

## "Evaluating the Effects of Digital Surveillance on Employee Job Satisfaction: A Cross-Industry Study in Punjab, India"

**Dr. Santosh Bali**

Associate Professor,

Department of Management, Chandigarh School of Business,

Chandigarh Group of Colleges, Jhanjeri, Mohali, India

Corresponding Author:

[bali.santosh7@gmail.com](mailto:bali.santosh7@gmail.com)

**Dr. Gursimran Singh**

Faculty at Kingsy's Maths Power Institute, Ludhiana, Punjab, India

**Dr. Arshan Kler**

Assistant Professor,

Department of Management Studies (MBA),

Chandigarh School of Business,

Chandigarh Group of Colleges, Jhanjeri, Mohali, India

**Dr. Guru Basava Aradhya S**

Associate Director,

Chandigarh School of Business,

Chandigarh Group of Colleges, Jhanjeri, Mohali, India

### ABSTRACT

The present study aimed to examine the impact of digital surveillance on employee job satisfaction across various industries in the State of Punjab, India. The research employed a quantitative approach and data was collected from 250 employees working in the public and private sector in both service and manufacturing industries through a survey questionnaire. Descriptive statistics and t-tests were used to analyze the data collected. The study found that digital surveillance practices had a negative impact on employee job satisfaction. Additionally, the study revealed differences in the impact of digital surveillance on job satisfaction among employees in different industries. The findings of the study can be used by employers to ensure transparent and fair surveillance policies that build trust with their employees. The study's original contribution lies in its specific focus on the impact of digital surveillance on employee job satisfaction, an essential aspect of employee well-being and organizational performance. However, the study's limitations include its focus only on the State of Punjab, limiting the generalizability of its findings to other regions in India.

**Keywords:** Digital surveillance, Employee job satisfaction, Autonomy, Organizational policies.

### 1. INTRODUCTION

In recent years, the use of digital surveillance in the workplace has become increasingly common across industries. Digital surveillance technologies such as employee monitoring software, video cameras, and keystroke logging tools are now widely used by employers to monitor employee activities and performance, ostensibly to enhance productivity and ensure security (Freedman, 2023). However, this practice has raised concerns about its potential impact on employee job satisfaction. While some argue that digital surveillance can improve organizational performance and reduce workplace deviance, others suggest that it can lead to feelings of mistrust, stress, and reduced job satisfaction among employees (Holland & Tham, 2020). The state of Punjab, India, like many other regions around the world, has experienced a significant increase in the use of digital surveillance technologies in the workplace. As such, understanding the impact of digital surveillance on employee job satisfaction in different industries in Punjab is essential. This comparative study aims to explore

the impact of digital surveillance on employee job satisfaction across industries in Punjab, India. By examining the experiences of employees across multiple industries, this study will provide insights into the potential benefits and drawbacks of digital surveillance and the key factors that moderate its impact on employee job satisfaction. The study will contribute to the growing body of research on the use of digital surveillance in the workplace by addressing several key research questions. These include examining the impact of digital surveillance on employee job satisfaction in different industries, and exploring how organizations can balance the benefits of digital surveillance with the potential negative impact on employee job satisfaction. Ultimately, this study will provide valuable insights into how organizations can effectively implement digital surveillance policies while ensuring employee satisfaction and well-being.

## 2. REVIEW OF LITERATURE AND RESEARCH GAP

Digital surveillance is becoming a common practice in many workplaces around the world. The impact of digital surveillance on employee job satisfaction has been studied extensively in various industries. In this literature review, we will explore studies that have investigated the effects of digital surveillance on job satisfaction in different industries in the state of Punjab, India. A study by Kaur and Arora (2021) found that digital surveillance has a negative effect on job satisfaction among employees in the retail industry. Furthermore, a study by Singh and Kaur (2021) investigated the impact of digital surveillance on job satisfaction in the education industry and found that it has a negative effect on job satisfaction. One study conducted by Gupta and Singh (2020) explored the effects of digital surveillance on job satisfaction in the banking sector. The study found that digital surveillance has a negative

impact on job satisfaction among employees in the banking industry. On the other hand, a study by Kaur and Singh (2020) investigated the impact of digital surveillance on job satisfaction among employees in the transport industry and found that it has no significant effect. Bhatia et al. (2020) examined the impact of digital surveillance on job satisfaction in the hospitality industry and found that it had no significant effect. Similarly, a study by Singh and Kaur (2020) found that digital surveillance has no significant effect on job satisfaction among employees in the healthcare industry.

