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Mission, Motivation, and the Active Decision to Work for a Social Cause

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Abstract

The mission of a job does not only affect the type of worker attracted to an organisation, but may also provide incentives to an existing workforce. We conducted a natural field experiment with 267 short-time workers and randomly allocated them to either a prosocial or a commercial job. Our data suggest that the mission of a job itself has a performance enhancing motivational impact on particular individuals only, i.e., workers with a prosocial attitude. However, the mission is very important if it has been actively selected. Those workers who have chosen to contribute to a social cause outperform the ones randomly assigned to the same job by about 15 percent. This effect seems to be a universal phenomenon which is not driven by information about the alternative job, the choice itself or a particular subgroup.

Keywords: active decision, cognitive dissonance theory, field experiment, mission, performance, prosocial work

JEL classification: C93, D64, J33, M52, M55

Mission, Motivation, and the Active Decision to Work for a Social Cause

A large range of empirical literature has established a variety of observable and unobservable differences in organizational characteristics, workers, and jobs between the private and the nonprofit sector. Particularly, members of nonprofit organizations are said to strongly care for the mission of their job or the underlying social cause (Weisbrod, 1998). Handy and Katz (1998) suggest that lower monetary wages ―that are partially compensated for by a higher component of fringe benefits―[1] are used by nonprofits as a screening device to attract intrinsically motivated individuals. Such individuals are willing to forego some money in exchange for the opportunity to provide goods with positive social externalities.[2] While there is mixed evidence on whether pay differentials across sectors are robust or diminish when controlling for exerted effort,[3] it is plausible to assume that effort exertion is less costly for those individuals whose work contributes to society so that the mission is expected to translate into higher performance rates. Self-selection processes into certain jobs or sectors, however, make it difficult to clearly assess performance differences between people who work for nonprofit and for-profit organizations. The present paper exploits a natural labor market setting which allows us to provide clean causal evidence on the motivational impact of a pro-social mission compared to a profit goal on workers' performance.

Since observational data is hardly qualified to isolate potential influencing factors on performance due to worker self-selection and measurement difficulties, we used a tightly controlled natural field experiment (Levitt and List, 2007; Harrison and List, 2004).

[1] Indeed, nonprofit employees often receive some nonpecuniary benefits e.g. in terms of social services (see, e.g., Mosca et al., 2007; Mocan and Tekin, 2003), but they also experience more wage equity (Leete, 2000) and higher job satisfaction (Zoutenbier, 2016).

[2] Experimental investigations find that reservation wages are lower in case of working for a socially responsible employer (Burbano, 2016) and that pay-for-performance seems to be mostly ineffective in mission-oriented settings (Jones et al., 2018; Ashraf et al., 2014). Banuri and Keefer (2016) even show that high pay attracts less pro-socially motivated individuals.

[3] Dur and Zoutenbier (2014b), for example, show that public sector employees with sufficiently long work experience are lazier than observationally equivalent employees in the private sector. For a survey on nonprofit wage differentials, see Preston and Sacks (2010).

Therefore, we partnered with a local advertising agency with customers from both the private and the nonprofit sector which planned to distribute several thousand advertising and charity letters in the near future. Together, we hired 267 temporary workers, paid them a fixed wage, and measured their performance in doing the simple, homogenous task of enveloping letters. The jobs differed only in the purpose of the letters (pro-social mission vs. commercial advertisements) and the allocation method of the jobs (self-selection vs. exogenous allocation).

To investigate the motivational impact of a pro-social mission it is, first of all, important to rule out sorting effects by keeping the group of workers constant. The potential motivational effect has to be broken into two aspects so that our paper deals with two consecutive questions. First, we ask whether a pro-social mission in itself has a positive effect on performance. We investigate this 'pure mission effect' by randomly sorting workers into a mission-oriented and a commercial job. Second, we ask whether the active choice of a mission-oriented job has a performance-enhancing effect. Consciously deciding in favor of a certain job is an inherent part of any work relationship which might interact with the presence of a social mission. To determine whether such an 'active mission choice effect' exists, we let a group of workers consciously make the choice to work towards a social mission. In order to compare them with workers who were randomly assigned towards the pro-social mission, we ensured that almost all workers prefer the mission over the commercial purpose so that sorting effects are negligible. It is obvious to assume that most people would rather work for a good cause than for a commercial goal, especially if both jobs are paid equally, motivated for example by their own pro-social preferences (e.g. altruism, warm-glow giving), image concerns (Ariely et al., 2009) or because it is the socially desirable response. As expected, the vast majority (87%) indeed sorted into the mission-oriented job.

Our data suggests that the scope for performance increases through the exogenous provision of a mission is limited. On average, we observe no significant difference in performance

between workers who were randomly allocated to either a mission-oriented or a profit-oriented job. However, if we restrict our analysis to pro-social workers (according to their previous volunteering activities as stated in their CV), we observe a performance difference between the two groups. Since individuals allocated to the different jobs do not significantly differ in terms of ability—measured within a preceding enveloping task—we can clearly attribute the higher average performance to a pure mission effect among the pro-social workers. When we allowed workers to choose between the two jobs holding payment equal, we find a positive and highly significant performance effect caused by the conscious decision in favor of contributing to a good cause. Performance increases by about 15 percent, and unlike before, this effect is not driven by a particular subgroup. Further control treatments rule out the possibility that information about the alternative job or the choice itself (independent of the underlying pro-social mission) caused the effect.

