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Do Bankers Have Deviant Moral Attitudes? Negative Results from a Tentative Survey^{*}

Abstract:

Bankers have a reputation for deviating from standard morals. It is an open question, though, if this claim can be substantiated. Here, it is tested directly if bankers respond differently to moral dilemmas. Evaluations of the moral acceptableness of behavioural options in two trolley cases by bankers (n = 23) are compared to those of ordinary people (n = 274). An apparent difference in response behaviour between the groups can be fully explained by a difference in the response behaviour of men and women. When controlling for gender, no differences between bankers and other people remain.

Keywords: Morals, bankers, survey, trolley dilemmas, experimental philosophy.

1. Introduction

Bankers are said to have low standing in public opinion. While their work is fundamental to modern market economy, they are often said to be willing readily to sell their own grandmothers for the smallest profit (see, e.g., Salmon 2013). Moreover, their alleged greed and unscrupulousness is frequently said to have caused many of the severe economic crises of the last decades and centuries. In short, bankers have the reputation of deviating from, or even lacking, 'standard morals'.

a) Motivation

Let us assume for a moment, that we could actually substantiate the claim that the observed behaviour of bankers violates 'standard morals'—a term to be clarified in the following—to an extent that would allow us to blame a majority of bankers for behaving immoral, and not just some 'black sheep' representing a small, but prominent, minority within the profession. We could then ask if this observed deviance is caused by either 'abnormal' moral attitudes of bankers themselves or by disadvantageous features of the structures of the market econ-

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omy which bankers are exposed to. In a prominent recent paper, e.g., Falk and Szech (2013a) argue and claim to present experimental evidence that it is not the characteristics of individual market participants but rather the market mechanism itself which causes an erosion of moral values (but see Lütge and Rusch 2013 and Breyer and Weimann 2014 for critical comments on that study).

The current study tries to tackle the same question, but from the opposite direction. Instead of exposing ordinary people to implementations of the market mechanism and studying their behaviour, a standard tool from moral psychology and experimental ethics (Lütge, Rusch and Uhl 2014) is used to survey moral attitudes of bankers directly and compare them to moral attitudes of ordinary people.

The rest of this paper is organised as follows: The remainder of this section fleshes out the theoretical background of the current study in more detail. *Section 2* describes how the empirical study was conducted. *Section 3* reports the results. *Section 4* discusses the limitations of the current study. *Section 5* concludes.

b) Theoretical background

The debate about the question whether the incentive structures of modern economies or individual misconducts, or both, are to blame for immoral behaviour observed in economic contexts has a long tradition which can only be sketched briefly here (see, e.g., Lütge 2005, Kirchgässner 2010 and Bowles and Polanía-Reyes 2012 for more detailed accounts). While some scholars, in line with Adam Smith's 'invisible hand'-ideal, hold that 'undisturbed' free market economies automatically lead to morally desirable outcomes, others argue that unregulated markets tend to fail, resulting in morally unsatisfactory allocations of societal resources.

Independent of which stance one might take in this debate, however, the two empirical key questions of whether (i) we can observe changes in moral attitudes and morally relevant behaviour caused by changes in economic incentive structures and whether (ii) we can observe differences in moral attitudes between specific groups of economic decision makers ('economic agents' for short) are highly relevant. Besides being important for the theoretical part of the debate, the answers to these two questions are decisive for the choice of practical measures which are to be taken in order to prevent immoral behaviour in economic contexts.

To illustrate this point, let us first assume for a moment that thorough empirical research found no systematic interaction of economic incentives and moral behaviour. This would imply that observed immoral behaviour could clearly be attributed to individual differences in moral attitudes. To counteract immoral behaviour we could then mainly focus on a broad moral education of all economic agents, which includes preventive training during economic education but also mechanisms for sanctioning individual misconduct. Note that, importantly, in this scenario sanctions of individual misconducts are justified in the sense that they only affect those individuals whose immoral attitudes are the reason for their misbehaviour (see, e.g., Mukerji and Lütge 2014 for a related discussion). If, in addition, systematic differences in moral attitudes between specific groups of economic agents were empirically established, we could conclude, furthermore, that certain positions in market economies attract specific personalities. To prevent immoral behaviour we could then focus on moral education of particularly those economic agents who aspire after these positions and might even install barriers of entry based on screenings of these agents' moral attitudes (see, e.g., Mazar and Ariely 2006 for a related discussion). Again, sanctions for individual misconduct would still be justified in the sense just outlined.

