

# You've got mail!

Research report 2015



## About the Future Work Centre

The Future Work Centre conducts innovative, high quality psychological research about people's experience of work.

By openly sharing the results and actionable insights, we hope to improve the quality and experience of work, both now and in the future.

We know that high quality research is already being carried out in academic environments, however, often the data remains within this domain.

This means organisations and the wider public fail to benefit from these powerful insights.

The Future Work Centre aims to bridge this gap.

# Our research agenda: 'Technology at work'

## During 2015/16, we will be focusing our research on the role and impact of technology at work.

Technology plays an increasingly significant role in our experience of work. The proliferation of mobile communication, never-ending email and the reliance on technology to connect virtual teams, is in one form or another impacting our experience of work as never before.

The boundaries between work and home life are becoming less clear. Advances in technology mean that more of us are bringing personal devices into work, accessing social media and living an online experience that crosses the work/home divide. The collision of these two domains brings both advantages and challenges.

Our aim is to quantify the impact technology is having on work, from a psychological perspective. We will explore how people manage the impact of technology differently, and identify practical actions that can be taken on the back of our research – whether that be for the individual employee, the manager of a team or the leader of an organisation.

## During this series, we will look at the following six areas:

- › Email communication at work
- › Flexible working, virtual collaboration and work-life integration
- › Learning, development and training
- › Wearable technology
- › Social networking in the workplace
- › Cyber-bullying

technology

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## Research team:

We'd like to acknowledge the contribution of the following people in conducting this research study and providing their valuable insight and expertise in compiling this report:

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# Executive summary

## Email is part of most people's lives.

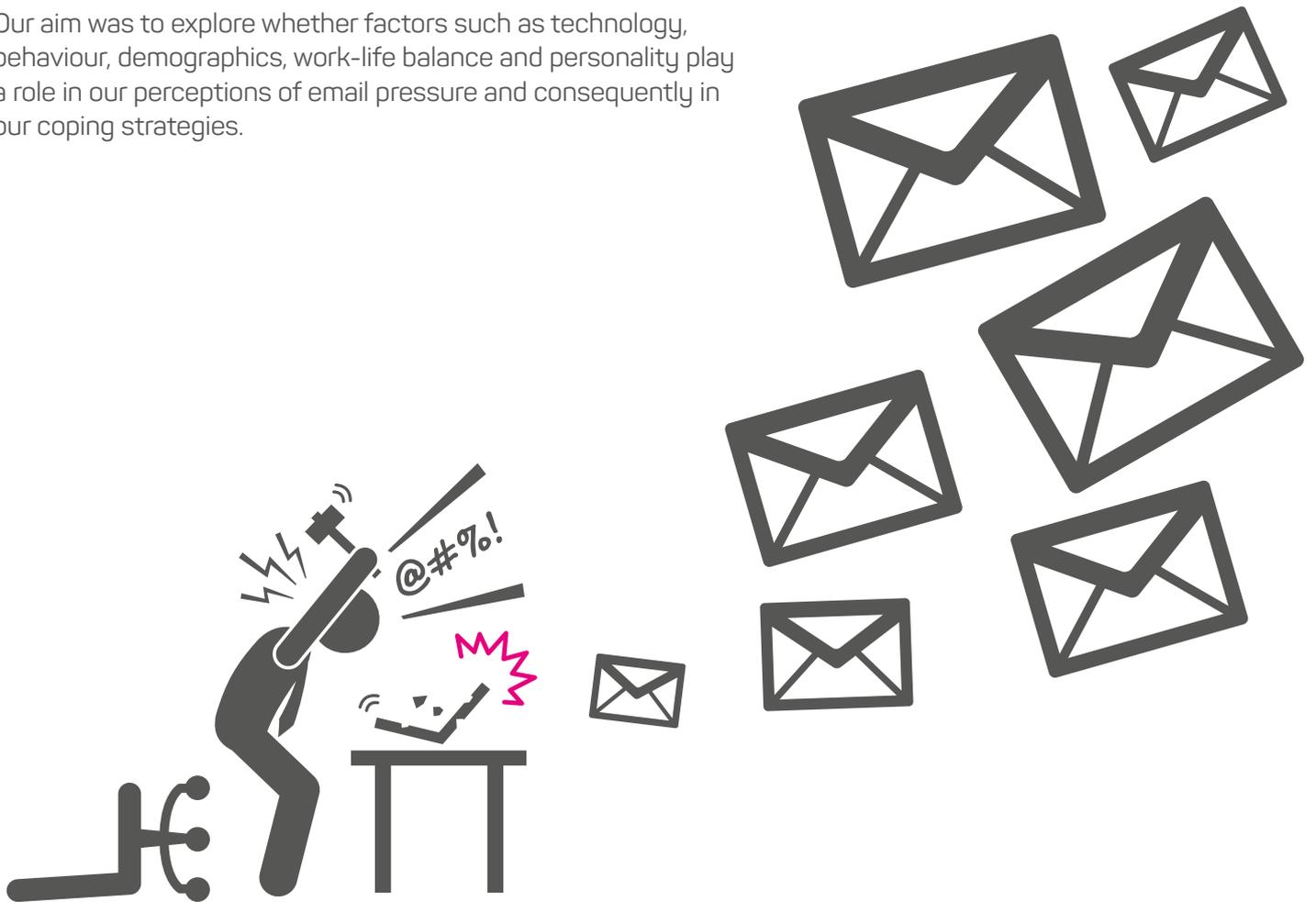
Since its creation in the 1970s, its growth has been unprecedented, facilitating quick and easy communication between individuals across borders and time zones, for both business and personal use.

But despite its widespread usage and popularity as a communication tool, for some individuals and employers, it can be a source of major frustration, anxiety and lost productivity.

As the volume of email continues to rise, many of us are feeling the impact – struggling to prioritise work effectively and constantly being interrupted by the flow of messages and demands, resulting in decreased productivity and stress.

In order to understand more about how email both facilitates and negatively impacts the employee experience, we conducted a survey of just under 2,000 people across a variety of industries, sectors and job roles in the UK.

Our aim was to explore whether factors such as technology, behaviour, demographics, work-life balance and personality play a role in our perceptions of email pressure and consequently in our coping strategies.



## What did we find?

- We found a **strong relationship between using 'push' email and perceived email pressure**. This means that people who automatically receive email on their devices were more likely to report higher perceived email pressure.
- People who leave their **email on all day were much more likely to report perceived email pressure**.
- Checking email **earlier in the morning or later at night** is associated with higher levels of perceived email pressure.
- **Managers experience significantly higher levels of perceived email pressure** when compared to non-managers.

Our research also highlighted some interesting group differences in the role personality plays in our experience of email and how email has the potential to both positively and negatively impact our work-life balance:

- **Higher email pressure** was associated with more examples of **work negatively impacting home life and home life negatively impacting performance at work**.
- We found that **personality appears to moderate the relationship between perceived email pressure and work-life balance**. People who rate their own ability and sense of control over their environment lower find that work interferes more with their home life, and vice versa.



## So, what should we do?

We know that everybody is different and therefore, there are no one-size-fits-all solutions for email. But what we are able to do is put forward a selection of practical actions that individuals and organisations can adopt, based on what works best for them given their individual circumstances.

We have divided our recommendations and suggestions for individual employees into two areas - behaviour changes (i.e. what you can do differently) and mindset changes (i.e. how you think about email). Research has indicated the role of email behaviours in our experience of pressure and stress, but we also know how important the role of our expectations and mental 'rules of thumb' are in how we respond to the outside world.

Our recommendations to organisations focus particularly on what the people who set email policies and those in a position to role model positive email behaviour can do to help their employees.



### What's next?

These research results represent just a snapshot of the email experience of a large, UK-wide population. We want to continue to examine these themes in more detail, to build the evidence-base for advice regarding email and better understand how it can be used to best effect. We're particularly interested in learning which approaches to email management are most effective for different kinds of email users.

