Received: 20 09 2011 | Accepted: 22 03 2012

Punishment as a Price to Pay

Ch'ng Kean Siang¹

ABSTRACT

Management meted out punishment to enforce rules and encourage adherence. However, the effectiveness depended on how the employees perceive and interpret the policy. Therefore, it was uncertain how to best achieve the target. The paper tested employees' behavioral responses in two conditions, 1) when employees had to pay fines to employer and 2) when employees had to pay fines to co-workers. Condition one was a typical deterrence policy implemented to punish misconduct in an organization, and condition two tested the behavioral responses to distributive outcomes. Questionnaire was distributed to these employees to investigate perception. The experimental results indicated that employees responded differently to the two conditions, misconduct was significantly reduced in condition two but not in condition one. While employees agreed that the implementation was fair in the two conditions, they did not agree on the punishment outcomes in condition two. The employees perceived paying fines to employer was more acceptable than paying fines to co-workers. Accounting for social norms in the implementation was more successful than formal deterrence.

KEY WORDS: Punishment; Deterrence; Lateness; Field Experiment; Decision

JEL Classification: C93, D03, J33, L23

¹ Universiti Sains, MALAYSIA

Introduction

Organizations enforce rules and regulations to align the interest of the employees and the organization. While there is no question that adherence is critical to the smooth functioning of an organization (Bell et al., 2002; Tyler & Blader, 2005), the strategies an organization uses to best achieve the target is always very elusive. The present paper compares two strategies to achieve adherence; the command and control approach and self-regulatory approach.

In command and control approach, organizations enforce rules through incentives to encourage adherence and sanctions to discourage misbehavior (Gomez-Mejia & Balkin, 1992; Lauver et al., 2009; Ames et al., 2000). It is based on the view that rule-following is

a function of cost and benefits. However, its efficacy has been questioned and it has consistently been found to have only minor influence on adherence (Markell, 2000; MacCoun, 1993). The self-regulatory approach represents an alternative approach that focuses on employee's intrinsic motivations (Tyler & Blader, 2005). It is based on the employees' intrinsic desire to follow organizational rules. Such desire is linked to the employees' judgment on employer, interactions with their peers at the work place and perceived organization's policy with own value (King & Lenox, 2000; Podsakoff et al., 2006).

Although the information on the link between judgment on the punishment and behavioral outcomes is important (Zimmerman & Zeitz, 2002; King & Lenox, 2000; Lauver et al., 2009), it is usually measured by observing the relation between employee criterion variables and different perceptions through questionnaire. There is lack of direct field evidence of the relation be-

Correspondence concerning to this article should be addressed to: cks@usm.my

tween sanction, perception and behavioral outcomes and its application to solve the problem of misconduct. These are the issues explored by the present paper. The present study intends to test the responses of employees to an adherence policy in an organization. The study was conducted in an on going relation between employer and employees. The dependent variable is employee's lateness. To encourage adherence, fines on lateness was imposed in two different conditions; 1) employer collected the fines and 2) co-workers collected the fines.

The command and control policy in the first condition is justified by the assumption in the deterrence approach that workers are rational and the aversive event they undergo will deter them from coming to work late in the future. The underlying cognitive process is that people maximize rewards and minimize costs. Therefore an offence can be deterred if the expected cost, if reprimanded, is higher than the benefit of an act (Bentham, 1962; Becker, 1976; Nagin, 1998; Avolio et al., 1999). Studies looking at employees' misconduct have found association between deterrence and adherence (Ames et al., 2000; Bacharach et al., 2002). The undesirable consequences can also promote the learning speed of desirable behaviors (Ball & Sims Jr, 1991) of other co-workers, who observe the imposition and negative experience of the punished workers (Schnake, 1986; O'Reilly et al., 1989; Trevino, 1992). Based on this premise, the deterrence approach should be able to increase adherence among employees.

