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# Students' Community Service: Self-Selection and the Effects of Participation

**WU**

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UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

Author and Presenter: Paul Rameder

Co-Authors: Michael Meyer and Michaela Neumayr

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# Background & Motivation

- Number of Community Service Programs at Universities in Europe and thus the opportunities to engage in Community Service (CS) have steadily increased during the last decades (Griffith, 2012).
- Empirical findings: Community Service has a positive impact on students' personal, social ethical, and academic domains (e.g., Astin & Sax, 1998; Hooghe, 2003; Seider, Rabinowicz, & Gillmor, 2011; Stukas, Clary, & Snyder, 1999; Yoa, 2008)
- But, not all students enrolled in such programs, however, are indeed transformed by their experiences (Jones et al., 2005)
- The impact of such programs may be moderated by participants' characteristics (van Goethem et al., 2014).

# Self-Selection or Participation Effects

- Above all, it is still unclear whether the impact of voluntary community service is caused by the service experience itself or because students with specific traits or background characteristics self-select into the program (Hooghe, 2003; Quintelier, 2013).
- Contributing to a still open question in volunteering research: Volunteers are the better humans (e.g. Wilson & Musick 1999, Musick & Wilson 2018)– but why?

# Research Questions

Our study investigates whether effects of voluntary service programs are indeed caused by the service experience or by prior self-selection.

1. How do levels of self-efficacy, generalized trust, empathy, attribution of poverty differ between participants and non-participants of CS-programs?
2. How does students' participation in CS affect these attitudes and traits?



# Quasi-experimental Design

- Pre-post quasi-experiments with students who participated in a Community Service Program at WU Vienna
- Questionnaire:
  - at t1 (prior to the treatment) – paper and pencil
  - at t2 (one year after the beginning) - online
- Data collection in 2011:
  - sample of 63 students taking part in the program (treatment group)
  - sample of 362 students not taking part (control group)

## **Analytic strategy and statistic methods**

- Testing for group differences (sociodemographic background variables)
- Testing for a non-response bias
- Testing for self selection effects:
  - Bivariate analysis
  - Logistic regressions
- Testing for participation effect:
  - Repeated measure anova
  - Linear regressions



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**Bildung ist der Schlüssel zum friedlichen  
Zusammenleben in unserer Gesellschaft.**





# The Treatment: volunteering@wu

- WU Vienna is the largest Business University in Europe (22K students, 2K staff & faculty)
- Established in 2010
- Students work with children from economically/socially disadvantaged background (mainly refugees)
- Meetings with children once a week for at least one year (approx. 80h contact with children)
- Provide children with support for schoolwork, recreational and outdoor activities, summer camp
- Students participate in trainings (35h) and reflection sessions (10h)
- 180 students/year, 230 children/year

# Program (Treatment)

	<b>Volunteering@WU (Community Service)</b>
<b>Primary Intended Beneficiary</b>	Recipient AND Provider
<b>Primary Focus</b>	2/3 Service and 1/3 Learning
<b>Intended Educational Purposes</b>	Civic, Ethical and Personal Development
<b>Integration with Curriculum</b>	Peripheral/Supplemental
<b>Nature of Service Activity</b>	Based on a Social Cause

# Measures



## Demographics

- Gender
- Age
- Place of Birth
- Employment status
- Volunteering status
- Residence during childhood (number of inhabitants)
- Mother's highest education
- Father's highest education
- Family income during childhood

## Traits and attitudes

- Self Efficacy: 10 items scale, German version of GSE by Schwarzer/Jerusalem 1995
- Empathy: 4 item scale by Davis 1994; Bekkers 2004
- Generalized Trust: Single Item by van Ingen/Bekkers 2015
- Attribution of Poverty: 8 item scale (Seider et al. 2011)

# Items of the General Self-Efficacy and the Empathic-Concern Scale

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Number	The general self-efficacy scale (GSE; Schwarzer & Jerusalem, 1995)
1	I can always manage to solve difficult problems if I try hard enough.
2	If someone opposes me, I can find the means and ways to get what I want.
3	It is easy for me to stick to my aims and accomplish my goals.
4	I am confident that I could deal efficiently with unexpected events.
5	Thanks to my resourcefulness, I know how to handle unforeseen situations.
6	I can solve most problems if I invest the necessary effort.
7	I can remain calm when facing difficulties because I can rely on my coping abilities.
8	When I am confronted with a problem, I can usually find several solutions.
9	If I am in trouble, I can usually think of a solution.
10	I can usually handle whatever comes my way.

