Analyse der Survey-Daten von CHILDREN for a better World e.V.

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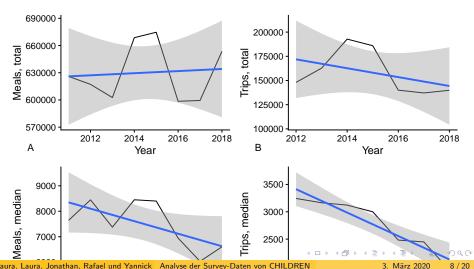
Zusammenfassende Statistiken

	Jahr	Begünstigte, Mittagstisch	Begünstigte, Entdeckerfonds	Einrichtungen, Mittagstisch	Einricht
1	2011	3748.0		52	
2	2012	3556.0	2803.0	51	
3	2013	4015.0	2823.0	55	
4	2014	4685.0	2752.0	55	
5	2015	5857.0	3823.0	55	
6	2016	3075.0	3819.0	59	
7	2017	4895.0	4150.0	64	
8	2018	5102.5	6911.0	68	

Table: Summary Statistics

Dynamics

Figure: Yearly dynamics of total grants in Meals and Trips program



Empirische Ansatz

$$y_{it} = \beta_0 + \beta_1 x_{it} + \epsilon_{it} \tag{1}$$

Zusammenhang Mahlzeiten und Zuschüsse

Table: Zusammenhang zwischen Anzahl der Mahlzeiten und realer Fördersumme

	(1)	(2)	(3)	(4)	(5)
(Intercept)	-12089.14* (5192.86)	-1814.16 (1765.93)	3535.39*** (498.99)	3107.70*** (508.94)	-12250.60** (4524.09)
realSubsidy	2.61***	0.50**	0.29***	0.25***	2.72*** (0.51)
eatersPerMealNo	(0.51)	172.83*** (14.92)	(0.03)	19.00* (8.45)	(0.51)
R ²	0.43	0.73	0.13	0.21	0.45
Adj. R ²	0.43	0.73	0.12	0.20	0.45
Num. obs. RMSE	329 39992.79	329 27390.90	250 3629.72	250 3463.66	440 39601.41

Abhängige Variable: Anzahl der Mahlzeiten

realSubsidy: Fördersumme für Mittagstisch (EUR von 2015)

eatersPerMeal: Anzahl der durch Mittagtisch Begünstigten, einfaches lineares Modell, geschätzt mit Ansatz der kleinsten Quadrate

Modell (2): ursprünglicher Datensatz, lineares Modell mit Kontrollen, geschätzt mit Ansatz der kleinsten Quadrate Modell (3): Datensatz ohne Ausreißer, einfaches lineares Modell, geschätzt mit Ansatz der klein-

sten Quadrate

Modell (4): data set without outliers, linear model with controls, estimated with OLS

Model (5): imputed data set, simple linear model, estimated with OLS

All regressions are estimated with robust standard errors ***p < 0.001, **p < 0.01, *p < 0.05.

Zusammenhang Ausflüge und Zuschüsse

Table: Association between number of trips and real subsidy

	(1)	(2)	(3)	(4)	(5)
(Intercept)	3.7049***	3.4394***	2.6236***	2.3660***	3.6237***
	(0.3313)	(0.3359)	(0.2300)	(0.2609)	(0.3253)
realTripsSubsidy	0.0002*	0.0001	0.0003***	0.0003***	0.0002*
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
tripsKidsNo		0.0059		0.0043	
		(0.0032)		(0.0027)	
R ²	0.0474	0.0729	0.0880	0.1241	0.0504
Adj. R ²	0.0444	0.0671	0.0844	0.1172	0.0476
Num. obs.	322	319	257	256	334
RMSE	2.9565	2.8967	1.6981	1.6579	2.9310

Dependent variable: number of trips

realTripsSubsidy: subsidy for Trips program in 2015 EUR

tripsKidsNo: number of beneficiaries of Trips program

Model (1): original data set, simple linear model, estimated with OLS

Model (2): original data set, linear model with controls, estimated with OLS Model (3): data set without outliers, simple linear model, esmitaed with OLS

