

DISCUSSION PAPER SERIES

IZA DP No. 11825

**How Common Are Bad Bosses?**

Benjamin Artz  
Amanda H. Goodall  
Andrew J. Oswald

SEPTEMBER 2018

## DISCUSSION PAPER SERIES

IZA DP No. 11825

# How Common Are Bad Bosses?

**Benjamin Artz**

*University of Wisconsin at Oshkosh*

**Amanda H. Goodall**

*Cass Business School, City University London and IZA*

**Andrew J. Oswald**

*University of Warwick, CAGE Research Centre and IZA*

SEPTEMBER 2018

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

## ABSTRACT

---

### **How Common Are Bad Bosses?\***

Bosses play an important role in workplaces. Yet little is currently known about a foundational question. Are the right people promoted to be managers, team leaders, and supervisors? Gallup data and the famous Peter Principle both suggest that incompetent bosses are likely to be all around us. This paper's results uncover a different, and more nuanced, conclusion. By taking data on 35 nations, the paper provides the first statistically representative international estimates of the extent to which employees have 'bad bosses'. Using a simple, and arguably natural, measure, the paper calculates that approximately 13% of Europe's workers have a bad boss. These bosses are most common in the Transport sector and large organizations. The paper discusses its methodology, performs validation checks, and reviews other data and implications.

**JEL Classification:** J28, I31, M54

**Keywords:** bosses, leadership, job satisfaction, well-being

**Corresponding author:**

Andrew J. Oswald  
University of Warwick  
Coventry CV4 7AL  
United Kingdom

E-mail: [andrew.oswald@warwick.ac.uk](mailto:andrew.oswald@warwick.ac.uk)

---

\* For helpful comments, we are grateful to Aaron Schat, Marina Halac, John Heywood, Lilian de Menezes, James Oswald, and Bert Van Landeghem.

*“In a hierarchy, every employee tends to rise to his level of incompetence.”*

Laurence J Peter in The Peter Principle.

*“Is there some reason my coffee is not here? Has she died, or something?”*

Miranda Priestly in The Devil Wears Prada.

## **Introduction**

Recent Gallup data reveal that half of US employees say they have left a company because of a bad boss (Harter and Adkins, 2015; Herrera, 2018). Long before this, Peter and Hull (1969) became famous for the idea, now known across the world as the Peter Principle, that managers and supervisors are routinely promoted to one level too high, relative to their abilities, within organizations (Lazear, 2004; Barmby, Eberth and Ma, 2012). Movie and media representations of bad bosses continue to be commonplace.

Today there are important concerns about stress and psychological ill-health in workplaces (Clark, 2005; Jones, Latreille and Sloane, 2016; Bryson, Forth and Stokes, 2017). If bad bosses are indeed widely spread across organizations in the modern world, there is a considerable amount of evidence that this can be expected to have deleterious effects on employee well-being and workplace performance (Artz, Goodall and Oswald 2017; Bryson, Forth and Kirby, 2005; Lazear, Shaw and Stanton, 2015; Tepper, 2000; Bryson, Forth and Stokes, 2017). Hence these intellectual issues are fundamental ones in industrial relations, labour economics, and related parts of social science.

Currently, however, there is a significant lacuna in the research literature. There are no published papers -- to our knowledge<sup>1</sup> -- that assess in an internationally consistent way the rarity or commonness of ‘bad bosses’. This study is a cautious attempt to provide the first estimates<sup>2</sup>. It uses the 2015 European Working Conditions Survey (EWCS). Broadly, the paper finds that, although a non-negligible number of bosses -- approximately one in eight -- can be classified as bad, the data do not seem as gloomy as might be expected by the picture painted by the Gallup survey information or any near-literal interpretation of the Peter Principle.

---

<sup>1</sup> After searches on the Web of Science and Google Scholar.

<sup>2</sup> It should be mentioned that a stream of work by economists Nick Bloom, John Van Reenen, and colleagues, tackles certain related issues for manufacturing industry, although with different methods.

The background to this study is a familiar one. Supervisors and managers self-evidently exert a great deal of power in the workplace. They can have profound effects upon employees and on the ways in which organizations operate. Certain HRM practices and high job-satisfaction are believed to be positively associated with organizational performance (Bryson, 2004; White and Bryson, 2013; Böckerman and Ilmakunnas, 2012; Oswald, Proto and Sgroi, 2015; Bryson, Forth and Stokes, 2017). A contrasting negative-leader perspective studies the effects of bosses' bad behaviour, most commonly through important work on 'abusive supervision' (Tepper, 2000) and 'destructive leadership' (Einarsen, Aasland, and Skogstad, 2007). Bad bosses can have a major negative impact on workers. Hoel and Beale (2006) study workplace bullying in Britain. Bender, Heywood and Kidd (2017) find some evidence that supervisors' race and gender may affect how workers of the same race and gender are treated in the workplace. Green (2010) and Green and Tsitsianis (2005) discover greater intensification of work and reduced task discretion. Jones et al. (2016) document some possible effects on productivity from employees' psychological health. This study also links to conceptual work on 'expert leadership, including Goodall (2012) and Bäker and Goodall (2018). The quality of one's immediate boss is empirically both a key determinant of job satisfaction (Artz, Goodall and Oswald, 2017; Bäker and Goodall, 2018) and individual performance (Lazear, Shaw and Stanton, 2015).

### **Methodological issues**

There is no standard methodology for this research problem. Hence we have attempted to build up from first principles.

Like all humans, individual bosses inevitably have individual strengths and weaknesses. Some overall metric, or average index, is therefore required. To try to avoid charges of arbitrariness, we begin with what seems the intuitive and natural benchmark (however, we also discuss variations around the benchmark). In the data set, we have assessments of the boss in seven dimensions. We are therefore able to create a simple 'net' score. To give a flavour of the later method, a boss in this study will be classified as 'bad' if the person's net score across the summed criteria is negative. The seven criteria are: how workers rate their immediate boss in areas such as *feedback, respect, praise and recognition, help getting the job done, support for individual development, successful team-working, and helps and supports*.

For the calculations, random samples of employees are required. The data used<sup>3</sup> in the paper are drawn from (i) the European Working Conditions Survey (EWCS) for the year 2015, (ii) the General Social Survey of the United States for the year 2012, and the General Social Survey of the United States for the year 1996. The main part of the paper, however, concentrates on the European data. All the different data sets are statistically representative of the chosen populations. Descriptive statistics, and further details of the data sets for Europe and the USA, are given in an appendix. Tables A.1 and A.2, in the appendix, describe the wording of the key survey questions. Means and standard deviations are also reported.

It might be argued that there are two ways to tackle the research question. An observer-based approach would send external observers into a random sample of workplaces. The observers would be given training in how to record the actions, and make judgments about the quality, of the bosses that they see in the workplace. This research method arguably has the advantage that, as long as assessors could make accurate judgments, there would be some degree of objectivity to the data. Assessors could be trusted to be impartial. However, the procedure also has potential disadvantages. First, observers would find it hard to gauge in an even-handed way a wide variety of different kinds of environments about which they inevitably had no deep knowledge. Second, there would remain an amount of subjectivity, which in this case would come from the assessors' side. Third, and perhaps most important, the bosses would be likely to act differently when they knew that, on particular days, they were being observed.

A second, and alternative, procedure would be to gather data on the quality of bosses by asking questions of the employees themselves. This employee-based method also has a mixture of strengths and weaknesses. It has the advantage that workers are the ones who know the most about their line managers and who see them over long periods. Purcell and Hutchinson (2007) argue that it is employees' perceptions of manager practices, and not just the intended or implemented practices, that particularly matter. Moreover, employees understand the nature of the work and can assess their bosses' actions in many more settings than is feasible for any visiting social-science investigator, and thus are well placed, in principle, to evaluate the quality of their boss. The approach also has the potential strength that whatever a worker feels about his or her

---

<sup>3</sup> Most surveys do not report information about the role of supervisors, so we have to use selected years for which such data are available.

line manager, regardless of its exact objective truth, could have a fundamental influence. Nevertheless, this style of empirical inquiry would have disadvantages. First, workers might let personal animosity or attachment cloud their views about the strengths and weaknesses of an individual boss; second, employees might not understand the entire production process, and thus ultimately give honest but misinformed line-manager ratings; third, workers might fear their boss, and believe that their own answers could not be guaranteed to be confidential, and so might choose to give unduly favourable appraisals.

In an ideal world, both approaches would be undertaken. A degree of match between the two -- the observer-based methodology and employee-based methodology -- might then be sought. A good match would allow more confident judgements to be made about the proportion of good bosses and bad bosses. What the current paper does is to enquire, as thoroughly as it is able, into the second form of evidence. It averages across workers' subjective views, and a range of questions, in order to produce what we believe to be the first international sector-wide estimate of 'bad bosses' in today's workplaces.

### **Details on the method**

The European Working Conditions Survey data set provides an opportunity to assess bosses across nations in a uniform way. It provides a sample, for the year 2015, of approximately 28,000 randomly sampled European employees. In each country, workers are asked:

*To what extent do you agree or disagree with the following statements?*

- ***Your immediate boss provides useful feedback on your work.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5 = Strongly agree.
- ***Your immediate boss respects you as a person.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5 = Strongly agree.
- ***Your immediate boss gives you praise and recognition when you do a good job.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5= Strongly agree.
- ***Your immediate boss is helpful in getting the job done.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5 = Strongly agree.

- ***Your immediate boss encourages and supports your development.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5 = Strongly agree.
- ***Your immediate boss is successful in getting people to work together.*** 1= Strongly disagree. 2 = Tend to disagree. 3 = Neither agree nor disagree. 4 = Tend to agree. 5 = Strongly agree.

As is clear from the wording, these questions are meant to elicit assessments of the person's immediate boss, namely any form of line manager within the organization's hierarchy, whom we take to be the supervisor or manager directly above the interviewed employee. These questions arguably correspond with HR practices of "feedback", "respect", "praise and recognition", "help with getting the job done", "support for individual development", and "successful team working". As will be shown later, moreover, each of these variables enters a job satisfaction equation in a statistically significant way.