We consider our investigations as useful for at least three reasons. First, we focus on an important labor market difference between profit-seeking and mission-based organizations, apart from the differences in compensation that have been the focus of most prior empirical work. Second, our study has important practical implications in that it enlightens our understanding on who is affected by a pro-social mission. We shed light on the question whether a pro-social mission is only relevant to job applicants who are determined and highly intrinsically motivated to do good with their work or also to those who ended up rather by accident in a pro-social job. Third, we aim at not only contributing to the general understanding of the interplay between mission and motivation but also studying the impact of deliberation about a job characteristic on subsequent workplace behavior.

Related Literature and Hypotheses

In the first part of the study, we address the question whether individuals, picked at random from a broad population of short-term workers, perform better when working for a social cause rather than towards a profit goal ('pure mission effect'). The previous empirical literature on the relationship between an organization's mission and workers' performance can be divided into two strands.

The first group of studies highlights the importance of a mission match (or mission alignment). Carpenter and Gong (2016), for example, conducted a real-effort (stuffing political campaign letters) lab experiment in which subjects were randomly allocated to two organizations whose mission were diametrically opposed. Given these diametrically opposed missions, the performance of mission matched subjects was more than 70 percent higher than the performance of the mismatched individuals, but high-powered performance pay could, at least to a great extent, substitute for mission matching. A similar design (i.e. using two diametrically opposed organizations to create mission matches and mismatches) was implemented by Smith (2016). With slightly more than 40 percent performance difference between matched and mismatched subjects, the effect is less pronounced than in Carpenter and Gong (2016) but still very large. The author argues that meaningfulness serves as an intervening mechanism between the mission match and subjects' exerted efforts.[4] Besides, this effect is more pronounced for pro-social individuals, measured within a modified dictator game. Other experimental studies refrain from explicitly creating matches and mismatches but they also vary the match quality and compare subjects' performance to a control group in which no mission is present at all (which means that no donations will be made to any charity). With the exception of Cassar (2018), most of these studies confirm that there is a

[4] Based on 1895 survey responses from employees of a large New York State agency, Wright (2007) supports the suggestion that higher work motivation in case of an organizational mission is mediated by the perceived importance of the job. These findings are connected to a recent strand of literature which analyzes the impact of perceived meaning of work on performance (Chadi et al., 2017; Chandler and Kapelner, 2013; Kosfeld et al., 2017; Bäker and Mechtel, 2018).

positive relationship between mission match and exerted or stated effort (e.g. Resh et al., 2017; Gerhards, 2015; Koppel and Regner, 2014).[5]

The second group of studies focuses on the mere impact of social incentives on individuals' performance independent of how much the mission is appreciated. By comparing groups of subjects whose efforts either generate donations to a charity or not, a significant difference in performance can be observed (Kajackaite and Sliwka, 2017) but these effects are often confined to particular circumstances such as low stakes (Charness et al., 2016; Imas, 2014) or subgroups such as low productivity individuals (Tonin and Vlassopoulos, 2015) or females (Tonin and Vlassopoulos, 2010).

The experimental designs of all these previous studies are very well suited for answering the question whether *additionally* pursuing a pro-social mission ─e.g. in terms of corporate social responsibility activities─ enhances workers' motivation. However, the findings are only limitedly transferable to our question whether nonprofit workers exert higher efforts than for-profit workers. Note that pursuing a commercial goal can be perceived to be meaningful, too. Then, if the mission effect is solely mediated by the perceived meaningfulness of work as suggested by Smith (2016), no mission effect might be found. The following empirical and experimental evidence support this suggestion.

First, findings from the British Household Panel Survey suggest that the likelihood of unpaid overtime remains stable if individuals switch from the nonprofit to the for-profit sector (Gregg et al., 2011). Second, the experimental design by Fehrler and Kosfeld (2014) is close to the previously mentioned investigations but their control group differs in that subjects' chosen effort also generates money for a randomly selected student from the university and not only for themselves. In that setting, the authors did not find any positive mission effect even though subjects could choose their preferred charity to which the donations shall be made.

[5] Besides theoretical contributions that support this notion (e.g. Besley and Ghatak, 2005), Dur and Zoutenbier (2014a) show that mission alignment also plays an important role in sorting into the public sector using representative survey data from 50 countries.

Finally, Banuri et al. (2018) experimentally differentiate between task-based and mission-based motivation. They show that mission-based motivation enhances performance only if there is no task motivation (i.e., in case of sitting in front of a blank computer screen).

By randomly allocating workers to different letters (pro-social mission vs. commercial advertisements) that need to be stuffed, we can cleanly identify, if existent, a pure mission effect on workers' exerted efforts. Taken all the related evidence together, we derive the following hypotheses:

Hypothesis 1a: **There is no *pure mission effect* for the overall sample.**

Hypothesis 1b: **There is a *pure mission effect* for volunteering individuals.**

Hypothesis 1b suggests regularly volunteering individuals as a possible subgroup that exerts higher efforts in case of a pro-social mission compared to the profit goal for two reasons. First, social engagement (as stated in an applicant's vita) credibly reveals that this person cares about the well-being of others (Heinz and Schumacher, 2017) and previous research suggests that individuals' pro-sociality is an important factor in mission-oriented settings (see, e.g., Smith, 2016). Second, volunteers might especially value the work of the volunteering agency (which is the sender of the mission-oriented letter) so that there might additionally be a high mission match for these individuals.

