

Taking Control of Work-Life Balance with Microboundaries

Research-Informed Strategies



For more info:

Marta Cecchinato

m.cecchinato@cs.ucl.ac.uk

www.digitalboundariesresearch.wordpress.com

Table of Contents

Key.....	4
Did you know?.....	5
How to use this booklet.....	7
Email Management.....	9
Other Communication Channels Management	11
Time Management	13
Notification Management	15
Expectation Management	17
What is IFTTT?	19
Strategies Log	21
References	23

Key



Phone based strategy



Android-only strategy



iOS-only strategy



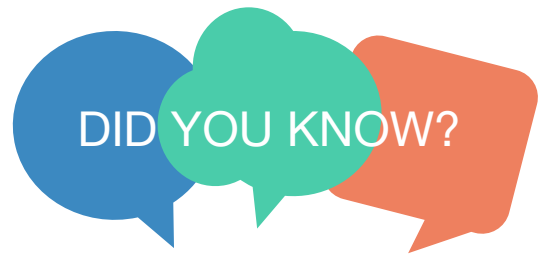
Windows-only strategy



Laptop/PC based strategy



“If This Then That” service (<https://ifttt.com/>)



Communication technologies are increasingly embedded in our everyday, impacting how we work and socialise. This can create expectations of endless availability which may lead to issues of work-life balance. Research has found a positive correlation between work interrupting non-work and stress, and if no measures are put in place to recover for our daily worries and stresses, other major health issues can arise, such as burn-out. Therefore, achieving work-life balance is an issue that concerns many. A key factor to reaching this goal is feeling in control. With notifications interrupting and information overload overwhelming us on all our devices, it can be hard to feel in control.

At University College London, we have been researching how people cope with work-life balance issues and the expectation of being always online. Our findings show that technology should be designed to be more in line with our values and make us stop and think when this is not the case. But it's not all down to technology – individuals play a key role in managing their own work-life balance. We found that there are workarounds and strategies that people can put in place to make technology work for them, to align digital behaviours to personal values and feel in control of work-life balance. These are microboundary strategies.

Microboundary strategies (Cecchinato et al., 2015, Cox et al. 2016, Cecchinato et al. 2017) can be used to limit the negative effects of boundary cross-overs (e.g. receiving a work email on a weekend) and feel more in control. When we feel in control, we experience less stress and we fewer interruptions between work and non-work. These microboundaries, which are presented in this booklet, relate to digital behaviours and can occur on devices, applications, accounts, and notifications.

It's time to take back control

Use this booklet to experiment what microboundary strategies work best for you. We have grouped them in five sections: email, communication channels, notifications, and expectation management. To put the strategies in context, at the beginning of each section, we have included a summary of prior work that explains why those strategies can be useful for you. Don't worry, we've not made it sound too academic! But if you are interested in reading the original research, there is a list of references at the end of this booklet. Other than some theory, each section includes a list of strategies and step-by-step instructions on how to implement them.

This booklet is not intended be a complete list of strategies, but it is meant to be a starting point to reflect on your own practices and help you gain more awareness. Of course, as you experiment, you can certainly come up with your own strategies.

Self-experimenting is a key element to finding the right balance for you between use of technology, expectation management and sense of control. You might find that you prefer automatic rules for settings that help you transition between work and non-work, or perhaps you prefer to manually change settings as a conscious reminder of what you want to be focusing on in that moment.

How to use this booklet

1) *Reflect on your every day practices: What are your priorities? What do you value?*

Before you start, we recommend you take some time to reflect on what is it exactly you would like to improve. You can spend as much time as you want on this activity. If you are unsure, you could use some self-tracking tools to give you a better understanding of your everyday behaviour. For example, you could download RescueTime (see page 14) to learn how you spend your time on your devices. Or you could keep a diary of your communication habits and keep track of when work interrupts non-work (and vice versa) – you can download a template here: [Self-Study Diary](#).

2) *Read through this booklet to identify strategies that can help you.*

Select at least one or two strategies to start with for a couple of weeks and see how you get on. Remember, your time = your rules. If something doesn't work out for you, you can always revert back to old habits or try out new strategies.

3) *Commit to your new strategy(ies).*

In order to help you stick to your new strategy, we recommend you write down what you intend to try out in the commitment card below. You can also decide to share your commitment on social media, or just by talking to friends, family and colleagues.