We'd also like to understand more about how users derive meaning from emails and how this contributes to their sense of email-related pressure. When it comes to email behaviour, we'd like to understand how much of this is because of explicit rules in organisations (e.g. 'employees must respond to customer queries within four hours') and how much is due to implied ways of working (e.g. 'I've noticed people don't tend to email at weekends here').

If you'd like to find out more about our research, or get involved yourself, please contact us at [info@futureworkcentre.com](mailto:info@futureworkcentre.com)



**You've got mail!:**  
**our study**



**Email is an important tool in many people's working lives. It has the potential to add value, but also to contribute to employee dissatisfaction and to even be detrimental to our well-being.**

Over the years, much has been written on the use of email and its effect on our lives.

But when we reviewed the relevant scientific and popular literature, we felt one area in particular needed further exploration – the relationship between personality and individuals' experiences of email.





2.5 billion email  
users worldwide

(Radicati, 2014)



On average,  
adults spend  
over one hour  
of each day  
on email

(Ofcom, 2014)

## **Psychological research from the previous three decades has demonstrated how people differ in terms of what motivates them, what leads to stress and what they want from work. So why would one-size-fits-all advice about email work for everyone?**

There are many examples of how organisations (and governments) have attempted to tame the email beast by applying generic rules over usage, such as when employees can check and send emails.

But these haven't worked for everyone, as such rigid rules don't account for the needs of those with flexible working arrangements, who may want to use their email in the evenings.

We know that individual differences – in what employees think, feel and do – help us understand their experience of work and the success of teams and organisations. However, email is an area that has received less research attention from a psychological perspective. We want to reverse that trend by taking an evidence-based approach to the study of email usage and its impact on people's lives, and share our findings in a way everyone can understand and, more importantly, use to improve their own experience of email.

### **About the study**

We surveyed just under 2,000 people across a variety of industries, sectors and job roles in the UK.

Our survey tapped into attitudes towards email, daily use of email, aspects of personality, experience of the interface between work and home (sometimes called 'work-life balance') and the technology people use to access their email.

Our results highlighted some interesting group differences in the role personality plays in our experience of email and how email has the potential to both positively and negatively impact our work-life balance.

It is important to recognise that this study is cross-sectional, as we have only looked at the experience of using email at a single point in time. This means we can't attribute causality (i.e. x leads to y) at this stage, but we can use this snapshot of data to highlight potential relationships, put forward initial recommendations and identify areas for further study. We will follow up this research with the analysis of various interventions (e.g. changes to email checking behaviour) to examine their impact and add to the evidence-base around email.

We also conducted a literature review, looking at existing pieces of research and commentary on email usage. We recognise that lots of good work has already been done in this area, and we felt it was important to review current theories in order to identify potential gaps that we can fill or areas we can expand on.

The purpose of our study is not to show that what has been done previously is wrong – instead we wanted to bring together new and existing research in order to confirm trends and put forward tangible actions that will help improve people's experience of email.

**So, let's take a look at what we've uncovered...**





**A double-edged  
sword: the pros  
and cons of email**



## One of the overriding themes emerging from our review of existing research is the unintended consequences of email.

The scientists who first developed 'electronic mail' could not have foreseen how email would become such a large part of so many people's working lives - or its potential for misuse.

Email was originally used to exchange useful information between professionals in different physical locations. Now we know that emails are often exchanged between people sitting in the same building – or even in the same room! And it's safe to say that not all emails contain useful information. So, how did we get to this position?

Research carried out over the last decade has clearly illustrated that email is a **'double-edged sword'** – in other words, it has definite advantages but also some obvious drawbacks.



196.3 billion emails  
sent in 2014 –  
108 billion were  
work-related

(Radicati, 2014)

In the UK, email is rated  
second only to telephone calls  
in terms of communications  
importance

(Ofcom, 2014)



## Some advantages of email as a communications tool include:

- As a written form of communication, email can be **accessed at the recipient's convenience**. Unlike speech, emails can be read and reread, printed for offline consumption, revisited and considered long after the initial message has been received. Practically speaking, this means colleagues in significantly different time zones can communicate easily, reading messages and responding at a time that suits them.
- Email makes it **easy to share information** with different people at the same time. This makes it potentially more efficient than face-to-face or telephone communication, especially when people are based in different locations, or when other reasons make it impractical to bring a group together for a meeting.
- Information contained in an email can be received almost **instantaneously**, underlining the speed with which important messages can be distributed.
- Email has a **built-in audit trail**, including when it was sent, by whom and to whom. This can make it easy to search for and revisit the information contained in emails. We know that human memory is fallible, making conversations difficult to recall with similar clarity and accuracy.





## However, there are also disadvantages of using email in our day-to-day communications:

- The **absence of clear email norms**. People approach email very differently in terms of the language they use, levels of familiarity expressed to the recipient, frequency of checking and speed of response. This lack of established norms can lead to misunderstanding between email users and perceived pressure to constantly check for new emails or respond more quickly than is convenient.
- Unlike face-to-face communication or contact via telephone, **email has no non-verbal cues**, such as body language or facial expression. It is therefore easy to misinterpret ambiguous emails or take away an unintended negative (or positive?) message.
- Some research participants have highlighted the view that **email is perhaps too spontaneous**, as it provides too easy a channel for communication and results in people sending messages they might not otherwise deliver to someone's face or over the telephone. This increases the volume of emails sent and received, which can make it harder to keep on top of incoming email and prioritise those that require action.
- **Email doesn't allow the user to self-correct** in the moment. Once an email has been sent (and received), any elaboration or correction to the message must take the form of an additional email or some other follow-up communication. Whereas, face-to-face communication and telephone calls allow participants to correct themselves and both seek and provide additional context, as the conversation requires.
- The feeling of **email overload** can lead to email users experiencing stress. Email overload occurs when the user's perception of email volume exceeds their perception of their ability to deal with it all. In some studies, this experience of email overload leads to unwelcome physical symptoms and even emotional exhaustion.
- Email can also act as **a distractor**, whereby it diverts your attention away from other things you should or want to be working on.

Existing research has also thrown up some conflicting results, indicating that email volume predicts stress (and doesn't), frequent checking of email can cause stress (and reduce it), and neatly filing email is associated with high productivity (and lower efficiency).

Clearly, we need to establish what works for different people, and this study serves as a launch pad for future research projects, where we will put some of these claims to the test and find out which approaches work, for who and in what work environments.