In reality, jobs are usually not randomly assigned. Even if people do not have a real choice ─because the job market is very tight and workers are glad to get a job offer at all─, accepting a job involves, at least to a certain extent, a commitment. Choosing a mission-oriented job may lead to behavioral changes which we address in the second part of the study ('active mission choice effect').

In order to understand how the interplay of an active choice and underlying cognitions may affect performance, we draw on cognitive dissonance theory which explicates how individual

behavior may motivate a change in attitude (Festinger, 1957). Specifically, cognitive dissonance theory proposes that individuals want to avoid any inconsistencies of their cognitions that create a feeling of discomfort. Dissonance caused by a decision (sorting into a social mission job while not being highly committed to the social cause) can be reduced by viewing the chosen alternative (mission job) as more attractive and/or viewing the rejected alternative (commercial job) as less attractive. A dissonance-reducing activity then can be seen in putting extra effort in the chosen mission job since it is not so unpleasant or the social goal is even more desirable as originally thought (see Harmon-Jones et al., 2009).

By looking at the possible interaction effect between a social mission and the choice of it, we also follow a recent strand of literature which stresses the importance of nudges to behavioral changes (Thaler and Sunstein, 2008). In particular, such an 'active decision' intervention might induce workers to reflect and possibly form a subjective value for the pro-social job (Stutzer, Goette, and Zehnder, 2011), above and beyond a pure mission effect. Related, Krupka and Weber (2009) provide experimental evidence for the so-called focusing effect of social norms by showing that the degree of individuals' pro-social behavior increases when their attention is drawn to these norms.

By allowing workers to deliberately sort into a mission-oriented job compared to a for-profit purpose and keeping the composition of our workforce nearly unchanged due to equal payment, we can investigate the existence of 'active mission choice effect' ─a possibly important aspect that has been neglected in the mission-based motivation literature so far. Based on the previously mentioned theories and findings, we derive the following hypotheses:

Hypothesis 2a: **There is an *active mission choice effect* for the overall sample.**

Hypothesis 2b: **The *active mission choice effect* is bigger than the *pure mission effect* for non-volunteering individuals only.**

The latter hypothesis should be true if the active mission choice effect can be explained by the cognitive dissonance theory. In that case, choosing the mission-oriented job does not create any cognitive dissonance for pro-social individuals so that the active choice should not play a role for these individuals. The less socially minded people, however, are in a state of cognitive dissonance. Consequently, in order to avoid discomfort, these individuals are expected to put extra effort in the chosen job. Taken together, we would observe a high level of performance among all individuals (Hypothesis 2a), with the pro-social individuals performing similarly compared to others. Hence, our data does not only allow investigating the overall effect but it can also shed light on the underlying channel.

Study Design

We partnered with a local advertising agency to investigate the motivational impact of a pro-social mission itself and the conscious choice to contribute to a social cause. This agency is specialized on advertisements for nonprofit organizations, but also has customers from the private and public sector. Various upcoming mailing campaigns for different organizations, which all included the need to envelope, stamp, and distribute letters, gave us the opportunity to conduct a natural field experiment (Harrison and List 2004). It also allowed us to observe temporary staff in a controlled but natural working environment without the workers being informed that they were taking part in an experiment.

We attracted prospective workers' attention by small advertisements on bulletin boards (in supermarkets, public libraries, university campuses, etc.) and via regional online platforms. Advertisements informed potential workers about the type of the job (office job for a one-time project), payment (10 EUR per hour) and contact details. No information was given regarding the project's purpose (which turned later out to be either commercial or pro-social). Interested individuals applied in person during office hours. Some of them brought a résumé, while

others filled in a short form. We briefly informed them about the mailing campaigns and asked them some standardized questions regarding experience in similar jobs and potential working times. We offered all applicants an immediate trial. We paid them 5 EUR for thirty minutes of work. The task consisted of enveloping letters, stamping the letters on the front and back and binding the letters together in stacks of ten with a rubber band. Since the task was the same for all applicants and differed only in the neutral content (sports information) from the treatment letters, we use the number of enveloped letters as a performance indicator.

Of the 267 workers who applied for the job and enveloped the sports information letters, 246 individuals showed up for the allocated work shift. For a shift of two hours, people received a fixed payment of 20 EUR. Upon arrival, a research assistant welcomed the workers and gave them brief standardized instructions for the task at hand. To rule out peer effects, each worker was allocated a different meeting time so that the instructor briefed only one worker at a time. Furthermore, employees worked alone in single offices without any coworkers or supervisors around. All offices were identically equipped with a desk, two office chairs and about 400 letters and envelopes.[6] Workers were also told that breaks could be taken whenever necessary. Given these particular circumstances, workers were likely to feel self-responsible for the managed workload. In addition, workers were told in advance that this job is a unique opportunity to earn money with this employer to rule out any career concerns.

[6] During the 30 minute trial work period, workers enveloped on average 37.45 letters. Hence, 400 letters clearly exceeded the maximum productivity for a two-hour shift so that it was clear that enveloping all of them would be impossible and no one should feel obliged to try to master it.