While deterrence theory emphasizes that punishment is function to cost and benefit, many past studies have offered views that organizational justice, social comparison, social norms and legitimacy enter the cognitive process. Simply having a policy in place does not solve all the misconducts, but the relationship established between the enforcement policy and the perceived social norms held by employees (Ames et al., 2000), the perceived importance of organization's deterrence policy (Lauver et al., 2009) and the acceptability of a behavior (Bacharach et al., 2002) in an organization is more important. The second condition in this study utilizes the social norm.

Comparing the results from both conditions allows one to understand the importance employees place on each mechanism. The first condition relies on cost and benefit and the second condition depends on social

comparison when employees compare punishment outcomes with other co-workers. Since the mechanism and procedure in carrying out the punishment are similar in the two conditions, employees should be indifferent between the two conditions if they respond to cost and benefit. But if social norm dominates the decision, the attendance should improve more in condition two than in condition one.

The perceptual analysis on the link between individual judgment and deterrence policy in the two conditions is tested through survey. While there have been many past studies on influence of value judgment on behavior, such as Zimmerman and Zeitz (2002) and Suchman (1995) who focus on the role of legitimacy of rules and Paternoster & Simpson (1996) on morality, this study focuses on the influence of perceived procedural and distributive fairness by the employees in the two conditions on their behavioral outcomes. Procedural justice concerns judgment about the process by which decision is made (Masterson et al., 2000). Studies have shown significant positive relation between high procedural justice and job satisfaction (Mossholder et al., 1998; Naumann & Bennett, 2000; Simons & Roberson, 2003). Distributive justice refers to fair distribution of outcomes. Research has shown that when the two types of justice are measured separately, procedural justice determines organizational citizenship and distributive justice is more related to pay satisfaction (Niehoff & Moorman, 1993). Pay inequality has been shown to cause low job satisfaction among employees, which promotes negative reciprocity and low productivity (Charness & Kuhn, 2007; Clark et al., 2010). These two types of justice have been shown to affect the employees' justice perception on punishment or reward and have a direct link with the commitment and behavior (see, for examples, Podsakoff et al., 2006; Ball et al., 1994).

The experimental results show that employees react differently to condition 1 and condition 2; the attendance in condition 2 is significantly improved, but this does not happen among the employees in condition 1. The deterrence approach is not effective in reducing the misconduct. However, when the workers pay lateness punishment to their co-workers in condition 2, the attendance improves significantly. The results also show that information about the difference in lateness between the worker and his co-worker does not help;

instead, this information has a positive effect on coming to work late.

The survey results indicate that employees find that the procedure used in meting out the punishment as fair. However, the employees perceive differently the outcomes of the two conditions; paying lateness punishment to the employer is more acceptable than paying the punishment to their co-workers. Although the management employs similar system in meting out the punishment, perceived inequality in outcome in the second condition renders paying punishment to co-workers more effective compared to paying punishment to employer.

The paper is divided into six sections as follows: section two explains the experimental design and procedures used to collect the data, section three is the experimental predictions and hypotheses, section four shows the results, section five explains the results and limitations of the study based on the results, and section six concludes the paper.

Methodology

Participants

Of the 300 total staff members, 50 participated in the experiment. They were from various departments of a plastic molding factory: 7 participants from the quality and assurance department (QAD), 4 from the production department (PROD), 11 from the tooling department (TOOL), 3 from the plant and facility section (PFS), 3 from the material and logistic section (MLS), 6 from the engineering department (EGD), 2 from purchasing (PUR), 7 from production engineering (PES), 6 from the administrative and finance department (AFD), and 1 from the marketing department (MKT). Three groups were formed based on the salary scale: RM1500–RM2000 (14 participants), RM2001–RM2500 (16 participants), and RM2501–RM3000 (20 participants). The members of a group were not necessarily from the same department. The selection of the participants was based on individual lateness in the previous months: workers who arrived more than 5 minutes late in a week. The time to report to work is 8.30 a.m. from Monday to Saturday.