**Let's start by introducing the key concepts we're going to explore in this report.**



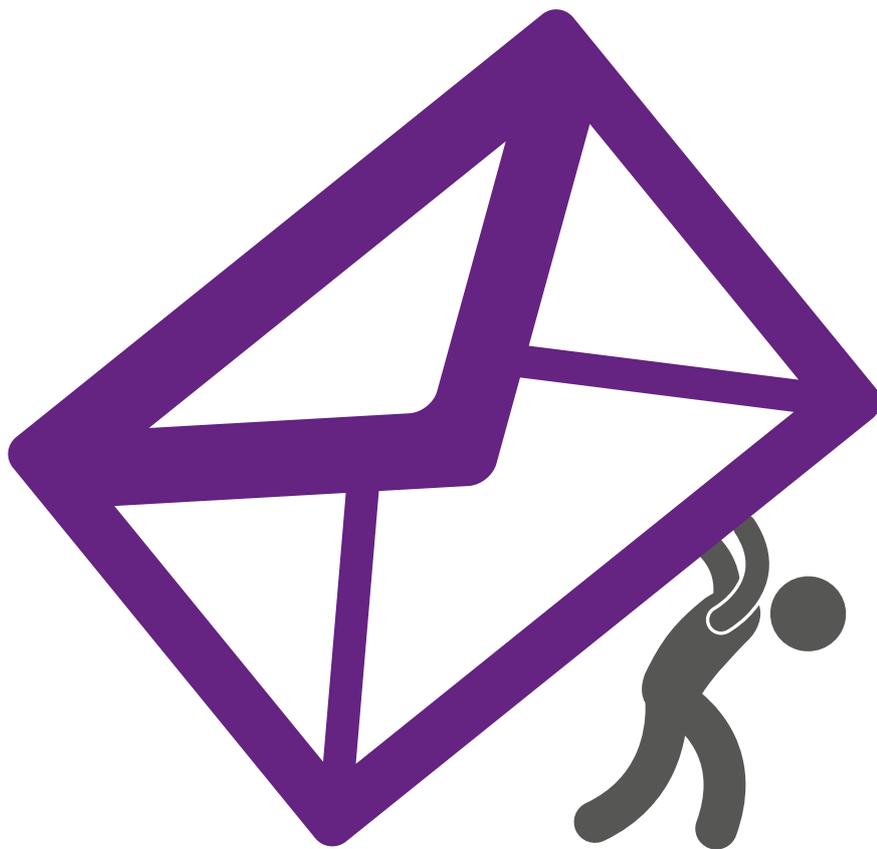


**One size  
*does not* fit all:  
our key concepts**

**We know that differences in what individuals think, feel and do affect their experience of work, so it makes sense that this would apply to email too.**

In the following sections, we'll look at the relationships between perceived email pressure and technology, work-life balance outcomes and personality, in order to demonstrate that one size does not fit all when it comes to managing our experience of email.

Before that, let's explain some of the key psychological concepts that we'll talk about in this report, as well as giving you more background on how we measured them.



## Perceived email pressure

Like all stressors, email pressure is subjective in nature, so it's important to examine it from the individual's perspective in order to develop effective recommendations and solutions that work for different people.

In our survey, we asked a series of questions relating to people's perception of their email experience, such as: whether they feel pressure from colleagues or clients to check email outside of working hours; if they feel pressure from family or friends to stop checking email when they're with them; whether work-related emails are the cause of arguments or friction in their personal life; and if email allows them to work more efficiently, productively and in a more flexible way.

We used the responses to these questions to create a **perceived email pressure** score. You will see us making reference to this throughout the report.

## Work-life balance outcomes

We also wanted to understand more about the behavioural and emotional outcomes of work-life balance, and to build on previous research that highlights home and work can impact each other, both positively and negatively.

We measured **work-life balance outcomes** with a questionnaire called the Survey of Work-Home Interference (SWING), from the University of Nijmegen in the Netherlands. This assesses how much work interferes with home (positively and/or negatively) and how much home interferes with work (positively and/or negatively). Using this questionnaire, we were able to produce four scores for each participant:

### ➤ Negative work-to-home interference:

The negative impact of work on your home life. This was measured by questions such as *'How often does it happen that you find it difficult to fulfil your domestic obligations because you are constantly thinking about work?'*

### ➤ Positive work-to-home interference:

The positive influence of work on your home life. This was measured by questions such as *'How often does it happen that after a pleasant working day/week, you feel more in the mood to engage in activities with your spouse/family/friends?'*

### ➤ Negative home-to-work interference:

The negative impact of your home life on your job performance. This was measured by questions such as *'How often does it happen that you have difficulty concentrating on your work because you are preoccupied with life at home/domestic matters?'*

### ➤ Positive home-to-work interference:

The positive impact of your home life on your job performance. This was measured by questions such as *'How often does it happen that after spending a pleasant weekend with your spouse/family/friends, you have more fun in your job?'*



## Personality

And finally, we wanted to look at the links between personality and perceived email pressure and work-life balance outcomes.

### Core self-evaluation

We included a measure of **core self-evaluation** in our survey.

Core self-evaluation is an aspect of personality that relates to how we assess our own abilities and the extent to which we believe we can control our environment and ourselves. This taps into a number of important aspects of personality, which previous research has linked to job satisfaction, key behaviours at work and the impact email can have on us:

➤ **Self-esteem:**

The overall value that we place on ourselves as a person. This was measured by statements such as *'Overall, I am satisfied with myself'*.

➤ **Generalized self-efficacy:**

Our own evaluation of how well we believe we can perform across a variety of situations. This was measured by statements such as *'When I try, I generally succeed'*.

➤ **Neuroticism:**

The tendency to hold a more negative view of the world and to focus on negative aspects of oneself. This was measured by statements such as *'There are times when things look pretty bleak and hopeless to me'*.

➤ **Locus of control:**

Our beliefs about the degree to which we can control the events in our lives that affect us. People with an internal locus of control tend to believe events in their lives happen as a result of their own actions, whereas those with an external focus of control tend to believe that the things that happen in their lives are out of their control. This was measured by statements such as *'I determine what will happen in my life'*.

We can therefore conclude that individuals who score **high on core self-evaluation** are more likely to be well adjusted, positive, self-confident, and to have a strong belief in their own abilities.



## Moderator

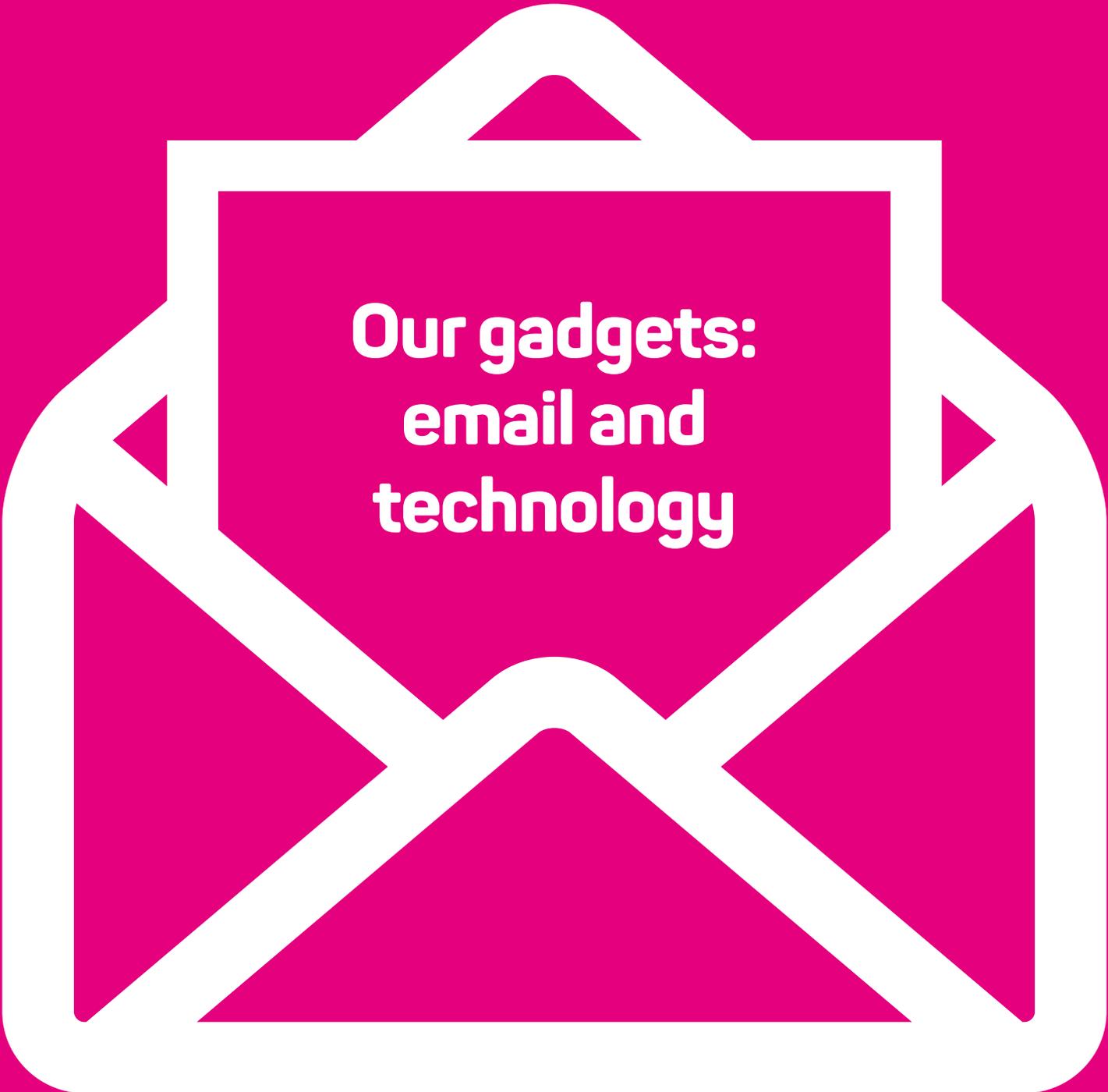
There were a variety of other factors that we also measured in this research – for example, how people use email, what sort of technology they prefer and their job level. Having asked our participants about these concepts, we wanted to bring them together to create a more cohesive picture.