Our aim in this paper is to understand the distribution of bad bosses. We therefore need to establish a bad-boss 'cutoff' level. To do this, assumptions have to be made about what a reasonable requirement is for a good or bad boss. On that, there is scope for debate and fair-minded disagreement. Therefore, in this study we err on the side of conservatism. We adopt a symmetric rating method that leads to a form of net assessment. We add up the plusses and the minuses to create that overall view of the quality of a boss. More precisely, the chosen criterion in this paper is the following: A line manager is classified as 'bad' if the person's combined net score on the seven questions is negative, that is, is overall in the 'disagree' columns. This cutoff corresponds, in the data set, to an aggregated boss score of 20 points or lower.<sup>4</sup>

---

<sup>4</sup> As an example, consider a boss who is right at the cut-off. Imagine that he or she is given by the employee a score of 2 out of 5 on 'feedback', a 2 out of 5 on 'helpful', a 2 on 'respect', a 3 on 'encourages', and a 4 on the other three questions ('praises', 'successful in teamwork', 'helps and supports'). Thus, the worker tends to disagree that the boss gives useful feedback; tends to disagree that the boss is helpful in getting the job done; tends to disagree that the boss is respectful; has no strong opinion on the question of whether the boss gives encouragement; tends to agree that the boss gives praise, and fosters team productivity, and provides help and support. This implies a net neutral score. This is a total of 21 points out of a possible 35. The arithmetical reason is that the three scores (2+2+2) below the indifference level (which is a 3) are exactly offset by three scores (4+4+4) above. Put differently, the employee is ambivalent about this hypothetical boss (2+2+2+3+4+4+4 = 21). Overall, across the seven elements by which the boss is assessed, the worker's view is then a neutral one – neither good nor bad.



The logic of the chosen definitional cutoff of a score of ‘20 and below = bad boss’ is based on the intuition and flexibility of averaging. In this way, bosses are not required to be anywhere near perfect, nor even to be competent in every aspect of their actions. Instead, the measure is an attempt to sum across their possible strengths and weaknesses. Some individual-question negatives (for example, ‘I disagree that the boss is helpful in getting the job done...’) are allowed, without the individual being given the bad-boss tag, as long as any demerits are made up with offsetting plusses from a sufficient number of other questions from among the seven. A form of ‘net’ score thus emerges in which there is a kind of average across each of his or her strengths and weaknesses.

## **Main results**

The answers in the EWCS data set on Europe allow a calculation of the commonness or otherwise of ‘bad bosses’. The method takes an aggregation of employees’ judgments across the seven different questions. When we make this calculation, approximately *13% of workers are estimated to have bad bosses*. To illustrate how that number is derived, consider Figures 1 and 2. These provide visual plots of the distribution of bad and good bosses across the combined European economies. The first diagram, Figure 1, gives the frequency distribution of boss quality. It depicts the percentages of bosses who are given every individual score between the lowest feasible (a score of 7) and the highest feasible (a score of 35).<sup>5</sup> The second diagram, Figure 2, is the cumulative frequency distribution.

The pattern in Figure 1 makes it clear that workers’ views on their immediate bosses lead to an estimated boss-quality distribution that is bimodal. Hence, there are two spikes. These occur fairly high up the quality range at 28 points and then again right at the top at 35 points. The percentages of employees giving these two exact scores are, respectively, approximately 8% of employees and 13% of employees. Figure 2 is the cumulative version.

Figure 3 gives the distribution of bad bosses across industries. In comparing sectors, however, it should be borne in mind that sample sizes here are smaller than ideal, so we caution that our calculations ought to be viewed as some of the first, and tentative, international estimates. Figure 3 reveals that bad bosses are most common in Transportation and in Manufacturing, at

---

<sup>5</sup> We think a fair criticism would be that the top score of 35 has a mechanical feel to it, where all the elemental scores are themselves high, but this is how the data come out, and for our purposes any top-end bunching has little effect.

17.4% and 16.0% respectively. At slightly lower levels come Human Health and Social Work and Agriculture, Forestry and Fishing. The sample size for Manufacturing is fairly large (at 4412 workers), so the high number of bad bosses reported in that sector may, in this case, be somewhat reliable. These estimated numbers should perhaps be read as complementary to the influential work on manufacturing by Bloom and Van Reenen and colleagues (such as Bloom et al. 2012).

It is possible to raise objections to the weighting that is used in these calculations. With this method we have treated good and bad ratings in an even-handed, symmetric way. Under our chosen approach, therefore, a boss who had workers who were indifferent on all of the seven questions assessing that boss (so the worker said ‘I neither agree nor disagree’ on every occasion when asked about the boss’s qualities) would escape the bad-boss label.

Other cut-offs are straightforward to apply. One possibility, as another option in assessing bosses, would be to start from the point of view that a boss should be viewed as someone who has consequences that are better than merely marginally positive. Then the almost -- but not quite -- minimal requirement might be someone who scores positively, in a net sense, in more than a single category. This criterion would imply a bad-boss categorization that begins at 22 points or less. It can be seen from Figure 2 that such a definitional rule would produce approximately an 18.5% estimate for the percentage of (fairly) bad bosses. As another more extreme position, say, a boss might be expected to score positively on every one of the seven criteria. That would lead to a harsh bar and produce a bad-boss definition as being anyone who was given less than a 4 out of 5 on any of the seven sub-criteria (approximately half of all bosses would fail by this benchmark). Alternatively, and more leniently, some investigators might merely wish to put asymmetric weight on negative assessments, so that negatives would be relatively hard to outweigh with positives. All of these could be calculated using the methodology, but the current paper takes an illustratively simple, symmetric stance and uses a 20-point cut-off.

Table 1 moves to micro-econometric equations for boss quality. Using the individual data, it examines the statistical correlates with boss quality. To form the dependent variable, we weight each of the employee’s answers, on the 5 point scale, and then sum those numbers across the seven questions. This produces a rating, from 7 to 35, of the employee’s boss. We treat this evaluation by each worker as a measure of ‘Continuous Boss Quality’. Table 1’s dependent variable is this continuous measure.

The columns in Table 1 build up in length and specification. In the fullest specification, which includes a measure of general cheerful mood, and is shown in column 4 of Table 1, a number of independent variables remain statistically significant at conventional confidence levels. They include a dummy variable for employee representation in the workplace, which suggests, interestingly, that there is some kind of association between allowing employees a formal way to express opinions and having a better boss. Column 4 also controls for a cheerful mood; pay; hours of work (negatively); and size of firm (negatively). The age profile is U-shaped. Middle-aged workers therefore assign the lowest ratings to their bosses, which seems consistent, in principle, with the low well-being levels often reported generally in midlife (as in Blanchflower and Oswald, 2008).

Another notable feature of column 4 of Table 1 is the result on the size of the workplace. Larger workplaces are associated with lower boss-quality scores.

### **On workers' assessments**

How, in this data set, might the workers' evaluations of their bosses be checked and validated? If employees' answers about their bosses are genuinely informative -- rather than just randomly unpleasant or pleasant remarks -- those answers should be correlated with the workers' overall views of the desirability of their own job. Negative scores on boss-quality criteria, for example, should be associated *ceteris paribus* with less satisfied employees and ones who are considering leaving the organization.

It might be argued that workers who give favourable scores for their bosses are bound, by the nature of human personalities, to tend to give favourable job-satisfaction scores. Although it is not possible to control for this omitted-personality problem in a completely certain way, Table 2 does show that the key pattern is strikingly robust to the inclusion of other variables for a sunny kind of personality.

Table 2 reports satisfaction equations for Europe (asked in 32 different languages). Here the dependent variable is a measure of the job satisfaction of the approximately 28,000 randomly sampled European workers. More precisely, the wording of the question is "On the whole, are you 'very satisfied', 'satisfied', 'not very satisfied', or 'not at all satisfied' with working conditions in your main job?" As a check, we later examine equivalent equations for a question about whether the employee is enthusiastic about his or her job. [Table A.1 in the appendix gives full wordings].

For ease of reading, a simple OLS estimator is used. However, the results are essentially unaffected by using instead an ordered estimator; those versions of the equations are available upon request.

The mean of the dependent variable in Table 2 is approximately 3.06 on a 4-point scale. It has a standard deviation (driven by the across-person variation) of approximately 0.68. A standard set of personal and demographic variables are included in the job satisfaction equations in Table 2. These include gender, age, marital and education dummies, and a set of dummy variables for different kinds of workplaces and employees.

In Table 2 the key variables are how the employee evaluates the activities of his or her immediate boss. As can be seen, each of the boss-assessment variables has the natural implied sign. Thus in column 1 of Table 2, for example, the coefficient on the positively coded variables of Gives Useful Feedback is 0.180, with a large t-statistic. The implied effect-size in a job satisfaction equation is substantial. As the value of this variable can vary from 1 to 5, the coefficient implies that the difference between a boss score of 1 and a boss score of 5 translates into a job satisfaction difference of approximately 0.9 job-satisfaction points. Within Table 2, each of the seven boss characteristics -- listed vertically in the table -- has a coefficient of approximately 0.2-0.3 in value. These are cross-sectional estimates, so should be treated extremely cautiously, but do seem consistent with the notion that the nature of boss behaviour may have considerable implications for employees' well-being at work.

Table 3 moves to an alternative specification. It is suggestive of three further conclusions. The first is that, as in column 1, the seven items seem to enter together, with less collinearity than might have been expected. In column 2 of Table 3 the boss variables are compressed into a single composite. As explained earlier, 'continuous boss quality' is defined to run from a low of 7 to a high of 35. The composite coefficient in the second column of Table 1 is 0.045 with a small standard error. People who have bosses whom they rate highly across the seven criteria are far more likely, holding other observables constant, to be contented at work. As an illustrative calculation, a putative move from having the worst possible boss to having the best possible boss would imply a move of 28 points in boss quality, which, when multiplied by 0.045 leads to an implied greater level of job satisfaction of 1.26 points.

As explained above, intrinsically happy individuals might view their boss and job through rose-tinted glasses. If that were the case, the positive correlation between job satisfaction and perceived boss-quality could be due to an omitted personality variable. Therefore, a second contribution of Table 3 is to seek an approximate correction for the intrinsic personality (or, arguably, mood on the interview day) of the individual worker. This is done with a cheerfulness variable. The independent variable ‘cheerful mood’ in column 3 of Table 3 is calculated from a separate question from the EWCS data set; within the questionnaire the cheerfulness question is separated from the boss-quality questions by many pages. The wording of the cheerfulness question, which is meant from the wording to apply to life rather than the job, is: *Which is the closest to how you have been feeling over the last two weeks? I have felt cheerful and in good spirits: All of the time; Most of the time; More than half of the time; Less than half of the time; Some of the time; At no time.*

Controlling for cheerfulness appears here -- encouragingly -- to have almost no effect on the key estimates. It can be seen in column 3 of Table 3 that when the cheerfulness variable is entered in the job satisfaction equation there is robustness in the coefficient on the boss-quality variable. It alters only from 0.045 to 0.040, and retains statistical significance at any conventional level of confidence. That stability is valuably suggestive. The evidence in Table 3 does not seem to favour the view that workers who appreciate their bosses merely have positive personalities that tend to be appreciative of everything (including their jobs).

