

IMPACT OF MOBILE PHONE USAGE AT THE WORKPLACE ON EMPLOYEE PRODUCTIVITY

Mrs. S. Muthulakshmi Assistant Professor Department of Bank Management Agurchand Manmull Jain College Muthulakshmi.s@amjaincollege.edu.in

Dr. T. K. Avvai Kothai Associate Professor and Head PG and Research Department of Commerce Guru Nanak College Avvai.kothai@gurunanakcollege.edu.in

ABSTRACT

Mobile devices are becoming increasingly common in the workplace, but there is still debate over whether the use of these devices could be impacting employee productivity. This research aims to address the gap in the literature by investigating the influence of mobile phone usage at the workplace on employee productivity. To do so, a quantitative research approach was used to explore the ways in which employees use their mobile phones in the workplace, investigate the impact of such usage on employee productivity, and assess the strategies employers use to regulate mobile phone use in the workplace. This research will provide a better understanding of the relationship between mobile phone use in the workplace. The findings of this research paper will be beneficial for employers who are looking for ways to improve their employees' productivity, as well as for employees who want to be able to use their mobile phones in the workplace without being distracted. **Keywords:** Impact, Employee Productivity, Usage of Mobile Phones, Strategies

Introduction

Smartphones have impacted the daily lives of people in many ways. Some positive impacts are that smartphones have made communication and connection easier, helped people stay organized, and helped people stay in touch with their loved ones. Additionally, smartphones have also had a negative impact on people's mental health.

Nowadays, it is common for employees to carry out their tasks from home or even on holidays. The boundary between one's personal life and professional life simply evaporated. Employee distraction at the workplace can negatively impact an organization's productivity, efficiency, and morale. It can also lead to increased levels of stress and burnout, which can have long-term consequences on employee engagement and job satisfaction. For this reason, it's important for organisations to focus on reducing the amount of distraction present in the workplace. From providing employees with the necessary tools and resources to help them stay focused, to implementing policies that discourage non-work related activities, organizations can take steps to reduce the amount of distraction present in the workplace and create a more productive and efficient environment.

Employee productivity is vital to the sustainability of any business. When employees are productive, they are able to complete tasks more quickly and efficiently, freeing up time for other business tasks. This can lead to cost savings, as well as improved customer satisfaction due to better service. Increased productivity also leads to higher morale among employees. When employees are more motivated and engaged, they are more likely to stay with the company for the long term, reducing turnover costs. Additionally, improved employee productivity can lead to better quality products, improved customer service, and improved customer loyalty. All of these factors can help a business remain sustainable in the long run.

Review of Literature

The impact of mobile phone usage at the workplace on employee productivity has been studied by researchers from a number of different backgrounds. Some of the findings of this research include the following:

1. There is evidence to suggest that mobile phone usage at the workplace can have an impact on employee productivity.

2. The impact of mobile phone usage on employee productivity is likely to be influenced by a number of factors, including the type of mobile phone usage, the type of work being done, and the level of distraction involved.

3. There is no one-size-fits-all approach to managing the impact of mobile phone usage on employee productivity, as the best approach will vary depending on the specific situation.



Pitichat (2013), mobile phones can strengthen a workplace by encouraging autonomy, fostering solid relationships between employees and the business from the ground up, and facilitating information exchange.

Carayannis (2011), indicates that employees are feeling comfortable and relaxed while using their own smartphones at the workplace and that this stress-free component leads to increased productivity levels.

Kakihara (2002), the increasing popularity of smartphone's popularity can be converted as a tool for business networking to enhance its ability to help employees manage their workloads and to enable them to work remotely.

Bozeman (2011), using a smartphone excessively at work might cause addiction and preoccupation, which can reduce productivity.

Employees that use smartphones are also taken away from the meeting's information and other attendees (Ebelhar, 2009).

Cavazotti (2014) study described their usage of smartphones as insane, compulsive, and unhealthy. The usage of cellphones has raised workloads, blurred the lines between work and personal life, interfered with free time, and caused family and spousal problems. Employees feel obligated to respond directly to superiors even while they are on vacation due to the rising expectations for availability and prompt responses.

In a recent study by Screen Education, it was discovered that workers waste, on average, more than two hours every day using their phones. What employees were actually doing on their phones in place of their work-related obligations was revealed by a 2017 survey conducted by Office Team and Robert Half Talent Solutions.

Ahmed used a Technological Acceptance Model (TAM) to evaluate the use of smartphones at work.

