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Follow the Leader or Follow Anyone – Evidence from a Natural Field Experiment

Felix Ebeling (University of Cologne)
Christoph Feldhaus (University of Cologne)
Johannes Fendrich (University of Cologne)

Cologne Graduate School
in Management, Economics
and Social Sciences
Albertus-Magnus-Platz
50923 Köln
www.cgs.uni-koeln.de

University of Cologne



Follow the Leader or Follow Anyone – Evidence from a Natural Field Experiment

Felix Ebeling, Christoph Feldhaus, Johannes Fendrich*

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Abstract

In a fundraising field experiment we show that individuals are not only conditionally cooperative, but that they are also more prone to donate to a homeless individual when the previous donor has a higher social status. We trailed a homeless person asking for donations within Cologne's metro trains for two weeks. Thereby we systematically varied the status of the first giver in the train. In the control treatment we did not intervene. In the low status treatment the first giver was always a (poor looking) low status person from our team and correspondingly in the high status treatment a (rich looking) high status person. In our experiment the probability to receive a donation in a train is 65% higher in the low status treatment than in the control treatment. Additionally, in comparison to the low status treatment, the probability increases by 22% in the high status treatment. To our best knowledge this is the first study providing field evidence for the particular influence of high status individuals on others' economic activities.

JEL classification: C93, D64, H41

Keywords: Status, Fundraising, Field Experiment

*Felix Ebeling, University of Cologne, Department of Economics, ebeling@wiso.uni-koeln.de, Christoph Feldhaus, University of Cologne, Department of Economics, feldhaus@wiso.uni-koeln.de, Johannes Fendrich, University of Cologne, Department of Economics, fendrich@wiso.uni-koeln.de. We thank Bernd Irlenbusch, Axel Ockenfels, Bettina Rockenbach, Dirk Sliwka, Veronika Grimm, Abdolkarim Sadrieh and Matthias Sutter for helpful comments. We also gratefully acknowledge the support of the Deutsche Forschungsgemeinschaft.

1. Introduction

Our research is concerned with the optimal solicitation order in fundraising campaigns when information on previous giving is available. Previous theoretical research on solicitation order suggests soliciting the most generous donors first (see e.g. Andreoni 1998, Versterlund 2003). Field-studies of List & Lucking-Reiley (2002) and Shang & Croson (2009) support these theoretical findings.¹ Our paper reveals the importance of status of first givers. Thus, fundraisers should not only be concerned with the amount of the first donation but also with the status of its donor. A higher status entails more subsequent donations.

In our study we designed a natural field experiment (Harrison & List 2004) to test the influence of the first donor's status in fundraising. Our experiment is concerned with donations to a homeless "street newspaper" seller. As in many larger western cities "street newspapers" are also sold in Cologne (Germany).² Sellers are mainly homeless people offering the newspaper at street corners or promoting it on the streets or on the metro. Despite the fact that they offer newspapers, sellers mostly receive donations while newspapers are sold rarely.³ Frankly spoken, selling street newspapers is a polite way to ask for donations. For our experiment, we trailed a homeless newspaper seller for two weeks. Our focus was on metro wagon sales since every wagon provides an isolated environment that can be regarded as one independent observation. An observation started when the seller entered the metro wagon at a station. After the wagon doors closed he began to promote the newspaper. Basically the seller said: „Dear ladies and gentlemen, is anyone interested in a street newspaper or has a small donation for a homeless person?“. Afterwards, he walked through the train showing his collecting box and the newspaper to passengers. An observation ended, when the seller left the wagon at the next station. Our experiment involved three treatment variations. In the control treatment we did not intervene. We solely observed the seller making his tour through the train as described above. In the second and third treatment we manipulated the status of the first donor in the train. In the low-status treatment, the first donor was a poor looking person from our team. In the high-status treatment however, the first donor was a rich looking person from our team. The procedure in the low and high status treatment was identical to the control treatment with the exception that the donor from our team started giving directly after the seller's promotion.⁴

¹Andreoni (1998) and List & Lucking-Riley (2002) focus on the amount of seed money in fundraising campaigns for threshold public goods, Vesterlund (2003) is concerned with the optimal announcement strategy of previous contributions while Shang & Croson (2009) are interested in the optimal provision of social information. However, when it comes to the optimal solicitation order, all papers suggest soliciting large donations first.

²For general information on street newspapers see http://en.wikipedia.org/wiki/Street_newspaper. For information on the street newspaper in Cologne, see: <http://www.querkopf-koeln.de/>. A picture of the newspaper can be found in the appendix.

³This impression from everyday life is corroborated in our experiment. Our seller received roughly 25 times more through donations than by selling newspapers.

⁴By clarifying in advance at which door the seller enters the train, we could easily ensure to be the first donor in the train.

