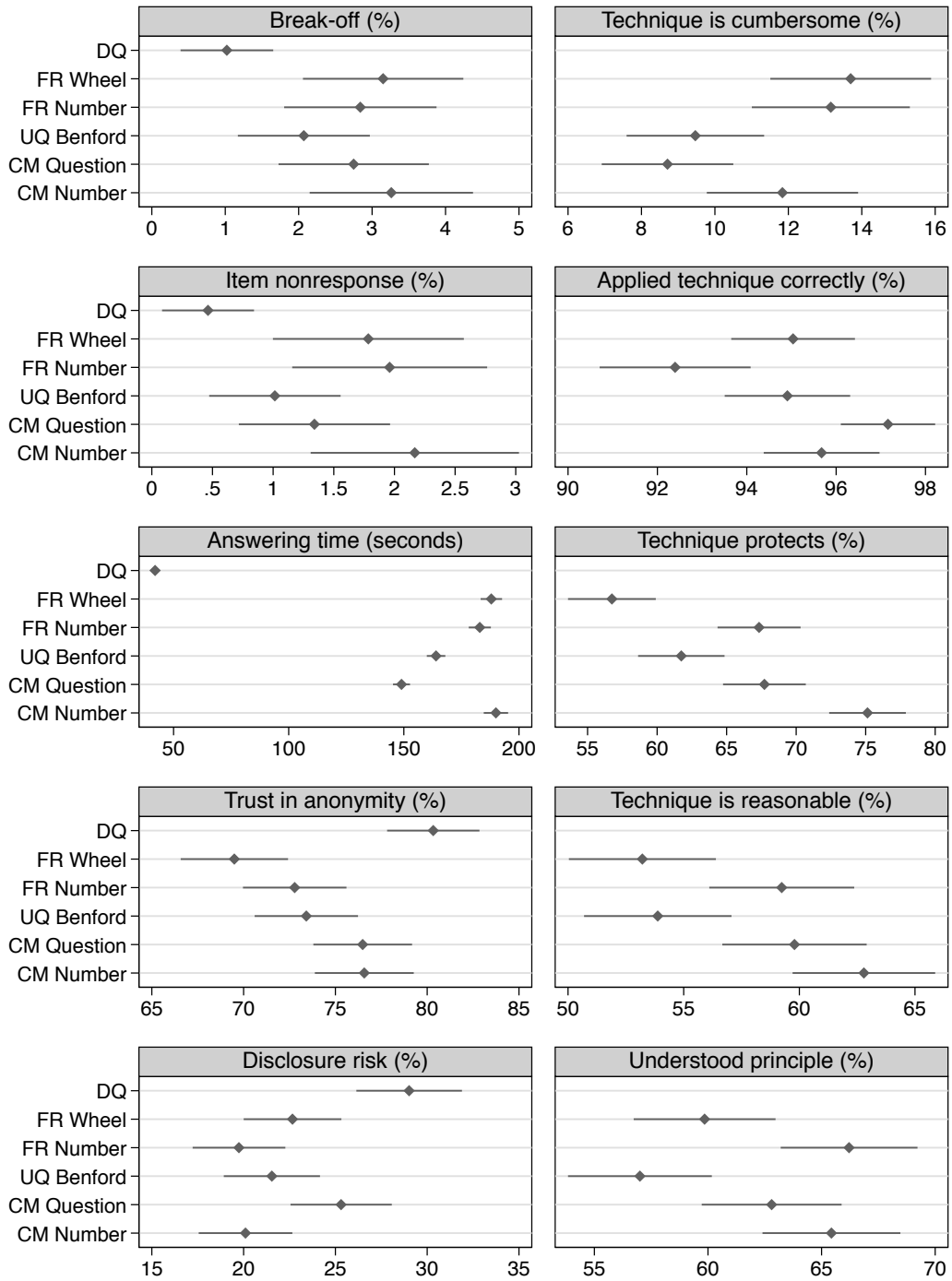
3.3 Prevalence estimates using maximum-likelihood estimation

	Copying from other students in exam	Using crib notes in exam	Taking drugs to enhance exam performance	Including plagiarism in paper	Handing in someone else's paper
<i>Levels</i>					
Direct questioning (DQ)	-1.530 (0.085)	-2.313 (0.113)	-3.359 (0.180)	-3.532 (0.227)	-4.146 (0.304)
FR Wheel	-1.216 (0.122)	-2.071 (0.199)	-18.174 (1.763)	-4.435 (1.747)	-7.658 (42.335)
FR Number	-1.453 (0.137)	-1.862 (0.173)	-17.762 (2.915)	-3.465 (0.709)	-18.160 (0.407)
UQ Benford	-1.556 (0.133)	-1.891 (0.162)	-2.905 (0.333)	-2.478 (0.279)	-3.511 (0.648)
CM Question	-0.863 (0.133)	-1.367 (0.166)	-1.767 (0.213)	-2.469 (0.399)	-2.389 (0.377)
CM Number	-1.133 (0.142)	-2.103 (0.249)	-2.864 (0.450)	-2.348 (0.346)	-3.622 (1.004)
<i>Differences</i>					
FR Wheel – DQ	0.314 (0.148)	0.242 (0.229)	-14.815 (1.772)	-0.903 (1.761)	-3.512 (42.336)
FR Number – DQ	0.077 (0.161)	0.451 (0.207)	-14.403 (2.920)	0.067 (0.744)	-14.014 (0.508)
UQ Benford – DQ	-0.026 (0.158)	0.422 (0.197)	0.453 (0.379)	1.054 (0.359)	0.635 (0.715)
CM Question – DQ	0.667 (0.158)	0.946 (0.201)	1.592 (0.279)	1.063 (0.459)	1.757 (0.484)
CM Number – DQ	0.397 (0.166)	0.210 (0.274)	0.495 (0.485)	1.184 (0.413)	0.524 (1.049)
<i>N</i>	5704	5694	5674	4208	4201



3.4 Quality criteria

	Break-off (%)	Item nonresponse (%)	Answering time (seconds)	Trust in anonymity (%)	Disclosure risk (%)
Direct questioning	1.02 (0.32)	0.46 (0.19)	42.00 (0.74)	80.33 (1.28)	29.02 (1.47)
FR Wheel	3.15 (0.56)	1.79 (0.40)	188.00 (2.37)	69.50 (1.49)	22.67 (1.36)
FR Number	2.84 (0.53)	1.96 (0.41)	183.00 (2.45)	72.78 (1.44)	19.75 (1.29)
UQ Benford	2.07 (0.46)	1.01 (0.28)	164.00 (2.05)	73.42 (1.44)	21.54 (1.34)
CM Question	2.75 (0.52)	1.34 (0.32)	149.00 (1.88)	76.49 (1.37)	25.31 (1.41)
CM Number	3.26 (0.57)	2.17 (0.44)	190.00 (2.70)	76.58 (1.37)	20.11 (1.30)
<i>N</i>	5877	5877	5806	5731	5721
	Technique is cumbersome (%)	Applied technique correctly (%)	Technique protects (%)	Technique is reasonable (%)	Understood principle (%)
FR Wheel	13.70 (1.12)	95.04 (0.71)	56.75 (1.61)	53.21 (1.62)	59.85 (1.59)
FR Number	13.16 (1.10)	92.40 (0.86)	67.33 (1.52)	59.24 (1.60)	66.21 (1.54)
UQ Benford	9.47 (0.96)	94.91 (0.72)	61.74 (1.59)	53.88 (1.63)	57.01 (1.61)
CM Question	8.71 (0.91)	97.16 (0.54)	67.72 (1.52)	59.79 (1.59)	62.80 (1.57)
CM Number	11.84 (1.05)	95.68 (0.66)	75.13 (1.41)	62.79 (1.57)	65.43 (1.55)
<i>N</i>	4738	4736	4734	4733	4736



4 Main analysis log file

Stata/MP 14.1; required packages: fre, estout, estwrite, rrreg, rrlogit

4.1 Response rates

```
. use http://repec.sowi.unibe.ch/files/wp8/ASQ-ETHBE-2011.dta
(Online Survey on "Exams and Written assignments" 2011)
. local N 19410 // gross sample
. mat R = J(6,6,..)
. mat coln R = "Bern:N" "Bern:RR" "Zurich:N" "Zurich:RR" "Total:N" "Total:RR"
. mat rown R = "Sample" "Started" "Started2" "Completed" "Completed2" "SQ"
. mat R[1,1] = 8610, 1, 10800, 1, 19410, 1
. forv i = 1/3 {
2.   local iff: word `i' of "sample==1" "inlist(sample,2,3)" "1"
3.   local ii = `i'*2 - 1
4.   qui count if `iff'
5.   mat R[2,`ii'] = r(N), r(N)/R[1,`ii']
6.   qui count if `iff' & r13!=.b // submitted first page with questions
7.   mat R[3,`ii'] = r(N), r(N)/R[1,`ii']
8.   qui count if `iff' & inlist(dispcode,31,32)
9.   mat R[4,`ii'] = r(N), r(N)/R[1,`ii']
10.  qui count if `iff' & r125!=.b & r126!=.b // submitted last page with questions
11.  mat R[5,`ii'] = r(N), r(N)/R[1,`ii']
12.  qui count if `iff' & r110!=.b // reached sensitive questions
13.  mat R[6,`ii'] = r(N), r(N)/R[1,`ii']
14. }
. // Sample:      Gross sample
. // Started:     Started the survey
. // Started2:    Submitted at least the first page containing questions
. // Completed:   Completed questionnaire to very end
. // Completed2: Completed the questionnaire to last page containing questions
. mat list R
R[6,6]
```

	Bern: N	Bern: RR	Zurich: N	Zurich: RR	Total: N	Total: RR
Sample	8610	1	10800	1	19410	1
Started	2773	.32206736	4581	.42416667	7354	.37887687
Started2	2616	.30383275	4296	.39777778	6912	.3561051
Completed	2486	.28873403	4005	.37083333	6491	.33441525
Completed2	2495	.28977933	4013	.37157407	6508	.33529109
SQ	2558	.2970964	4143	.38361111	6701	.34523442

4.2 Overall response time

```
. su dur, detail
Total time to complete survey (in seconds)
```

Percentiles	Smallest		
1%	0		
5%	10		
10%	335	Obs	7,354
25%	526	Sum of Wgt.	7,354
50%	709.5	Mean	16611.27
		Largest	Std. Dev.
75%	964		162679.5
90%	1479	Variance	2.65e+10
95%	2490	Skewness	11.46556
99%	252743	Kurtosis	141.5774

```

. di r(p50)/60
11.825
. su dur if dispcode==31, detail
      Total time to complete survey (in seconds)
-----
Percentiles      Smallest
1%              313          122
5%              409          123
10%             462          202      Obs          6,260
25%             572.5        209      Sum of Wgt.  6,260
50%             732
                          Largest      Mean          841.4109
75%             955          4452      Std. Dev.    450.8291
90%            1306          4513      Variance     203246.8
95%            1654.5        4613      Skewness     2.860002
99%            2686          4615      Kurtosis     15.88577
. di r(p50)/60
12.2
. su dur if rl10!=.b, detail // reached sensitive questions
      Total time to complete survey (in seconds)
-----
Percentiles      Smallest
1%              289          15
5%              397          31
10%             456          122      Obs          6,701
25%             571          123      Sum of Wgt.  6,701
50%             739
                          Largest      Mean          12815.8
75%             992          1960254   Std. Dev.    137181.3
90%            1517          2158255   Variance     1.88e+10
95%            2507          2162913   Skewness     12.88195
99%            88368         2225719   Kurtosis     172.7103
. di r(p50)/60
12.316667
. su dur if rl10!=.b & dispcode==31, detail // reached sensitive questions
      Total time to complete survey (in seconds)
-----
Percentiles      Smallest
1%              313          122
5%              409          123
10%             462          202      Obs          6,260
25%             572.5        209      Sum of Wgt.  6,260
50%             732
                          Largest      Mean          841.4109
75%             955          4452      Std. Dev.    450.8291
90%            1306          4513      Variance     203246.8
95%            1654.5        4613      Skewness     2.860002
99%            2686          4615      Kurtosis     15.88577
. di r(p50)/60
12.2

```

4.3 Selection of sample for analysis

```

. // - exclude observartions who did not reach the sensitive questions intro page
. // - exclude observations that did not see the sensitive questions because they
. // did not yet have exampe and did not write a paper yet
. // - exclude observations where assignment of expcond failed
. // - generate language filter variable (well or very well german skills)
. fre expcond
expcond — Experimental condition

```

		Freq.	Percent	Valid	Cum.
Valid	1 direct questioning	1048	14.25	16.61	16.61
	2 FR pick-a-number	1052	14.31	16.67	33.28
	3 CM pick-a-number	1051	14.29	16.66	49.94
	4 FR random wheel	1054	14.33	16.70	66.64
	5 UQ Benford	1049	14.26	16.62	83.26
	6 CM unrelated question	1056	14.36	16.74	100.00
	Total	6310	85.80	100.00	
Missing	.a no expcond (technical failure)	4	0.05		
	.b break-off	653	8.88		
	.c filter: neither paper, nor exam	387	5.26		
	Total	1044	14.20		
Total		7354	100.00		

```
. drop if expcond>=.
(1,044 observations deleted)
. drop if (q17==.e & q19==.e) // one obs with valid expcond who was filtered for all items
(1 observation deleted)
. fre expcond
expcond — Experimental condition
```

		Freq.	Percent	Valid	Cum.
Valid	1 direct questioning	1048	16.61	16.61	16.61
	2 FR pick-a-number	1052	16.67	16.67	33.29
	3 CM pick-a-number	1050	16.64	16.64	49.93
	4 FR random wheel	1054	16.71	16.71	66.63
	5 UQ Benford	1049	16.63	16.63	83.26
	6 CM unrelated question	1056	16.74	16.74	100.00
	Total	6309	100.00	100.00	

```
. qui recode expcond ///
> (1 = 1 "DQ") ///
> (4 = 2 "FRwheel") ///
> (2 = 3 "FRnumb") ///
> (5 = 4 "UQbenf") ///
> (6 = 5 "CMquest") ///
> (3 = 6 "CMnumb") ///
> , gen(expcond1)
. drop expcond
. rename expcond1 expcond
. fre expcond
expcond — RECODE of expcond (Experimental condition)
```

		Freq.	Percent	Valid	Cum.
Valid	1 DQ	1048	16.61	16.61	16.61
	2 FRwheel	1054	16.71	16.71	33.32
	3 FRnumb	1052	16.67	16.67	49.99
	4 UQbenf	1049	16.63	16.63	66.62
	5 CMquest	1056	16.74	16.74	83.36
	6 CMnumb	1050	16.64	16.64	100.00
	Total	6309	100.00	100.00	

```
. fre q4_2
q4_2 — German language skills
```

		Freq.	Percent	Valid	Cum.
Valid	1 poor	28	0.44	0.45	0.45
	2 rather poor	47	0.74	0.75	1.20
	3 average	155	2.46	2.47	3.67
	4 good	423	6.70	6.75	10.42
	5 very good/mother tongue	5614	88.98	89.58	100.00

Total	6267	99.33	100.00
Missing .a no answer	42	0.67	
Total	6309	100.00	

```
. gen byte language = inlist(q4_2,4,5)
. fre language
language
```

	Freq.	Percent	Valid	Cum.
Valid 0	272	4.31	4.31	4.31
1	6037	95.69	95.69	100.00
Total	6309	100.00	100.00	

```
. fre expcond if language
expcond — RECODE of expcond (Experimental condition)
```

	Freq.	Percent	Valid	Cum.
Valid 1 DQ	1004	16.63	16.63	16.63
2 FRwheel	1010	16.73	16.73	33.36
3 FRnumb	1014	16.80	16.80	50.16
4 UQbenf	998	16.53	16.53	66.69
5 CMquest	1008	16.70	16.70	83.39
6 CMnumb	1003	16.61	16.61	100.00
Total	6037	100.00	100.00	

```
. gen byte nopretest = (sample!=2)
. fre expcond if language & nopretest
expcond — RECODE of expcond (Experimental condition)
```

	Freq.	Percent	Valid	Cum.
Valid 1 DQ	978	16.64	16.64	16.64
2 FRwheel	984	16.74	16.74	33.38
3 FRnumb	986	16.78	16.78	50.16
4 UQbenf	966	16.44	16.44	66.60
5 CMquest	982	16.71	16.71	83.31
6 CMnumb	981	16.69	16.69	100.00
Total	5877	100.00	100.00	

4.4 Number of observations per item and technique

```
. // SELECTION: ALL OBS
. qui estpost tabstat q14 q16 q17 q18 q19, by(expcond) stat(count) ///
> columns(statistics) nototal
. esttab ., main(count) unstack compress not noobs nonote nostar nonum nomti
```

	DQ	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
q14	1018	1014	1008	1022	1024	1008
q16	1018	1013	1006	1017	1020	1004
q17	1015	1013	1005	1009	1012	1003
q18	753	751	743	749	757	738
q19	755	750	743	749	753	737

```
. // SELECTION: GOOD LANGUAGE SKILLS
. qui estpost tabstat q14 q16 q17 q18 q19 if language, by(expcond) ///
> stat(count) columns(statistics) nototal
```

```

. esttab ., main(count) unstack compress not noobs nonote nostar nonum nomti

```

	DQ	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
q14	979	972	980	977	983	968
q16	979	971	979	973	980	965
q17	976	971	978	967	972	963
q18	723	720	718	722	725	710
q19	725	717	718	721	721	709

```

.
. // SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA
. qui estpost tabstat q14 q16 q17 q18 q19 if language & nopretest, by(expcnd) ///
> stat(count) columns(statistics) nototal
. esttab ., main(count) unstack compress not noobs nonote nostar nonum nomti

```

	DQ	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
q14	955	947	952	946	957	947
q16	955	946	951	942	955	945
q17	952	946	950	936	947	943
q18	704	704	698	699	708	695
q19	706	701	698	698	704	694

4.5 Question sensitivity

```

. preserve
. keep id language nopretest q20_? q21_? q22_?
. qui reshape long q20_ q21_ q22_, i(id) j(question)
. lab def question ///
> 1 "Copying from other students in exam" ///
> 2 "Using crib notes in exam" ///
> 3 "Taking drugs to enhance exam performance" ///
> 4 "Including plagiarism in paper" ///
> 5 "Handing in someone else's paper"
. lab val question question
.
. // descriptive norm: 100 - "How many out of 100 students have ever ...?"
. qui gen descriptive = 100-q20_ if q20_<.
.
. // personal norm: "How bad do you think is ...?" (rather bad or very bad)
. qui gen personal = inlist(q21_,4,5)*100 if inlist(q21_,1,2,3,4,5)
.
. // general norm: "How bad do most people think is ...?" (rather bad or very bad)
. qui gen general = inlist(q22_,4,5)*100 if inlist(q22_,1,2,3,4,5)
.
. // SELECTION: ALL OBS
. qui estpost tabstat descriptive personal general ///
> , by(question) nototal
. esttab, cell((descriptive(f(0)) personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
Copying from other students in exam	77	39	32
Using crib notes in exam	81	51	36
Taking drugs to enhance exam perfor	87	62	50
Including plagiarism in paper	89	80	69
Handing in someone else's paper	93	93	84

```

. qui estpost tabstat descriptive personal general ///
> , by(question) s(count) nototal
. esttab, cell((descriptive personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
Copying from other students in exam	6145	6158	6121
Using crib notes in exam	6141	6144	6103
Taking drugs to enhance exam perfor	6132	6146	6110
Including plagiarism in paper	6122	6149	6117
Handing in someone else's paper	6125	6151	6113

```

.
. // SELECTION: GOOD LANGUAGE SKILLS
. qui estpost tabstat descriptive personal general if language ///
> , by(question) nototal
. esttab, cell((descriptive(f(0)) personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
Copying from other students in exam	77	39	31
Using crib notes in exam	81	50	35
Taking drugs to enhance exam perfor	87	62	50
Including plagiarism in paper	89	80	69
Handing in someone else's paper	94	94	85

```

. qui estpost tabstat descriptive personal general if language ///
> , by(question) s(count) nototal
. esttab, cell((descriptive personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
Copying from other students in exam	5909	5921	5889
Using crib notes in exam	5905	5912	5871
Taking drugs to enhance exam perfor	5895	5909	5878
Including plagiarism in paper	5887	5913	5886
Handing in someone else's paper	5890	5915	5881

```

.
. // SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA
. qui estpost tabstat descriptive personal general if language & nopretest ///
> , by(question) nototal
. esttab, cell((descriptive(f(0)) personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
Copying from other students in exam	77	39	31
Using crib notes in exam	81	50	35
Taking drugs to enhance exam perfor	87	62	50
Including plagiarism in paper	89	80	69
Handing in someone else's paper	94	94	85

```

. qui estpost tabstat descriptive personal general if language & nopretest ///
> , by(question) s(count) nototal
. esttab, cell((descriptive personal general)) ///
> varlab(`e(labels)') varwidth(35) noobs nonum nomti

```

	descriptive	personal	general
--	-------------	----------	---------

Copying from other students in exam	5754	5769	5737
Using crib notes in exam	5750	5760	5719
Taking drugs to enhance exam perfor	5741	5758	5727
Including plagiarism in paper	5732	5762	5734
Handing in someone else's paper	5735	5763	5729

```
. restore
```

4.6 Prevalence estimates

```
. capt prog drop nlrrreg
. program nlrrreg, rclass // nonlinear randomized response regression
1.   version 13.1
2.   syntax varlist(min=2) [aw fw iw] if
3.   gettoken lhs rhs : varlist
4.   local xb
5.   local plus
6.   foreach v in `rhs' {
7.       local xb `xb' `plus' `{v'}*`v'
8.       local plus "+"
9.   }
10.  return local eq "`lhs' = (1-`lhs'_pyes-`lhs'_pno)*((2*`lhs'_pcm-1)*(`xb')-`lhs'_pcm+1)+`lhs
> '_pyes"
11.  return local title "`lhs' = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes"
12.  end
. est clear
. forv i = 0/2 {
2.   preserve
3.   if `i'==1 {
4.       di _n as res "=> SELECTION: GOOD LANGUAGE SKILLS"
5.       keep if language
6.   }
7.   else if `i'==2 {
8.       di _n as res "=> SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA"
9.       keep if language & nopretest
10.  }
11.  else di _n as res "=> SELECTION: ALL OBS"
12.  // prevalence by implementation
.   gen byte DQ      = expcond==1
13.  gen byte FRwheel = expcond==2
14.  gen byte FRnumb  = expcond==3
15.  gen byte UQbenf  = expcond==4
16.  gen byte CMquest = expcond==5
17.  gen byte CMnumb  = expcond==6
18.  foreach v in q14 q16 q17 q18 q19 {
19.      di _n as res "`"=> `v': `:var lab `v''"'
20.      // least-squares
.       rrreg `v' DQ FRwheel FRnumb UQbenf CMquest CMnumb ///
>       , nocons hc2 pyes(`v'_pyes) pno(`v'_pno) pwarner(`v'_pcm)
21.      est sto `v'
22.      nlcom (FRwheel: _b[FRwheel]-_b[DQ]) (FRnumb:_b[FRnumb]-_b[DQ]) ///
>       (UQbenf:_b[UQbenf]-_b[DQ]) (CMquest:_b[CMquest]-_b[DQ]) ///
>       (CMnumb:_b[CMnumb]-_b[DQ]), post
23.      est sto `v'_d
24.      // nonlinear least-squares
.       nl rrreg: `v' DQ FRwheel FRnumb UQbenf CMquest CMnumb, vce(robust)
25.      est sto `v'_nl
26.      nlcom (FRwheel: _b[FRwheel]-_b[DQ]) (FRnumb:_b[FRnumb]-_b[DQ]) ///
>       (UQbenf:_b[UQbenf]-_b[DQ]) (CMquest:_b[CMquest]-_b[DQ]) ///
>       (CMnumb:_b[CMnumb]-_b[DQ]), post
27.      est sto `v'_nl_d
28.      // maximum likelihood
.       rrlogit `v' DQ FRwheel FRnumb UQbenf CMquest CMnumb ///
>       , nocons robust nolog pyes(`v'_pyes) pno(`v'_pno) pwarner(`v'_pcm)
```



```

29.      est sto `v'_ml
30.      nlcom (FRwheel: _b[FRwheel]-_b[DQ]) (FRnumb:_b[FRnumb]-_b[DQ]) ///
>         (UQbenf:_b[UQbenf]-_b[DQ]) (CMquest:_b[CMquest]-_b[DQ]) ///
>         (CMnumb:_b[CMnumb]-_b[DQ]), post
31.      est sto `v'_ml_d
32.      }
33.      qui estwrite * using log/main/detailed`i', replace
34.      est clear
35.      restore
36.      }

```

==> SELECTION: ALL OBS

==> q14: Have you ever copied from other students during an exam?

