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Top management’s snoopiing: Is sneaking over employees’ productivity and job commitment a wise approach?

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The management’s responsibility is to monitor the employee’s performance but when it becomes a desire of the management to snoop/spy the employees’ performance, then, this act has a direct influence on the employees and their motivations. The paper investigates the effects of top management’s spying/snooping in the organization on employees’ productivity and job commitment. For the purpose, a sample of 3500 employees, via self-administered survey technique, was analyzed. Tobit Model (censored regression) has been used to interrogate the effect of snooping/spying on employee productivity and commitment. Tobit Model marked findings that the approach of top management to snoop/spy on the employees’ productivity and job commitment affects adversely on the employees. Policy makers should adopt informal ways to practice snooping as it causes stress, mental illness, de-motivation and especially, when snooping is via other co-workers and employees, it creates major disruption and a rise to politicking in organization, which affects the proper streamlining of business operations across the departments.

Key words: Organizational spying/snooping, job commitment, employees’ productivity, stress.

INTRODUCTION

In a work environment, it is a norm that the employees are monitored for their work performance (Vorvoreanu and Botan, 2001). Now, at workplaces, whether it is tech savvy or a nominal one, each worker’s working step is subject to snooping (Meeks, 2010).

Undercover checking on the performance of the employees by the top management has borne many issues but recently, it has been known that spying leads to stress and consequently reduces performance. With the advancement of technology, spying has become easier as there are loads of electronic devices available to scrutinize, especially in the American workplace environment (Vorvoreanu and Botan, 2001).

The research indicates that organizations use the spying approach to monitor the workforce productivity, misconduct and compliance with employer’s workplace policies (Lasprogata et al., 2004). Studies have affirmed that there is strong association of decreased job satisfaction with the mentoring via electronic devices (Aiello and Kolb, 1995). If there is job dissatisfaction, then this will also lead to less job commitment.

The ratio of the employers to spy on their employee is on the high side and mostly, 80% of the employers also disclose their spying practice to their employees and it was revealed that employees at their work stations do use computer for personal reasons but it does not affect the job’s productivity (Al-Rjoub et al., 2008).

Primarily, this study tries to identify the top management’s spying effect on employees’ productivity.
and job commitment; whether it is done with electronic devices and/or through other means (undercover employees to monitor other employees).

LITERATURE REVIEW

Workplace privacy is dead and buried a long time ago. Employers do monitor e-mails, eavesdrop on telephone calls, observe internet access, and lookout on workers with hidden cameras. Some companies have even installed cameras in the bathrooms; though it is unethical to record the telephone calls and spy around in one’s personal life, which is the non-traditional ways of snooping over employees. Equity theory puts forwards the unbalancing act of employees due to the surveillance by direct and direct exchanges. Due to surveillance, managers gain extra power and control over employees because employees understand that such kind of surveillance is always in the favor of the management. Similar to this theory is the concept of resistance, which explained that due to the surveillance, employees behavior turns out to be negative.

Specific research by Aiello and Kolb (1995) highlights that if skilled workers are monitored, they tend to bring higher performance and a faster work-orientation, that is, a positive outcome and if unskilled workers are monitored, they tend to bring lower performance, that is, a negative outcome. It was also found that monitoring does cause certain level of stress to any category of employees/workers. Larson and Callahan (1990) mentioned that group level screening is not as effective as individual screening over employees work assignments and attitude.

According to Meeks (2000), organizations, as routine, monitor their employee and has now become a part of their workplace practice. For instance, Xerox organization sacked 40 of their employees due to the mal-use of the internet.

The analysis conducted by Vorvoreanu and Botan (2001) determined significant relationship between surveillance and performance. Surveillance has a negative effect on the workplace culture. At a broad-spectrum, stress and privacy invasion are the two main pointers which are not only the consequences of monitoring, but might also decrease performance and quality of work. Other factors such as job commitment and motivation towards work will be another disturbance by the employees.

