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# Supplementary Materials for

# Searching for an alliance with journalism: a survey to investigate health literacy in Italy

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#### SUPPLEMENTAL METHODS M1 Variables entered in the first step of the backward stepwise selection for the multiple regression models.

All models were adjusted for age and gender as fixed terms.

Concerning the models including both journalists and general population: The first step included: nationality, geographical area, educational level, number of household components, currently worker/non-worker/student, economic situation, personal chronic disease or disability, family member with a chronic disease or disability, family member working in the healthcare field, work/study background (i.e. the categories: health journalists, non-health journalists who had personally written about medicine/health, journalists who had never written about medicine/health, general population).

Concerning the models including only journalists: Having personally written about medicine and having studied health communication or scientific dissemination through a course or other means were also fixed terms like age and gender. The first step included: nationality, geographical area, educational level, number of household components, currently worker/non-worker/student, economic situation, personal chronic disease or disability, family member with a chronic disease or disability, family member working in the healthcare field, working for a daily newspaper, working for a periodical, working as freelance, working for an online newspaper, primary area of specialization (politics; news report; education; science & medicine).

Concerning the models including only healthcare workers: The first step included: nationality, geographical area, educational level, number of household components, currently worker/non-worker/student, economic situation, personal chronic disease or disability, family member with a chronic disease or disability, family member working in the healthcare field.

#### Table S1

Characteristics of the journalists' subsample: overall descriptive analyses and stratified by the health literacy outcomes

		Journalists (n = 142)	SILS: inadequate HL			METER: lo marginal	ow/ HL		MDIT: non- passing HL		
			No (n = 107) N %	Yes (n = 35) N %	р	No (n = 21) N %	Yes (n = 119) N %	р	No (n =51) N %	Yes (n = 73) N %	р
Target groups	Health journalists	36 (25.4)	31 (86.1)	5 (13.9)	0.222	11 (30.6)	25 (69.4)	0.007	22 (73.3)	8 (26.7)	<0.001
	Non-health journalists who had personally written about medicine	56 (39.4)	40 (71.4)	16 (28.6)		7 (12.5)	49 (87.5)		16 (31.4)	35 (68.6)	
	Journalists who had never written about medicine	50 (35.2)	36 (72)	14 (28)		3 (6.3)	45 (93.8)		13 (30.2)	30 (69.8)	
Having	No	50 (35.2)	36 (72)	14 (28)	0.494	3 (6.3)	45 (93.8)	0.036	13 (30.2)	30 (69.8)	0.072
personally written about medicine	Yes	92 (64.8)	71 (77.2)	21 (22.8)		18 (19.6)	74 (80.4)		38 (46.9)	43 (53.1)	
Having	No	97 (68.3)	73 (75.3)	24 (24.7)	0.969	11 (11.6)	84 (88.4)	0.100	30 (35.3)	55 (64.7)	0.051
studied health communication or scientific dissemination through a course or other means	Yes	45 (31.7)	34 (75.6)	11 (24.4)		10 (22.2)	35 (77.8)		21 (53.8)	18 (46.2)	
Mean of communic	ation*										
Communication	No	133 (93.7)	101 (75.9)	32 (24.1)	0.532	20 (15.3)	111 (84.7)	0.736	50 (43.5)	65 (56.5)	0.057
agency	Yes	9 (6.3)	6 (66.7)	3 (33.3)		1 (11.1)	8 (88.9)		1 (11.1)	8 (88.9)	
Press office	No	127 (89.4)	95 (74.8)	32 (25.2)	0.659	18 (14.4)	107 (85.6)	0.566	47 (42)	65 (58)	0.564
(public institution)	Yes	15 (10.6)	12 (80)	3 (20)		3 (20)	12 (80)		4 (33.3)	8 (66.7)	
Press office	No	130 (91.5)	97 (74.6)	33 (25.4)	0.503	19 (14.7)	110 (85.3)	0.758	49 (43)	65 (57)	0.157
(private institution)	Yes	12 (8.5)	10 (83.3)	2 (16.7)		2 (18.2)	9 (81.8)		2 (20)	8 (80)	
Press agency	No	137 (96.5)	105 (76.6)	32 (23.4)	0.062	21 (15.6)	114 (84.4)	0.339	50 (42)	69 (58)	0.327
	Yes	5 (3.5)	2 (40)	3 (60)		0 (0)	5 (100)		1 (20)	4 (80)	

