Commentary

Recommendations for working from home during the COVID-19 pandemic (and beyond)

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Abstract.

BACKGROUND: There is a growing trend around the globe for having more people working from home, particularly in the current COVID-19 pandemic. Although it is widely implemented in a number of countries and types of companies, it has shown to have multiple challenges.

METHODS: In this article, we provide several recommendations on how to work from home, incorporating information from several publications.

RESULTS: The suggestions are: create routines, be organized, have an adequate home office, enhance your productivity, be responsible, avoid extreme multitasking, facilitate communication and networking, be balanced, use available computer programs and platforms, be creative with remote teaching, explore options for remote research and learn from the challenges. **CONCLUSIONS:** These recommendations would help students, professors and researchers around the globe during the current COVID-19 pandemic, and beyond.

Keywords: Remote teaching, innovation, work environments, global health, education, COVID-19, pandemic

Introduction

There is a growing trend around the globe for having more people working from home [1], particularly in the current COVID-19 pandemic [2]. Although it is widely implemented in a number of countries and types of companies, it has shown to have multiple challenges [1, 3]. In the field of medical education, working from home has its particular issues and needs, such as the logistic and quality of the teaching activities [4]. We now have the technology to be constantly connected to each other, and we can attend meetings and classes with hundreds of people in all parts of the world [5]. We will need to use time in a wise and productive manner, in order to keep track of the latest advances in science and at the

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same time become more productive and creative and to stay healthy and happy. In this article, we provide several recommendations on how to work from home and it would help students, professors and researchers around the globe during the current COVID-19 pandemic, and beyond.

Twelve recommendations

1. Create routines

Whether you live alone or with other people, it is essential that you and each member of the house, including children, have a routine and schedule. Establishing a solid routine is the key to success. It is essential not to confuse flexibility with a complete lack of routine. Routine is essential to be organized and to be more productive. In general: wake up at the same time every day and go to bed at the same hour to help regulate your circadian rhythms. Your internal clock affects everything from mood to diet to heart function [6]. Exercising at specific hours is helpful for physical health and for forming habits. Trying to continue with your general regular routine can bring a sense of normality to your day and will avoid inappropriate working times. Closing your computer, leaving your desk and locking your home office helps you stay away from work in your free time. As studies have shown that actions become habit after several weeks of routine [7], setting reminders as alarms might be helpful in those first weeks.

2. Be organized

Organization is key to productivity and for efficient use of time. It is helpful to keep 'to do lists' and to update them daily. One list can be of things you have to complete the same day, and another list for the tasks that need to be finished later in the week. Every time you complete a task, strikethrough it on the list. If in the middle of productive work, you remember you have to do something, or someone asks you to do a task, add it to your list. Do not stop working until you finish what you were doing and if you have an idea write it down on another list. As some people might need help with tracking time, setting an alarm or using apps might be helpful. The combination of working from home and parenting has its own challenges, depending on the age of the child and the gender of the working parent [8-10]. Keep in mind that there are other activities in which you will have to invest your time, such as preparing food, taking care of children or cleaning. Create agreements with

all the members of the family to carry out the needed tasks at home.

3. Have an adequate home office

Create a working space with a computer that is ergonomically friendly (a screen of adequate size) and with an appropriate desk. The more it resembles your workplace, the better. A second monitor would replace the need to print documents and it is important to find a space away from your bedroom to work. Studies have shown that people that use their bed to work have a higher risk of developing sleeping disorders [11]. Make sure your working space also has a comfortable chair, good illumination and ventilation and adequate accessories (such as a good internet connection and microphone and camera). If you get easily distracted, you can use noise cancelling headphones, either to listen to music or to reduce distracting outside noise.

4. Enhance your productivity

Enjoy your work, in order to maximize and prioritize productivity. Although there are global changes in productivity, your work performance will be evaluated according to how productive you have been [12]. Set clearly defined goals, with yourself as well as with others. The SMART goal approach can help you reach your goals, which need to be Specific, Measurable, Achievable, Realistic and Time-bound [13].

Do not check your emails continuously throughout the day, set times to do this. If you feel the need to continuously check emails, work offline. First do the work that is more challenging, taking into account that you need a mind that is not tired. If you need a break, you can check your email, which is usually not very challenging. Be flexible, as you might need to re-prioritize.

5. Be responsible

In order to work in an adequate manner, you have to be responsible if you want to have the flexibility to set your own schedule. The basic principle is to do the things you have to do, before you do the things you want to do. Knowing that you will have a reward, when you finish the things you have to do, will motivate you to keep on going. Share accountability with others. Do not overload yourself or your colleagues with a large number of meetings, focus on the most important ones [12].