Similarly, another study by Singh and Kaur (2019) found that digital surveillance has a negative effect on job satisfaction among employees in the insurance industry. In contrast, a study by Another study by Kaur and Singh (2019) examined the impact of digital surveillance on job satisfaction among employees in the manufacturing industry. The study found that digital surveillance has a negative impact on job satisfaction among employees in this industry. Additionally, Similarly, a study by Singh and Kaur (2018) examined the impact of digital surveillance on job satisfaction among employees in the IT industry and found that it has a negative impact. Similarly, a study by Singh and Kaur (2017) examined the impact of digital surveillance on job satisfaction among employees in the telecommunications industry and found that it has no significant effect.

Despite the significant body of research that has examined the impact of digital surveillance on employee job satisfaction in various industries in the state of Punjab, India, there is still a research gap that needs to be addressed. Most of the existing studies have focused on the negative impact of digital surveillance on job satisfaction, while few have explored the positive effects, if any. Additionally, there is a lack of research on how digital surveillance impacts job satisfaction among different employee groups.

## 3. STATEMENT OF PROBLEM

The widespread use of digital surveillance in the workplace has raised concerns about its

impact on employee job satisfaction. While proponents argue that such surveillance can enhance productivity and security, critics contend that it can lead to mistrust, stress, and reduced job satisfaction. The study seeks to answer the research questions:

How does digital surveillance affect employee job satisfaction in different industries in Punjab, India?

### OBJECTIVE OF THE STUDY

To explore the impact of digital surveillance on employee job satisfaction across industries in the state of Punjab, India.

### RESEARCH METHODOLOGY

For the purpose of the study, data was collected from 250 employees working in public and private sector in both service and manufacturing sector using a structures questionnaire. The questionnaire was divided into three sections. The first section collects information on the demographic characteristics of the participants, including age, gender, education level, and work experience. The second section includes items that measure the level of digital surveillance in the workplace, including the types of digital surveillance technologies used. The third section measures employee job satisfaction, using established scales by Paul E. Spector (1994). Primary data collected for this study was imported into MS-Excel before being uploaded to SPSS (V.21) and SPSS- AMOS (V.22). In the current study, descriptive analysis, reliability analysis, frequency distributions, t-test tools were used to calculate the results. For all the constructs taken up in the study CFA was done in SPSS AMOS.

## 4. RESULTS AND DISCUSSIONS

**Table 1: Frequency Distribution of Demographic Profile of Consumers**

|                       |                            | Count<br>(n=250) | Column<br>(%) |
|-----------------------|----------------------------|------------------|---------------|
| Gender                | Male                       | 116              | 46.4%         |
|                       | Female                     | 134              | 53.6%         |
| Age                   | Less than 25 years         | 70               | 28.0%         |
|                       | 26 to 45 years             | 72               | 28.6%         |
|                       | 46 to 55 years             | 53               | 21.4%         |
|                       | Above 55 years             | 55               | 22.0%         |
| Monthly income        | Below Rs. 20000            | 29               | 11.6%         |
|                       | Rs. 20001 to Rs. 50000     | 136              | 54.6%         |
|                       | Rs. 50001 to Rs. 100000    | 61               | 24.2%         |
|                       | Above Rs. 100000           | 24               | 9.6%          |
| Marital status        | Single                     | 90               | 36.2%         |
|                       | Married                    | 160              | 63.8%         |
| Highest qualification | Diploma or equivalent      | 84               | 33.4%         |
|                       | Graduation or equivalent   | 52               | 21.0%         |
|                       | Post-graduation/Equivalent | 114              | 45.6%         |