Experimental Design and Procedure

The experiment was conducted at a plastic molding factory from 30 August 2010 to 27 November 2010. In

the first 4 weeks of the total 13 weeks, we investigated the effect of the fine imposed by the employer on workers' lateness. It is called Baseline treatment (henceforth, B treatment). At the beginning of the fifth week until the eighth week, the fines were paid to the co-workers who reported on time. It is called Relative treatment or R treatment. In the ninth week until the thirteenth week, the fines again were paid back to the employer. In all the treatments, employees could observe the lateness difference between themselves and their co-workers and at the end of each week the accumulated fines earned and paid by workers were announced.

During the experiment, each participant was matched with one partner. The matching mechanism was decided based on similar salary scale to ensure that only workers with the same salary category were matched. Each individual was matched with a different partner every week and the identity of the partner was known only to the manager in the Human Resource (HR) Department to avoid collusion during the experiment. The identity of the partner was only revealed on Saturday evening every week when the weekly payoff was announced on the company notice board, and after that, the same group of people from the same salary category was reshuffled to form pairs for the coming week. Since the number of players selected to participate in the experiment was not known, the participants could not guess who were the players and their potential partners.

The observations are divided into three different time slots: observations in the first four weeks (B treatment) from 30 August 2010 to 25 September 2010, observations from week five to week eight (R treatment) from 27 September 2010 to 22 October 2010, and observations in the final five weeks from 25 October 2010 to 27 November 2010.

Baseline (B) treatment

The experiment began when the HR department announced the purpose of the exercise and the matching mechanism through email and on the notice board. The workers in this treatment were informed that the fines would be paid to the employer as punishment. The fines were calculated based on the formula for one minute of lateness:

$$\pi_{ij} = \frac{1}{26 \text{ days}} \times \frac{1}{8 \text{ hours}} \times \frac{1}{60 \text{ min}} \times \text{lateness (in Min)} \quad (1)$$

where I = basic salary. The total amount paid as fines was then announced during the evening of every Saturday. The workers would know the identity of their partner and how much they and their co-workers were punished for reporting to work late during the week. The workers were then matched with a different partner, whose identity was not revealed for the coming week.

Relative payoff (R) treatment

This treatment shares the same design as the B treatment except that the employees paid fines to their partners. The calculation of fines follows equation (1) with π_{ij} = payment/fine paid by employee i to employee j when employee i is late to work. If both employees are late, the company collected $\pi_{ij} + \pi_{ji}$ from both employee i and employee j , respectively. However, if the reported time was different, $\pi_{ij} - \pi_{ji} = x$, x amount would be paid to employee j and the amount π_{ij} and π_{ji} would be paid to the company. The net payoff of employee j in this case is $x - \pi_{ji}$, the payoff to employee i is $-\pi_{ij}$ and the amount collected by the company is $\pi_{ij} + \pi_{ji} - x$. The payoff rules ensure that lateness is not rewarded and the company does not make a loss from the exercise. If employee i arrives late and employee j reports to work on time, employee i 's payoff is $-\pi_{ij}$ and employee j 's payoff is $x = \pi_{ij}$. Symmetrically, employee i 's payoff is $x = \pi_{ji}$ if employee j is late to work. If both report to work on time, neither employee will be punished and both will earn zero payoff.

In the end of each week, the HR manager announced the identity of participants, the information about the

attendance and the payoff made and earned by each participant. The announcement played an important role in the experiment as it conveyed the message about the total lateness committed by each worker, the discrepancy of total payout and how much had been deducted from the basic salary.