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Cronbach's alpha:  
.84 pretreatment  
.86 posttreatment

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Number	Empathic Concern Scale (Bekkers, 2004; Davis, 1994)
1	I often feel concern for people who are less fortunate materially than me.
2	Other people's problems do not usually bother me.
3	I am often touched by what other people go through.
4	Other people's misfortune does not usually bother me.

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Cronbach's alpha:  
.76 pretreatment  
.70 posttreatment

Note. Response format: 5-point-Likert-type scale from 5 = *strongly agree* to 1 = *strongly disagree*.

# Items of the Attributions for Poverty Scale

Number	Statements (based on Seider, Gillmor, & Rabinowicz, 2011)	Causal attribution
1	Poor people in this country are poor because of circumstances beyond their control	Structural (external)
2	Most of the jobs poor people can get do not pay enough to support a family	
3	Most poor people work but cannot earn enough money	
4	Poor people lack opportunities because they come from poor families	
5	Most poor people in this country do not work (reversed)	Individualistic (internal)
6	Poor people in this country are not doing enough to help themselves out of poverty (reversed)	
7	Poor people today have it easy because they can get government benefits without doing anything in return (reversed)	Cronbach's alpha: .80 pretreatment .80 posttreatment
8	Poor people in this country do not actively seek to improve their lives (reversed)	

<sup>1</sup> Note. Response format: 5-point-Likert-type scale from 5 = *strongly agree* to 1 = *strongly disagree*.

# Self-Selection and/or Participation Effect

## Self-selection Effect

Students who participate in volunteering@wu differ significantly from those that do not participate at  $t_1$ .

## Participation Effect

Students who participate in volunteering@wu show a stronger increase/decrease from  $t_1$  to  $t_2$  compared to students that do not participate.

# Hs For Both Effects

Domain	Selection-Effect		Participation-Effect	
	<i>Hypothesis</i>		<i>Hypothesis</i>	
Self-Efficacy	H <sub>1a</sub>	+	H <sub>1b</sub>	+
Empathy	H <sub>2a</sub>	+	H <sub>2b</sub>	+
Generalized Social Trust	H <sub>3a</sub>	+	H <sub>3b</sub>	+
Attribution of Poverty				
Internal / individualistic	H <sub>4a</sub>	-	H <sub>4b</sub>	-
External / structural	H <sub>5a</sub>	+	H <sub>5b</sub>	+



# Findings: Self-Selection



# Descriptives and Bivariate Analysis

## Testing for Self-Selection

	Treatment group		Control group			
	M (SD)	MD	M (SD)	MD	p	g
<i>n</i>	63		362			
Self-efficacy (values for $t_1$ )	3.76 (0.62)	1	3.69 (0.51)	13	.334 <sup>a</sup>	.13
Empathic concern (values for $t_1$ )	4.07 (0.75)	0	3.80 (0.70)	5	.012 <sup>a</sup>	.38
Generalized trust (values for $t_1$ )	2.97 (1.09)	0	2.58 (1.04)	4	.010 <sup>a</sup>	.37
Poverty external (values for $t_1$ )	3.64 (0.59)	1	3.28 (0.61)	20	.000 <sup>a</sup>	.59
Poverty internal (values for $t_1$ )	2.23 (0.71)	3	2.74 (0.80)	16	.000 <sup>a</sup>	.65
Female	78.7	2	61.5	11	.010 <sup>b</sup>	
Age (in years)	22.94 (3.88)	0	23.23 (2.57)	3	.560 <sup>a</sup>	
Born abroad	20.6	0	19.8	4	.883 <sup>b</sup>	
Currently employed	63.5	0	64.2	2	.918 <sup>b</sup>	
Currently volunteering	49.2	0	64.1	8	.025 <sup>b</sup>	
Community type during childhood		1		19	.270 <sup>c</sup>	
500 to 10,000 inhabitants	50.0		45.8			
10,001 to 3,00,000 inhabitants	29.0		23.6			
>3,00,000 inhabitants	21.0		30.6			
Mother's highest level of education		0		13	.134 <sup>c</sup>	
primary	36.5		43.8			
secondary	12.7		16.9			
tertiary	50.8		39.3			
Father's highest level of education		0		16	.999 <sup>c</sup>	
primary	33.3		37.0			
secondary	25.4		18.5			
tertiary	41.3		44.5			
Family income during childhood		3		40	.611 <sup>c</sup>	
less than 1,001 Euro	5.0		1.9			
1,001-2,500 Euro	21.7		26.1			
2,501-4,000 Euro	40.0		35.4			
4,001-7,000 Euro	26.7		24.8			
more than 7,000 Euro	6.7		11.8			