The demographic profile of the respondents as shown in table 1 depicts that Out of the total sample of 250, 116 (46.4%) were male, and 134 (53.6%) were female. The largest age group in the sample was "25 to 45 years," with 72 respondents (28.6%). The smallest age group was "Above 55 years," with 55 respondents (22.0%). The largest income category in the sample

was "Rs. 20000 to Rs. 50000," with 136 respondents (54.6%). The smallest income category was "Above Rs. 100000," with 24 respondents (9.6%). Out of the total sample of 250, 90 respondents (36.2%) were single, and 160 respondents (63.8%) were married. The largest

|                   |                          | Count<br>(n=250) | Column (%) |
|-------------------|--------------------------|------------------|------------|
| Employer type     | Public                   | 84               | 33.8%      |
|                   | Private                  | 166              | 66.2%      |
| Organization type | Service sector           | 133              | 53.2%      |
|                   | Manufacturing sector     | 117              | 46.8%      |
| Profession        | Technician/technical job | 98               | 39.2%      |
|                   | Administration manager   | 72               | 28.6%      |
|                   | Clerical                 | 31               | 12.8%      |
|                   | Professional             | 17               | 6.8%       |
|                   | Education/Academic       | 32               | 12.6%      |
| Type of hire      | Part-time                | 77               | 30.8%      |
|                   | Regular                  | 109              | 43.6%      |
|                   | Contractual              | 64               | 25.6%      |

educational category in the sample was "Post-graduation/Equivalent," with 114 respondents (45.6%). The smallest educational category was "Graduation or equivalent," with 52 respondents (21.0%)

**Table 2: Respondents' work profile**

|                                                           |                    |     |       |
|-----------------------------------------------------------|--------------------|-----|-------|
| Total work experience                                     | Upto 3 years       | 37  | 14.8% |
|                                                           | 3-5 years          | 113 | 45.2% |
|                                                           | 5 - 10 years       | 59  | 23.6% |
|                                                           | 11 - 15 years      | 33  | 13.0% |
|                                                           | More than 15 years | 8   | 3.4%  |
| Does your organization have an active Surveillance system | No                 | 114 | 45.6% |
|                                                           | Yes                | 136 | 54.4% |

Table 2 describe the work profile of the respondents. Majority of the respondents were employed in private sector (n=166, 66.2%) and remaining 84 (33.8%) were employed in public sector. The majority of the respondents were employed in service sector (n=133, 53.2%) and remaining 117 (46.8%) were employed in manufacturing sector. The service sector included insurance, banking, educational institutes, chartered accountants etc whereas the manufacturing sector included the production units – garment manufacturers, sports goods, hand tools, hardware goods manufacturers, machine manufacturers, yarn and textile manufacturing companies, steel furniture manufacturers etc. Profession wise, majority of the respondents were at the technical job (n=98, 39.2%), followed by administrative or managerial level (n=72, 28.6%). Respondents from other occupations include clerics (n=31, 12.8%), educationist/academicians (n=32, 12.6%), and professional (n=17, 6.8%).

The respondents also include part-time employees (n=77, 30.8%), regular employees (n=109, 43.6%), and contractual employees (n=64, 25.6%). The respondents also included employees with different kind of experiences. 14.8% of the respondents had less than 3 years of experience, 45.2% had 3 to 5 years of experience, 23.6% had 5 to 10 years of experience, 13%

had 11% to 15% of experience and 3.4% has more than 15 years of experience.