4) *Keep a log of the strategies that worked (or haven't) for you.*

You will find that as time goes by, or situations change, you might want to revisit your strategies. Keeping a record of what worked and didn't work for you in certain context can be a helpful reminder for future references. You can use the template at the back of this booklet.

**CUT THE COMMITMENT CARD BELOW AND KEEP IN A VISIBLE PLACE
(e.g. your diary, on the fridge, etc.)**



The step(s) I will take to improve my work-life balance through technology is (are):

I will _____

Signed:

Date:

Email Management



Email research has found that checking email less frequently reduces stress. While there is no magic number about how often this should be, making it less frequent is key.



- **Turn off push notifications.** You are likely to be checking anyway, so there is no need to be alerted for every new email, especially in your personal account(s).



- **Change how often you get new emails.** If you still want push notifications, try changing how often your email client syncs your inbox. You could change it to as low as once or twice per day, or to every 25 minutes, to allow you to work uninterrupted following the “Pomodoro technique”.

Mobile email addiction has been identified and compared to gambling behaviours, whereby the unexpected new email provides users with a thrill. Here are some strategies to avoid falling in the trap of feeling rewarded for finding a new email, but then immediately feeling compelled to act on it:



- **Check work and personal emails separately.** Download two separate apps for work and personal email on your phone/tablet. Use different email clients for your laptop (e.g. check personal email in a browser tab, and work email on the Outlook desktop client).

Keep in mind:

- You can use unroll.me to delete unwanted email subscriptions.
- Schedule your emails with ad-hoc tools (e.g. [Boomerang for Gmail](#), [Right in Inbox](#), [MailButler](#), etc.).
- Learn more about your email behaviour ([Immersion](#), [Gmail Meter](#)).
- Be concise (see [Email Charter](#), [sentence.es](#)).
- Have clear subject lines (e.g. use them to ask questions),
- Do you need to cc everyone?
- Could you be using an instant messaging (IM) channel instead? Slack is a great tool where you can create private and public channels with your team, as well as send direct messages and share files. (<https://slack.com/>).

How to disable push notifications for email:



○ Mail app (on iOS)

Device Settings -> Mail, Contacts, Calendar -> Fetch new data -> turn off Push.



○ Gmail app (on Android/iOS):

Settings -> select account -> uncheck "Sync Gmail".



○ Gmail (on browser):

Download <http://www.inboxpause.com/> and then manually pause your inbox to work offline.



○ Outlook (on Mac):

From the top menu: Outlook -> select "Work Offline".



○ Mozilla Thunderbird

Top menu: Tools/Edit/Preferences -> Account settings -> select the account -> Server Settings -> disable "Check for new messages every __ minutes" -> disable "Allow immediate server notifications when new messages arrive"

How to reduce syncing frequency of email clients:



○ Outlook (on Windows)

By default this is set to be every 30 min. To change, go to Send/Receive tab -> Define Send/Receive groups -> schedule an automatic send/receive every -> select your frequency.



○ Outlook (on Mac)

From the top menu: Tools -> Run Schedule -> Edit schedule -> click "+" to select your schedule. You can have it manually, or repeated schedules at your preferred frequency. Make sure that the Action is what you want it to be (e.g. Receive Mail). Quit Outlook to allow the changes to start.



○ Mail (on Mac)

From the top menu: Mail -> Preferences-> General -> Check for new messages -> select the frequency you want (every minute, 5min, 15min, 30min, every hour, manually).



○ Email app (on Samsung)

Apps -> Email -> Menu -> Settings -> email account -> Synch schedule -> select the frequency you want.



○ Mail (on Windows 10 and iOS)

From device Settings -> Mail, Contacts, Calendar -> Fetch new data -> from the Fetch menu, select your preferred option (15min, 30min, hourly, manually).



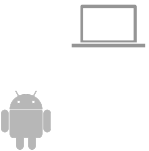


○ Mozilla Thunderbird

From the top menu: Tools/Edit/Preferences -> Account settings -> select the account -> Server Settings -> Check for new messages every __ minutes -> select your frequency preference. It can go as high as 410065408, which is every 780 years!


