

Works Discussion Paper Series

No.55

## Does Harassment Prevention Law Reduce Harassment in Workplaces?

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January 28<sup>th</sup>, 2022

Abstract

This paper analyzes the impact of harassment prevention laws on harassment in the workplace using a unique Japanese survey dataset that provides information on harassment. The harassment prevention laws went into effect only for large companies in 2020, and I conducted difference-in-difference (DID) analysis using the institutional changes by controlling for unobserved macro shocks. The results showed that the harassment prevention law reduced harassment by about 7%.

*Keywords* Harassment, Harassment prevention law, Bullying, Sexual harassment, Workplace

All contents and opinions in this discussion paper are the personal views of the author and do not represent the views of their organizations or Recruit Works Institute.

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†I would like to thank Ryo Kambayashi and seminar participants at Recruit Works Institute and Recruit Co., Ltd. The views expressed in this paper are my own and do not represent the views of organizations with which I am affiliated. Any remaining errors and omissions are my own.

# 1 Introduction

Working conditions are detrimental to health and have been shown to increase individual turnover and the probability of absence from work as shown Ose (2005) and Barnay (2016).<sup>1</sup> Furthermore, Bubonya et al. (2017) show deterioration of mental health influences individual productivity, and also relate job satisfaction. While it has long been understood that poor health places a heavy burden on the affected person and their family, it has now become an inevitable management issue. Working conditions can be influenced by a number of factors, such as long working hours and dangerous work (Røed and Fevang, 2007), but one of the most important is bullying, or harassment. It is not difficult to imagine how harassment can worsen an individual's health and reduce their performance at work. In the context of economics like Eriksen et al. (2016), harassment is also known to cause a number of problems. The question of how to reduce harassment is an important one in labour matters.

This paper evaluates the impact of the 2020 harassment prevention law in Japan on the presence or absence of harassment. The law was prioritised for large companies, so that I apply difference-in-difference (DID) for identification strategy. In 2020, the spread of the coronavirus changed a number of factors in the work environment. The DID method is suitable because it can eliminate unobserved macro-shocks. The results show that the Harassment prevention law has reduced harassment by around 7%. As the law has been in force for only six months at the time of the data collection, this suggests that its impact is limited, but important. This results are robust against some assumptions for DID identification.

Although many people are aware of the importance of the issue of harassment in the workplace, there is very little research on this in the field of economics except Eriksen et al. (2016).<sup>2</sup> Their results show that gender does not significantly explain exposure to bullying and that exposure to bullying is associated with negative immediate self-reported health for both genders. Furthermore they also find that only bullied females have higher, persistent increases in long-term sickness absence

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<sup>1</sup>Pouliakas and Theodossiou (2013) summarized this literature.

<sup>2</sup>There is an accumulation of research on harassment in fields other than economics. In psychology and industrial psychology, for example, the impact of harassment on health, including mental health, has been studied in Kivimäki et al. (2000), Kivimäki et al. (2003), and Vartia (2001). In management science, these behaviours have been interpreted as a type of counter productive work behaviors or abusive leadership problem.

and adverse long-term health. Of the few that do exist, only a few papers have analyzed the impact of harassment on any outcomes such as Eriksen et al. (2016). None of the papers consider the existence of harassment, for example, how it can be reduced. Especially, there is also little research in the context of developed countries. However, research on harassment in developing countries, has recently become well known, as global value chains (GVCs) have expanded rapidly since the 2000s, and companies from developed countries have moved into developing countries. They have had a positive impact on employment creation in developing countries (Barrientos et al., 2011), and improved firm productivity and performance (Bustos, 2011), but in the process it has also been criticized for creating unfavourable working conditions.<sup>3</sup> For example, long working hours, low wages and unsafe workplaces. There has been an increase in research on the impact of trade on working conditions and, in turn, their impact on performance and productivity. Weziak-Bialowolska et al. (2020), which is one of the few, addressed the prevalence of workplace harassment in the garment industry in Mexico, Sri Lanka, China and Cambodia and the impacts of workplace harassment on outcomes related to withdrawal from work (intentions to leave, quitting, and limited abilities to perform usual tasks), work attitudes (work engagement and job satisfaction) and self-reported work quality. However, the structure of harassment in developing and developed countries is likely to be different and needs to be analyzed in developed countries.

The contribution of this paper is adding empirical results on bullying and harassment at work in the context of developed countries. In particular, it is probably the first ever paper of anti-harassment legislation in a developed country carefully evaluating causal impacts.

