

Crying Wolf in the Lab

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Abstract

Keywords:

1 Introduction

A Tables

Table 1: WTP for Information (Discrepancy)

	(1)	(2)	(3)	(4)	(5)	(6)
FP costs	.17 (1.6)	.213** (2.3)	.062 (0.4)	.0744 (0.5)	.338** (2.3)	.37*** (2.7)
FN costs	.3*** (4.8)	.246*** (4.2)	.329*** (3.3)	.314*** (3.4)	.367*** (4.0)	.32*** (3.9)
Risk-averse			-.00425 (-0.0)	-.231 (-0.9)		
Risk-averse \times FP costs			.145 (0.7)	.217 (1.1)		
Risk-averse \times FN costs			-.0312 (-0.2)	-.125 (-1.0)		
Accur. beliefs					.132 (0.7)	.221 (0.9)
Accur. beliefs \times FP costs					-.381* (-1.9)	-.365* (-2.0)
Accur. beliefs \times FN costs					-.133 (-1.1)	-.145 (-1.3)
Constant	-.111 (-1.2)	.413*** (3.4)	-.139 (-1.0)	.463*** (2.6)	-.173 (-1.2)	.311* (1.7)
Prior dummies	No	Yes	No	Yes	No	Yes
Observations	744	744	690	690	744	744
Adjusted R^2	0.03	0.20	0.03	0.21	0.03	0.21

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2: WTP for Information (Discrepancy, demographic variables)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) est8	(9) est9
FP costs	.17 (1.6)	.196 (1.5)	.256** (2.1)	.0642 (0.4)	.159 (1.0)	.233** (2.0)	.266** (2.5)	.3** (2.0)	.325** (2.4)
FN costs	.3*** (4.8)	.277*** (3.3)	.208*** (2.7)	.407*** (4.2)	.313*** (3.3)	.272*** (3.9)	.232*** (3.6)	.365*** (3.9)	.335*** (3.7)
Male		-.131 (-0.7)	-.107 (-0.4)						
Male \times FP costs		-.0832 (-0.4)	-.124 (-0.6)						
Male \times FN costs		.0553 (0.4)	.0968 (0.8)						
Stat. class				-.0936 (-0.5)	.0477 (0.2)				
Stat. class \times FP costs				.165 (0.8)	.0859 (0.4)				
Stat. class \times FN costs				-.189 (-1.5)	-.116 (-1.0)				
>23 yrs						.0397 (0.2)	-.242 (-1.0)		
>23 yrs \times FP costs						-.331 (-1.4)	-.306 (-1.4)		
>23 yrs \times FN costs						.133 (0.9)	.071 (0.5)		
Good quiz								.222 (1.2)	.173 (0.7)
Good quiz \times FP costs								-.293 (-1.4)	-.254 (-1.4)
Good quiz \times FN costs								-.138 (-1.1)	-.185 (-1.6)
Constant	-.111 (-1.2)	-.0545 (-0.4)	.461*** (2.9)	-.045 (-0.3)	.379 (1.6)	-.118 (-1.1)	.455*** (3.2)	-.215 (-1.5)	.333* (1.9)
Prior dummies	No	No	Yes	No	Yes	No	Yes	No	Yes
Observations	744	744	744	744	744	744	744	744	744
Adjusted R^2	0.03	0.03	0.20	0.03	0.20	0.03	0.20	0.03	0.20

 t statistics in parentheses* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: WTP for Information (different risk aversion)

	(1) $\theta = 0$	(2) $\theta = 0.5$	(3) $\theta = 1.0$	(4) $\theta = 1.5$	(5) $\theta = 2.5$	(6) Heterogeneous θ
FP costs	.183* (1.8)	.212** (2.1)	.21** (2.0)	.165 (1.6)	.0499 (0.4)	.162 (1.3)
FN costs	.212*** (3.2)	.317*** (4.8)	.431*** (6.3)	.53*** (7.4)	.66*** (8.7)	.234*** (3.2)
Constant	.402*** (3.0)	.00285 (0.0)	-.516*** (-3.9)	-1.17*** (-8.8)	-1.67*** (-11.8)	-.0609 (-0.4)
Prior dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	594	594	594	594	594	594
Adjusted R^2	0.19	0.24	0.25	0.30	0.35	0.12

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: WTP for Information (different risk aversion)

	(1) $\theta = 0$	(2) $\theta = 0.5$	(3) $\theta = 1.0$	(4) $\theta = 1.5$	(5) $\theta = 2.5$
FP costs	.213** (2.3)	.246*** (2.6)	.246*** (2.6)	.201** (2.1)	.0858 (0.8)
FN costs	.246*** (4.2)	.348*** (5.9)	.46*** (7.5)	.556*** (8.8)	.687*** (10.2)
Constant	.413*** (3.4)	.0134 (0.1)	-.505*** (-4.1)	-1.16*** (-9.5)	-1.66*** (-12.8)
Prior dummies	Yes	Yes	Yes	Yes	Yes
Observations	744	744	744	744	744
Adjusted R^2	0.20	0.25	0.26	0.30	0.35

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Belief Elicitation: Discrepancy