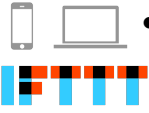
Other Communication Channels Management



Each person covers several roles in their life, some work-related, some pertinent to personal life. In our research on work-home boundaries and technology we found that people create more complex interactions to discourage them from accessing work 'stuff' when not working. They basically create some friction in their interactions.

-  • **Create different user accounts on your devices.** This could apply to accounts on your laptop (e.g. one for work activities where you block social media, and one for personal where you don't have work emails synched), or even different users on your phone (***only works with Android Lollipop***).
-  • **Create different accounts for communication channels.** You could have a Skype account for work on your laptop, and a different personal Skype account on your phone. That way you don't have to worry about thinking where you are logged in.
-  • **Group work and non-work tools separately.** On your phone, you can use folders to organise (and hide away) work apps such as email, Slack, etc. Moving that folder away from the home screen is another way of creating some friction.

Research has shown that people make use of online statuses to infer someone's availability and determine how quickly they are going to reply. If you do not want people to assume that just because you are online you are available and can be interrupted, set yourself away or log out of channels outside of working hours.

-  • **Sign out of any instant messaging (IM) channel.** You can do this manually at the end of your working day, or you can automate it based on time/location (e.g. when you leave work, when you arrive home).
-  • **Sign out of any video-conference channel.** Any call on Skype, Google Hangout is likely going to be a schedule call anyway, so there is no need to be constantly logged in, especially on all your devices. You can do this manually or set automatic rules.

How to create a new account on your laptop:



- **Mac**

Apple menu -> System Preferences -> Users & Groups -> unlock and enter your password -> click "+" -> click New Account -> choose the type of user depending on how you want you use the other account (e.g. just for browsing the Internet a guest account may be enough) -> enter full name (you can't change this later!) -> enter a password for the new user -> click Create User.



- **Windows (8, 10)**

Start -> Settings -> Accounts -> Your account -> Family & other users -> Add someone else to this PC -> here you will need to enter a Microsoft email account. If you don't have another one, choose "sign in without a Microsoft account" -> Local account -> choose their name and password -> Next -> Finish.

How to create a new account on your phone:



- **Android Lollipop and above**

Pull down the notification centre -> select the profile icon -> Add user -> follow the instructions to enter a new Google account. For this you will need to have create a new email address.

How to create dedicated folder for apps:



- **iOS**

Home screen -> hold down on an app for about two seconds -> all the apps start bouncing. From here, you can delete apps, move apps, and put apps in folders. To create a folder, just drag one app onto another.



- **Android**

To create a folder, just drag one app onto another.

Keep in mind:

- Curate the content of your messages – if it's quick questions, etc. use IM channel. If you need to have a more permanent record, email it.
- Delete apps links from home screen or from the phone during holidays.

Time Management



Boundary research has shown that work-life conflict occurs when the demands from one domain (e.g. attending art class) interfere with the demands of another domain (e.g. working long hours), leading then to burnout, absenteeism, and stress. To reduce work-life conflict, one of the suggested research solution is to create temporal boundaries to allow time to recover.



- **Build downtime in your schedule.** Block out time in advance in your calendar for your own activities, hobbies, etc. Regardless if you share your calendar or not, it will help you protect your time.



- **Build focused time in your schedule.** Block out time in advance every day or every week to schedule undisturbed time to work on a task/project. This could also mean blocking certain websites which can distract you from your task (e.g. social media). For example, you could set a calendar event called “No Meeting Wednesday”.

In our research, we have found that sometimes people are not fully aware of how they are spending time (or how much time they are spending actually working). Self-tracking has been proven to encourage reflection, which increases self-awareness and thus promotes behaviour changes.



- **Self-track how you spend your time on devices.** There are several tools that allow you to track how you spend your time on your devices, while others allow you to track how much time you spend in different locations (see overleaf).

Keep in mind:

- You don't need to be connected to the Internet on your phone all the time. Turn on airplane mode, or simply turn off data (so you still get phone calls and SMS) when you don't want to be interrupted.

Web tools to block distracting websites or apps:



- **StayFocusd** <http://www.stayfocusd.com/> (works on Chrome)



- **LeechBlock** <http://www.proginosko.com/leechblock/> (works on Firefox)



- **WasteNoTime** <http://www.bumblebeesystems.com/wastenotime/> (works on Safari)



- **Productivity Owl** <http://www.productivityowl.com/> (works on Chrome) – this one is more for fun: an owl starts flying around the page when your dedicated time on the website is up and automatically closes the page!