As we have said throughout this report, individuals are very different and personality is one huge part of what makes us all different. For example, whilst those in more senior positions in an organisation may experience higher email pressure generally, this might not be the case for all senior managers.

Why not? Might it be due to personality?

We therefore wanted to examine whether personality acts as a **moderator** across these relationships. Simply put, a moderator is a factor that influences the impact one variable has on another. By examining how personality acts as a moderator, we can clarify how much of an influence it has on work-life balance outcomes (for example) when employees experience email pressure.





**Our gadgets:  
email and  
technology**

## Before we explore what factors affect perceived email pressure, let's take a look at how we use technology to access email in our day-to-day lives.

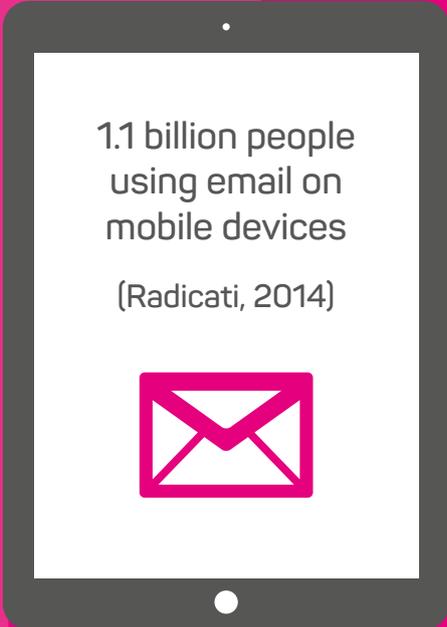
The earliest forms of email were accessed via large, static computers and for many years, you could only access email on a desktop computer.

Now, however, users have a range of options to choose from, including smartphones, tablets, laptops and smart TV, which completely changes how and where we use email.

Consider for a moment how differently you approach writing an email when sitting at your desk with a full-size keyboard, as opposed to using your smartphone while on the train. There's a good chance the length, accuracy and tone of your email may be different in these two scenarios, right?

Clearly, we need to examine the role of technology choice in people's experience of email to get a fuller picture of its impact on our lives.





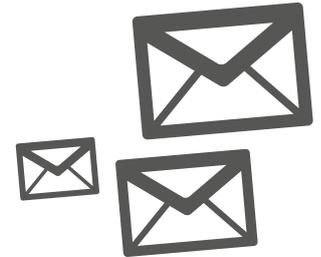
## How are we using our technology?

Our survey analysis highlighted some clear trends in how people are using technology to deal with email.

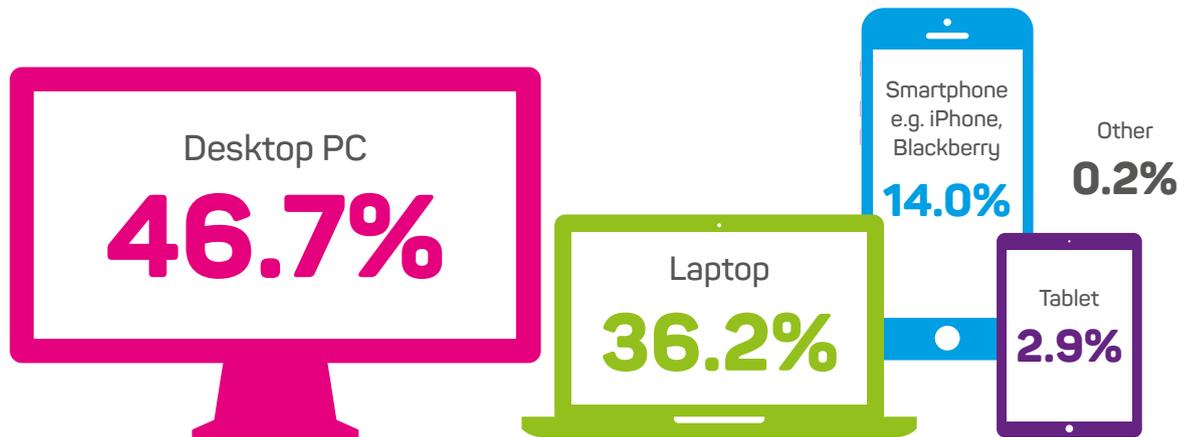
### Preferred gadget

When asked about their preferred gadget for accessing email, just over **45% of people indicated desktop computers** are (still) the most used, followed by laptops, smartphones and then tablets.

Looking at different age groups, **younger people** told us they prefer **smartphones** to other technologies for accessing email, whilst **older email users** still prefer **desktop computers**. If we look at the use of technology across the UK, it seems that Londoners are much more likely to use smartphones to check their email, while the Scottish are more likely to use a desktop computer. Laptops are the favourite email device among the Welsh.



### Which device do you use most to access email?



### 'Push' email

Our survey shows that **'push' email** – where email is automatically sent to your inbox without you having to request it from the server – is **used by 49% of email users**.

And it is statistically much more likely to be used by younger email users. Men are also more likely to use push email than women, while Londoners are more likely to use it than other UK residents.

We're interested in this kind of usage, as it removes some of the **control** users have over their email. When using push technology, email users will receive emails (and associated notifications, such as a vibration or ringtone) as they are sent from the email server. This can mean an almost constant stream of incoming notifications, which represents a possible **distraction**.

## Email duration

When asked how long they leave their email application running, **62% of users said they leave their emails on all day.**



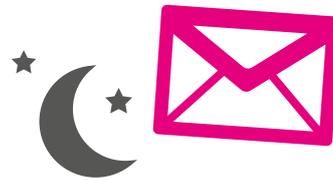
Only when reading  
or writing emails

**16.2%**



Most of the day

**21.7%**



All day

**62.1%**

All-day email is much more likely among younger email users (80% of 15–24 year olds) than older people (50% of those 55 years and over). Londoners are the most likely population to keep their email application on all day.

People least likely to leave their email on all day are those working in the teaching, charity, and health and social care professions. This may of course be due to the practicalities of their jobs. Conversely, those most likely to leave email on all day work in the business and consulting professions.



### So what does this tell us?

When we look at the data based on individual differences and geographic location, there are some clear trends in how people use technology to access their email, but these don't represent anything actionable. So, whilst it's interesting to see that Londoners are more likely to use push email and leave it on all day, can we give them or anyone else advice based on this? Not yet – but the following sections will give us additional insight that we can start forming into tangible actions.