Another possible concern is that the positive link between bosses and the worker’s job satisfaction might operate partly through compensatory levels of earnings and hours of work. Yet column 4 of Table 3 checks this and reveals that adjustments for those influences do not alter the main conclusion. In column 4, the logarithm of the individual worker’s earnings and their weekly hours worked are included as extra independent variables. As would be expected, the former enters positively and the latter negatively. A set of controls for workplace size are also included in column 4 of Table 3. However, none of these additional variables makes a difference to the coefficient estimate on ‘continuous boss quality’. It remains unchanged, in column 4, at 0.040.

Figure 4 gives a graphical representation of the relevance of boss variables in a worker job-satisfaction equation. Using column 4 of Table 3, the coefficients imply that boss quality is the single largest element.

## **An extension: bosses in the USA**

This section of the paper briefly describes complementary material. To contain the length of this paper, these findings are reported more fully in the Appendix.

The analysis is for the United States and uses the data set known as the General Social Survey. Pooled cross-sectional estimates from the GSS are given for the year 2012. The sample size in these regression equations is much smaller than before: it is approximately 600 employees. That is because the necessary questions are not routinely asked in the regular GSS annual surveys. However, the 2012 GSS data set has the interesting and unusual feature that it asks workers whether they have witnessed bad kinds of behaviour in their workplace (and if so by whom). This potentially allows a comparison to be made between bad behaviour by various kinds of people, including the person's boss.

Although the sample is small, this appears to be the first time GSS data have been used to examine the bad behaviour of bosses. The behaviours highlighted in GSS fall broadly within the set identified by Tepper (2000) as 'abusive supervision' (see Table 1. Constructs That Capture Nonphysical, Supervisor Hostility p. 263). The bad behaviours identified in GSS are worded in the survey as:

- *I have been denied a raise or promotion without being given a valid reason*
- *I have been lied to by co-workers or supervisors*
- *I have been treated in a rude or disrespectful manner at work*
- *I have received emails, text messages, mobile cell phone calls, or other electronic, internet or social network communications from people at work that were harassing or threatening*
- *People at work have spread rumors or gossip about me*
- *I have felt ignored, excluded or isolated from others at work*
- *I have been the target of derogatory comments or jokes at work.*

Using these categories, approximately two thirds of employees say they have witnessed bad behaviour. The questionnaire makes it possible to identify the sources. In the analysis the key question used to create independent variables for the regression equations of Table A3 is "In the past 12 months, the person engaged in these types of behaviour has most often been: a coworker, your supervisor or boss, a customer/client/patient". Mean proportions are: a coworker 31% of the

time; a supervisor or boss 17% of the time; customers/clients/patients 15% of the time. These variables are then entered, in Table A3, as independent variables in a US job satisfaction equation.

Table A3 reveals, first, that overall job satisfaction levels are markedly lower among employees who have observed certain bad behaviours. When clients have behaved badly, that coefficient, in the first column of Table A3, is -0.426, which is nearly half a job satisfaction point. In column 1 of Table A3, which is for the full sample, what is noticeable is that the Boss Behaved Badly variable has the largest negative coefficient when compared to the other two kinds of bad behaviour (by coworkers and clients). We reject the null hypothesis that -0.856 is equal -0.543. Moreover, these coefficients on behaviour are large when contrasted with the personal characteristics. Table A3 produces the same kind of result for a smaller sample where some kind of bad behaviour was reported. Column 3 omits workers who attribute bad behaviour to not being given an increase in pay or promotion (actions that might be justifiable by a boss and might not necessarily be 'bad') and similar conclusions hold. Later columns of Table A3 indicate robustness.

Some further evidence, of an older kind, is provided in Table A4. The dependent variables again include job satisfaction in the United States GSS, but in this case the data are from the year 1996. Here the main variable is a set of answers to questions such as '*when was the last time you were really angry, irritated or annoyed at your boss?*', or at a coworker, or at a subordinate, or a client, and so on. Also '*how intense would you say your anger or irritation was?*', '*how often did you think about it?*', and '*how long did the anger and irritation last?*' Table A4's results, again on admittedly small samples, suggests that bosses apparently have the most important negative consequences. The other coefficients are dominated in size by that on 'mad at boss'. Table A5 offers further results. Table A6 gives a corroborative equation-specification for 'enthusiasm'.

## **Discussion**

Approximately one eighth (more precisely, 13%) of Europe's workers have been found to have a bad boss. This estimated number may seem surprisingly low<sup>6</sup> to those who know the Gallup finding on half of employees having had a boss bad enough to force them to quit, or had expected that Miranda Priestly, from the movie *The Devil Wears Prada*, would be found widely across the industrialized world's workplaces. Nevertheless, the paper's calculation should be kept in

---

<sup>6</sup> Our own intuition, when beginning the project, was that the number would be higher than 13%.

perspective. It stems from the presumption here that an appropriate cutoff rule for the definition of a bad boss is an aggregate score that is negative (that is, a score of 20 or worse on the summed integers over the seven questions). That might be seen as setting a bar that is low and rather lenient on bosses; to escape the bad-boss classification here does not require that a boss be positively valuable, only that he or she be a zero or above. To allow a different cut-off to be chosen, Figure 2 makes it possible visually to calculate the percentages that would be generated under different cutoff rules. A related question is: what can be said about ‘good bosses’. Because the data exhibit a skewed distribution, there is no single way to address that particular question. For example, it can be seen from Figure 1 that approximately 13% of bosses are given by their workers a ‘perfect’ score of 35 out of 35; that would be one way to define a good boss, but it appears to us to be a rather extreme one. More broadly, Table 1 gives equations that effectively offer statistical predictors of the probability of a very good boss compared to a fairly good boss (and so on). The current study has focused on the rarer ‘bad boss’ end of the distribution, where it might be argued that a fairly natural and clear cut-off -- for ‘badness’ -- can be defined.

Given length constraints, we briefly review other points below.

Further potential concern 1: Bosses in these data sets are not randomly assigned, so some of the causality is unclear.

This is an important query. One answer is that much of the current paper engages in a new form of measurement rather than only hypothesis-testing. The paper aims to measure the commonness or otherwise of bad bosses; that does not require an assessment of how those bosses came to be appointed. The econometric work points to a persistent type of correlation, between boss variables and levels of worker satisfaction, and these patterns are not widely known and thus seem worth documenting as systematically as possible. Nevertheless, they remain correlations.

Further potential concern 2: Some of the variables in the empirical work use subjective data. Such data may be unreliable.

There is evidence that subjective well-being scores are correlated with, and predictive of, objective and observable phenomena. Examples include Oswald and Wu (2010). It might also be pointed out that corporations around the world make use of subjective satisfaction data, in market research and their human resources divisions, so such data might be said to have passed a key Chicago-esque ‘market’ test. Finally, workers’ feelings -- about their bosses and other aspects of their



working environment -- seem likely to be intrinsically important in governing the actual actions of those workers. As mentioned earlier, this approach is common in the associated literature examining destructive and abusive bosses. Disgruntled employees, whether or not there is an objective case for their disgruntlement, may be less productive ones and be ones who intend to quit. In this special sense, subjectivity may not be a disadvantage.

Further potential concern 3: A central role in the analysis is given to subjective assessments of the quality of the immediate boss, and the main dependent variable is also a subjective assessment of job satisfaction, so inferences from cross-sectional regressions may be biased by omitted personality variables.

Employees seem to be in a fairly good position to answer questions about the competence of their boss. However, this correlational concern nevertheless remains a valid one. A fixed-effects analysis would be preferable; it would allow unobservable personal characteristics to be differenced out. However, the paper's principal results are robust to the inclusion of an extra independent variable for the person's cheerfulness with life. In Table 3, for example, the third and fourth columns show that the inclusion of a cheerful-mood control does not alter the punchline of that part of the analysis. Hence, it appears unlikely that the statistical connection between perceived boss quality and the worker's overall satisfaction is some spurious form of pattern.

## **Conclusions**

The contribution of the paper has been to estimate the prevalence of 'bad bosses' in Europe's workplaces. To our knowledge, the results are the first of their kind. There is no previous study that allows such a question to be answered in a cross-national statistically representative way.

The analysis produces five main conclusions. First, by implementing the paper's cut-off for the definition of a bad boss, which is based on a net negative score over 7 summed categories (helping, respect, feedback, etc), 13% of Europe's workers are estimated to have a bad boss. This figure is lower <sup>7</sup> than might have been expected by those who believe in any extreme version of the Peter Principle or the Gallup-data finding discussed earlier. Second, across industries, bad

---

<sup>7</sup> It should perhaps be mentioned that we ourselves had expected a higher figure for the proportion of bad bosses. It may be that public perceptions of bosses are biased by the fact that citizens who are unhappy with their boss tend to be the ones who speak out about 'the boss'. Hence Amanda Priestly types may be rarer than is imagined.

bosses are most common in Transport. Third, the paper estimates a series of boss-quality equations. This finds, among other results, that boss-quality scores are greatest in workplaces in which there are worker-representation committees and in small workplaces. Fourth, employees who have bad bosses are less satisfied in their jobs than other employees, and this is apparently not because of any omitted-personality effect. Finally, there is suggestive correlational evidence that bad behaviour by the boss may have worse implications than other kinds of bad behaviour at work, and that anger about the boss may last longer than other kinds of anger.

An interesting potential slant on our findings comes from two earlier studies that focus on aggressive or abusive boss behaviour. The first used data from the Netherlands and examined two rather general forms of undesirable boss behaviour – experiencing ‘unpleasant situations’ and ‘aggression’ (Hubert and van Veldhoven, 2001). These authors identified the prevalence of these behaviours in Dutch workplaces to be 11%. The second study estimated the frequency of workers’ exposure to aggressive actions by their supervisor in a sample of approximately 2500 employees in the US (Schat, Frone, & Kelloway, 2006). In that sample, 13.5% of US workers reported having been exposed to aggression from their boss or supervisor (see Table 4.6 of Schat et al. 2006). These studies differ from ours because they focus on explicit negative behaviour such as aggression. Nevertheless, the similarity in size of the three percentages (ours for Europe’s nations at 13%, 11% in the Netherlands, and 13.5% in the United States), is potentially intriguing. It demands attention in future research.