- **Offtime** <http://offtime.co/> Can be used to have focused work time or help unplug. It allows you to block apps during focused time but still receive SMS or calls. It also creates a log of your usage patterns to help you gain more insight.



- **Flipd App** <http://www.flipdapp.co/> Similar to Offtime, it puts a timer on your phone lock screen to prevent you from accessing distracting apps. You are still able to receive notifications or access your phone, it just makes it a bit harder.

Self-tracking tools:



- **RescueTime** <https://www.rescuetime.com/> The free version of this tool can be installed on your Android device and any laptop/PC. It automatically classifies time spent on each device as productive (e.g. Word, email) or as procrastination (e.g. Facebook), but you can customise it. To make the most of this tool, you could either decide to use it with a specific goal in mind (e.g. find out how much time I spend on email every day/week/month), or let it run in the background for a few weeks or months and then look back at the data to notice any interesting patterns.



- **30/30 app**: <http://3030.binaryhammer.com/> This iOS only app allows you to set a list of tasks and a length of time for each one (from 1 minute to 1 hour). When you start the timer, it will tell you when it's time to move on to the next task.



- **Pomodoro timer**. If you search for "Pomodoro timer" you will find several online tools and apps to download. The aim is to break down each task into chunks of 25 minutes at a time, with a 5 minute break in between.

Notification Management



Research on multi-tasking and interruptions has shown that we generally react to a new message within 6 seconds. Resuming a task after an interruption takes between 64 seconds and 20 minutes. Constant activity switching can actually have more negative effects than actual interruptions.

Also, research on notification behaviour has shown that critical messages are only 12% of what we receive.



- **Turn off your notifications.** You might want to do this forever for certain apps, or based on certain times/locations, or even manually on a case-by-case basis.

We have also found that people who separate their devices (i.e. smartphone and tablet are only for personal stuff, laptop is only for work stuff) feel more in control of work-home boundary management.



- **Create device separation.** Dedicate each device to one life domain; this might mean deleting or removing any work/personal accounts/apps on it.

Keep in mind:

- You could simply put your phone with the screen facing down on the table to avoid catching glimpses of incoming notifications.
- You can customise sounds for important notifications.
- If you have an iPhone, you can use VIP lists in your contacts to customise who can notify you
- If you want to use a device for multiple life domains, think of how to structure them (e.g. different users, creating folders, separating desktops, etc.) – see strategies in other sections.

How to turn off notifications on phone:



- **Android**

Settings -> Sounds and Notifications -> App notifications -> select the app you want to change settings for -> Notifications -> select between Block all, Treat as priority, or Allow peaking



- **iOS**

Settings -> Notifications -> select the app you want to change settings for -> toggle notifications off. Consider also whether you want the notification to be displayed on the lock screen, or whether you want the 'Badge App icon" (the red circle with the number). Repeat for all other apps you want to change.



- **Windows phone**

Settings -> Notifications & actions -> find the app you want to change -> select preferred notifications (Windows phone 8)

How to customise “Do Not Disturb” settings:



- **Slack**

From the top menu: Slack -> Preferences -> Do not disturb -> customise the time when you do not want to be disturbed



- **Laptop (Mac)**

Apple menu -> System Preferences -> Notifications -> Do not disturb -> then select when to turn off notifications (e.g. specific times).



- **Laptop (Windows 10)**






In the bottom right corner, right click or press and hold “Action Centre icon” -> select Turn on Quiet hours. Alternatively, open Settings -> System -> Notifications and actions -> select your preferred settings (e.g. showing notifications on the lock screen, turning off notifications, etc.).

See Email Management section to change settings for Email notifications

Expectation Management



Research has shown that response expectations are set after the first response, with an initial baseline of 24hours. This is valid for email, but will vary depending on the channel used.

-   • **Set email signatures.** Tell people when/how you check emails or what channels are best to be used for certain situations.
-   • **Set an out-of-office for the weekends.** You could say something like *“As an attempt to master more work-life balance, I don't check my email during the weekend. I will get back to you next week.”*
-  • **Turn off Awareness cues.** Awareness cues are all those cues that let you know whether a person is online, if a message has been read, or when they were last using the app. Knowing someone has read your message can be useful, knowing they've been online 4 times since is not so useful.