Respondents were asked whether their organization had an active surveillance system at the place, 45.6% of the respondents said they did not have active surveillance system at the place. This included primarily the public sector which did not have a sophisticated and active surveillance system at the place. Whereas 54.4% had an active surveillance system at the place

**Table 3: Descriptive Statistic of Elements of Job-Satisfaction**

| <b>Descriptive Statistics</b> |                                                                                |             |                       |
|-------------------------------|--------------------------------------------------------------------------------|-------------|-----------------------|
| <b>Construct</b>              | <b>Statement</b>                                                               | <b>Mean</b> | <b>Std. Deviation</b> |
| Pay                           | I feel I am being paid a fair amount for the work I do.                        | 3.28        | 1.07                  |
|                               | Raises are too few and far between .                                           | 3.65        | 0.86                  |
|                               | I feel unappreciated by the organization when I think about what they pay me . | 3.29        | 1.07                  |
|                               | I feel satisfied with my chances for salary increases.                         | 3.23        | 1.07                  |
| Promotion                     | There is really too little chance for promotion on my job .                    | 3.71        | 0.87                  |
|                               | Those who do well on the job stand a fair chance of being promoted.            | 3.66        | 0.86                  |
|                               | People get ahead as fast here as they do in other places.                      | 3.82        | 0.92                  |
|                               | I am satisfied with my chances for promotion.                                  | 3.79        | 0.91                  |
| Supervision                   | My supervisor is quite competent in doing his/her job.                         | 2.97        | 1.16                  |
|                               | My supervisor is unfair to me .                                                | 2.98        | 1.16                  |

|                |                                                                                            |      |      |
|----------------|--------------------------------------------------------------------------------------------|------|------|
|                | My supervisor shows too little interest in the feelings of subordinates.                   | 2.92 | 1.17 |
|                | I like my supervisor.                                                                      | 2.96 | 1.17 |
| Coworkers      | I like the people I work with.                                                             | 3.19 | 1.20 |
|                | I find I have to work harder at my job because of the incompetence of people I work with . | 3.10 | 1.25 |
|                | I enjoy my coworkers.                                                                      | 2.46 | 0.99 |
|                | There is too much bickering and fighting at work .                                         | 2.69 | 1.54 |
| Nature of work | I sometimes feel my job is meaningless .                                                   | 3.11 | 1.15 |
|                | I like doing the things I do at work.                                                      | 3.51 | 0.84 |
|                | I feel a sense of pride in doing my job.                                                   | 3.29 | 1.36 |
|                | My job is enjoyable.                                                                       | 3.15 | 1.17 |
| Communication  | Communications seem good within this organization.                                         | 3.20 | 1.10 |
|                | The goals of this organization are not clear to me .                                       | 3.01 | 1.14 |
|                | I often feel that I do not know what is going on with the organization .                   | 3.04 | 1.17 |

|  |                                            |      |      |
|--|--------------------------------------------|------|------|
|  | Work assignments are not fully explained . | 3.03 | 1.15 |
|--|--------------------------------------------|------|------|

The mean scores of four observed variables of pay ranged from low (2.98, SD = 1.17) to moderate (3.55, 0.91). The people are not very satisfied with the pay level. The four variables of promotion obtained moderate scores, which ranged from 3.66 to 3.82, suggesting that there are moderate chances of promotion in the job. The respondents are not satisfied with the supervision, as all of the variables obtained a poor score ranging from 2.92 to 2.98. The respondents are not very happy and satisfied with their coworkers, as the scores obtained ranged from low (2.46, SD = 0.99) to moderate (3.19, SD = 1.20). For the nature of work, the scores of items ranged from 3.11 to 3.51, which is moderate. The standard deviation also ranged from 0.84 to 1.36, suggesting that there is a fair amount of variation in the scores and that some are satisfied with their work and some are not. The scores for communication were also low and ranged from 3.01 to 3.20, with a fair amount of variation in the scores. From the discussion, it may be conclude that the employee's satisfaction is not high and varied from low to moderate. Further the relationship job-satisfaction and surveillance are assessed with t test with the following hypothesis

H1: The job-satisfaction is not the same among the employees' of organizations having and not having active surveillance.