Table 1: Main Treatment Conditions

Allocation method / Letter content	Letter content given exogenously	Letter content chosen endogenously by workers
For-profit goal (increasing sales)	PROFIT	CHOICE(Profit)
Social cause (recruiting volunteers for charities)	MISSION	CHOICE(Mission)

Our 246 workers were randomly allocated into one out of five treatment groups: PROFIT, MISSION, CHOICE, INFORMATION CONTROL, and CHOICE CONTROL.[7] The task was always identical, i.e. enveloping and stamping letters, but (a) the content of the letter and (b) the allocation method differed between treatments. The content involved a pro-social mission (call for recruiting new volunteers for local charities) in treatments MISSION and CHOICE(Mission), and a commercial purpose (advertisements for local shops) in treatments PROFIT and CHOICE(Profit). The method of how we allocated workers to the charity or for-profit letter varied systematically between treatments in that some workers could choose according to their preferences (CHOICE(Profit) and CHOICE(Mission)), whereas others were exogenously and randomly allocated to one of the letter types (PROFIT and MISSION). An overview on the resulting main experimental conditions is given in Table 1.

By comparing PROFIT and MISSION, we can investigate whether there is a pure mission effect. Furthermore, we are interested in whether the active and conscious choice of such a mission (additionally) enhances workers' performance, which can be examined by comparing MISSION and CHOICE(Mission). A comparison between the two groups CHOICE (Mission) and

[7] The randomly allocated treatments are always written in capital letters. A bracket after the treatment name indicates which letter was chosen by the workers who were allowed to decide between two different types.

CHOICE(Profit) allows to disentangle a performance change due to consciously choosing to do good from a positive performance effect due to the choice itself. However, we expected only a small number of workers to choose the for-profit letter as long as working for a pro-social mission was costless. Hence, we implemented the additional control group CHOICE CONTROL in which workers could decide between two different for-profit letters. The for-profit letter 'pets' contained an advertisement for dog accessories (CHOICE CONTROL(Letter 1)), whereas the for-profit letter 'kids' contained an advertisement for clothes for babies and children (CHOICE CONTROL(Letter 2)). This control treatment resembles treatment CHOICE in that workers were also allowed to make a decision between two options regarding the content of the letters to be stuffed, but only in CHOICE, workers could deliberately opt for pro-social work.

Since sorting is also associated with information about different options, differences in workers' performance may be driven by both facets. Therefore, we implemented a further control group INFORMATION CONTROL, which differs only in the factor 'information' from treatment MISSION. There the workers enveloped charity letters but were informed that others already had enveloped for-profit letters.

Table 2: Additional Control Treatments

CHOICE CONTROL	Choice between two for-profit letters: CHOICE CONTROL(Letter 1) and CHOICE CONTROL(Letter 2).
INFORMATION CONTROL	Exogenous allocation of pro-social letters with information that previous workers had enveloped for-profit letters

Empirical Analysis

Workers enveloping letters for a for-profit purpose handle on average 168.53 letters during their shift (treatment PROFIT), while workers exogenously endowed with a mission (treatment MISSION) perform equally well with an average of 172.83 letters (p = 0.637)[8]. Additionally, since individual ability does not differ significantly between treatments (37.30 vs. 37.55, p = 0.866),[9] we can conclude that there is no pure motivational effect of the mission itself in our field experiment ─which confirms Hypothesis 1a. To test Hypothesis 1b, we run subgroup analyses using information about workers' volunteering activities as given in the application process. Within the whole sample, 34.83% of workers volunteered in the past for at least six months, which matches the data from the German Survey on Volunteering very well (Hagen and Vogel 2012). By looking at individuals with no or only minor volunteering activities (less than six months), we again find no difference between MISSION and PROFIT (p = 0.385). Volunteers, however, seem indeed to be positively affected by the underlying pro-social mission, they enveloped on average 204.64 letters if the letter aimed at attracting new volunteers. In case of the for-profit letter, the average number was only 172.64, resulting in an economically significant raw difference of almost 18% (p = 0.093, but with only 14 observations each).

Regression analyses (see Appendix A.1) which control for potential differences in initial productivity between volunteers and non-volunteers support the previous findings. Due to the low number of observations, subgroup analyses should doubtlessly to be taken with care. Still, the data stresses that, for the majority of people, a pro-social mission has no impact on their effort provided at work compared to a profit-oriented job without such a mission.

[8] If we do not report otherwise, the p-value is always obtained from a two-sided Wilcoxon rank sum test.

[9] Even though there is an overall large variation in the number of enveloped letters during the 30 minutes trial work period preceding the treatment intervention, ranging from 15 to 79 letters, we do not find any statistically significant differences across treatments (p= 0.988, Kruskal-Wallis equality-of-population rank test). There is only a somewhat weaker initial performance for the 21 workers who did not come back for the main job (so-called 'dropouts') with an average of 34.57 letters.

Result 1: **We do not observe a pure mission effect when comparing a mission-oriented and a for-profit job. If at all, an economically significant impact can only be reported for regularly engaged volunteers. These findings support both Hypothesis 1a and Hypothesis 1b.**

We now turn to the analysis of a potential 'active mission choice effect'. In treatment CHOICE, in which workers could choose the type of letter they wanted to envelope (mission-oriented or for-profit) without any impact on their payment, the vast majority (87%) opted, as expected, for the pro-social mission.[10] The average performance in CHOICE(Mission) (195.75 letters) is significantly higher than in both treatments in which the letters have been assigned to the workers (PROFIT 168.53 letters: $p = 0.010$; MISSION 172.83 letters: $p = 0.052$). Comparing the groups of workers which were randomly assigned to the pro-social cause with the workers who actively decided in favor of the charity letter, there is a difference of roughly 27 letters enveloped, which is a sizeable performance increase of more than 15%. This finding suggests that workers are highly motivated to perform well if they had deliberately decided upon doing something good ─which supports Hypothesis 2a.