	(1)	(2)	(3)	(4)	(5)	(6)
False neg. rate	-.0141 (-0.3)	-.014 (-0.3)	.0199 (0.2)	.0201 (0.2)	.101 (1.1)	.0992 (1.1)
False pos. rate	-.546*** (-10.4)	-.547*** (-10.5)	-.578*** (-7.4)	-.579*** (-7.5)	-.596*** (-7.1)	-.594*** (-7.1)
Good quiz			.00858 (0.4)	-.00576 (-0.2)		
Good quiz \times False neg. rate			-.0705 (-0.6)	-.0708 (-0.6)		
Good quiz \times False pos. rate			.0718 (0.7)	.0715 (0.7)		
Stat. class					.015 (0.7)	.0385 (1.0)
Stat. class \times False neg. rate					-.186 (-1.6)	-.185 (-1.6)
Stat. class \times False pos. rate					.0824 (0.8)	.0796 (0.7)
Constant	.0406*** (3.8)	-.00484 (-0.3)	.0364** (2.2)	-.00227 (-0.1)	.0315* (1.8)	-.0313 (-0.9)
Prior prob dummies	No	Yes	No	Yes	No	Yes
Observations	1488	1488	1488	1488	1488	1488
Adjusted R^2	0.07	0.08	0.07	0.08	0.07	0.08

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Informed Protection: Response to Reported Beliefs

	(1)	(2)	(3)	(4)
Informed protection				
Belief	2.18*** (18.5)	2.62*** (18.2)	2.56*** (13.2)	2.74*** (11.6)
Belief error		1.52*** (11.5)	1.47*** (8.8)	1.61*** (7.1)
Good quiz			.108 (1.0)	
Good quiz \times Belief			.14 (0.5)	
Good quiz \times Belief error			.11 (0.4)	
Stat. class				.127 (1.1)
Stat. class \times Belief				-.189 (-0.6)
Stat. class \times Belief error				-.135 (-0.5)
Constant	-.762*** (-14.3)	-.881*** (-15.7)	-.932*** (-11.5)	-.963*** (-10.0)
Observations	1487	1487	1487	1487
<i>AIC</i>	1566.82	1413.23	1414.64	1418.02

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Expected costs discrepancy

	(1)	(2)	(3)	(4)	(5)	(6)
FP costs	.0438 (0.4)	.0142 (0.1)	.0512 (0.4)	.0505 (0.3)	.0318 (0.2)	-.0582 (-0.4)
FN costs	-.0137 (-0.2)	.0227 (0.3)	-.132 (-1.4)	-.13 (-1.1)	.163** (2.0)	.287** (2.5)
Risk-averse			-.284 (-1.4)	.0641 (0.3)		
Risk-averse \times FP costs			-.0282 (-0.1)	-.0629 (-0.3)		
Risk-averse \times FN costs			.22* (1.9)	.269* (1.7)		
Accur. beliefs					.613*** (3.2)	.0902 (0.4)
Accur. beliefs \times FP costs					.0566 (0.3)	.185 (1.0)
Accur. beliefs \times FN costs					-.354*** (-3.0)	-.522*** (-3.5)
Constant	-.857*** (-8.9)	-.706*** (-6.4)	-.684*** (-5.4)	-.754*** (-4.7)	-1.17*** (-7.7)	-.758*** (-5.1)
Prior prob dummies	No	Yes	No	Yes	No	Yes
Observations	743	743	689	689	743	743
Adjusted R^2	-0.00	-0.00	-0.00	-0.00	0.02	0.04

t statistics in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 8: Expected costs discrepancy (without 10% outliers)

	(1)	(2)	(3)	(4)	(5)	(6)
FP costs	-.229*** (-4.2)	-.208*** (-4.0)	-.145** (-2.1)	-.122* (-1.9)	-.27*** (-3.2)	-.113* (-1.7)
FN costs	-.12*** (-4.2)	-.13*** (-4.1)	-.138*** (-3.5)	-.154*** (-3.8)	-.0714* (-1.7)	-.145*** (-3.8)
Risk-averse			-.135* (-1.9)	-.0101 (-0.1)		-.122* (-1.7)
Risk-averse \times FP costs			-.116 (-1.0)	-.103 (-1.0)		-.101 (-0.9)
Risk-averse \times FN costs			.0319 (0.5)	.0286 (0.4)		.0157 (0.3)
Accur. beliefs					.182*** (2.7)	.214*** (3.1)
Accur. beliefs \times FP costs					.102 (1.0)	
Accur. beliefs \times FN costs					-.0933 (-1.6)	
Constant	-.185*** (-5.6)	-.0718 (-1.6)	-.133*** (-3.5)	-.0814 (-1.4)	-.283*** (-5.0)	-.137* (-1.9)
Prior prob dummies	No	Yes	No	Yes	No	Yes
Observations	658	658	614	614	658	614
Adjusted R^2	0.05	0.07	0.06	0.09	0.06	0.11

t statistics in parentheses* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B Figures

Figure 1: Belief Updating

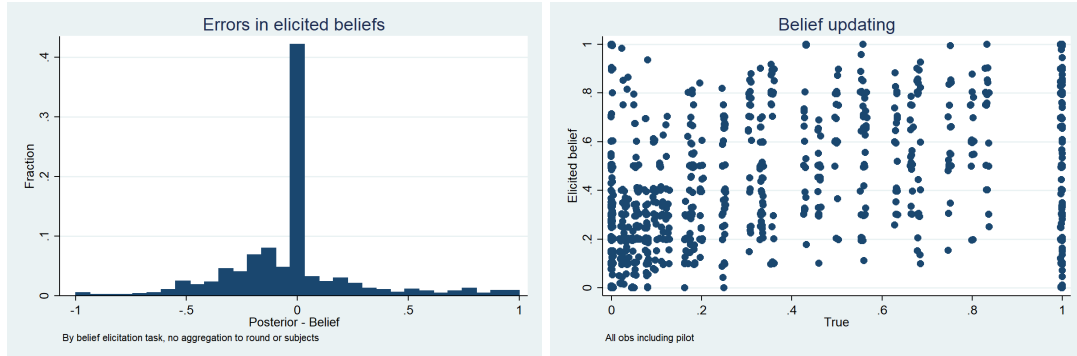


Figure 2: Following beliefs vs following posterior probabilities in IP



Figure 3: x