## References

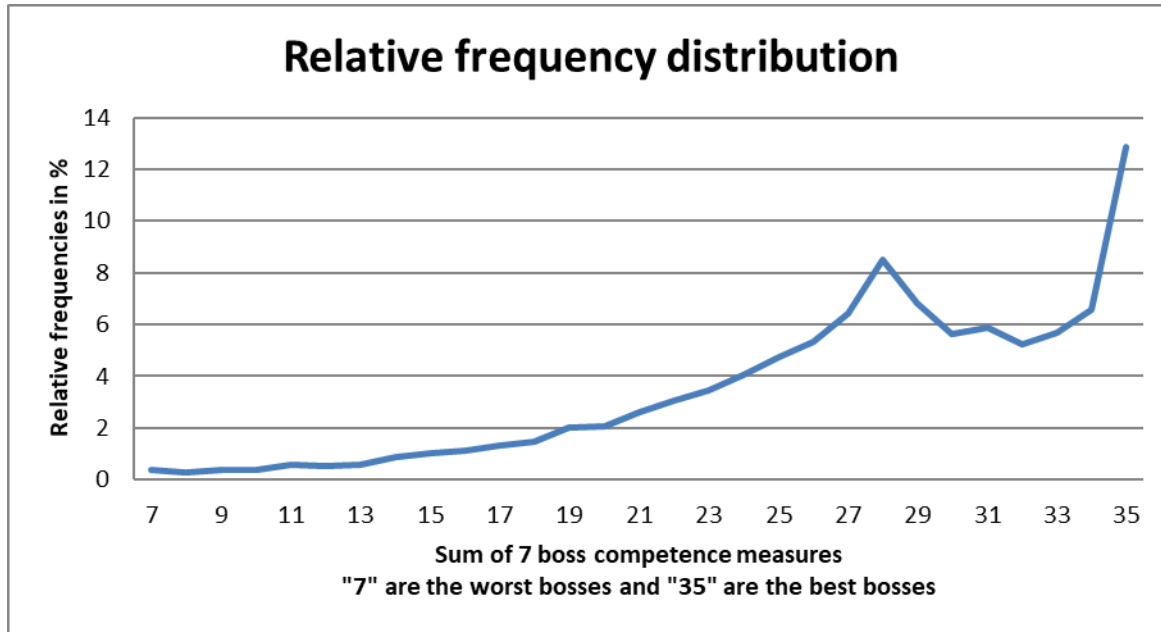
- Artz, B., Goodall, A. H. and Oswald, A. J. 2017. Boss competence and worker well-being. Industrial and Labor Relations Review, 70 (2): 419 – 450.
- Bäker, A and Goodall, A.H. 2018. Which doctors make the best leaders? The influence of line managers on employee job satisfaction. Working paper, Cass Business School.
- Barmby, T., Eberth, B. and Ma A. 2012. Incentives, learning, task difficulty, and the Peter Principle: Interpreting individual output changes in an organisational hierarchy. Labour Economics, 19(1): 76-81.
- Bender, K.A., Heywood, J. S. and Kidd, M. P. 2017. Claims of employment discrimination and worker voice. Industrial Relations Journal, 48 (2): 133 – 153.
- Blanchflower, D.G. and Oswald, A.J. 2008. Is well-being U-shaped over the life cycle? Social Science & Medicine, 66(8): 1733-1749.
- Bloom, N., Genakos, C., Sadun, R. and Van Reenen, J. 2012. Management practices across firms and countries. Academy of Management Perspectives, 26: 12-33.
- Böckerman, P., Ilmakunnas, P. 2012. The job satisfaction-productivity nexus: A study using matched survey and register data. ILR Review, 65(2): 244-262.
- Böckerman, P., Bryson, A. and Ilmakunnas, P. 2012. Does high-involvement management improve worker wellbeing? Journal of Economic Behavior and Organization, 84: 660-680.
- Bryson, A. 2004. Managerial responsiveness to union and nonunion worker voice in Britain. Industrial Relations, 43, 1, 213-241.
- Bryson, A., Forth, J. and Kirby, S. 2005. High involvement management practices, trade union representation and workplace performance in Britain. Scottish Journal of Political Economy, 52 (3): 451–91.
- Bryson, A., Forth, J., and Stokes, L. 2017. Does employees' subjective well-being affect workplace performance? Human Relations, 70 (8): 1017 – 1037.
- Clark, A.E. 2005. Your money or your life: Changing job quality in OECD countries. British Journal of Industrial Relations, 43 (3): 377 – 400.
- Einarsen, S., Aasland, M. S., and Skogstad, A. 2007. Destructive leadership behaviour: A definition and conceptual model. Leadership Quarterly, 18: 207–216.
- Goodall, A.H. 2012. A theory of expert leadership. IZA discussion paper 6566. Bonn, Germany.

- Green, F. 2010. Well-being, job satisfaction and labour mobility. Labour Economics, 17 (6): 897–903.
- Green, F. and Tsitsianis, N. 2005. An investigation of national trends in job satisfaction in Britain and Germany. British Journal of Industrial Relations, 43: 401–429.
- Harter J. and Adkins, A. 2015. Employees want more from their managers. Gallup Workplace. [www.gallup.com/workplace/236570/employees-lot-managers.aspx](http://www.gallup.com/workplace/236570/employees-lot-managers.aspx).
- Herrera, T. 2018. Ghosts, seagulls, and incompetents: How to deal with bad bosses. New York Times, August 6.
- Hoel, H. and Beale, D. 2006. Workplace bullying, psychological perspectives and industrial relations: Towards a contextualized and interdisciplinary approach. British Journal of Industrial Relations, 44, 2: 239–262.
- Hubert, A. B. and van Veldhoven, M. J. P. M. 2001. Risk sectors for undesirable behaviour and mobbing. European Journal of Work and Organizational Psychology, 10: 415–424.
- Jones, M.K., Latreille, P.L., and Sloane, P.J. 2016. Job anxiety, work-related psychological illness and workplace performance. British Journal of Industrial Relations, 54, 4: 742–767.
- Lazear, E.P. 2004. The Peter Principle: A theory of decline. Journal of Political Economy, 112, 1: S141-S163.
- Lazear, E.P., Shaw, K.L. and Stanton, C.T. 2015. The value of bosses. Journal of Labor Economics, 33(4): 823-861.
- Oswald, A.J. and Wu, S. 2010. Objective confirmation of subjective measures of human well-being: Evidence from the USA. Science, 327: 576-579.
- Oswald, A.J., Proto, E. and Sgroi, D. 2015. Happiness and productivity. Journal of Labor Economics, 33: 789-822.
- Peter, L.J. and Hull, R. 1969. The Peter Principle, William Morrow & Co Inc. (Pan Books edition 1970).
- Purcell, J. and Hutchinson, S. 2007. Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. Human Resource Management Journal, 17(1): 3-20.
- Schat, A. C. H., Frone, M. R., and Kelloway, E. K. 2006. Prevalence of workplace aggression in the U.S. workforce: Findings from a national study. In E. K. Kelloway, J. Barling, & J. J. Hurrell (Eds.), Handbook of workplace violence: 47-89. Thousand Oaks, CA: Sage.

Tepper, B. J. 2000. Consequences of abusive supervision. Academy of Management Journal, 43: 178-190.

White, M., and Bryson, A. 2013. Positive employee attitudes: How much human resource management do you need? Human Relations, 66(3): 385–406.

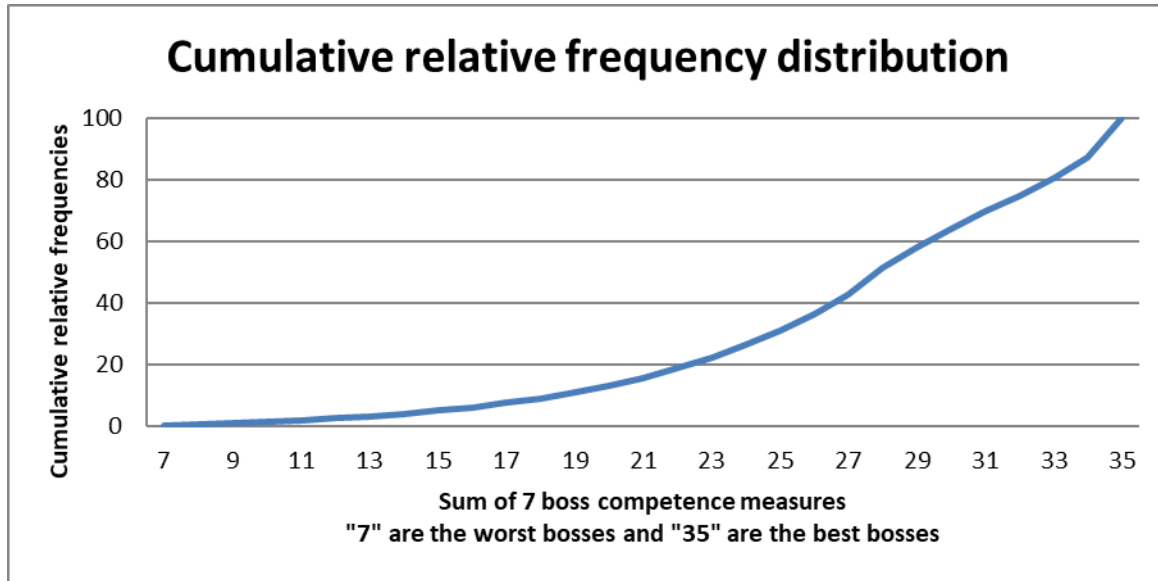
**Figure 1:** The Frequency Distribution of Boss Quality in Europe



The boss-quality scale here runs from a low of 7 to a high of 35. Larger numbers on the horizontal axis indicate better bosses.

The paper's definitional cut-off for a 'bad boss' is 20 points and below. The reason is that this cut-off corresponds to a net negative, when summed, across the seven assessment questions that are asked about the boss's behaviour. However, the diagram also allows calculations to be read off for any other chosen definition.