The survey was administered to the 50 participants to investigate their perception on the two treatments. The questionnaire was delivered to the HR manager and sent to all the participants through internal email upon approval. The survey consists of 12 items; first 6 items investigate the procedural justice perception and the last 6 items measure the distributive justice of the two treatments. Items 1, 4 and 5 are questions related to formal procedure and items 2, 3 and 6 measure how the policy affects participants (Niehoff & Moorman, 1993). Items 7 and 9 measure perception on when payment is made to employer and items 8, 10, 11 and 12 investigate responses when payment is made to co-workers. All participants had to answer following a five points scale from 1=strongly disagree to 5=strongly agree. The questions are listed in Table 1. The purpose of the survey is to investigate the perceptions on the two treatments, it is not linked to job satisfaction.

The response rate was 88% (44 respondents) with 25 male and 19 female. The age ranges from 21 to 43 with mean age of 30.90 years old (S.D. 4.95). 6 participants are from QAD, 4 (PROD), 9 (TOOL), 3 (PFS), 2 (MLS), 5 (EGD), 2 (PUR), 6 (PES), 6 (AFD) and 1 (MKT).

Table 1. The questions to investigate procedural justice and distributive justice

1	The management provides adequate explanation on the procedure and implementation of the punishment.
2	The management possesses accurate information about staff attendance
3	My everyday attendance can be accessible so I can keep track of my own attendance
4	The calculation of the punishment is based on my salary
5	The punishment is applied consistently to all affected employees.
6	The monitoring system is conducted through computer and applied to all employees.
7	If I consistently report to work later than my colleague, it is ok that I pay higher fine to the management.
8	It is ok that you paid the fines to your colleague if you report to work later than him.
9	In the end of the month, your salary will be deducted more than your colleague as you paid higher fine to the management.
10	It is ok that my colleague collects fines from me as he reports to work earlier than me.
11	I feel ok if my colleague enjoys higher income than me due to my lateness to work.
12	I feel paying the fines to management or to my co-worker is similar.

Experimental predictions

In the baseline (B) treatment, the punishment paid by the workers who arrived late should reduce individual lateness. The negative consequences borne by the workers, such as a drop in income, should encourage the workers to reduce or eliminate their misconduct. Since the fines are accumulated and deducted from the workers' monthly income, they face difficulties in adjusting their monthly fixed consumptions. To avoid this, according to the deterrence approach, workers should eliminate the habit of coming to work late. The first hypothesis is:

Hypothesis 1: The penalty of lateness paid to the employer should reduce individual lateness.

The rationality and deterrence approaches predict that workers compare the cost of the punishment and the benefit of coming to work late. If this is true, there should not be any difference in the behavioral responses to punishment in the B and R treatments. This is because paying fines to the employer and paying fines to co-workers do not make a difference in the decision to report on time.

Hypothesis 2: There should not be any discernible difference in lateness when workers pay a penalty to the employer or to their co-worker.

However, if distributive fairness is important to the employees' decision making, the perception formed by the workers and how they interpret the fines in the two treatments should affect the individual decision. Fines

paid to the co-worker should create dissatisfaction with the discrepancy of the payoff earned by the co-worker, which may be higher than the worker's own payoff. In the R treatment, one should observe an improvement in the attendance of workers. Individual lateness in the treatment should be lower than in the B treatment.

Hypothesis 3: The discrepancy in penalty payout by the workers should improve the attendance of the workers when they pay fines to their co-worker.

Results

Effect of the payout difference on lateness

Figure 1 shows the changes in lateness from 30 August 2010 to 27 November 2010: a total of 13 weeks. The observations in weeks one to four are the average lateness committed in the B treatment (slot one), the R treatment is conducted in week five to week eight (slot two), and weeks nine to thirteen form slot three.

From Figure 1, the solid line is the average lateness from the group with the salary category of RM1500–RM2000 (G1520), the long dashed line is RM2001–RM2500 (G2025), and the short dashed line is RM2501–RM3000 (G2530). The figure indicates a significant impact when workers pay lateness punishment to co-workers; the overall average lateness for all the groups drops from 59.36 minutes in week 4 to 31.94 minutes in week 8. When this payment scheme is removed in week 9, the lateness reverts to the level of the first five weeks or higher.