```

Randomized response regression          Number of obs   =      6,094
                                         F(      6,   6088) =     115.28
                                         Prob > F         =      0.0000
                                         R-squared       =      0.0916
                                         Adj R-squared   =      0.0907
                                         Root MSE       =      0.6956

```

q14	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.175835	.0119371	14.73	0.000	.152434	.1992359
FRwheel	.2207703	.0208494	10.59	0.000	.1798981	.2616426
FRnumb	.1870315	.0204394	9.15	0.000	.146963	.2271
UQbenf	.1716039	.0186352	9.21	0.000	.1350723	.2081356
CMquest	.2944856	.0283458	10.39	0.000	.2389177	.3500535
CMnumb	.2477679	.0267034	9.28	0.000	.1954198	.300116

```

Pr(non-negated question) = q14_pcm
Pr(surrogate "yes")      = q14_pyes
Pr(surrogate "no")      = q14_pno

```

```

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb:  _b[FRnumb]-_b[DQ]
UQbenf:  _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb:  _b[CMnumb]-_b[DQ]

```

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0449354	.0240248	1.87	0.061	-.0021525	.0920232
FRnumb	.0111966	.0236699	0.47	0.636	-.0351956	.0575887
UQbenf	-.004231	.0221307	-0.19	0.848	-.0476063	.0391443
CMquest	.1186506	.0307568	3.86	0.000	.0583684	.1789329
CMnumb	.0719329	.0292501	2.46	0.014	.0146038	.129262

(obs = 6,094)

```

Iteration 0: residual SS = 1247.79
Iteration 1: residual SS = 1247.79
Iteration 2: residual SS = 1247.79

```

```

Nonlinear regression          Number of obs   =      6,094
                               R-squared       =      0.4422
                               Adj R-squared    =      0.4417
                               Root MSE      =      .4527239
                               Res. dev.     =     7629.362

```

q14 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q14	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.175835	.0119371	14.73	0.000	.152434	.1992359
/FRwheel	.2192948	.0207067	10.59	0.000	.1787023	.2598872
/FRnumb	.1882704	.020368	9.24	0.000	.1483419	.2281988
/UQbenf	.174043	.0185485	9.38	0.000	.1376813	.2104048
/CMquest	.292659	.0268401	10.90	0.000	.2400429	.3452751

/CMnumb	.2453347	.0253928	9.66	0.000	.1955559	.2951136
---------	----------	----------	------	-------	----------	----------

```

FRwheel:  _b[FRwheel]-_b[DQ]
FRnumb:   _b[FRnumb]-_b[DQ]
UQbenf:   _b[UQbenf]-_b[DQ]
CMquest:  _b[CMquest]-_b[DQ]
CMnumb:   _b[CMnumb]-_b[DQ]

```

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0434598	.0239011	1.82	0.069	-.0033855	.0903051
FRnumb	.0124354	.0236082	0.53	0.598	-.0338359	.0587067
UQbenf	-.0017919	.0220577	-0.08	0.935	-.0450243	.0414404
CMquest	.116824	.0293749	3.98	0.000	.0592502	.1743978
CMnumb	.0694997	.0280587	2.48	0.013	.0145058	.1244937

```

Randomized response logistic regression      Number of obs   =      6094
                                             Nonzero outcomes =      2237
P(non-negated question) = q14_pcm          Zero outcomes   =      3857
P(surrogate "yes")      = q14_pyces       Wald chi2(6)    =      843.18
P(surrogate "no")      = q14_pno         Prob > chi2     =      0.0000
Log pseudolikelihood = -3644.4404        Pseudo R2      =

```

q14	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-1.544825	.0823383	-18.76	0.000	-1.706205	-1.383445
FRwheel	-1.268698	.1208237	-10.50	0.000	-1.505508	-1.031888
FRnumb	-1.462307	.1332552	-10.97	0.000	-1.723482	-1.201132
UQbenf	-1.552817	.1280034	-12.13	0.000	-1.803699	-1.301935
CMquest	-.8833593	.1298557	-6.80	0.000	-1.137872	-.6288467
CMnumb	-1.124844	.1373664	-8.19	0.000	-1.394077	-.8556107

```

FRwheel:  _b[FRwheel]-_b[DQ]
FRnumb:   _b[FRnumb]-_b[DQ]
UQbenf:   _b[UQbenf]-_b[DQ]
CMquest:  _b[CMquest]-_b[DQ]
CMnumb:   _b[CMnumb]-_b[DQ]

```

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.2761267	.146212	1.89	0.059	-.0104436	.562697
FRnumb	.0825178	.1566414	0.53	0.598	-.2244938	.3895294
UQbenf	-.0079925	.1521987	-0.05	0.958	-.3062965	.2903116
CMquest	.6614656	.1537599	4.30	0.000	.3601017	.9628295
CMnumb	.419981	.1601535	2.62	0.009	.106086	.733876

==> q16: Have you ever used illicit crib notes in an exam?

```

Randomized response regression      Number of obs   =      6,078
                                             F( 6, 6072)    =      49.19
                                             Prob > F        =      0.0000
                                             R-squared       =      0.0372
                                             Adj R-squared   =      0.0362
                                             Root MSE       =      0.6541

```

q16	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.089391	.0089465	9.99	0.000	.0718527	.1069292
FRwheel	.1119886	.0192055	5.83	0.000	.0743389	.1496383
FRnumb	.1386404	.0197505	7.02	0.000	.0999224	.1773584
UQbenf	.1292375	.0178851	7.23	0.000	.0941764	.1642986
CMquest	.1731582	.0273636	6.33	0.000	.1195157	.2268006
CMnumb	.1115538	.0250867	4.45	0.000	.0623749	.1607326

Pr(non-negated question) = q16_pcm
 Pr(surrogate "yes") = q16_pyes
 Pr(surrogate "no") = q16_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0225976	.0211871	1.07	0.286	-.0189283	.0641236
FRnumb	.0492494	.0216823	2.27	0.023	.0067529	.0917459
UQbenf	.0398465	.0199979	1.99	0.046	.0006514	.0790417
CMquest	.0837672	.028789	2.91	0.004	.0273418	.1401927
CMnumb	.0221628	.0266342	0.83	0.405	-.0300393	.074365

(obs = 6,078)

Iteration 0: residual SS = 1066.908
 Iteration 1: residual SS = 1066.908
 Iteration 2: residual SS = 1066.908

Nonlinear regression

Number of obs = 6,078
 R-squared = 0.4801
 Adj R-squared = 0.4796
 Root MSE = .4191771
 Res. dev. = 6673.438

q16 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q16	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.089391	.0089465	9.99	0.000	.0718526	.1069293
/FRwheel	.1115001	.0190836	5.84	0.000	.0740894	.1489107
/FRnumb	.1373552	.0196031	7.01	0.000	.0989261	.1757842
/UQbenf	.1289632	.0176845	7.29	0.000	.0942953	.1636311
/CMquest	.1905796	.0260591	7.31	0.000	.1394945	.2416648
/CMnumb	.1127951	.0236285	4.77	0.000	.066475	.1591153

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0221091	.0210766	1.05	0.294	-.0192003	.0634185
FRnumb	.0479642	.0215481	2.23	0.026	.0057307	.0901978
UQbenf	.0395722	.0198187	2.00	0.046	.0007282	.0784162
CMquest	.1011887	.0275521	3.67	0.000	.0471876	.1551898
CMnumb	.0234042	.0252655	0.93	0.354	-.0261152	.0729236

Randomized response logistic regression

Number of obs = 6078
 Nonzero outcomes = 2052
 Zero outcomes = 4026
 Wald chi2(6) = 984.92
 Prob > chi2 = 0.0000
 Pseudo R2 = .

P(non-negated question) = q16_pcm
 P(surrogate "yes") = q16_pyes
 P(surrogate "no") = q16_pno
 Log pseudolikelihood = -3226.6025

q16	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-2.321094	.1098624	-21.13	0.000	-2.53642	-2.105768
FRwheel	-2.074979	.1925203	-10.78	0.000	-2.452312	-1.697646
FRnumb	-1.836162	.165313	-11.11	0.000	-2.160169	-1.512154

q17	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0374384	.0059615	6.28	0.000	.0257518	.0491251
/FRwheel	-.0068377	.0163145	-0.42	0.675	-.0388199	.0251445
/FRnumb	-.0111953	.0163125	-0.69	0.493	-.0431735	.020783
/UQbenf	.0526083	.0159025	3.31	0.001	.0214337	.083783
/CMquest	.1443335	.0254457	5.67	0.000	.0944509	.1942161
/CMnumb	.0533748	.0225295	2.37	0.018	.0092089	.0975407

FRwheel: _b[/FRwheel]-_b[/DQ]
FRnumb: _b[/FRnumb]-_b[/DQ]
UQbenf: _b[/UQbenf]-_b[/DQ]
CMquest: _b[/CMquest]-_b[/DQ]
CMnumb: _b[/CMnumb]-_b[/DQ]

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0442761	.0173696	-2.55	0.011	-.0783198	-.0102324
FRnumb	-.0486337	.0173677	-2.80	0.005	-.0826737	-.0145937
UQbenf	.0151699	.0169832	0.89	0.372	-.0181166	.0484564
CMquest	.1068951	.0261347	4.09	0.000	.0556721	.1581182
CMnumb	.0159364	.0233049	0.68	0.494	-.0297404	.0616132

Randomized response logistic regression Number of obs = 6057
Nonzero outcomes = 1763
P(non-negated question) = q17_pcm Zero outcomes = 4294
P(surrogate "yes") = q17_pyces Wald chi2(6) = 794.09
P(surrogate "no") = q17_pno Prob > chi2 = 0.0000
Log pseudolikelihood = -2673.631 Pseudo R2 = .

q17	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-3.246905	.1653604	-19.64	0.000	-3.571005	-2.922804
FRwheel	-17.56097	2.385198	-7.36	0.000	-22.23587	-12.88607
FRnumb	-18.06502	1.456568	-12.40	0.000	-20.91984	-15.2102
UQbenf	-2.886097	.3161596	-9.13	0.000	-3.505758	-2.266435
CMquest	-1.792754	.2094639	-8.56	0.000	-2.203296	-1.382213
CMnumb	-2.84724	.4295691	-6.63	0.000	-3.68918	-2.0053

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-14.31407	2.390923	-5.99	0.000	-19.00019	-9.627945
FRnumb	-14.81812	1.465925	-10.11	0.000	-17.69128	-11.94496
UQbenf	.360808	.3567926	1.01	0.312	-.3384926	1.060109
CMquest	1.45415	.2668692	5.45	0.000	.9310964	1.977205
CMnumb	.3996648	.4602974	0.87	0.385	-.5025015	1.301831

==> q18: Have you ever handed in a paper containing plagiarisms?

Randomized response regression Number of obs = 4,491
F(6, 4485) = 9.60
Prob > F = 0.0000
R-squared = 0.0092
Adj R-squared = 0.0079
Root MSE = 0.6055

q18	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
-----	-------	----------------------	---	------	----------------------	--

DQ	.0332005	.0065333	5.08	0.000	.0203921	.046009
FRwheel	.0139444	.0197694	0.71	0.481	-.0248135	.0527022
FRnumb	.0242261	.0201391	1.20	0.229	-.0152565	.0637087
UQbenf	.0730961	.0193601	3.78	0.000	.0351408	.1110514
CMquest	.0730954	.0301319	2.43	0.015	.0140219	.1321689
CMnumb	.0890921	.0286582	3.11	0.002	.032908	.1452763

Pr(non-negated question) = q18_pcm
Pr(surrogate "yes") = q18_pyes
Pr(surrogate "no") = q18_pno

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0192562	.020821	-0.92	0.355	-.0600646	.0215523
FRnumb	-.0089744	.0211723	-0.42	0.672	-.0504714	.0325226
UQbenf	.0398956	.0204327	1.95	0.051	-.0001518	.079943
CMquest	.0398949	.0308321	1.29	0.196	-.0205349	.1003247
CMnumb	.0558916	.0293934	1.90	0.057	-.0017185	.1135017

(obs = 4,491)

Iteration 0: residual SS = 645.8064
Iteration 1: residual SS = 645.8064
Iteration 2: residual SS = 645.8064

Nonlinear regression

Number of obs = 4,491
R-squared = 0.5258
Adj R-squared = 0.5252
Root MSE = .3794635
Res. dev. = 4035.371

q18 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q18	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0332005	.0065333	5.08	0.000	.020392	.046009
/FRwheel	.0155668	.0197392	0.79	0.430	-.0231318	.0542654
/FRnumb	.0257756	.0201025	1.28	0.200	-.0136352	.0651863
/UQbenf	.0714792	.0190079	3.76	0.000	.0342144	.1087441
/CMquest	.0806931	.028158	2.87	0.004	.0254896	.1358966
/CMnumb	.09233	.0269908	3.42	0.001	.0394148	.1452452

FRwheel: _b[/FRwheel]-_b[/DQ]
FRnumb: _b[/FRnumb]-_b[/DQ]
UQbenf: _b[/UQbenf]-_b[/DQ]
CMquest: _b[/CMquest]-_b[/DQ]
CMnumb: _b[/CMnumb]-_b[/DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0176337	.0207923	-0.85	0.396	-.0583859	.0231185
FRnumb	-.0074249	.0211375	-0.35	0.725	-.0488537	.0340038
UQbenf	.0382787	.0200994	1.90	0.057	-.0011154	.0776727
CMquest	.0474926	.028906	1.64	0.100	-.0091621	.1041472
CMnumb	.0591295	.0277702	2.13	0.033	.0047008	.1135581

Randomized response logistic regression

Number of obs = 4491
Nonzero outcomes = 1362
Zero outcomes = 3129
Wald chi2(6) = 478.58
Prob > chi2 = 0.0000

P(non-negated question) = q18_pcm
P(surrogate "yes") = q18_pyes
P(surrogate "no") = q18_pno

Log pseudolikelihood = -2029.658 Pseudo R2 = .

q18	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-3.371424	.2034276	-16.57	0.000	-3.770135	-2.972714
FRwheel	-4.149484	1.287422	-3.22	0.001	-6.672784	-1.626183
FRnumb	-3.634541	.8001411	-4.54	0.000	-5.202789	-2.066294
UQbenf	-2.579137	.290493	-8.88	0.000	-3.148493	-2.009782
CMquest	-2.415564	.3705003	-6.52	0.000	-3.141731	-1.689397
CMnumb	-2.27528	.3168711	-7.18	0.000	-2.896336	-1.654224

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.7780591	1.303395	-0.60	0.551	-3.332666	1.776548
FRnumb	-.2631169	.8255958	-0.32	0.750	-1.881255	1.355021
UQbenf	.7922871	.3546392	2.23	0.025	.0972071	1.487367
CMquest	.9558604	.4226739	2.26	0.024	.1274348	1.784286
CMnumb	1.096145	.3765503	2.91	0.004	.3581196	1.83417

==> q19: Have you ever handed in someone else's work as your own?

Randomized response regression

Number of obs	=	4,487
F(6, 4481)	=	4.09
Prob > F	=	0.0004
R-squared	=	0.0037
Adj R-squared	=	0.0024
Root MSE	=	0.5751

q19	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.015894	.0045546	3.49	0.000	.0069647	.0248233
FRwheel	.0038519	.0194912	0.20	0.843	-.0343604	.0420641
FRnumb	-.0397413	.0179932	-2.21	0.027	-.0750168	-.0044658
UQbenf	.0260643	.0178372	1.46	0.144	-.0089055	.061034
CMquest	.0687585	.0299696	2.29	0.022	.0100033	.1275138
CMnumb	.0071235	.0268577	0.27	0.791	-.0455308	.0597778

Pr(non-negated question) = q19_pcm
 Pr(surrogate "yes") = q19_pyes
 Pr(surrogate "no") = q19_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0120422	.0200162	-0.60	0.547	-.0512733	.0271889
FRnumb	-.0556353	.0185607	-3.00	0.003	-.0920136	-.0192571
UQbenf	.0101702	.0184095	0.55	0.581	-.0259118	.0462523
CMquest	.0528645	.0303137	1.74	0.081	-.0065493	.1122783
CMnumb	-.0087706	.0272411	-0.32	0.747	-.0621622	.0446211

(obs = 4,487)

Iteration 0: residual SS = 572.9733
 Iteration 1: residual SS = 572.9733
 Iteration 2: residual SS = 572.9733

Nonlinear regression

Number of obs = 4,487
 R-squared = 0.5545
 Adj R-squared = 0.5539
 Root MSE = .3575853
 Res. dev. = 3498.857

$$q19 = (1 - pyes - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyes$$

q19	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.015894	.0045547	3.49	0.000	.0069647	.0248234
/FRwheel	.0036932	.0193484	0.19	0.849	-.0342393	.0416257
/FRnumb	-.039399	.0178742	-2.20	0.028	-.0744413	-.0043567
/UQbenf	.0246417	.0174399	1.41	0.158	-.0095492	.0588326
/CMquest	.0846701	.0283394	2.99	0.003	.0291109	.1402294
/CMnumb	.0225806	.0255675	0.88	0.377	-.0275442	.0727055

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0122009	.0198773	-0.61	0.539	-.0511596	.0267579
FRnumb	-.055293	.0184454	-3.00	0.003	-.0914454	-.0191407
UQbenf	.0087477	.0180249	0.49	0.627	-.0265804	.0440758
CMquest	.0687761	.0287031	2.40	0.017	.0125191	.1250331
CMnumb	.0066866	.02597	0.26	0.797	-.0442136	.0575868

Randomized response logistic regression

Number of obs = 4487
 Nonzero outcomes = 1286
 Zero outcomes = 3201
 Wald chi2(6) = 1658.17
 Prob > chi2 = 0.0000
 Pseudo R2 = .

P(non-negated question) = q19_pcm
 P(surrogate "yes") = q19_pyes
 P(surrogate "no") = q19_pno
 Log pseudolikelihood = -1839.8481

q19	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-4.125786	.2910285	-14.18	0.000	-4.696192	-3.555381
FRwheel	-5.596814	5.250358	-1.07	0.286	-15.88733	4.693699
FRnumb	-16.85247	.4548958	-37.05	0.000	-17.74405	-15.96089
UQbenf	-3.727863	.759834	-4.91	0.000	-5.21711	-2.238615
CMquest	-2.363046	.3569764	-6.62	0.000	-3.062707	-1.663385
CMnumb	-3.52375	.8892762	-3.96	0.000	-5.266699	-1.780801

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-1.471028	5.258418	-0.28	0.780	-11.77734	8.835282
FRnumb	-12.72668	.5400258	-23.57	0.000	-13.78511	-11.66825
UQbenf	.3979238	.8136617	0.49	0.625	-1.196824	1.992671
CMquest	1.762741	.4605755	3.83	0.000	.8600292	2.665452
CMnumb	.6020365	.9356868	0.64	0.520	-1.231876	2.435949

==> SELECTION: GOOD LANGUAGE SKILLS
 (272 observations deleted)

==> q14: Have you ever copied from other students during an exam?

Randomized response regression

Number of obs	=	5,859
F(6, 5853)	=	113.29
Prob > F	=	0.0000
R-squared	=	0.0935
Adj R-squared	=	0.0926
Root MSE	=	0.6971

q14	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.1787538	.0122517	14.59	0.000	.1547361	.2027716
FRwheel	.2280235	.0213957	10.66	0.000	.1860801	.2699669
FRnumb	.1877834	.0207512	9.05	0.000	.1471034	.2284635
UQbenf	.1724155	.0190734	9.04	0.000	.1350246	.2098065
CMquest	.300554	.0289865	10.37	0.000	.2437297	.3573782
CMnumb	.2474174	.0272899	9.07	0.000	.193919	.3009157

Pr(non-negated question) = q14_pcm
 Pr(surrogate "yes") = q14_pyes
 Pr(surrogate "no") = q14_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0492697	.0246552	2.00	0.046	.0009465	.097593
FRnumb	.0090296	.024098	0.37	0.708	-.0382017	.0562609
UQbenf	-.0063383	.0226693	-0.28	0.780	-.0507694	.0380928
CMquest	.1218002	.0314694	3.87	0.000	.0601213	.183479
CMnumb	.0686635	.0299139	2.30	0.022	.0100333	.1272938

(obs = 5,859)

Iteration 0: residual SS = 1204.343
 Iteration 1: residual SS = 1204.343
 Iteration 2: residual SS = 1204.343

Nonlinear regression

Number of obs	=	5,859
R-squared	=	0.4401
Adj R-squared	=	0.4395
Root MSE	=	.4536134
Res. dev.	=	7357.922

q14 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q14	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
/DQ	.1787538	.0122517	14.59	0.000	.154736	.2027716
/FRwheel	.2251998	.0212184	10.61	0.000	.1836039	.2667956
/FRnumb	.1888196	.020673	9.13	0.000	.1482928	.2293463
/UQbenf	.1749845	.0189894	9.21	0.000	.1377583	.2122107
/CMquest	.2969271	.0274169	10.83	0.000	.2431798	.3506744
/CMnumb	.2452314	.0259551	9.45	0.000	.1943497	.296113

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0464459	.0245015	1.90	0.058	-.0015761	.094468

FRnumb	.0100657	.0240308	0.42	0.675	-.0370337	.0571652
UQbenf	-.0037693	.0225987	-0.17	0.868	-.0480619	.0405233
CMquest	.1181733	.0300298	3.94	0.000	.0593159	.1770306
CMnumb	.0664776	.0287014	2.32	0.021	.0102238	.1227313

Randomized response logistic regression

Number of obs = 5859
 Nonzero outcomes = 2151
 Zero outcomes = 3708
 P(non-negated question) = q14_pcm
 P(surrogate "yes") = q14_pyes
 P(surrogate "no") = q14_pno
 Log pseudolikelihood = -3514.2397
 Wald chi2(6) = 801.85
 Prob > chi2 = 0.0000
 Pseudo R2 = .

q14	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-1.524813	.0834221	-18.28	0.000	-1.688318	-1.361309
FRwheel	-1.233594	.121421	-10.16	0.000	-1.471574	-.995613
FRnumb	-1.45855	.1349389	-10.81	0.000	-1.723025	-1.194074
UQbenf	-1.546062	.1304423	-11.85	0.000	-1.801724	-1.2904
CMquest	-.8630747	.1316176	-6.56	0.000	-1.12104	-.6051089
CMnumb	-1.125285	.1404135	-8.01	0.000	-1.400491	-.85008

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.2912196	.147317	1.98	0.048	.0024835	.5799556
FRnumb	.0662637	.1586435	0.42	0.676	-.2446719	.3771992
UQbenf	-.0212486	.1548368	-0.14	0.891	-.3247231	.282226
CMquest	.6617386	.1558283	4.25	0.000	.3563208	.9671564
CMnumb	.3995279	.1633255	2.45	0.014	.0794159	.7196399

==> q16: Have you ever used illicit crib notes in an exam?

Randomized response regression

Number of obs = 5,847
 F(6, 5841) = 48.30
 Prob > F = 0.0000
 R-squared = 0.0384
 Adj R-squared = 0.0374
 Root MSE = 0.6551

q16	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.0909091	.0091926	9.89	0.000	.0728882	.10893
FRwheel	.1128276	.0196403	5.74	0.000	.0743254	.1513297
FRnumb	.1386335	.0200239	6.92	0.000	.0993794	.1778877
UQbenf	.1292657	.0182852	7.07	0.000	.0934199	.1651114
CMquest	.1837023	.0280172	6.56	0.000	.1287782	.2386265
CMnumb	.1088083	.0255878	4.25	0.000	.0586467	.1589699

Pr(non-negated question) = q16_pcm
 Pr(surrogate "yes") = q16_pyes
 Pr(surrogate "no") = q16_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----	-------	-----------	---	------	----------------------	--

FRwheel	.0219185	.0216851	1.01	0.312	-.0205835	.0644205
FRnumb	.0477244	.0220331	2.17	0.030	.0045403	.0909086
UQbenf	.0383566	.0204659	1.87	0.061	-.0017558	.078469
CMquest	.0927932	.0294868	3.15	0.002	.0350002	.1505862
CMnumb	.0178992	.027189	0.66	0.510	-.0353902	.0711886

(obs = 5,847)

Iteration 0: residual SS = 1028.768

Iteration 1: residual SS = 1028.768

Iteration 2: residual SS = 1028.768

Nonlinear regression

Number of obs = 5,847
R-squared = 0.4794
Adj R-squared = 0.4788
Root MSE = .4196769
Res. dev. = 6433.512

q16 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q16	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0909091	.0091926	9.89	0.000	.0728882	.10893
/FRwheel	.1115799	.019487	5.73	0.000	.0733782	.1497817
/FRnumb	.1379106	.0198938	6.93	0.000	.0989115	.1769098
/UQbenf	.1288861	.0180752	7.13	0.000	.0934519	.1643202
/CMquest	.1986899	.0266536	7.45	0.000	.1464389	.2509409
/CMnumb	.1098028	.0240841	4.56	0.000	.062589	.1570165

FRwheel: _b[/FRwheel]-_b[/DQ]
FRnumb: _b[/FRnumb]-_b[/DQ]
UQbenf: _b[/UQbenf]-_b[/DQ]
CMquest: _b[/CMquest]-_b[/DQ]
CMnumb: _b[/CMnumb]-_b[/DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0206708	.0215464	0.96	0.337	-.0215593	.062901
FRnumb	.0470015	.021915	2.14	0.032	.004049	.0899541
UQbenf	.037977	.0202785	1.87	0.061	-.0017682	.0777222
CMquest	.1077808	.0281943	3.82	0.000	.0525209	.1630406
CMnumb	.0188937	.0257788	0.73	0.464	-.0316319	.0694193

Randomized response logistic regression

Number of obs = 5847
Nonzero outcomes = 1976
Zero outcomes = 3871
Wald chi2(6) = 944.42
Prob > chi2 = 0.0000
Pseudo R2 = .

P(non-negated question) = q16_pcm
P(surrogate "yes") = q16_pyes
P(surrogate "no") = q16_pno
Log pseudolikelihood = -3109.8225

q16	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-2.302585	.111183	-20.71	0.000	-2.5205	-2.08467
FRwheel	-2.07335	.1964368	-10.55	0.000	-2.458359	-1.688341
FRnumb	-1.832039	.1672135	-10.96	0.000	-2.159771	-1.504307
UQbenf	-1.912938	.161166	-11.87	0.000	-2.228818	-1.597059
CMquest	-1.388375	.1655516	-8.39	0.000	-1.71285	-1.0639
CMnumb	-2.090289	.2448709	-8.54	0.000	-2.570227	-1.610351

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----	-------	-----------	---	------	----------------------	--

FRwheel	.2292348	.225719	1.02	0.310	-.2131663	.6716359
FRnumb	.4705461	.2008035	2.34	0.019	.0769785	.8641136
UQbenf	.389647	.1957962	1.99	0.047	.0058935	.7734004
CMquest	.9142099	.1994217	4.58	0.000	.5233506	1.305069
CMnumb	.2122961	.2689302	0.79	0.430	-.3147973	.7393895

==> q17: Have you ever used prescription drugs to enhance exam performance?

Randomized response regression

Number of obs	=	5,827
F(6, 5821)	=	12.79
Prob > F	=	0.0000
R-squared	=	0.0133
Adj R-squared	=	0.0123
Root MSE	=	0.6002

q17	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.0338115	.0057884	5.84	0.000	.022464	.0451589
FRwheel	-.0088683	.0167123	-0.53	0.596	-.0416305	.023894
FRnumb	-.015167	.0164164	-0.92	0.356	-.0473492	.0170152
UQbenf	.0467085	.0163111	2.86	0.004	.0147327	.0786842
CMquest	.1525884	.0279942	5.45	0.000	.0977094	.2074674
CMnumb	.0462098	.0245081	1.89	0.059	-.0018353	.0942548

Pr(non-negated question) = q17_pcm
Pr(surrogate "yes") = q17_pyess
Pr(surrogate "no") = q17_pno

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0426798	.0176863	-2.41	0.016	-.0773443	-.0080152
FRnumb	-.0489785	.017407	-2.81	0.005	-.0830956	-.0148614
UQbenf	.012897	.0173077	0.75	0.456	-.0210255	.0468195
CMquest	.1187769	.0285864	4.16	0.000	.0627487	.1748052
CMnumb	.0123983	.0251824	0.49	0.622	-.0369583	.0617549

(obs = 5,827)

Iteration 0: residual SS = 804.3184
Iteration 1: residual SS = 804.3184
Iteration 2: residual SS = 804.3184

Nonlinear regression

Number of obs	=	5,827
R-squared	=	0.5229
Adj R-squared	=	0.5225
Root MSE	=	.3717194
Res. dev.	=	4997.321

$$q17 = (1 - pyess - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyess$$

q17	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
/DQ	.0338115	.0057884	5.84	0.000	.022464	.045159
/FRwheel	-.0080979	.016639	-0.49	0.627	-.0407165	.0245208
/FRnumb	-.0108392	.0165563	-0.65	0.513	-.0432957	.0216174
/UQbenf	.0473568	.0161029	2.94	0.003	.0157891	.0789245
/CMquest	.1478823	.0259923	5.69	0.000	.0969278	.1988368
/CMnumb	.0497125	.0229452	2.17	0.030	.0047313	.0946936

FRwheel: _b[FRwheel]-_b[/DQ]
FRnumb: _b[FRnumb]-_b[/DQ]

FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0196321	.0210139	-0.93	0.350	-.0608186	.0215545
FRnumb	.0004344	.0215819	0.02	0.984	-.0418654	.0427342
UQbenf	.0477065	.0207934	2.29	0.022	.0069521	.0884608
CMquest	.0470202	.0314323	1.50	0.135	-.0145859	.1086263
CMnumb	.0554614	.0298562	1.86	0.063	-.0030556	.1139784

(obs = 4,318)

Iteration 0: residual SS = 618.4744
 Iteration 1: residual SS = 618.4744
 Iteration 2: residual SS = 618.4744

Nonlinear regression

Number of obs = 4,318
 R-squared = 0.5279
 Adj R-squared = 0.5272
 Root MSE = .3787228
 Res. dev. = 3862.819

q18 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q18	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0290456	.0062499	4.65	0.000	.0167926	.0412987
/FRwheel	.0102383	.0199819	0.51	0.608	-.0289366	.0494131
/FRnumb	.0308035	.0206055	1.49	0.135	-.0095939	.0712009
/UQbenf	.0752031	.0194814	3.86	0.000	.0370095	.1133968
/CMquest	.08088	.0286865	2.82	0.005	.0246397	.1371203
/CMnumb	.0871806	.0274548	3.18	0.002	.0333552	.1410061

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0188074	.0209365	-0.90	0.369	-.0598422	.0222275
FRnumb	.0017579	.0215325	0.08	0.935	-.040445	.0439607
UQbenf	.0461575	.0204594	2.26	0.024	.0060578	.0862572
CMquest	.0518344	.0293595	1.77	0.077	-.0057091	.1093778
CMnumb	.058135	.0281572	2.06	0.039	.002948	.113322

Randomized response logistic regression

Number of obs = 4318
 Nonzero outcomes = 1310
 Zero outcomes = 3008
 Wald chi2(6) = 448.46
 Prob > chi2 = 0.0000
 Pseudo R2 = .

P(non-negated question) = q18_pcm
 P(surrogate "yes") = q18_pyes
 P(surrogate "no") = q18_pno
 Log pseudolikelihood = -1942.0758

q18	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-3.509411	.2214834	-15.85	0.000	-3.943511	-3.075311
FRwheel	-4.572665	1.970767	-2.32	0.020	-8.435296	-.7100328
FRnumb	-3.450787	.6898335	-5.00	0.000	-4.802835	-2.098738
UQbenf	-2.521624	.2833493	-8.90	0.000	-3.076979	-1.96627
CMquest	-2.423211	.3812412	-6.36	0.000	-3.17043	-1.675992
CMnumb	-2.339326	.3398052	-6.88	0.000	-3.005332	-1.67332