Rjoub et al. (2008) revealed that certain employees do have high regard to be monitored to improve their behavior in the workplace and to improve the relationship with co-workers. In this case, employees do not care about the organization’s performance. In addition, the findings also showed that the percentage of people who prefer spying/monitoring are not higher than the percentage of people who do not want to be monitored. In short, employers always have a desire to snoop around the workplace and employees do not feel this as a good way to form appraisal or check on them. Apart from being surveyed or monitored by physical presence of an employer, video monitoring is a lot in use. Dixon (1995) stated that the introduction of video surveillance is the most damaging variable between employee and employer relation. The research study stated that in the U.S., any mode of monitoring/spying over employees, are the major stress caused at workplace. The study conducted by Ahmed (2007) on analysis of workplace surveillance which was conducted on university employees, found out that 66% of the employees were positive about the surveillance, while 33% were intrusive and had a negative appeal on the monitoring practices.

LaNuez and Jermier (1994) mentioned in the chapter of neglected patterns of resistance at work that electronic control system can lead to disruption. Resistance, which is the opposing force, occurs when the employee freedom is threatened. Here, the freedom is threatened by monitoring and surveillance by employer in order to measure performance of employee. The research by Morgan (1987) concluded that not only does electronic monitoring have the capability to negatively influence working situations and cause extreme stress, also, it may actually generate depression at work, low clarity and task variety, peer social support depression, supervisory support depression, job loss fright and lack of control and autonomy over tasks. This supports that electronic monitoring can cause a decline in job productivity and commitment. This paper has broadly marked the effects of top management spying/snooping in organization, if any, on employee's productivity and job commitment. Spying/snooping is a source of invasion at employees work area. Research has been carried out particularly on electronic surveillance but not much on the fact on how spying via other co-workers affect the productivity and job commitment of the employees.

Hypotheses

H1: Top management spying in the organization affects the productivity of employees.

H2: Top management spying in the organization affects the job commitment of employees.

RESEARCH METHODS

Description of sampling and data

A survey was done for this study in which respondents were randomly selected from different organizations of Pakistan. The respondents contained both the male and female employees with
variety of age, educational background and experience related to work. They were directly met and were told about the significance of the study. Questionnaires were given to them to be filled, and were collected some days later.

The sampling technique that was used in this study was the convenience sampling technique. This technique is chosen because of the shortage of time and availability of respondents to be studied upon. The respondents were the managers and the employee of an organization. Sample size of this study was 3500 respondents which contained both male and female. They were of different age, educational background and work experience.

### Econometrical modeling

In this research, a large sample of respondents’ (3500) employees from the various industries and corporate sectors were selected. The data for employee productivity and employee job commitments on the basis of snooping/spying were recorded with two different sets of respondents’ categories which included the respondents with various levels of agreements in relevance to their productivity and job commitments due to spying on them and the respondents that had not been affected at all by spying. Since the outlined description qualifies for Tobit model selection, therefore, the association of the employee productivity and job commitment with spying/spying has been interrogated by censoring the dependent variables (employee productivity and job commitment for the cases when snooping/spying does not matter to them) and then applying the Tobit model.

Censored regression model or the Tobit model is defined as the regression model based on censoring the distribution of dependent variable. It is acquired by causing the mean in the previous corresponding model to a conventional regression model. The general expression may be given in terms of an index function:

\[ y^*_i = x_i^\prime \beta + \varepsilon_i \]

\[ y_i = \begin{cases} 0 & \text{if } y^*_i \leq 0, \\ y^*_i & \text{if } y^*_i > 0. \end{cases} \]

Since the data of employee productivity and job commitment are censored, therefore, two potential conditional mean functions we considered, which reflects the purpose of the study. While, for the index variable, sometimes called the latent variable, it is acquired by causing the mean in the previous corresponding model to a conventional regression model. The general expression may be given in terms of an index function:

\[ E[y^*_i | x_i] = x_i^\prime \beta \]

For the recording of the randomly drawn sample from the population, which may or may not be censored, the following equation can be used for computing latent variable:

\[ E[y^*_i | x_i] = \Phi \left( \frac{x_i^\prime \beta}{\sigma} \right) \left( x_i^\prime \beta + \sigma \lambda_i \right), \]

Where,

\[ \lambda = \frac{\Phi \left( \frac{0 - x_i^\prime \beta}{\sigma} \right)}{1 - \Phi \left( \frac{0 - x_i^\prime \beta}{\sigma} \right)} = \frac{\Phi \left( \frac{x_i^\prime \beta}{\sigma} \right)}{\Phi \left( \frac{0 - x_i^\prime \beta}{\sigma} \right)} \]

As we are intending to confine our attention to censored observations, then the results for the truncated regression model may not apply, because the truncated regression model is no more amenable to least squares than the censored data model.