Figure 1. The change in lateness according to G1520, G2025, and G2530

The average data based on group types shows a significant drop in lateness in weeks 4 to 8. Workers from group G2530 react to the payment difference more than workers from other groups. In week 4, the average lateness among the workers in G2530 is 101.7 minutes, but in week 8 it drops to 33.26 minutes: a 66% drop. On average, workers from G1520 report to work 55% earlier and workers from G2025 34% earlier in the same time period.

To investigate whether workers react differently to the punishment, this study conducts Tobit regression separately for the three time slots to investigate the workers' reaction when they pay penalty to the employer and to their co-worker. Two variables are taken into account – payout and lateness difference – to investigate the effects on workers' behavior. Table 2 presents the results.

Table 2. The effect of payout difference and difference in lateness on lateness

	Total Lateness			Individual lateness		
	(1)	(2)	(3)	(4)	(5)	(6)
Week	1-4	5-8	9-13	1-4	5-8	9-13
Const	-0.0279	0.5288**	0.0621	-1437**	0.1252	-0.0766
Z value	-0.29	2.22	0.68	_-2.27	1.16	-1.44
Payoff diff				-0.0268***	-0.3166***	-0.0270***
Z value				-13.4	-13.98	-16.46
Week 2	-0.1669	-0.0934	-0.002	-0.0674	-0.0427	-0.0048
Z value	-1.56	-0.44	-0.02	-1.9	-0.55	-0.12
Week 3	-0.1657	-0.0513	-0.1182	-0.0517	-0.0019	-0.0349
Z value	-1.5	-0.24	-1.18	-1.42	-0.02	-0.89
Week 4	-0.0797	-0.3608*	-0.1567	-0.016	-0.1913***	-0.0729
Z value	-0.73	-1.8	-1.56	-0.44	-2.61	-1.89
Week 5			-0.1867*			-0.0829*
Z value			-1.88			-2.17
Difference	0.9729***	0.7867***	0.9643***	0.3167***	-0.3313***	0.3378***
Z value	19.53	10.52	21.13	12.16	12.11	15.43
Chi Squared	220.01	105.32	283.58	331.12	251.81	435.79
Left censored	34	7	26	118	63	125
Uncensored	66	93	99	82	137	125
Log likelihood	-54.4674	-142.277	-69.153	-76.9747	-178.257	-98.2326

Note: the variable difference measures the difference between own lateness and partner's lateness. The variable payout difference (in RM) measures the punishment paid by the worker and paid by the partner, which can be either negative or positive. *** is 1% s.l., ** is 5% s.l., and * is 10% s.l. As the workers are matched into pairs, total lateness measures the lateness from group 1 and group 2. Columns 1, 2, and 3, and 4, 5, and 6 represent time slots one, two, and three, respectively.

Figure 2. The changes in lateness in response to the payment received by the partner

As can be seen from the fifth column in Table 1, the attendance improves if the workers observe that they pay more than their co-workers. For every RM1 difference in payout, the attendance improves by 0.3166 hours in weeks 5–8. Although the workers observe the difference in lateness between themselves and their partners, it does not help to improve the overall attendance; instead, the lateness difference has a positive impact on individual lateness. Based on the result, we conclude that workers react more to information about payout differences than to information about lateness differences.

If the late punishment is paid to the employer, the observable payout difference does not have any significant impact on the decision to report to work on time, as reported in columns four and six. For example, in weeks 5 to 8 (column 5), it takes a payout difference of RM3.15 to reduce lateness by one hour, but it takes a payout difference of RM37 to achieve the same effect in weeks 1 to 4 (column 4). The workers are more sensitive to the payout difference in weeks 5 to 8 because they pay the penalty to their co-workers.