```

FRwheel:  _b[FRwheel]-_b[DQ]
FRnumb:   _b[FRnumb]-_b[DQ]
UQbenf:   _b[UQbenf]-_b[DQ]
CMquest:  _b[CMquest]-_b[DQ]
CMnumb:   _b[CMnumb]-_b[DQ]

```

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-1.063254	1.983173	-0.54	0.592	-4.950202	2.823695
FRnumb	.0586243	.7245172	0.08	0.936	-1.361403	1.478652
UQbenf	.9877866	.3596411	2.75	0.006	.282903	1.69267
CMquest	1.0862	.4409079	2.46	0.014	.2220364	1.950364
CMnumb	1.170085	.4056137	2.88	0.004	.3750968	1.965073

==> q19: Have you ever handed in someone else's work as your own?

```

Randomized response regression
Number of obs   =    4,311
F( 6, 4305)    =    3.75
Prob > F        =    0.0010
R-squared       =    0.0032
Adj R-squared   =    0.0019
Root MSE       =    0.5729

```

q19	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.0151724	.004543	3.34	0.001	.0062659	.0240789
FRwheel	.0046103	.0199535	0.23	0.817	-.034509	.0437295
FRnumb	-.0425178	.0182124	-2.33	0.020	-.0782235	-.0068121
UQbenf	.0242783	.0181161	1.34	0.180	-.0112387	.0597952
CMquest	.0611946	.0304735	2.01	0.045	.001451	.1209383
CMnumb	.0014104	.0273094	0.05	0.959	-.0521301	.054951

```

Pr(non-negated question) = q19_pcm
Pr(surrogate "yes")      = q19_pyess
Pr(surrogate "no")       = q19_pno

```

```

FRwheel:  _b[FRwheel]-_b[DQ]
FRnumb:   _b[FRnumb]-_b[DQ]
UQbenf:   _b[UQbenf]-_b[DQ]
CMquest:  _b[CMquest]-_b[DQ]
CMnumb:   _b[CMnumb]-_b[DQ]

```

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0105622	.0204642	-0.52	0.606	-.0506712	.0295469
FRnumb	-.0576902	.0187705	-3.07	0.002	-.0944796	-.0209008
UQbenf	.0091058	.0186771	0.49	0.626	-.0275005	.0457122
CMquest	.0460222	.0308102	1.49	0.135	-.0143647	.1064091
CMnumb	-.013762	.0276847	-0.50	0.619	-.068023	.0404991

(obs = 4,311)

```

Iteration 0: residual SS = 545.5862
Iteration 1: residual SS = 545.5862
Iteration 2: residual SS = 545.5862

```

```

Nonlinear regression
Number of obs   =    4,311
R-squared       =    0.5564
Adj R-squared   =    0.5558
Root MSE       =    .355996
Res. dev.      =   3322.974

```

q19 = (1 - pyess - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyess

q19	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0151724	.004543	3.34	0.001	.0062658	.024079
/FRwheel	.0052575	.0198606	0.26	0.791	-.0336795	.0441944

/FRnumb	-.0426856	.0180504	-2.36	0.018	-.0780737	-.0072976
/UQbenf	.0233073	.0177427	1.31	0.189	-.0114775	.058092
/CMquest	.0749097	.0287011	2.61	0.009	.0186407	.1311787
/CMnumb	.017106	.0259919	0.66	0.510	-.0338516	.0680636

FRwheel: _b[/FRwheel]-_b[/DQ]
FRnumb: _b[/FRnumb]-_b[/DQ]
UQbenf: _b[/UQbenf]-_b[/DQ]
CMquest: _b[/CMquest]-_b[/DQ]
CMnumb: _b[/CMnumb]-_b[/DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.009915	.0203736	-0.49	0.627	-.0498464	.0300165
FRnumb	-.057858	.0186133	-3.11	0.002	-.0943394	-.0213766
UQbenf	.0081348	.018315	0.44	0.657	-.027762	.0440316
CMquest	.0597373	.0290584	2.06	0.040	.0027838	.1166908
CMnumb	.0019336	.026386	0.07	0.942	-.049782	.0536492

Randomized response logistic regression Number of obs = 4311
Nonzero outcomes = 1230
P(non-negated question) = q19_pcm Zero outcomes = 3081
P(surrogate "yes") = q19_pyes Wald chi2(6) = 2013.06
P(surrogate "no") = q19_pno Prob > chi2 = 0.0000
Log pseudolikelihood = -1755.7563 Pseudo R2 = .

q19	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-4.173149	.3039079	-13.73	0.000	-4.768798	-3.577501
FRwheel	-5.24398	3.795953	-1.38	0.167	-12.68391	2.195951
FRnumb	-17.75581	.4243027	-41.85	0.000	-18.58742	-16.92419
UQbenf	-3.769098	.8020154	-4.70	0.000	-5.341019	-2.197177
CMquest	-2.502611	.4075223	-6.14	0.000	-3.30134	-1.703882
CMnumb	-3.726755	1.093333	-3.41	0.001	-5.869648	-1.583862

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-1.070831	3.808099	-0.28	0.779	-8.534567	6.392906
FRnumb	-13.58266	.5219126	-26.02	0.000	-14.60559	-12.55973
UQbenf	.4040513	.8576646	0.47	0.638	-1.27694	2.085043
CMquest	1.670538	.5083645	3.29	0.001	.6741624	2.666915
CMnumb	.446394	1.134785	0.39	0.694	-1.777743	2.670531

==> SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA
(432 observations deleted)

==> q14: Have you ever copied from other students during an exam?

Randomized response regression Number of obs = 5,704
F(6, 5698) = 110.54
Prob > F = 0.0000
R-squared = 0.0939
Adj R-squared = 0.0929
Root MSE = 0.6970

q14	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.1780105	.0123846	14.37	0.000	.153732	.202289
FRwheel	.2313739	.0217143	10.66	0.000	.1888057	.2739422

FRnumb	.187996	.0210487	8.93	0.000	.1467327	.2292594
UQbenf	.171038	.0193612	8.83	0.000	.1330827	.2089932
CMquest	.301104	.0293637	10.25	0.000	.2435399	.358668
CMnumb	.2468321	.0275734	8.95	0.000	.1927778	.3008864

Pr(non-negated question) = q14_pcm
Pr(surrogate "yes") = q14_pyese
Pr(surrogate "no") = q14_pno

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0533635	.0249978	2.13	0.033	.0043687	.1023582
FRnumb	.0099856	.0244218	0.41	0.683	-.0378803	.0578514
UQbenf	-.0069725	.0229833	-0.30	0.762	-.052019	.038074
CMquest	.1230935	.0318686	3.86	0.000	.0606323	.1855548
CMnumb	.0688216	.030227	2.28	0.023	.0095779	.1280654

(obs = 5,704)

Iteration 0: residual SS = 1172.227
Iteration 1: residual SS = 1172.227
Iteration 2: residual SS = 1172.227

Nonlinear regression

Number of obs = 5,704
R-squared = 0.4415
Adj R-squared = 0.4409
Root MSE = .4535703
Res. dev. = 7162.026

$$q14 = (1 - pyese - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyese$$

q14	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.1780105	.0123846	14.37	0.000	.1537319	.202289
/FRwheel	.2282079	.0215273	10.60	0.000	.1860062	.2704095
/FRnumb	.1897954	.0209907	9.04	0.000	.1486456	.2309452
/UQbenf	.1735239	.0192727	9.00	0.000	.1357422	.2113056
/CMquest	.2969005	.0277753	10.69	0.000	.2424503	.3513508
/CMnumb	.2438591	.0262072	9.31	0.000	.192483	.2952351

FRwheel: _b[/FRwheel]-_b[/DQ]
FRnumb: _b[/FRnumb]-_b[/DQ]
UQbenf: _b[/UQbenf]-_b[/DQ]
CMquest: _b[/CMquest]-_b[/DQ]
CMnumb: _b[/CMnumb]-_b[/DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0501974	.0248355	2.02	0.043	.0015207	.0988741
FRnumb	.0117849	.0243719	0.48	0.629	-.0359831	.059553
UQbenf	-.0044866	.0229088	-0.20	0.845	-.049387	.0404139
CMquest	.1188901	.0304113	3.91	0.000	.059285	.1784951
CMnumb	.0658486	.0289861	2.27	0.023	.0090368	.1226603

Randomized response logistic regression

Number of obs = 5704
Nonzero outcomes = 2099
Zero outcomes = 3605
Wald chi2(6) = 781.17
Prob > chi2 = 0.0000
Pseudo R2 = .

P(non-negated question) = q14_pcm
P(surrogate "yes") = q14_pyese
P(surrogate "no") = q14_pno
Log pseudolikelihood = -3420.5294

Robust

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-1.529885	.084602	-18.08	0.000	-1.695702	-1.364068
FRwheel	-1.216218	.1220209	-9.97	0.000	-1.455374	-.977061
FRnumb	-1.452814	.1365014	-10.64	0.000	-1.720352	-1.185277
UQbenf	-1.55624	.1332764	-11.68	0.000	-1.817457	-1.295023
CMquest	-.8632926	.1333733	-6.47	0.000	-1.1247	-.6018856
CMnumb	-1.133124	.1424255	-7.96	0.000	-1.412273	-.853975

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q14	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.3136677	.148481	2.11	0.035	.0226503	.6046851
FRnumb	.0770708	.1605931	0.48	0.631	-.2376858	.3918274
UQbenf	-.0263552	.157861	-0.17	0.867	-.335757	.2830467
CMquest	.6665927	.1579428	4.22	0.000	.3570304	.976155
CMnumb	.3967614	.1656578	2.40	0.017	.072078	.7214448

==> q16: Have you ever used illicit crib notes in an exam?

Randomized response regression

Number of obs	=	5,694
F(6, 5688)	=	46.96
Prob > F	=	0.0000
R-squared	=	0.0386
Adj R-squared	=	0.0376
Root MSE	=	0.6550

q16	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.0900524	.0092679	9.72	0.000	.0718837	.108221
FRwheel	.112961	.0198939	5.68	0.000	.0739613	.1519607
FRnumb	.1344199	.0202346	6.64	0.000	.0947523	.1740875
UQbenf	.1323909	.018653	7.10	0.000	.0958238	.1689579
CMquest	.1885568	.0284448	6.63	0.000	.1327942	.2443195
CMnumb	.105291	.025783	4.08	0.000	.0547464	.1558356

Pr(non-negated question) = q16_pcm
Pr(surrogate "yes") = q16_pyes
Pr(surrogate "no") = q16_pno

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0229086	.0219468	1.04	0.297	-.0201063	.0659236
FRnumb	.0443676	.0222561	1.99	0.046	.0007464	.0879887
UQbenf	.0423385	.0208286	2.03	0.042	.0015153	.0831618
CMquest	.0985045	.0299166	3.29	0.001	.0398691	.1571399
CMnumb	.0152386	.0273982	0.56	0.578	-.0384608	.0689381

(obs = 5,694)

Iteration 0: residual SS = 1001.115
Iteration 1: residual SS = 1001.115
Iteration 2: residual SS = 1001.115

Nonlinear regression

Number of obs	=	5,694
R-squared	=	0.4791
Adj R-squared	=	0.4786

Root MSE = .4195292
 Res. dev. = 6260.999

$$q16 = (1 - pyes - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyes$$

q16	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0900524	.0092679	9.72	0.000	.0718837	.108221
/FRwheel	.1118349	.0197434	5.66	0.000	.0731304	.1505394
/FRnumb	.1344252	.0201279	6.68	0.000	.094967	.1738835
/UQbenf	.1314868	.0184189	7.14	0.000	.0953787	.1675949
/CMquest	.2022981	.0270298	7.48	0.000	.1493095	.2552868
/CMnumb	.1080978	.0243184	4.45	0.000	.0604244	.1557712

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.0217826	.0218104	1.00	0.318	-.0209651	.0645302
FRnumb	.0443729	.0221591	2.00	0.045	.0009419	.0878039
UQbenf	.0414344	.0206192	2.01	0.044	.0010216	.0818473
CMquest	.1122458	.0285745	3.93	0.000	.0562407	.1682508
CMnumb	.0180454	.0260246	0.69	0.488	-.0329619	.0690528

Randomized response logistic regression Number of obs = 5694
 Nonzero outcomes = 1922
 P(non-negated question) = q16_pcm Zero outcomes = 3772
 P(surrogate "yes") = q16_pyes Wald chi2(6) = 919.11
 P(surrogate "no") = q16_pno Prob > chi2 = 0.0000
 Log pseudolikelihood = -3026.3984 Pseudo R2 = .

q16	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-2.312996	.1130526	-20.46	0.000	-2.534575	-2.091417
FRwheel	-2.070914	.1986263	-10.43	0.000	-2.460215	-1.681614
FRnumb	-1.862391	.1728944	-10.77	0.000	-2.201258	-1.523524
UQbenf	-1.891325	.161793	-11.69	0.000	-2.208434	-1.574217
CMquest	-1.366749	.1658674	-8.24	0.000	-1.691843	-1.041655
CMnumb	-2.103224	.24919	-8.44	0.000	-2.591627	-1.61482

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q16	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	.2420816	.2285461	1.06	0.289	-.2058606	.6900237
FRnumb	.4506049	.2065754	2.18	0.029	.0457246	.8554852
UQbenf	.4216708	.1973775	2.14	0.033	.034818	.8085236
CMquest	.9462466	.2007309	4.71	0.000	.5528213	1.339672
CMnumb	.2097721	.2736358	0.77	0.443	-.3265442	.7460883

==> q17: Have you ever used prescription drugs to enhance exam performance?

Randomized response regression Number of obs = 5,674
 F(6, 5668) = 12.83
 Prob > F = 0.0000
 R-squared = 0.0138
 Adj R-squared = 0.0128

Root MSE = 0.6022

q17	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.0336134	.0058444	5.75	0.000	.0221561	.0450708
FRwheel	-.0103653	.0168805	-0.61	0.539	-.0434575	.0227269
FRnumb	-.0100585	.0168142	-0.60	0.550	-.0430207	.0229038
UQbenf	.0513577	.0167173	3.07	0.002	.0185854	.0841299
CMquest	.1547812	.0284093	5.45	0.000	.0990881	.2104743
CMnumb	.0498409	.0248185	2.01	0.045	.0011873	.0984946

Pr(non-negated question) = q17_pcm
 Pr(surrogate "yes") = q17_pyes
 Pr(surrogate "no") = q17_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0439787	.0178636	-2.46	0.014	-.0789907	-.0089667
FRnumb	-.0436719	.017801	-2.45	0.014	-.0785612	-.0087827
UQbenf	.0177442	.0177094	1.00	0.316	-.0169656	.0524541
CMquest	.1211677	.0290042	4.18	0.000	.0643205	.178015
CMnumb	.0162275	.0254973	0.64	0.524	-.0337463	.0662013

(obs = 5,674)

Iteration 0: residual SS = 787.7065
 Iteration 1: residual SS = 787.7065
 Iteration 2: residual SS = 787.7065

Nonlinear regression

Number of obs = 5,674
 R-squared = 0.5226
 Adj R-squared = 0.5221
 Root MSE = .3727926
 Res. dev. = 4898.665

q17 = (1 - pyes - pno)*((2*pcm - 1)*{xb} - pcm + 1) + pyes

q17	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0336134	.0058444	5.75	0.000	.0221561	.0450708
/FRwheel	-.0095309	.0168101	-0.57	0.571	-.0424851	.0234233
/FRnumb	-.0058119	.0169474	-0.34	0.732	-.0390352	.0274114
/UQbenf	.0516322	.0164868	3.13	0.002	.0193117	.0839527
/CMquest	.1479792	.0263343	5.62	0.000	.0963539	.1996044
/CMnumb	.0529202	.0232322	2.28	0.023	.0073762	.0984642

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0431443	.0177971	-2.42	0.015	-.078026	-.0082627
FRnumb	-.0394254	.0179268	-2.20	0.028	-.0745613	-.0042895
UQbenf	.0180188	.0174921	1.03	0.303	-.0162651	.0523026
CMquest	.1143657	.026975	4.24	0.000	.0614957	.1672358
CMnumb	.0193067	.0239561	0.81	0.420	-.0276463	.0662597

Randomized response logistic regression

Number of obs = 5674

```

Nonzero outcomes = 1650
Zero outcomes = 4024
Wald chi2(6) = 677.10
Prob > chi2 = 0.0000
Pseudo R2 = .

P(non-negated question) = q17_pcm
P(surrogate "yes") = q17_pyes
P(surrogate "no") = q17_pno
Log pseudolikelihood = -2495.1493

```

q17	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-3.3587	.1798511	-18.67	0.000	-3.711202	-3.006199
FRwheel	-18.1742	1.763219	-10.31	0.000	-21.63004	-14.71835
FRnumb	-17.76217	2.914581	-6.09	0.000	-23.47464	-12.04969
UQbenf	-2.905302	.3334105	-8.71	0.000	-3.558774	-2.251829
CMquest	-1.766571	.2133092	-8.28	0.000	-2.18465	-1.348493
CMnumb	-2.863767	.4502749	-6.36	0.000	-3.74629	-1.981245

```

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

```

q17	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-14.8155	1.772367	-8.36	0.000	-18.28927	-11.34172
FRnumb	-14.40347	2.920125	-4.93	0.000	-20.12681	-8.680128
UQbenf	.4533985	.3788258	1.20	0.231	-.2890865	1.195883
CMquest	1.592129	.2790112	5.71	0.000	1.045277	2.138981
CMnumb	.4949331	.4848648	1.02	0.307	-.4553845	1.445251

==> q18: Have you ever handed in a paper containing plagiarisms?