To scrutinize the suggestion that a feasible channel of this active mission choice effect is a result of individuals' avoidance of cognitive dissonances, we again split the sample according to workers' volunteering activities. We do neither observe a performance difference between volunteers and non-volunteers in the group CHOICE(Mission) itself ($p = 0.956$) nor between volunteers who were either exogenously allocated the mission-oriented job or the ones who actively decided in favor of working for the pro-social cause ($p = 0.416$). However, we find a highly significant treatment effect of actively choosing to good for the subsample of non-volunteers (155.69 vs. 197.48 letters, $p = 0.004$). This observation suggests that the less

[10] Equal payment is the crucial element in our experimental design since lower payments in mission-oriented jobs have been shown to result in strong sorting effects (Fehrler and Kosfeld, 2014), only one third of individuals was willing to do the mission-oriented job since it was more costly than the alternative. In such a case, observed performance differences are quite likely to be due to a change in the workforce's composition and the impact of the choice itself cannot be investigated.

socially minded individuals indeed seem to increase their effort to avoid the state of cognitive dissonance.

Table 3: Comparing the Workforce's Composition

	PROFIT	CHOICE (Mission)	*p*-value
Initial performance	37.30	37.63	.843
Female	.65	.625	.816
Age	25.7	24.25	.588
Foreign	.175	.15	.762
Volunteer	.35	.425	.491
N	40	40	

Note: *p*-values are received from Wilcoxon rank sum test, two-sided, and Pearson's chi-squared, respectively.

Since not all of the workers allocated to the treatment CHOICE opted for the pro-social cause, it seems appropriate to check whether this positive performance effect is at least partly due to a change in the workforce's composition. Table 3 shows that workforce characteristics do not differ significantly between the groups PROFIT[11] and CHOICE(Mission)[12], but 94% of volunteers in treatment CHOICE decided in favor of the charity letter whereas this number is somewhat smaller for non-volunteers (82%), resulting in a larger share of 42.5% volunteers in CHOICE(Mission). Even though descriptive statistics and nonparametric treatment testing suggest that individuals' pro-sociality plays no role in this group, we used regression analysis

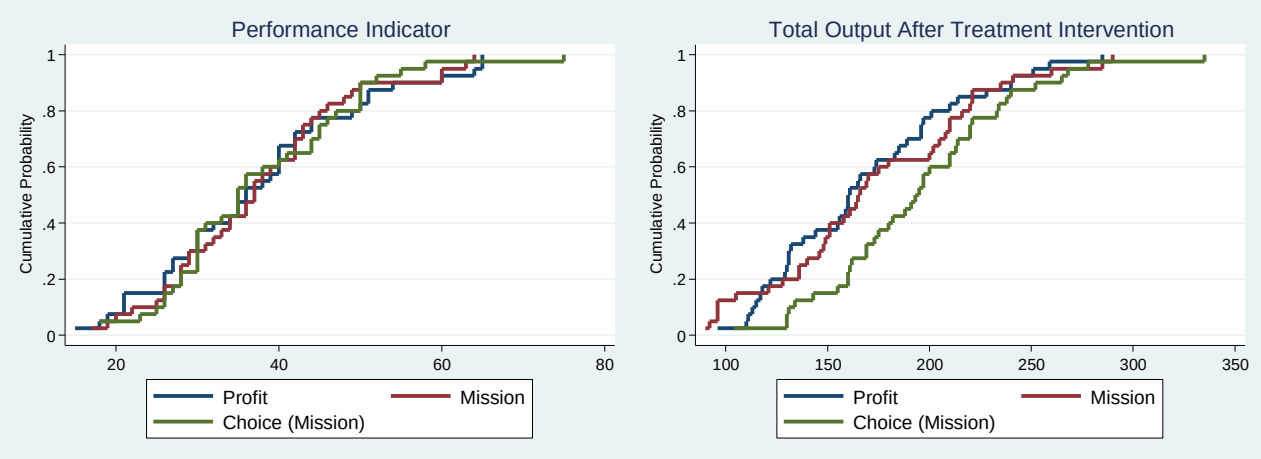
[11] To investigate the motivational impact of a pro-social mission compared to a commercial purpose, treatment PROFIT serves as the reference group throughout the paper. Using treatment MISSION as the reference group does not alter results qualitatively.

[12] For the descriptive statistics on all available experimental groups, see Appendix A.3.

to check for heterogeneous treatment effects (see Appendix A.2). If we include an interaction term for having actively chosen the pro-social mission and being a volunteer, the finding again rejects the conjecture that the average treatment effect is driven by the higher number of volunteers: the (statistically insignificant) point estimate for this interaction term remains nearly unchanged. Another important dimension of the workforce's composition might be individuals' ability.