Individual reaction to lateness punishment

The reaction to the unequal payoff improves individual attendance in order to reduce the punishment payment. This causes workers who observe a high punishment payment received by their partner to report to work on time. Figure 2 illustrates this behavior for the individual workers in group G2530 (to save space, we report only the workers from group G2530 since the punishment has a higher impact on this group of workers). The primary y-axis measures the lateness in hours and the secondary y-axis is the payment received by the co-worker in RM. The solid line is the worker's own lateness and the dashed line is the payment in RM to the co-worker.

Since we are interested in knowing the effect of the payment received by the co-worker on a worker's punctuality, the negative payment in the figure means the co-worker pays the worker for arriving late. From the figure, a high punishment payment received by the co-worker encourages the worker to reduce his own lateness and the worker is encouraged to remain punctual if he enjoys a payment from his co-worker. For example, the total amount received by workers nine and ten in Figure 2 is RM 93.28 and RM16.69, respectively, when the workers consistently report to work on time. The high payment paid by workers one and five (RM104.73 and RM 86.42, respectively) encourages the workers to reduce their lateness from 3.41 hours to 1.01 hours, and 3.27 hours to 1.2 hours, respectively. On average, the Spearman correlation coefficient between own lateness and payout to the co-worker is -0.66 (P-value = 0.0000). The individual worker average lateness is 0.9105 hours (S.D. = 1.2795), the maximum payout of RM45.90 in week 5 is reduced to 0.2495 hours (S.D. = 0.4267), and the maximum payout is RM16.52 in week 8.

Results from the survey

Table 3 gives the results of the survey and the correlation matrix. As indicated in the table, the outcome received by individuals dominates the procedure of the implementation in influencing adherence. Perceived distributive fairness when payment is paid to co-workers (i.e. condition 2) is significantly related to attendance decision. The variables "how policy affects" and distributive fairness (B) have moderate effect on employees in condition 1. This suggests that while employees react to fair implementation, perceived inequity in outcome plays a more significant role in influencing decision.

Table 3. Descriptive statistics and correlation

Variables	Mean	S.D	1	2	3	4
1 Formal procedure	4.1970	0.5200	(0.779)			
2 How policy affects	4.0909	0.6758	0.2126	(0.824)		
3 Distributive fairness (B)	3.8523	0.7669	0.4149***	0.7445***	(0.8717)	
4 Distributive fairness (R)	1.8181	0.712	0.0931	0.2184	0.0774	(0.9048)
5 Total Ind lateness (B)	1.9768	2.3595	-0.1176	-0.3578**	-0.2532*	0.0048
6 Total Ind lateness (R)	2.8856	2.5864	-0.0166	0.0783	0.0252	0.3940***

Note: numbers in the parentheses are Cronbach alpha reliability test. *** is 1% s.l. ** 5% s.l. * 10% s.l.

Discussion

Several conclusions can be drawn from the results obtained. First, the results suggest that punishment outcomes have a strong relation with the employee's fairness perception and behavioral results. This can be traced back to inequity aversion model and social comparison behavior. An individual is inequity averse if he dislikes outcomes that are perceived as inequitable. This social comparison process affects the judgment of the employees on the punishment outcomes and consequently, improves the attendance in R-treatment.

Second, this aversion changes the perception on the punishment in the two conditions. The significant relation between perceived distributive fairness and the improved attendance in the second condition implies that the decision to report to work or not is determined by social norm. In the first condition (i.e., B-treatment), the high score achieved in distributive fairness category (Mean = 3.8) and its weak relation with individual lateness may imply that employees perceive paying fines to employer is reciprocally fair. This may be due to the perception that it is fair to pay, as the fine is a price to buy lateness. Therefore, one may conclude that paying fines to employer in the B-treatment is more bearable than paying fines to co-workers in R-treatment.

Third, management can utilize this social norm to achieve adherence as long as the procedure in meting out the punishment is fair. Research in organizational justice and citizenship has shown that the effect of the punishment depends on the judgment and perception on the policy, which influence the behavioral outcomes of the employees (Ball et al., 1994; Trevino, 1992; Simons & Roberson, 2003; Podsakoff et al., 2006). Negative reactions to the policy are mainly due to unjust punishment, but not the punishment per se. Therefore, the application of fair implementation and social norm improves effectiveness and does not affect the citizenship.