```

Randomized response regression
Number of obs = 4,208
F( 6, 4202) = 8.63
Prob > F = 0.0000
R-squared = 0.0092
Adj R-squared = 0.0078
Root MSE = 0.6054

```

q18	Coef.	Robust HC2 Std. Err.	t	P> t	[95% Conf. Interval]	
DQ	.0284091	.006266	4.53	0.000	.0161244	.0406938
FRwheel	.011048	.0203399	0.54	0.587	-.0288289	.0509249
FRnumb	.0289319	.0209359	1.38	0.167	-.0121135	.0699772
UQbenf	.0790041	.0202241	3.91	0.000	.0393542	.118654
CMquest	.0725475	.0310859	2.33	0.020	.0116027	.1334922
CMnumb	.0848921	.029491	2.88	0.004	.0270742	.14271

```

Pr(non-negated question) = q18_pcm
Pr(surrogate "yes") = q18_pyes
Pr(surrogate "no") = q18_pno

```

```

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

```

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0173611	.0212832	-0.82	0.415	-.0590754	.0243532
FRnumb	.0005228	.0218535	0.02	0.981	-.0423092	.0433548
UQbenf	.050595	.0211725	2.39	0.017	.0090976	.0920924
CMquest	.0441384	.0317111	1.39	0.164	-.0180143	.106291
CMnumb	.056483	.0301493	1.87	0.061	-.0026086	.1155746

(obs = 4,208)

Iteration 0: residual SS = 602.9148
 Iteration 1: residual SS = 602.9148
 Iteration 2: residual SS = 602.9148

Nonlinear regression Number of obs = 4,208
 R-squared = 0.5312
 Adj R-squared = 0.5305
 Root MSE = .3787913
 Res. dev. = 3765.782

$$q18 = (1 - pyes - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyes$$

q18	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
/DQ	.0284091	.0062661	4.53	0.000	.0161243	.0406939
/FRwheel	.011724	.0202483	0.58	0.563	-.0279735	.0514214
/FRnumb	.0303923	.0208918	1.45	0.146	-.0105666	.0713511
/UQbenf	.0779743	.0199021	3.92	0.000	.0389556	.1169929
/CMquest	.0774339	.0289324	2.68	0.007	.0207112	.1341566
/CMnumb	.0867154	.027699	3.13	0.002	.0324108	.1410201

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0166851	.0211957	-0.79	0.431	-.058228	.0248577
FRnumb	.0019832	.0218112	0.09	0.928	-.040766	.0447323
UQbenf	.0495652	.0208652	2.38	0.018	.0086701	.0904602
CMquest	.0490248	.0296031	1.66	0.098	-.0089962	.1070459
CMnumb	.0583064	.0283989	2.05	0.040	.0026456	.1139671

Randomized response logistic regression Number of obs = 4208
 Nonzero outcomes = 1286
 Zero outcomes = 2922
 Wald chi2(6) = 436.24
 Prob > chi2 = 0.0000
 Pseudo R2 = .

P(non-negated question) = q18_pcm
 P(surrogate "yes") = q18_pyes
 P(surrogate "no") = q18_pno
 Log pseudolikelihood = -1892.7032

q18	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-3.532226	.2268793	-15.57	0.000	-3.976901	-3.08755
FRwheel	-4.43541	1.746559	-2.54	0.011	-7.858602	-1.012218
FRnumb	-3.464858	.708575	-4.89	0.000	-4.853639	-2.076077
UQbenf	-2.477822	.2785162	-8.90	0.000	-3.023704	-1.931941
CMquest	-2.469223	.3994954	-6.18	0.000	-3.25222	-1.686226
CMnumb	-2.348066	.3456846	-6.79	0.000	-3.025595	-1.670537

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q18	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.9031841	1.761233	-0.51	0.608	-4.355137	2.548769
FRnumb	.0673677	.7440112	0.09	0.928	-1.390868	1.525603
UQbenf	1.054403	.359229	2.94	0.003	.3503275	1.758479
CMquest	1.063003	.4594244	2.31	0.021	.1625472	1.963458
CMnumb	1.18416	.4134877	2.86	0.004	.3737386	1.994581

==> q19: Have you ever handed in someone else's work as your own?

Randomized response regression

Number of obs	=	4,201
F(6, 4195)	=	4.23
Prob > F	=	0.0003
R-squared	=	0.0042
Adj R-squared	=	0.0028
Root MSE	=	0.5743

q19	Robust HC2		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
DQ	.0155807	.0046643	3.34	0.001	.0064362	.0247253
FRwheel	.0001981	.0200333	0.01	0.992	-.0390778	.039474
FRnumb	-.0453677	.0183505	-2.47	0.013	-.0813445	-.0093909
UQbenf	.0309879	.0186576	1.66	0.097	-.005591	.0675667
CMquest	.0714779	.0309639	2.31	0.021	.0107723	.1321835
CMnumb	.0050432	.0276703	0.18	0.855	-.0492053	.0592918

Pr(non-negated question) = q19_pcm
 Pr(surrogate "yes") = q19_pyes
 Pr(surrogate "no") = q19_pno

FRwheel: _b[FRwheel]-_b[DQ]
 FRnumb: _b[FRnumb]-_b[DQ]
 UQbenf: _b[UQbenf]-_b[DQ]
 CMquest: _b[CMquest]-_b[DQ]
 CMnumb: _b[CMnumb]-_b[DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-.0153826	.0205691	-0.75	0.455	-.0556974	.0249322
FRnumb	-.0609485	.0189341	-3.22	0.001	-.0980585	-.0238384
UQbenf	.0154072	.0192318	0.80	0.423	-.0222866	.0531009
CMquest	.0558972	.0313132	1.79	0.074	-.0054756	.11727
CMnumb	-.0105375	.0280607	-0.38	0.707	-.0655355	.0444605

(obs = 4,201)

Iteration 0: residual SS = 534.3242
 Iteration 1: residual SS = 534.3242
 Iteration 2: residual SS = 534.3242

Nonlinear regression

Number of obs	=	4,201
R-squared	=	0.5536
Adj R-squared	=	0.5530
Root MSE	=	.3568917
Res. dev.	=	3259.144

$$q19 = (1 - pyes - pno) * ((2 * pcm - 1) * \{xb\} - pcm + 1) + pyes$$

q19	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
/DQ	.0155807	.0046644	3.34	0.001	.0064361	.0247254
/FRwheel	.0004742	.019914	0.02	0.981	-.0385679	.0395163
/FRnumb	-.0449909	.0182291	-2.47	0.014	-.0807296	-.0092522
/UQbenf	.029894	.0182778	1.64	0.102	-.0059403	.0657282
/CMquest	.0834807	.0291603	2.86	0.004	.0263111	.1406504
/CMnumb	.0200275	.02631	0.76	0.447	-.031554	.071609

FRwheel: _b[/FRwheel]-_b[/DQ]
 FRnumb: _b[/FRnumb]-_b[/DQ]
 UQbenf: _b[/UQbenf]-_b[/DQ]
 CMquest: _b[/CMquest]-_b[/DQ]
 CMnumb: _b[/CMnumb]-_b[/DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
-----	-------	-----------	---	------	----------------------	--

FRwheel	-.0151065	.020453	-0.74	0.460	-.0551937	.0249806
FRnumb	-.0605716	.0188164	-3.22	0.001	-.0974511	-.0236922
UQbenf	.0143132	.0188636	0.76	0.448	-.0226587	.0512852
CMquest	.0679	.029531	2.30	0.021	.0100203	.1257797
CMnumb	.0044467	.0267202	0.17	0.868	-.047924	.0568174

Randomized response logistic regression

Number of obs	=	4201
Nonzero outcomes	=	1197
Zero outcomes	=	3004
Wald chi2(6)	=	2262.71
Prob > chi2	=	0.0000
Pseudo R2	=	.

P(non-negated question) = q19_pcm
P(surrogate "yes") = q19_pyes
P(surrogate "no") = q19_pno
Log pseudolikelihood = -1717.7414

q19	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	-4.145991	.3039166	-13.64	0.000	-4.741656	-3.550325
FRwheel	-7.657942	42.33454	-0.18	0.856	-90.63211	75.31623
FRnumb	-18.16045	.4066926	-44.65	0.000	-18.95755	-17.36334
UQbenf	-3.510837	.6476489	-5.42	0.000	-4.780206	-2.241469
CMquest	-2.389437	.3769237	-6.34	0.000	-3.128194	-1.65068
CMnumb	-3.622003	1.003699	-3.61	0.000	-5.589218	-1.654789

FRwheel: _b[FRwheel]-_b[DQ]
FRnumb: _b[FRnumb]-_b[DQ]
UQbenf: _b[UQbenf]-_b[DQ]
CMquest: _b[CMquest]-_b[DQ]
CMnumb: _b[CMnumb]-_b[DQ]

q19	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
FRwheel	-3.511952	42.33563	-0.08	0.934	-86.48826	79.46436
FRnumb	-14.01446	.5077048	-27.60	0.000	-15.00954	-13.01937
UQbenf	.6351535	.715412	0.89	0.375	-.7670283	2.037335
CMquest	1.756554	.4841867	3.63	0.000	.8075655	2.705543
CMnumb	.5239877	1.048703	0.50	0.617	-1.531432	2.579407

4.7 Quality criteria

Breakoff, Item-Nonresponse, Answering time, Trust, Disclosure Risk, Protection, Understanding, Compliance; note: sample already restricted to the ones who reached the sensitive questions (i.e. obs with valid expcond)

```
. // - breakoff
. gen byte breakoff = (r125==.b | r126==.b) // did not reach end of questionnaire
. // (i.e. did not submit last page with questions)
. fre breakoff
breakoff
```

		Freq.	Percent	Valid	Cum.
Valid	0	6124	97.07	97.07	97.07
	1	185	2.93	2.93	100.00
	Total	6309	100.00	100.00	

```
. // - item nonresponse (proportion of items not answered)
. assert !((q14==.e | q16==.e | q17==.e) & (q18==.e | q19==.e))
. assert (q14==.e & q16==.e & q17==.e) if (q14==.e | q16==.e | q17==.e)
. assert (q18==.e & q19==.e) if (q18==.e | q19==.e)
. gen nonresp = 0
```



```

. gen byte items = 0
. foreach v in q14 q16 q17 q18 q19 {
2.   qui replace nonresp = nonresp + 1 if inlist(`v', .a, .b)
3.   qui replace items = items + 1 if `v'<=.b
4. }

```

```

. fre items

```

		Freq.	Percent	Valid	Cum.
Valid	2	119	1.89	1.89	1.89
	3	1693	26.83	26.83	28.72
	5	4497	71.28	71.28	100.00
	Total	6309	100.00	100.00	

```

. fre nonresp

```

		Freq.	Percent	Valid	Cum.
Valid	0	6137	97.27	97.27	97.27
	1	50	0.79	0.79	98.07
	2	10	0.16	0.16	98.22
	3	8	0.13	0.13	98.35
	4	19	0.30	0.30	98.65
	5	85	1.35	1.35	100.00
	Total	6309	100.00	100.00	

```

. replace nonresp = nonresp / items
(172 real changes made)

```

```

. drop items

```

```

. fre nonresp

```

		Freq.	Percent	Valid	Cum.
Valid	0	6137	97.27	97.27	97.27
	.2	36	0.57	0.57	97.84
	.33333333	12	0.19	0.19	98.03
	.4	7	0.11	0.11	98.15
	.5	2	0.03	0.03	98.18
	.6	7	0.11	0.11	98.29
	.66666667	3	0.05	0.05	98.34
	.8	19	0.30	0.30	98.64
	1	86	1.36	1.36	100.00
	Total	6309	100.00	100.00	

```

. // - total time to answer sensitive question block (only respondents who
. // completed the block)

```

```

. gen time = 0

```

```

. foreach v of var r111-r119 {
2.   qui replace time = time + `v' if `v'!=.c // => missing if breakoff
3. }

```

```

. su time, d

```

		time		
	Percentiles	Smallest		
1%	23	5		
5%	35	6		
10%	47	6	Obs	6,213
25%	116	7	Sum of Wgt.	6,213
50%	161		Mean	2083.261
		Largest	Std. Dev.	55755.11

```

75%      213      1819811
90%      291      1889589      Variance      3.11e+09
95%      386      1910334      Skewness      33.39023
99%      1196     2157705      Kurtosis      1149.005

```

```

. gen time2 = 0
. foreach v of var rl14 rl16-rl19 { // only the actual questions without instruction pages
2.   qui replace time2 = time2 + `v' if `v'!=.c // => missing if breakoff
3. }
. su time2, d

```

time2					
Percentiles		Smallest			
1%	15	3			
5%	25	4			
10%	32	4	Obs		6,213
25%	49	4	Sum of Wgt.		6,213
50%	71		Mean		603.4349
		Largest	Std. Dev.		25792.32
75%	99	156675			
90%	135	204284	Variance		6.65e+08
95%	173	686032	Skewness		66.41272
99%	418	1889582	Kurtosis		4713.503

```

. // - trust in anonymity (q25_1)
. fre q25_1
q25_1 — How much do you trust in the anonymity and confidentiality of this survey?

```

		Freq.	Percent	Valid	Cum.
Valid	1 not at all	76	1.20	1.24	1.24
	2 rather not	370	5.86	6.05	7.29
	3 partly	1101	17.45	18.00	25.29
	4 rather much	2824	44.76	46.17	71.47
	5 very much	1745	27.66	28.53	100.00
	Total	6116	96.94	100.00	
Missing	.a no answer	29	0.46		
	.b break-off	164	2.60		
	Total	193	3.06		
Total		6309	100.00		

```

. gen byte trust = inlist(q25_1,4,5) if inlist(q25_1,1,2,3,4,5)
(193 missing values generated)
. fre trust
trust

```

		Freq.	Percent	Valid	Cum.
Valid	0	1547	24.52	25.29	25.29
	1	4569	72.42	74.71	100.00
	Total	6116	96.94	100.00	
Missing	.	193	3.06		
Total		6309	100.00		

```

. // - risk of disclosure
. fre q25_2
q25_2 — How likely can respondents' sensitive behavior be disclosed by this survey?

```

		Freq.	Percent	Valid	Cum.
Valid	1 impossible	506	8.02	8.29	8.29
	2 very unlikely	2152	34.11	35.26	43.55
	3 rather unlikely	2039	32.32	33.41	76.96
	4 rather likely	1168	18.51	19.14	96.10
	5 very likely	238	3.77	3.90	100.00
	Total	6103	96.73	100.00	

Missing .a no answer	42	0.67
.b break-off	164	2.60
Total	206	3.27
Total	6309	100.00

```
. gen byte risk = inlist(q25_2,4,5) if inlist(q25_2,1,2,3,4,5)
(206 missing values generated)
```

```
. fre risk
```

```
risk
```

		Freq.	Percent	Valid	Cum.
Valid	0	4697	74.45	76.96	76.96
	1	1406	22.29	23.04	100.00
	Total	6103	96.73	100.00	
Missing	.	206	3.27		
Total		6309	100.00		

```
. // - cumbersome to use
```

```
. fre q26_1
```

```
q26_1 — How cumbersome was the use of the special survey technique?
```

		Freq.	Percent	Valid	Cum.
Valid	1 not cumbersome at all	2114	33.51	41.82	41.82
	2 slightly cumbersome	1779	28.20	35.19	77.01
	3 somewhat cumbersome	577	9.15	11.41	88.43
	4 rather cumbersome	513	8.13	10.15	98.58
	5 very cumbersome	72	1.14	1.42	100.00
	Total	5055	80.12	100.00	
Missing	.a no answer	37	0.59		
	.b break-off	185	2.93		
	.d filter: direct questioning	1032	16.36		
	Total	1254	19.88		
Total		6309	100.00		

```
. gen byte cumbersome = inlist(q26_1,4,5) if inlist(q26_1,1,2,3,4,5) & expcond!=1
(1,255 missing values generated)
```

```
. fre cumbersome
```

```
cumbersome
```

		Freq.	Percent	Valid	Cum.
Valid	0	4469	70.84	88.43	88.43
	1	585	9.27	11.57	100.00
	Total	5054	80.11	100.00	
Missing	.	1255	19.89		
Total		6309	100.00		

```
. // - applied technique correctly
```

```
. fre q26_2
```

```
q26_2 — Do you think you carried out the special technique correctly?
```

		Freq.	Percent	Valid	Cum.
Valid	1 definitely not	19	0.30	0.38	0.38
	2 rather not	74	1.17	1.46	1.84
	3 partly	193	3.06	3.82	5.66
	4 rather yes	1349	21.38	26.69	32.34
	5 yes, definitely	3420	54.21	67.66	100.00
	Total	5055	80.12	100.00	
Missing	.a no answer	37	0.59		
	.b break-off	185	2.93		
	.d filter: direct questioning	1032	16.36		
	Total	1254	19.88		

Total	6309	100.00
-------	------	--------

```
. gen byte correct = inlist(q26_2,4,5) if inlist(q26_2,1,2,3,4,5) & expcond!=1
(1,255 missing values generated)
```

```
. fre correct
correct
```

		Freq.	Percent	Valid	Cum.
Valid	0	286	4.53	5.66	5.66
	1	4768	75.57	94.34	100.00
	Total	5054	80.11	100.00	
Missing	.	1255	19.89		
Total		6309	100.00		

```
. // - does technique protect?
. fre q26_3
```

q26_3 — Does the special technique fully protect your answers?

		Freq.	Percent	Valid	Cum.
Valid	1 definitely not	181	2.87	3.58	3.58
	2 rather not	599	9.49	11.86	15.44
	3 partly	974	15.44	19.28	34.72
	4 rather yes	2429	38.50	48.08	82.80
	5 yes, definitely	869	13.77	17.20	100.00
	Total	5052	80.08	100.00	
Missing	.a no answer	40	0.63		
	.b break-off	185	2.93		
	.d filter: direct questioning	1032	16.36		
	Total	1257	19.92		
Total		6309	100.00		

```
. gen byte tprotect = inlist(q26_3,4,5) if inlist(q26_3,1,2,3,4,5) & expcond!=1
(1,258 missing values generated)
```

```
. fre tprotect
tprotect
```

		Freq.	Percent	Valid	Cum.
Valid	0	1754	27.80	34.73	34.73
	1	3297	52.26	65.27	100.00
	Total	5051	80.06	100.00	
Missing	.	1258	19.94		
Total		6309	100.00		

```
. // - does technique make sense?
. fre q26_4
```

q26_4 — How reasonable is the use of this technique?

		Freq.	Percent	Valid	Cum.
Valid	1 not reasonable at all	128	2.03	2.53	2.53
	2 slightly reasonable	739	11.71	14.63	17.16
	3 somewhat reasonable	1277	20.24	25.28	42.44
	4 rather reasonable	1911	30.29	37.83	80.27
	5 very reasonable	997	15.80	19.73	100.00
	Total	5052	80.08	100.00	
Missing	.a no answer	40	0.63		
	.b break-off	185	2.93		
	.d filter: direct questioning	1032	16.36		
	Total	1257	19.92		
Total		6309	100.00		

```
. gen byte sense = inlist(q26_4,4,5) if inlist(q26_4,1,2,3,4,5) & expcond!=1
```

(1,258 missing values generated)

```
. fre sense
```

sense

		Freq.	Percent	Valid	Cum.
Valid	0	2143	33.97	42.43	42.43
	1	2908	46.09	57.57	100.00
	Total	5051	80.06	100.00	
Missing	.	1258	19.94		
Total		6309	100.00		

```
. // - do you understand?
```

```
. fre q26_5
```

q26_5 — Do you understand how the technique protects your answers?

			Freq.	Percent	Valid	Cum.
Valid	1	definitely not	256	4.06	5.06	5.06
	2	rather not	836	13.25	16.54	21.60
	3	partly	824	13.06	16.30	37.90
	4	rather yes	1867	29.59	36.93	74.84
	5	yes, definitely	1272	20.16	25.16	100.00
	Total		5055	80.12	100.00	
Missing	.a	no answer	37	0.59		
	.b	break-off	185	2.93		
	.d	filter: direct questioning	1032	16.36		
	Total		1254	19.88		
Total			6309	100.00		

```
. gen byte understand = inlist(q26_5,4,5) if inlist(q26_5,1,2,3,4,5) & expcond!=1  
(1,255 missing values generated)
```

```
. fre understand
```

understand

		Freq.	Percent	Valid	Cum.
Valid	0	1915	30.35	37.89	37.89
	1	3139	49.75	62.11	100.00
	Total	5054	80.11	100.00	
Missing	.	1255	19.89		
Total		6309	100.00		

```
.  
. capt prog drop mymedian  
. program mymedian, eclass  
1. syntax varname [if] [in], over(varname) [ level(passthru) * ]  
2. marksample touse  
3. markout `touse' `over'  
4. qui count if `touse'  
5. local N = r(N)  
6. tempname b se _N V df  
7. local coln  
8. qui levelsof `over'  
9. foreach l in `r(levels)' {  
10. local coln `"'`coln' `"' : lab (`over') `l''''''''  
11. qui qreg `varlist' if `touse' & (`over'==`l'), quantile(.5) `options'  
12. mat `b' = nullmat(`b'), _b[_cons]  
13. mat `se' = nullmat(`se'), _se[_cons]  
14. mat `df' = nullmat(`df'), e(df_r)  
15. mat `_N' = nullmat(`_N'), e(N)  
16. }  
17. mat coln `b' = `coln'  
18. mat coln `se' = `coln'  
19. mat coln `df' = `coln'
```

```

20.    mat coln `N' = `coln'
21.    mat `V' = diag(vecdiag(`se' * `se'))
22.    eret post `b' `V', esample(`touse') obs(`N')
23.    eret local cmd "mymedian"
24.    eret local depvar "`varlist'"
25.    eret local over  "`over'"
26.    eret matrix _N = `N'
27.    eret matrix df = `df'
28.    _coef_table_header
29.    eret di
30. end

. local d (dFRwheel: _b[FRwheel]-_b[DQ]) (dFRnumb: _b[FRnumb]-_b[DQ]) ///
>      (dUQbenf: _b[UQbenf]-_b[DQ]) (dCMquest: _b[CMquest]-_b[DQ]) ///
>      (dCMnumb: _b[CMnumb]-_b[DQ])

. forv i = 0/2 {
2.    preserve
3.    if `i'==1 {
4.        di _n as res "==> SELECTION: GOOD LANGUAGE SKILLS"
5.        keep if language
6.    }
7.    else if `i'==2 {
8.        di _n as res "==> SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA"
9.        keep if language & nopretest
10.   }
11.   else di _n as res "==> SELECTION: ALL OBS"
12.   mean breakoff, over(expcnd) citype(logit)
13.   est sto breakoff
14.   nlcom `d'
15.   mean nonresp, over(expcnd) citype(logit)
16.   est sto nonresp
17.   nlcom `d'
18.   mymedian time, over(expcnd)
19.   est sto time
20.   nlcom `d'
21.   mymedian time2, over(expcnd)
22.   est sto time2
23.   nlcom `d'
24.   mean trust, over(expcnd) citype(logit)
25.   est sto trust
26.   nlcom `d'
27.   mean risk, over(expcnd) citype(logit)
28.   est sto risk
29.   nlcom `d'
30.   mean cumbersome, over(expcnd) citype(logit)
31.   est sto cumbersome
32.   mean correct, over(expcnd) citype(logit)
33.   est sto correct
34.   mean tprotect, over(expcnd) citype(logit)
35.   est sto tprotect
36.   mean sense, over(expcnd) citype(logit)
37.   est sto sense
38.   mean understand, over(expcnd) citype(logit)
39.   est sto understand
40.   qui estwrite * using log/main/eval`i', replace
41.   restore
42. }

```

==> SELECTION: ALL OBS

Mean estimation Number of obs = 6,309

 DQ: expcnd = DQ
 FRwheel: expcnd = FRwheel
 FRnumb: expcnd = FRnumb
 UQbenf: expcnd = UQbenf
 CMquest: expcnd = CMquest
 CMnumb: expcnd = CMnumb

Over	Mean	Std. Err.	[95% Conf. Interval]
------	------	-----------	----------------------

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

time	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	145	2.355412	61.56	0.000	140.3835	149.6165
dFRnumb	140	2.590806	54.04	0.000	134.9221	145.0779
dUQbenf	123	2.200607	55.89	0.000	118.6869	127.3131
dCMquest	108	1.892567	57.07	0.000	104.2906	111.7094
dCMnumb	148	2.593561	57.06	0.000	142.9167	153.0833

Number of obs = 6,213

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	33	.5655254	58.35	0.000	31.89159	34.10841
FRwheel	85	1.213395	70.05	0.000	82.62179	87.37821
FRnumb	69	1.052117	65.58	0.000	66.93789	71.06211
UQbenf	70	1.051778	66.55	0.000	67.93855	72.06145
CMquest	95	1.293664	73.43	0.000	92.46446	97.53554
CMnumb	76	1.134334	67.00	0.000	73.77675	78.22325

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	52	1.338711	38.84	0.000	49.37618	54.62382
dFRnumb	36	1.194475	30.14	0.000	33.65887	38.34113
dUQbenf	37	1.194176	30.98	0.000	34.65946	39.34054
dCMquest	62	1.411873	43.91	0.000	59.23278	64.76722
dCMnumb	43	1.267491	33.93	0.000	40.51576	45.48424

Mean estimation Number of obs = 6,116

DQ: expcond = DQ
FRwheel: expcond = FRwheel
FRnumb: expcond = FRnumb
UQbenf: expcond = UQbenf
CMquest: expcond = CMquest
CMnumb: expcond = CMnumb

Over	Mean	Std. Err.	[95% Conf. Interval]	
trust				
DQ	.8068293	.0123371	.7814886	.829871
FRwheel	.6915521	.0144825	.6624626	.7191972
FRnumb	.7310345	.0139251	.7028785	.7574431
UQbenf	.7270059	.0139422	.6988381	.7534685
CMquest	.7646484	.0132633	.7376628	.7896497
CMnumb	.7608696	.0134152	.7335899	.7861701

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

Mean	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
------	-------	-----------	---	------	----------------------	--


```

dFRwheel:  _b[FRwheel]-_b[DQ]
dFRnumb:   _b[FRnumb]-_b[DQ]
dUQbenf:   _b[UQbenf]-_b[DQ]
dCMquest:  _b[CMquest]-_b[DQ]
dCMnumb:   _b[CMnumb]-_b[DQ]

```

time	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	145	2.395703	60.53	0.000	140.3045	149.6955
dFRnumb	140	2.548586	54.93	0.000	135.0049	144.9951
dUQbenf	122	2.24213	54.41	0.000	117.6055	126.3945
dCMquest	107	2.011426	53.20	0.000	103.0577	110.9423
dCMnumb	147	2.712046	54.20	0.000	141.6845	152.3155

Number of obs = 5,961

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	33	.488146	67.60	0.000	32.04325	33.95675
FRwheel	85	1.221998	69.56	0.000	82.60493	87.39507
FRnumb	69	1.057826	65.23	0.000	66.9267	71.0733
UQbenf	69	1.059599	65.12	0.000	66.92322	71.07678
CMquest	94	1.221793	76.94	0.000	91.60533	96.39467
CMnumb	75	1.142457	65.65	0.000	72.76083	77.23917

```

dFRwheel:  _b[FRwheel]-_b[DQ]
dFRnumb:   _b[FRnumb]-_b[DQ]
dUQbenf:   _b[UQbenf]-_b[DQ]
dCMquest:  _b[CMquest]-_b[DQ]
dCMnumb:   _b[CMnumb]-_b[DQ]

```

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	52	1.31589	39.52	0.000	49.4209	54.5791
dFRnumb	36	1.165024	30.90	0.000	33.71659	38.28341
dUQbenf	36	1.166635	30.86	0.000	33.71344	38.28656
dCMquest	61	1.315699	46.36	0.000	58.42128	63.57872
dCMnumb	42	1.242375	33.81	0.000	39.56499	44.43501

Mean estimation Number of obs = 5,884