In the opposite case, where no systematic differences in moral attitudes are found empirically, but changes in incentives affect moral behaviour, the picture changes quite drastically. For one, individual sanctions lose part of their justification in this scenario, because misconducts could no longer be attributed mainly to individual immoral attitudes. Rather, at least some part of the blame for immoral behaviour would have to be transferred to the designers of those incentive structures which cause this behaviour. Maybe even more importantly, the measures to be taken to prevent moral misconduct would now need to focus mainly on re-designing these incentives, e.g. through external regulations or internal revisions of the rules governing the practices within particular professions.

The most complex and probably most realistic case, finally, is of course a scenario where both, effects of incentives and systematic differences in moral attitudes, can be established empirically. In this case, the justification of individual sanctions becomes ambivalent, as it is unclear a priori if specific cases of misconduct are to be blamed on disincentives or immoral attitudes or both. Furthermore, potential interaction effects of incentive structures and moral attitudes have to be taken into account now. It could, e.g., be the case that economic agents do not differ in their moral attitudes early in their careers but then gradually develop a 'déformation professionelle' under the influence of particular disincentives they are exposed to in their professions (see, e.g., Frey and Meier 2003 for a related discussion). It could, however, also be the case that certain professions attract specifically those agents who are especially susceptive to the temptations of disincentives. Even worse, finally, it could be that agents with immoral inclinations self-select into those professions which offer sufficient institutional leeway for them to deploy their deviant tendencies at a low risk of being sanctioned. In any case, in this scenario combinations of both preventive measures, individual moral education and re-design of incentive structures, would be needed to be adapted to the specificities of a given incentive structure in order to effectively counteract immoral behaviour.

Unfortunately, the two key empirical questions about incentive effects and systematic differences in moral attitudes are far from being answered. Regarding disincentives, recent studies suggest that market mechanisms might actually negatively affect morally relevant preferences (DeScioli et al. 2014) and behaviour (Falk and Szech 2013a; 2013b). Other scholars argue, however, that a host of behavioural studies also shows that individual prosocial (i.e., moral) preferences can also lead to a certain resistance of experimental subjects to the temptations of incentive structures favouring completely egoistic behaviour (Stringham 2011; Bowles and Polanía-Reyes 2012). Taken together, thus, the available evidence suggests that changes of incentives do influence morally relevant behaviour but also that these effects are mediated by individual moral attitudes to some degree. Regarding systematic differences in moral attitudes, countless previous studies have examined the moral attitudes of business and economics students yielding multifarious results (see, e.g., Borkowski and Ugras 1998; Frey and Meier 2003; del Mar Alonso-Almeida et al. 2014). The question if systematic differences can actually be found between specific groups of professionals, bankers in the current case, and the rest of society has only been tackled infrequently by previous research, though (but see, e.g., Cohn et al. 2014; Holtbrügge et al. 2014). The current study therefore represents one of the first tentative attempts to investigate this question more directly.

c) Testing for systematic differences in moral attitudes

One of the central concepts in moral philosophy is the distinction between deontological and consequentialist ethics (Broads 1930). In an extremely simplified account, consequentialists hold that the moral rightness of an act solely depends on its consequences, while deontologists claim that every morally relevant act has an intrinsic value which defines its goodness or badness. Roughly speaking, deontology and consequentialism can be viewed as the two extremes of a continuum of ways of moral justification. Building on a thought experiment devised by Foot (1967), moral psychologists and experimental philosophers have been using standardised cases of moral dilemmas, i.e., the 'trolley problems', to survey the degrees of consequentialism and deontology present in moral reasoning of individuals (see, e.g., Greene et al. 2001). Revealing results were obtained (see, e.g., Greene 2008). It has been found, for example, that high cognitive load increases the probability of deontological judgements (Greene et al. 2008), that cognitively more reflective individuals tend to more consequentialist reasoning (Paxton et al. 2011), that more empathetic individuals tend to give more deontological judgements (Conway and Gawronski 2013), and more (see Greene 2014 for a comprehensive listing of over 20 related studies). Most relevant for the present study, it was also found that high degrees of consequentialism are associated with the psychological traits of psychopathy (Koenigs et al. 2012) and Machiavellianism (Bartels and Pizarro 2011, 156):