The author employs this model to explain how people's perceptions of new technologies influence their intentions to utilise social networking sites as a tool for knowledge exchange by emphasising its usability and ease of use.

The TAM model has been widely used in research on rising Information Technology (IT) and to examine the usage of social sites for knowledge sharing.

Research Gap

The use of smartphones at the workplace is becoming increasingly prevalent in today's society. While it has become an accepted part of many work environments, there is still a lack of research on the impact of mobile phone use at the workplace on employee productivity. This research gap could be addressed through a study that examines how different types of mobile phone use (e.g., voice calls, text messages, social media, etc.) affect employee productivity. Such a study could also explore potential moderating variables, such as age, gender, and job role, and could also be conducted across different types of organizations. This type of research could provide valuable insights into how mobile phone use at the workplace is impacting employee productivity and could inform employers on how to maximize employee productivity while still allowing for the use of mobile phones.

Conceptual framework

Conceptual frameworks for mobile phone usage and employee productivity have been proposed by researchers.



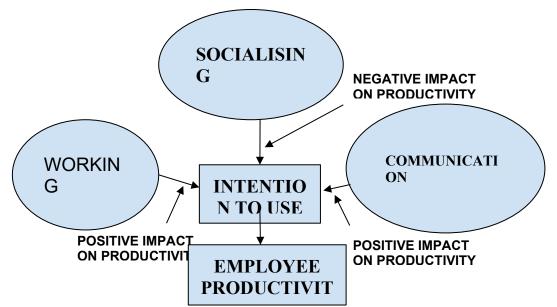


Figure 1: Determinants of Intention to Use

The framework will help managers understand how different types of mobile phone usage impact employee productivity, as well as identify interventions that could improve employee productivity.

Description: The following sections provide a description of the different types of mobile phone usage and how they can impact employee productivity.

Types of mobile phone usage

There are three main types of mobile phone usage: Working, Socializing, and Communication.

Types of Usage	Definition	Variables Extracted
		DEVELOP LEARNING
		BETTER PERFORMANCE
WORKING	Using a mobile phone to conduct work-related activities.	EMPLOYEE MORALE
		DISTRACTION
	Using mobile phone to adjust group behaviour	TIME WASTING
SOCIALISING	and to behave in a manner approved by the society	SLOWS PACE OF WORK
		MANAGE STRESS
		WORK AND LIFE BALANCE
COMMUNICATING	Using mobile phones to communicate with peers, friends and family.	BONDING

Table 1 Employee Morale is that the satisfaction of an employee about the work environment

Methodology

Research Methodology: Methodology for the current research consist the followings

Research Design: Descriptive research design adopted for the study is mainly. The study was carried out in the Chennai region.

Sample Size & Sampling Techniques: Due to time and budget constraints, the sample size was specifically kept minimal. Non-random sampling, often known as convenience sampling, was employed for this research. A total of 51 respondents were chosen based on the researcher's convenience. The survey was conducted among Five major industries namely Education, Finance, Information Technology, Health Care, Food Service in



Chennai Region. Data was collected over a period of 10 days and analysis of the data generated to validate the hypothesized model. At this stage, statistical tools and techniques were used to arrive at the results.

Data Collection The primary data for this study was collected using a multiple-choice, likert scale structured questionnaire. The questionnaire consists of 3 sections namely, Demographic profile and Mobile phone usage at work, Productivity, Security policy. The prepared questionnaire was sent as Google form to 87 respondents out of which 51 responses were complete in all aspects and considered for the study.

Research Question

- 1. What are the impacts of using mobile phones at work?
- 2. What are the productivity benefits of using mobile phones at work?
- 3. What are the impacts of using mobile phones at work on employee morale?

Objectives of the Study

- 1. To study the mobile phones usage at workplace and its impact on employee morale
- 2. To study mobile phone usage at work between genders.
- 3. To assess the effect of using smartphones on employee productivity.

Hypotheses

Three hypotheses were developed based on the study objectives. These hypotheses were tested with SPSS and will be published in the paper as follows.

- To test Objective 1 (SPSS tool: Pearson Correlation Coefficient)
 [H0]: There exist no significant correlations between smartphone usage and employee morale
 [H1]: There exist significant correlations between smartphone usage and employee morale
- 2. To test Objective 2 (SPSS tool: One way ANOVA)
 [H0]: There is NO statistically significant difference in smartphone usage at work between genders.
 [H1]: There is a statistically significant difference in smartphone usage at work between genders.
- To test Objective 3 (SPSS tool: Regression)
 [H0]: There is no significant effect of using smartphones on employee productivity
 [H1]: There is a significant effect of using smartphones on employee productivity.