# Self-Selection: Logistic Regressions

Treatment group (reference: control group)	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Exp(B)	p	Exp(B)	p	Exp(B)	P	Exp(B)	p	Exp(B)	p	Exp(B)	p
Female	1.97	.053	2.234	.028	1.557	.240	2.009	.048	1.693	.147	2.158	.044
Age (in years)	0.975	.675	0.978	.717	0.973	.657	0.983	.779	0.943	.375	0.935	.325
Born abroad	1.188	.665	1.205	.640	1.253	.576	1.223	.618	1.326	.494	1.793	.187
Currently employed	0.933	.833	1.001	.997	0.912	.780	0.938	.846	0.922	.811	1.069	.849
Currently volunteering	0.577	.066	0.616	.109	0.566	.059	0.559	.054	0.656	.173	0.664	.198
Residence during childhood	0.793	.217	0.794	.224	0.785	.201	0.798	.235	0.767	.175	0.780	.208
Mother's level of education	1.315	.140	1.255	.224	1.273	.200	1.272	.198	1.269	.224	1.313	.174
Father's level of education	0.975	.898	0.998	.993	1.007	.974	0.981	.922	0.976	.906	0.942	.776
Family income childhood	0.836	.291	0.848	.341	0.844	.324	0.862	.392	0.888	.519	0.862	.413
Self-efficacy ( $t_1$ )			1.589	.111								
Empathic concern ( $t_1$ )					1.540	.069						
Generalized trust ( $t_1$ )							1.374	.025				
Poverty external ( $t_1$ )									2.914	.000		
Poverty internal ( $t_1$ )											0.392	.000
Intercept	0.497	.674	0.071	.200	0.114	.241	0.160	.282	0.026	.068	9.394	.242
n	352		341		350		351		339		343	
$\chi^2/df$	13.742/9		14.659/10		17.034/10		18.712/10		29.373/10		36.636/10	
-2 Log-likelihood	301.298		293.16		297.283		295.968		277.711		268.675	
Pseudo $R^2$ (Nagelkerke's)	.065		.071		.080		.088		.139		.172	

Note. Listwise deletion applied for missing data.

# Findings: Participation



# Time- and Participation Effects: Repeated Measure ANOVA

	Time effect (Control and treatment group)			Participation effect (Group × Time effect)		
	<i>F</i>	<i>p</i>	$\eta^2$	<i>F</i>	<i>p</i>	$\eta^2$
Self-efficacy	1.001	.329	.007	0.273	.602	.002
Empathic concern	0.076	.783	.007	0.382	.537	.003
Generalized trust	14.449	.000	.096	0.003	.959	.000
Poverty external	2.148	.145	.016	0.394	.531	.003
Poverty internal	0.163	.687	.001	2.319	.130	.017

Note.  $n = 138$  (all students responding at pre- and posttest measurement). ANOVA = analysis of variance.