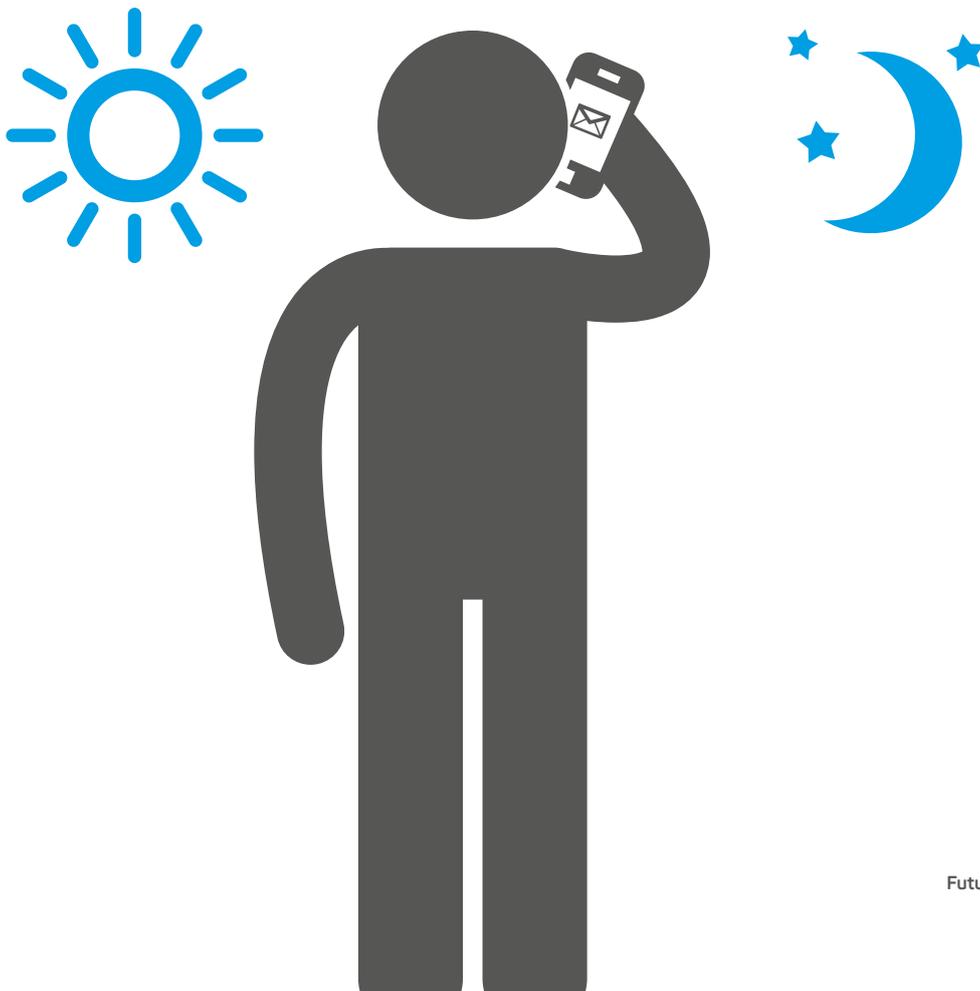
**Under pressure:  
our experience  
of email**



## One of the things we were particularly interested in was email users' perception of their experience.

We asked our research participants about their views of email as a communications tool; to what extent they felt pressured to use email – either from colleagues, clients or themselves – and whether they thought email was in itself useful.

This gave us significant additional insight into the email experience, illustrating the role of external factors – such as the timing of email activity, how we receive emails, volume of email, etc. – in contributing to perceptions of email pressure.



## What factors affect our perceived email pressure?

The relationship between behaviour, demographics and perceived email pressure is a complex one, as the following findings illustrate. We believe these underline the reason why one-size-fits-all organisational solutions or advice don't tend to work.

### Technology

- Perceptions of email pressure were **significantly higher among users of Mac OS** when compared to Windows, and among iOS (iPhones) users when compared to Android, Windows or Blackberry. Users of Windows smartphones reported the lowest levels of perceived email pressure.

But why is this? At this stage, we don't know. In order to explain this relationship, we'd need to conduct further investigations into device operating systems. So, we're not saying that Mac OS causes stress and email pressure – it's simply an interesting data point and there could be many explanations, such as usability, familiarity, job design, types of people, etc.

- We also found a strong **significant correlation between using push email and perceived email pressure**. This means that people who told us they used push email on their devices were more likely to report higher perceived email pressure.

Due to the nature of this study (a survey of the general public, at a single point in time), we can't be certain on the direction of causality. That is, we don't know if push email is on by choice, if it is a response to perceived email pressure or if pressure is a result of being on the receiving end of push email. We aim to clarify these relationships in subsequent studies.

### Email usage

- People who reported **leaving their email on all day were much more likely to report perceived email pressure**. Again, we don't know if they leave their email on all day in order to deal with perceived email pressure, or whether all-day email is the cause of email pressure.

- There was a positive, but small, **correlation between the number of emails received and perceived email pressure**. So, the volume of emails received does play a part in pressure but isn't the number one factor.

This is interesting, as 'email overload' can bring forth images of large numbers of emails to deal with. However, our study didn't examine the perceived difficulty of dealing with the emails. And we know that not all emails are equal. Consider the different impact of receiving an email confirming your next business flight and one that lists multiple significant complaints of bullying and harassment from one of your colleagues. The first represents a form of information you may simply file away for later use. The latter could be the start of a protracted and emotionally draining experience at work.

So, when it comes to users' perceptions of email stress, the content and tone of emails received could well be more important than the volume of emails received. This is something we would like to examine in subsequent research. For now, this points to the importance of how users make sense of and interpret emails, which is a factor of personality.

- It seems that **when we check email** is associated with perceptions of email pressure. Checking email **earlier in the morning** or **later at night** is associated with higher levels of perceived email pressure.

Again, the direction of this relationship is unclear, in that early-morning or late-night email use may be a form of coping with work pressure, or it may be a contributing factor for the experience of email pressure.

