

Jahrestagung ASI & DGS-Sektion "Methoden der empirischen Forschung": Paneldaten | Berlin (digital) 19.11.2021

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## **ACKNOWLEDGMENTS**



Presentation of joint work with André Pirralha, Götz Lechner, Anna Passmann & Friederike Schlücker (LIfBi)



## POINT OF DEPARTURE



How do panel members behave by a break of usual rhythm of surveying and how we can use the communication between waves to secure the best response rate after the break?



#### **EXPERIMENT: SETTINGS**

- Targets: students of Starting Cohort 2 (SC2) of National Educational Panel Study (NEPS) in Germany in grade 9
- Survey of school students, however in individual field since grade 5
- 🚜 Usual survey rhythm: annually since kindergarten / grade 1
- 2019: break in annually surveying (grade 8) by design
- Communication: parents and students together
- Q Gap in interviewing in grade 8 to be filled trough communication



## USUAL COMMUNICATION IN NEPS SC2

June/July: Summer greetings card

## Year

October – December: Field

- \* Cover letter & brochure
- \* 10EUR for completed interview

December/January: Winter greetings card



## **COMMUNICATION IN NEPS SC2 IN 2019**

June/July: Summer greetings card Year October December: Field Cover letter & brochure teted interview December/January: Winter greetings card



## **COMMUNICATION IN NEPS SC2 IN 2019**

June/July: Summer greetings card

Year

October/November: Communication experiment

December/January: Winter greetings card

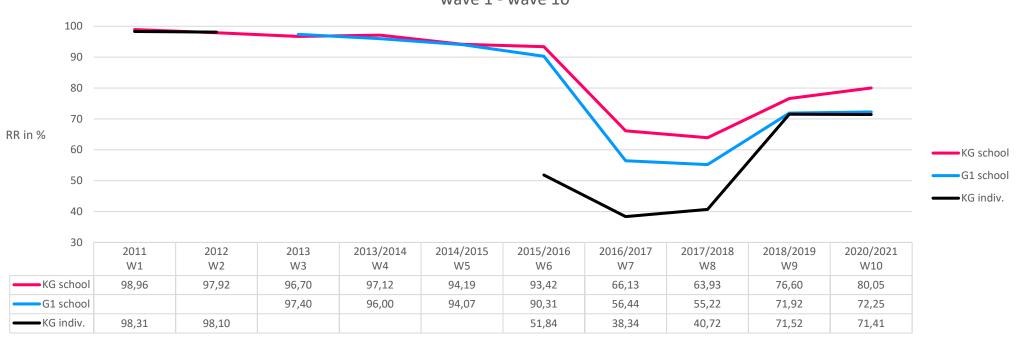


## **EXPERIMENT DESIGN**

Experimental groups			
No letter		N=1,006	
Letter only	Party Comment of the	N=1,015	Block-Randomization for:  1) Panel-Status:  a) active panel member
Letter + brochure	The second secon	N=1,020	b) temp. drop-out 1 year c) temp. drop-out 2 years  1) CASMIN parents: 4 groups
Letter + incentive	Figure 1 Agent	N=994	a) 1a, 1b, 2b b) 1c, 2a c) 2c d) 3a, 3b
Letter + brochure + incentive	Figure 1 and	N=1,043	

## **RESPONSE RATE**

#### Response rates in NEPS Starting Cohort 2 wave 1 - wave 10



Origin of the groups	Mode	Mode	Mode	Mode	Mode	Field
KG school	PAPI	PAPI/CAWI	PAPI/CAWI	CAPI & PAPI/CAWI	PAPI/CAWI	school
G1 school	PAPI	PAPI/CAWI	PAPI/CAWI	CAPI & PAPI/CAWI	PAPI/CAWI	home
KG ind.	PAPI	PAPI/CAWI	PAPI/CAWI	CAPI & PAPI/CAWI	PAPI/CAWI	