# Participation Effect: Linear Regressions

**Table 7.** Participation Effect: Linear Regressions.

	Self-efficacy ( $t_2$ )		Empathic concern ( $t_2$ )		Generalized trust ( $t_2$ )		Poverty external ( $t_2$ )		Poverty internal ( $t_2$ )	
	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$
Intercept		.791		.001		.399		.026		.809
Self-efficacy ( $t_1$ )	<b>.773</b>	.000								
Empathic concern ( $t_1$ )			<b>.605</b>	.000						
Generalized trust ( $t_1$ )					<b>.625</b>	.000				
Poverty external ( $t_1$ )							<b>.410</b>	.000		
Poverty internal ( $t_1$ )									<b>.636</b>	.000
Treatment group (reference = control group)	.074	.242	.036	.637	.132	.086	.057	.512	.024	.775
Female (reference = male)	.057	.407	.111	.166	.031	.682	.011	.900	-.031	.700
Age	.091	.186	.002	.976	-.002	.977	.070	.434	.117	.191
Born abroad	<b>-.141</b>	.032	-.024	.749	-.096	.210	-.178	.040	-.037	.672
Currently employed (reference = currently not employed)	-.022	.734	.011	.880	.101	.183	-.160	.057	-.062	.441
Currently volunteering (reference = currently not volunteering)	.039	.561	-.005	.951	-.006	.939	-.027	.761	-.005	.953
Residence during childhood (number of inhabitants)	-.027	.692	-.063	.433	.120	.140	.014	.876	.006	.944
Mother's highest education	.003	.969	-.010	.901	.024	.758	.129	.150	-.169	.052
Father's highest education	.125	.093	-.055	.521	.062	.475	-.208	.036	.055	.556
Family income during childhood	.104	.173	-.058	.504	-.001	.992	.038	.699	.154	.111
$n$		120		122		123		118		118
Adjusted $R^2$		.582		.431		.408		.296		.352

Note.  $n = 138$  (all students responding at pre- and posttest measurement).

## Should Community Service Programs be voluntary or mandatory?

- Voluntary service programs at universities attract those students who already show better scores on social and personal domains
- Students who are already engaged in volunteering elsewhere are less likely to volunteer in the program at their university
- Voluntary service programs at universities still bring novices into volunteering
- Females are more likely to self-select into service programs

### **Mandatory programs:**

- yield poorer learning outcomes for students who are less inclined to participate
- undermine students' intrinsic motivation and reduce their future willingness to volunteer (e.g., Chan, Ngai, & Kwan, 2017; Clary, Snyder, & Stukas, 1998).

## Effects of participations?

- Scant literature on service programs that discusses non- or even opposing participation effects on students and provides alternative explanations
- Thus, exposure to and contact with refugee children led to a slight decrease in students' favorable attitudes. These results also suggest revisiting the contact hypothesis (Allport, 1954)
- Exposure to poverty strengthens both external and internal attributions for poverty (Lee, Farrell, & Link, 2004; Merolla, Hunt, & Serpe, 2011).



# Limitations and Future Research

- Service: Effect of the specific placement was not examined, though some placements probably produced more beneficial experiences than did others.
- Context: Students of business administration and economics at a university embedded in the European welfare state context.
- Studied domains are too stable and trait-based, and expecting stronger changes in these domains was overoptimistic.
  - ⇒ Future research: Also focus on the change of state-based; retention tests
- Observed changes opposing our expectations need to be analyzed in depth by more qualitative inquiry.
  - ⇒ Future research should include both, qualitative and quantitative analyses (often limited by time and resources)



VIENNA UNIVERSITY OF  
ECONOMICS AND BUSINESS

**Institute for Nonprofit-Management**  
DEPARTMENT Management  
Welthandelsplatz 1, 1020 Vienna, Austria

**UNIV.PROF. DR. Michael Meyer**  
**UNIV.ASS. DR. Michaela Neumayr**  
**UNIV.ASS. DR. Paul Rameder**

[michael.meyer@wu.ac.at](mailto:michael.meyer@wu.ac.at)  
[michaela.neumayr@wu.ac.at](mailto:michaela.neumayr@wu.ac.at)  
[paul.rameder@wu.ac.at](mailto:paul.rameder@wu.ac.at)

[www.wu.ac.at/npo](http://www.wu.ac.at/npo)