Figure 1 illustrates that, besides the equality of means, the distribution of initial performance is also comparable across treatments. Whereas the cumulative distribution functions on the left are almost identical, the distribution of workers' output in the experimental group CHOICE(Mission) is clearly shifted to the right (right part of the figure) so that the previously identified treatment effect is not driven by single outliers and, hence, unlikely to be caused by a change in the workforce's composition.[13]

Figure 1: Cumulative Distribution Functions of Workers' Performance



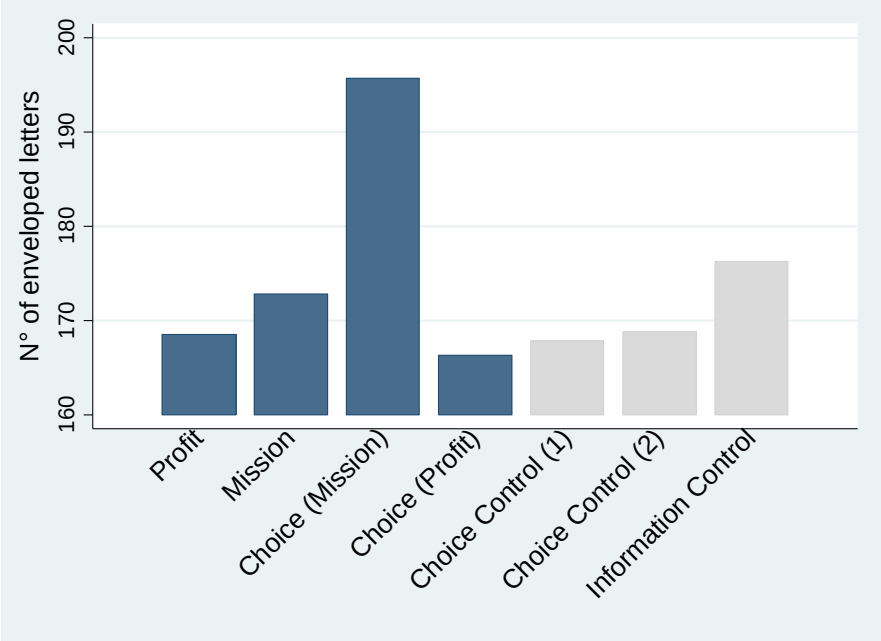
[13] We found only one worker in the group CHOICE [Mission] who performed substantially better than all remaining workers already during the first 30-minutes of the shift. Excluding this outlier, however, does qualitatively not change any of the results presented here.

Finally, we checked for heterogeneity of the treatment effect as regards individual ability or workers' gender, but the active mission choice effect does not seem to be restricted to any specific subgroup.

> ***Result 2:*** **Contrary to an exogenously provided mission, the active choice to do good increases the work motivation of the whole group sizably. Given that only non-volunteers are sensitive to this specific treatment, our data suggests that the avoidance of cognitive dissonances is a likely behavioral driver.**

To rule out the possibility that the previously identified effect isdriven by information about the different options or the mere right to choose — which are two inevitable aspects of self-selection — we analyze the work performance in the control treatments INFORMATION CONTROL and CHOICE CONTROL. To get an overall picture, Figure 2 illustrates the average performance for all treatment groups.

Figure 2: Average Work Performances



Given that the workers who opted for the for-profit instead of the charity letters in treatment CHOICE perform on average (166.33 letters) almost identical to workers who were exogenously assigned to one of the letters, it is rather unlikely that the choice itself boosts employees' performance even though this number is based on six workers only. Both control groups CHOICE CONTROL(Letter 1) and CHOICE CONTROL(Letter 2) with on average 167.87 and 168.83 enveloped letters (based on 38 and 42 workers, respectively) confirm this suggestion.

Finally, being aware of the existence of the for-profit letters in treatment INFORMATION CONTROL yields the highest average of 176.30 enveloped letters among all experimental groups besides CHOICE (Mission). This number, however, is neither significantly different from treatment PROFIT (p = 0.196) nor MISSION (p = 0.519). Notwithstanding that the distribution of individual ability and socio-demographics do not differ significantly between all treatments (see Appendix A.3), we use regression analyses (see Table 4) to confirm that only one out of seven experimental groups, i.e. CHOICE(Mission) clearly outperformed any other.

Table 4: Treatment Effects Overview

	(1)	(2)
PROFIT	*Ref.*	*Ref.*
MISSION	4.300	3.363
	(11.076)	(6.875)
CHOICE(Mission)	27.225**	25.833***
	(10.500)	(6.846)
CHOICE(Profit)	-2.192	-2.029
	(17.245)	(9.299)
INFORMATION CONTROL	7.775	6.616
	(9.265)	(6.722)
CHOICE CONTROL(Letter 1)	-0.657	-3.855
	(9.225)	(5.589)
CHOICE CONTROL(Letter 2)	0.308	-1.226
	(10.050)	(5.995)
Constant	168.525***	56.264***
	(7.406)	(11.211)
Additional Controls	No	Yes
Observations	246	244
Adjusted R^2	.024	.595

Note: Dependent variable is the total number of enveloped letters during the two-hour shift. Additional controls include workers' initial productivity (performance indicator), their gender, age, nationality (being native or foreign), and whether they have been volunteering before. In specification (2), two observations are lost due to missings as regards their birthdate. The table reports OLS coefficient estimates (robust standard in parentheses). Comparing the point estimates for MISSION(Choice) and INFORMATION CONTROL, which are closest to each other, we still find a highly significant difference between the two (p=0.007). Significance levels are denoted as follows: * p<0.1; ** p<0.05; *** p<0.01.