There are some limitations of the research that should be recognized especially on the forces that may affect the behavioral outcomes observed above. The two treatments may create different perception that employees in the B-treatment is more tightly monitored and controlled by the management than the R-treatment, which is managed by their peers. When R-treatment is preceded by B-treatment, the perception that employer

is rewarding early comers and employees are now more fairly treated is created. However, if the R-treatment is preceded by when employees are not monitored, the perception could be different. This is due to the difficulty faced by the employees to adapt to the new and more team-based structure as what emphasized by the Structural Adaptation Theory (Hollenbeck et al., 2011). This study does not conduct the comparison because the company under study has implemented the punishment policy even before the study.

The behavioral pattern observed in the experimental results may be due to the competition effect produced by the R-treatment. To avoid loss to the employer, the experimental design does not reward employees who come to work on time in the B-treatment, but employees who come to work on time are rewarded from the fines paid by their co-workers in the R-treatment. Employees who come on time consistently will be rewarded highly and those who report late will have to pay heavy fine. As in Tournament Theory (Lazear & Rosen, 1981), this creates incentive to compete.

Since the experiment was conducted in a very short period of time, we do not have the opportunity to observe the impact of the implementation on the organizational citizenship in a longer term. Although the mechanism helps management to achieve adherence, the lack of privacy can have negative impact in the long term. Therefore, the management may consider publishing only the fines paid but not the lateness to conceal the information about the staff salary.

Conclusions

The present study complements experimental results with survey to investigate the effectiveness of punishment in an on going relation between employer and employees. Two experimental treatments were conducted in a plastic molding factory to test employees' reaction to punishment. The two treatments are 1) when the fines were paid to employer and 2) when the fines were paid to co-workers. The behavioral outcomes show that adherence is higher in condition 2 than in condition 1. Paying fines to co-workers is more effective than paying fines to employer in improving attendance. To understand the employees' interpretation and perception on the two treatments, survey was administered. The survey focuses on two criterion variables; procedural justice and distribu-

tive justice. While the results show that employees' attendance is not related to procedural justice, it is strongly determined by distributive justice. Employees consider it fair to pay the fines to employer but do not agree on paying the fines to co-workers. This is because employees perceive that the punishment outcomes in condition 2 create unequal distribution compared to condition 1. Employees might perceive the fines on lateness as reciprocally fair and economically justifiable, thus fines are perceived as price to buy commodity. This economic perception is changed to a social perception when the employees have to pay a co-worker for coming to work late. When a co-worker earned a substantially larger income, it creates a perception of unfairness.