In the Tobit model, the marginal effect of spying on outlined various employee productivity and job commitment can be calculated by the following. While, Assuming that ε is a continuous random variable with mean 0 and variance \( \sigma^2 \), and 

\[ f(\varepsilon | x) = f(\varepsilon). \]

Whereas, \( a \) and \( b \) are constants, let \( f(\varepsilon) \) and \( F(\varepsilon) \) denote the density and cdf of \( \varepsilon \):

\[ \frac{\partial E[y|x]}{\partial x} = \beta \times \text{Prob} \left[ a < y^* < b \right]. \]

### Proof

\[ E[y|x] = a \text{Prob} \left[ y^* \leq a|x \right] + b \text{Prob} \left[ y^* \geq b|x \right] + \text{Prob} \left[ a < y^* < b |x \right] \]

Let, \( \alpha_j = \frac{x - x_j \beta}{\sigma} \), \( F_j = F(\alpha_j) \), \( f_j = f(\alpha_j) \), and \( j = a, b \).

Then,

\[ E[y|x] = a F_a + b(1 - F_b) + (F_b - F_a) E[y^* | a < y^* < b, x]. \]

Since,

\[ y^* = x \beta + \sigma [ (y^* - \beta x)/\sigma ] \] , the conditional mean may be written

\[ E[y^* | a < y^* < b, x] = x \beta + \sigma \int_{a \sigma}^{b \sigma} \frac{(c/\sigma) f(c/\sigma)}{F_b - F_a} d \left( \frac{c}{\sigma} \right). \]

Collecting terms, we have:

\[ E[y|x] = a F_a + b(1 - F_b) + (F_b - F_a) \beta x + \sigma \int_{a \sigma}^{b \sigma} \frac{(c/\sigma) f(c/\sigma)}{F_b - F_a} d \left( \frac{c}{\sigma} \right). \]

Now, differentiate with respect to \( x \). The only complication is the last term, for which the differentiation is with respect to the limits of integration. We use Leibnitz’s theorem and use the assumption that \( f(\varepsilon) \) does not involve \( x \). Thus:

\[ \frac{\partial E[y|x]}{\partial x} = \left( \frac{-\beta}{\sigma} \right) a f_a - \left( \frac{-\beta}{\sigma} \right) b f_b + \left( F_b - F_a \right) \beta + (\beta x) \left( f_b - f_a \right) \left( \frac{-\beta}{\sigma} \right) + \sigma \left[ a f_a + a f_a \right] \left( \frac{-\beta}{\sigma} \right). \]

After inserting the definitions of \( \alpha_a \) and \( \alpha_b \), and collection terms, we find all terms sum to zero save for the desired result:

\[ \frac{\partial E[y|x]}{\partial x} = \left( F_b - F_a \right) \beta = \beta \times \text{Prob} \left[ a < y^*_i < b \right]. \]

Censoring at zero and normally distributed disturbance, the result
Table 1. Tobit estimates for employee productivity due to managerial spying.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Employee productivity</th>
<th>Scaled OLS</th>
<th>Ordinary least squares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient (T-value)</td>
<td>Slope</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>124.82 (28.89)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spying via technology</td>
<td>46.131 (11.74)</td>
<td>59.12</td>
<td>27.72</td>
</tr>
<tr>
<td>Spying via coworkers</td>
<td>57.103 (15.32)</td>
<td>74.12</td>
<td>33.62</td>
</tr>
</tbody>
</table>

Sample size 3500
Proportion working 0.770

specializes to:

\[
\frac{\partial E[y_i|x_i]}{\partial x_i} = \beta \Phi \left( \frac{\beta x_i}{\sigma} \right)
\]