Harassment is also an important labour issue in Japan. Sexual harassment, long working hours and bullying in the workplace have been the main concerns especially since 2018. Harassment has become a social problem, with suicides sometimes resulting from it. It is also becoming a social problem for companies as it is related to the reputation of the company and is seen as part of management issues. In addition, the number of consultations on labour problems at the Labour Standards Supervision Office has more than doubled over the past 10 years, with harassment being the most common type of consultations, whereas 10 years ago most consultations were on unfair

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<sup>3</sup>Tanaka (2020) shows that exporting has significant positive impacts on working conditions regarding fire safety, health management, and freedom of negotiation.

dismissal and unpaid wages according to Ministry of Health and Welfare (2020). Of the total number of consultations, harassment has the largest share, at 25.5% in 2019, compared with 13.9% in 2010. In contrast, dismissals and unpaid wages have fallen from 35.3% to 20.5% over the same period. Even in the Japanese context, there is little research on harassment, with the exception of Kawaguchi (2019), which analyzed maternity harassment, but the mechanism and other aspects are different from the harassment in other previous research.

The remainder of the paper is organized as follows: section 2 discusses the data and descriptive statistics, and section 3 explains the institutional setting. Section 4 describes the identification strategy and estimation model, and section 5 discusses the estimation results. Section 6 provides some additional remarks, and concludes the paper, with suggestions for further research.

## 2 Data

This paper uses the Japanese Panel Study of Employment Dynamics (JPSED), a panel survey with a standard set of demographic and labor market variables that has been conducted by the Recruit Works Institute every year since 2015. JPSED is a nationwide survey that is representative of all men and women 3 over the ages of 15 years old and is conducted by an internet monitor registered to Intage Corporation.<sup>4</sup> The first wave of the survey included 49,131 people, and while JPSED has contracted and expanded through panel attrition and sample addition, it collects around 50,000 observations each year. The surveys, which are conducted each January, ask about the work situation in the previous month and previous year. For this study, we use the 2020 and 2021 waves of the survey conducted from January 9-31, 2020, when the outbreak of COVID-19 in China had been covered by the media but Japan was as yet virtually unaffected. The data for 2019 has not been affected by COVID-19. This basic analysis sample consists of employed men and women whose ages are 20 years old or above and 70 years old or below because there is sample selection for older age workers.

The key variable is harassment. The question about harassment for this survey is as follows “We

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<sup>4</sup>Kawaguchi and Motegi (2021) compared JPSED to the 2015 Census, paying particular attention to the gaps in types of employment and the distribution of industries of workers. The distributions of these workers’ characteristics of the 2019 JPSED are broadly similar to the distribution based on the 2015 population census.

would like to ask you about your work at your workplace over the last year (January-December 2020). Do any of the following apply at your workplace?" One of the questions was "I had seen and heard of people in the workplace, including myself, being harassed or sexually harassed." Respondents can choose from the following five options, 1. applicable, 2. if anything, applicable, 3. I cannot say either, 4. if anything, not applicable, 5. not applicable. Survey responses are recorded on a 5-point Likert scale ranging from not applicable to applicable, and we characterized those who responded either "applicable" or "if anything, applicable" (1 or 2 on the scale) as workers for whom that specific conditions about harassment variable applies. In this survey, the unit of observation is the individual. This time, the unit of observation is interpreted as the workplace. In other words, this is an individual response, but this is because the individual captures the situation in the workplace.

According to this definition, harassment is considered to be subjective. A commonly used definition of harassment is the NAQ-R (Negative Acts Questionnaire-Revised), a scale widely used in workplace bullying literature such as Eriksen et al. (2016). The questionnaire measures various negative actions (NA) such as "Being ignored or excluded". These are objective measures and are often used in research. However, since there is no such objective information available for this study, it remains on a subjective level. In other words, since it is a perception of harassment, it is strongly correlated with individual heterogeneity. In the present analysis, we will use panel data to eliminate such factors. Robustness check on the measurement of a variable with a definition using the original numeric value before conversion to a Likert scale.