References

- Ames, G. M., Grube, J. W., & Moore, R. S. (2000) Social control and workplace drinking norms: A comparison of two organizational culture. *Journal of Studies on Alcohol*, 61, 203-213.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999) Re-examining the components of transformational and transactional leadership using multifactor leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 442-461.
- Bacharach, S. B., Bamberger, P. A., & Sonnenstuhl, W. J. (2002) Driven to drink: Managerial control, work related risk factors and employee problem drinking. *Academy of Management Journal*, 45, 637-658.
- Ball, G. A. & Sims Jr, H. P. (1991) A conceptual analysis of cognition and effect in organizational punishment. *Human Resources Management Review*, 1, 227-243.
- Ball, G. A., Trevino, L. K., & Sims Jr, H. P. (1994) Just and unjust punishment: Influences on subordinate performance and citizenship. *Academy of Management Journal*, 37, 299-322.
- Becker, G. S. (1976) *The Economic approach to Human Behavior*. Chicago, IL and London, UK, The University of Chicago Press.
- Bell, M. P., McLaughlin, M. E., & Sequeira, J. M. (2002) Discrimination, harassment and the glass ceiling: Women executives as change agents. *Journal of Business Ethics*, 37, 65-76.
- Bentham, J. (1962) *The Works of Jeremy Bentham*. Principles of penal law. New York, NY, Russell and Russell
- Charness, G. & Kuhn, P. (2007) Does pay inequality affect worker effort? Experimental evidence. *Journal of Labor Economics*, 25, 693-723.
- Clark, A. E., Masclet, D., & Villeval, M.-C. (2010) Effort and comparison income: experimental and survey evidence. *Industrial and Labor Relations Review*, 63, 407-470.
- Gomez-Mejia, L. R. & Balkin, D. B. (1992) The determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, 35, 921-955.
- Hollenbeck, J. R., Ellis, A. P. J., Humphrey, S. E., Garza, A. S., & Ilgen, D. R. (2011) Asymmetry in structural adaptation: The differential impact of centralizing versus decentralizing team decision making structures. *Organizational Behavior and Human Decision Processes*, 114, 64-74.
- King, A. & Lenox, M. (2000) Industry self regulation without sanctions. *Academy of Management Journal*, 43, 698-716.
- Lauver, K. J., Lester, S. W., & Lentz, P. J. (2009) Perceptions of acceptability and enforcement. Their relationship with employees' behavior concerning alcohol. *Journal of Leadership and Organizational Studies*, 15, 416-428.
- Lazear, E. P. & Rosen, S. (1981) Rank order tournaments as optimum labor contract. *Journal of Political Economy*, 89, 841-865.
- MacCoun, R. J. (1993) Drugs and the law: A psychological analysis of drug prohibition. *Psychological Bulletin*, 113, 497-512.
- Markell, D. L. (2000) The role of deterrence based enforcement in a reinvented state/federal relationship. *Harvard Environmental Law Review*, 24, 1-114.
- Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000) Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43, 738-749.
- Mossholder, K. V., Bennett, N., & Martin, C. (1998) A multilevel analysis of procedural justice context. *Journal of Organizational Behavior*, 20, 131-141.
- Nagin, D. (1998) *Deterrence and Incapacitation. The handbook of crime and punishment*. New York, NY, Oxford University Press.

- Naumann, S. E. & Bennett, N. (2000) A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal*,43, 881-889.
- Niehoff, B. P. & Moorman, R. H. (1993) Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*,36, 527-556.
- O'Reilly, I., Charles, A., & Puffer, S. M. (1989) The impact of rewards and punishments in a social context: A laboratory and field experiment. *Journal of Occupational Psychology*,62, 41-53.
- Paternoster, R. & Simpson, S. (1996) Sanction threats and appeals to morality: Testing a rational choice model of corporate crime. *Law and Society Review*,30, 549-583.
- Podsakoff, P. M., Bommer, W. H., Podsakoff, N. P., & MacKenzie, S. B. (2006) Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions and behaviors: A meta analytic review of existing and new research. *Organizational Behavior and Human Decision Processes*,99, 113-142.
- Schnake, M. E. (1986) Vicarious punishment in a work setting. *Journal of Applied Psychology*,71, 343-345.
- Simons, T. & Roberson, Q. (2003) Managers should care about fairness: the effects of aggregate justice perceptions on organizational outcomes. *Journal of Applied Psychology*,88, 432-443.
- Suchman, M. (1995) Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*,20, 571-610.
- Trevino, L. K. (1992) The social effects of punishment in organizations: A justice perspective. *Academy of Management Review*,17, 647-676.
- Tyler, T. R. & Blader, S. L. (2005) Can business effectively regulate employee conduct? The antecedents of rule following in work settings. *Academy of Management Journal*,48, 1143-1158.
- Zimmerman, M. A. & Zeitz, G. J. (2002) Beyond survival: A achieving new venture growth by building legitimacy. *Academy of Management Review*,27, 414-431.

Acknowledgements

This research is funded by the Universiti Sains Malaysia, grant number 304/PSosial/6311027