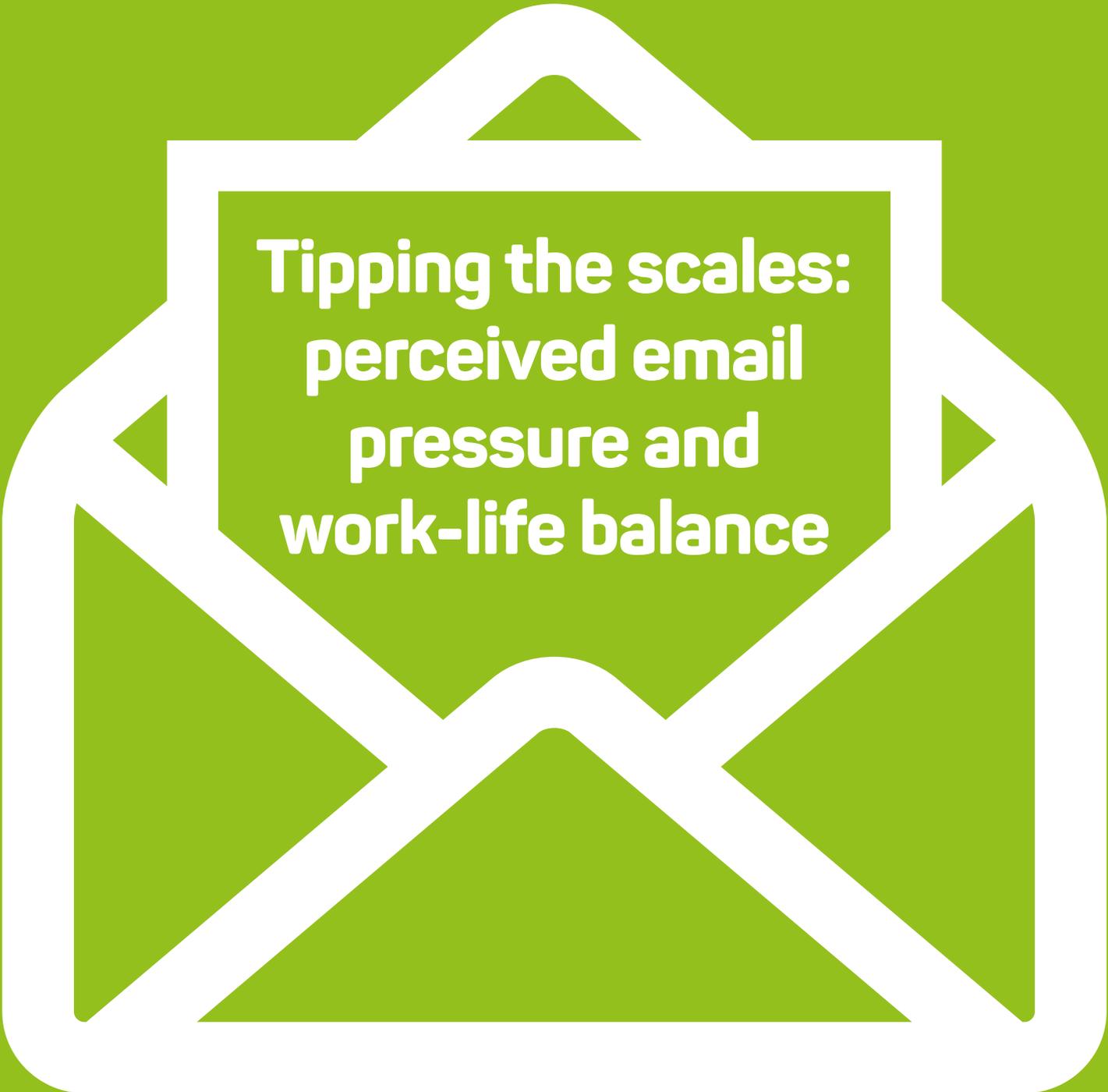
## Other factors

- When it comes to sectors and jobs, perceived email pressure was **highest in IT and Marketing, PR, Media and Internet sectors**. Of course, we can't conclude that working in these sectors leads to high email pressure, as so many other factors will play a part. But looking at our data, we can see that over 30% of this group received more than 50 emails a day and over 65% leave their email systems running all day. This perception of pressure could therefore be linked to reliance on email in these sectors.
- There were some regional variations in experience of email pressure, with people based in **London reporting the highest rates**. Once again, this may be due to the reliance on email, with 29% of users from London receiving over 50 emails per day and 69% leaving their email systems running all day.
- Perceived email pressure was **highest in younger people** and steadily decreased with age. Why might this be? Perhaps people learn the ambiguous rules or etiquette of email with experience in the workplace. Or maybe it is because younger people were also most likely to use smartphones, leave email on all day and use push email - the very combination of email usage factors associated with higher perceived email pressure.
- **Managers experience significantly higher levels of perceived email pressure** when compared to individual contributors (non-managers). We're not able to tell from the data why this is exactly, but we can hypothesise it may be a combination of the different responsibilities managers have, along with the relative volume, complexity or urgency of the emails they receive. It is conceivable that managers receive more high-priority or business-critical information via email.
- **People who rated email more positively** in terms of the flexibility it affords them and the productivity it facilitates were more likely to report **higher levels of perceived email pressure**. This echoes the notion of email as a double-edged sword – as well as acknowledging the benefits of email, these users also experience the negative consequences. The explanation for this may be that people who rate email more positively in term of flexibility and productivity, use it more and are therefore more prone to the pressures, or it may be that people who experience email pressure use it in a more flexible way in order to counter the impact of this pressure.



### What can we conclude from this?

We've identified that there are a number of external factors associated with perceived email pressure – from the technology we use to access email and our day-to-day usage, to our job sectors and role levels – but what actual impact does perceived email pressure have on our lives? This question leads us neatly to our next section, which looks at work-life balance outcomes.



**Tipping the scales:  
perceived email  
pressure and  
work-life balance**



**Out-of-work communications (of which email is one example) has previously been cited as a cause of work-life balance dissatisfaction.**

But we were interested in understanding how perceived email pressure actually impacts our work-life balance, not just our satisfaction with it.

We wanted to understand more about the behavioural and emotional outcomes of work-life balance, and build on previous research highlighting that home and work can impact each other, both positively and negatively.



## It's important to underline that the whole concept of work-life balance is complex.

This is definitely another area where one-size solutions do not work for everyone. Factors such as caring responsibilities, social commitments, dealing with emergencies (personal and professional) and job design factors, such as working hours and shift patterns, all play a part in understanding the relationship between our personal and professional lives.

Some people like to blend these two aspects of life, dipping in and out of work-mode as and when they need to. Others prefer to ensure the two don't interact and are keen to keep stricter boundaries in place. Some employees have a lot more freedom to organise their work as it suits them, while others have no chance to work from home or even vary their working hours. Hence, the importance of looking at outcomes rather than satisfaction when we examine work-life balance.

We're interested in what actually happens, rather than people's levels of satisfaction with work-life balance.

## Work-life balance outcomes and perceived email pressure

There appears to be a relationship between the experience of perceived email pressure and work-life balance outcomes:

- We found a **moderate positive correlation between perceived email pressure and negative work-to-home interference**. This means that higher email pressure was associated with more examples of work negatively impacting home life (e.g. bringing a bad mood home, or bringing actual work home). And because it was a statistically significant correlation, we can exclude the role of chance or fluke in these results.

**'It's difficult for me – emails never stop and if I don't keep on top of them I find myself missing sales opportunities. It reached a peak last year when I was on holiday with the family and ended up missing out on a number of activities, as I was constantly checking emails on my phone. My partner was not happy with me and we ended up arguing!'**



- There was also a **moderate positive correlation between email pressure and negative home-to-work interference**. In this relationship, perceived email pressure is associated with more examples of home life negatively impacting the work domain.

**'It can be an absolute nightmare. We have been having work done to our house and this is putting a strain on all of us. I am constantly worrying about it and it's making the whole family really irritable. You'd think I'd be thankful to get to the office but when I am there I can't stop thinking about what will be waiting for me when I get home. This is definitely impacting the way I am with colleagues and how productive I am.'**



- Our study showed that **perceived email pressure is significantly higher in people with caring responsibilities**. This finding is probably less of a surprise, as the work-life balance research literature is full of examples citing the challenges facing carers when it comes to navigating the boundaries between work and home. Interestingly, our data didn't reveal any significant differences between people with different caring responsibilities. It seems that just having these responsibilities is associated with significantly higher email pressure.



## What does this tell us?

All of the above are important findings as they link perceptions of email pressure to actual work-life balance outcomes, not just perceptions of work-life balance. But that's not the end of the story. Whilst we've identified the external factors that affect our perceived email pressure and explored the relationship between perceived email pressure and work-life balance, there's another variable we should consider in order to increase our understanding of an individual's experience of email – personality.



**The X factor:  
personality as  
a moderator**



## **As we discussed earlier, we were interested in understanding the role individual differences play in how we approach and deal with email at work.**

This is in an attempt to really get beneath the skin of one-size-fits-all recommendations and provide targeted advice to email users.

Our personality represents a major part of these individual differences and has an obvious role to play in helping us better understand how we use email at work.

It may be that some aspects of personality leave us with a tendency to check email more frequently or to respond with anger as soon as we sense disrespect in an email we receive. Or indeed, a tendency to use email more effectively as an aid to our own personal productivity.



The key results from our analysis have highlighted some interesting relationships between perceived email pressure, work-life balance outcomes and personality. The most significant of these is that **personality acts as a moderator between perceived email pressure and work-life balance outcomes**. That is to say – personality influences how much perceived email pressure results in positive or negative work-life balance outcomes.



## Personality moderates the relationship between email pressure and all work-life balance outcomes, both positive and negative

- ▶ People with **lower core self-evaluation seem to experience more interference between work and home (positive and negative)** than those people with higher core self-evaluation. This may be because those with higher core self-evaluation believe they have more control over their situation and are therefore less impacted by their jobs. They may interpret email pressure as a necessary part of their job, rather than a challenge, and allow it to impact them to a lesser extent.