The spread of the new coronavirus was observed from 2019 to 2020. In this study, I use panel data to remove such factors. One of the most important things is remote work. For those who were able to work more remotely, harassment may have decreased because they did not have to observe others in the workplace. In particular, according to Kawaguchi and Motegi (2021), there is a result that remote work is easier to do in large companies after COVID-19. In other words, there is a high possibility that the number of harassment cases decreases in large companies, which are potentially the treatment group. Therefore, this time I will control remote work in detail. Specifically I set two variables about definitions of remote work. The first definition is those workers who actually worked remotely in each year, while the second definition is the state of the remote work system at

work and how it applies to respondent.<sup>5</sup>

### 3 Harassment prevention law in 2020

Harassment has become an issue in Japan since around 2018. This is partly due to the “Me Too” Movement, which was launched in the United States in 2017. It is also known that there is a close relationship between sexual harassment and workplace bullying. Also, in some companies, harassment from superiors to subordinates has become an issue, with some subordinates committing suicide. Harassment in the sports and education field has also started to be regarded as a problem following these news.

With the support of public opinion, the revised Law for Comprehensive Promotion of Labor Policies (Law for Prevention of Power Harassment) was enacted in May 2019 and promulgated in June. The Ministry of Health, Labor and Welfare (MHLW) led the implementation of this law. This law defines harassment as “words or actions that are beyond the necessary and reasonable scope in the course of work, based on a superior relationship, and that harm the work environment.” The law came into effect in June 2020 for large companies and April 2022 for small and medium-sized companies. For small and medium-sized enterprises, it was made an effort obligation until April 2022. Importantly, the law is a non-legally binding set of rules, a so-called soft law. However, they may play an important role in dealing with ambiguous concepts such as harassment, but their effectiveness is unknown. There are no penalties for violating the law. If the Minister of Health, Labor and Welfare deems it necessary, they can give advice, guidance, or recommendations to employers. In other words, employers can damage the reputation of the company if they do not comply with the law. The specific examples of harassment are (1) mental aggression, (2) physical aggression, (3) excessive demands, (4) insufficient demands, (5) disconnection from relationships, and (6) violation of individuality. In response to these trends, strict measures have been taken against sexual harassment. Harassment can be described as a vague concept, but this law clarifies the definition.

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<sup>5</sup>There are four options about company rules about remote work, from 1) the company sets the rule and it applies to the respondent, 2) the company sets the rule but it does not apply to the respondent, 3) the company does not set a rule, and 4) do not know.

This paper will make use of this system change. In other words, large companies are considered to be the treatment group and small and medium-sized companies are considered to be the control group, and whether they have been treated before or after 2020 is determined. Figure 1 shows the transition of harassment between large firms and small and medium-sized companies, and illustrates this change to some extent. Figure 1 illustrates this change to a certain extent: between 2019 and 2020, harassment has decreased more in large companies than in small medium enterprises. Importantly, harassment has also decreased for small medium enterprises. There are several reasons for this. Firstly, small medium enterprises may be cracking down on harassment in preparation for the law coming into force in 2022. The second possibility is that in 2020, due to the spread of teleworking and other measures to combat the COVID-19, harassment will have decreased. In addition, between 2017 and 2018 harassment increased in both large and small companies. This may be due to a change in attitudes. As mentioned above, there was a lot of media coverage of harassment in 2018. There was also the "Me Too" movement. In this survey, the question of what constitutes harassment is subjective. In other words, it is possible that people who did not perceive harassment as harassment before may have come to perceive it as harassment after 2018.

## 4 Estimations

This study estimates the effects of harassment prevention law on seeing and hearing harassment in workplace. The following equation was estimated:

$$y_{igt} = \alpha LE_g + \gamma After_t + \beta LE_g \times After_t + x'_{igt} \delta + \theta_i + \epsilon_{igt} \quad (1)$$

where subscripts  $i$ ,  $g$  and  $t$  indicate workplaces, group (large enterprise or small medium enterprise) and year respectively. The dependent variable  $y_{igt}$  is a dummy variable taking one if there is harassment in the workplace, which means workers see or hear harassment in their workplaces. Treatment group is  $LE_g$  in this study, where workplace observed by the workers belongs to large enterprise. The time after the policy is implemented is defined as  $After_t$ . Covariates are described



as  $x_{igt}$ , which is a set of demographic variables including age and its square, working hours and indicator variables for remote work system. Since long working hours are likely to be closely linked to harassment, we control for this. As for working hours, we mean individual working hours, but we adopted it as a variable in the sense that there is a certain correlation between individual working hours and working hours in the workplace. There are two unobserved variables.  $\theta_i$  is time invariant unobserved term such as human resource management styles and corporate structure, also catches up with individual unobserved factors, a perception of harassment, it is strongly correlated with individual heterogeneity. In the present analysis, I will use panel data to eliminate such factors.  $\epsilon_{igt}$  is unobserved error term including measurement error.