```

DQ:  expcond = DQ
FRwheel:  expcond = FRwheel
FRnumb:  expcond = FRnumb
UQbenf:  expcond = UQbenf
CMquest:  expcond = CMquest
CMnumb:  expcond = CMnumb

```

Over	Mean	Std. Err.	[95% Conf. Interval]	
trust				
DQ	.8060914	.0126036	.7801842	.829612
FRwheel	.692229	.014767	.6625508	.7203986
FRnumb	.7315096	.0141135	.7029579	.7582607
UQbenf	.7336735	.0141276	.705079	.7604375
CMquest	.7637475	.0135622	.7361376	.7892952
CMnumb	.7664609	.0135774	.7387992	.7920178

```

dFRwheel:  _b[FRwheel]-_b[DQ]
dFRnumb:   _b[FRnumb]-_b[DQ]
dUQbenf:   _b[UQbenf]-_b[DQ]
dCMquest:  _b[CMquest]-_b[DQ]
dCMnumb:   _b[CMnumb]-_b[DQ]

```

Mean	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
------	-------	-----------	---	------	----------------------	--

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

time	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	146	2.483923	58.78	0.000	141.1316	150.8684
dFRnumb	141	2.560569	55.07	0.000	135.9814	146.0186
dUQbenf	122	2.176831	56.04	0.000	117.7335	126.2665
dCMquest	107	2.019975	52.97	0.000	103.0409	110.9591
dCMnumb	148	2.800436	52.85	0.000	142.5112	153.4888

Number of obs = 5,806

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
DQ	33	.490208	67.32	0.000	32.03921	33.96079
FRwheel	85	1.227202	69.26	0.000	82.59473	87.40527
FRnumb	69	1.062845	64.92	0.000	66.91686	71.08314
UQbenf	69	1.065418	64.76	0.000	66.91182	71.08818
CMquest	94	1.226991	76.61	0.000	91.59514	96.40486
CMnumb	75	1.146378	65.42	0.000	72.75314	77.24686

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

time2	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
dFRwheel	52	1.321488	39.35	0.000	49.40993	54.59007
dFRnumb	36	1.170446	30.76	0.000	33.70597	38.29403
dUQbenf	36	1.172783	30.70	0.000	33.70139	38.29861
dCMquest	61	1.321292	46.17	0.000	58.41032	63.58968
dCMnumb	42	1.24679	33.69	0.000	39.55634	44.44366

Mean estimation Number of obs = 5,731

DQ: expcond = DQ
FRwheel: expcond = FRwheel
FRnumb: expcond = FRnumb
UQbenf: expcond = UQbenf
CMquest: expcond = CMquest
CMnumb: expcond = CMnumb

Over	Mean	Std. Err.	[95% Conf. Interval]	
trust				
DQ	.8033299	.0128286	.7769635	.8272723
FRwheel	.6949686	.0149145	.6649714	.7233971
FRnumb	.7278415	.0143796	.6987581	.7551011
UQbenf	.7341772	.0143556	.7051034	.7613548
CMquest	.7648903	.0137153	.7369485	.790707
CMnumb	.7657563	.0137337	.7377691	.7916002

dFRwheel: _b[FRwheel]-_b[DQ]
dFRnumb: _b[FRnumb]-_b[DQ]
dUQbenf: _b[UQbenf]-_b[DQ]
dCMquest: _b[CMquest]-_b[DQ]
dCMnumb: _b[CMnumb]-_b[DQ]

Mean	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
------	-------	-----------	---	------	----------------------	--

	0.0000	1.0000					
correct	0.0965	-0.0277	-0.1424	1.0000			
	0.0000	1.0000	0.0000				
tprotect	0.3809	-0.1813	-0.1127	0.1482	1.0000		
	0.0000	0.0000	0.0000	0.0000			
sense	0.2263	-0.0800	-0.1758	0.1401	0.3839	1.0000	
	0.0000	0.0000	0.0000	0.0000	0.0000		
understand	0.2427	-0.1090	-0.0741	0.1260	0.4591	0.3135	1.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

```
. pwcorr trust risk cumbersome correct tprotect sense understand ///
> if language, sig bonferroni
```

	trust	risk	cumber-e	correct	tprotect	sense	unders-d
trust	1.0000						
risk	-0.1214	1.0000					
	0.0000						
cumbersome	-0.0926	0.0172	1.0000				
	0.0000	1.0000					
correct	0.1019	-0.0158	-0.1496	1.0000			
	0.0000	1.0000	0.0000				
tprotect	0.3860	-0.1811	-0.1141	0.1361	1.0000		
	0.0000	0.0000	0.0000	0.0000			
sense	0.2284	-0.0804	-0.1773	0.1351	0.3834	1.0000	
	0.0000	0.0000	0.0000	0.0000	0.0000		
understand	0.2414	-0.1085	-0.0765	0.1207	0.4586	0.3133	1.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

```
. pwcorr trust risk cumbersome correct tprotect sense understand ///
> if language & noprettest, sig bonferroni
```

	trust	risk	cumber-e	correct	tprotect	sense	unders-d
trust	1.0000						
risk	-0.1197	1.0000					
	0.0000						
cumbersome	-0.0925	0.0108	1.0000				
	0.0000	1.0000					
correct	0.1075	-0.0196	-0.1512	1.0000			
	0.0000	1.0000	0.0000				
tprotect	0.3842	-0.1773	-0.1108	0.1386	1.0000		
	0.0000	0.0000	0.0000	0.0000			
sense	0.2277	-0.0814	-0.1737	0.1358	0.3841	1.0000	
	0.0000	0.0000	0.0000	0.0000	0.0000		
understand	0.2410	-0.1053	-0.0788	0.1244	0.4582	0.3113	1.0000
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

4.8 Correlation between protection level (design parameters) and trust

```
. generate byte highprotection = (protect==1) if protect<.
(1,063 missing values generated)
. forv i = 0/2 {
2.     preserve
3.     if `i'==1 {
4.         di _n as res "==> SELECTION: GOOD LANGUAGE SKILLS"
5.         keep if language
6.     }
7.     else if `i'==2 {
8.         di _n as res "==> SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA"
9.         keep if language & nopretest
10.    }
11.    else di _n as res "==> SELECTION: ALL OBS"
12.    qui eststo Total: estpost correlate highprotection trust risk tprotect sense
13.    forv i = 2/6 {
14.        qui eststo t`i', ti(`: lab (expcond) `i'): ///
>         estpost correlate highprotection trust risk tprotect sense ///
>         if expcond==`i'
15.    }
16.    esttab Total t?, mti nonum p nostrar noobs
17.    restore
18. }
==> SELECTION: ALL OBS
```

	Total	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
trust	0.0277 (0.048)	0.0635 (0.043)	0.0203 (0.519)	0.00539 (0.863)	0.0481 (0.124)	0 (1.000)
risk	-0.00878 (0.531)	-0.00736 (0.815)	-0.0136 (0.666)	0.00102 (0.974)	-0.0555 (0.076)	0.0348 (0.269)
tprotect	0.0359 (0.011)	0.0432 (0.171)	0.0548 (0.082)	0.0142 (0.652)	0.0431 (0.170)	0.0268 (0.396)
sense	0.0105 (0.455)	0.0313 (0.320)	0.00104 (0.974)	0.0278 (0.376)	-0.0441 (0.160)	0.0369 (0.243)

p-values in parentheses

```
==> SELECTION: GOOD LANGUAGE SKILLS
(272 observations deleted)
```

	Total	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
trust	0.0318 (0.026)	0.0625 (0.051)	0.0245 (0.441)	0.0195 (0.541)	0.0502 (0.116)	-0.000480 (0.988)
risk	-0.00547 (0.702)	0.00320 (0.921)	-0.00975 (0.760)	-0.000933 (0.977)	-0.0510 (0.111)	0.0351 (0.275)
tprotect	0.0337 (0.019)	0.0336 (0.296)	0.0627 (0.050)	0.0224 (0.484)	0.0364 (0.256)	0.0114 (0.724)
sense	0.00454 (0.752)	0.0233 (0.467)	0.00201 (0.950)	0.0301 (0.348)	-0.0565 (0.078)	0.0225 (0.486)

p-values in parentheses

```
==> SELECTION: GOOD LANGUAGE SKILLS AND NO PRETEST DATA
(432 observations deleted)
```

	Total	FRwheel	FRnumb	UQbenf	CMquest	CMnumb
trust	0.0327 (0.024)	0.0615 (0.058)	0.0204 (0.527)	0.0239 (0.463)	0.0535 (0.098)	0.00217 (0.947)
risk	-0.00789 (0.586)	0.000568 (0.986)	-0.0126 (0.697)	-0.00458 (0.888)	-0.0590 (0.068)	0.0404 (0.213)
tprotect	0.0342	0.0359	0.0533	0.0271	0.0390	0.0140

	(0.019)	(0.269)	(0.101)	(0.407)	(0.230)	(0.666)
sense	0.00469	0.0263	0.00422	0.0331	-0.0652	0.0240
	(0.747)	(0.418)	(0.897)	(0.310)	(0.044)	(0.461)

p-values in parentheses

5 Extended analysis log file

Stata/MP 14.1; required packages: fre, estout, rrreg

5.1 Selection of sample for analysis

```
. use http://repec.sowi.unibe.ch/files/wp8/ASQ-ETHBE-2011.dta
(Online Survey on "Exams and Written assignments" 2011)
. // - exclude observations who did not reach the sensitive questions intro page
. // - exclude observations that did not see the sensitive questions because they
. // did not yet have exampe and did not write a paper yet
. // - exclude observations where assignment of expcond failed
. // - generate language filter variable (well or very well german skills)
. fre expcond
expcond — Experimental condition
```

		Freq.	Percent	Valid	Cum.
Valid	1 direct questioning	1048	14.25	16.61	16.61
	2 FR pick-a-number	1052	14.31	16.67	33.28
	3 CM pick-a-number	1051	14.29	16.66	49.94
	4 FR random wheel	1054	14.33	16.70	66.64
	5 UQ Benford	1049	14.26	16.62	83.26
	6 CM unrelated question	1056	14.36	16.74	100.00
	Total	6310	85.80	100.00	
Missing	.a no expcond (technical failure)	4	0.05		
	.b break-off	653	8.88		
	.c filter: neither paper, nor exam	387	5.26		
	Total	1044	14.20		
Total		7354	100.00		

```
. drop if expcond>=.
(1,044 observations deleted)
. drop if (q17==.e & q19==.e) // one obs with valid expcond who was filtered for all items
(1 observation deleted)
. fre expcond
expcond — Experimental condition
```

		Freq.	Percent	Valid	Cum.
Valid	1 direct questioning	1048	16.61	16.61	16.61
	2 FR pick-a-number	1052	16.67	16.67	33.29
	3 CM pick-a-number	1050	16.64	16.64	49.93
	4 FR random wheel	1054	16.71	16.71	66.63
	5 UQ Benford	1049	16.63	16.63	83.26
	6 CM unrelated question	1056	16.74	16.74	100.00
	Total	6309	100.00	100.00	

```
. qui recode expcond ///
> (1 = 1 "DQ") ///
> (4 = 2 "FRwheel") ///
> (2 = 3 "FRnumb") ///
> (5 = 4 "UQbenf") ///
> (6 = 5 "CMquest") ///
> (3 = 6 "CMnumb") ///
> , gen(expcond1)
. drop expcond
. rename expcond1 expcond
. fre expcond
expcond — RECODE of expcond (Experimental condition)
```

	Freq.	Percent	Valid	Cum.
--	-------	---------	-------	------

Valid					
	1 DQ	1048	16.61	16.61	16.61
	2 FRwheel	1054	16.71	16.71	33.32
	3 FRnumb	1052	16.67	16.67	49.99
	4 UQbenf	1049	16.63	16.63	66.62
	5 CMquest	1056	16.74	16.74	83.36
	6 CMnumb	1050	16.64	16.64	100.00
	Total	6309	100.00	100.00	

```
. fre q4_2
```

```
q4_2 — German language skills
```

		Freq.	Percent	Valid	Cum.
Valid	1 poor	28	0.44	0.45	0.45
	2 rather poor	47	0.74	0.75	1.20
	3 average	155	2.46	2.47	3.67
	4 good	423	6.70	6.75	10.42
	5 very good/mother tongue	5614	88.98	89.58	100.00
	Total	6267	99.33	100.00	
Missing	.a no answer	42	0.67		
	Total	6309	100.00		

```
. gen byte language = inlist(q4_2,4,5)
```

```
. fre language
```

```
language
```

		Freq.	Percent	Valid	Cum.
Valid	0	272	4.31	4.31	4.31
	1	6037	95.69	95.69	100.00
	Total	6309	100.00	100.00	

```
. fre expcond if language
```

```
expcond — RECODE of expcond (Experimental condition)
```

		Freq.	Percent	Valid	Cum.
Valid	1 DQ	1004	16.63	16.63	16.63
	2 FRwheel	1010	16.73	16.73	33.36
	3 FRnumb	1014	16.80	16.80	50.16
	4 UQbenf	998	16.53	16.53	66.69
	5 CMquest	1008	16.70	16.70	83.39
	6 CMnumb	1003	16.61	16.61	100.00
	Total	6037	100.00	100.00	

```
. gen byte nopretest = (sample!=2)
```

```
. fre expcond if language & nopretest
```

```
expcond — RECODE of expcond (Experimental condition)
```

		Freq.	Percent	Valid	Cum.
Valid	1 DQ	978	16.64	16.64	16.64
	2 FRwheel	984	16.74	16.74	33.38
	3 FRnumb	986	16.78	16.78	50.16
	4 UQbenf	966	16.44	16.44	66.60
	5 CMquest	982	16.71	16.71	83.31
	6 CMnumb	981	16.69	16.69	100.00
	Total	5877	100.00	100.00	

```
.
. // Treatment variables
. gen byte DQ = expcond==1
. gen byte FRwheel = expcond==2
```

```

. gen byte FRnumb = expcond==3
. gen byte UQbenf = expcond==4
. gen byte CMquest = expcond==5
. gen byte CMnumb = expcond==6

```

5.2 Effect of level of protection

```

. preserve
. keep id DQ FR* UQbenf CM* language nopretest protect q14* q16* q17* q18* q19*
. drop *_uq *_seed
. local i 0
. foreach v in q14 q16 q17 q18 q19 {
2.     local ++i
3.     rename `v' sq`i'
4.     rename `v'_pyes pyes`i'
5.     rename `v'_pno pno`i'
6.     rename `v'_pcm pcm`i'
7. }
. reshape long sq pyes pno pcm, i(id) j(sqid)
(note: j = 1 2 3 4 5)

```

Data	wide	->	long
Number of obs.	6309	->	31545
Number of variables	30	->	15
j variable (5 values)		->	sqid
xij variables:			
	sq1 sq2 ... sq5	->	sq
	pyes1 pyes2 ... pyes5	->	pyes
	pno1 pno2 ... pno5	->	pno
	pcm1 pcm2 ... pcm5	->	pcm

```

. fre sqid
sqid

```

		Freq.	Percent	Valid	Cum.
Valid	1	6309	20.00	20.00	20.00
	2	6309	20.00	20.00	40.00
	3	6309	20.00	20.00	60.00
	4	6309	20.00	20.00	80.00
	5	6309	20.00	20.00	100.00
	Total	31545	100.00	100.00	

```

. fre protect
protect — Level of respondent protection

```

		Freq.	Percent	Valid	Cum.
Valid	1 high	13125	41.61	50.04	50.04
	2 low	13105	41.54	49.96	100.00
	Total	26230	83.15	100.00	
Missing	.b break-off	75	0.24		
	.e filter: direct questioning	5240	16.61		
	Total	5315	16.85		
Total		31545	100.00		

```

. gen byte high = (!DQ) & protect==1 if protect!=.b
(75 missing values generated)
. forv i=1/5 {
2.     gen byte DQ`i' = DQ & sqid==`i'

```



```

3.   foreach v in FRwheel FRnumb UQbenf CMquest CMnumb {
4.       gen byte `v`i' = `v' & sqid==`i'
5.       qui gen byte `v`i'high = `v' & sqid==`i' & protect==1 if protect!=.b
6.   }
7. }

. foreach if in "" "if language" "if language & nopretest" {
2.   if "`if'"!="if language" continue // remove to compute all results
3.   di _n as res "/* ----- */"
4.   if "`if'"!="" di as res " ==> `if'"
5.   rrrreg sq DQ? FRwheel? FRnumb? UQbenf? CMquest? CMnumb? ///
>       FRwheel?high FRnumb?high UQbenf?high CMquest?high CMnumb?high ///
>       `if', nocons vce(cluster id) pyes(pyes) pno(pno) pwarner(pcm)
6.   testparm FRwheel?high
7.   testparm FRnumb?high
8.   testparm UQbenf?high
9.   testparm CMquest?high
10.  testparm CMnumb?high
11.  testparm FRwheel?high FRnumb?high UQbenf?high CMquest?high CMnumb?high
12. }

```

```

/* ----- */
==> if language
Randomized response regression          Number of obs   =   26,162
                                         F( 55, 5976)    =   18.42
                                         Prob > F        =   0.0000
                                         R-squared      =   0.0413
                                         Adj R-squared  =   0.0393
                                         Root MSE      =   0.6322

```

(Std. Err. adjusted for 5,977 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
DQ1	.1787538	.0122591	14.58	0.000	.1547216	.2027861
DQ2	.0909091	.0091982	9.88	0.000	.0728774	.1089408
DQ3	.0338115	.0057919	5.84	0.000	.0224572	.0451657
DQ4	.0290456	.0062525	4.65	0.000	.0167884	.0413029
DQ5	.0151724	.0045449	3.34	0.001	.0062628	.024082
FRwheel1	.2038946	.028264	7.21	0.000	.1484869	.2593023
FRwheel2	.1021764	.0260067	3.93	0.000	.0511939	.1531589
FRwheel3	-.002291	.0224949	-0.10	0.919	-.046389	.0418071
FRwheel4	.0166988	.027521	0.61	0.544	-.0372524	.0706499
FRwheel5	.0103359	.0273099	0.38	0.705	-.0432014	.0638733
FRnumb1	.1966689	.0280769	7.00	0.000	.1416281	.2517098
FRnumb2	.132417	.0267813	4.94	0.000	.079916	.1849179
FRnumb3	.0219479	.0234185	0.94	0.349	-.0239609	.0678566
FRnumb4	.0407407	.0279929	1.46	0.146	-.0141355	.095617
FRnumb5	-.0439492	.0239763	-1.83	0.067	-.0909515	.003053
UQbenf1	.1966012	.0257461	7.64	0.000	.1461295	.2470728
UQbenf2	.1256983	.0237619	5.29	0.000	.0791163	.1722802
UQbenf3	.0528013	.0210451	2.51	0.012	.0115453	.0940574
UQbenf4	.0621539	.0248924	2.50	0.013	.0133557	.110952
UQbenf5	.0151385	.0223329	0.68	0.498	-.0286421	.0589191
CMquest1	.2938297	.0348854	8.42	0.000	.2254417	.3622177
CMquest2	.2132927	.0338615	6.30	0.000	.1469119	.2796736
CMquest3	.1229956	.0322211	3.82	0.000	.0598306	.1861606
CMquest4	.0852793	.0357477	2.39	0.017	.0152009	.1553578
CMquest5	.0873451	.0360497	2.42	0.015	.0166747	.1580156
CMnumb1	.2395397	.0322051	7.44	0.000	.1764061	.3026734
CMnumb2	.112395	.0294624	3.81	0.000	.054638	.1701519
CMnumb3	.0588235	.0278307	2.11	0.035	.0042652	.1133818
CMnumb4	.0939227	.0331783	2.83	0.005	.0288811	.1589642
CMnumb5	.0566298	.0318292	1.78	0.075	-.0057669	.1190265
FRwheel1high	.0481588	.0427779	1.13	0.260	-.0357014	.1320189
FRwheel2high	.0212804	.0392932	0.54	0.588	-.0557484	.0983092
FRwheel3high	-.0131411	.0334387	-0.39	0.694	-.0786931	.0524108
FRwheel4high	-.014025	.0400248	-0.35	0.726	-.092488	.064438
FRwheel5high	-.0110062	.0397958	-0.28	0.782	-.0890203	.067008

FRnumb1high	-.0176629	.0415014	-0.43	0.670	-.0990207	.063695
FRnumb2high	.0123199	.0400298	0.31	0.758	-.066153	.0907928
FRnumb3high	-.0737771	.0327713	-2.25	0.024	-.1380207	-.0095335
FRnumb4high	-.0225843	.0413324	-0.55	0.585	-.1036107	.0584421
FRnumb5high	.0028629	.0364399	0.08	0.937	-.0685726	.0742983
UQbenf1high	-.0480272	.0381141	-1.26	0.208	-.1227446	.0266903
UQbenf2high	.0070984	.0365621	0.19	0.846	-.0645765	.0787733
UQbenf3high	-.0121231	.0326108	-0.37	0.710	-.076052	.0518058
UQbenf4high	.0289559	.0395957	0.73	0.465	-.0486661	.1065778
UQbenf5high	.0181536	.0361808	0.50	0.616	-.0527737	.089081
CMquest1high	.0134077	.0579577	0.23	0.817	-.1002103	.1270258
CMquest2high	-.0589403	.0559751	-1.05	0.292	-.1686716	.0507911
CMquest3high	.0588225	.0558738	1.05	0.292	-.0507103	.1683553
CMquest4high	-.0185036	.0617153	-0.30	0.764	-.1394878	.1024806
CMquest5high	-.0526663	.0610681	-0.86	0.388	-.1723817	.0670492
CMnumb1high	.0155623	.0544047	0.29	0.775	-.0910907	.1222152
CMnumb2high	-.007078	.0509738	-0.14	0.890	-.107005	.092849
CMnumb3high	-.0249426	.0488405	-0.51	0.610	-.1206877	.0708025
CMnumb4high	-.01921	.0588208	-0.33	0.744	-.1345201	.0961
CMnumb5high	-.1128258	.0548442	-2.06	0.040	-.2203402	-.0053114

Pr(non-negated question) = pcm
Pr(surrogate "yes") = pyes
Pr(surrogate "no") = pno

(1) FRwheel1high = 0
(2) FRwheel2high = 0
(3) FRwheel3high = 0
(4) FRwheel4high = 0
(5) FRwheel5high = 0
F(5, 5976) = 0.36
Prob > F = 0.8741

(1) FRnumb1high = 0
(2) FRnumb2high = 0
(3) FRnumb3high = 0
(4) FRnumb4high = 0
(5) FRnumb5high = 0
F(5, 5976) = 1.11
Prob > F = 0.3511

(1) UQbenf1high = 0
(2) UQbenf2high = 0
(3) UQbenf3high = 0
(4) UQbenf4high = 0
(5) UQbenf5high = 0
F(5, 5976) = 0.61
Prob > F = 0.6937

(1) CMquest1high = 0
(2) CMquest2high = 0
(3) CMquest3high = 0
(4) CMquest4high = 0
(5) CMquest5high = 0
F(5, 5976) = 0.66
Prob > F = 0.6575

(1) CMnumb1high = 0
(2) CMnumb2high = 0
(3) CMnumb3high = 0
(4) CMnumb4high = 0
(5) CMnumb5high = 0
F(5, 5976) = 0.95
Prob > F = 0.4476

(1) FRwheel1high = 0
(2) FRwheel2high = 0
(3) FRwheel3high = 0
(4) FRwheel4high = 0
(5) FRwheel5high = 0

```

( 6) FRnumb1high = 0
( 7) FRnumb2high = 0
( 8) FRnumb3high = 0
( 9) FRnumb4high = 0
(10) FRnumb5high = 0
(11) UQbenf1high = 0
(12) UQbenf2high = 0
(13) UQbenf3high = 0
(14) UQbenf4high = 0
(15) UQbenf5high = 0
(16) CMquest1high = 0
(17) CMquest2high = 0
(18) CMquest3high = 0
(19) CMquest4high = 0
(20) CMquest5high = 0
(21) CMnumb1high = 0
(22) CMnumb2high = 0
(23) CMnumb3high = 0
(24) CMnumb4high = 0
(25) CMnumb5high = 0
      F( 25, 5976) = 0.74
      Prob > F = 0.8227
. restore
.
. // Results: No effects of level of protection whatsoever.

```

5.3 Effect of yes/no dominance (CM Number)

```

. preserve
. keep if CMnumb
(5,259 observations deleted)
. gen byte yes1 = cond(sequence==1, 1, 0)
. gen byte yes2 = cond(sequence==1, 0, 1)
. gen byte yes3 = cond(sequence==1, 1, 0)
. gen byte yes4 = cond(sequence==1, 0, 1)
. gen byte yes5 = cond(sequence==1, 1, 0)
. keep id language noprettest protect q14* q16* q17* q18* q19* yes?
. drop *_uq *_seed
. local i 0
. foreach v in q14 q16 q17 q18 q19 {
2.   local ++i
3.   rename `v' sq`i'
4.   rename `v'_pyes pyes`i'
5.   rename `v'_pno pno`i'
6.   rename `v'_pcm pcm`i'
7. }
. reshape long sq pyes pno pcm yes, i(id) j(sqid)
(note: j = 1 2 3 4 5)

```

Data	wide	->	long
Number of obs.	1050	->	5250
Number of variables	29	->	10
j variable (5 values)		->	sqid
xij variables:			
	sq1 sq2 ... sq5	->	sq
	pyes1 pyes2 ... pyes5	->	pyes
	pno1 pno2 ... pno5	->	pno
	pcm1 pcm2 ... pcm5	->	pcm
	yes1 yes2 ... yes5	->	yes