In our experiment about 10,500 individuals participated in 567 independent observations. In total we received 424 donations and raised 316.27€.⁵ The experiment provides two main results. First, donors in metro trains are conditionally cooperative. While the probability of getting a donation in a train is 30% in the control treatment, it increases to 49% in the low-status treatment. This difference is highly significant ($p < 0.01$) in probit regressions controlling for the number of passengers, the metro-line and other covariates. This result is in line with previous research on conditional cooperation (Fischbacher et al. 2001, Frey & Mayer 2004, Shang & Croson 2009). Second, donors are more prone to donate when the first donor has a higher status. The probability of getting a donation in a train is about 60% in the high status treatment. Thus, in comparison to the low status treatment, we find an additional increase of 22% in the probability of getting a donation in a train in the high status treatment. Probit regressions show that this difference is significant ($p < 0.05$). The expected value of donations in metro trains is 0.40€ in the control treatment, 0.57€ in the low status treatment and 0.69€ in the high status treatment.

2. Relevant Literature

This paper contributes to three fields of economic literature. It adds insight on fundraising research, research on individuals' quest for status and partly on leadership research.

First, our research is concerned with fundraising. Within charitable giving/fundraising literature (apart from research relating status and fundraising) research on conditional cooperation is most important for us. Fischbacher & Gächter (2010) p. 541 describe conditional cooperation as "many people's propensity to cooperate provided others cooperate as well". Conditional cooperation is found robustly in laboratory studies (Fischbacher et al. 2001, Kocher et al. 2008, Fischbacher & Gächter 2010) as well as in charitable giving field studies (Frey & Meyer 2004, Shang & Croson 2009). In the field experiment of Frey & Meier (2004) students are more prone to contribute to charitable funds when knowing that many other students contribute. Shang & Croson (2009) provide additional evidence for conditional cooperation in a public radio fundraising experiment. In their experiment, participants receive information on previous donations whereby the amount of these donations vary; the higher the mentioned donation, the higher subsequent ones. Regarding our experiment, both, the high status and the low status treatment confirm the conditional cooperation hypothesis. Metro passengers' propensity to contribute is significantly higher in case of other contributors.

Second, our research is concerned with individual's quest for status. Different areas of economic research emphasize the role of status, e.g. research on consumer choice (Frank 1985, Hopkins & Kornienko 2004, Charles et al. 2009, Heffertz 2011), organizations (Frank 1984, Moldovanu et al. 2007, Besley & Ghatak 2008) and fundraising (Harbaugh 1998a, Harbaugh 1998b, Kumru & Vesterlund 2010). Weiss & Fershtman (1998) p. 802 define social status as "a ranking of individuals [...] in a given society, based on their traits, assets, and actions". Exact definitions in other research areas may deviate, but as Frank & Heffertz (2011) point out, it is hard to find a definition not related

⁵We excluded one observation from our analysis. The homeless seller received 16.22€ in this observation. This amount exceeded all other observation-amounts by far. The reasons for the exclusion are similarly to the reasons for exclusion of observations mentioned by Falk (2007). First, this observation skews the analysis of the absolute donation level. Second, it is unlikely that such donations are due to our treatment variation.

to “rank” or “position”.⁶ Most important for our research are the economic approaches towards status by Ball et al. (2001) and Kumru & Vesterlund (2010). Ball et al. (2001) examine prices in a competitive laboratory market. Participants of their experiment act as buyers or sellers and are attributed with a low or a high status. Independent of the market side assigned to high status participants, they always capture a greater share of the surplus. Apparently, low status agents are willing to sacrifice consumption to trade with high status agents or, more generally, they sacrifice consumption to associate with them. Kumru & Vesterlund (2010) transfer the idea of Ball et al. (2001) to a fundraising setup. In their sequential laboratory public good game individuals are also assigned with a high or a low status. When first movers are high status agents, public good contributions are significantly higher. Again, low status agents are willing to sacrifice consumption to associate with high status agents. The results from our field experiment corroborate Kumru & Vesterlunds' laboratory findings. Metro passengers contribute significantly more often to the homeless when the first mover has a higher status.

Third, our research is concerned with leadership. In economic literature, leaders are often defined as individuals with superior information (cf. Hermalin 1998, p. 1198). As Henrich & Gil-White (2001) argue, high status individuals often have superior information.⁷ In so far one might perceive the high status individual from our experiment to be a leader. Vesterlund (2003) and Andreoni (2006) investigate the influence of such superior informed leaders in fundraising campaigns. Following their theories, a donation of a high status individual or leader is a signal for the high quality of the charity and thus leads to higher subsequent contributions. Therefore, our results can also be explained by these theories.

3. Experimental design

3.1 Environment

We conducted our experiment in summer 2011 in the metro trains of Cologne's municipal transport services “KölnerVerkehrs-Betriebe”(KVB). Cologne's metro train system consists of eleven lines and has a path length of 193.8 km. In 2010 Cologne's metro system had more than 200 million passengers. More than 300,000 customers are frequenters.⁸ This represents more than one quarter of Cologne's inhabitants. Hence, passengers most likely represent a cross section of urban West-German society. To assure a subject pool representing these socio-demographic characteristics, observations in our experiment stem from different daytimes. We took trains from 9.15am to 12.15pm and from 5pm to 8pm. In the morning “shift” commuter traffic is basically over and passengers are mainly non-working society (e.g. young mothers, students, pensioners). By contrast, at least in the early hours of the evening shift, commuters are a major fraction of passengers. Furthermore, to prevent effects arising from particular populations in different neighborhoods, we took nine of the eleven metro lines in different areas of Cologne.