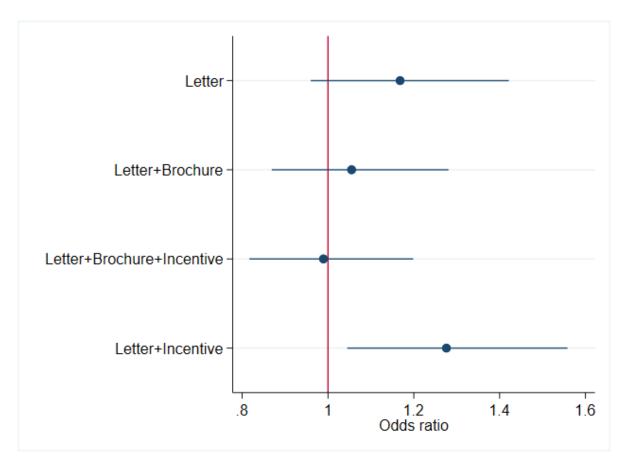
## FINDINGS: RESPONSE RATES BY TREATMENT GROUPS

Experimental groups		Response rate	
No letter		71,3%	
Letter only	The second secon	74,4%	
Letter + brochure	The state of the s	72,4%	72,69%
Letter + incentive	Interest of the second of the	76,0%	
Letter + brochure + incentive	Account of the control of the contro	71,1%	



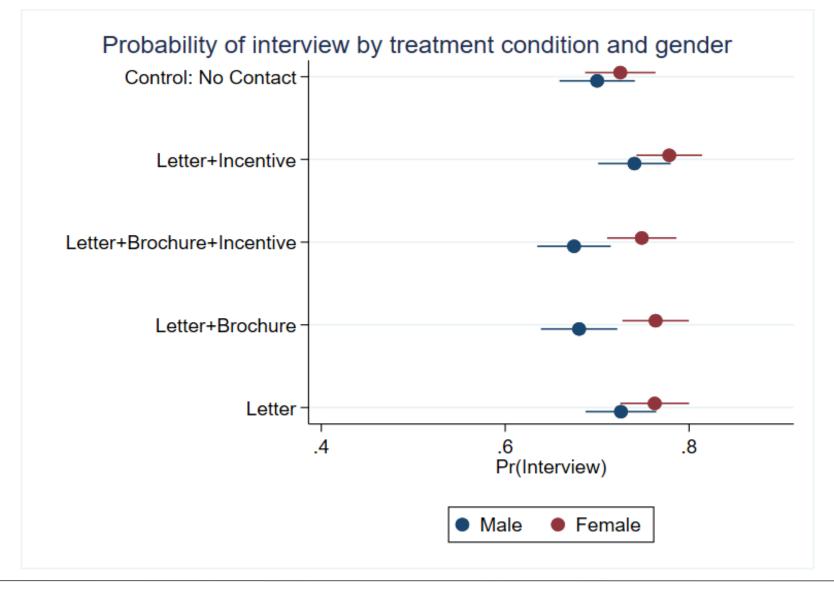
## FINDINGS: LOGISTIC REGRESSION FOR PARTICIPATION (NO/YES)

	Coef.	P >  z	95% con	f. interval
No contact	reference			
Letter	.0155	.121	041	.352
L + Brochure	.0535	.589	141	.247
L + Brochure + Incentive	011	.914	202	.181
L + Incentive	.244	.017	.044	.444
Prob > chi2	.0554			
Pseudo R2	.0016			
N	5,068			