Conclusion

In an ideal world, employees have a clear idea of their preferred mission and the organizations they would like to work for, search until they find the perfect job, and then exert the highest possible performance. In such a world, pro-social individuals would reliably sort themselves into mission-oriented jobs and non-profit organizations whereas individuals who are particularly extrinsically motivated will be found in the private-sector companies whose over-oriented goal is profit maximization. Actually, it is not uncommon that people have less precise ideas about their preferences and desired jobs. To put it positively, they are open to new experiences, they just want to try themselves out and they could imagine both, working for either a pro-social or a profit-oriented job. Sometimes, finding the first or a new job just has simply to be quick, and job seekers take the first-best they can get so that it is decided by chance where they finally go to. The existing literature cannot adequately inform us on the question whether a job's pro-social mission has per se a positive impact on workers' willingness to exert effort compared to a profit goal.

Our study seeks to fill this gap by examining how workers respond to a randomly assigned pro-social mission. We are the first to use a standard profit job as a comparison group since a job whose overall goal is to maximize sales can be considered as the default case. This clearly sets us apart from mission match studies, in which the subjects are randomly assigned to their preferred mission or the exact opposite. These studies are extremely valuable and enlightening from a methodological point of view, but they can hardly be regarded as a reflection of a real decision-making situation. Obviously, our two job orientations (mission-oriented versus commercial) are less diametrically opposed than two opposing missions (e.g. political party campaigns for either Obama or Romney, Carpenter and Gong 2016). Hence, we had to assume that our mission effects on performance would be much weaker, if any. Indeed, we find that employees allocated to the pro-social mission work as hard as those working towards

a profit goal. Only when looking at a very specific subgroup, namely people who already do unpaid volunteer work during their leisure time, we observe a significant positive effect of the mission on performance. This coincides with the assumption that a pro-social mission is clearly more important for these people than for the average population.

Furthermore, we allowed employees in different treatment conditions to opt for their preferred job since self-selection is an inherent part of the real labor market. The innovation here is that workers could choose between a normal job and "to do something good" without an earnings loss in the latter case. Since it was to be expected (and also confirmed) that this option was the preferred one by the vast majority, we were able to generate a particularly interesting group for research: a workforce that deliberately chose a job with a pro-social mission without the usually biased workforce characteristics due to selection. Therefore, we are the first who are able to analyze the performance of a complete population of temporary workers who have previously deliberately decided to work for a social cause. Based on the theory of cognitive dissonance we can test the assumption that it is not the social mission itself that enhances performance, but the conscious choice thereof and the need for individuals to behave in a consistent manner. Indeed, we find that there is no additional performance effect of the active choice for the subgroup of volunteer workers, who already performed very well under the exogenous allocation of the pro-social mission. We do, however, observe a statistically significant performance increase for non-volunteers in case of actively deciding in favor of the social cause which suggests that the avoidance of cognitive dissonances is a likely behavioral driver. While previous research emphasizes the importance of a perfect mission match and therefore suggests that NPO managers should pay particular attention to perfect screening and selection, we find that *all* workers are willing to work harder for the success of a pro-social mission once they decided to work for such a social cause. The occurrence of this active mission choice effect seems to be good news for the society as a whole but also for

human resource management in that not the perfect match has to be found but only a candidate that has valid alternatives and deliberately chooses one out of these.

Discussion

Our main finding on the effect of the active choice of a mission-oriented job on work performance is an interesting result and a so far neglected aspect, but it should be followed by further investigations. Even though we intentionally designed our experiment in such a way that we can rule out any influences from external rewards, it is worthwhile to discuss the relevance of monetary incentive schemes. Ashraf et al. (2014), for example, suggest that financial rewards are complementary to pro-social motivation, pointing to the question of whether incentive pay might raise performance even further or not. The probably most essential issue would be to analyze onto what extent the perceived fairness of a fixed wage influences the established findings. Given the present setting of a one-time job without any specific requirements applicants have to fulfill, the paid hourly wage can be perceived as rather generous. To the contrary, agents employed at non-profit organizations usually receive significantly lower salaries than employees working for profit oriented companies. If the positive performance effect of actively choosing to do good was tight to perceiving the paid wage as fair, it would be interesting for employers to think about, at least moderate, wage increases, ending up in a beneficial situation for both employee and employer.

Given that the active mission choice effect seems to be driven by people who work harder in order to strive for internal psychological consistency, future research should also aim at investigating the long-run consequences of such a behavior. On the one hand, individuals' desire to avoid cognitive dissonances might fatigue them so that they become more likely to reduce effort exertion or even quit the job. On the other hand, however, such an avoidance behavior might not be necessary in the long-run for at least two reasons. First, Stutzer et al.

(2011) indicate that attributing a value to a particular pro-social activity may require introspection, but many people seem to refrain from doing so. If they start working for a pro-social cause, organizational socialization might make it necessary to introspect and altruistic preferences could adapt. Second, some individuals might not consider (certain) social activities as particularly important since they might not have the necessary information to assess their importance, they could even have prejudices towards potential clients or co-workers. According to Allport's contact hypothesis (also known as intergroup contact theory), contact with an unfamiliar outgroup (both chosen and enforced) improves knowledge, increases empathy and reduces fears, ultimately breaking down prejudices (see, e.g., the meta-analysis by Pettigrew and Tropp, 2006). As a consequence, accepting a mission-oriented job could (positively) change individuals' perceptions by getting in contact with the matter. Using both lines of reasoning, one might argue that avoiding cognitive dissonances might not be necessary in the long-run due to an increase of intrinsic motivation to contribute to the pro-social cause after executing the job for a certain period of time.