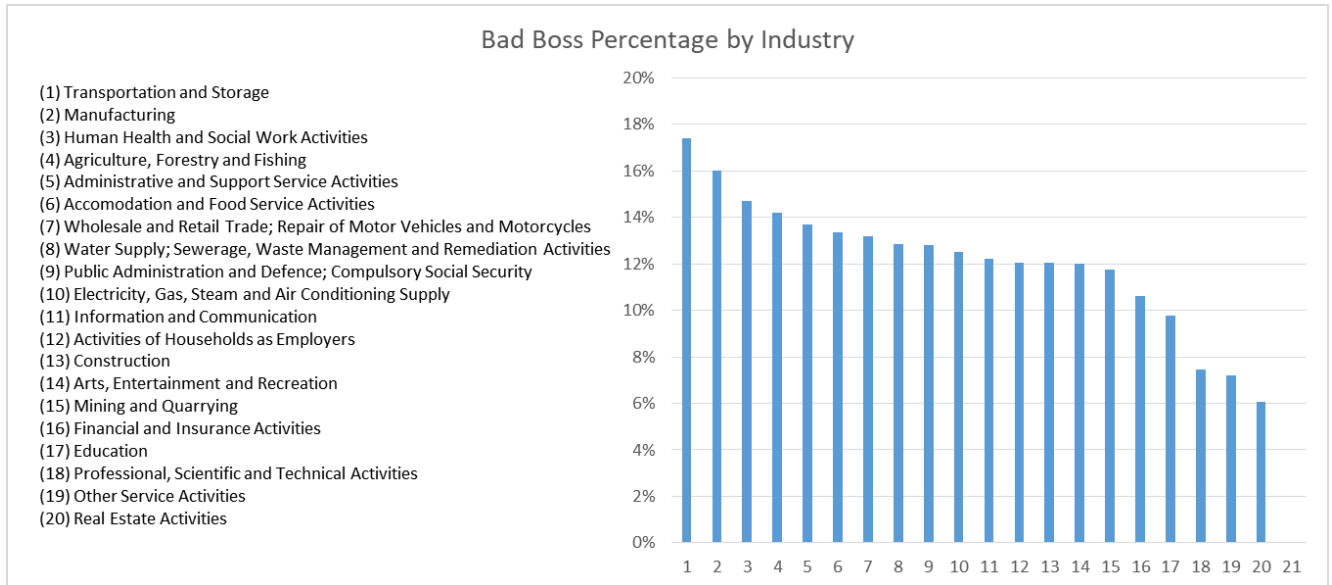
**Figure 2:** The Cumulative Distribution of Assessed Boss Quality in Europe



The boss-quality scale here runs from a low of 7 to a high of 35. Larger numbers on the horizontal axis indicate better bosses.

The paper's definitional cut-off for a 'bad boss' is 20 points and below. The reason is that this cut-off corresponds to a net negative, when summed, across the seven assessment questions that are asked about the boss's behaviour. However, the diagram also allows calculations to be read off for any other chosen definition.

**Figure 3: The Distribution of Bad Bosses across Twenty Industries**

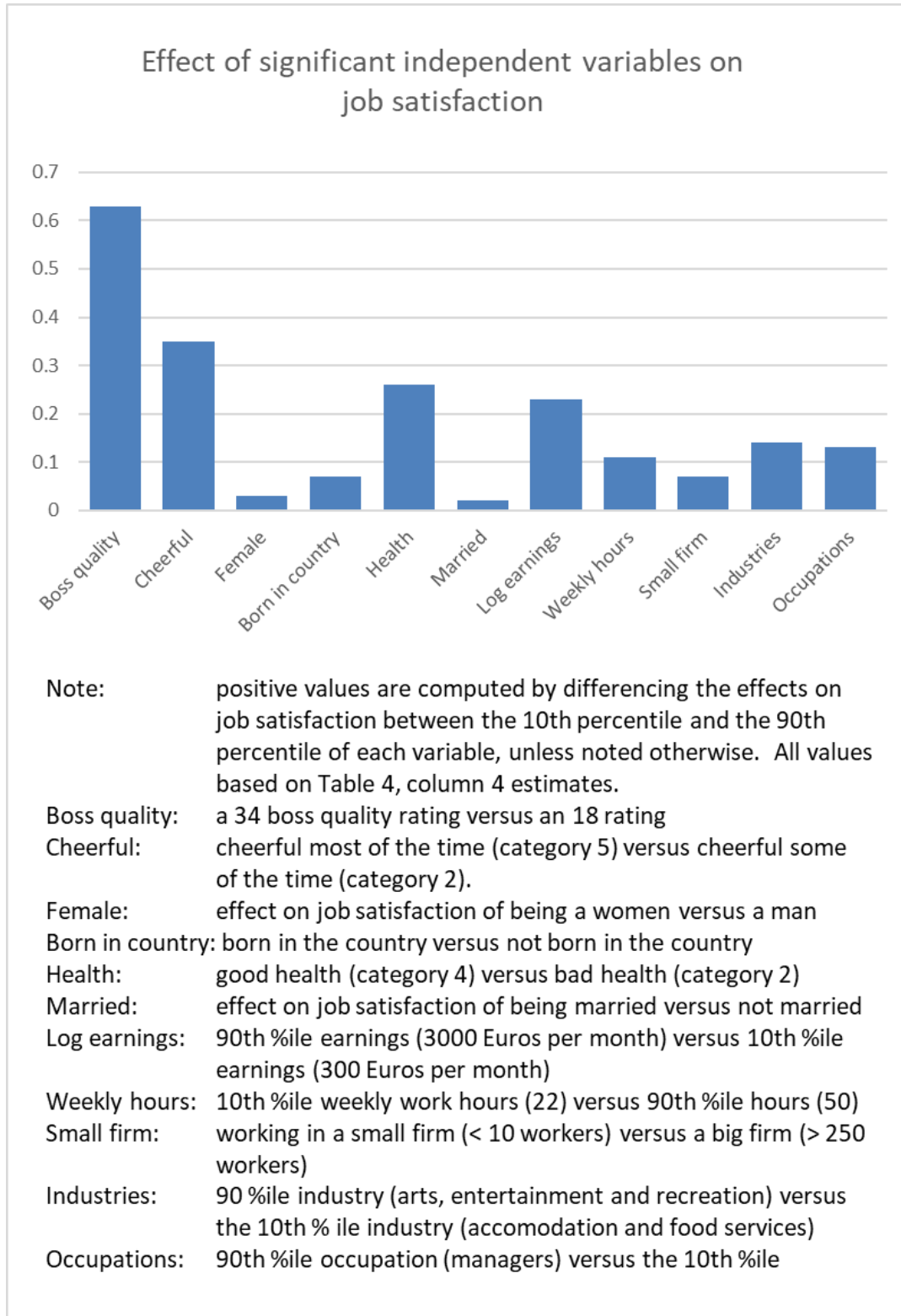


The proportion of bad bosses in each of twenty industries is on the vertical axis.

As in earlier diagrams, the definitional cut-off used here for a ‘bad boss’ is 20 points and below.



**Figure 4:** Exploring the Correlation Between Boss-Quality and Employee Job Satisfaction



**Table 1:** Boss-quality equations for Europe (EWCS 2015)

	(1)	(2)	(3)	(4)
Female	0.238** (2.518)	0.104 (1.092)	0.172* (1.926)	0.101 (0.950)
Age	-0.116*** (-4.276)	-0.094*** (-3.590)	-0.067*** (-2.787)	-0.080*** (-3.230)
Age squared	0.001*** (4.358)	0.001*** (4.054)	0.001*** (3.197)	0.001*** (3.400)
Immigrant	-0.350* (-1.875)	-0.073 (-0.485)	-0.046 (-0.333)	0.041 (0.307)
Physical health	1.667*** (18.360)	1.595*** (17.395)	0.901*** (11.114)	0.896*** (11.003)
Married	0.337*** (3.051)	0.216** (2.208)	0.176* (1.837)	0.162 (1.598)
Primary education	1.294* (1.729)	1.198 (1.358)	1.285 (1.595)	1.885* (1.828)
Lower secondary education	0.208 (0.320)	0.585 (0.727)	0.642 (0.845)	1.135 (1.179)
Upper secondary ed.	0.292 (0.444)	0.905 (1.094)	0.922 (1.187)	1.430 (1.373)
Post-sec. non-tertiary ed.	0.650 (0.871)	0.726 (0.953)	0.812 (1.114)	1.426 (1.465)
Short-cycle tertiary ed.	0.592 (0.787)	0.594 (0.677)	0.671 (0.807)	1.059 (0.953)
Bachelor degree ed.	1.232* (1.936)	0.725 (0.930)	0.784 (1.054)	1.159 (1.111)
Master degree ed.	1.080 (1.581)	0.816 (0.974)	0.929 (1.161)	1.357 (1.288)
Doctorate degree ed.	0.489 (0.524)	-0.151 (-0.146)	0.059 (0.060)	0.282 (0.221)
Employer tenure	0.004 (0.544)	-0.000 (-0.048)	-0.002 (-0.309)	-0.001 (-0.187)
Public sector employer	0.139 (0.993)	-0.338*** (-2.665)	-0.318** (-2.460)	-0.236 (-1.561)
Joint private-public employer	0.009 (0.047)	-0.066 (-0.345)	-0.155 (-0.812)	-0.190 (-0.853)
Not-for-profit employer	0.356 (0.982)	0.235 (0.693)	0.262 (0.841)	0.298 (0.892)
Employees are represented	-0.189 (-1.299)	0.129 (1.129)	0.106 (0.988)	0.409*** (3.122)

Cheerful mood (of employee)			1.477***	1.381***
			(25.628)	(25.003)
Log monthly earnings				0.346**
				(2.209)
Weekly hours worked				-0.026***
				(-4.055)
Medium firm				-1.073***
				(-8.213)
Big firm				-1.244***
				(-7.933)
Industries (21)	No	Yes	Yes	Yes
Occupations (9)	No	Yes	Yes	Yes
Countries (35)	No	Yes	Yes	Yes
Constant	22.104***	22.111***	17.156***	16.490***
	(22.965)	(22.699)	(17.377)	(11.780)
R-squared	0.048	0.088	0.148	0.145
Observations	27981	27981	27981	22127

Notes: t-statistics are in parentheses; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Heteroskedasticity-robust standard errors are clustered at the country level.

Here the dependent variable is boss-quality. This is a continuous variable, not a binary variable. It is created by adding up the seven boss characteristic measures and thus reaching a sum, in integers, that can range from 7 (worst quality boss) to 35 (best quality boss).