```
. fre sqid
sqid
```

		Freq.	Percent	Valid	Cum.
Valid	1	1050	20.00	20.00	20.00
	2	1050	20.00	20.00	40.00
	3	1050	20.00	20.00	60.00
	4	1050	20.00	20.00	80.00
	5	1050	20.00	20.00	100.00
	Total	5250	100.00	100.00	

```
. fre protect
protect — Level of respondent protection
```

		Freq.	Percent	Valid	Cum.
Valid	1 high	2615	49.81	50.05	50.05
	2 low	2610	49.71	49.95	100.00
	Total	5225	99.52	100.00	
Missing	.b break-off	25	0.48		
Total		5250	100.00		

```
. forv i=1/5 {
2.   gen byte sq`i' = sqid==`i'
3.   gen byte sqyes`i' = sqid==`i' & yes
4. }
. foreach if in "" "if language" "if language & nopretest" {
2.   if "`if'"!="if language" continue // remove to compute all results
3.   di _n as res "/* ----- */"
4.   if "`if'"==" di as res " ==> `if'"
5.   rrrreg sq sq? sqyes? ///
>   `if', nocons vce(cluster id) pyes(pyes) pno(pno) pwarner(pcm)
6.   testparm sqyes?
7. }
```

```
/* ----- */
==> if language
```

```
Randomized response regression          Number of obs   =    4,315
                                         F( 10,  985)    =    11.85
                                         Prob > F        =    0.0000
                                         R-squared      =    0.0312
                                         Adj R-squared  =    0.0290
                                         Root MSE      =    0.7858
```

(Std. Err. adjusted for 986 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
sq1	.2026749	.0379386	5.34	0.000	.1282252	.2771246
sq2	.0541667	.034944	1.55	0.121	-.0144067	.12274
sq3	-.0056936	.0331646	-0.17	0.864	-.0707749	.0593877
sq4	.0806011	.0404497	1.99	0.047	.0012235	.1599787
sq5	-.0262391	.0383801	-0.68	0.494	-.1015552	.0490771
sqyes1	.0898562	.0545668	1.65	0.100	-.0172242	.1969367
sqyes2	.1087199	.0510907	2.13	0.034	.0084607	.2089792
sqyes3	.1041311	.048964	2.13	0.034	.0080454	.2002167
sqyes4	.0080617	.0584887	0.14	0.890	-.1067151	.1228385
sqyes5	.0535615	.0545798	0.98	0.327	-.0535445	.1606675

```
Pr(non-negated question) = pcm
Pr(surrogate "yes")      = pyes
Pr(surrogate "no")       = pno
( 1) sqyes1 = 0
( 2) sqyes2 = 0
( 3) sqyes3 = 0
```

```

( 4) sqyes4 = 0
( 5) sqyes5 = 0
      F( 5, 985) = 2.53
      Prob > F = 0.0274

. restore

.
. // Results: prevalence seems to be higher if "yes" is the dominant random
. // answer; can't think of a reasonable explanation why this should be; maybe
. // there is a priming effect; note that in CM Question performs much better
. // than CM Number even though "no" is always the dominant answer

```

5.4 Effects of respondents' evaluation

```

. preserve
. gen byte trust = inlist(q25_1,4,5) if inlist(q25_1,1,2,3,4,5)
(193 missing values generated)
. gen byte risk = inlist(q25_2,4,5) if inlist(q25_2,1,2,3,4,5)
(206 missing values generated)
. gen byte cumbersome = inlist(q26_1,4,5) if inlist(q26_1,1,2,3,4,5) & expcond!=1
(1,255 missing values generated)
. gen byte correct = inlist(q26_2,4,5) if inlist(q26_2,1,2,3,4,5) & expcond!=1
(1,255 missing values generated)
. gen byte tprotect = inlist(q26_3,4,5) if inlist(q26_3,1,2,3,4,5) & expcond!=1
(1,258 missing values generated)
. gen byte sense = inlist(q26_4,4,5) if inlist(q26_4,1,2,3,4,5) & expcond!=1
(1,258 missing values generated)
. gen byte understand = inlist(q26_5,4,5) if inlist(q26_5,1,2,3,4,5) & expcond!=1
(1,255 missing values generated)
. keep id DQ FR* UQbenf CM* language nopretest q14* q16* q17* q18* q19* ///
> trust risk cumbersome correct tprotect sense understand
. drop *_uq *_seed
. local i 0
. foreach v in q14 q16 q17 q18 q19 {
2. local ++i
3. rename `v' sq`i'
4. rename `v'_pyes pyes`i'
5. rename `v'_pno pno`i'
6. rename `v'_pcm pcm`i'
7. }
. reshape long sq pyes pno pcm, i(id) j(sqid)
(note: j = 1 2 3 4 5)

```

Data	wide	->	long
Number of obs.	6309	->	31545
Number of variables	36	->	21
j variable (5 values)		->	sqid
xij variables:			
	sq1 sq2 ... sq5	->	sq
	pyes1 pyes2 ... pyes5	->	pyes
	pno1 pno2 ... pno5	->	pno
	pcm1 pcm2 ... pcm5	->	pcm

```

. fre sqid
sqid

```

		Freq.	Percent	Valid	Cum.
Valid	1	6309	20.00	20.00	20.00
	2	6309	20.00	20.00	40.00
	3	6309	20.00	20.00	60.00

4	6309	20.00	20.00	80.00
5	6309	20.00	20.00	100.00
Total	31545	100.00	100.00	

```
. forv i=1/5 {
2.   foreach v in DQ FRwheel FRnumb UQbenf CMquest CMnumb {
3.     gen byte `v`i' = `v' & sqid==`i'
4.     foreach vv in trust risk cumbersome correct tprotect sense understand {
5.       qui gen byte `v`i`vv' = `v' & `vv' & sqid==`i' if `vv'<.
6.     }
7.   }
8. }

. foreach if in "" "if language" "if language & noprettest" {
2.   if "`if'"!="if language" continue // remove to compute all results
3.   di _n as res "/* ----- */"
4.   if "`if'"!="" di as res "   ==> `if'"
5.   foreach v in trust risk cumbersome correct tprotect sense understand {
6.     di as res _n "=> `v'"
7.     if inlist("`v'", "trust", "risk") {
8.       local DQ "DQ?"
9.       local DQiv "DQ?`v'"
10.    }
11.   else {
12.     local DQ
13.     local DQiv
14.   }
15.   rrrreg sq `DQ' FRwheel? FRnumb? UQbenf? CMquest? CMnumb? ///
>   `DQiv' FRwheel?`v' FRnumb?`v' UQbenf?`v' CMquest?`v' CMnumb?`v' ///
>   `if', nocons vce(cluster id) pyes(pyes) pno(pno) pwarner(pcm)
16.   if "DQ"!=" testparm `DQiv'
17.   testparm FRwheel?`v'
18.   testparm FRnumb?`v'
19.   testparm UQbenf?`v'
20.   testparm CMquest?`v'
21.   testparm CMnumb?`v'
22.   testparm `DQiv' FRwheel?`v' FRnumb?`v' UQbenf?`v' CMquest?`v' CMnumb?`v'
23. }
24. }
```

```
/* ----- */
=> if language
=> trust

Randomized response regression                Number of obs   =   25,801
                                                F( 60, 5878)   =   16.24
                                                Prob > F       =   0.0000
                                                R-squared     =   0.0410
                                                Adj R-squared  =   0.0388
                                                Root MSE     =   0.6320

(Std. Err. adjusted for 5,879 clusters in id)
```

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
DQ1	.2043011	.0295997	6.90	0.000	.1462748	.2623274
DQ2	.0806452	.0199898	4.03	0.000	.0414578	.1198325
DQ3	.0486486	.0158363	3.07	0.002	.0176037	.0796936
DQ4	.0071942	.0071771	1.00	0.316	-.0068756	.0212641
DQ5	.0215827	.0123408	1.75	0.080	-.0026097	.0457752
FRwheel1	.2061856	.0384376	5.36	0.000	.1308337	.2815375
FRwheel2	.0646552	.0338591	1.91	0.056	-.0017212	.1310316
FRwheel3	-.0853379	.0254739	-3.35	0.001	-.135276	-.0353998
FRwheel4	.0229358	.0370537	0.62	0.536	-.0497031	.0955746
FRwheel5	.0038226	.0359679	0.11	0.915	-.0666876	.0743329
FRnumb1	.1875538	.0404843	4.63	0.000	.1081898	.2669179
FRnumb2	.1282552	.0387252	3.31	0.001	.0523396	.2041708
FRnumb3	.0020616	.0331468	0.06	0.950	-.0629184	.0670416
FRnumb4	.0586895	.0410101	1.43	0.152	-.0217054	.1390843

FRnumb5	-.0310541	.0357783	-0.87	0.385	-.1011928	.0390845
UQbenf1	.1528836	.0366421	4.17	0.000	.0810517	.2247156
UQbenf2	.1094746	.0348827	3.14	0.002	.0410918	.1778575
UQbenf3	.0264008	.0305469	0.86	0.387	-.0334822	.0862839
UQbenf4	.066198	.0366588	1.81	0.071	-.0056668	.1380627
UQbenf5	.0571593	.0361701	1.58	0.114	-.0137473	.128066
CMquest1	.3107405	.0606109	5.13	0.000	.1919209	.42956
CMquest2	.1718343	.0569238	3.02	0.003	.0602427	.2834259
CMquest3	.2436181	.0585468	4.16	0.000	.128845	.3583913
CMquest4	.0914792	.0609083	1.50	0.133	-.0279234	.2108819
CMquest5	-.00868	.0569124	-0.15	0.879	-.1202492	.1028893
CMnumb1	.2009132	.0563949	3.56	0.000	.0903585	.311468
CMnumb2	.0844749	.0529103	1.60	0.110	-.0192488	.1881986
CMnumb3	.0593607	.0519719	1.14	0.253	-.0425234	.1612448
CMnumb4	.1002907	.0605528	1.66	0.098	-.0184151	.2189965
CMnumb5	.0247093	.0572817	0.43	0.666	-.087584	.1370026
DQ1trust	-.0346353	.0325218	-1.06	0.287	-.0983899	.0291194
DQ2trust	.0093291	.0224743	0.42	0.678	-.0347287	.053387
DQ3trust	-.0177606	.017012	-1.04	0.297	-.0511104	.0155892
DQ4trust	.0225781	.0101106	2.23	0.026	.0027576	.0423986
DQ5trust	-.0076211	.0132808	-0.57	0.566	-.0336563	.0184141
FRwheel1trust	.0372047	.0465101	0.80	0.424	-.0539722	.1283815
FRwheel2trust	.0647099	.0416151	1.55	0.120	-.0168711	.1462909
FRwheel3trust	.1085976	.0332376	3.27	0.001	.0434396	.1737556
FRwheel4trust	-.0158351	.0443332	-0.36	0.721	-.1027446	.0710743
FRwheel5trust	.003278	.0434298	0.08	0.940	-.0818604	.0884164
FRnumb1trust	-.0035064	.0472464	-0.07	0.941	-.0961267	.0891138
FRnumb2trust	.0148982	.04537	0.33	0.743	-.0740436	.1038399
FRnumb3trust	-.023697	.0382239	-0.62	0.535	-.0986299	.0512359
FRnumb4trust	-.0384776	.0475884	-0.81	0.419	-.1317683	.0548131
FRnumb5trust	-.0152602	.0416667	-0.37	0.714	-.0969423	.066422
UQbenf1trust	.0277987	.0430438	0.65	0.518	-.056583	.1121803
UQbenf2trust	.0272987	.0410448	0.67	0.506	-.0531643	.1077617
UQbenf3trust	.0252633	.0361475	0.70	0.485	-.045599	.0961256
UQbenf4trust	.015068	.0436677	0.35	0.730	-.0705367	.1006727
UQbenf5trust	-.0461072	.0417968	-1.10	0.270	-.1280444	.03583
CMquest1trust	-.0170665	.06922	-0.25	0.805	-.1527632	.1186302
CMquest2trust	.0145336	.0655699	0.22	0.825	-.1140076	.1430748
CMquest3trust	-.1232245	.0667621	-1.85	0.065	-.2541028	.0076538
CMquest4trust	-.0215297	.0708549	-0.30	0.761	-.1604314	.1173719
CMquest5trust	.090972	.0674868	1.35	0.178	-.0413269	.2232709
CMnumb1trust	.0586235	.0645947	0.91	0.364	-.0680059	.185253
CMnumb2trust	.0315115	.0605605	0.52	0.603	-.0872093	.1502323
CMnumb3trust	-.0154234	.0590531	-0.26	0.794	-.1311891	.1003423
CMnumb4trust	-.0185238	.0692364	-0.27	0.789	-.1542525	.1172049
CMnumb5trust	-.0341255	.0651909	-0.52	0.601	-.1619237	.0936727

Pr(non-negated question) = pcm
Pr(surrogate "yes") = pyes
Pr(surrogate "no") = pno

- (1) DQ1trust = 0
- (2) DQ2trust = 0
- (3) DQ3trust = 0
- (4) DQ4trust = 0
- (5) DQ5trust = 0

F(5, 5878) = 1.92
Prob > F = 0.0883

- (1) FRwheel1trust = 0
- (2) FRwheel2trust = 0
- (3) FRwheel3trust = 0
- (4) FRwheel4trust = 0
- (5) FRwheel5trust = 0

F(5, 5878) = 2.58
Prob > F = 0.0246

- (1) FRnumb1trust = 0
- (2) FRnumb2trust = 0

```

( 3) FRnumb3trust = 0
( 4) FRnumb4trust = 0
( 5) FRnumb5trust = 0
      F( 5, 5878) = 0.24
      Prob > F = 0.9428
( 1) UQbenf1trust = 0
( 2) UQbenf2trust = 0
( 3) UQbenf3trust = 0
( 4) UQbenf4trust = 0
( 5) UQbenf5trust = 0
      F( 5, 5878) = 0.73
      Prob > F = 0.5991
( 1) CMquest1trust = 0
( 2) CMquest2trust = 0
( 3) CMquest3trust = 0
( 4) CMquest4trust = 0
( 5) CMquest5trust = 0
      F( 5, 5878) = 1.13
      Prob > F = 0.3411
( 1) CMnumb1trust = 0
( 2) CMnumb2trust = 0
( 3) CMnumb3trust = 0
( 4) CMnumb4trust = 0
( 5) CMnumb5trust = 0
      F( 5, 5878) = 0.30
      Prob > F = 0.9103
( 1) DQ1trust = 0
( 2) DQ2trust = 0
( 3) DQ3trust = 0
( 4) DQ4trust = 0
( 5) DQ5trust = 0
( 6) FRwheel1trust = 0
( 7) FRwheel2trust = 0
( 8) FRwheel3trust = 0
( 9) FRwheel4trust = 0
(10) FRwheel5trust = 0
(11) FRnumb1trust = 0
(12) FRnumb2trust = 0
(13) FRnumb3trust = 0
(14) FRnumb4trust = 0
(15) FRnumb5trust = 0
(16) UQbenf1trust = 0
(17) UQbenf2trust = 0
(18) UQbenf3trust = 0
(19) UQbenf4trust = 0
(20) UQbenf5trust = 0
(21) CMquest1trust = 0
(22) CMquest2trust = 0
(23) CMquest3trust = 0
(24) CMquest4trust = 0
(25) CMquest5trust = 0
(26) CMnumb1trust = 0
(27) CMnumb2trust = 0
(28) CMnumb3trust = 0
(29) CMnumb4trust = 0
(30) CMnumb5trust = 0
      F( 30, 5878) = 1.15
      Prob > F = 0.2610

```

==> risk

Randomized response regression

```

Number of obs = 25,757
F( 60, 5868) = 16.10
Prob > F = 0.0000
R-squared = 0.0409
Adj R-squared = 0.0387
Root MSE = 0.6319

```


(Std. Err. adjusted for 5,869 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
DQ1	.1632653	.0141291	11.56	0.000	.1355671	.1909635
DQ2	.0874636	.0107997	8.10	0.000	.0662922	.1086349
DQ3	.0321637	.0067545	4.76	0.000	.0189225	.045405
DQ4	.0297619	.0075786	3.93	0.000	.014905	.0446188
DQ5	.0178218	.0058947	3.02	0.003	.006266	.0293775
FRwheel1	.2157974	.0244564	8.82	0.000	.1678539	.263741
FRwheel2	.1035525	.0223905	4.62	0.000	.0596588	.1474462
FRwheel3	-.0060386	.0192865	-0.31	0.754	-.0438472	.03177
FRwheel4	.0117227	.0232017	0.51	0.613	-.0337611	.0572066
FRwheel5	-.003262	.0225608	-0.14	0.885	-.0474894	.0409655
FRnumb1	.1797133	.023226	7.74	0.000	.1341817	.2252448
FRnumb2	.1267384	.0222659	5.69	0.000	.083089	.1703877
FRnumb3	-.0047251	.0187929	-0.25	0.801	-.0415661	.0321159
FRnumb4	.0272331	.0232604	1.17	0.242	-.0183659	.0728321
FRnumb5	-.035205	.0208757	-1.69	0.092	-.076129	.0057191
UQbenf1	.1733588	.0215909	8.03	0.000	.1310326	.2156849
UQbenf2	.13969	.0208796	6.69	0.000	.0987584	.1806217
UQbenf3	.0457225	.0183911	2.49	0.013	.0096692	.0817758
UQbenf4	.0703799	.0223025	3.16	0.002	.0266588	.1141011
UQbenf5	.0370387	.0210822	1.76	0.079	-.00429	.0783675
CMquest1	.2813628	.0338043	8.32	0.000	.215094	.3476317
CMquest2	.1865943	.0329976	5.65	0.000	.1219068	.2512818
CMquest3	.1481852	.0329651	4.50	0.000	.0835615	.2128089
CMquest4	.0909926	.0367437	2.48	0.013	.0189615	.1630238
CMquest5	.0743228	.0359492	2.07	0.039	.0038493	.1447964
CMnumb1	.2339028	.0305734	7.65	0.000	.1739677	.2938378
CMnumb2	.1202365	.0289487	4.15	0.000	.0634865	.1769866
CMnumb3	.0401316	.0273867	1.47	0.143	-.0135564	.0938195
CMnumb4	.1129326	.0337083	3.35	0.001	.046852	.1790132
CMnumb5	.0036496	.0309992	0.12	0.906	-.0571203	.0644195
DQ1risk	.0403711	.028121	1.44	0.151	-.0147564	.0954985
DQ2risk	.0034455	.0204426	0.17	0.866	-.0366295	.0435206
DQ3risk	.0078363	.0136236	0.58	0.565	-.0188711	.0345436
DQ4risk	-.0149836	.0113726	-1.32	0.188	-.0372781	.0073109
DQ5risk	-.0080179	.0090803	-0.88	0.377	-.0258186	.0097829
FRwheel1risk	.0722543	.0524513	1.38	0.168	-.0305695	.1750781
FRwheel2risk	.0345753	.0478699	0.72	0.470	-.0592673	.1284179
FRwheel3risk	-.0223762	.0391447	-0.57	0.568	-.0991143	.0543619
FRwheel4risk	.00277	.04849	0.06	0.954	-.0922883	.0978284
FRwheel5risk	.0332827	.0494845	0.67	0.501	-.0637251	.1302905
FRnumb1risk	.0313391	.0532345	0.59	0.556	-.0730202	.1356983
FRnumb2risk	.0596226	.0523887	1.14	0.255	-.0430785	.1623238
FRnumb3risk	-.0521603	.039114	-1.33	0.182	-.1288381	.0245176
FRnumb4risk	.0209023	.0527004	0.40	0.692	-.0824099	.1242146
FRnumb5risk	-.0410888	.0430047	-0.96	0.339	-.1253938	.0432163
UQbenf1risk	-.004432	.0474723	-0.09	0.926	-.0974952	.0886312
UQbenf2risk	-.0539454	.0437215	-1.23	0.217	-.1396556	.0317649
UQbenf3risk	-.0031951	.0402928	-0.08	0.937	-.0821839	.0757937
UQbenf4risk	.0132533	.0485833	0.27	0.785	-.0819879	.1084946
UQbenf5risk	-.0778449	.0392068	-1.99	0.047	-.1547046	-.0009853
CMquest1risk	.0586866	.067483	0.87	0.385	-.073605	.1909781
CMquest2risk	-.0053124	.0641005	-0.08	0.934	-.130973	.1203482
CMquest3risk	.0060133	.0635875	0.09	0.925	-.1186416	.1306682
CMquest4risk	-.0618253	.0684795	-0.90	0.367	-.1960704	.0724198
CMquest5risk	-.0623298	.0685366	-0.91	0.363	-.1966869	.0720273
CMnumb1risk	.0595183	.0702051	0.85	0.397	-.0781095	.1971461
CMnumb2risk	-.0521737	.0636347	-0.82	0.412	-.1769212	.0725738
CMnumb3risk	.0410203	.0634021	0.65	0.518	-.0832713	.1653118
CMnumb4risk	-.1162006	.0684095	-1.70	0.089	-.2503084	.0179073
CMnumb5risk	-.0265255	.0661267	-0.40	0.688	-.1561581	.1031072

Pr(non-negated question) = pcm

```

Pr(surrogate "yes") = pyes
Pr(surrogate "no") = pno

( 1) DQ1risk = 0
( 2) DQ2risk = 0
( 3) DQ3risk = 0
( 4) DQ4risk = 0
( 5) DQ5risk = 0
      F( 5, 5868) = 1.09
      Prob > F = 0.3615

( 1) FRwheel1risk = 0
( 2) FRwheel2risk = 0
( 3) FRwheel3risk = 0
( 4) FRwheel4risk = 0
( 5) FRwheel5risk = 0
      F( 5, 5868) = 0.64
      Prob > F = 0.6705

( 1) FRnumb1risk = 0
( 2) FRnumb2risk = 0
( 3) FRnumb3risk = 0
( 4) FRnumb4risk = 0
( 5) FRnumb5risk = 0
      F( 5, 5868) = 0.91
      Prob > F = 0.4756

( 1) UQbenf1risk = 0
( 2) UQbenf2risk = 0
( 3) UQbenf3risk = 0
( 4) UQbenf4risk = 0
( 5) UQbenf5risk = 0
      F( 5, 5868) = 1.20
      Prob > F = 0.3044

( 1) CMquest1risk = 0
( 2) CMquest2risk = 0
( 3) CMquest3risk = 0
( 4) CMquest4risk = 0
( 5) CMquest5risk = 0
      F( 5, 5868) = 0.58
      Prob > F = 0.7186

( 1) CMnumb1risk = 0
( 2) CMnumb2risk = 0
( 3) CMnumb3risk = 0
( 4) CMnumb4risk = 0
( 5) CMnumb5risk = 0
      F( 5, 5868) = 0.98
      Prob > F = 0.4306