**'I pulled up on the drive and quickly checked my email on my phone. My boss had sent me some feedback about my performance.'**



### Person with low core self-evaluation:

*'I was upset for the rest of the night and couldn't sleep.'*



### Person with high core self-evaluation:

*'I discussed it with my partner that evening and thought through how best to address it.'*

This demonstrates that if you have control and confidence you can create boundaries. You don't think, 'it's happening to me', but instead you think, 'I can control this. I can simply put it in a box and get on with the other stuff'.

- When **core self-evaluation is low, perceived email pressure is more likely to be associated with negative home-to-work interference**. In other words, rating your own ability and sense of control over your environment lower, means that email pressure is more likely to translate into negative home-to-work interference for you.



**Person with low core self-evaluation:**

*When I got to work on Monday, I couldn't stop thinking about it and just couldn't see how we would resolve it. I ended up snapping at a colleague and couldn't focus on what I was meant to be doing. The next night my partner took me out for dinner and we talked it all through. I was able to concentrate so much better at work the next day and enjoyed being there.'*



**Person with high core self-evaluation:**

*When I got to work on Monday I had loads to get through so I sent my partner an email and suggested going out for dinner that night to talk some more. I was then able to have an enjoyable and productive day at work.'*

## **We also found some interesting relationships between personality, work-life balance outcomes and 'seniority' (i.e. whether someone is a manager/leader or an individual contributor/non-manager)**

- **Higher core self-evaluation** is associated with **lower negative work-to-home interference for managers (and leaders)** when compared to individual contributors (non-managers). This may be due to the greater influence and discretion that managers have over their working lives, with regards to working hours, decision-making, delegation, etc.
- **High core self-evaluation** is also associated with **higher positive work-to-home interference for both managers and individual contributors**; however, the relationship is slightly stronger for individual contributors.
- **Higher core self-evaluation** is associated with **lower negative home-to-work interference** for both managers and individual contributors.
- **Higher core self-evaluation** is also associated with a **small positive correlation with positive home-to-work interference for individual contributors**, but this effect is not observed for managers.

These results indicate that the effects of personality are fairly similar for both managers and non-managers. This could be interpreted as high core self-evaluation being generally protective against negative interactions and increasing positive interactions – although for managers the positive aspects of their work-life interactions seem slightly less correlated with personality.

## Personality moderates the relationship between working with colleagues/clients in different time zones and some work-life balance outcomes)

- People with **lower core self-evaluation** experience **more home-to-work interference (both positive and negative)** if they work with **colleagues in different time zones**.
- People with **lower core self-evaluation** experience **more negative home-to-work interference** when they are also dealing with **clients in different time zones**.
- Interestingly, **people with low core self-evaluation** not only experience **stronger negative home-to-work interference, but also appear to gain more positive effects** (positive home-to-work interference) from communicating with people in different time zones than people with higher core self-evaluation. So whilst they report that 'bad' situations at home affect their work and job performance, they also report that 'good' situations positively affect their working life.
- **When it comes to working with clients in different time zones, the only significant interaction was between personality and negative home-to-work interface.** So, dealing with clients appears to differ from dealing with colleagues, in that personality only influences the negative effects of differing time zones for client interactions, whereas it influences the positive and negative home-to-work interface for colleague interactions.



### So, in summary...

Our results illustrate how personality moderates the relationship between perceived email pressure and all work-life balance outcomes. It shows that people with low core self-evaluation experience more interference, both positive and negative, between their work and home lives – i.e. they are more sensitive to how the two domains – work and home – affect each other.

This could be due to how people with low core self-evaluation make sense of their world. People with high core self-evaluation don't see these things as happening to them – they can take control and set boundaries.

Now we've finished exploring the key data from our study, it's time to look at what we can do to improve our experience of email in our day-to-day lives.

**What should  
we do?**



## One of our core aims is to provide individual employees and organisations with accessible insight and actionable recommendations.

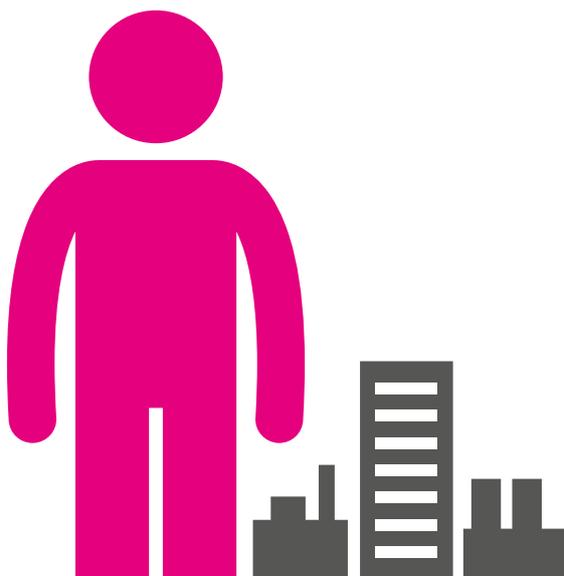
When we started this study, our objective was to explore the use of email at work and identify areas for further investigation. However, our research has given us real insight into the impact of email on our day-to-day lives, which means we're able to make some initial recommendations now on what individuals can do to improve their experience of email.

It is important to reiterate though that this study was cross-sectional in nature, so it's impossible to attribute causality (i.e. x leads to y) as we've only looked at the experience of using email at a single point in time.

We will follow up this study with the analysis of various interventions (e.g. changes to email checking behaviour) to examine their impact and add to the evidence-base around email. So, based on our literature review and the data we collected for this exploratory study, we can suggest some practical actions for two main groups:

- **Individual employees**
- **Organisations**

But remember, there is no one-size-fits-all solution for email, so you should reflect on what works best for you, given your role and experience of work to date.



# Individuals

We have divided our recommendations and suggestions for individual employees (and, of course, managers of others) into two areas - behaviour changes (i.e. what you can do differently) and mindset changes (i.e. how you think about email). Research has indicated the role of email behaviours in our experience of pressure and stress, but we also know how important the role of our expectations and mental 'rules of thumb' are in how we respond to the outside world.

## Behaviour

- ▶ Our results indicate a correlation between having email on all day and perceptions of email pressure. **You may want to consider launching your email application when you want to use email and closing it down for periods** when you don't wish to be interrupted by incoming emails. In other words, use email when you intend to, not just because it's always running in the background.
- ▶ Unless it's a requirement of your role, **consider how much push email is helping you**. If you find yourself distracted and/or pressured by the constant ping-pong of newly arriving emails, consider updating your device to only download emails when you instruct it. This can provide a sense of control over the flow of emails and allow you to concentrate on other tasks.
- ▶ Previous research has recommended limiting or completely **switching off email notifications on your devices**. Consider how useful you personally find them and whether it might be less of a distraction to turn them off. This can allow you to focus on other tasks, while your email application is running in the background, therefore still limiting the potential for email interruptions.
- ▶ Our results also indicate the strong relationships between email checking times (early morning and late at night) and perceptions of email pressure. It would be inappropriate of us to instruct people to stop checking their email at a time that suits them, but **consider how useful you feel it is to begin your working day so early or end it so late**. It's also worth considering the potential impact your very early or late emails have on your colleagues.

Are you checking email outside of working hours to keep on top of things? Does this contribute to your feelings of relaxation and switching off from work? Or are you checking it outside of work due to perceptions of pressure or even fear? If it's the former, and this doesn't cause undue concern or pressure, then go for it! If it's the latter, consider how you might reduce your checking of email over time. If you can reduce out of hours email use without it impacting your productivity or incurring negative feedback from your colleagues or clients, perhaps you were worrying unnecessarily.