"Psychopathy refers to a personality style characterized by low empathy, callous affect, and thrill-seeking. [...] Machiavellianism [...] refers to the degree to which people are cynical, emotionally detached from others, and manipulative. Both psychopathy and Machiavellianism share the aspects of emotional coldness, aggression, and willingness to engage in or rationalize deceit, but while correlated they have been found to be distinct in previous studies [(Paulhus and Williams 2002)]." While not being completely methodologically unproblematic (see the critical review by Christensen and Gomila 2012), the 'trolley problems' are one of the best established tools of experimental ethics (see, e.g., Dworazik and Rusch 2014). As the extensive work by Greene and colleagues shows, subjects' responses to these highly stylised moral dilemmas correlate in meaningful ways with more general personality traits. Moreover, the attitudes toward moral justification surveyed using this quite simple method have also been found to be predictive of allocation choices in monetarily incentivised economic experiments recently (Cornelissen et al. 2013). The 'trolley problems' therefore qualify as a convenient tool for probing moral attitudes and the results obtained in this way are very likely to be indicative of cognitive characteristics of the surveyed subjects relevant in real-world moral decision making.

The current study uses the two most prominent 'trolley problems' ('footbridge' and 'bystander') to test for differences between two groups of subjects: a large convenience sample of ordinary people and a smaller group of bankers (see *section 2*). Many situational factors have been identified which influence responses to these thought experiments (see above). The current study, however, utilises the 'trolley dilemmas' to test for group differences. Therefore, both groups were exposed to exactly the same two dilemmas in exactly the same way. The only question of interest here is if subjects belonging to one of the two groups significantly differ in their responses from the subjects of the other group.

If bankers showed increased levels of consequentialist responses to standardised moral dilemmas, for example, this could be taken as an indication that they deviate from 'standard morals', heuristically defined as the average moral attitudes of the ordinary people surveyed in this study. Given the reliable correlations of high levels of consequentialist reasoning and negative personality traits mentioned above, this potential result could even indicate that bankers have a higher probability to possess these traits—be it because specific personalities tend to self-select into this profession or because of a 'déformation professionelle' later in their careers. If bankers did not differ significantly from the ordinary people in this first test, however, that result would need to be interpreted with more caution (see discussion in *section 4*).

2. Material and Methods

a) Sampling method and demography

In the course of a separate study on peer-to-peer microcredit lending, which was publicly advertised through university email lists and Facebook, all respondents (n = 276) were presented with the two most widely used standard moral dilemmas, i.e., the 'footbridge' and the 'bystander at the switch' scenarios (vignettes are available in the *appendix A3*). Information on sex (male/female), age group (11-20, 21-30, ..., 71+), education (five levels), relationship status (single/non-

single), and children (yes/no) were surveyed from all respondents. In order to be able to compare the lending decisions of lay people to those of experts a number of bankers (n = 23), mainly loan officers working for a number of German financial institutions, were later invited directly to participate in the study (mean professional experience \pm std.dev.: 10.6 \pm 8.6 years; mean maximum credit line managed so far \pm std.dev.: 4.1 \pm 9.7 million Euro). However, a number of respondents (n = 8) to the first public call for participation stated that they also worked in finance, management, or similar fields, and one of them stated she was a banker. In order to rule out biased results potentially caused by a too narrow definition of 'banker', these respondents were grouped with bankers in a wider second category labelled 'merchants' (n = 31). This alternative grouping, however, yielded qualitatively equivalent results (see *section 3* and *appendix A1*). The anonymity of all participants was guaranteed by research design. Although personal email addresses were used to invite the bankers, these addresses were at no point linked to individual responses in the online survey.