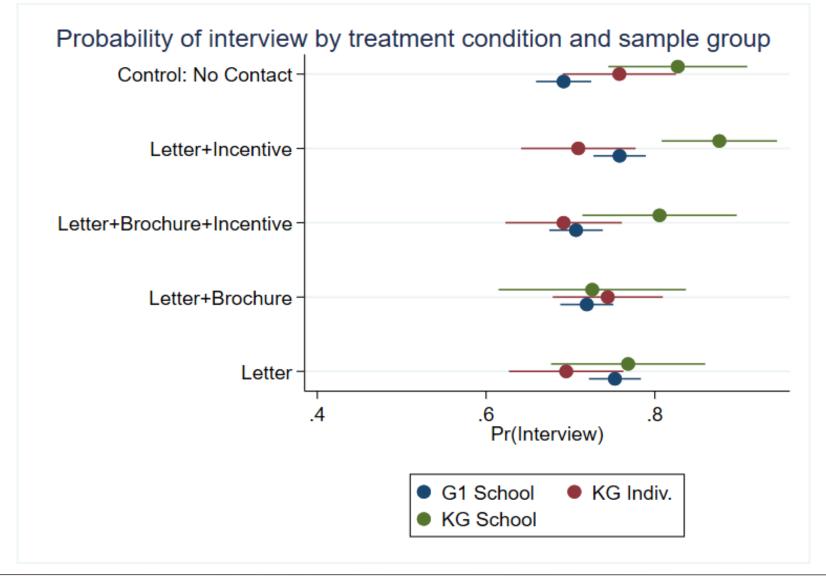


## FINDINGS: MARGINAL EFFECTS FOR TREATMENT AND GENDER



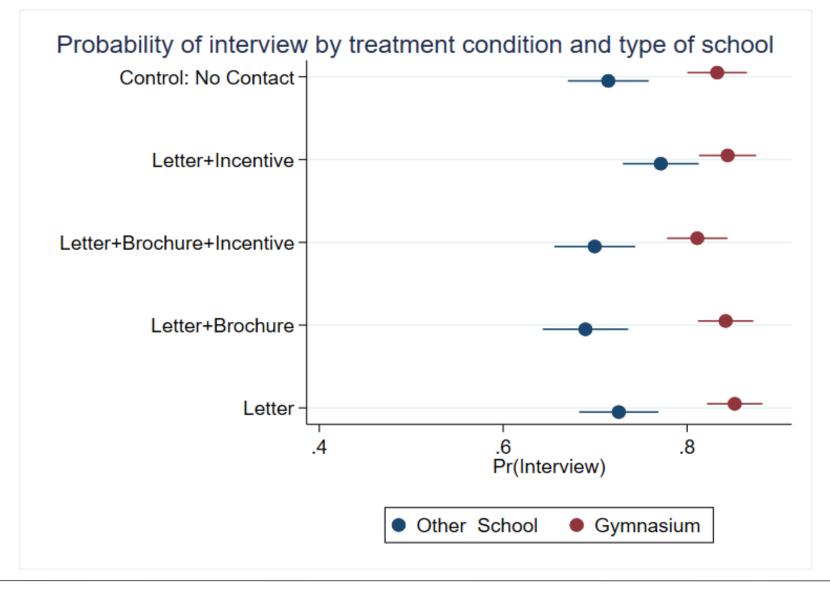


## FINDINGS: MARGINAL EFFECTS FOR TREATMENT AND SAMPLE ORIGIN



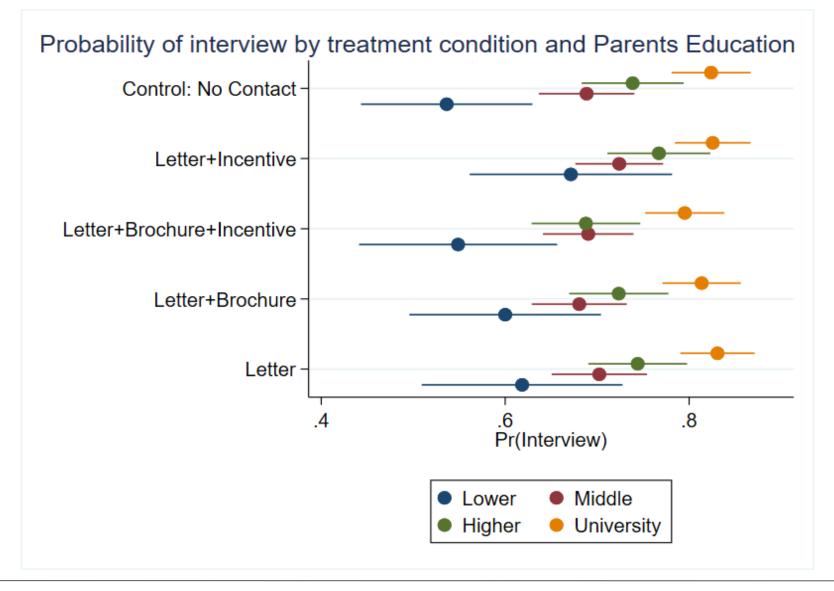


## FINDINGS: MARGINAL EFFECTS FOR TREATMENT AND TYPE OF SCHOOL



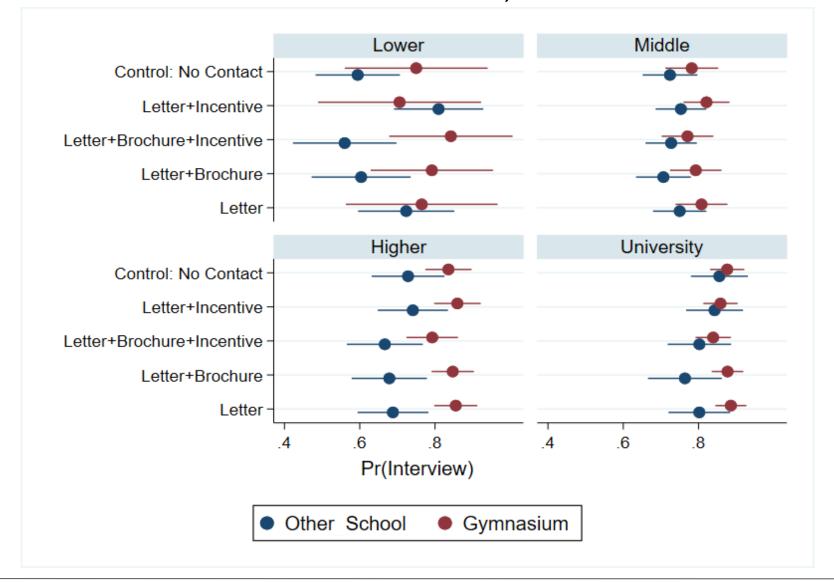


## FINDINGS: MARGINAL EFFECTS FOR TREATMENT AND PARENT'S EDUCATION





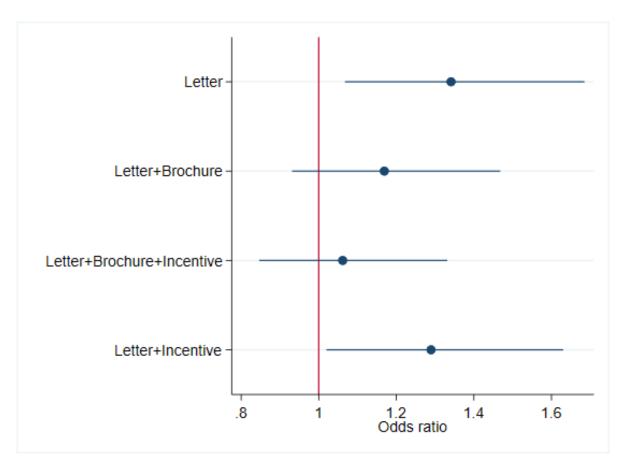
## FINDINGS: MARGINAL EFFECTS FOR TREATMENT, PARENT'S AND STUDENT'S EDUCATION





## FINDINGS: EFFECTS OF TREATMENT CONDITIONS AFTER FIRST REMINDER

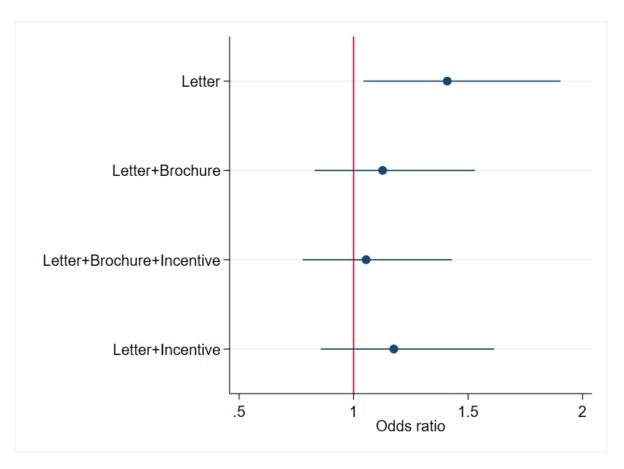
	Coef.	P >  z	95% con	f. interval
No letter	reference			
Letter	.293	.012	.065	.521
L + Brochure	.156	.178	071	.383
L + Brochure + Incentive	.059	.604	166	.286
L + Incentive	.254	.034	.019	.488
Prob > chi2	.0585			
Pseudo R2	.0022			
N	2,978			





## FINDINGS: EFFECTS OF TREATMENT CONDITIONS AFTER SECOND REMINDER

	Coef.	P >  z	95% con	f. interval
No letter	reference			
Letter	.343	.025	.042	.643
L + Brochure	.119	.444	186	.425
L + Brochure + Incentive	.053	.732	251	.357
L + Incentive	.161	.315	154	.478
Prob > chi2	.1997			
Pseudo R2	.0025			
N	1,952			





## **CONCLUSIONS**

- Only the "incentive" treatment has a overall statistically sig. (positive) effect on participation (ref. no contact)
- Only incentive treatment did not work differently between students from *Gymnasium* and other school types.

  All other treatments worked significantly better for students in *Gymnasium*
- Brochure seems to affect differently boys and girls and students within lower educ. background of parents
- "More appreciation leads to higher response" seems not to be true. Focus on internal or external motivation
- The likelihood to answer after first reminder was higher for the groups "letter" and "incentive" and only for the group "letter" after second reminder
- The treatments work differently with respect to the different characteristic of the respondents
- Communication strategies have an influence on response also one year after treatment (sic!), work in different manner and can also help to increase the quality of a panel by influencing subgroups

# THANK YOU FOR YOUR ATTENTION!



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