- ▶ While there was only a weak relationship between volume of email received and perceptions of email pressure, it may be useful to **consider how many emails you yourself are sending**. Think about the colleagues and clients whom you email, their communication preferences and the messages you are trying to convey. Is email always the best medium? Might a telephone call or video conference call be better suited to the task at hand?
- ▶ The content of email has also been identified as a potential stressor at work. **Reflect on your email writing style** and check your messages for ambiguity, the potential for misinterpretation and how these messages might contribute to conflict or disharmony at work. Remember, not everyone finds it easy to communicate clearly using email.



## Mindset

- If you think email is a source of stress for you at work, it can be useful to explore how you think about it. **Reflect on your emotional responses** to emails from various sources and see if there are any trends or patterns. Are they from certain people? Are your 'stressful' emails about certain topics? Or at certain times of day (or night!).

We are more likely to misinterpret messages or read more into them than is intended when we let our emotions take over, often resulting in an angry response that we later regret. But remember that you are not your emotions, and you don't have to act on them – take a step back from the email before responding and compose your reply when you're feeling calmer and more in control.

- **Challenge your own thinking.** Consider how much of your thinking is factual and how much is driven by your emotions, expectations or assumptions, about what you think 'will' or 'might' happen. We can sometimes predict future 'disasters' that will never happen and easily imagine terrible consequences for our (in)action that have no basis in reality. Be careful that you don't find yourself fortune-telling or mind-reading (e.g. 'I have to send this report by 5pm, otherwise we'll lose this client account' or 'My manager will think I can't do my job if I don't respond to this email now').
- Listen to your 'self-talk' when it comes to email. We all have an inner voice, which can be helpful and supportive (like a sports coach or a teacher) or unhelpful (like an inner critic). **Listen to your self-talk when it comes to email and watch out for phrases that have a sense of 'demandingness'** (e.g. 'I have to check my email', 'I must respond to this immediately' or 'I need to empty my inbox'), and check if your appraisal of the situation is correct or realistic. You might be demanding too much of yourself and inflicting additional, unwanted pressure. Consider how helpful this kind of self-talk is and whether you could moderate it to something more forgiving (e.g. 'I'd like to check my email now, but...').
- **Consider how you can reflect on your experience of email over time.** We're not very good at remembering all the details of our daily lives, so you may find it useful to maintain a simple journal or diary, noting your key observations about emails (e.g. your sense of satisfaction when you've emptied your inbox, your feelings of frustration when receiving emails late at night, your motivation for checking your email first thing in the morning and so on). Reviewing this record of your habits over time may reveal some trends or patterns to you.



# Organisations

Our recommendations to organisations – particularly to the people who set email policies and those in a position to role model positive email behaviour – are as follows:

- Develop a clear picture of what is actually going on in your organisation when it comes to email. **Quantify your email challenge** in terms of email volume, intra-team and department communication by email, duplication of effort and of course employees' perceptions of email. This will give you some contextual data in order to make some changes and potential improvements. You can also use this information to see if actual email behaviour runs contrary to what you believe your values and organisational culture support.
- **Consider how you introduce email to new employees** and how explicit you are about your organisation's norms on email use. Do you simply provide employees with an email account or do you set out your expectations and provide them with clear guidance on how email should be used? Ambiguity around email norms contributes to email pressure and perceived increases in workload – both potentially contributing to stress and productivity impairment.
- Consider the introduction **of formal training or briefings in the use of email**, for both new and existing employees. This could be based around your values and aspirations concerning (for example) work-life balance, productivity, communication and respect. At a minimum, being clearer about what you expect from email communication as an organisation can help reduce ambiguity, increase civility and potentially even reduce the volume of emails sent.
- Remember – **email is one communication channel, amongst others**. Consider how else you can facilitate communication using other tools, such as instant messaging, forums, teleconference or face-to-face meetings, and make sure you match the medium to the message. For example, giving feedback on a team member's end-of-year performance review should be managed via a face-to-face meeting, whereas checking to see if a colleague is going to the Christmas party can be done via instant messaging.
- **Check your role models**. Are your senior leaders role-modelling good email behaviour? Are they sending late night and weekend emails? Are they using inappropriately harsh language or using email as their only communication tool? Are they simply spending too long dealing with their email in the first place? It will be more difficult to instil good email practices if employees don't have positive senior role models. Start at the top and lead by example.
- **If you're tempted to introduce an email process for everyone, consider if you're introducing an inflexible rule or one-size-fits-all process that isn't helpful**. The results of our survey outlined above underline that there is no one-size-fits-all approach to email, so be mindful of the following factors: what problem you believe you are trying to solve; why you believe it's a problem in the first place; how your process or regulation might impact a diverse group of employees, including those we have discussed above. Consider how you can get employee input before you launch new email processes.



# Conclusions and next steps

## Taking this research further

We hope you've found these results as interesting and insightful as we have. As we explained earlier, this represents a snapshot of the email experience of a large, UK-wide population. We of course want to continue to examine these themes in more detail, to build the evidence-base for advice regarding email and better understand how it can be used to best effect.

We're particularly interested in learning which approaches to email management are most effective for different kinds of email users. We'd also like to understand more about how users derive meaning from emails and how this contributes to their sense of email-related pressure.

When it comes to email behaviour, we'd like to understand how much of this is because of explicit rules in organisations (e.g. 'employees must respond to customer queries within four hours') and how much is due to implied ways of working (e.g. 'I've noticed people don't tend to email at weekends here').



## How to get involved

If you'd like to participate in future research, please keep a look out on the Future Work Centre website ([www.futureworkcentre.com](http://www.futureworkcentre.com)) for details of our follow-up research projects, surveys and polls.

We're always looking for more research participants and we believe our upcoming projects will be equally interesting for people to get involved in. If you represent an organisation and would like to host future projects or request research and insight support from the Future Work Centre, please email us at [info@futureworkcentre.com](mailto:info@futureworkcentre.com) to learn more about how we can support your teams and organisation.

And of course, if you have any ideas for topics you think would make for good research projects, please get in touch.



# References and further reading

**Byron, K. 2008.**

Carrying too heavy a load? The communication and miscommunication of emotion by email. *Academy of Management Review*, 33: 309-327.

**Dabbish, L.A., Kraut, R.E. (2006).**

Email overload at work: An analysis of factors associated with email strain. *Proceedings of the 2006 ACM conference on Computer Supported Cooperative Work* (pp.431-440). ACM Press.

**Giumetti, G. W., Hatfield, A. L., Scisco, J. L., Schroeder, A. N., Muth, E. R., & Kowalski, R. M. 2013.**

What a rude email! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an online context. *Journal of Occupational Health Psychology*, 18: 297-309.

**Giumetti, G. W., McKibben, E. S., Hatfield, A. L., Schroeder, A. N., & Kowalski, R. M. 2012.**

Cyber incivility at work: The new age of interpersonal deviance. *Cyber psychology, Behavior, and Social Networking*, 15: 148- 154.

**Ofcom (2014).**

Digital Day, Overview of findings published in the Communications Market Report 2014.

Retrieved from [http://stakeholders.ofcom.org.uk/binaries/research/crossmedia/2014/Digital\\_Day\\_2014\\_Overview\\_of\\_Findings.pdf](http://stakeholders.ofcom.org.uk/binaries/research/crossmedia/2014/Digital_Day_2014_Overview_of_Findings.pdf)

**Park, Y., Fritz, C., & Jex, S. M. (2015).**

Daily Cyber Incivility and Distress The Moderating Roles of Resources at Work and Home. *Journal of Management*, 0149206315576796.

**Radicati, S. & Levenstein, J. (2014).**

Email Statistics Report, 2014-2018.

Retrieved from <http://www.radicati.com/wp/wp-content/uploads/2014/01/Email-Statistics-Report-2014-2018-Executive-Summary.pdf>.



## Get in touch

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