Cheerful mood is included as a form of personality control. It indicates how often, in the last two weeks, workers “have felt cheerful and in good spirits”, taking on the values of 1 (at no time) to 6 (all of the time).

**Table 2:** Employee job-satisfaction equations for Europe (EWCS 2015)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Boss gives useful feedback	0.180*** (24.851)						
Boss is helpful in getting job done		0.155*** (18.100)					
Boss respects workers as people			0.261*** (27.982)				
Boss encourages development				0.207*** (29.767)			
Boss gives praise and recognition					0.193*** (29.242)		
Boss successful in team work						0.205*** (30.145)	
Boss helps and supports workers							0.175*** (16.033)
Female	0.009 (0.865)	0.017* (1.811)	0.013 (1.317)	0.010 (1.115)	0.011 (1.118)	0.015 (1.566)	0.010 (0.951)
Age	-0.009*** (-2.654)	-0.010*** (-3.279)	-0.009*** (-2.887)	-0.008*** (-2.636)	-0.008*** (-2.665)	-0.008*** (-2.607)	-0.010*** (-3.055)
Age squared	1.4x10 <sup>-4</sup> *** (4.059)	1.6x10 <sup>-4</sup> *** (4.693)	1.4x10 <sup>-4</sup> *** (4.116)	1.4x10 <sup>-4</sup> *** (4.109)	1.4x10 <sup>-4</sup> *** (4.030)	1.2x10 <sup>-4</sup> *** (3.862)	1.6x10 <sup>-4</sup> *** (4.567)
Immigrant	-0.072*** (-4.549)	-0.077*** (-4.775)	-0.062*** (-4.001)	-0.066*** (-4.580)	-0.069*** (-4.314)	-0.085*** (-5.723)	-0.065*** (-3.667)
Physical health	0.212*** (22.955)	0.216*** (21.713)	0.202*** (20.147)	0.201*** (21.670)	0.207*** (22.464)	0.204*** (20.597)	0.211*** (18.779)
Married	0.022** (2.287)	0.031*** (3.364)	0.019** (2.079)	0.022** (2.447)	0.024*** (2.592)	0.023** (2.482)	0.027*** (2.999)
Primary education	-0.051 (-0.836)	-0.038 (-0.960)	-0.031 (-0.583)	-0.022 (-0.419)	-0.025 (-0.385)	-0.033 (-0.532)	-0.025 (-0.600)
Lower secondary education	-0.040 (-0.667)	-0.023 (-0.558)	-0.017 (-0.311)	0.003 (0.058)	-0.006 (-0.109)	-0.017 (-0.279)	-0.018 (-0.454)
Upper secondary ed.	-0.037 (-0.619)	-0.019 (-0.479)	-0.018 (-0.340)	0.004 (0.070)	-0.007 (-0.117)	-0.008 (-0.131)	-0.020 (-0.492)
Post-sec. non-tertiary ed.	-0.054 (-0.761)	-0.040 (-0.841)	-0.030 (-0.471)	-0.017 (-0.277)	-0.028 (-0.400)	-0.025 (-0.345)	-0.036 (-0.800)
Short-cycle tertiary ed.	-0.037 (-0.648)	-0.025 (-0.668)	-0.020 (-0.388)	0.004 (0.085)	-0.012 (-0.216)	-0.001 (-0.010)	-0.027 (-0.670)
Bachelor degree ed.	-0.008 (-0.150)	0.003 (0.085)	2.8x10 <sup>-4</sup> (0.006)	0.031 (0.662)	0.012 (0.217)	0.027 (0.470)	0.002 (0.049)
Master degree ed.	-0.025 (-0.400)	-0.014 (-0.337)	-0.027 (-0.488)	0.004 (0.080)	-0.008 (-0.121)	0.011 (0.168)	-0.011 (-0.267)

Doctorate degree ed.	-0.027	-0.030	-0.042	-0.017	-0.033	0.007	-0.031
	(-0.503)	(-0.688)	(-0.942)	(-0.368)	(-0.579)	(0.141)	(-0.536)
Employer tenure	5.3x10 <sup>-4</sup>	4.7x10 <sup>-4</sup>	6.5x10 <sup>-5</sup>	3.1x10 <sup>-4</sup>	4.6x10 <sup>-4</sup>	0.001	5.8x10 <sup>-5</sup>
	(1.054)	(0.962)	(0.128)	(0.751)	(0.954)	(1.133)	(0.123)
Public sector employer	0.006	0.007	-4.1x10 <sup>-4</sup>	0.005	0.005	0.004	-0.001
	(0.361)	(0.414)	(-0.025)	(0.295)	(0.302)	(0.252)	(-0.091)
Joint private-public employer	0.008	0.001	-0.002	-4.9x10 <sup>-4</sup>	0.003	-0.006	0.010
	(0.282)	(0.027)	(-0.084)	(-0.018)	(0.106)	(-0.220)	(0.365)
Not-for-profit employer	0.034	0.034	0.018	0.036	0.017	0.047	0.021
	(0.734)	(0.717)	(0.408)	(0.766)	(0.371)	(1.038)	(0.420)
Employees are represented	-0.007	0.001	-0.003	-0.006	-0.007	-0.004	-0.003
	(-0.588)	(0.086)	(-0.310)	(-0.577)	(-0.652)	(-0.329)	(-0.262)
Industries (21 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupations (9 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.741***	1.854***	1.336***	1.627***	1.688***	1.633***	1.773***
	(24.521)	(23.684)	(17.068)	(21.650)	(22.704)	(22.917)	(23.045)
R-squared	0.180	0.166	0.201	0.210	0.203	0.193	0.175

Notes: All estimations are for 27,981 observations. t-statistics are in parentheses; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Heteroskedasticity-robust standard errors are clustered at the country level. Job satisfaction takes on the values of 1 (not at all satisfied) to 4 (very satisfied) and is derived from the question: "On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main job". Each boss characteristic takes on values of 1 (strongly disagree or never) to 5 (strongly agree or always) and is defined as follows:

Gives useful feedback: [The boss] provides useful feedback on your work.

Helpful in getting job done: [The boss] is helpful in getting the job done.

Respects workers as people: [The boss] respects you as a person.

Encourages development: [The boss] encourages and supports your development.

Gives praise and recognition: [The boss] gives you praise and recognition when you do a good job.

Successful in team work: [The boss] is successful in getting people to work together.

Helps and supports workers: Your manager helps and supports you.

**Table 3:** Further OLS job-satisfaction equations for Europe (EWCS 2015)

	(1)	(2)	(3)	(4)
Boss gives useful feedback	0.008*			
	(1.651)			
Boss is helpful in getting job done	0.009**			
	(1.963)			
Boss respects workers as people	0.094***			
	(14.110)			
Boss encourages development	0.059***			
	(7.984)			
Boss gives praise and recognition	0.051***			
	(7.362)			
Boss successful in team work	0.055***			
	(9.274)			
Boss helps and supports workers	0.060***			
	(7.044)			
Continuous measure of boss quality		0.045***	0.040***	0.040***
		(37.157)	(31.477)	(28.057)
Cheerful mood (of employee)			0.114***	0.116***
			(27.779)	(27.075)
Log monthly earnings				0.099***
				(5.215)
Weekly hours worked				-0.004***
				(-6.344)
Medium firm				-0.035**
				(-2.403)
Big firm				-0.071***
				(-4.642)
All demographic and job controls	Yes	Yes	Yes	Yes
Industries (21 categories)	Yes	Yes	Yes	Yes
Occupations (9 categories)	Yes	Yes	Yes	Yes
Constant	1.178***	1.280***	1.033***	0.367**
	(15.702)	(17.541)	(13.157)	(2.421)
R-squared	0.253	0.245	0.277	0.297
Observations	27981	27981	27981	22127

Notes: t-statistics are in parentheses; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Heteroskedasticity-robust standard errors are clustered at the country level. Job satisfaction takes on the values of 1 (not at all satisfied) to 4 (very satisfied) and is derived from the question: "On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main job". Each boss characteristic takes on values of 1 (strongly disagree or never) to 5 (strongly agree or always) and is defined as follows:

Gives useful feedback: [The boss] provides useful feedback on your work.

Helpful in getting job done: [The boss] is helpful in getting the job done.

Respects workers as people: [The boss] respects you as a person.

Encourages development: [The boss] encourages and supports your development.

Gives praise and recognition: [The boss] gives you praise and recognition when you do a good job.

Successful in team work: [The boss] is successful in getting people to work together.

Helps and supports workers: Your manager helps and supports you.

Continuous boss quality adds the seven boss characteristic measures together and reaches a sum ranging from integers of 7 (worst quality boss) to 35 (best quality boss). Cheerful mood indicates how often in the last two weeks workers “have felt cheerful and in good spirits”, taking on the values of 1 (at no time) to 6 (all of the time).

**APPENDIX**

**(for publication if desired)**



## APPENDIX

**Table A1:** Control-variable summary statistics (EWCS 2015, GSS 2012, GSS 1996)

Control variables with descriptions	Mean (Standard deviation)		
	EWCS 2015	GSS 2012	GSS 1996
Job satisfaction (EWCS): = 1 if not at all satisfied with working conditions in main job to 4 if very satisfied.	3.063 (0.682)	----- -----	----- -----
Job satisfaction (GSS 2012): = 1 if completely dissatisfied with the main job to 7 if completely satisfied.	----- -----	5.325 (1.198)	----- -----
Job satisfaction (GSS 1996): = 1 if very dissatisfied with the work you do to 4 if very satisfied.	----- -----	----- -----	3.250 (0.816)
Female: = 1 if respondent is female and 0 if male.	0.512 (0.500)	0.506 (0.500)	0.534 (0.499)
Age: respondent's age in years	42.121 (11.660)	41.589 (13.237)	40.551 (12.682)
Age squared: square of respondent's age in years	1910.090 (992.930)	1904.570 (1175.328)	1805.130 (1131.681)
Immigrant: = 1 if respondent was not born in surveyed country and 0 otherwise.	0.086 (0.281)	----- -----	----- -----
Black: = 1 if respondent is Black and 0 otherwise.	----- -----	0.152 (0.360)	0.138 (0.345)
Race not Black or White: = 1 if respondent is not Black or White and 0 otherwise.	----- -----	0.116 (0.320)	0.057 (0.232)
Physical health (EWCS): = 1 if health in general is very bad to 5 if health is very good.	4.048 (0.734)	----- -----	----- -----
Physical health (GSS 2012): = 1 if health in general is poor to 5 if health is excellent.	----- -----	3.613 (0.996)	----- -----
Physical health (GSS 1996): = 1 if health in general is poor to 4 if health is excellent.	----- -----	----- -----	3.162 (0.734)
Married: = 1 if respondent is married and 0 otherwise.	0.652 (0.476)	0.463 (0.499)	0.503 (0.500)
Education (EWCS): ordered categories from lowest level of education by country (= 1) to highest level (= 9)	4.991 (1.712)	----- -----	----- -----
Education (GSS 2012 and GSS 1996): the highest grade of schooling that the respondent finished	----- -----	13.959 (3.012)	13.717 (2.733)
Tenure: number of years respondent has been in company or organization	9.961 (9.674)	----- -----	----- -----
Public sector employer: = 1 if respondent works in the public sector and 0 otherwise.	0.292 (0.455)	0.190 (0.393)	----- -----
Joint private public sector employer: = 1 if respondent works in a joint private-public organization/company, 0 otherwise.	0.037 (0.189)	----- -----	----- -----