( 1) DQ1risk = 0
( 2) DQ2risk = 0
( 3) DQ3risk = 0
( 4) DQ4risk = 0
( 5) DQ5risk = 0
( 6) FRwheel1risk = 0
( 7) FRwheel2risk = 0
( 8) FRwheel3risk = 0
( 9) FRwheel4risk = 0
(10) FRwheel5risk = 0
(11) FRnumb1risk = 0
(12) FRnumb2risk = 0
(13) FRnumb3risk = 0
(14) FRnumb4risk = 0
(15) FRnumb5risk = 0
(16) UQbenf1risk = 0
(17) UQbenf2risk = 0
(18) UQbenf3risk = 0
(19) UQbenf4risk = 0
(20) UQbenf5risk = 0

```

(21) CMquest1risk = 0
(22) CMquest2risk = 0
(23) CMquest3risk = 0
(24) CMquest4risk = 0
(25) CMquest5risk = 0
(26) CMnumb1risk = 0
(27) CMnumb2risk = 0
(28) CMnumb3risk = 0
(29) CMnumb4risk = 0
(30) CMnumb5risk = 0
F(30, 5868) = 0.90
Prob > F = 0.6245

==> cumbersome

Randomized response regression

Number of obs = 21,355
F(50, 4862) = 13.61
Prob > F = 0.0000
R-squared = 0.0410
Adj R-squared = 0.0387
Root MSE = 0.6825

(Std. Err. adjusted for 4,863 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
FRwheel1	.2230722	.0233203	9.57	0.000	.1773539	.2687905
FRwheel2	.123317	.0216604	5.69	0.000	.0808529	.1657811
FRwheel3	-.002411	.0184516	-0.13	0.896	-.0385845	.0337624
FRwheel4	.0089532	.0218806	0.41	0.682	-.0339428	.0518491
FRwheel5	.0026171	.0216797	0.12	0.904	-.0398849	.045119
FRnumb1	.1882011	.0225177	8.36	0.000	.1440563	.2323459
FRnumb2	.1502601	.021922	6.85	0.000	.107283	.1932372
FRnumb3	-.0166066	.0177466	-0.94	0.349	-.051398	.0181847
FRnumb4	.0215541	.0221639	0.97	0.331	-.0218972	.0650054
FRnumb5	-.0443895	.0197083	-2.25	0.024	-.0830268	-.0057523
UQbenf1	.1699017	.0202012	8.41	0.000	.1302982	.2095052
UQbenf2	.1144682	.0190358	6.01	0.000	.0771495	.1517869
UQbenf3	.0330647	.0168605	1.96	0.050	.0000105	.066119
UQbenf4	.0377051	.0196899	1.91	0.056	-.000896	.0763062
UQbenf5	-.0097981	.0178073	-0.55	0.582	-.0447084	.0251122
CMquest1	.2757966	.0304941	9.04	0.000	.2160144	.3355788
CMquest2	.1877798	.0296282	6.34	0.000	.1296953	.2458644
CMquest3	.1507092	.0295633	5.10	0.000	.0927517	.2086667
CMquest4	.0544151	.0322016	1.69	0.091	-.0087147	.1175448
CMquest5	.0395954	.0318115	1.24	0.213	-.0227695	.1019603
CMnumb1	.2428401	.0293023	8.29	0.000	.1853943	.3002859
CMnumb2	.097852	.0272813	3.59	0.000	.0443684	.1513357
CMnumb3	.037037	.0261119	1.42	0.156	-.0141541	.0882282
CMnumb4	.0825243	.03125	2.64	0.008	.0212601	.1437885
CMnumb5	-.0040584	.0291325	-0.14	0.889	-.0611713	.0530544
FRwheel1cumbersome	.0665215	.0634603	1.05	0.295	-.0578893	.1909323
FRwheel2cumbersome	-.0762606	.0533679	-1.43	0.153	-.1808859	.0283646
FRwheel3cumbersome	-.0462523	.0451656	-1.02	0.306	-.1347972	.0422926
FRwheel4cumbersome	.016557	.0600101	0.28	0.783	-.1010899	.134204
FRwheel5cumbersome	.0058863	.0583861	0.10	0.920	-.1085769	.1203495
FRnumb1cumbersome	-.0374395	.0613007	-0.61	0.541	-.1576166	.0827376
FRnumb2cumbersome	-.0657976	.0581102	-1.13	0.258	-.1797199	.0481247
FRnumb3cumbersome	.006444	.0501413	0.13	0.898	-.0918556	.1047437
FRnumb4cumbersome	.0723056	.0659361	1.10	0.273	-.0569589	.20157
FRnumb5cumbersome	.0154422	.05537	0.28	0.780	-.093108	.1239923
UQbenf1cumbersome	.0229511	.0679905	0.34	0.736	-.110341	.1562432
UQbenf2cumbersome	.1600089	.0712245	2.25	0.025	.0203766	.2996411
UQbenf3cumbersome	.131633	.0654539	2.01	0.044	.0033138	.2599522
UQbenf4cumbersome	.3850317	.0842098	4.57	0.000	.2199425	.5501209
UQbenf5cumbersome	.315424	.0797694	3.95	0.000	.1590399	.471808
CMquest1cumbersome	.2478005	.1072523	2.31	0.021	.0375375	.4580634
CMquest2cumbersome	-.0044934	.1023662	-0.04	0.965	-.2051774	.1961906
CMquest3cumbersome	-.0033208	.099983	-0.03	0.974	-.1993326	.192691

CMquest4cumbbersome	.2037469	.1140843	1.79	0.074	-.0199099	.4274036
CMquest5cumbbersome	.1558666	.1101263	1.42	0.157	-.0600307	.3717639
CMnumb1cumbbersome	.0323893	.0875879	0.37	0.712	-.1393226	.2041012
CMnumb2cumbbersome	.1044207	.0844333	1.24	0.216	-.0611067	.2699481
CMnumb3cumbbersome	.1106902	.0821184	1.35	0.178	-.0502989	.2716794
CMnumb4cumbbersome	.059451	.095356	0.62	0.533	-.1274898	.2463919
CMnumb5cumbbersome	.0040584	.0860745	0.05	0.962	-.1646865	.1728034

Pr(non-negated question) = pcm
Pr(surrogate "yes") = pyes
Pr(surrogate "no") = pno

(1) FRwheel1cumbbersome = 0
(2) FRwheel2cumbbersome = 0
(3) FRwheel3cumbbersome = 0
(4) FRwheel4cumbbersome = 0
(5) FRwheel5cumbbersome = 0
F(5, 4862) = 1.12
Prob > F = 0.3481

(1) FRnumb1cumbbersome = 0
(2) FRnumb2cumbbersome = 0
(3) FRnumb3cumbbersome = 0
(4) FRnumb4cumbbersome = 0
(5) FRnumb5cumbbersome = 0
F(5, 4862) = 0.65
Prob > F = 0.6582

(1) UQbenf1cumbbersome = 0
(2) UQbenf2cumbbersome = 0
(3) UQbenf3cumbbersome = 0
(4) UQbenf4cumbbersome = 0
(5) UQbenf5cumbbersome = 0
F(5, 4862) = 6.21
Prob > F = 0.0000

(1) CMquest1cumbbersome = 0
(2) CMquest2cumbbersome = 0
(3) CMquest3cumbbersome = 0
(4) CMquest4cumbbersome = 0
(5) CMquest5cumbbersome = 0
F(5, 4862) = 1.76
Prob > F = 0.1175

(1) CMnumb1cumbbersome = 0
(2) CMnumb2cumbbersome = 0
(3) CMnumb3cumbbersome = 0
(4) CMnumb4cumbbersome = 0
(5) CMnumb5cumbbersome = 0
F(5, 4862) = 0.84
Prob > F = 0.5245

(1) FRwheel1cumbbersome = 0
(2) FRwheel2cumbbersome = 0
(3) FRwheel3cumbbersome = 0
(4) FRwheel4cumbbersome = 0
(5) FRwheel5cumbbersome = 0
(6) FRnumb1cumbbersome = 0
(7) FRnumb2cumbbersome = 0
(8) FRnumb3cumbbersome = 0
(9) FRnumb4cumbbersome = 0
(10) FRnumb5cumbbersome = 0
(11) UQbenf1cumbbersome = 0
(12) UQbenf2cumbbersome = 0
(13) UQbenf3cumbbersome = 0
(14) UQbenf4cumbbersome = 0
(15) UQbenf5cumbbersome = 0
(16) CMquest1cumbbersome = 0
(17) CMquest2cumbbersome = 0
(18) CMquest3cumbbersome = 0

- (19) CMquest4cumbersome = 0
- (20) CMquest5cumbersome = 0
- (21) CMnumb1cumbersome = 0
- (22) CMnumb2cumbersome = 0
- (23) CMnumb3cumbersome = 0
- (24) CMnumb4cumbersome = 0
- (25) CMnumb5cumbersome = 0

F(25, 4862) = 2.12
 Prob > F = 0.0010

==> correct

Randomized response regression

Number of obs = 21,351
 F(50, 4860) = 13.32
 Prob > F = 0.0000
 R-squared = 0.0390
 Adj R-squared = 0.0367
 Root MSE = 0.6835

(Std. Err. adjusted for 4,861 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
FRwheel1	.2215762	.1008786	2.20	0.028	.0238086	.4193438
FRwheel2	.124677	.0941289	1.32	0.185	-.0598581	.3092121
FRwheel3	-.0654762	.0716762	-0.91	0.361	-.2059939	.0750415
FRwheel4	.0122549	.0911727	0.13	0.893	-.1664848	.1909946
FRwheel5	.0514706	.0962631	0.53	0.593	-.1372486	.2401898
FRnumb1	.3179012	.0818377	3.88	0.000	.1574624	.4783401
FRnumb2	.1373457	.0735788	1.87	0.062	-.0069021	.2815935
FRnumb3	-.0408951	.057324	-0.71	0.476	-.153276	.0714859
FRnumb4	.0469697	.0762287	0.62	0.538	-.102473	.1964124
FRnumb5	-.1287879	.0508978	-2.53	0.011	-.2285705	-.0290052
UQbenf1	.3593336	.0939252	3.83	0.000	.1751977	.5434695
UQbenf2	.3081613	.0921941	3.34	0.001	.1274192	.4889033
UQbenf3	.2090079	.0868157	2.41	0.016	.0388099	.379206
UQbenf4	.0812957	.0881189	0.92	0.356	-.0914572	.2540486
UQbenf5	.2584347	.1044746	2.47	0.013	.0536172	.4632522
CMquest1	.3573854	.1800389	1.99	0.047	.0044278	.710343
CMquest2	.2756271	.167656	1.64	0.100	-.0530545	.6043087
CMquest3	.347606	.1769864	1.96	0.050	.0006326	.6945794
CMquest4	.1635235	.195658	0.84	0.403	-.2200548	.5471017
CMquest5	.1983501	.2099925	0.94	0.345	-.2133301	.6100303
CMnumb1	.2625	.1387912	1.89	0.059	-.0095936	.5345936
CMnumb2	.0875	.1281098	0.68	0.495	-.1636532	.3386532
CMnumb3	.15	.1326896	1.13	0.258	-.1101316	.4101316
CMnumb4	-.0258621	.1350185	-0.19	0.848	-.2905595	.2388353
CMnumb5	.0775862	.1470414	0.53	0.598	-.2106813	.3658538
FRwheel1correct	.0140443	.1033106	0.14	0.892	-.1884912	.2165798
FRwheel2correct	-.0134126	.096298	-0.14	0.889	-.2022002	.175375
FRwheel3correct	.0596879	.0737559	0.81	0.418	-.0849071	.2042829
FRwheel4correct	.001198	.0935567	0.01	0.990	-.1822155	.1846115
FRwheel5correct	-.0504741	.0984374	-0.51	0.608	-.2434559	.1425077
FRnumb1correct	-.1456853	.0846529	-1.72	0.085	-.3116433	.0202727
FRnumb2correct	.0015117	.0765553	0.02	0.984	-.1485714	.1515948
FRnumb3correct	.0293867	.0599155	0.49	0.624	-.0880748	.1468481
FRnumb4correct	-.0161342	.0792965	-0.20	0.839	-.1715912	.1393228
FRnumb5correct	.094464	.0545216	1.73	0.083	-.0124229	.201351
UQbenf1correct	-.1973254	.0959497	-2.06	0.040	-.3854302	-.0092206
UQbenf2correct	-.1867731	.0940855	-1.99	0.047	-.3712233	-.0023229
UQbenf3correct	-.1721106	.0883895	-1.95	0.052	-.3453941	.0011729
UQbenf4correct	-.0037359	.0904749	-0.04	0.967	-.18111075	.1736357
UQbenf5correct	-.2505988	.1060269	-2.36	0.018	-.4584595	-.0427381
CMquest1correct	-.0606535	.182483	-0.33	0.740	-.4184026	.2970957
CMquest2correct	-.0900513	.170117	-0.53	0.597	-.4235575	.243455
CMquest3correct	-.204053	.179279	-1.14	0.255	-.5555209	.1474149
CMquest4correct	-.0960634	.19816	-0.48	0.628	-.4845467	.2924199
CMquest5correct	-.1427578	.2122637	-0.67	0.501	-.5588907	.2733752
CMnumb1correct	-.0182756	.1416152	-0.13	0.897	-.2959054	.2593542

CMnumb2correct	.0221154	.1307938	0.17	0.866	-.2342997	.2785304
CMnumb3correct	-.1057206	.1350591	-0.78	0.434	-.3704974	.1590563
CMnumb4correct	.118496	.1383515	0.86	0.392	-.1527355	.3897275
CMnumb5correct	-.0831749	.1496635	-0.56	0.578	-.3765831	.2102333

```

Pr(non-negated question) = pcm
Pr(surrogate "yes")      = pyes
Pr(surrogate "no")       = pno

( 1) FRwheel1correct = 0
( 2) FRwheel2correct = 0
( 3) FRwheel3correct = 0
( 4) FRwheel4correct = 0
( 5) FRwheel5correct = 0
      F( 5, 4860) = 0.23
      Prob > F = 0.9509

( 1) FRnumb1correct = 0
( 2) FRnumb2correct = 0
( 3) FRnumb3correct = 0
( 4) FRnumb4correct = 0
( 5) FRnumb5correct = 0
      F( 5, 4860) = 1.47
      Prob > F = 0.1963

( 1) UQbenf1correct = 0
( 2) UQbenf2correct = 0
( 3) UQbenf3correct = 0
( 4) UQbenf4correct = 0
( 5) UQbenf5correct = 0
      F( 5, 4860) = 2.44
      Prob > F = 0.0323

( 1) CMquest1correct = 0
( 2) CMquest2correct = 0
( 3) CMquest3correct = 0
( 4) CMquest4correct = 0
( 5) CMquest5correct = 0
      F( 5, 4860) = 0.43
      Prob > F = 0.8276

( 1) CMnumb1correct = 0
( 2) CMnumb2correct = 0
( 3) CMnumb3correct = 0
( 4) CMnumb4correct = 0
( 5) CMnumb5correct = 0
      F( 5, 4860) = 0.37
      Prob > F = 0.8682

( 1) FRwheel1correct = 0
( 2) FRwheel2correct = 0
( 3) FRwheel3correct = 0
( 4) FRwheel4correct = 0
( 5) FRwheel5correct = 0
( 6) FRnumb1correct = 0
( 7) FRnumb2correct = 0
( 8) FRnumb3correct = 0
( 9) FRnumb4correct = 0
(10) FRnumb5correct = 0
(11) UQbenf1correct = 0
(12) UQbenf2correct = 0
(13) UQbenf3correct = 0
(14) UQbenf4correct = 0
(15) UQbenf5correct = 0
(16) CMquest1correct = 0
(17) CMquest2correct = 0
(18) CMquest3correct = 0
(19) CMquest4correct = 0
(20) CMquest5correct = 0
(21) CMnumb1correct = 0

```

(22) CMnumb2correct = 0
 (23) CMnumb3correct = 0
 (24) CMnumb4correct = 0
 (25) CMnumb5correct = 0
 F(25, 4860) = 0.99
 Prob > F = 0.4797

==> tprotect

Randomized response regression

Number of obs = 21,339
 F(50, 4858) = 13.29
 Prob > F = 0.0000
 R-squared = 0.0392
 Adj R-squared = 0.0369
 Root MSE = 0.6832

(Std. Err. adjusted for 4,859 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
FRwheel1	.2443767	.0330811	7.39	0.000	.1795227	.3092306
FRwheel2	.1069783	.0299312	3.57	0.000	.0482995	.1656571
FRwheel3	-.0625509	.0228344	-2.74	0.006	-.1073167	-.0177851
FRwheel4	.0325397	.0313431	1.04	0.299	-.0289069	.0939863
FRwheel5	-.0161376	.0289912	-0.56	0.578	-.0729734	.0406983
FRnumb1	.1765233	.0363964	4.85	0.000	.1051698	.2478768
FRnumb2	.1324164	.0352106	3.76	0.000	.0633878	.201445
FRnumb3	-.0303848	.0282716	-1.07	0.283	-.0858098	.0250403
FRnumb4	.0193432	.0343706	0.56	0.574	-.0480388	.0867252
FRnumb5	-.0447154	.0307884	-1.45	0.146	-.1050746	.0156437
UQbenf1	.2047214	.031895	6.42	0.000	.1421928	.26725
UQbenf2	.1182631	.0292999	4.04	0.000	.0608219	.1757042
UQbenf3	.0374608	.025975	1.44	0.149	-.0134619	.0883836
UQbenf4	.1049112	.033412	3.14	0.002	.0394086	.1704137
UQbenf5	.0098923	.0285299	0.35	0.729	-.0460391	.0658238
CMquest1	.2570721	.0502338	5.12	0.000	.1585911	.3555531
CMquest2	.1723873	.0479888	3.59	0.000	.0783076	.2664671
CMquest3	.2700326	.051293	5.26	0.000	.169475	.3705901
CMquest4	.0458921	.0521646	0.88	0.379	-.0563742	.1481584
CMquest5	.0632821	.0522667	1.21	0.226	-.0391844	.1657485
CMnumb1	.3329741	.0569842	5.84	0.000	.2212592	.444689
CMnumb2	.1799569	.0540846	3.33	0.001	.0739265	.2859873
CMnumb3	-.008658	.0475767	-0.18	0.856	-.1019299	.0846138
CMnumb4	.1168478	.0583515	2.00	0.045	.0024525	.2312431
CMnumb5	.0298913	.0547781	0.55	0.585	-.0774986	.1372812
FRwheel1tprotect	-.0167948	.0439077	-0.38	0.702	-.1028737	.0692842
FRwheel2tprotect	.0111417	.0400483	0.28	0.781	-.0673711	.0896544
FRwheel3tprotect	.0951641	.0331643	2.87	0.004	.030147	.1601812
FRwheel4tprotect	-.034047	.0413517	-0.82	0.410	-.1151151	.0470211
FRwheel5tprotect	.0361634	.0402349	0.90	0.369	-.0427152	.115042
FRnumb1tprotect	.0080742	.0444869	0.18	0.856	-.0791402	.0952887
FRnumb2tprotect	.0072024	.043037	0.17	0.867	-.0771697	.0915744
FRnumb3tprotect	.0236872	.0349448	0.68	0.498	-.0448204	.0921948
FRnumb4tprotect	.019203	.043359	0.44	0.658	-.0658002	.1042063
FRnumb5tprotect	.0009426	.0383507	0.02	0.980	-.0742422	.0761273
UQbenf1tprotect	-.0536705	.0399947	-1.34	0.180	-.1320782	.0247372
UQbenf2tprotect	.019774	.0377506	0.52	0.600	-.0542342	.0937822
UQbenf3tprotect	.0123941	.0335127	0.37	0.712	-.053306	.0780941
UQbenf4tprotect	-.0460842	.0416179	-1.11	0.268	-.1276741	.0355056
UQbenf5tprotect	.0185143	.0369446	0.50	0.616	-.0539139	.0909425
CMquest1tprotect	.0529527	.0618448	0.86	0.392	-.068291	.1741964
CMquest2tprotect	.0206998	.0594892	0.35	0.728	-.0959259	.1373255
CMquest3tprotect	-.1761698	.0613159	-2.87	0.004	-.2963767	-.0559629
CMquest4tprotect	.0448573	.0649213	0.69	0.490	-.0824179	.1721325
CMquest5tprotect	-.0077045	.0645269	-0.12	0.905	-.1342064	.1187975
CMnumb1tprotect	-.1137865	.0651242	-1.75	0.081	-.2414593	.0138864
CMnumb2tprotect	-.0942926	.0615397	-1.53	0.126	-.2149382	.0263531
CMnumb3tprotect	.0778888	.0557243	1.40	0.162	-.031356	.1871336
CMnumb4tprotect	-.0416051	.0676166	-0.62	0.538	-.1741642	.090954

CMnumb5tprotect	-.0420508	.0633204	-0.66	0.507	-.1661874	.0820857
-----------------	-----------	----------	-------	-------	-----------	----------

```

Pr(non-negated question) = pcm
Pr(surrogate "yes")      = pyes
Pr(surrogate "no")       = pno

( 1) FRwheel1tprotect = 0
( 2) FRwheel2tprotect = 0
( 3) FRwheel3tprotect = 0
( 4) FRwheel4tprotect = 0
( 5) FRwheel5tprotect = 0
      F( 5, 4858) = 1.93
      Prob > F = 0.0857

( 1) FRnumb1tprotect = 0
( 2) FRnumb2tprotect = 0
( 3) FRnumb3tprotect = 0
( 4) FRnumb4tprotect = 0
( 5) FRnumb5tprotect = 0
      F( 5, 4858) = 0.13
      Prob > F = 0.9858

( 1) UQbenf1tprotect = 0
( 2) UQbenf2tprotect = 0
( 3) UQbenf3tprotect = 0
( 4) UQbenf4tprotect = 0
( 5) UQbenf5tprotect = 0
      F( 5, 4858) = 0.94
      Prob > F = 0.4537

( 1) CMquest1tprotect = 0
( 2) CMquest2tprotect = 0
( 3) CMquest3tprotect = 0
( 4) CMquest4tprotect = 0
( 5) CMquest5tprotect = 0
      F( 5, 4858) = 1.95
      Prob > F = 0.0829

( 1) CMnumb1tprotect = 0
( 2) CMnumb2tprotect = 0
( 3) CMnumb3tprotect = 0
( 4) CMnumb4tprotect = 0
( 5) CMnumb5tprotect = 0
      F( 5, 4858) = 1.55
      Prob > F = 0.1702

( 1) FRwheel1tprotect = 0
( 2) FRwheel2tprotect = 0
( 3) FRwheel3tprotect = 0
( 4) FRwheel4tprotect = 0
( 5) FRwheel5tprotect = 0
( 6) FRnumb1tprotect = 0
( 7) FRnumb2tprotect = 0
( 8) FRnumb3tprotect = 0
( 9) FRnumb4tprotect = 0
(10) FRnumb5tprotect = 0
(11) UQbenf1tprotect = 0
(12) UQbenf2tprotect = 0
(13) UQbenf3tprotect = 0
(14) UQbenf4tprotect = 0
(15) UQbenf5tprotect = 0
(16) CMquest1tprotect = 0
(17) CMquest2tprotect = 0
(18) CMquest3tprotect = 0
(19) CMquest4tprotect = 0
(20) CMquest5tprotect = 0
(21) CMnumb1tprotect = 0
(22) CMnumb2tprotect = 0
(23) CMnumb3tprotect = 0
(24) CMnumb4tprotect = 0

```



```

Pr(surrogate "yes")      = pyes
Pr(surrogate "no")     = pno

( 1) FRwheel1sense = 0
( 2) FRwheel2sense = 0
( 3) FRwheel3sense = 0
( 4) FRwheel4sense = 0
( 5) FRwheel5sense = 0
      F( 5, 4857) = 1.01
      Prob > F = 0.4084

( 1) FRnumb1sense = 0
( 2) FRnumb2sense = 0
( 3) FRnumb3sense = 0
( 4) FRnumb4sense = 0
( 5) FRnumb5sense = 0
      F( 5, 4857) = 0.24
      Prob > F = 0.9466

( 1) UQbenf1sense = 0
( 2) UQbenf2sense = 0
( 3) UQbenf3sense = 0
( 4) UQbenf4sense = 0
( 5) UQbenf5sense = 0
      F( 5, 4857) = 1.07
      Prob > F = 0.3742

( 1) CMquest1sense = 0
( 2) CMquest2sense = 0
( 3) CMquest3sense = 0
( 4) CMquest4sense = 0
( 5) CMquest5sense = 0
      F( 5, 4857) = 0.45
      Prob > F = 0.8165

( 1) CMnumb1sense = 0
( 2) CMnumb2sense = 0
( 3) CMnumb3sense = 0
( 4) CMnumb4sense = 0
( 5) CMnumb5sense = 0
      F( 5, 4857) = 2.51
      Prob > F = 0.0282

( 1) FRwheel1sense = 0
( 2) FRwheel2sense = 0
( 3) FRwheel3sense = 0
( 4) FRwheel4sense = 0
( 5) FRwheel5sense = 0
( 6) FRnumb1sense = 0
( 7) FRnumb2sense = 0
( 8) FRnumb3sense = 0
( 9) FRnumb4sense = 0
(10) FRnumb5sense = 0
(11) UQbenf1sense = 0
(12) UQbenf2sense = 0
(13) UQbenf3sense = 0
(14) UQbenf4sense = 0
(15) UQbenf5sense = 0
(16) CMquest1sense = 0
(17) CMquest2sense = 0
(18) CMquest3sense = 0
(19) CMquest4sense = 0
(20) CMquest5sense = 0
(21) CMnumb1sense = 0
(22) CMnumb2sense = 0
(23) CMnumb3sense = 0
(24) CMnumb4sense = 0
(25) CMnumb5sense = 0
      F( 25, 4857) = 1.05
      Prob > F = 0.3885

```

==> understand

Randomized response regression

Number of obs = 21,351
 F(50, 4860) = 13.05
 Prob > F = 0.0000
 R-squared = 0.0387
 Adj R-squared = 0.0365
 Root MSE = 0.6830

(Std. Err. adjusted for 4,861 clusters in id)

sq	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
FRwheel1	.2402963	.0346908	6.93	0.000	.1722866	.308306
FRwheel2	.1091164	.0314115	3.47	0.001	.0475357	.1706972
FRwheel3	-.0343137	.0255532	-1.34	0.179	-.0844096	.0157821
FRwheel4	.0280661	.0325946	0.86	0.389	-.035834	.0919663
FRwheel5	-.0042291	.0310725	-0.14	0.892	-.0651452	.0566869
FRnumb1	.159334	.0352662	4.52	0.000	.0901963	.2284718
FRnumb2	.1443406	.0349646	4.13	0.000	.0757942	.212887
FRnumb3	-.0378159	.0274363	-1.38	0.168	-.0916035	.0159718
FRnumb4	.0383491	.0355283	1.08	0.280	-.0313024	.1080005
FRnumb5	-.04528	.0308026	-1.47	0.142	-.1056671	.0151071
UQbenf1	.1485156	.0285569	5.20	0.000	.0925311	.2045001
UQbenf2	.1279157	.0279216	4.58	0.000	.0731767	.1826546
UQbenf3	.023192	.0237893	0.97	0.330	-.0234457	.0698298
UQbenf4	.0908662	.0308779	2.94	0.003	.0303316	.1514008
UQbenf5	.0055197	.0265504	0.21	0.835	-.0465311	.0575705
CMquest1	.2460448	.0465686	5.28	0.000	.1547493	.3373404
CMquest2	.1881622	.0457079	4.12	0.000	.0985541	.2777704
CMquest3	.2256949	.0473725	4.76	0.000	.1328234	.3185663
CMquest4	.1128488	.0518842	2.18	0.030	.0111323	.2145653
CMquest5	.0434454	.0492235	0.88	0.377	-.053055	.1399458
CMnumb1	.2960123	.0477352	6.20	0.000	.2024298	.3895948
CMnumb2	.1334356	.0446475	2.99	0.003	.0459063	.2209648
CMnumb3	-.0115385	.0401116	-0.29	0.774	-.0901753	.0670984
CMnumb4	.111336	.0509638	2.18	0.029	.0114239	.2112482
CMnumb5	.0302419	.0480504	0.63	0.529	-.0639587	.1244425
FRwheel1understand	-.0106474	.044488	-0.24	0.811	-.0978639	.0765691
FRwheel2understand	.0057145	.0405361	0.14	0.888	-.0737547	.0851836
FRwheel3understand	.0393205	.0338861	1.16	0.246	-.0271115	.1057525
FRwheel4understand	-.0249126	.0418349	-0.60	0.552	-.106928	.0571027
FRwheel5understand	.0166419	.0408883	0.41	0.684	-.0635177	.0968015
FRnumb1understand	.0341027	.0438003	0.78	0.436	-.0517657	.1199711
FRnumb2understand	-.0082951	.0429208	-0.19	0.847	-.0924393	.0758491
FRnumb3understand	.0352787	.0344568	1.02	0.306	-.0322722	.1028296
FRnumb4understand	-.0107545	.0439839	-0.24	0.807	-.0969828	.0754739
FRnumb5understand	.0013595	.0383316	0.04	0.972	-.0737878	.0765068
UQbenf1understand	.0424843	.0386652	1.10	0.272	-.033317	.1182857
UQbenf2understand	.0039133	.0372236	0.11	0.916	-.0690617	.0768883
UQbenf3understand	.0380869	.0327292	1.16	0.245	-.0260772	.1022509
UQbenf4understand	-.0256809	.0404302	-0.64	0.525	-.1049424	.0535807
UQbenf5understand	.0238026	.0361162	0.66	0.510	-.0470015	.0946067
CMquest1understand	.0797521	.0599672	1.33	0.184	-.0378108	.1973151
CMquest2understand	-.0010841	.0583992	-0.02	0.985	-.115573	.1134047
CMquest3understand	-.1238758	.0589428	-2.10	0.036	-.2394303	-.0083213
CMquest4understand	-.0596969	.0648194	-0.92	0.357	-.1867722	.0673784
CMquest5understand	.0167546	.0628197	0.27	0.790	-.1064003	.1399096
CMnumb1understand	-.0749978	.0584847	-1.28	0.200	-.1896542	.0396586
CMnumb2understand	-.0353648	.0547528	-0.65	0.518	-.1427051	.0719754
CMnumb3understand	.0907185	.0508648	1.78	0.075	-.0089995	.1904365
CMnumb4understand	-.0390402	.0624075	-0.63	0.532	-.1613872	.0833068
CMnumb5understand	-.0485346	.0584741	-0.83	0.407	-.1631703	.0661011

Pr(non-negated question) = pcm
 Pr(surrogate "yes") = pyes
 Pr(surrogate "no") = pno

(1) FRwheel1understand = 0