Limitations of Study

1. Time, Place and Industry: Data collection time and Place were limited hence the result may vary if the study was taken in a different time frame.

2. Sample size is small, increase in sample may give different results

3. The study did not attempt to reveal the impact of Mobile Usage on the Specific Industries like manufacturing, consulting firms.

Analysis and Discussion

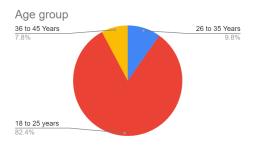


Figure 2: Age of the Respondents

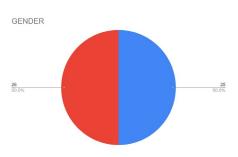




Figure 3: Gender of the Respondents

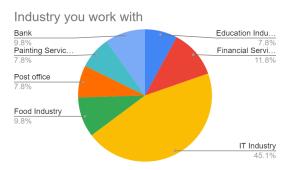


Figure 4: Industry of the Respondents

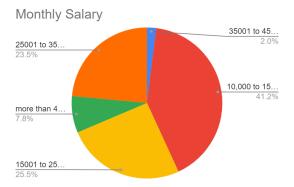


Figure 5: Monthly Income of the respondents

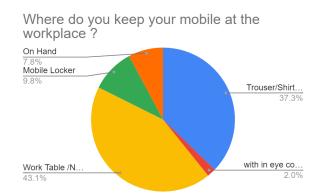


Figure 6: Mobile Usage at Workplace among Respondents

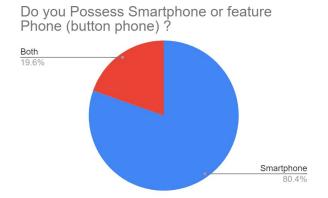


Figure 7: Possession of Smartphone among Respondents



Figure 2

Test Results of Hypothesis 1

[H0]: There exist no significant correlations between smartphone usage and employee morale

[H1]: There exist significant correlations between smartphone usage and employee morale

		EMPLOYEEM ORALE	WORKBALAN CE	STRESSMAN AGEMENT	DISTRACTIO N
EMPLOYEEMORALE	Pearson Correlation	1	.210	095	.003
	Sig. (2-tailed)		.140	.505	.981
	Ν	51	51	51	51
WORKBALANCE	Pearson Correlation	.210	1	.108	.077
	Sig. (2-tailed)	.140		.450	.592
	Ν	51	51	51	51
STRESSMANAGEMENT	Pearson Correlation	095	.108	1	193
	Sig. (2-tailed)	.505	.450		.174
	Ν	51	51	51	51
DISTRACTION	Pearson Correlation	.003	.077	193	1
	Sig. (2-tailed)	.981	.592	.174	
	N	51	51	51	51

Correlations

Table 2: Correlation between Employee Morale, Work Balance, Stress Management, Distraction factors

The null hypothesis to be tested in this study depicts that there is no significant positive impact of smartphone usage on employee morale. The alternative hypothesis is that there exists a significant positive impact between smartphone usage and employee morale. The Pearson correlation coefficient was used to measure the stability of the relationship between smartphone usage and employee morale. A correlation of (r= .210, r= -.095, r = .003: p>.001) indicates a very low positive linear relationship between Smartphone usage (workplace distraction) and employee morale. This means that there is no significant positive impact between smartphone usage and employee morale in the study population. The P-value is greater than the significance level ($\alpha = 0.05$), so **we fail to reject the null hypothesis.** We conclude that the correlation is not statically significant. Hence, H1 was not supported. This means the smartphone usage at the workplace has no impact on employee morale.

Test results of Hypothesis 2

[H0]: There is NO statistically significant difference in smartphone usage at work between genders.

[H1]: There is a statistically significant difference in smartphone usage at work between genders.