⁶For research from other areas such as evolutionary sociology see for example Henrich & Gil-White (2001) and Boyd & Richerson (2002).

⁷Anthropologist literature as Henrich & Gil-White (2001), Chudek et al. (2012) and Panchanathan (2010) is about prestige biased learning. Accordingly, individuals have a tendency to adopt behavior from high status individuals, because their ex-post behavior seemed to be more successful (worthy to adopt).

⁸Source of figures: Website of “KölnerVerkehrs-Betriebe AG” (Cologne's Public Transport Enterprise) <http://www.kvb-koeln.de/german/unternehmen/leistungsdaten/index.html>

3.2 Homeless newspaper seller

In our experiment the receiver of the donations was a unique authentic homeless person. Even though he was surprisingly reliable in terms of our “employment relationship”, credible information concerning his life was hard to get. However, we were able to identify some features doubtlessly. First, for several reasons he slipped through the cracks of the German welfare system. Second, in the period we conducted our experiment he had no permanent residence. Third, selling street newspapers and receiving donations represented his main sources of income at that time.

Additionally to his earnings from newspaper sales and donations, we paid the homeless person 50€ each day. This is equivalent to approximately 1.5 to 2 times his daily income generated by newspaper sales and donations in the time span of our experiment.

3.3 Procedure

We trailed the homeless newspaper seller for two weeks in summer 2011. Both weeks were the first of their respective month.⁹ Within a week we tried not to take trains with the same passengers more than once. For example, if we had taken a certain metro line every weekday at the same time, the probability to meet commuters more than once would have increased. Thus, in both weeks, we allocated only one morning and one evening shift to a particular metro line.¹⁰ Since passenger compositions in metro trains in the morning and evening shifts substantially differ in terms of socio-demographic characteristics, this particular measure decreases the probability to encounter the same passengers more than once. Furthermore, these shifts on the same metro line were never consecutive. If we had used a particular line in the morning shift, we did not use the same line in the evening. And accordingly, if we had used a metro line in the evening, we did not use the same line the next morning. Thus, even if we encounter the same passenger twice our giving was inconspicuous, because giving in regular intervals (e.g. every second day) from a certain donor is rather the rule than the exception.¹¹

Within a shift we shuttle on a certain track section of Cologne’s metro network. The track section of a shift comprises three consecutive stations (e.g. the stations A, B, C). Treatments alternate between stations in a strict order. The following example clarifies the procedure: Recall that Cologne’s metro consists of two wagons per train. At station A, the homeless newspaper seller and the high status person enter the train in the second wagon. In the meantime the low status person enters the first wagon. On the ride from station A to station B we conducted the high status treatment in the second wagon. At station B, the homeless newspaper seller leaves the second wagon and enters the first one. The high status person stays in the second wagon. On the ride from station B to C we conducted the low status treatment in the first wagon. At station C we left the train, changed the platform and went back to station A following the same procedure. Similarly, at station A, we left the train again

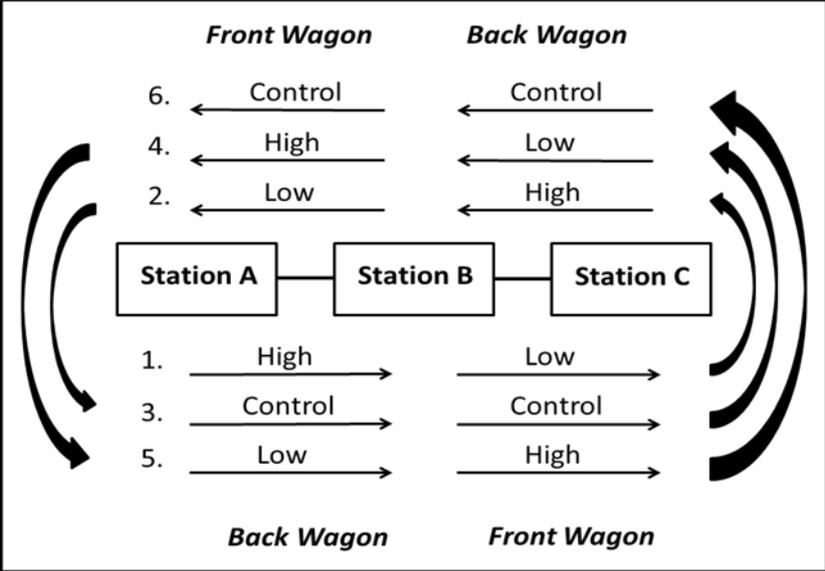
⁹In interviews conducted previously to our experiment, homeless persons mentioned a decreasing tendency of donations over a month. To keep circumstances similar, we conducted our experiment in the first full week of July (4th - 8th) and the first full week of September (5th - 9th).

¹⁰Actually, we used some metro lines twice in the evening and in the morning. However, the same line was only used a second time on a different track section rather remote from the first section. So we regard these “long lines” as different lines because passengers most probably change between different parts of the city.