# Table S1 Continued

		Journalists	SILS: inadequate HL			METER: low/marginal HL			MDIT: non-passing HL		
		(n = 142)	No (n = 107) N %	Yes (n = 35) N %	р	No (n = 21) N %	Yes (n = 119) N %	р	No (n =51) N %	Yes (n = 73) N %	р
Radio channel	No	131 (92.3)	98 (74.8)	33 (25.2)	0.604	21 (16.3)	108 (83.7)	0.147	48 (42.1)	66 (57.9)	0.456
	Yes	11 (7.7)	9 (81.8)	2 (18.2)		0 (0)	11 (100)		3 (30)	7 (70)	
Service	No	139 (97.9)	105 (75.5)	34 (24.5)	0.724	20 (14.6)	117 (85.4)	0.369	51 (42.1)	70 (57.9)	0.143
	Yes	3 (2.1)	2 (66.7)	1 (33.3)		1 (33.3)	2 (66.7)		0 (0)	3 (100)	
Online magazine	No	114 (80.3)	85 (74.6)	29 (25.4)	0.659	13 (11.5)	100 (88.5)	0.018	43 (42.6)	58 (57.4)	0.493
	Yes	28 (19.7)	22 (78.6)	6 (21.4)		8 (29.6)	19 (70.4)		8 (34.8)	15 (65.2)	
Television channel	No	129 (90.8)	98 (76)	31 (24)	0.591	20 (15.7)	107 (84.3)	0.438	46 (41.1)	66 (58.9)	0.968
	Yes	13 (9.2)	9 (69.2)	4 (30.8)		1 (7.7)	12 (92.3)		5 (41.7)	7 (58.3)	
Daily newspaper	No	87 (61.3)	63 (72.4)	24 (27.6)	0.307	12 (14)	74 (86)	0.662	25 (32.5)	52 (67.5)	0.012
	Yes	55 (38.7)	44 (80)	11 (20)		9 (16.7)	45 (83.3)		26 (55.3)	21 (44.7)	
Periodical newspaper	No	114 (80.3)	85 (74.6)	29 (25.4)	0.659	14 (12.4)	99 (87.6)	0.077	39 (39)	61 (61)	0.325
	Yes	28 (19.7)	22 (78.6)	6 (21.4)		/ (25.9)	20 (/4.1)		12 (50)	12 (50)	
Freelance	No	113 (/9.6)	83 (73.5)	30 (26.5)	0.300	14 (12.5)	98 (87.5)	0.098	40 (40.4)	59 (59.6)	0./44
	Yes	29 (20.4)	24 (82.8)	5 (17.2)		/ (25)	21 (75)		11 (44)	14 (56)	
Other	No	137 (96.5)	103 (75.2)	34 (24.8)	0.806	20 (14.8)	115 (85.2)	0./50	49 (40.8)	/1 (59.2)	0./14
	Yes	5 (3.5)	4 (80)	1 (20)		1 (20)	4 (80)		2 (50)	2 (50)	
Area of specializat	ion*	04 (64 4)	70 (76 0)	24 (22.4)	0.540	10 (11 2)	70 (00 0)	0.000	24(42)	(7 (50)	0.702
Politics	No	91 (64.1)	/0 (/6.9)	21 (23.1)	0.562	10 (11.2)	/9 (88.8)	0.099	34 (42)	47 (58)	0.793
•	Yes	51 (35.9)	37 (72.5)	14 (27.5)		11 (21.6)	40 (/8.4)		17 (39.5)	26 (60.5)	
News report	No	96 (67.6)	/5 (/8.1)	21 (21.9)	0.268	15 (16)	/9 (84)	0.650	35 (41.2)	50 (58.8)	0.987
• -	Yes	46 (32.4)	32 (69.6)	14 (30.4)		6(13)	40 (87)		16 (41)	23 (59)	
Arts	No	106 (74.6)	82 (77.4)	24 (22.6)	0.341	10 (9.5)	95 (90.5)	0.002	40 (43.5)	52 (56.5)	0.367
-	Yes	36 (25.4)	25 (69.4)	11 (30.6)	0.474	11 (31.4)	24 (68.6)	0.054	11 (34.4)	21 (65.6)	0.706
Education	No	102 (71.8)	80 (78.4)	22 (21.6)	0.174	13 (12.9)	88 (87.1)	0.256	37 (40.2)	55 (59.8)	0.726
<b>C</b>	Yes	40 (28.2)	27 (67.5)	13 (32.5)	0.225	8 (20.5)	31 (79.5)	0.210	14 (43.8)	18 (56.3)	.0.001
sports and motor sports	NO	110 (77.5)	85 (77.3)	25 (22.7)	0.325	18 (16.7)	90 (83.3)	0.310	50 (53.2)	44 (46.8)	<0.001
A	Yes	32 (22.5)	22 (68.8)	10 (31.3)	0.724	3 (9.4)	29 (90.6)	0.222	(3.3)	29 (96.7)	0.107
Agriculture	NO	119 (83.8)	89 (74.8)	30 (25.2)	0.724	16 (13.7)	101 (86.3)	0.322	40 (38.1)	05 (01.9)	0.107
D	Yes	23 (16.2)	18 (78.3)	5 (21.7)	0.061	5 (21.7)	18 (78.3)	0.222	11 (57.9)	8 (42.1)	0.062
Business/Finance	NO	119 (83.8)	90 (75.6)	29 (24.4)	0.861	16 (13.7)	101 (86.3)	0.322	40 (37.7)	66 (62.3)	0.062
Colon on and	Yes	23 (16.2)	75 (71.4)	6 (26.1)	0.060	5 (21.7)	18 (78.3)	0.007	11 (61.1)	7 (38.9)	-0.001
medicine	NO	105 (73.9)	75 (71.4)	30 (28.0)	0.068	10 (9.7)	93 (90.3)	0.003	29 (31.2)	04 (08.8)	<0.001
Ta alama la mut	Yes	37 (20.1)	32 (86.5)	5 (13.5)	0762	14 (12.7)	26 (70.3)	0.1.40	22 (71)	9 (29)	0.017
Computer science	NO	111 (78.2)	83 (74.8)	28 (25.2)	0.763	14 (12.7)	96 (87.3)	0.149	35 (35.7)	63 (64.3)	0.017
F. t. t. S	res	31 (21.8)	24 (77.4)	7 (22.0)	0.422	7 (23.3)	23 (70.7)	0.215	10 (01.5)	10 (38.5)	0.024
Entertainment	NO	116 (81.7)	89 (76.7)	27 (23.3)	0.423	19 (16.4)	97 (83.6)	0.315	47 (45.6)	56 (54.4)	0.024
Kitch on /fashiar (	res	20 (18.3)	18 (09.2)	8 (30.8)	0.145	2 (8.3)	22 (91.7)	0.027	4 (19)	17 (81)	0.105
travel	NO	127 (89.4)	98 (77.2)	29 (22.8)	0.145	19 (15.1)	107 (84.9)	0.937	49 (43.4)	04 (56.6)	0.105
Other	Yes	15 (10.6)	9 (60)	6 (40)	0.514	2 (14.3)	12 (85.7)	0.057	2 (18.2)	9 (81.8)	0.001
Other	NO	135 (95.1)	6 (05 7)	34 (25.2)	0.514	20(15)	(05 7)	0.957	49 (41.5)	09 (58.5)	0.691
	TES	/ (4.9)	0(85./)	1 (14.3)		1 (14.3)	0(85./)		2 (33.3)	4 (00./)	