Keep in mind:

- People will message you on the channel they are most likely going to get your quickest response from. Create some 'perceived boundaries' – if you want to check your emails, go ahead, but it doesn't mean you need to reply straight away.
- Set expectations in advance.
- Sit in someone else's office when they are not in, or go to a coffee shop.
- Learn to say no and delegate:
 - “I only say yes to something if I have something particular to offer”*
 - “I only say yes if I'm the best person to do this, because...”*
 - “I will do it because I will be able to get out of it”*
 - “If I want to say no, or delegate, I should ask 'Is there someone else who could do this equally well?’”*

How to turn off Awareness Cues:



- **WhatsApp (“last seen at ...”)**

Open WhatsApp -> Menu (three dots top right corner) -> Settings -> Account -> Privacy -> Who can see my Personal Info -> “Last Seen” -> choose between everyone, my contacts, and nobody.



- **WhatsApp (read receipts)**

Open WhatsApp -> Menu (three dots top right corner) -> Settings -> Account -> Privacy -> uncheck “read receipts”. *Note: this doesn't work for group messages.*



- **iMessage/Messages (read receipt)**. On iMessage (Messages) you can turn off read receipts for specific people. Open Messages -> tap on the conversation you are interested -> Info -> Send read receipts -> toggle it off (it needs to be white).

Example of Email Signatures:

- I aspire to achieve a sensible work-life balance. I don't expect a reply to this email from you outside of your normal working hours. Please expect the same from me.
- I'm terrible at carrying and answering my ****phone/email/social media/etc.****, best way to reach me is *****.
- Please note: I sometimes work offline but will check emails at least once per working day.
- To help me manage my inbox more quickly and not have to do it in my spare time, I'm writing shorter emails. Don't take it personally! Here are some other reasons why this is a good idea: <http://emailcharter.org>
- Save our inboxes! <http://emailcharter.org/>
- Too brief? Here's why: <http://emailcharter.org/>
- Q: Why is this email a pre-determined number sentences or less?
A: <http://sentenc.es>

Example of Out of Office messages:

- I'm out of office until *****. I get a lot of emails, so you may wish to contact me again after this date.
- I am on leave until ***** and will not be able to respond to your email until I return.
- I'm away on holiday with a large pile of novels. I'll be back on *****.
- I'm on leave until *****. If your message requires an urgent response, please re-send after that date.
- I'm travelling between ***** and ***** with limited access to email/Internet/etc. If it's urgent, you can find me on social media.

What is IFTTT?













It's a free service (web & app based) that allows you to create simple conditional rules, called "applets". IFTTT stands for "If This Then That" and it allows you to link different web services (e.g. Gmail) and specific settings (e.g. entering a specific location).









There are several already existing applets that you can choose from, or you can create your own based on your needs. All you need to do is create an account and download the app on your phone. You will need to authorise individual services, depending on the applet you choose.

<https://ifttt.com/> and <https://ifttt.com/products/do/button>



You can use IFTTT to set rules ("applets") around when and where you want to change settings to your devices, such as receiving notifications. You will need to create an account on the website and download the app on your phone. These are some of the existing rules and what apps they work with (just search in your browser for IFTTT and the name of the rule):

-   • **Let the team know you are signing off (Slack):**
<https://ifttt.com/applets/45017934d-let-the-team-know-you-are-signing-off>
-   • **Post on Slack when entering/exiting an area (Slack):**
<https://ifttt.com/applets/45017672d-when-entering-or-exiting-an-area-post-to-a-slack-channel/>
-   • **Let your team know you are away (Slack):**
<https://ifttt.com/applets/192057p-let-your-team-know-you-re-away>
-   • **Log how much time you spend at home, work, etc. (GPS):**
<https://ifttt.com/applets/133495p-log-how-much-time-you-spend-at-home-work-etc>
-   • **Get a notification every time you come home (GPS)** (this can be used to set location-based alerts regardless of time, e.g. remember to log out of a channel. It uses the GPS on your phone). <https://ifttt.com/applets/165413p-get-a-notification-every-time-you-come-home>
-   • **Send a notification if enter or exit an area (GPS)** (this can be used to alert others that you are no longer working for example). <https://ifttt.com/applets/25874686d-if-you-enter-or-exit-an-area-then-send-a-notification/edit>