The target parameter is  $\beta$  capturing average treatment effect on treated (ATT). Equation (1) is estimated by fixed effects methods. I need two assumptions for identification, (1) common trend assumption and (2) no compositional changes. These will be discussed again in the results section.

## 5 Results

### 5.1 Basic results: The effects on harassment

The column (1) of Table 2 shows that there was an effect of the treatment on harassment. The column (2) shows that the treatment has an effect on harassment, as estimated by the fixed effects. The coefficients are slightly attenuated. It means that unobservable factors may determine the workplace where harassment is likely to occur and the characteristics of those who are likely to perceive it as harassment. The column (3) shows the results after carefully controlling for other variables, such as remote work, and shows that, in any case, the harassment prevention law has been effective in reducing harassment. The impact was -0.015 percentage points, which is small but not negligible at 7%, given that 22% of the respondents had no harassment.<sup>6</sup> In addition, the Harassment prevention law is not a policy that will change rapidly after its implementation. In other words, it is possible that the impact of the law will gradually spread from now on. Although the impact of the law this time was only -0.015 percentage points, it is possible that the impact will be even greater in a few years' time.

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<sup>6</sup>This is calculated by  $-0.015/0.22$ .

The impact of harassment is also expected to vary by industry. In other words, there are some industries where harassment is more prevalent than others because of the culture of the workplace. The type of industry also affects the degree of remote work. For example, Kawaguchi and Motegi (2021) and Dingel and Neiman (2020) prove that the degree of remote work differs depending on the industry. Therefore, I include industry fixed effects in our estimation. However, in any case, the size of the impact remains unchanged at -0.015. It can be said that the Harassment prevention law had a certain effect in deterring harassment.

## 5.2 Another definition of harassment

Next, as an important robustness check, we change the definition of harassment. This time, harassment has been converted from a five-point Likert scale into a binary variable. However, this five-point scale is a subjective variable and therefore difficult to handle although differences in perception are removed by fixed effects. In the present study, therefore, we have tried to conduct the same analysis by treating it as a continuous variable with five levels, although it is a subjective scale in any case. The result is shown in column (1) in Table 3. There is a negative and significant impact, although the significance level is weakened to around 10%. The impact itself cannot be interpreted exactly, as the difference between 1 and 2 and between 3 and 4 is different for each value, but as it is negative and significant, we can say that the Harassment prevention law has been able to reduce harassment. A further robustness check is carried out in the next section.

## 5.3 Robustness check

Next, I conduct robustness check specific to DID estimation. The first is the common trend assumption, i.e. the assumption that the treatment and control groups have, on average, the same change in the period before and after the absence of the policy. Under the common trend assumption during the periods  $t = \{t', t\}$  where  $t' < t$ ,  $t'$  indicates a pre-treatment period,  $t$  indicates a post-treatment period, and  $y_t$  indicates the outcome at period  $t$ , the following also holds:

$$E(y_{0it} - y_{0it'} | LE_g = 1, x_{igt}) = E(y_{0it} - y_{0it'} | LE_g = 0, x_{igt}) \quad (2)$$

This is tested using a placebo test. We check whether the trend in the year before the policy is equal. The results are shown in column (3) in Table 3. As can be seen, the results are not significant and the assumption is fulfilled. However, it should be noted that this is not the case for time across policy years.

The next step is to check whether the composition changes between the previous and subsequent years. First of all, it is unlikely that people will change their group after announcement of this policy. As it is panel data, it is possible to check whether the workplace has been changed or not. Other than announcement effects, there will have been an outbreak of the COVID-19 and many people will have lost their jobs or taken time off work in 2020. Furthermore, there may also be a selection problem, as people who are harassed are more likely to leave the labour market in the first place. For this analysis, we exclude those who left or changed jobs in 2020. This will allow us to look at changes in the same workplace. The results are shown in column (2) in Table 3. The significance of the results is not lost. The coefficient changes by only 0.02. This means that those who left the company may have seen and heard more harassment, which may have been a threat to the process described earlier. The result that the Harassment prevention law has been effective has been maintained.

## 5.4 Discussion

Once again, the Anti-Harassment Act has reduced harassment by 1.5 percentage points, or about 7% of the total. How are these estimates to be interpreted? Firstly, of course, they are the result of companies cracking down hard on those who would harass them, in order to avoid damage to their reputation. In particular, the fact that harassment is now prohibited by law is likely to make it less tolerated by the public. It is also difficult to define what constitutes harassment in the first place. The Anti-Harassment Act has clarified what constitutes harassment. This has made it easier to reduce harassment.