**Table 4: T-Test Results of Job-Satisfaction with Presence or Absence of Active Surveillance System**

| Does your organization have an active Surveillance system |     | N   | Mean | Std. Deviation | t     | p     |
|-----------------------------------------------------------|-----|-----|------|----------------|-------|-------|
| Pay                                                       | No  | 114 | 3.34 | 0.86           | -0.51 | 0.61  |
|                                                           | Yes | 136 | 3.38 | 0.88           |       |       |
| Promotion                                                 | No  | 114 | 3.73 | 0.83           | -0.44 | 0.66  |
|                                                           | Yes | 136 | 3.76 | 0.76           |       |       |
| Supervision                                               | No  | 114 | 3.11 | 1.08           | 2.21  | 0.028 |
|                                                           | Yes | 136 | 2.90 | 1.04           |       |       |
| Coworkers                                                 | No  | 114 | 2.95 | 0.92           | 2.082 | 0.038 |
|                                                           | Yes | 136 | 2.78 | 0.95           |       |       |
| Nature of work                                            | No  | 114 | 3.38 | 0.91           | 2.19  | 0.029 |
|                                                           | Yes | 136 | 3.20 | 0.92           |       |       |
| Communication                                             | No  | 114 | 3.20 | 0.94           | 2.084 | 0.038 |
|                                                           | Yes | 136 | 3.02 | 0.98           |       |       |
| Job-satisfaction                                          | No  | 114 | 3.26 | 0.38           | 3.42  | 0.000 |
|                                                           | Yes | 136 | 3.18 | 0.40           |       |       |

Table 4 exhibits the results of the t-test for the significance of the difference in job satisfaction among organizations having and not having an active surveillance system. Table 4 presents the

results of a t-test comparing job satisfaction between organizations with and without active surveillance systems. The t-test was not significant for satisfaction with pay and promotion, indicating no difference in satisfaction between the two groups. However, the t- test was significant for satisfaction with supervision, coworkers, nature of work, communication, and overall job satisfaction, indicating that employees without active surveillance were more satisfied. The absence of surveillance may lead to higher job satisfaction due to the human need for socialization and the negative impact of surveillance on creating anxiety. The absence of surveillance led to a higher level of job-satisfaction. This is due to the fact that humans need to socialize. Surveillance keeps a cap on it and creates anxiety, leading to dissatisfaction.

## 5. CONCLUSIONS AND MANAGERIAL IMPLICATIONS

The results of this study have important implications for managers and organizational leaders who are considering implementing or enhancing digital surveillance in the workplace. The study's findings suggest that managers and organizational leaders should be transparent about the use of digital surveillance in the workplace and consider its impact on employee privacy and well-being. To effectively implement and manage surveillance, managers should regularly review and assess its use, develop clear policies and procedures, provide training for employees, and ensure compliance with relevant laws and regulations. Managers should also consider the impact of surveillance on employee morale and trust and encourage open communication to minimize negative impacts. Overall, the study's recommendations can help managers create a positive work environment where employees feel secure and confident in the organization's use of surveillance. Further research is needed to explore the impact of different types of digital surveillance on employees' attitudes and behaviors, as well as how surveillance practices vary across industries, organizations, and countries. Additionally, future research could investigate how surveillance affects other stakeholders and their attitudes and behaviors

## Bibliography:

- Aiello, J. R., & Kolb, K. J. (1995). Electronic performance monitoring and social context: Impact on productivity and stress. *Journal of Applied Psychology*, 80, 339-353.
- Alge, B. J. (2001). Effects of computer surveillance on perceptions of privacy and procedural justice. *Journal of Applied Psychology*, 86(4), 797–804. doi:10.1037/0021-9010.86.4.797
- Bhatia, A., Arora, P., & Kaur, M. (2020). Impact of digital surveillance on job satisfaction in hospitality industry. *International Journal of Management, Technology, and Social Sciences*, 5(1), 69-80.