## Table S2

Health literacy of journalists and general population compared with journalists whose primary area of specialization is medicine: simple regressions with poor health literacy as outcome (according to SILS, METER, and MDIT)

	SILS				METER		MDIT			
	OR	95% CI	р	OR	95% CI	р	OR	95% CI	р	
Health journalists	Ref.			Ref.			Ref.			
Non-health journalists who had personally written about medicine	2.48	0.82-7.51	0.108	3.08	1.06-8.92	0.038	6.02	2.21-16.39	<0.001	
Journalists who had never written about medicine	2.41	0.78-7.45	0.126	6.60	1.68-25.9	0.007	6.35	2.25-17.93	<0.001	
General population	1.50	0.56-3.99	0.419	1.55	0.73-3.28	0.257	4.61	1.98-10.7	<0.001	

#### Table S3

Multiple regression models in the healthcare subsample with poor health literacy as outcome (according to SILS, METER, and MDIT)

	SILS				METER		MDIT			
	adjOR	95% CI	р	adjOR	95% CI	р	adjOR	95% CI	р	
Age	0.92	0.87-0.97	0.004	0.96	0.94-0.98	<0.001	1.00	0.98-1.02	0.904	
Female	0.99	0.17-5.81	0.994	1.24	0.56-2.77	0.599	0.77	0.34-1.73	0.526	
Northern Italy	Ref.			Ref.						
Central Italy	< 0.001	-	0.999	0.29	0.03-2.47	0.259				
Southern Italy	< 0.001	-	0.999	1.18	0.28-5.01	0.818				
Bachelor or Master's degree	Ref.			Ref.			Ref.			
High school or lower	8.29	0.84-82.33	0.071	2.29	0.66-7.93	0.191	3.86	0.98-15.24	0.054	
Postgraduates degree	1.87	0.24-14.49	0.549	2.28	0.86-6.04	0.098	2.05	0.81-5.17	0.129	
Worker	Ref.			Ref.			Ref.			
Non-worker	< 0.001	-	0.999	3.41	0.51-22.64	0.205	1.37	0.12-15.59	0.801	
Student	< 0.001	-	0.998	0.19	0.04-0.88	0.034	0.28	0.07-1.13	0.075	
Family member with a chronic disease or disability	0.62	0.1-3.79	0.601							
Insufficient/poor perceived economic status				2.23	0.99-5.03	0.052	2.75	1.16-6.56	0.022	
Family member working in the healthcare field							0.47	0.21-1.08	0.074	

Figures are expressed as adjusted Odds Ratios (adjOR) and 95% Confidence Interval (CI).