Before describing the study further, a note on the composition of the samples is in order. The lay sample is large and mainly consists of people associated with one German university whose email list was used for advertisement (students, alumni, researchers, and administrative staff), while the expert sample is small and consists of loan officers who voluntarily agreed to participate in a study on microcredit lending. One potentially biasing effect in the data analysed here might thus be self-selection: It could be suspected that people holding a more deontological metaethical position might also be more inclined to volunteer for scientific surveys, for example. As this pertains equally to both groups studied, though, because both groups volunteered to participate, it could also be argued that self-selection should rather lead to a level-effect in the combined sample than to differences between the two groups. As there is no way of controlling for effects like this in the study at hand, this study's results have to be regarded as tentative. The results described below, nevertheless, will hopefully be instructive for refined work on the research question in focus here, as they show that strong gender effects have to be controlled for before potential vocational effects can be traced.

b) Dependent variables

In the two scenarios presented ('footbridge' and 'bystander', always in this sequence; Wiegmann et al. 2012) respondents had to state whether they hold a particular decision which entails the death of one person but saves five others to be morally acceptable ('a') or unacceptable ('u'). In 'footbridge' this decision requires to personally kill the one person, while in 'bystander' it only requires to throw a switch. We thus obtain four possible responses: 'u/u', 'u/a', 'a/u' and 'a/a'. The counterintuitive 'a/u' response, however, which states that actively killing the one person in 'footbridge' is acceptable while throwing the switch in 'bystander' is not, is known to be very uncommon. Only two of all 299 respondents in this study gave this answer. These two subjects, one banker and one other, are excluded from further analyses. As the other three responses can be interpreted as exhibiting increasing levels of consequentialist reasoning, they will be referred to as: u/u' = 'deontological', u/a' = 'mixed', and 'a/a' = 'consequentialist'.

3. Results

At first glance, the data indicate that bankers might actually possess an increased probability of giving fully consequentialist answers (17.4%) compared to the other people surveyed (6.2%). A χ^2 -test indicates a difference between groups, significant at the 10% level (all χ^2 -tests reported are two-sided and exact; as the distribution of responses lies below 5 for one of the cells of the contingency table, the p-values of Freeman-Halton extensions of Fisher's exact test for 2x3 contingency tables are also reported, see Freeman and Halton 1951). Applying the same tests using the 'merchants' category as the grouping variable yields no significant difference, though ($\chi^2 = 2.24$, p = .333; Freeman-Halton: p = .316). Table 1 summarises response data.

Grouping	Subgroup	Deont.	Mixed	Conseq.	Total	χ^2	Freeman- Halton
By profession	Bankers	11 (47.8%)	8 (34.8%)	4 (17.4%)	23 (100%)	4.59 (<i>p</i> = .093)	<i>p</i> = .096
	Others	125 (45.6%)	132 (48.2%)	17 (6.2%)	274 (100%)		
By sex	Men	37 (35.2%)	52 (49.5%)	16 (15.2%)	105 (100%)	19.47 (<i>p</i> < .001)	<i>p</i> < .001
	Women	99 (51.6%)	88 (45.8%)	5 (2.6%)	192 (100%)		

Table 1: Absolute numbers and percentages of responses ('deontological', 'mixed', or 'consequentialist') given by (i) bankers and other professions, (ii) men and women. Two-sided exact χ^2 -test and Freeman-Halton extension of Fisher's exact test indicate a difference between professions significant at the 10% level, but this effect can be fully explained by differing distributions of answers between the sexes (16 of the 23 bankers surveyed stated their sex as 'male').