¹¹We interviewed several homeless newspaper sellers previous to our experiment about their income structure. All of them reported the importance of regular donors.

and changed the platform. In the subsequent two rides from A to C we conducted two control treatments. The described six rides are one procedure cycle. At C we restart the procedure cycle, but with the low status treatment in the second wagon and correspondingly the high status person in the first wagon. Figure 1 shows the rides after two procedure cycles.

Figure 1: Running Order, showing two procedure cycles



After two procedure cycles we continue at station A with the high status treatment and so on. As can be seen in Figure 1, the described treatment alternation leads to an ongoing treatment change on every of the four station-connections (AB, BC, CB, BA). Most importantly, the procedure assures a minimal time difference between treatment observations from a certain station-connection.¹² Thus, the environment of observations is identical.

With one exception, we only shuttle between stations with parallel running lines because the frequency of trains is higher when two metro lines operate. Waiting time between taken trains shortens. It allows us to collect more data within a shift. The duration of a shift was approximately three hours. Any extension of a shift would have increased the probability to encounter the same passengers again (on their way back home), but the shorter the shift the lower the number of collected observations would have been. Three hours is the compromise we chose. We cannot rule out same passengers in some observations. However, the presented means reduce their number and thereby possible distortions of the results.

Within a train we implemented a standardized donation request of the homeless person. When conducting a treatment in the second wagon of a train, the homeless person always entered the train by the same door of the wagon. His request started after the doors closed and the train started. He announced his newspaper sale by: "Dear Ladies and Gentleman, is anyone interested in a street

¹²At a certain station, approximately 18 minutes pass from one observation to the next. In the first week we had some exceptions from the explained procedure. Basically, we extended our procedure to four instead of two stations (everything else, e.g. treatment order, remained similar). We tested whether results differ in these observations. We found no differences.

newspaper or has a small donation for a homeless person?” Afterwards, he walked through the train, showing his collecting box and the newspaper to passengers. His path through the train was predefined. He walked to the next door, turned around and left the train by the same door he entered. When conducting a treatment in the first wagon, everything else remained equal, but the homeless newspaper seller started at the last door of the wagon. Due to the symmetrical structure of wagons, no further differences arose. In case of a low or high status treatment, the corresponding status person always entered the train by the same door as the seller or already waited at that door. Directly after the start of the donation request, the status person takes out some money from his pocket and puts it into the collecting box of the homeless person.¹³ Thereby, we could easily establish our status person as the first donor.

3.4 Treatments

We conducted three treatments in our experiment: A control treatment, a low status treatment and a high status treatment. We did not intervene in the donation request of the homeless person in the control treatment. In the low and high status treatment however, the first donor in the wagon was the respective status person.

In our experiment we had to attribute status visibly to a person. A successful assignment of status implies a substantial agreement among different members of a society on the hierarchical status of the person (Weiss & Fershtman 1998). We orientated our implementation to the prominent concept of socioeconomic status (SES). Kraus & Keltner 2009 p. 99 define SES “by material wealth, occupation, and participation in educational and social institutions”.¹⁴ We tried to choose persons and outfits clearly representing at a first glance different characteristics of these dimensions. In both weeks of our experiment the high status person was a 31 year old male. He was dressed in a suit, tie, shirt and leather shoes. He carried a laptop bag and a high profile national newspaper (Frankfurter Allgemeine Zeitung). Altogether, the price of his outfit was above 800€. The low status person changed between experiment weeks. In the first week, the low status person was an unemployed person in his mid-forties. He was dressed with raddled jeans, sneakers, an old hoodie and a cap. However, because of the higher age of the low status person we changed the low status person in the second week.¹⁵ The second low status person was a 27 year old male, dressed in old tracksuit pants, camouflage sweater, tatty chucks and a cap. He carried a plastic bag from a discount supermarket and a tabloid paper. Photos of the persons can be found in the appendix.

To control whether our visual implementation of high and low status individuals is in line with the general perception of these persons, we conducted a classroom survey. 319 bachelor students of the Faculty of Management, Economics and Social Science of the University of Cologne received pictures

¹³In both status treatments we donated exactly 50 Cent in five 10 Cent coins. This is important from the economic perspective. Several theories about leadership in fundraising (e.g. Vesterlund 2003, Andreoni 2006, Hermalin 1998) are particularly concerned with the donation-amount of the first giver. Our study did not focus on this aspect. Since people in our experimental environment can roughly see what others donate, beliefs about the donation-amount hardly differ between the treatments. Differences can be ascribed to status-modification.

¹⁴ See Dutton & Levin (1989), Adler et al. (1994) and Oakes & Rossi (2003) among others for similar definitions.

¹⁵Individuals might associate a higher status to an older person. Thanks to Matthias Sutter for this helpful suggestion.

of the different characters. Each student received a picture of one person and had to estimate the level of education, occupational qualification, employment status and income level. In line with our expectations, the high status person exceeds by far both low type persons in all categories. Obviously, a change in appearance effectively change perceived socioeconomic status of a person. There are also significant differences between the two low type persons in some categories, but in comparison to the high type, these differences are small. A detailed description of the survey results can also be found in the appendix.