MOBILEPH	HONEUSAGE	E						
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
MALE	25	3.222	1.3961	.2327	2.750	3.695	1.0	5.0
FEMALE	26	2.933	1.7099	.4415	1.986	3.880	1.0	5.0
Total	51	3.137	1.4835	.2077	2.720	3.554	1.0	5.0

Descriptives

Table 3: Results of the Descriptive Statistics of Gender of the Respondents



ANOVA

MOBILEUSAGE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.722	1	4.722	10.645	.002
Within Groups	21.735	49	.444		
Total	26.456	50			

Table 4: Significance of Difference in Gender on Mobile Usage

Test Statistic: One way ANOVA Significance Level: 0.05 Data: Quantitative data on mobile phone usage at work by gender

The test posit that the mean score for male employees (M=3.22, SD=1.39) was significantly different from female employees. The mean difference is significant at 0.05 levels. Hence, **H1 was supported.** Conclusion: The calculated p-value is less than the significance level of 0.05, and then we reject the null hypothesis and accept the alternative hypothesis that there is a statistically significant difference in mobile phone usage at work between genders.

Test Result for Hypothesis 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.844 ^a	.713	.707	.2180

a. Predictors: (Constant), MOBILEUSAGE

Table 5: Model Summary of Regression Results.

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.785	1	5.785	121.732	<.001 ^b
	Residual	2.329	49	.048		
	Total	8.114	50			

a. Dependent Variable: EMPLOYEEPRODUCTIVITY

b. Predictors: (Constant), MOBILEUSAGE

 Table 6: ANOVA Table of significant Predictors.

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.137	.100		11.424	<.001
	MOBILEUSAGE	.468	.042	.844	11.033	<.001

a. Dependent Variable: EMPLOYEEPRODUCTIVITY

 Table 7: Significant Predictors of Mobile Usage

Regression Summary Table

Hypothesis Regree Weigh		R^2	F	P-Value	Hypothesis supported
----------------------------	--	-----	---	---------	-------------------------



H1 MU	J~EPRO .844	.713	121.732	.000	YES
-------	-------------	------	---------	------	-----

Table 8: Hypothesis Results

**MU- Mobile phone Usage; EPRO - Employee Productivity

The hypothesis tests if smartphone usage carries a significant impact on employee productivity. To test hypothesis H1, the dependent variable productivity was regressed on the predictive variable mobile usage. Smartphone usage significantly predicted productivity (F=121.732,P<0.001), which indicates that using mobile phones at the workplace can significantly affect employee productivity (B=.844, P<0.001). Moreover, R square = .713 depicts that the model explains 71% of the variance in employee productivity. Hence, **H1 was supported**. This is likely due to the fact that smartphones are not essential for most tasks, and can actually be distracting when used excessively.

Findings of the study

The findings and implications of the research are as follows:

- Study consists of an **equal** number of male and female respondents.
- Majority of the sample population are in the age group of **18 25 years**, 82.4%.
- 45.1% of respondents work in the **IT sector**, which accounts for the majority of responses.
- Most of the respondents earn between **Rs.10**, **000 to Rs.15**, **000** per month in terms of salary.
- 43% of respondents stated they keep their phones in their pockets or on the work table.

• 25% of respondents stated that they use their mobile phones at work exclusively for personal purposes, while 23% said they use them 60% for personal use and 40% for business.

• Among all other uses, using a mobile phone for **messaging applications (such as Whatsapp, Social Media, Emails, etc.) ranks first** with 33% of the responses. Searching for valuable information, listening to music, and using OTT applications—such as Doom Scrolling—take second and third places, respectively.

• Working intention of mobile phone usage can have a positive impact on employee productivity, but it can easily distract employees from their work and absorb productive work time.

• **Socializing** intention of mobile phone usage can have potential negative effects of smartphone use since frequent notifications from social media applications can easily distract them; they started to give least importance to face-to-face interaction.

• **Communicating** intention of mobile phone usage has a positive impact on employee productivity, because it can reduce stress and anxiety levels, improve communication and relationships, improve productivity, allow employees to work from anywhere, and improve work-life balance.

• According to the study, using a mobile phone in the workplace with the intention to communicate and to learn new things may increase employee productivity, but it has to be cautiously monitored as people are more likely to be distracted while using a mobile phone. Additionally, the study could suggest that companies should consider implementing policies that limit the dependency of smartphones at the workplace or promote the use of it for exclusive learning purposes. Another implication is that mobile phone use can lead to a decrease in communication

between employees.

Suggestions Of The Study

The research suggests that the following factors should be considered when designing a mobile phone policy:

- The mobile phone should be used for work-related purposes only.
- The mobile phone should be used in a safe and healthy environment.
- The mobile phone should be used to increase the learning ability.

• The mobile phone should be used in a manner that is compatible with the organization's culture, values and Industrial requirements.

• The mobile phone should be used in a manner that is consistent with company policy.

Strategies

The following strategies will help to ensure that the employees are able to focus on their work and are not distracted.

• Companies can educate employees about the negative effects of mobile phone use in the workplace, and provide resources on how to reduce distractions.

• To limit the amount of time spent on mobile phones, companies might encourage employees to use phone calls instead of texts and emails wherever possible.

• Companies may encourage employees to use mobile phones for professional purposes only.

• Companies can install phone-based productivity tools that allow employees to stay productive while on their mobile phones.



- Companies can restrict access to the internet and other distracting content on mobile phones in the workplace.
- Companies can set clear and unambiguous standards for the usage of smartphones in the workplace.

Conclusion

According to the findings of this study, there is a positive relationship between mobile usage and employee productivity. This study has implications for organizations who want to increase employee productivity and satisfaction in order to attain sustainability. Employees who use mobile devices to access work information and communicate with co-workers are more productive than their counterparts who do not use mobile devices. This is likely because mobile devices allow employees to stay on top of their work and communicate with co-workers easily and efficiently. The study also found that mobile devices have no role in improving employee morale. This theory states that the acceptance of communication technologies in organizations, such as mobile phones, is determined by individual characteristics, environmental factors and technology-related factors. Individual Factors: This includes the individual's attitude towards the usage of smartphones at the workplace, their knowledge and skills in using mobile phones, and their motivation to use them. Environmental Factors: This includes the organizational culture, policies and regulations, and the availability of resources to support the use of mobile phones. Technology-related Factors: This includes the features and usability of the mobile phones, the speed and reliability of the network, and the availability of applications.

References

- Abeele, M.V.; Beullens, K.; Roe, K. Measuring mobile phone use: Gender, age and real usage level in relation to the accuracy and validity of self-reported mobile phone use. Mob. Media Commun. 2013, 1, 213–236. [CrossRef]
- Belhar, J. (2009). Mind your BlackBerry or mind your manners. The NewYork Times, Jun 21 Bozeman, M. (2011). Smartphone obsession is the latest addiction. BozemanDaily Chronicle, July 27
- Carayannis, Elias & Clark, Stephen. (2011). Do Smartphones Make for Smarter Business? The Smartphone CEO Study. Journal of the Knowledge Economy. 2. 201-233. 10.1007/s13132-011-0044-9.
- Cavazotte, F., Heloisa Lemos, A. and Villadsen, K. (2014), Corporatesmartphones: professionals' conscious engagement in escalating work connectivity. New Technology, Work and Employment, 29: 72–87. doi:10.1111/ntwe.12022
- Cugueró-Escofet, N.; Ficapal-Cusí, P.; Torrent-Sellens, J. Sustainable human resource management: How to create a knowledge sharing behavior through organizational justice, organizational support, satisfaction and commitment. Sustainability 2019, 11, 5419
- Gagne,M.&Deci,E.L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior. 26, 331-362.
- Kakihara, M. & Sørensen, C. (2002). Post-modern professionals' work andmobile technology 25th Information Systems Research Seminar ,Bautahøj, Denmark
- Lepp, A.; Barkley, J.E.; Karpinski, A.C. The relationship between cell phone use, academic performance anxiety, and satisfaction with life in college students. Comput. Hum. Behav. 2014, 31, 343–350. [CrossRef]
- Pitichat, T. (2013) "Smartphones in the workplace: Changing organizationa lbehavior, transforming the future," LUX: A Journal of Trans disciplinaryWriting and Research from Claremont Graduate University: Vol. 3: Iss.1, Article 13
- Salloum, Said & Alhamad, Ahmad Qasim & Al-Emran, Mostafa & Monem, Azza & Shaalan, Khaled. (2019). Exploring Students' Acceptance of E-Learning Through the Development of a Comprehensive Technology Acceptance Model. IEEE Access. PP. 1-1. 10.1109/ACCESS.2019.2939467.
- Shrivastava, A.; Sharma, M.; Marimuthu, P. Internet use at workplaces and its effects on working style in indian context: An exploration. Indian J. Occup. Env. Med. 2016, 20, 88–94
- Wahla, R.S.; Awan, A.G. Mobile phones usage and employees' performance: A perspective from Pakistan. Int. J. Acad. Res. Account. Financ. Manag. Sci. 2014, 4, 153–165.