However, a closer look reveals that this difference is completely explainable by sex differences in response behaviour. Of the 23 bankers surveyed 16 (69.6%) stated their sex as 'male', while only 89 (32.5%) of the 274 other respondents did. This is a significant difference in sex distribution between the two groups ($\chi^2 = 12.77$, p = .001). Moreover, the response behaviour of men and women in this sample is significantly different ($\chi^2 = 19.47$, p < .001), see *table 1*. A detailed analysis of the data using a multinomial logit model including all controls indicates that sex is the only factor which shows a robust and significant influence on response behaviour (see *appendix A1*; the model, however, also indicates that relationship status and education level might influence subjects'

metaethical stances). Replicating and extending previous work (e.g., Indick et al. 2000; Fumagalli et al. 2010), the sex differences found are stronger in the 'footbridge' than in the 'bystander' scenario when analysing the complete sample ('footbridge': $\chi^2 = 16.61$, p < .001; 'bystander': $\chi^2 = 7.52$, p < .01; see *appendix A2*). Significant differences between responses of male and female bankers were found as well (Freeman-Halton: p = .08; see *appendix A2*).

4. Discussion

This study compares the responses of professional bankers to the two standard trolley dilemmas 'bystander' and 'footbridge' to those of ordinary people. It finds no indications that individual bankers' evaluations of the moral acceptableness of the behavioural options in these dilemmas deviate from those of ordinary people. However, the results do indicate that the male-biased gender composition of the sample of bankers surveyed has a group-level effect on judgements of the moral acceptableness of harmful acts to third parties, as measured by the two trolley dilemmas. In the aggregate, thus, bankers show a weakly significant tendency towards more consequentialist judgements in this study.

This finding is in line with previous findings of gender differences in moral judgement more generally (see, e.g., You et al. 2011). Furthermore, women have repeatedly been found to tend to more deontological responses to moral dilemmas (Indick et al. 2000; Fumagalli et al. 2010). Viewed together with observations of a general tendency of male-biased employment rates in higher-level management positions of the finance industry (see, e.g., Stock 2010; Holst and Schimeta 2012) this study's findings therefore highlight the potential importance of an effect of biased sex-ratios on the business culture in certain professions, particularly in the finance industry. It could be that an overrepresentation of men in higher-level management positions leads to more consequentialist moral decision making in this sector, i.e., to decisions which are less guided by empathetic concerns (Conway and Gawronski 2013) and appear cold-hearted and aggressive (Bartels and Pizarro 2011; Koenigs et al. 2012). If this were the case, an additional preventive measure should receive more attention in the struggle against moral misconduct in professional banking: namely gender equality, particularly at higher management levels.

Before drawing further reaching conclusions from the study at hand, however, its obvious limitations should be addressed: (i) the number of bankers surveyed is small (n = 24) and both samples are not representative; (ii) moral evaluations of only two dilemma cases are analysed; (iii) only self-reported moral preferences are available, i.e., no data on factual decisions with moral relevance was obtained, and subjects self-selected into participation.

Ad (i): Future studies must aim at larger sample sizes and representativity. The results presented here only indicate that if there actually are differences in moral attitudes between bankers and other people, they likely are not pronounced enough to be found in a small sample like the one at hand, particularly given that, as this study clearly shows, differences in response behaviour between men and women have to be controlled for before any other effects could potentially become observable.

Ad (ii): While the number of scenarios that could be presented to respondents was strongly limited by the design of the larger study on microcredit lending which this survey was part of, it is remarkable that such strong sex differences could be found, even in single scenarios and even within the small group of bankers (see *appendix A2*). There is, thus, some reason to be confident that response behaviour in these two cases corresponds to robust differences in morally relevant decision making (Cornelissen et al. 2013) and maybe even stable personality traits (Bartels and Pizarro 2011; also see *section 1*).

Ad (iii): Only self-reported moral attitudes of one particular kind were analysed here. This precludes further reaching inferences, particularly regarding actual behaviour. However, this study also has one potential benefit. By including this survey in the preliminaries of a larger study on economic decision making, the potentially biasing effect of self-selection regarding participation in surveys on moral attitudes was likely reduced in this sample. However, as all of the subjects volunteered to participate in the study, it is still likely that the particular sample of people surveyed here is biased with respect to general helpfulness. This, though, pertains equally to the bankers and the other people who volunteered to participate in this study.