4. Results

4.1 Overview

Table 1 presents the main results of the experiment. It reports the donations received during our sessions. The first row of Table 1 shows the absolute number of rides conducted in the three treatments. The second and the third row report the absolute and relative number of rides with at least one donation. The last row contains the average amount of donations per observation in the different treatments. While the absolute number of rides with at least one donation is 55 in the control treatment, this number increases to 94 in the low status treatment and to 115 in the high status treatment. This increase is also reflected in the relative frequencies. In comparison to the control treatment the probability to receive at least one donation in a train is 65% higher in the low status treatment. Additionally, in comparison to the low status treatment, probability to receive a donation increases by 22% in the high status treatment. The corresponding average amounts of donation per observation are 0.40€, 0.57€, and 0.69€, respectively.

Before analyzing the collected data in detail, we want to mention some peculiarities of our rather unusual setup. Approximately 10,500 metro passengers participated in our experiment. The average number of passengers confronted with the homeless newspaper seller per observation was 16.4 in July and 20.5 in September. The increase in ridership is most likely due to rainy and cold weather in September.¹⁶ We therefore assume that people are more likely to take the metro then.

We conducted 567 train rides in the experiment. In 265 rides the homeless person received at least one donation. Altogether he received 408 donations and sold 16 newspapers.¹⁷ The small fraction of newspaper sales corroborates our assumption about the sources of income of homeless newspaper sellers. The bulk of earnings come from donations.¹⁸

¹⁶In July there was sunny weather with an average temperature of 20 degrees during our experiment week. In the September sessions there was rainy weather with an average temperature of 17 degrees.

¹⁷We tried to gather additional data on donors. For every donor we estimated age and status. We cross-checked the estimations and concluded that age and status estimations are quite unreliable. While some age groups and status characteristics are unequivocally others are suggestive. We will not further analyze donor's characteristics.

¹⁸In the two weeks of the experiment our homeless person earned an accumulated amount of 316,27€. The recommended price for the newspaper is 1,50€ whereby 0.75€ are intended for the seller. Buyers often do not stick to the price and sometimes give a higher amount, e.g. 2€. The 316,27€ are earnings. We already deducted the 0.75€ wholesale price of the newspaper paid by the seller. One might subtract another $0.75€ \cdot 16 = 12€$ to receive a proper donation amount. Ultimately it does not matter. By far the biggest part comes from donations.

Table 1: Donation Patterns in different Treatments

	Control	Low	High
Rides	184	191	192
Rides with Donations	55	94	115
Relative Frequency	0.30	0.49	0.60
Average Donations per Observation	0.40€	0.57€	0.69€

4.2 Conditional Cooperation

Table 2 provides evidence for conditional cooperation. It presents probit regressions. The dependent variable is a dummy. It takes value “1” if at least one person in a wagon donated and “0” otherwise.¹⁹ The dependent variable is regressed on three dummies and different control variables. The variable “week” is a dummy for period (July or September). The variable “low” is the dummy variable for a low status treatment. The variable “high” is a dummy variable for the high status treatment. The control treatment is the reference for both. Model (1) shows no significant differences between periods. As subsequent models show this is true independent of additional controls which are listed in the following. The dummy “week” is not significant in any model. Model (2) adds the treatment dummy variables. Both coefficients are positive and highly significant ($p < 0.01$). Models (3) to (5) add further control variables. Model (3) adds daytime and wagon position (front/back). Model (4) additionally controls for number of passengers. Model (5) additionally controls for line and shift. The treatment dummies remain significant across models. Metro passengers are conditional cooperators and thus more likely to donate when there are previous donations. Different coefficients of the low and high dummy indicate different marginal effects. This is analyzed in the next section in detail.

Table 2: Conditional Cooperation

	(1)	(2)	(3)	(4)	(5)
week	0.990 (0.105)	0.982 (0.106)	0.983 (0.106)	0.966 (0.109)	0.953 (0.112)
low		1.662*** (0.221)	1.652*** (0.220)	1.653*** (0.222)	1.607*** (0.219)
high		2.178*** (0.291)	2.220*** (0.298)	2.292*** (0.313)	2.305*** (0.321)
Observations	567	567	567	567	567
Pseudo R-squared	0.000	0.045	0.049	0.067	0.088

Notes: Probit regressions with donation as dependent variable. Standard errors in parenthesis. Level of significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Furthermore, results from Mann-Whitney U tests provide additional evidence for conditional cooperation. In the second week we gathered data on the donation amount from every observation.²⁰ We compare the distribution of donation amounts per observation with a two-tailed

¹⁹ It does not make sense to use the number of donors in a wagon as dependent variable. Receiving donations in a wagon is a sequential process. When there is more than one donor, subsequent donors may donate due to several reasons (e.g. status of first donor from the passenger crowd), but not due to our treatment intervention.

²⁰ Note that there might be more than one donation in an observation.

