

Crying Wolf in the Lab

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January 20, 2022

Abstract

Keywords:

1 Introduction

A Tables

Table 1: WTP for Information (Discrepancy)

	(1)	(2)	(3)	(4)	(5)	(6)
FP costs	.17 (0.1)	.213* (0.1)	.062 (0.2)	.0744 (0.2)	.338* (0.2)	.37** (0.2)
FN costs	.3*** (0.1)	.246*** (0.1)	.329*** (0.1)	.314*** (0.1)	.367*** (0.1)	.32*** (0.1)
Risk-averse			-.00425 (0.3)	-.231 (0.4)		
Risk-averse \times FP costs			.145 (0.2)	.217 (0.2)		
Risk-averse \times FN costs			-.0312 (0.1)	-.125 (0.1)		
Accur. beliefs					.132 (0.3)	.221 (0.4)
Accur. beliefs \times FP costs					-.381* (0.2)	-.365 (0.2)
Accur. beliefs \times FN costs					-.133 (0.1)	-.145 (0.1)
Constant	-.111 (0.1)	.413** (0.2)	-.139 (0.2)	.463* (0.3)	-.173 (0.2)	.311 (0.3)
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

Standard errors 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 (0.1)	.196 (0.2)	.256 (0.2)	.0642 (0.2)	.159 (0.2)	.233* (0.1)	.266* (0.1)	.3* (0.2)	.325* (0.2)
FN costs	.3*** (0.1)	.277*** (0.1)	.208** (0.1)	.407*** (0.1)	.313*** (0.1)	.272*** (0.1)	.232*** (0.1)	.365*** (0.1)	.335*** (0.1)
Male		-.131 (0.3)	-.107 (0.4)						
Male \times FP costs		-.0832 (0.2)	-.124 (0.2)						
Male \times FN costs		.0553 (0.1)	.0968 (0.1)						
Stat. class				-.0936 (0.3)	.0477 (0.4)				
Stat. class \times FP costs				.165 (0.2)	.0859 (0.2)				
Stat. class \times FN costs				-.189 (0.1)	-.116 (0.1)				
>23 yrs						.0397 (0.3)	-.242 (0.3)		
>23 yrs \times FP costs						-.331 (0.3)	-.306 (0.3)		
>23 yrs \times FN costs						.133 (0.2)	.071 (0.2)		
Good quiz								.222 (0.3)	.173 (0.4)
Good quiz \times FP costs								-.293 (0.2)	-.254 (0.2)
Good quiz \times FN costs								-.138 (0.1)	-.185 (0.1)
Constant	-.111 (0.1)	-.0545 (0.2)	.461* (0.2)	-.045 (0.2)	.379 (0.3)	-.118 (0.2)	.455** (0.2)	-.215 (0.2)	.333 (0.3)
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

Standard errors in parentheses

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

Table 3: WTP for Information (different risk aversion)

	(1)	(2)	(3)	(4)	(5)	(6)
	$\theta = 0$	$\theta = 0.5$	$\theta = 1.0$	$\theta = 1.5$	$\theta = 2.5$	Heterogeneous θ
FP costs	.183 (0.1)	.212 (0.1)	.21 (0.1)	.165 (0.1)	.0499 (0.1)	.162 (0.1)
FN costs	.212*** (0.1)	.317*** (0.1)	.431*** (0.1)	.53*** (0.1)	.66*** (0.1)	.234*** (0.1)
Constant	.402** (0.2)	.00285 (0.2)	-.516*** (0.2)	-1.17*** (0.2)	-1.67*** (0.2)	-.0609 (0.2)
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

Standard errors in parentheses

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

Table 4: WTP for Information (different risk aversion)

	(1)	(2)	(3)	(4)	(5)
	$\theta = 0$	$\theta = 0.5$	$\theta = 1.0$	$\theta = 1.5$	$\theta = 2.5$
FP costs	.213* (0.1)	.246** (0.1)	.246** (0.1)	.201* (0.1)	.0858 (0.1)
FN costs	.246*** (0.1)	.348*** (0.1)	.46*** (0.1)	.556*** (0.1)	.687*** (0.1)
Constant	.413** (0.2)	.0134 (0.2)	-.505*** (0.2)	-1.16*** (0.2)	-1.66*** (0.2)
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