Harassment has also decreased in small medium enterprises. This result can be interpreted in two ways. The results can be interpreted in two ways: a reduction in workload due to the coronavirus, or a reduction in social contact in order to maintain social distance. This has led to a decrease in harassment. The second possibility is that small medium enterprises are starting to prepare for the law, which will apply to them from April 2022. The law is not yet in force for small medium enterprises, but they are obliged to make efforts.

## 6 Conclusion

This paper analyzes the impact of harassment prevention laws on harassment in the workplace using a unique Japanese survey dataset that provides information on harassment. The harassment prevention laws went into effect only for large companies in 2020, and I conducted difference-in-difference (DID) analysis using the institutional changes by controlling for unobserved macro shocks. The results showed that the harassment prevention law reduced harassment by about 7%.

I conclude this paper with some suggestions of future research. The law is also likely to be compulsory in nature, causing companies to change their behavior gradually rather than uniformly. Dynamic treatment effects should be taken into account. This impact should be additionally verified while the survey continues. From April 2022, the law will also apply to small medium enterprises. New data should be added and validated when the law comes into force for small medium enterprises. The staggered DID method should then be applied such as Callaway and Sant'Anna (2020) and Goodman-Bacon (2021) because the timing of the treatment is different.

Table 1: Summary statistics

	Small medium enterprise		Large enterprise		Total	
	mean	sd	mean	sd	mean	sd
Harassment	0.15	0.36	0.22	0.42	0.18	0.38
Female	0.43	0.49	0.40	0.49	0.41	0.49
Age	45.63	14.76	41.70	13.16	43.93	14.22
Work hours	35.73	15.72	37.77	13.08	36.61	14.68
Remote work	0.12	0.32	0.14	0.35	0.13	0.33
Remote work institution	2.95	0.65	2.70	0.85	2.84	0.76
Observations	41831		31745		73576	

Figure 1: Transition of seeing and hearing harassment

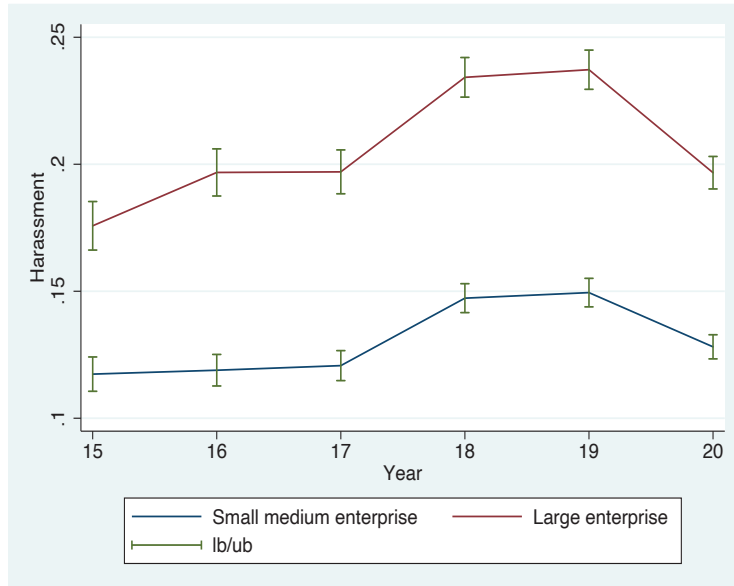


Table 2: The effects of prevention law on harassment

	(1) OLS Harassment=1	(2) FE Harassment=1	(3) FE Harassment=1	(4) FE Harassment=1
Treatment	-0.019*** (0.006)	-0.015*** (0.006)	-0.015** (0.006)	-0.015** (0.006)
Control	No	No	Yes	Yes
Industry FE	No	No	No	Yes
Adjusted $R^2$	0.01	0.01	0.01	0.01
Observation	71,098	71,098	70,902	70,902

1. Standard errors are in parentheses and are heteroskedastic consistent and are robust against individual levels.

2. \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

3. Coefficients are average marginal effects for all estimation methods.

Table 3: Robustness check

	(1) FE Harassment=1 Another definition	(2) FE Harassment=1 Not change job	(3) FE Harassment=1 Placebo test
Treatment	-0.030* (0.017)	-0.013** (0.006)	-0.003 (0.06)
Control	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Adjusted $R^2$	0.01	0.01	0.00
Observation	70,902	58,759	76,255

1. Standard errors are in parentheses and are heteroskedastic consistent and are robust against individual levels.

2. \* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

3. Coefficients are average marginal effects for all estimation methods.

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