Mann-Whitney U test. It detects a highly significant difference ($p = 0.009$) between the distribution of the control and the low status treatment as well as a highly significant difference between the control and the high status treatment ($p = 0.000$). We did not gather the donation amount per observation in the first week of the experiment. However, from the collected data we can calculate the average donation amount per observation for each week. In July the average donation amount per observation is 0.37€ in the control treatment, 0.50€ in the low status treatment and 0.59€ in the high status treatment. The corresponding values for the second week are 0.43€, 0.63€ and 0.78€, respectively. Even if average donation amounts are generally lower in the first week, the pattern is similar: Average donation amounts are higher in the low and high status treatment. Furthermore, the probit regressions of Table 2 show no difference in donation probabilities between weeks. There is no reason to assume systematically different distributions of donation amounts in July observations.

4.3 Status Effects

Table 3 provides evidence for the positive effect of a high status first mover on subsequent giving. As Table 2 it presents probit regressions with a dummy as dependent variable. Again it takes the value “1” if at least one passenger donated in the wagon and “0” otherwise. In contrast to the probit regression of Table 2, we now only analyze observations from the low and high status treatment. The variable “high” is the dummy for the high status treatment whereas “low” is taken as the reference. Model (1) again indicates no significant differences between weeks. As subsequent models show this is true independent of additional controls. The dummy “week” is not significant in any model. Model (2) adds the dummy variable for the high status treatment. The coefficient is positive and significant ($p < 0.05$). Models (3) to (5) add the same controls as in Table 2. However, the high status treatment dummy remains significant. Metro passengers are more likely to donate when the previous donor has a higher status.

Table 3: Status Effects

	(1)	(2)	(3)	(4)	(5)
Week	1.001 (0.129)	1.001 (0.129)	1.007 (0.131)	0.943 (0.131)	0.956 (0.138)
High		1.310** (0.169)	1.347** (0.176)	1.410** (0.189)	1.426*** (0.193)
Observations	383	383	383	383	383
Pseudo R-squared	0.000	0.008	0.019	0.046	0.060

Notes: Probit regressions with donation as dependent variable. Standard errors in parenthesis. Level of significance: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Furthermore, the result from a Mann-WhitneyU test provides additional evidence for the positive effect of a high status first mover on donations. We compare the second week’s distributions of donation amounts with a Mann-Whitney U test. It detects a almost significant difference ($p = 0.057$) between the distributions of the low and the high status treatment. As argued in the previous section there is no reason to assume different distributions in the first week.

4.4 Crowding In of relatively low Donations

As reported in the previous sections, starting with donations of low or high status individuals crowds in additional donations. It is of interest to know whether motives of additional donors differ. Different values of single donations are an indication for different motives. On a first glance, the average values of single donations indicate differences. The average single donation is 0.90€ in the control treatment, 0.74€ in the low status treatment and 0.68€ in the high status treatment. Unfortunately, our study is limited in the analysis of single donations. Due to technical reasons, we cannot disentangle the single values of donations when more than one passenger in a wagon donated. What we can do however, is to compare distributions of observations with only one donation. Non-parametric tests show no significant difference between those distributions.

Even if we could disentangle single donations and the differences between treatments were significant: There would still be multiple economic explanations for these differences in average donation amounts. For example, Dellavigna et al. (2012) reveal in their study social pressure (beside altruism) as a motive for donations. Similarly, in our experiment a donation of a metro passenger might induce social pressure on other metro passengers. To circumvent social pressure, passengers reluctantly donate smaller amounts. However, pure altruism also explains smaller amounts of following donations, as the homeless person already received some money. Furthermore, perceived donations from our team member might be reference values for followers.

4.5 Gender Differences

In September we recorded the gender distribution of passengers. Gender split of passengers was almost equal (3,145 women, 3,078 men). Despite the results presented below, in our opinion, there is no reason to assume a different gender split of passenger in the first week.

In both weeks we record the gender of donors. In the first week of our experiment 69.4% of donations came from females. A binomial-test rejects the hypothesis of equal gender split in donors ($p = 0.000$). In the second week only 52.8% of donations came from females. A further binomial-test does not reject the hypothesis of an equal gender split in donors ($p = 0.391$). The drop of female donors in the second week occurred across all treatments, even though the decrease is by far strongest in the control treatment (For details, see Table A.8 in the appendix). Furthermore, in both weeks the fraction of female donors was highest in the high status treatment. The drop of female donors is especially surprising as the probability of receiving a donation within treatments remains constant across weeks. The drop of female donors is apparently completely substituted by male donors. We cannot provide a proper explanation for this phenomenon. Overall, 60.3% of donations came from females. A binomial-test rejects the hypothesis of equal gender split in donors ($p = 0.000$).

5. Conclusion

By simple means we are able to transfer the abstract concept of status into the field. This enables us to test the particular influence of high status individuals on others' economic activities in a field study. As the results reveal, individuals are not only conditional cooperative, but also more prone to donate when previous givers have an apparently higher socioeconomic status. More generally, individuals seem to sacrifice consumption to associate with high status individuals. Whether the

observed behavior is an act of following, imitation or pure association remains open for future research.