Although not a formal result, this does suggest a reason why, in general, least squares estimates of the coefficients in a Tobit model usually resemble the MLEs times the proportion of non-limit observations in the sample. McDonald and Moffitt (1980) suggested a useful decomposition of \( \frac{\partial E[y_i|x_i]}{\partial x_i} \):

\[
\frac{\partial E[y_i|x_i]}{\partial x_i} = \beta \times \{ \Phi_i[1 - \lambda_i(\alpha_i + \lambda_i)] + \phi_i(\alpha_i + \lambda_i) \}.
\]

Where \( \alpha_i = x_i' \beta \), \( \Phi_i = \Phi(\alpha_i) \) and \( \lambda_i = \phi_i(\alpha_i) \). Taking the two parts separately, this result decomposes the slope vector into:

\[
\frac{\partial E[y_i|x_i]}{\partial x_i} = \text{Prob}[y_i > 0] \frac{\partial E[y_i|x_i, y_i > 0]}{\partial x_i} + \text{Prob}[y_i > 0] \frac{\partial E[y_i|x_i, y_i > 0]}{\partial x_i}.
\]

Thus, a change in \( x_i \) (that is, spying) has two results: it has an effect on the conditional mean of \( y_i \) (amount of employee productivity and job commitment) in the positive fraction of the distribution and it also affects the probability that the observation will fall in that fraction of the distribution. The log-likelihood for the censored regression model is:

\[
\ln L = \sum_{y_i > 0} \left[ \frac{-1}{2} \log(2\pi) + \ln \sigma^2 + \frac{(y_i - x_i' \beta)^2}{\sigma^2} \right] + \sum_{y_i < 0} \ln \left[ 1 - \Phi \left( \frac{x_i' \beta}{\sigma} \right) \right]
\]

RESULTS

The comparative empirical results of scaled ordinary least square (OLS) (Tobit model) and OLS (multiple linear regression) reveal that the Tobit model is an appropriate, better and robust model that explain the outlined category of relationship between the variables when dependent variable is required to be censored (Tables 1 and 2).

The finding of this paper confirms that all of the spying techniques which includes spying via technology and spying via coworkers in relevance to the various industries adversely affect the employee productivity and job commitment at work, while spying via coworkers dissatisfies employees more in terms of productivity and job commitment than the spying via technology, as the betas for spying via coworkers are found thicker than the spying via technology at \( t > 1.5 \), Thus our outlined hypotheses fail to be rejected.

DISCUSSION AND CONCLUSIONS

In a contemporary world, where technology is changing too fast, work has become easy, abundant and more transparent. This transparency is to control employees work behavior, task performance, communication levels across organization through snooping/spying over them. It is certain that management wants the best of their employees so that the business overall delivers more than the expectations. It has been noted that spying is now said to be a norm and is expected by the organizations and that is why new entrants are well-aware of the fact that employers can formally or informally snoop around through camera, phone tracking, internet controls and monitors etc. Now, within a few years, another way of snooping over employees which have emerged frequently is through co-workers and other employees. Communication of information through informal sources and bypassing hierarchical levels are devastating in numerous ways. Such acts affect employee productivity and job commitment. This study results that snooping over employees especially through other co-workers and employees has more adverse
impact on employees’ productivity and job commitment. The key factors are stress, depression and mental illness and de-motivation and peer-competition. It gives birth to politics within the organizational culture and more business communication conflicts occur when the source of snooping through co-workers and other measures is revealed to the employees.

**Implications**

The policy makers should be aware of the negativity caused by spying over employees and especially via co-workers. Certain policies should be adopted in which employees should be un-aware of spying over them and certain informal ways of spying can be adopted to avoid lack of job commitment and low productivity at work. Another wise approach for the management to track their employees in order to avoid misconceptions and aforementioned issues is to communicate their monitoring system for tracking attitude and performance at the point of hiring, which will basically provide a clean slate for the employees to comprehend the monitoring system to be an unbiased way of controlling employees. As far as snooping via co-workers is concerned, it is already found that this approach has more adverse points and should be avoided by the management as it is an unreliable and in most cases, a biased way to track employees.

**REFERENCES**


