



Starting Point

The survey research community currently has reservations about online data collection. Still, online surveys and especially **social media-based survey research** are increasingly becoming a **central part of market research as well as of some pockets of social science research** (see Keusch, 2015), particularly for researchers who are thematically rooted and do substantial research (see Prandner & Röser, 2017).

Subsequently, the number of projects that collect non-probability convenience samples provided by a **self-selection of social media users is growing**.

The present paper focuses on the **consequences for substantive results** and is based on a survey among Facebook users.



Research Objectives

Since self-selection of social media users influences substantial results (Couper et al., 2017; Hargittai, 2015), the question arises:

How can a self-selection bias be accounted for?

In order to answer this question, relevant characteristics of the target group have to be taken into account. For this reason, the Facebook users are put into three groups:

User-A: wants active involvement or encouragement, with positive expectations about the impact of the inquiry.

User-B: does not want active involvement and does not expect a positive impact.

User-C: is in between.

Finally, the **center of interest** is the **impact of the group assignment** on the **outcome**.



Methods and Data

258 Facebook users participated in the study, which was an invitation posted by eight German and six Austrian public utilities. The participants were grouped according to configural frequency analysis in a person-centered analytic approach for categorical data. Finally, linear regressions were performed.

Table 1: Indicators used for configural frequency analysis (CFA)

Dim.	Indicator	Above: \bar{x}	n
Engagement	I1: Conviction reg. the surveys impact	73.6%	231
	I2: Importance of User-Questions	52.8%	229
	I3: Importance of User-Comments	54.6%	231



Key Findings

Key findings consist of the respondents' **classification** (Table 2: group assignment) and, in dependence on it, the users' **characteristics and preferences** (Figure 1), since both **help to explain the outcome** (Table 3: impact on substantial results).

Table 2: Classification of respondents (CFA)

Comb. of possible answers			Frequency	Classification (Group assignment)
I1	I2	I3		
1	1	1	8	Typ C: Antitype
1	1	2	66	Typ A: Active + Conf.
1	2	1	14	Residuary
1	2	2	31	Typ C: Antitype
2	1	1	13	Residuary
2	1	2	34	Residuary
2	2	1	24	Typ B: Passive + Non-C.
2	2	2	37	Residuary

Figure 1: Users' characteristics and preferences (extract)

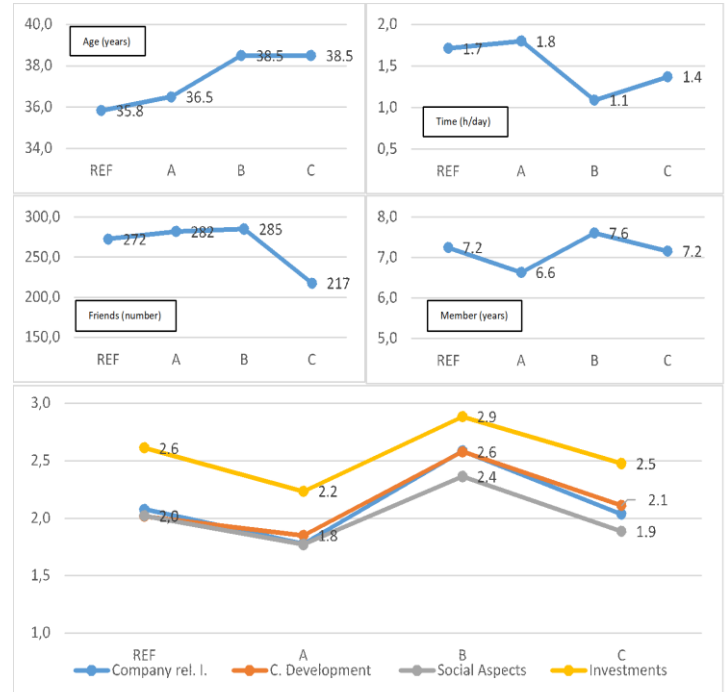


Table 3: Linear regressions with and without controlling group affiliation

Pred.	Type of Information							
	Company rel. Info		Comp. Developm.		Social aspects		Investment	
Male	-.168*	-0.165*	.003	-0.007	.153*	0.175*	-.175*	-0.151*
Age	-.001	-0.025	.087	0.050	.036	0.031	.022	0.020
AT ^(b)	-.125	-0.097	-.178*	-0.160*	-.028	0.009	.057	0.094
Mem	.088	0.035	.135	0.086	.102	0.054	.173*	0.126
Time	-.049	0.007	-.003	0.049	-.073	-0.022	-.080	-0.031
Friend	.059	0.059	.026	0.030	-.005	-0.011	.025	0.023
Typ A:	-	-.192**	-	-.112	-	-.279***	-	-.300***
Typ B:	-	.225**	-	.282***	-	.101	-	.048
Typ C:	-	-.037	-	.044	-	-.171*	-	-.128
R ² (c)	.024	.114	.029	.120	.014	.105	.036	.111
n	207	204	207	204	207	204	207	203

To Sum Up

1. Participation in social media surveys has to be seen as a form of media usage: **controlling for social media engagement** is necessary to account for (highly) possible selection bias.
2. Attitude towards surveys provides explanatory power: results in non-probability online surveys might be (heavily) **influenced by participants' convictions, which have to be considered**.



GOR

TH, Köln

March 2019

List of References: Couper, M. P., Antoun, C., & Mavletova, A. (2017). Mobile web surveys. In: TOOO MANY EDDI! Total survey error in practice, 133-154. // Hargittai, E. (2015). Is Bigger Always Better? Potential Biases of Big Data Derived from Social Network Sites. The ANNALS of the American Academy of Political and Social Science 659 (1), 63-76. // Keusch, Florian (2015). Why do people participate in Web surveys? Applying survey participation theory to Internet survey data collection. In: Manag Rev Q, 65 (3), 183-216. // Prandner, D. & Röser, A. (2017). Questions of Quality - Is Data Quality Still Tied to Survey Mode?. In: MedienJournal, 41(3), 49-63.