Finally: How can the negative result (no significant effect of profession on moral attitude) of this study be interpreted? It is, of course, mistaken to infer from a non-significant statistical test for group differences that the two groups actually do not differ, particularly given the limitations of the current study just discussed. Furthermore, the current study only tested for differences in one metaethical domain, namely consequentialist vs. deontological moral justification. The groups might differ in other moral domains, e.g. with respect to egoistic vs. altruistic moral values or moral relativism. More and broader systematic research of the moral attitudes of specific groups of economic agents is definitely needed. The current study, though, already indicates that certain professions might systematically differ from others in their average moral attitudes. In the case of the bankers surveyed here, however, the reason for this difference is not that bankers' morals deviate from those of ordinary people but rather because of sex differences in moral attitudes and a male-biased sex ratio among bankers.

5. Conclusions

Let us assume for a moment that future research can substantiate the suspicion raised by the tentative results presented here that individual bankers exhibit no deviating moral attitudes but that, nevertheless, biased sex-ratios in this profession lead to systematic differences of moral attitudes between bankers and the rest of society. Returning to the potential scenarios outlined above (see section 1) this would then mean that, at least for bankers, we face a modified variant of the most complex scenario. As other studies indicate, it is likely that bankers are exposed to (Cohn et al. 2014), and react to (Falk and Szech 2013a), a number of disincentives in their professional environments. Furthermore, as this study suggests, a male-biased gender composition of the higher-level decision makers of the financial industry might foster more consequentialist moral decision making in this sector. Both these factors are then likely to amplify the perceived differences between the moral attitudes, and the moral conduct, of 'ordinary' people and that of professional bankers. Even worse, we might be facing a 'vicious circle' in the following sense: As consequentialist moral reasoning is, to some extent, correlated with emotional coldness, aggressiveness, and even deceit (see section 1), we have some reason to expect that decision makers in the banking industry are unlikely to see a genuine need for changing the incentive structure of their business, because, from their moral perspective, their conduct might be morally well justified.

With respect to the practical measures to be taken in order to counteract moral misconduct, thus, this study indicates that, besides studying the institutional factors influencing the moral decision making processes of bankers and their external regulation, another important measure should be taken into consideration: The strong sex differences in moral attitudes found here reinforce the idea that a higher share of women in influential positions of the finance industry could lead to a positive change of this sector's 'economic culture' from the inside (see, e.g., Eagly and Carli 2003; Holtbrügge et al. 2014)—presuming that more deontological moral reasoning is what we want.

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A1 Multinomial Logit Regression Model

Multinomial logit regression models regressing dilemma responses on all available control variables; only the model using the 'bankers/non-bankers' grouping is reported, results for the 'merchants/non-merchants' grouping are virtually the same. Calculated using SPSS 21. Dependent variable DILEMMA: 0= 'deontological', 1 = 'mixed', 2 = 'consequentialist' (reference response: 'mixed'). 297 observations, Nagelkerke's pseudo $R^2 = .14$.

Response		В	Std. Error	Wald χ^2	p-Value	Exp(B)
	Intercept	1.47	.94	2.45	.12	/
deontological	AGEGRP	.00	.00	.02	.90	1.00 (1.00-1.00)
	EDUCATION	42	.18	5.64	.02	.66 (.4793)
	NON-BANKER	55	.50	1.18	.28	.58 (.22-1.55)
	SEX=FEMALE	.43	.27	2.50	.11	1.54 (.90-2.64)
	NO CHILDREN	10	.46	.04	.84	.91 (.36-2.25)
	SINGLE	72	.27	7.09	.01	.49 (.2983)
	Intercept	2.05	1.98	1.07	.30	/
	AGEGRP	.00	.00	.97	.33	1.00 (1.00-1.00)
	EDUCATION	54	.36	2.25	.13	.58 (.29-1.18)
consequentialist	NON-BANKER	83	.70	1.41	.24	.44 (.11-1.72)
	SEX=FEMALE	-1.70	.56	9.13	<.01	.18 (.0655)
	NO CHILDREN	.11	1.03	.01	.92	1.11 (.15-8.44)
	SINGLE	81	.53	2.33	.13	.44 (.16-1.26)

Table 2: Parameter estimates for the multinomial logit model including all controls. In brackets: 95%-level confidence intervals for Exp(B), i.e. the marginal effect of the respective variables on response probabilities.