Not-for-profit employer: = 1 if respondent works in the not-for-profit sector or an NGO and 0 otherwise.	0.011 (0.104)	----- -----	----- -----
Represented by a group (EWCS): = 1 if a trade union, works council or a similar committee representing employees exists at respondent's company and 0 otherwise.	0.500 (0.500)	----- -----	----- -----
Union member (GSS 2012 and GSS 1996): = 1 if respondent belongs to a labor union and 0 otherwise.	----- -----	0.071 (0.258)	0.090 (0.286)
Medium firm (EWCS): = 1 if 10 - 249 employees work in respondent's company or organization and 0 otherwise.	0.440 (0.496)	----- -----	----- -----
Big firm (EWCS): = 1 if more than 250 employees work in respondent's company or organization and 0 otherwise.	0.343 (0.475)	----- -----	----- -----
Medium firm (GSS 2012 and GSS 1996): = 1 if 10 - 99 people work at respondent's location (for firms with multiple sites)	----- -----	0.383 (0.486)	0.304 (0.460)
Big firm (GSS 2012 and GSS 1996): = 1 if more than 99 people work at respondent's location (for firms with multiple sites)	----- -----	0.413 (0.493)	0.324 (0.468)
Weekly hours worked (EWCS): number of hours respondent usually works per week in main job.	38.168 (10.576)	----- -----	----- -----
Weekly hours worked (GSS 2012 and GSS 1996): hours worked last week, or if did not work last week, hours usually work.	----- -----	40.746 (13.875)	----- -----
Log of earnings (EWCS): natural log of monthly earnings.	6.899 (0.901)	----- -----	----- -----
Income categories (GSS 2012 and GSS 1996): 12 income groups increase by \$1,000 until \$10,000, then by \$5,000 until \$25,000.	----- -----	10.541 (2.644)	10.001 (2.844)
Industry categories	21	20	11
Occupation categories	9	21	9
Main sample observations	27,981	630	1,838

**Table A2:** Boss qualities and related variables (EWCS 2015, GSS 2012, GSS 1996)

Boss qualities and related variables with descriptions	Mean (Standard Deviation)		
	EWCS 2015	GSS 2012	GSS 1996
Gives useful feedback: The boss provides useful feedback on your work = 1 if strongly disagree to 5 if strongly agree	3.889 (1.123)	----- -----	----- -----
Helpful in getting job done: The boss is helpful in getting the job done = 1 if strongly disagree to 5 if strongly agree	3.731 (1.242)	----- -----	----- -----
Respects workers as people: The boss respects you as a person = 1 if strongly disagree to 5 if strongly agree	4.418 (0.852)	----- -----	----- -----
Encourages development: The boss encourages and supports your development = 1 if strongly disagree to 5 if strongly agree	3.870 (1.145)	----- -----	----- -----
Gives praise and recognition: The boss gives you praise and recognition when you do a good job = 1 if strongly disagree to 5 if strongly agree	3.883 (1.154)	----- -----	----- -----
Successful in team work: The boss is successful in getting people to work together = 1 if strongly disagree to 5 if strongly agree	3.952 (1.075)	----- -----	----- -----
Helps and supports workers: Your manager helps and supports you = 1 if never to 5 if always	3.791 (1.156)	----- -----	----- -----
Continuous boss quality: The sum of the above 7 boss quality measures - ranges from 7 (worst possible) to 35 (best possible)	27.534 (6.113)	----- -----	----- -----
Boss behaved badly: = 1 if in the past 12 months, the person who has engaged in the se types of behaviors has most often been the boss and 0 otherwise.	----- -----	0.168 (0.374)	----- -----
Coworkers behaved badly: = 1 if in the past 12 months, the person who has engaged in the se types of behaviors has most often been a co-worker and 0 otherwise.	----- -----	0.313 (0.464)	----- -----
Clients behaved badly: = 1 if in the past 12 months, the person who has engaged in the se types of behaviors has most often been a customer/client/patient and 0 otherwise.	----- -----	0.152 (0.360)	----- -----
Mad at boss: = 1 if the last time you were really angry, irritated or annoyed was at your boss and 0 otherwise.	----- -----	----- -----	0.054 (0.225)
Mad at co-worker: = 1 if the last time you were really angry, irritated or annoyed was at a co-worker and 0 otherwise.	----- -----	----- -----	0.055 (0.228)
Mad at subordinate worker: = 1 if the last time you were really angry, irritated or annoyed was at a subordinate worker and 0 otherwise.	----- -----	----- -----	0.016 (0.125)

Mad at client: = 1 if the last time you were really angry, irritated or annoyed was at a customer or client and 0 otherwise.	-----	-----	0.014 (0.118)
Mad at someone else at work: = 1 if the last time you were really angry, irritated or annoyed was at someone else at work and 0 otherwise.	-----	-----	0.014 (0.118)
Mad at anything/anyone else: = 1 if you were mad at family member, friend, anyone else, yourself or an object or circumstance and 0 otherwise.	-----	-----	0.230 (0.421)
Intensity of anger: How intense would you say your anger or irritation was? Ranges from 0 (weakest possible ) to 10 (most intense possible)	-----	-----	6.289 (2.342)
How often thought about it: How often have you thought about this situation since it happened? Ranges from 1 (never) to 4 (very often)	-----	-----	2.395 (0.982)
How long anger lasted: How long did your anger or irritation last? Ranges from 1 (seconds) to 6 (felt it continuously up until now)	-----	-----	3.568 (1.445)

**Table A3:** OLS job satisfaction equations (GSS 2012)

	All workers		Workers never denied a raise		All workers		Workers never denied a raise	
	All work places	Bad work places	All work places	Bad work places	All work places	Bad work places	All work places	Bad work places
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Boss behaved badly	-0.856*** (-6.039)	-0.391** (-2.460)	-0.728*** (-4.454)	-0.372* (-1.934)	-0.862*** (-5.714)	-0.351** (-2.123)	-0.796*** (-4.553)	-0.415** (-2.072)
Coworkers behaved badly	-0.426*** (-3.891)		-0.358*** (-3.002)		-0.481*** (-4.040)		-0.453*** (-3.499)	
Clients behaved badly	-0.543*** (-3.830)	-0.151 (-0.897)	-0.386** (-2.272)	-0.084 (-0.396)	-0.627*** (-4.274)	-0.200 (-1.080)	-0.513*** (-2.873)	-0.148 (-0.631)
Female	-0.175 (-1.553)	-0.069 (-0.452)	-0.157 (-1.291)	-0.023 (-0.127)	-0.186 (-1.520)	0.004 (0.023)	-0.250* (-1.914)	-0.052 (-0.260)
Age	-0.029 (-1.257)	-0.011 (-0.325)	-0.020 (-0.810)	0.024 (0.567)	-0.029 (-1.181)	-0.001 (-0.025)	-0.011 (-0.413)	0.060 (1.209)
Age squared	0.000 (1.600)	0.000 (0.590)	0.000 (1.136)	-0.000 (-0.348)	0.000 (1.456)	0.000 (0.223)	0.000 (0.609)	-0.001 (-1.104)
Black	-0.150 (-1.192)	-0.208 (-1.204)	-0.143 (-0.968)	-0.280 (-1.218)	-0.213 (-1.537)	-0.264 (-1.422)	-0.210 (-1.230)	-0.284 (-1.080)
Race is not Black or White	-0.003 (-0.018)	-0.083 (-0.370)	0.152 (0.977)	0.207 (0.850)	0.057 (0.331)	0.006 (0.027)	0.252 (1.463)	0.308 (1.108)
Physical health	0.113** (2.293)	0.100 (1.391)	0.118** (2.250)	0.129 (1.566)	0.122** (2.141)	0.090 (1.100)	0.128** (2.159)	0.104 (1.118)
Education	-0.055*** (-2.706)	-0.046 (-1.421)	-0.065*** (-3.162)	-0.074* (-1.884)	-0.058** (-2.411)	-0.057 (-1.634)	-0.072*** (-2.788)	-0.099** (-2.218)
Married	0.250*** (2.687)	0.270** (2.151)	0.273*** (2.718)	0.323** (2.158)	0.219** (2.160)	0.170 (1.239)	0.302*** (2.666)	0.296* (1.713)
Union member	0.179 (1.142)	0.206 (0.984)	0.115 (0.672)	-0.028 (-0.124)	0.054 (0.336)	-0.048 (-0.207)	-0.077 (-0.435)	-0.309 (-1.258)

Public sector employer	0.235*	0.204	0.235	0.326	0.250*	0.294	0.278*	0.569**
	(1.722)	(1.006)	(1.629)	(1.445)	(1.648)	(1.307)	(1.757)	(2.126)
Weekly hours worked					0.010**	0.014**	0.007*	0.011*
					(2.426)	(2.472)	(1.699)	(1.930)
Medium firm					-0.258*	-0.304	-0.173	-0.243
					(-1.690)	(-1.362)	(-1.057)	(-0.911)
Big firm					-0.043	-0.025	0.030	-0.021
					(-0.283)	(-0.117)	(0.189)	(-0.087)
Ordered income categories (12)	No	No	No	No	Yes	Yes	Yes	Yes
Industries (20 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupations (21 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	6.537***	5.148***	6.014***	3.778***	5.608***	3.965***	5.273***	3.029**
	(7.255)	(5.108)	(4.297)	(3.302)	(4.968)	(3.237)	(3.683)	(2.101)
R-squared	0.214	0.194	0.225	0.283	0.282	0.263	0.333	0.403
Observations	630	399	488	265	547	356	412	229

Notes: t-statistics are in parentheses and based on heteroscedasticity-robust standard errors; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Job satisfaction takes on the values of 1 (completely dissatisfied) to 7 (completely satisfied) and is derived from the question: “All things considered, how satisfied are you with your (main) job?” Weekly hours worked includes all jobs. Firm-size indicators include only those employees working at firms with multiple job sites. Ordered income categories are groupings of last year’s income that range in size of \$1,000 increments up until \$10,000, then \$5,000 increments until \$25,000 and then finally earnings over \$25,000. Boss behaved badly, coworkers behaved badly and clients behaved badly are indicator variables that equal one when respondents answer in the affirmative for each group to the question: “In the past 12 months, the person who has engaged in these types of behaviors has most often been: a co-worker, your supervisor or boss, a customer/client/patient.” See Appendix A for a list of the behaviors in question and proportions of workers experiencing each behavior.