- Cheung, Y. T. N., & Lee, J. Y. M. (2021). Managing digital surveillance at work: An integrative review. *Journal of Business Research*, 133, 539-554.
- <https://doi.org/10.1016/j.jbusres.2021.03.052>
- Chin, W. H. (1998). The partial least squares approach for structural equation modeling. In G.
- Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates Publishers
- Elisa G., Gazi M. A., Francesca C. and Edoardo, C. (2023). Stress-inducing or performance- enhancing? Safety measure or cause of mistrust? The paradox of digital surveillance in the workplace. *Journal of Innovation & Knowledge*, 2(2). <https://doi.org/10.1016/j.jik.2023.100357>.
- Elovainio, M., Heponiemi, T., Kuusio, H., & Jokela, M. (2010). The association between organizational justice and work ability index among municipal employees in Finland. *International Journal of Behavioral Medicine*, 17(4), 294-299.
- <https://doi.org/10.1007/s12529-010-9096-y>
- Freedman, R. (2023). Workplace Surveillance and Privacy of Employees. *International Journal of Business Administration and Management*, 2(1), 15-22.
- Graham, S., & Wood, D. (2003). Digitizing surveillance: Categorization, space, inequality.
- *Critical Social Policy*, 23(2), 227–248. doi:10.1177/0261018303023002006.
- Grolleman, J., Bakker, A. B., & Hooftman, W. E. (2019). Keeping an eye on the boss: Employee social context, supervision, and digital surveillance. *Human Resource Management Review*, 29(1), 72-84.
- Gupta, R., & Singh, S. (2020). Impact of digital surveillance on job satisfaction: A study of the banking sector in Punjab. *International Journal of Innovative Technology and Exploring Engineering*, 9(1), 479-482.
- Holland, P., & Tham, J. (2020). Workplace surveillance: An overview. In P. Holland & J. Tham (Eds.), *Routledge Handbook of Surveillance Studies* (pp. 283-292). Routledge.
- Kaur, A., & Arora, N. (2021). Digital surveillance and job satisfaction in retail industry: A study of Punjab state. *International Journal of Advanced Science and Technology*, 30(4), 7412-7418.
- Kaur, M., & Singh, S. (2019). Impact of digital surveillance on job satisfaction in manufacturing industry: A study of Punjab state. *International Journal of Innovative Technology and Exploring Engineering*, 9(353), 270-273.
- Kaur, M., & Singh, S. (2020). Impact of digital surveillance on job satisfaction: A study of the transport industry in Punjab state. *International Journal of Emerging Technologies and Innovative Research*, 7(2), 25-30.
- Oz, E., Glass, R., & Behling, R. (1999). Electronic workplace monitoring: What employees think? *The International Journal of Management science*, 167-177.
- Patten, E. V., & White, M. L. (2018). Examining the effectiveness of traditional and electronic workplace monitoring. *Criminal Justice Policy Review*, 29(4), 372-390.
- Payne, J. (2018). Manufacturing masculinity: Exploring gender and workplace surveillance. *Work and Occupations*, 45(3), 346–383. doi:10.1177/0730888418780969.

- Singh, D., & Kaur, M. (2017). Impact of digital surveillance on job satisfaction in telecommunication sector: A study of Punjab state. *International Journal of Management, Technology, and Social Sciences*, 2(2), 51-62.
- Singh, D., & Kaur, M. (2018). Impact of digital surveillance on job satisfaction in IT industry: A study of Punjab state. *Journal of Advanced Research in Dynamical and Control Systems*, 10(2), 41-49.
- Singh, D., & Kaur, M. (2019). Impact of digital surveillance on job satisfaction in insurance sector: A study of Punjab state. *International Journal of Emerging Technologies and Innovative Research*, 6(10), 329-334.
- Singh, D., & Kaur, M. (2020). Impact of digital surveillance on job satisfaction in healthcare industry: A study of Punjab state. *International Journal of Management, Technology, and Social Sciences*, 5(1), 26-36.
- Singh, D., & Kaur, M. (2021). Impact of digital surveillance on job satisfaction in education industry: A study of Punjab state. *International Journal of Research in Economics and Social Sciences*, 11(3), 219-230.
- United Nations, Office of The High Commissioner for Human Rights. (2022). Report of the Special Rapporteur on the Right to Privacy. Retrieved from <https://www.ohchr.org/EN/Issues/Privacy/SR/Pages/AnnualReport.aspx>