-   **Automatically unmute your android phone at a specific time on weekdays:** <https://ifttt.com/applets/165394p-automatically-unmute-your-android-phone-at-a-specific-time-on-weekdays>
-   **If today's smartphone usage time exceeds your limit be polite and put your phone away:** <https://ifttt.com/applets/257213p-if-today-s-smartphone-usage-time-exceeds-your-limit-be-polite-and-put-your-phone-away>
-   **Turn off mobile data when I get home:** <https://ifttt.com/applets/185476p-turn-off-mobile-data-when-i-get-home>
-   **Mute phone when a focus time session is started (needs RescueTime):** <https://ifttt.com/applets/315926p-mute-phone-when-a-focustime-session-is-started> (Needs Rescuetime)

See **Time Management** section to see alternatives for phone focused time: *Offtime* and *Flipd* can be valid alternatives but need to be manually started.

Keep in mind:

There are other similar tools to IFTTT, such as

- Zapier <https://zapier.com/>
- Llama Lab <http://llamalab.com/automate/>

Strategies Log

Strategy	Used (from – to):	Notes (What worked / didn't work? Why?):

Strategy	Used (from – to):	Notes (What worked / didn't work? Why?)

References

- Cecchinato, M.E., Cox, A. L., & Bird, J. (2017). Always On(line)? User Experience of Smartwatches and their Role within Multi-Device Ecologies. *Proceedings of the SIGCHI Conference on Human Factors in Computing systems*. ACM.
- Cecchinato, M. E., Cox, A. L., & Bird, J. (2015, April). Working 9-5?: Professional differences in email and boundary management practices. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 3989-3998). ACM.
- Cecchinato, M., Fleck, R., Bird, J., & Cox, A. L. (2015). Online vs. Offline: Implications for Work Identity. Between the lines: Re-evaluating the Online/Offline Binary: A workshop at CHI'15.
- Cirillo, F. (2006). The Pomodoro Technique (The Pomodoro). *Agile Processes in Software Engineering and*, 54(2).
- Cox, A. L., Gould, S. J., Cecchinato, M. E., Iacovides, I., & Renfree, I. (2016, May). Design Frictions for Mindful Interactions: The Case for Microboundaries. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 1389-1397). ACM.
- Fleck, Rowanne, Rosalyn AV Robison, and Anna L. Cox. "Balancing boundaries: The role of technology boundary work in managing work-life balance." (2014).
- González, V. M., & Mark, G. (2004, April). Constant, constant, multi-tasking craziness: managing multiple working spheres. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 113-120). ACM.
- Kushlev, K., & Dunn, E. W. (2015). Checking email less frequently reduces stress. *Computers in Human Behavior*, 43, 220-228.
- Li, I., Dey, A., & Forlizzi, J. (2010, April). A stage-based model of personal informatics systems. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 557-566). ACM.
- Mark, G., Iqbal, S., Czerwinski, M., Johns, P., & Sano, A. (2016, May). Email duration, batching and self-interruption: Patterns of email use on productivity and stress. In *Proceedings of CHI*.
- Nippert-Eng, C. (1996, September). Calendars and keys: The classification of "home" and "work". In *Sociological Forum* (Vol. 11, No. 3, pp. 563-582). Kluwer Academic Publishers-Plenum Publishers.
- O'Hara, K. P., Massimi, M., Harper, R., Rubens, S., & Morris, J. (2014, February). Everyday dwelling with WhatsApp. In *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing* (pp. 1131-1143). ACM.
- Olson-Buchanan, J. B., & Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and non-work. *Journal of Vocational Behavior*, 68(3), 432-445.
- Rector, K., & Hailpern, J. (2014, April). MinEMail: SMS alert system for managing critical emails. In *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 783-792). ACM.
- Turel, O., & Serenko, A. (2010). Is mobile email addiction overlooked? *Communications of the ACM*, 53(5), 41-43.

For more info:
Marta Cecchinato
m.cecchinato@cs.ucl.ac.uk
www.digitalboundariesresearch.wordpress.com

This project was funded by:



and supported by:

