# **Email Interruptions**

Impact of Incoming Email on Productivity

In recent years, researchers have paid close attention to the effects email has on employee productivity and stress. Read the following articles that discuss some of the implications.

## Article #1

Effects of Email Addiction and Interruptions on Employees
Laura Marulanda-Carter and Thomas W. Jackson

## Full Text

The purpose of this research paper is to a) explore the effect of e-mail interruptions on tasks and b) explore the concept of e-mail addiction within the workplace. Data were collected from a large car rental company in the UK. The first collection method involved observing the effects of simulated e-mail interruptions on seven employees by measuring the interrupt handling time, the interrupt recovery time, and the additional time required to complete the task given the number of interruptions. The second part of the study involved a questionnaire sent to 100 employees to capture addictive characteristics in employees' e-mail communication behaviour.

# **Research Conclusion**

The results from this study highlight the many problems that are often associated with email use within organisations. In particular, this study explored email interruptions and email addiction in the workplace. The effect of an email interrupt becomes greater the more email is received and in this study five minute email interruptions caused an average handling time of 116.5 seconds, and recovery time of 68 seconds. Receiving email on an exponential rate becomes harder to manage and prioritise, so the interruptions lead to negative effects on employees. This was shown in the study findings where email interruptions caused a task to take a third longer, because it disturbed the employee's concentration and employees were generally seen to be less effective. Additionally, this study showed that the concept of email addiction exists in the workplace, where clinical characteristics classified at 12 per cent and behavioural characteristics classified at 15

per cent of email addicts. This research has shown the value in quantifying email addiction characteristics and measuring the level of addiction within an organisation.

	Clinical characteristics	Behavioral characteristics	
Table I. Characterist of an email	out ing our four circuit account longer unan		

The correlation analysis has shown that there is no statistically significant relationship between clinical and behavioural characteristics. This has led to the need for both characteristics to be used in classifying email addiction.

Whilst a single study cannot provide a sound basis for the practice of email management, similar studies have suggested recommendations for employees and employers in the workplace to manage email interruptions and minimise email addiction. Burgess, Jackson and Edwards found evidence that educating employees through email training significantly reduced email interruptions and improved the way people write emails. It is recommended that employees "think before they write" and ask themselves:

Is this email necessary? If so, is the email easy to read and straight to the point? Does it tell what is expected of the recipient? Does it state what and when action is required? (Burgess et al., 2005).

It is vital for employers to convey this and could setup email training as part of their initial introduction or on-going personal development for all employees.

An understanding of addictive disorders has important connotations for treatment, in that optimal treatment would require that both positive and negative reinforcement processes be addressed (Goodman, 1990). An employee with addictive tendencies towards email could show a remarkable improvement by simply being aware of their problem behaviour or habitual inclination. For example, if an employee is consistently checking email on an hourly basis (or less) or leaves email open between sessions then they may find an email schedule useful to

control their behaviour and manage their time more efficiently (McCorry, 2005). The steps to create an email schedule are shown in Table II. It is important to note these are suggested in light of the characteristics of email addiction as part of this study, further research is required to test these techniques and its application.

Schedule steps	Example
Choose a realistic number of times to check email per day	Three times per day
Set specific times throughout the day to manage email Set duration of time to deal with email during sessions	First thing in the morning (9 am), after lunch (1 pm), and end of day (4.30 pm)  Maximum 30 minutes per session
Specify email tasks to be complete during sessions	1st session – Read 2nd session – Read and Reply 3rd session – Send and File
Tips and advice	
Follow a regular and consistent schedule Spend time to get used to the schedule to ensure it	
is realistic and email is manageable During unscheduled time, turn off new email	
alerts, or close inbox entirely to focus attention	
If email correspondents are accustomed to	
immediate responses then ensure they are aware of the new schedule, i.e. send automated reply	
explaining expected response time and alternative contact details if message is urgent	

Although this research has shown both that email interruptions and addiction exists, it is acknowledged that there are limitations with the research. The study was constrained by the timeframes and availability of the participating organisation when administering the experiments. Ideally measuring an employee receiving email interruptions over a greater time period would achieve a more comprehensive understanding of how the initial impact of the interrupt is sustained, therefore the interrupt recovery time might be longer or shorter in a one-hour experiment. The most important limitation lies with the questionnaire. Although it was designed to capture email addiction characteristics within an organisational workplace, the evaluation criteria have not been used before. The scale used does provide a workable measure of email addiction, but further research is required to determine its construct validity and clinical utility. However, this research has shown that email interruptions do cause a negative impact on employees' time, and email can cause addictive behaviour in the workplace. <sup>1</sup>

<u>https://pdfs.semanticscholar.org/2ce8/7502de6fd1869308d1a30042663d07668eb4.pdf</u>. Accessed 21 Dec. 2017.

<sup>&</sup>lt;sup>1</sup> "Effects of e-mail addiction and interruptions on employees."

Article #2

Email Duration, Batching and Self-Interruption:
Patterns of Email Use on Productivity and Stress
Gloria Mark, Shamsi T. Iqbal, Mary Czerwinski, Paul Johns, Akane Sano

## Full Text

While email provides numerous benefits in the workplace, it is unclear how patterns of email use might affect key workplace indicators of productivity and stress. We investigate how three email use patterns: duration, interruption habit, and batching, relate to perceived workplace productivity and stress. We tracked email usage with computer logging, biosensors and daily surveys for 40 information workers in their *in situ* workplace environments for 12 workdays. We found that the longer daily time spent on email, the lower was perceived productivity and the higher the measured stress. People who primarily check email through self-interruptions report higher productivity with longer email duration compared to those who rely on notifications. Batching email is associated with higher rated productivity with longer email duration, but despite widespread claims, we found no evidence that batching email leads to lower stress. We discuss the implications of our results for improving organizational email practices.

# Research Conclusion

Our study is unique in that we found a relationship with increasing time that people spend on workday email and higher stress. Cutting off email in the workplace has been found to lower stress as was limiting the frequency of checking email. Neither of these conditions is realistic for the workplace given social norms. The study instead examined *in situ*, naturalistic workplace behavior. Until we invent a better replacement, email will not go away.

While email use certainly saves people time and effort in communicating, it also comes at a cost. The results suggest implications for organizations: spending longer time on email may have detrimental effects in the form of workplace stress. Any intervention that can decrease stress is

beneficial. Future research could examine more carefully exactly what types of workplace activities might be traded off with email use. Of course many factors of email can influence productivity and stress in the workplace. For example, receiving timely and relevant information, the job role of the sender, and the tone of the received email can all influence productivity and stress. Our study is a first step in providing evidence that suggests that reducing time on email could be beneficial.

Cutting down on email time (associated with higher assessed productivity and less stress) could improve the health and the wellbeing of employees. First, we suggest that organizations make a concerted effort to cut down on email traffic. Organizations could use a pull channel or wikis for much organizational information, reducing the volume of email. Second, while batching does not offer benefits for short durations on email, it may be a good strategy for those who expect to receive a large volume of email, as it will result in fewer interruptions (volume is shown to be correlated with duration). Third, while self-discipline can be a challenge, perhaps if employees are made aware that time on email can lead to stress, this could motivate them to restrict email time. Tools and user interface designs for protecting stressed users from the onslaught of email could contribute to improving workplace productivity and health. <sup>2</sup>

Knowing that there email can have such significant impacts on workplace productivity, it is that much more important to adopt effective strategies that will limit distraction and maximize our own potential.

To learn more about managing your email, proceed to the next section: "Email Management".

<sup>&</sup>lt;sup>2</sup> "Email Duration, Batching and Self-interruption: Patterns of Email Use ...." <a href="https://www.ics.uci.edu/~gmark/Home\_page/Research\_files/CHI%2016%20Email%20Duration.pdf">https://www.ics.uci.edu/~gmark/Home\_page/Research\_files/CHI%2016%20Email%20Duration.pdf</a>. Accessed 21 Dec. 2017.