6. Avoid extreme multitasking

Studies have shown that if you multitask you cannot give 100% of your attention to one thing, and therefore your attention to detail diminishes [14] increasing your chance to commit mistakes. With so many things going on at the same time, many people are trying to multitask. To focus on fundamental tasks [12] try to diminish distractions, such as calls. Explain to children that your working area is off limits and to avoid interrupting unless it is important.

7. Facilitate communication and networking

Being able to communicate quickly and reliably has made working from home possible. Update your manager or boss frequently and check on what the people you are supervising are working on. Have regular meetings, at least once a week, and continue having the same meetings you previously had. The more connected you feel with others, the more fulfillment you will feel working from home. If you need advice or assistance on your work, you can ask a coworker for help at the beginning of the day or week, so they can plan better. Also, be open and receptive to the help others are asking from you.

8. Be balanced

In order to stay healthy, you need to have a balance in all the different areas of your life (mental, physical, emotional, spiritual). By having a routine, organizing yourself and being productive, you will be able to have time for other things that are important. Studies have shown consistently that eating healthy, sleeping well and doing exercise decrease the risk of having mental or metabolic disorders [15, 16]. If you do not take care of the needs of your body, there will be a higher possibility that the disorders you have a genetic predisposition to, will develop [17]. Fresh air and natural light are good for you. Eat healthy and balanced at the same time. Getting enough and adequate sleep is one of the most important things to be productive, stay healthy and feel good. If you need a 10 minute break, use that time to have a relaxing moment.

9. Use available computer programs and platforms

There are multiple online platforms that facilitate teleconferences, such as Skype, Zoom, Google Meet and Microsoft Teams [18]. Some of them are completely free and others involve the payment of a fee for full use. Shared files in Google Drive or Dropbox are useful for collaborative online works. Applications such as WhatsApp or Slack facilitate other aspects of real-time communication with colleagues. Other apps like Toggl or Rescue Time might also be helpful. Toggle is an app that lets you manually track each task as you do it. Rescue Time will automatically monitor the websites you visit, track the time you spend on meetings or answering emails and create reports for you. This app will remind you if your scheduled half hour breaks are turning into two-hour procrastination windows.

10. Be creative with remote teaching

Multiple educational institutions around the globe have had the challenge of migrating classes from the classroom to online platforms. Available learning management systems, such as Moodle and Blackboard, facilitate the development of remote teaching, including the implementation of multiple activities and evaluation [19-21]. In addition, these platforms have the potential of providing quantitative data about the participation and interaction of students [22-24]. It also helps institutions to follow the development and dedication of the professors, analyzing quantitative data about the time they spend on the platforms. As it is possible that professors and institutions that have previous experience with virtual teaching have less issues in the transition to remote teaching, you can ask help from professors with more experience in online education. In this context, use of creative approaches from professors, particularly in resource-limited environments [25], would facilitate the fulfillment of learning objectives and the strengthening of competencies in students [26-28]. Teaching of clinical or practical subjects would benefit from the use of virtual systems [29].

11. Explore options for remote research

A large number of laboratories around the world have their members working from home. It means, in general, a focus on activities related to the analysis of data and writing of manuscripts and future grant applications [30, 31]. Those research groups that also have strong capacities in dry lab methods, such as bioinformatics or biostatistics, have a better opportunity of making progress on work during times when they are not physically present in the labs [32–34]. The transition to remote work also highlights the importance of an adequate backup (using cloud-based services) of key files from the labs, in addition to an appropriate implementation of electronic lab notebooks and laboratory information management systems [35].

12. Learn from the challenges

Be grateful if you have a job that has the possibility of working from home. Not everyone can and you might learn a lot from the experience. For example, this pandemic has given rise to several reflections that would be helpful for future times: it has highlighted the importance of investment in adequate health care systems and strong financing of public and private research and innovation systems, for multiple countries [36, 37]. In addition, it highlights the impact of broad collaborations among researchers and institutions and of quick and broad delivery of key results, from an Open Science perspective [38]. The transition to remote teaching has shown the importance of having the infrastructure and training for an effective use of virtual platforms in traditional academic programs. We need to systematize the lessons learned in times of crisis to be able to implement them efficiently and successfully if and when the need arises to do so again [4].

Conclusions

Working from home has several advantages and challenges. In this paper, we provide twelve recommendations that might be helpful for people around the world. When a person is working from home, work and family domains become interconnected and they are no longer separate spheres. It is possible that these days of pandemic [2] will have an impact on the way we work from now on. Currently, the days where we could socialize and attend large meetings in person are gone [39] and the time needed to print dozens of papers to read during long commutes is being replaced by more time spent online. Working from home can be isolating, so take time to connect with your team or if you live alone speak to someone on the phone at least once a day. Enjoy working from home; you can even have lunch or coffee with colleagues using virtual meetings.

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Conflict of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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