Model (4): data set without outliers, linear model with controls, estimated with OLS

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Selbstwertgefühl

Table: Association between selfworth and subsidy per beneficiary

	(1)	(2)	(3)	(4)	(5)
(Intercept)	0.08	0.12	0.09	0.12	0.23*
	(0.09)	(0.12)	(0.09)	(0.11)	(0.11)
real Subsidy Per Beneficiary	-0.00		-0.00		-0.00
	(0.00)		(0.00)		(0.00)
real Trips Subsidy Per Beneficiary		-0.00		-0.00	
		(0.00)		(0.00)	
ML1					0.24***
					(0.06)
ML2					0.37***
					(0.05)
ML3					0.15***
					(0.04)
R ²	0.00	0.01	0.00	0.01	0.30
Adj. R ²	0.00	0.01	0.00	0.01	0.28
Num. obs.	428	184	430	187	161
RMSE	1.00	1.00	1.00	1.00	0.79

Alltagskompetenzen

Table: Association between everyday expertise and subsidy per beneficiary

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	0.15	0.13	0.14	0.11	0.28*	0.08
	(0.09)	(0.10)	(0.09)	(0.10)	(0.11)	(0.09)
realSubsidyPerBeneficiary	-0.00		-0.00		-0.00	
	(0.00)		(0.00)		(0.00)	
realTripsSubsidyPerBeneficiary		-0.00		-0.00		-0.00
		(0.00)		(0.00)		(0.00)
ML1					0.31***	
					(0.06)	(0.07)
ML2					0.40***	
					(0.06)	(0.07)
ML3					0.16**	0.19**
					(0.05)	(0.06)
ML4						0.49***
-						(0.06)
\mathbb{R}^2	0.01	0.01	0.01	0.01	0.37	0.37
Adj. R ²	0.01	0.01	0.01	_0,01 _	0.36	0.35

Seltener krank

Table: Association between healthy meals criterion and beneficiaries being less ill

	(1)	(2)	(3)	(4)	(5)
(Intercept)	0.02	0.46**	0.09	0.39***	0.05
	(80.0)	(0.16)	(0.07)	(0.12)	(0.07)
DGECriteriaNoScaled	0.33***	0.35^{*}	0.25***	0.24	0.18*
	(80.0)	(0.16)	(0.07)	(0.14)	(0.07)
ML1					0.12^{*}
					(0.06)
ML2					0.27***
					(0.06)
R ²	0.12	0.29	0.07	0.16	0.19
Adj. R ²	0.11	0.29	0.07	0.16	0.17
Num. obs.	121	120	177	177	161
RMSE	0.91	7.83	0.94	7.95	0.87

Dependent variable: share of beneficiaries who are less frequently ill

DGECriteriaNo: index of healthy diet criteria fulfilled in organization's menu

Model (1): original data set, simple linear model, estimated with OLS

Model (2): original data set, simple linear model, estimated with WLS

Model (3): imputed data set, simple linear model, estimated with OLS Model (4): imputed data set, simple linear model, estimated with WLS

Ernährungswissen

Table: Association between healthy meals criterion and beneficiaries dietary knowledge

	(1)	(2)	(3)	(4)	(5)
(Intercept)	0.02	0.08	0.02	0.21	0.02
, , ,	(0.07)	(0.19)	(0.06)	(0.18)	(0.07)
DGECriteriaNoScaled	0.11	-0.02	0.12*	0.10	-0.00
	(0.06)	(0.12)	(0.05)	(0.14)	(0.06)
ML1					0.26***
					(0.06)
ML2					0.24***
					(0.06)
ML3					0.37***
					(0.06)
R^2	0.01	0.00	0.02	0.01	0.31
Adj. R ²	0.01	-0.00	0.01	0.01	0.29
Num. obs.	214	212	275	275	161
RMSE	0.98	8.49	0.96	9.45	0.83