It is worth mentioning that status concerns completely trump social preferences (e.g. Fehr & Schmidt 1999 and Bolton & Ockenfels 2000) in our environment.²¹ Ebeling (2012) already argues for a more norm based approach to explain conditional cooperation in donation situations and reveals the limited importance of inequality aversion in such situations. However, even approaches trying to explain behavior completely by relative contribution norms, as presented by Reuben & Riedl (2011), fail to predict our results.

Furthermore, even if our setting is not the typical fundraising environment, our research might have an implication for applied fundraising. When it comes to the solicitation order, fundraisers should ask high status donors first. While this was already suggested by previous researchers (e.g. Vesterlund & Kumru 2010), we are first in providing field evidence for the effectiveness. Keeping in mind the profitability of such a solicitation strategy, the results gain additional relevance. As a sound compilation of a solicitation order is more or less cost free, it is always worth to pay attention to the status of initial donors.

Previous economic research provides theoretical and laboratory evidence on the influence of high status individuals on others. Our paper corroborates these findings with field evidence. From our perspective, a possible next step is to test the role of high status individuals in adjacent economic areas. For example, as Frey & Toglér (2007) reveal, tax payers are also conditional cooperators. It might be interesting to know whether high status individuals have a particular influence on other's tax moral as claimed by Hammar et al. (2009) and Traxler (2010).

²¹Let us assume the passengers only consider the homeless seller, the donor and themselves. B&O's model predicts no difference between the low and high-status treatment. F&S's model even predicts more donations in the low status treatment when additionally assuming that the passenger's wealth is somewhere in between the low and the high type.

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APPENDIX A: Pictures of Characters and Newspaper

Low status individuals first week



Low status individual second week



High status individual in both weeks



Homeless street-newspaper seller



The street newspaper



APPENDIX B: Classroom Status Survey

We asked participants of a classroom-experiment (N = 319) which took place in November 2011 in a bachelor course at the Faculty of Management, Economics and Social Science of the University of Cologne on their impression of the socio-economic status of the low – and high - status individuals of our experiment. Each participant received one photo and had to estimate the level of education, occupational qualification, employment status and net income of the characters. N=102 received the photo of the low status individual of the first week, N=122 the photo of the low status individual of the second week and N=95 the photo of the high status individual.

Specification of categories:

- a) Level of education
 1. Certificate of Secondary Education (Hauptschulabschluss)
 2. General Certificate of Secondary Education (Realschulabschluss)
 3. General qualification for university entrance (Abitur)
- b) Occupational qualification
 1. None
 2. Apprenticeship (Berufsausbildung)
 3. University degree (Hochschulabschluss)
- c) Employment status
 1. Unemployed
 2. Part time job
 3. Tenure
- d) Net income
 1. To 1000
 2. 1000 – 1500
 3. 1500 – 2000
 4. 2000 – 2500
 5. 2500 – 3000
 6. 3000 – 3500
 7. 3500 – 4000
 8. 4000+

Results:

As can be seen in figure A.1 and A.2 the high status person exceeds by far both low type persons in all categories. This picture is corroborated by a T-test as well as a Mann-Whitney Test. It shows significant differences between the high status person and both low status persons in all categories. Apart from the category of education T-test and Mann-Whitney Test show significant differences between low type persons, too. The low status individual of the first week is on average perceived to have a higher occupational status, a higher employment status and more income. However, even though this difference is significant it does not seem to be substantial (with regards to the figures below). This is especially true in comparison to the huge difference of the low status persons to the high status person.

Figure A.1: Mean of estimated education, occupational qualification and employment status