Standard errors 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 (0.0)	-.014 (0.0)	.0199 (0.1)	.0201 (0.1)	.101 (0.1)	.0992 (0.1)
False pos. rate	-.546*** (0.1)	-.547*** (0.1)	-.578*** (0.1)	-.579*** (0.1)	-.596*** (0.1)	-.594*** (0.1)
Good quiz			.00858 (0.0)	-.00576 (0.0)		
Good quiz \times False neg. rate			-.0705 (0.1)	-.0708 (0.1)		
Good quiz \times False pos. rate			.0718 (0.1)	.0715 (0.1)		
Stat. class					.015 (0.0)	.0385 (0.1)
Stat. class \times False neg. rate					-.186** (0.1)	-.185** (0.1)
Stat. class \times False pos. rate					.0824 (0.1)	.0796 (0.1)
Constant	.0406*** (0.0)	-.00484 (0.0)	.0364* (0.0)	-.00227 (0.0)	.0315 (0.0)	-.0313 (0.0)
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

Standard errors 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*** (0.2)	2.62*** (0.2)	2.56*** (0.3)	2.74*** (0.3)
Belief error		1.52*** (0.2)	1.47*** (0.2)	1.61*** (0.3)
Good quiz			.108 (0.2)	
Good quiz \times Belief			.14 (0.4)	
Good quiz \times Belief error			.11 (0.4)	
Stat. class				.127 (0.2)
Stat. class \times Belief				-.189 (0.4)
Stat. class \times Belief error				-.135 (0.4)
Constant	-.762*** (0.1)	-.881*** (0.1)	-.932*** (0.1)	-.963*** (0.1)
Observations	1487	1487	1487	1487
<i>AIC</i>	1566.82	1413.23	1414.64	1418.02

Standard errors 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 (0.1)	.0142 (0.1)	.0512 (0.2)	.0505 (0.2)	.0318 (0.2)	-.0582 (0.2)
FN costs	-.0137 (0.1)	.0227 (0.1)	-.132 (0.1)	-.13 (0.1)	.163* (0.1)	.287** (0.1)
Risk-averse			-.284 (0.3)	.0641 (0.3)		
Risk-averse \times FP costs			-.0282 (0.2)	-.0629 (0.2)		
Risk-averse \times FN costs			.22* (0.1)	.269 (0.2)		
Accur. beliefs					.613** (0.3)	.0902 (0.3)
Accur. beliefs \times FP costs					.0566 (0.2)	.185 (0.2)
Accur. beliefs \times FN costs					-.354*** (0.1)	-.522*** (0.1)
Constant	-.857*** (0.1)	-.706*** (0.1)	-.684*** (0.2)	-.754*** (0.2)	-1.17*** (0.2)	-.758*** (0.2)
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

Standard errors 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*** (0.1)	-.208*** (0.1)	-.145** (0.1)	-.122* (0.1)	-.27*** (0.1)	-.113* (0.1)
FN costs	-.12*** (0.0)	-.13*** (0.0)	-.138*** (0.0)	-.154*** (0.0)	-.0714* (0.0)	-.145*** (0.0)
Risk-averse			-.135* (0.1)	-.0101 (0.1)		-.122* (0.1)
Risk-averse \times FP costs			-.116 (0.1)	-.103 (0.1)		-.101 (0.1)
Risk-averse \times FN costs			.0319 (0.1)	.0286 (0.1)		.0157 (0.1)
Accur. beliefs					.182*** (0.1)	.214** (0.1)
Accur. beliefs \times FP costs					.102 (0.1)	
Accur. beliefs \times FN costs					-.0933 (0.1)	
Constant	-.185*** (0.0)	-.0718 (0.1)	-.133*** (0.0)	-.0814 (0.1)	-.283*** (0.1)	-.137 (0.1)
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

Standard errors in parentheses

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

B Figures

Figure 1: Belief Updating

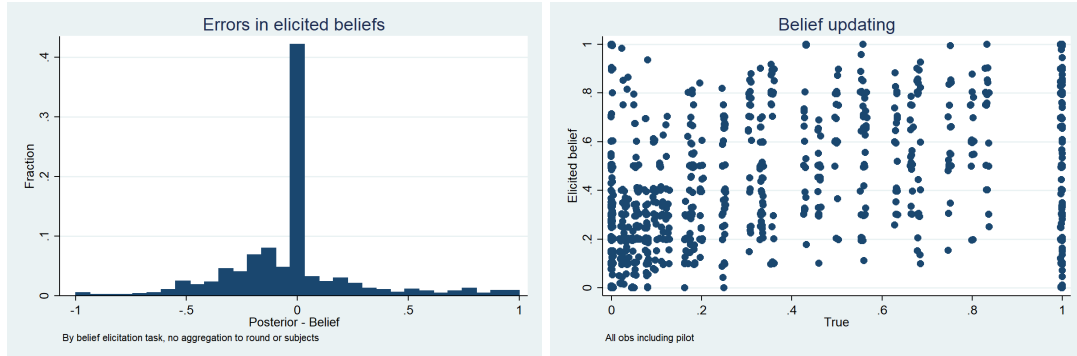


Figure 2: Following beliefs vs following posterior probabilities in IP



Figure 3: x