Dependent variable: share of beneficiaries with expanded dietary knowledge

Wertschätzung für gesundes Essen

Table: Association between healthy meals criterion and beneficiaries appreciation of a healthy diet

	(1)	(2)	(3)	(4)	(5)
(Intercept)	-0.03	0.26	0.02	0.37*	0.05
	(0.07)	(0.18)	(0.06)	(0.17)	(0.07)
DGECriteriaNoScaled	0.27***	-0.02	0.25***	0.01	0.03
	(0.07)	(0.15)	(0.06)	(0.13)	(0.06)
ML1					0.03
					(0.07)
ML2					0.47***
					(0.05)
ML3					0.24***
					(0.05)
\mathbb{R}^2	0.06	0.00	0.06	0.00	0.37
Adj. R ²	0.06	-0.00	0.06	-0.00	0.35
Num. obs.	213	211	274	274	161
RMSE	1.02	8.61	1.01	9.00	0.82

Dependent variable: share of beneficiaries with increased appreciation for a healthy diet DGECriteriaNo: index of healthy diet criteria fulfilled in organization's menu

Graphical evidence

Partition Mittagstisch

	Variable, Meals	Mapping, Meals	Information, Me
1	participateMore	participateMore	1.00
2	tasksLunch	tasksLunch	1.00
3	ownldeas	ownldeas	1.00
4	stayLonger	stayLonger	1.00
5	dietaryKnowledge	dietaryKnowledge	1.00
6	appreciateHealthy	${\sf appreciateHealthy}$	1.00
7	foodCulture	foodCulture	1.00
8	lessIII	lessIII	1.00
9	betterTeamwork	better Teamwork	1.00
10	moreRegularSchoolVisits	moreRegularSchoolVisits	1.00
11	addressProblems	addressProblems	1.00
12	reduced_var_1	more Concentrated	0.66
13	reduced_var_1	moreBalanced	0.66
14	reduced_var_2	monthlyCooks 🐗 🧸	→ 4 → 0
	2 3 4 5 6 7 8 9 10 11 12 13	1 participateMore 2 tasksLunch 3 ownldeas 4 stayLonger 5 dietaryKnowledge 6 appreciateHealthy 7 foodCulture 8 lessIll 9 betterTeamwork 10 moreRegularSchoolVisits 11 addressProblems 12 reduced_var_1 13 reduced_var_1	1participateMoreparticipateMore2tasksLunchtasksLunch3ownldeasownldeas4stayLongerstayLonger5dietaryKnowledgedietaryKnowledge6appreciateHealthyappreciateHealthy7foodCulturefoodCulture8lessIIIlessIII9betterTeamworkbetterTeamwork10moreRegularSchoolVisitsmoreRegularSchoolVisits11addressProblemsaddressProblems12reduced_var_1moreConcentrated13reduced_var_1moreBalanced

Partition Entdeckerfonds

	Variable, Trips	Mapping, Trips	Information, Tri
1	tripsSuggestions	tripsSuggestions	1.00
2	tripsDecisions	tripsDecisions	1.00
3	tripsOrganization	tripsOrganization	1.00
4	tripsCostCalculation	tripsCostCalculation	1.00
5	tripsBudget	tripsBudget	1.00
6	tripsMoney	tripsMoney	1.00
7	tripsReview	tripsReview	1.00
8	tripsPublicTransport	tripsPublicTransport	1.00
9	tripsMobility	tripsMobility	1.00
10	trips Additional Activities	trips Additional Activities	1.00
11	tripsSelfworth	tripsSelfworth	1.00
12	tripsFrustrationTolerance	trips Frustration Tolerance	1.00
13	reduced_var_1	tripsSuccess	0.68
14	reduced_var_1	tripsSelfEfficacy 🚁 🧸 🐗	1
aura, Laura	, Jonathan, Rafael und Yannick Analyse der S	Survey-Daten von CHILDREN	3. März 2020 19 / 20

References I