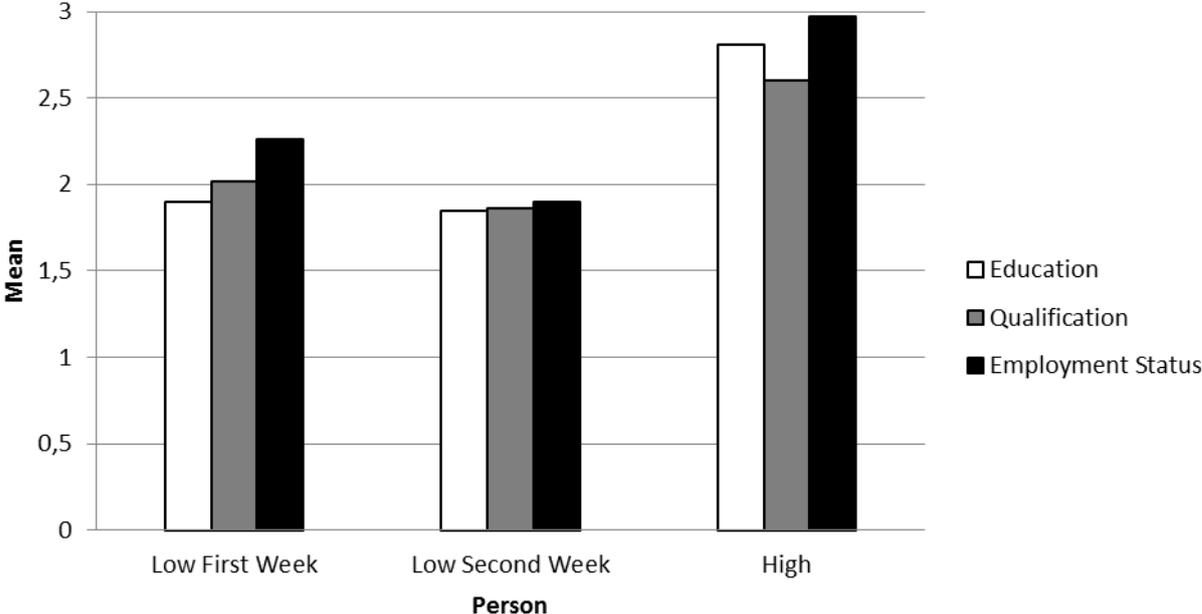
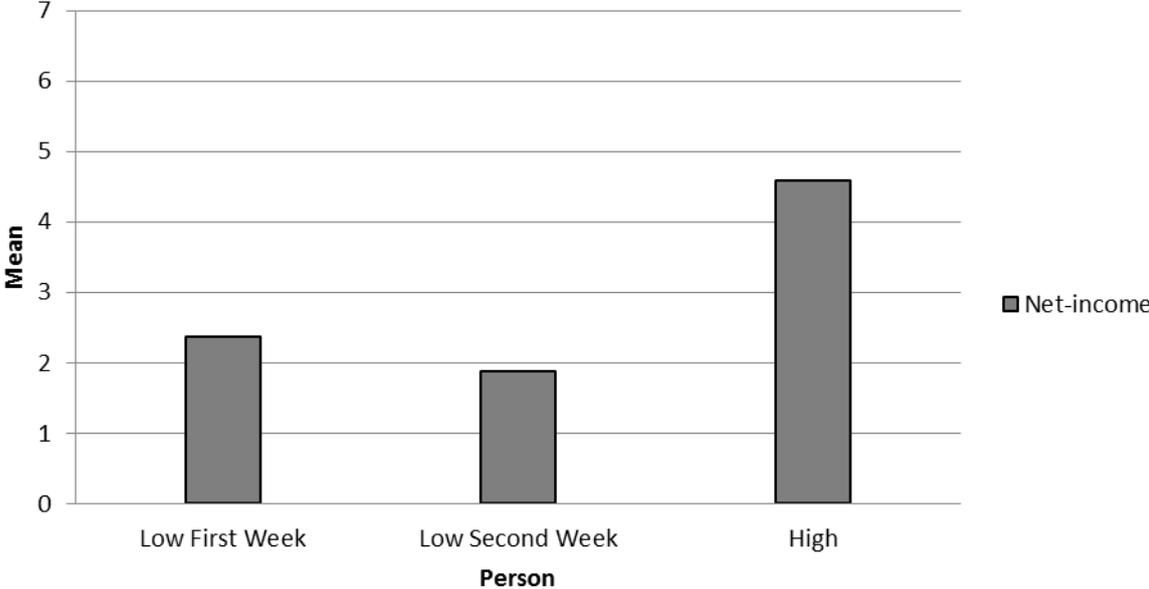


Figure A.2: Mean of estimated net income



APPENDIX C: Descriptive statistics

Table A.1: Rides

	July	September	All
Control	87	97	184
Low Status	88	103	191
High Status	88	104	192
Total	263	304	567

Table A.2: Rides with at least one Donation

	July	September	All
Control	27	28	55
Low Status	44	49	93
High Status	52	63	115
Total	123	141	264

Table A.3 Absolute Number of Donations

	July	September	All
Control	43	39	82
Low Status	67	79	146
High Status	83	113	196
Total	193	231	424

Table A.4 Absolute Profits

	July	September	All
Control	32.29€	41.33€	73.62€
Low Status	44.00€	65.78€	109.78€
High Status	51.65€	81.22€	132.87€
Total	127.94€	188.33€	316.27€

Table A.5: Average Amount of Donation per Observation

	July	September	All
Control	0.37€	0.43€	0.40€
Low Status	0.50€	0.64€	0.57€
High Status	0.59€	0.78€	0.69€
Total	0.49€	0.62€	0.56€

Table A.6: Average Value of Single Donations

	July	September	All
Control	0.75€	1.06€	0.90€
Low Status	0.66€	0.82€	0.74€
High Status	0.62€	0.72€	0.68€
Total	0.66€	0.81€	0.74€

Table A.7: Passengers

	July	September	All
Control	1539	1932	3471
Low Status	1436	2288	3724
High Status	1336	2021	3357
Total	4311	6241	10552

Table A.8: Percentage of Female Donors

	July	September	All
Control	69.77%	41.03%	56.10%
Low Status	61.19%	50.00%	55.03%
High Status	75.90%	58.41%	66.13%
Total	69.43%	52.56%	60.33%

Table A.9: Daytime

	Rides		Donations		Probability of Donation	
	Morning	Evening	Morning	Evening	Morning	Evening
Control	96	88	36	19	37.50%	21.59%
Low Status	97	95	42	53	43.30%	55.79%
High Status	96	96	54	61	56.25%	63.54%
Total	289	279	132	133	45.67%	47.67%

Figure A.3: Number of donations per observation with a least one donation