**Table A4: OLS job satisfaction equations (GSS 1996)**

	Job satisfaction	Intensity of anger	How often thought about it	How long anger lasted	Job satisfaction	Intensity of anger	How often thought about it	How long anger lasted
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mad at boss	-0.322*** (-3.786)	0.493* (1.888)	0.531*** (3.989)	0.535*** (3.040)	-0.289*** (-3.280)	0.724** (2.521)	0.552*** (3.910)	0.643*** (3.315)
Mad at co-workers	-0.150** (-1.991)	-0.660** (-2.509)	-0.159 (-1.229)	-0.129 (-0.740)	-0.156* (-1.856)	-0.382 (-1.296)	-0.078 (-0.564)	0.041 (0.213)
Mad at subordinate worker	0.105 (0.837)	0.246 (0.588)	-0.148 (-0.790)	0.001 (0.003)	0.040 (0.311)	0.316 (0.725)	-0.048 (-0.262)	0.091 (0.293)
Mad at client	-0.161 (-1.073)	-0.324 (-0.788)	-0.256 (-1.604)	-0.262 (-1.054)	-0.200 (-1.181)	0.037 (0.081)	-0.125 (-0.730)	-0.056 (-0.218)
Mad at someone else at work	-0.132 (-1.169)	-0.515 (-1.247)	0.228 (0.974)	0.022 (0.079)	-0.114 (-0.921)	-0.527 (-1.271)	0.305 (1.236)	0.197 (0.619)
Mad at anything/anyone else	-0.051 (-1.138)	0.040 (0.174)	0.099 (0.870)	-0.010 (-0.065)	-0.047 (-0.917)	0.217 (0.821)	0.173 (1.430)	0.218 (1.269)
Female	-0.007 (-0.168)	0.603*** (3.422)	0.117 (1.472)	0.196* (1.807)	0.000 (0.002)	0.632*** (3.065)	0.124 (1.384)	0.232* (1.843)
Age	0.001 (0.107)	0.042 (1.009)	0.014 (0.784)	-0.000 (-0.014)	-0.005 (-0.408)	0.021 (0.431)	0.018 (0.747)	0.018 (0.544)
Age squared	0.000 (0.689)	-0.001 (-1.457)	-0.000 (-1.015)	-0.000 (-0.073)	0.000 (1.136)	-0.000 (-0.761)	-0.000 (-0.859)	-0.000 (-0.525)
Black	-0.059 (-0.987)	0.156 (0.590)	-0.098 (-0.803)	0.268* (1.814)	-0.041 (-0.589)	-0.016 (-0.052)	-0.121 (-0.921)	0.192 (1.168)
Race is not Black or White	-0.054 (-0.692)	0.154 (0.409)	-0.280* (-1.697)	0.039 (0.183)	0.016 (0.197)	0.250 (0.515)	-0.332* (-1.842)	0.118 (0.426)
Physical health	0.148*** (5.496)	-0.314** (-2.521)	-0.086* (-1.706)	-0.204*** (-2.870)	0.130*** (4.138)	-0.267* (-1.804)	-0.105* (-1.879)	-0.148* (-1.817)
Education	-0.017** (-2.074)	-0.025 (-0.677)	0.014 (0.861)	0.035 (1.535)	-0.014 (-1.521)	0.004 (0.092)	0.024 (1.329)	0.031 (1.191)

Married	0.107*** (2.798)	-0.155 (-0.941)	-0.068 (-0.878)	0.002 (0.015)	0.036 (0.851)	-0.086 (-0.459)	-0.044 (-0.527)	0.108 (0.925)
Union member	-0.125* (-1.709)	-0.152 (-0.576)	-0.205* (-1.669)	0.159 (1.040)	-0.101 (-1.280)	-0.137 (-0.463)	-0.124 (-0.928)	0.156 (0.943)
Weekly hours worked					0.004** (2.226)	0.009 (1.208)	-0.005 (-1.389)	0.003 (0.556)
Medium firm					-0.059 (-1.085)	-0.192 (-0.807)	0.066 (0.630)	0.068 (0.466)
Big firm					-0.076 (-1.357)	0.022 (0.085)	-0.083 (-0.751)	-0.052 (-0.337)
Ordered income categories (12)	No	No	No	No	Yes	Yes	Yes	Yes
Industries (11 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupations (9 categories)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	3.088*** (11.377)	6.624*** (5.344)	2.390*** (4.276)	3.736*** (5.196)	3.210*** (8.689)	5.502*** (3.248)	2.244*** (2.940)	2.382*** (2.046)
R-squared	0.098	0.078	0.068	0.071	0.109	0.092	0.116	0.091
Observations	1838	872	738	874	1448	695	598	696

Notes: t-statistics are in parentheses and based on heteroscedasticity-robust standard errors; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Job satisfaction takes on the values of 1 (very dissatisfied) to 4 (very satisfied) and is derived from the question: “On the whole, how satisfied are you with the work that you do?” Intensity of anger takes on values of 0 (weakest possible) to 10 (most intense possible) based on the question: “How intense would you say your anger or irritation was?” How often thought about it takes values of 1 (never) to 4 (very often) based on the question: “How often have you thought about this situation since it happened?” How long anger lasted takes on the values of 1 (seconds) to 6 (felt it continuously up until now) and is based on the question: “How long did your anger or irritation last?” Weekly hours worked includes all jobs. Firm size indicators include only those employees working at firms with multiple job sites. Ordered income categories are groupings of last year’s income that range in size of \$1,000 increments up until \$10,000, then \$5,000 increments until \$25,000 and then finally earnings over \$25,000. The “mad at” variables are constructed from the following question: “Within the last month, think about the last time you felt really angry, irritated or annoyed. Who were you angry, irritated or annoyed at?” The “mad at” indicator variables reflect all those at work the respondent could have gotten mad at including the boss, a co-worker, a subordinate at work, a customer or client and someone else at work. The “mad at anything/anyone else” indicator includes spouse or partner, son, daughter, mother, father, sister, brother, another family member, a friend, an acquaintance, a neighbor, government agency, someone who was supposed to provide a service, a public figure, a stranger (including crowds), yourself or an object or circumstance.



**Table A5:** GSS 2012 Proportion of workers experiencing bad behaviors either often or sometimes

Bad behaviors	When most often the offender is:		
	Boss	Co-worker	Client
I have been denied a raise or promotion without being given a valid reason.	0.330	0.137	0.177
I have been lied to by co-workers or supervisors.	0.453	0.315	0.250
I have been treated in a rude or disrespectful manner at work.	0.217	0.152	0.198
I have received emails, text messages, mobile cell phone calls or other electronic, Internet or social network communications from people at work that were harassing or threatening.	0.019	0.036	0.010
People at work have spread rumors or gossip about me.	0.142	0.208	0.115
I have felt ignored, excluded or isolated from others at work.	0.311	0.188	0.219
I have been the target of derogatory comments or jokes at work.	0.142	0.178	0.094
Observations	106	197	96

**Table A6: OLS job enthusiasm equations (EWCS 2015)**

	(1)	(2)	(3)	(4)
Gives useful feedback	0.023*** (2.593)			
Helpful in getting job done	0.002 (0.260)			
Respects workers as people	0.060*** (5.366)			
Encourages development	0.104*** (8.344)			
Gives praise and recognition	0.046*** (3.851)			
Successful in team work	0.056*** (5.385)			
Helps and supports workers	0.079*** (6.916)			
Continuous boss quality		0.052*** (22.761)	0.042*** (22.000)	0.040*** (21.464)
Cheerful mood			0.209*** (29.866)	0.208*** (24.686)
Log monthly earnings				0.110*** (4.292)
Weekly hours worked				-0.002** (-2.257)
Medium firm				-0.056*** (-3.071)
Big firm				-0.104*** (-4.557)
All demographic and job controls	Yes	Yes	Yes	Yes
Industries (21 categories)	Yes	Yes	Yes	Yes
Occupations (9 categories)	Yes	Yes	Yes	Yes
Constant	1.921*** (14.692)	1.960*** (15.341)	1.508*** (10.590)	1.062*** (6.343)
R-squared	0.192	0.185	0.239	0.241
Observations	27949	27949	27949	22107

Notes: t-statistics are in parentheses; \*, \*\*, and \*\*\* represent statistical significance at the 10%, 5% and 1% levels. Heteroskedasticity-robust standard errors are clustered at the country level. Job enthusiasm takes on the values of 1 (never) to 5 (always) and is derived from the question: "Please tell me how often you feel this way: I am enthusiastic about my job". Each boss characteristic takes on values of 1 (strongly disagree or never) to 5 (strongly agree or always) and is defined as follows:

Gives useful feedback: [The boss] provides useful feedback on your work.

Helpful in getting job done: [The boss] is helpful in getting the job done.

Respects workers as people: [The boss] respects you as a person.

Encourages development: [The boss] encourages and supports your development.

Gives praise and recognition: [The boss] gives you praise and recognition when you do a good job.

Successful in team work: [The boss] is successful in getting people to work together.

Helps and supports workers: Your manager helps and supports you.

Continuous boss-quality adds the seven boss characteristic measures together and reaches a sum ranging from integers of 7 (worst quality boss) to 35 (best quality boss). Cheerful mood indicates how often in the last two weeks workers “have felt cheerful and in good spirits”, taking on the values of 1 (at no time) to 6 (all of the time).