Finally, one might investigate inasmuch the active mission choice effect exists for different age cohorts. In our experiment, the average age was about 25 years, most of the individuals are likely to have no previous labor market experiences. In that case, individual preferences might be less developed and more likely to adapt to the environment. If, however, individuals get older and preferences become stable, the question arises whether the majority of individuals would still opt for the pro-social cause. Less altruistic people might simply admit that they do not care for the mission so that the avoidance of cognitive dissonances is no longer relevant.

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Appendix

Table A.1: Robustness Checks Using Regression Analysis

	(1)	(2)	(3)	(4)
PROFIT	*Ref.*	*Ref.*	*Ref.*	*Ref.*
MISSION	4.300	3.518	3.359	-6.081
	(11.057)	(6.866)	(7.029)	(8.103)
Initial performance		3.126***	3.030***	2.964***
		(0.258)	(0.282)	(0.269)
Female			4.208	5.766
			(6.977)	(7.077)
Age			-0.054	-0.106
			(0.404)	(0.378)
Foreign			-1.241	-1.753
			(9.347)	(9.307)
Volunteer			8.870	-4.402
			(7.897)	(10.961)
MISSION *X* volunteer				26.694*
				(15.628)
Constant	168.525***	51.916***	51.273***	58.786***
	(7.393)	(9.530)	(17.268)	(16.008)
Observations	80	80	80	80
Adjusted R^2	--	.611	.600	.613

Note: Dependent variable is the total number of enveloped letters during the two-hour shift. The table reports OLS coefficient estimates (robust standard errors in parentheses). Only workers from the treatments MISSION and PROFIT are considered. Significance levels are denoted as follows: * p<0.1; ** p<0.05; *** p<0.01

Table A.2: Testing for Heterogeneity

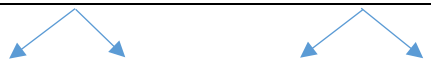
	(1)	(2)	(3)	(4)

PROFIT	*Ref.*	*Ref.*	*Ref.*	*Ref.*
CHOICE (Mission)	26.121***	23.135***	23.137**	28.461***
	(7.081)	(7.934)	(11.417)	(8.849)
Volunteer	1.258	-2.886	1.568	1.133
	(7.622)	(11.139)	(7.764)	(7.745)
CHOICE (Mission) *X* volunteer	--	7.767	--	--
		(15.837)		
Female	-0.026	0.531	-2.521	0.492
	(7.380)	(7.500)	(9.112)	(7.751)
CHOICE(Mission) *X* female	--	--	4.573	--
			(14.142)	
High ability workers	--	--	--	6.622
				(15.169)
CHOICE(Mission) *X* high ability	--	--	--	-4.572
				(15.061)
Age	-0.073	-0.089	-0.090	-0.086
	(0.454)	(0.450)	(0.444)	(0.456)
Foreign	1.778	2.639	1.170	2.456
	(10.288)	(10.260)	(10.360)	(10.616)
Initial performance	2.916***	2.941***	2.915***	2.776***
	(0.309)	(0.318)	(0.310)	(0.515)
Constant	60.905***	61.315***	63.004***	62.922***
	(18.602)	(18.723)	(18.612)	(21.122)
Observations	80	80	80	80
Adjusted R^2	.599	.595	.594	.589

Note: Dependent variable is the total number of enveloped letters during the two-hour shift. The table reports OLS coefficient estimates (robust standard in parentheses). Only workers from the treatments PROFIT and CHOICE(Mission) are considered. Significance levels are denoted as follows: * p<0.1; ** p<0.05; *** p<0.01.

Table A.3: Descriptive Statistics by Treatment Group

	PROFIT [*N* = 40]	MISSION [*N* = 40]	CHOICE [*N* = 46]	CHOICE CONTROL [*N* = 80]	INFORMATION CONTROL [*N* = 40]	DROPOUTS [*N* = 21]
Initial performance	37.30	37.55	37.61	38.01	37.70	34.57
Performance during 2-hours shift	168.53	172.83	191.91	168.34	176.3	--
Socio-demographics:						
Female	0.650	0.675	0.630	0.788	0.650	0.619
Age	25.70	24.25	24.22	24.79	24.34	25.56
Foreign	0.175	0.175	0.152	0.051	0.075	0.059
Regular volunteers	0.350	0.350	0.391	0.313	0.350	0.381



	CHOICE (Mission) [*N* = 40]	CHOICE (Profit) [*N* = 6]	CHOICE CONTROL (Letter 1) [*N* = 38]	CHOICE CONTROL (Letter 2) [*N* = 42]
Initial performance	37.63	37.5	38.42	37.64
Performance during 2-hours shift	195.75	166.33	167.87	168.83
Socio-demographics:				
Female	0.625	0.667	0.684	0.881
Age	24.25	24.00	25.30	24.34
Foreign	0.150	0.167	0.054	0.048
Regular volunteers	0.425	0.167	0.342	0.286

Note: Workers have been randomly allocated into the treatments depicted in the upper table. Afterwards, workers self-selected into the groups outlined in the lower table.

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