```

( 2) FRwheel2understand = 0
( 3) FRwheel3understand = 0
( 4) FRwheel4understand = 0
( 5) FRwheel5understand = 0
      F( 5, 4860) = 0.37
      Prob > F = 0.8669

( 1) FRnumb1understand = 0
( 2) FRnumb2understand = 0
( 3) FRnumb3understand = 0
( 4) FRnumb4understand = 0
( 5) FRnumb5understand = 0
      F( 5, 4860) = 0.34
      Prob > F = 0.8866

( 1) UQbenf1understand = 0
( 2) UQbenf2understand = 0
( 3) UQbenf3understand = 0
( 4) UQbenf4understand = 0
( 5) UQbenf5understand = 0
      F( 5, 4860) = 0.78
      Prob > F = 0.5643

( 1) CMquest1understand = 0
( 2) CMquest2understand = 0
( 3) CMquest3understand = 0
( 4) CMquest4understand = 0
( 5) CMquest5understand = 0
      F( 5, 4860) = 1.40
      Prob > F = 0.2221

( 1) CMnumb1understand = 0
( 2) CMnumb2understand = 0
( 3) CMnumb3understand = 0
( 4) CMnumb4understand = 0
( 5) CMnumb5understand = 0
      F( 5, 4860) = 1.26
      Prob > F = 0.2766

( 1) FRwheel1understand = 0
( 2) FRwheel2understand = 0
( 3) FRwheel3understand = 0
( 4) FRwheel4understand = 0
( 5) FRwheel5understand = 0
( 6) FRnumb1understand = 0
( 7) FRnumb2understand = 0
( 8) FRnumb3understand = 0
( 9) FRnumb4understand = 0
(10) FRnumb5understand = 0
(11) UQbenf1understand = 0
(12) UQbenf2understand = 0
(13) UQbenf3understand = 0
(14) UQbenf4understand = 0
(15) UQbenf5understand = 0
(16) CMquest1understand = 0
(17) CMquest2understand = 0
(18) CMquest3understand = 0
(19) CMquest4understand = 0
(20) CMquest5understand = 0
(21) CMnumb1understand = 0
(22) CMnumb2understand = 0
(23) CMnumb3understand = 0
(24) CMnumb4understand = 0
(25) CMnumb5understand = 0
      F( 25, 4860) = 0.83
      Prob > F = 0.7041

. restore
.
. // Results (significant effects)

```

```

. //
. // trust:
. // n.s. overall
. // p=0.025 FRwheel
. // + p=0.001 FRwheel #3
. // + p=0.026 DQ #4
. //
. // risk: overall test insignificant
. // - p=0.047 UQbenf #5
. //
. // cumbersome:
. // p=0.001 overall
. // p<0.001 UQbenf
. // + p=0.025 UQbenf #2
. // + p=0.044 UQbenf #3
. // + p=0.000 UQbenf #4
. // + p=0.000 UQbenf #5
. // + p=0.021 CMquest #1
. //
. // correct:
. // n.s. overall
. // p=0.032 UQbenf
. // - p=0.040 UQbenf #1
. // - p=0.047 UQbenf #2
. // - p=0.052 UQbenf #3
. // - p=0.018 UQbenf #5
. //
. // tprotect:
. // n.s. overall
. // + p=0.004 FRwheel #3
. // - p=0.004 CMquest #3
. //
. // sense:
. // n.s. overall
. // - p=0.003 CMnumb #5
. //
. // understand:
. // n.s. overall
. // - p=0.036 CMquest #3
. //
. // Summary:
. // - cumbersome has positive effect on prevalence for UQbenf
. // - correct has negative effect on prevalence for UQbenf

```

5.5 Subgroup differences

Subgroup differences in the prevalence estimates and the effects of the experimental conditions are analyzed by means of interaction terms. Analyzed subgroups are:

- ETH Zurich vs. University of Bern
- Science students vs. social science or humanities students
- females vs. males

```

. gen byte ETHZ = cond(sample>=2,1,0)
. lab var ETHZ "ETHZ vs. UniBE"
. fre ETHZ
ETHZ — ETHZ vs. UniBE

```

		Freq.	Percent	Valid	Cum.
Valid	0	2476	39.25	39.25	39.25
	1	3833	60.75	60.75	100.00

Total	6309	100.00	100.00
-------	------	--------	--------

```
. gen byte science = cond(inlist(q3_3cat,1,4,11,12,13,14),1, ///
> cond(inlist(q3_3cat,2,3,5,6,7,8,15),0,.))
(162 missing values generated)
```

```
. lab var science "science vs. social science and humanities"
. fre science
science — science vs. social science and humanities
```

		Freq.	Percent	Valid	Cum.
Valid	0	1723	27.31	28.03	28.03
	1	4424	70.12	71.97	100.00
	Total	6147	97.43	100.00	
Missing	.	162	2.57		
Total		6309	100.00		

```
. gen byte female = cond(q3_2==1,1,0) if !missing(q3_2)
(82 missing values generated)
```

```
. lab var female "female vs. male"
. fre female
female — female vs. male
```

		Freq.	Percent	Valid	Cum.
Valid	0	3430	54.37	55.08	55.08
	1	2797	44.33	44.92	100.00
	Total	6227	98.70	100.00	
Missing	.	82	1.30		
Total		6309	100.00		

```
. corr ETHZ science female
(obs=6,085)
```

	ETHZ	science	female
ETHZ	1.0000		
science	0.7075	1.0000	
female	-0.2371	-0.1989	1.0000

```
. foreach group in ETHZ science female {
2. local ints
3. foreach sq in FRwheel FRnumb UQbenf CMquest CMnumb {
4. qui gen `sq'x`group' = `sq'*`group'
5. local ints `ints' `sq'x`group'
6. }
7. foreach v in q14 q16 q17 q18 q19 {
8. qui rrreg `v' FRwheel FRnumb UQbenf CMquest CMnumb `group' `ints' ///
> , hc2 pyes(`v'_pyes) pno(`v'_pno) pwarner(`v'_pcm)
9. est sto `group'_`v'
10. }
11. }

. foreach group in ETHZ science female {
2. esttab `group'_*, replace transform(@*100 100) b(2) se nonum compress ///
> varwidth(15) title(Subgroup differences: `: var lab `group') nonote
3. }
```

Subgroup differences: ETHZ vs. UniBE

	q14	q16	q17	q18	q19
FRwheel	5.53 (3.88)	3.38 (3.33)	-4.18 (2.88)	-4.26 (3.09)	2.00 (3.23)
FRnumb	-2.98 (3.71)	-1.53 (3.19)	-7.90** (2.71)	1.12 (3.38)	-7.98** (2.69)
UQbenf	0.92	3.02	-2.72	2.16	1.75

	(3.61)	(3.08)	(2.65)	(3.08)	(2.88)
CMquest	11.69*	10.77*	9.13*	4.06	3.78
	(4.89)	(4.53)	(4.45)	(4.87)	(4.72)
CMnumb	5.40	1.89	4.75	4.50	-2.95
	(4.66)	(4.14)	(4.07)	(4.58)	(4.19)
ETHZ	-2.63	1.79	-1.97	1.62	1.53
	(2.47)	(1.79)	(1.28)	(1.27)	(0.83)
FRwheelxETHZ	-1.70	-1.87	-0.37	3.89	-5.34
	(4.94)	(4.32)	(3.62)	(4.16)	(4.11)
FRnumbxETHZ	6.85	10.77*	4.34	-3.34	3.99
	(4.82)	(4.31)	(3.51)	(4.34)	(3.68)
UQbenfxETHZ	-2.22	1.59	6.98*	2.99	-1.22
	(4.56)	(4.05)	(3.48)	(4.10)	(3.75)
CMquestxETHZ	0.30	-3.99	3.18	-0.11	2.51
	(6.29)	(5.87)	(5.73)	(6.29)	(6.16)
CMnumbxETHZ	2.99	0.56	-6.00	1.83	3.47
	(5.99)	(5.41)	(5.12)	(5.97)	(5.51)
_cons	19.16***	7.86***	4.93***	2.34**	0.67
	(1.95)	(1.34)	(1.08)	(0.88)	(0.47)
N	6094	6078	6057	4491	4487

Subgroup differences: science vs. social science and humanities

	q14	q16	q17	q18	q19
FRwheel	4.41	2.46	0.16	-7.57*	-0.66
	(4.68)	(4.09)	(3.53)	(3.42)	(3.48)
FRnumb	0.31	-3.54	-4.63	-2.47	-10.24***
	(4.61)	(3.92)	(3.31)	(3.75)	(2.82)
UQbenf	0.32	-0.78	-3.18	0.34	1.01
	(4.40)	(3.71)	(3.01)	(3.50)	(3.19)
CMquest	9.48	14.24**	6.52	1.46	2.12
	(5.77)	(5.51)	(5.05)	(5.40)	(5.13)
CMnumb	14.59*	5.50	4.08	6.81	-0.07
	(5.77)	(5.20)	(4.80)	(5.42)	(4.92)
science	-5.54*	-1.68	0.16	-0.52	1.60*
	(2.76)	(2.05)	(1.31)	(1.38)	(0.76)
FRwheelxscience	0.75	-0.10	-5.76	8.09	-0.93
	(5.48)	(4.81)	(4.09)	(4.32)	(4.29)
FRnumbxscience	2.32	12.35**	-0.89	3.05	6.74
	(5.38)	(4.71)	(3.88)	(4.56)	(3.69)
UQbenfxscience	-0.01	7.18	6.55	5.38	0.64
	(5.10)	(4.42)	(3.67)	(4.31)	(3.94)
CMquestxscience	5.79	-7.79	7.00	3.48	5.43
	(6.84)	(6.48)	(6.09)	(6.59)	(6.39)
CMnumbxscience	-7.83	-4.49	-3.47	-0.71	-0.89
	(6.71)	(6.07)	(5.63)	(6.49)	(5.95)
_cons	20.77***	9.86***	3.52**	3.35**	0.42
	(2.41)	(1.77)	(1.10)	(1.17)	(0.42)
N	5952	5936	5915	4380	4377

Subgroup differences: female vs. male

	q14	q16	q17	q18	q19
FRwheel	3.81	-2.44	-1.81	-0.73	-0.80
	(3.24)	(2.88)	(2.44)	(3.00)	(2.84)
FRnumb	1.76	5.51	-4.61*	1.41	-6.70**
	(3.14)	(2.99)	(2.27)	(2.96)	(2.46)

UQbenf	1.05 (2.98)	5.24 (2.84)	4.13 (2.37)	4.94 (2.87)	2.17 (2.59)
CMquest	11.49** (4.05)	3.68 (3.81)	8.94* (3.62)	2.49 (4.05)	5.49 (4.00)
CMnumb	7.16 (4.00)	0.03 (3.72)	2.64 (3.44)	5.19 (4.17)	-4.47 (3.74)
female	3.27 (2.43)	-3.54* (1.79)	2.01 (1.24)	-0.84 (1.32)	-0.31 (0.92)
FRwheelxfemale	1.69 (4.86)	10.27* (4.28)	-5.89 (3.52)	-2.37 (4.19)	-0.25 (4.05)
FRnumbxfemale	-0.89 (4.82)	-2.59 (4.34)	-2.07 (3.50)	-5.09 (4.26)	3.14 (3.81)
UQbenxfemale	-3.50 (4.48)	-3.42 (3.99)	-5.98 (3.46)	-2.34 (4.11)	-2.85 (3.69)
CMquestxfemale	1.65 (6.28)	11.72* (5.89)	5.23 (5.76)	3.18 (6.31)	-1.24 (6.17)
CMnumbxfemale	-0.46 (5.91)	4.06 (5.36)	-4.44 (4.97)	1.92 (5.95)	7.62 (5.51)
_cons	16.06*** (1.56)	10.65*** (1.31)	2.89*** (0.71)	3.76*** (0.95)	1.75** (0.66)
N	6026	6010	5990	4434	4429

6 Graphs and tables log file

Stata/MP 14.1; required packages: estout, estwrite, erepost, coefplot

6.1 Graphs for prevalence estimates

```
. set scheme simono
. program swapnames // rename nl estimates
1.   qui est restore `0'
2.   tempname b
3.   mat `b' = e(b)
4.   mata: st_matrixcolstripe("`b'", st_matrixcolstripe("`b'")[., (2,1)])
5.   erepost b=`b', rename
6.   qui est store `0'
7.   end

. program addbox
1.   args est w
2.   qui est restore `est'
3.   local h = `w'/2 // character halfwidth
4.   local m = `w'/2 * .25 // outer margin
5.   mata: st_matrix("e(box)", ///
>   (st_matrix("e(b)") :- `m' :- ///
>   (strlen(stofreal(st_matrix("e(b)")*100,"%9.0f"))*`h')) ///
>   \ (st_matrix("e(b)") :+ `m' :+ ///
>   (strlen(stofreal(st_matrix("e(b)")*100,"%9.0f"))*`h'))))
6.   qui est sto `est'
7.   end

. program mlrrt_pr
1.   tempname b ci V
2.   qui est restore `0'
3.   mata: mlrrt_dif("`b'", "`ci'")
4.   qui est restore `0'_d
5.   qui estadd matrix ci = `ci'
6.   mat `V' = `b' * `b' * 0
7.   erepost b=`b' V=`V'
8.   qui est sto `0'_d
9.   qui est restore `0'
10.  mata: mlrrt_levels("`b'", "`ci'")
11.  qui estadd matrix ci = `ci'
12.  mat `V' = `b' * `b' * 0
13.  erepost b=`b' V=`V'
14.  qui est sto `0'
15.  end

. mata
----- mata (type end to exit) -----
: void mlrrt_levels(string scalar b0, string scalar ci) {
>   b = st_matrix("e(b)")
>   se = sqrt(diagonal(st_matrix("e(V)")))'
>   st_matrix(b0, invlogit(b))
>   st_matrix(ci, (invlogit(b - invnormal(0.975):*se) \
>   invlogit(b + invnormal(0.975):*se)))
>   st_matrixcolstripe(b0, st_matrixcolstripe("e(b)"))
> }

: void mlrrt_dif(string scalar b0, string scalar ci) {
>   b = st_matrix("e(b)")
>   se = sqrt(diagonal(st_matrix("e(V)")))'
>   st_matrix(b0, (invlogit(b[|2 \ .|]):-invlogit(b[1])))
>   r = 100000
>   st_matrix(ci, mm_quantile((invlogit(rnormal(r,1,b[|2 \ .|],se[|2 \ .|])) :-
>   invlogit(rnormal(r,1,b[1],se[1]))),1,(0.025,0.975)'))
>   st_matrixcolstripe(b0, st_matrixcolstripe("e(b)")[|2,1 \ .,2|])
> }

: end
-----
```

```

. local q14 "copying from other students in exam"
. local q16 "using crib notes in exam"
. local q17 "taking drugs to enhance exam performance"
. local q18 "including plagiarism in paper"
. local q19 "handing in someone else's paper"
. forv i = 0/2 { // 0: all obs 1: good language 2: good language and no pretest
2. // graph by implementation
. est clear
3. qui estread log/main/detailed`i'
4. foreach v in q14 q16 q17 q18 q19 {
5.     swapnames `v'_nl
6.     mlrrt_pr `v'_ml
7. }
8. local ci 95
9. foreach e in "" "_nl" "_ml" {
10.    if "`e'=="_ml" local ci "ci"
11.    foreach v in q14 q16 q17 q18 q19 {
12.        addbox `v`e' 0.016
13.        addbox `v`e'_d 0.009
14.    }
15.    coefplot (q14`e', aseq(q14) ///
>         \ q16`e', aseq(q16) ///
>         \ q17`e', aseq(q17) ///
>         \ q18`e', aseq(q18) ///
>         \ q19`e', aseq(q19)), bylabel(Prevalence estimate in %) ///
>     || (q14`e'_d, aseq(q14) ///
>         \ q16`e'_d, aseq(q16) ///
>         \ q17`e'_d, aseq(q17) ///
>         \ q18`e'_d, aseq(q18) ///
>         \ q19`e'_d, aseq(q19)), bylabel(Difference to DQ) ///
>     || , if(!@ll<1 & @ul>25) ///
>     byopts(xrescale graphregion(margin(l=-5 b=0 t=2 r=2))) ///
>     xline(0, lstyle(grid)) rescale(100) xlabel(#7) ///
>     mlab msymbol(i) mlabpos(0) format(%9.0f) ///
>     ci(`ci' box) ciopts(recast(. rbar) barwidth(. 0.6) color(. white)) ///
>     eqlab("`q14'" "`q16'" "`q17'" "`q18'" "`q19'", angle(hor) wrap(13)) ///
>     coeflab(FRwheel = "FR Wheel" FRnumb = "FR Number" ///
>             UQbenf = "UQ Benford" CMquest = "CM Question" ///
>             CMnumb = "CM Number", labsize(*0.8))
16.    qui graph export log/grtab/detailed`i`e'.pdf, replace
17. }
18. }

```

6.2 Graphs for quality criteria

```

. forv i = 0/2 { // 0: all obs 1: good language 2: good language and no pretest
2. qui estread log/main/eval`i'
3. coefplot ///
>     breakoff, bylab("Break-off (%)") ///
>     || cumbersome, bylab("Technique is cumbersome (%)") ///
>     || nonresp, bylab("Item nonresponse (%)") ///
>     || correct, bylab("Applied technique correctly (%)") ///
>     || time, bylab("Answering time (seconds)") rescale(1) ///
>     || tprotect, bylab("Technique protects (%)") ///
>     || trust, bylab("Trust in anonymity (%)") ///
>     || sense, bylab("Technique is reasonable (%)") ///
>     || risk, bylab("Disclosure risk (%)") ///
>     || understand, bylab("Understood principle (%)") ///
>     ||, byopts(xrescale cols(2) graphregion(margin(l=-5 b=0 t=1 r=1))) ///
>     ms(d) rescale(100) ysize(7.4) xlabel(#6) ///
>     coeflab(FRwheel = "FR Wheel" ///
>             FRnumb = "FR Number" ///
>             UQbenf = "UQ Benford" ///
>             CMquest = "CM Question" ///

```

```

>          CMnumb = "CM Number")
4.   qui graph export log/grtab/eval`i'.pdf, replace
5. }

```

6.3 Tables for prevalence estimates

```

. program eappend
1.   args m1 eq1 m2 eq2
2.   tempname b1 V1 b2 V2
3.   qui est restore `m2'
4.   mat `b2' = e(b)
5.   mat `V2' = e(V)
6.   mat coleq `b2' = ```eq2''
7.   qui est restore `m1'
8.   mat `b1' = e(b)
9.   mat `V1' = e(V)
10.  mat coleq `b1' = ```eq1''
11.  mat `b1' = `b1', `b2'
12.  mat `V1' = (`V1', J(rowsof(`V1'), colsof(`V2'), 0)) \ ///
>      (J(rowsof(`V2'), colsof(`V1'), 0), `V2')
13.  erepost b = `b1' V = `V1', rename
14.  est sto `m1'
15. end

. local q14 "Copying from other students in exam"
. local q16 "Using crib notes in exam"
. local q17 "Taking drugs to enhance exam performance"
. local q18 "Including plagiarism in paper"
. local q19 "Handing in someone else's paper"
. forv i = 0/2 { // 0: all obs 1: good language 2: good language and no pretest
2.   // table by implementation
.   est clear
3.   qui estread log/main/detailed`i'
4.   foreach v in q14 q16 q17 q18 q19 {
5.     swapnames `v' _nl
6.   }
7.   foreach e in "" "_nl" "_ml" {
8.     if "`e'"=="_nl"      local eopt "transform(@*100 100) b(2)"
9.     else if "`e'"=="_ml"  local eopt "b(3)"
10.    else                  local eopt "transform(@*100 100) b(2)"
11.    foreach v in q14 q16 q17 q18 q19 {
12.      eappend `v'`e' "l" `v'`e'_d "d"
13.    }
14.    qui esttab q14`e' q16`e' q17`e' q18`e' q19`e' ///
>      using log/grtab/detailed`i'`e'.tex ///
>      , replace booktabs `eopt' se nostar nonum ///
>      mlab("`q14'" "`q16'" "`q17'" "`q18'" "`q19'", ///
>      prefix("\multicolumn{1}{v}{") suffix("{}")) nonote ///
>      eqlab("\textit{Levels}" "\textit{Differences}") ///
>      coeflabels(l:DQ "Direct questioning (DQ)" ///
>      l:FRwheel "FR Wheel" ///
>      l:FRnumb "FR Number" ///
>      l:UQbenf "UQ Benford" ///
>      l:CMquest "CM Question" ///
>      l:CMnumb "CM Number" ///
>      d:FRwheel "FR Wheel -- DQ" ///
>      d:FRnumb "FR Number -- DQ" ///
>      d:UQbenf "UQ Benford -- DQ" ///
>      d:CMquest "CM Question -- DQ" ///
>      d:CMnumb "CM Number -- DQ")
15.   }
16. }

```

6.4 Tables for quality criteria

```
. forv i = 0/2 { // 0: all obs 1: good language 2: good language and no pretest
2.   qui estread log/main/eval`i'
3.   qui esttab breakoff nonresp time trust risk ///
>   using log/grtab/eval`i'.tex ///
>   , replace booktabs eqlab(none) ///
>   transform(@*100 100, pattern(1 1 0 1 1)) b(2) se nostar nonum ///
>   mlab("Break-off (\%)") ///
>   "Item nonresponse (\%)") ///
>   "Answering time (seconds)" ///
>   "Trust in anonymity (\%)" ///
>   "Disclosure risk (\%)", ///
>   prefix("\multicolumn{1}{v}{") suffix("}") nonote ///
>   coeflabels(DQ "Direct questioning" ///
>   FRwheel "FR Wheel" ///
>   FRnumb  "FR Number" ///
>   UQbenf  "UQ Benford" ///
>   CMquest "CM Question" ///
>   CMnumb  "CM Number") ///
>   postfoot("\midrule")
4.   qui esttab cumbersome correct tprotect sense understand ///
>   using log/grtab/eval`i'.tex ///
>   , append booktabs eqlab(none) ///
>   transform(@*100 100) b(2) se nostar nonum ///
>   mlab("Technique is cumbersome (\%)") ///
>   "Applied technique correctly (\%)") ///
>   "Technique protects (\%)") ///
>   "Technique is reasonable (\%)") ///
>   "Understood principle (\%)", ///
>   prefix("\multicolumn{1}{v}{") suffix("}") nonote ///
>   coeflabels(DQ "Direct questioning" ///
>   FRwheel "FR Wheel" ///
>   FRnumb  "FR Number" ///
>   UQbenf  "UQ Benford" ///
>   CMquest "CM Question" ///
>   CMnumb  "CM Number") ///
>   prehead("%")
5. }
```