A2 Separate Analysis of Responses to the Two Dilemma Scenarios

	Footbridge	scenario	Bystander scenario			
	Unacceptable	Acceptable	Unacceptable	Acceptable		
	All respondents grouped by profession					
Bankers	19 (82.6%)	4 (17.4%)	11 (47.8%)	12 (52.2%)		
Others	257 (93.8%)	17 (6.2%)	125 (45.6%)	149 (54.4%)		
χ^2 -test	$\chi^2 = 4.04$ p = .067		$\chi^2 = 0.04$ p = 1.00			
Fisher's exact test	p = .0	067	p = .8	32		
	All respondents grouped by sex					
Women	187 (97.4%)	5 (2.6%)	99 (51.6%)	93 (48.7%)		
Men	89 (84.8%)	16 (15.2%)	37 (35.2%)	68 (64.8%)		
χ²-test	$\chi^2 = 16.49$ p < .001		$\chi^2 = 7.29$ p = .008			
Fisher's exact test	<i>p</i> < .0	001	p = .008			
	Bankers only					
Women	7 (100.0%)	0 (0.0%)	6 (85.7%)	1 (14.3%)		
Men	12 (75.0%)	4 (25.0%)	5 (31.3%)	11 (68.8%)		
Fisher's exact test	<i>p</i> = .273		<i>p</i> = .027			

A3 Survey Procedure and Vignettes Used

a) Survey procedure

The first wave of this survey was conducted in the summer of 2012. The link to the survey was posted on the *Facebook* page of the Peter Löscher Chair of Business Ethics (TU München) and sent to all subscribers of the email list for public calls for participation of the JLU Giessen. This resulted in the mentioned 276 responses to the two moral dilemmas. Later, in the winter of 2013, bankers were recruited to participate in the survey in two ways. First, four student assistants personally visited branches of several German banks in downtown Munich and gathered the email addresses of interested loan officers. Second, a call for participation was sent to all subscribers of the newsletter of the German 'Sparkassenakademie Alumni'. This resulted in 24 responses from bankers overall.

The survey was conducted online and had three main parts: First, basic demographic information was surveyed from the participants (age, education, sex, etc.) anonymously. Second, subjects replied to the two moral dilemmas ('footbridge' first, then 'bystander'; each on a separate screen). Finally, subjects each rated 25 microcredit loan applications using a number of scales. The choices analysed in the current study thus were the first two choices which the subjects of the longer microcredit study made.

b) Vignettes used (translated from German)

Instructions:

You will now read the descriptions of two moral dilemma situations. Please read the descriptions carefully and decide if you think that the action proposed is morally acceptable. (That means: Imagine someone had acted in the way described, would you then say that acting so was acceptable?)

You do not have to be ultimately sure of your answer. We only ask you for your first considered answer.

Footbridge:

A runaway railroad car is heading down the tracks toward five workmen who will be killed if the vehicle proceeds on its present course, because they cannot see or hear it coming.

You are on a footbridge over the tracks, in between the approaching trolley and the five workmen. Next to you on this footbridge is a stranger who happens to be very large. The only way to save the lives of the five workmen is to push this stranger off the bridge and onto the tracks below where his large body will stop the railroad car, but the stranger will die if you do this.

In this situation, do you think it is morally acceptable to push the stranger onto the tracks, so that the five workmen are saved?

Bystander:

A runaway railroad car is heading down the tracks toward five workmen who will be killed if the vehicle proceeds on its present course, because they cannot see or hear it coming.

You are standing beside the tracks by a switch which could divert the vehicle to a side track on which there is only one workman. The only way to save the lives of the five workmen is to hit the switch and divert the railroad car, but the workman on the side track will die if you do this.

In this situation, do you think it is morally acceptable to divert the vehicle, so that the five workmen are saved?

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