Digital Citizenship

Health and Wellbeing Course

Readings | Exercises | Case studies | Quizzes

Erasmus+

ATHENS LIFELONG LEARNING INSTITUTE

TEAM 4 excellence

SEAL CYPRUS

Strategic partnership to develop open educational resources for teaching digital citizenship

2019-3-RO01-KA205-078053

DIGCIT

D11 – Digital Citizenship "Health and Wellbeing" Course

Revision: v.1.1

Intellectual output	IO2 - Educational Materials for digital citizenship
Activity	Course Curriculum Development
Deliverable lead	Athens Lifelong Learning Institute, Greece
Due date	15 March 2021
Authors	Ourania XYLOURI
Abstract	This course addresses two elements of digital citizenship: the physical (health) and psychological wellbeing (wellness) of one's self while living and interacting in an ever-increasing digital technological world. Given the high frequency with which young people use technologies, particularly in their personal lives, health and wellbeing are areas that need to be addressed in the interest of developing well-balanced future citizens. In the physical health aspect, the ergonomics of the workstation have become more important than ever, given the frequency and duration of use of technologies. Some injuries that can be avoided include repetitive stress injuries, eyestrain and carpal tunnel syndrome. Simple solutions such as table height or screen placement can preclude health problems. In the psycho-social aspect, it is recognized that a cultural shift is occurring with respect to what is expected of individuals in social settings, in relationships with others through and with technology (e.g social media, online forums, etc.). The nature of highly mobile and highly connected technology places pressure on the nature of social connectedness and behaviour, both physical and virtual. Among the most alarming facts related to youth's health and wellbeing is the rising percentage of young people suffering from some type of media addiction. They exhibit compulsive behaviour that interferes with their normal living and causes high levels of stress on family, friends and their work environment (Young, 2009). Achieving balance has become a very relevant characteristic of healthy citizens.

	Participants in this course will be able to identify specific proven ergonomically solutions to put into place that offset these key digital health issues and why they work. They will also realize the key digital wellness issues which arise from overusing technology and why they occur.
Keywords	Model course; digital citizenship; course plan; health and wellbeing; digital health; digital wellness; information processing; ergonomics; social media; mental health; media diary; media addictions; digital stress; digital footprint; online sharing; misinformation; disinformation

Acknowledgement

This paper has received funding from the European Commission under Grant Agreement—2019-3-RO01-KA205-078053, ERASMUS+ Strategic Partnership project "Strategic partnership to develop open educational resources for teaching digital citizenship".

Disclaimer

„The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

Copyright notice

© 2020 - 2022 DIGCIT Consortium

The license **Attribution CC BY** lets others distribute, remix, adapt, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licenses offered. Recommended for maximum dissemination and use of licensed materials.

Contents

Introduction 6
1. Module 1 – Introduction to digital health and wellbeing 8
Digital health and wellbeing 8
Human interactions 9
Information processing capacity 10
Ergonomics 11
Ethical considerations and risks 13
Exercise 1: A media plan 13
2. Module 2 – Ergonomics 16
Ergonomics: An introduction 16
Health risks 17
Common mistakes 18
Some solutions 20
Exercise 2: What's wrong? 22
3. Module 3 – Mental health and media 24
Introduction 24
Social media and mental health 24
Signs that social media is impacting your mental health 29
Modifying social media use to improve mental health 29
Exercise 3: A Media diary 31
4. Module 4 – Media addictions 34
Media addictions: The meaning and nature of media addictions 34
The five types of media addictions 35
The reasons behind media addictions 36
Symptoms and diagnosis of media addictions 37
Ways to address and combat media addictions 38
Links to services providing support to addicted people 39
Exercise 4: Dealing with digital stress 40
5. Module 5 – The healthy use of digital tools and online devices 42
Digital footprints 42
Online sharing 44
Online Privacy 46
Misinformation, disinformation and fake news 47
Exercise 5: Filling in your footprint 50

6. Assessment quizzes 52
7. References 56
Appendix 58
Assessment quiz check sheets 58
Instructional design review checklist for youth workers 59
Feedback on topic for students 60

Introduction

Two of the most important aspects of digital citizenship are the physical (health) and psychological wellbeing (wellness) of one's self while living and interacting in an ever-increasing digital technological world. Given the high frequency with which young people use technologies, particularly in their personal lives, health and wellbeing are areas that need to be addressed in order to develop well-balanced future citizens.

In the physical health aspect, excessive use of technology can bring about a range of physical issues from postural distress and lack of exercise to disrupted life balance. Moreover, the ergonomics of the workstation have become more important than ever, given the frequency and duration of use of technologies. Some injuries that need to be addressed and avoided include repetitive stress injuries, eyestrain and carpal tunnel syndrome. Simple solutions such as table height or screen placement or placing limits on the time spent in front of a screen can preclude health problems.

In the psychosocial aspect, it is recognized that a cultural shift is occurring with respect to what is expected of individuals in social settings, in relationships with others through and with technology (e.g. social media, online forums, etc.). The nature of highly mobile and highly connected technology places pressure on the nature of social connectedness and behaviour, both physical and virtual. Among the numerous ethical considerations and risks related to mental and psychological health and well-being, perhaps the biggest ones are linked to impoverished interactions between humans and the progressively reduced "field of vision" imposed by the filter bubble search engines build around a person through profiling. Both limit the development of openness to cultural diversity and the capacity to engage with other beliefs and attitudes. Self-esteem is another aspect to be taken into consideration, especially since it is closely linked to the use of social media and the "likes" one might get for their photographs or their posts. Finally, among the most alarming facts related to youth's health and wellbeing is the rising percentage of young people suffering from some type of media addiction. They exhibit compulsive behaviour that interferes with their normal living and causes high levels of stress on family, friends and their work environment (Young, 2009). Achieving balance has become a very relevant characteristic of healthy citizens.

Balance is truly the operative word in the digital domain of health and well-being and necessitates a blend of the full range of digital competences, from values to attitudes, and skills to knowledge and critical understanding. Balance is something that young people need to develop by learning to listen, observe, show empathy and co-operate. Well-being is built to a large degree on how young people perceive themselves through the eyes of others, and hence on interaction with others.

Why is this course needed?

"Over the past quarter of a decade, European society appears to have acknowledged health and well-being as essential elements in digital citizenship and is striving to upgrade education systems accordingly. This requires taking into account the social, physical, cognitive and psychological aspects of learners rather than just performance-related aspects. It underlines the importance of focusing on the individual as well as the group"[1]

This course on digital health and wellbeing is necessary for a number of reasons, as presented below:

- because the impact of technologies and digital services on young people's mental, physical and emotional health is enormous

[1] Digital Citizenship Education Handbook, 2019, Council of Europe

- because numerous mental health issues are directly connected to the use of digital technologies
- because youth's social wellbeing, including aspects such as maintaining healthy relationships and participating in communities is highly affected by their use of the media and the social networks
- because many physical problems diagnosed among the youth are linked to their digital habits
- because there is a constant need to develop critical thinking among the population of youth on the ways they act, interact and counteract in online environments
- because the concepts of digital health and wellbeing are still underestimated or ignored for many young people.

This course transforms the lessons through exploration and willingness to discover new concepts, new ideas and new ways of thinking.

This is intended to be a course that provides trainees with knowledge, skills and competences in order to achieve a healthy and balanced life between their online and offline activities.

1. Module 1 – Introduction to digital health and wellbeing

Upon completing this module, you will be able to:

- Identify the means to check your own digital habits
- Define the basic concepts related to digital health and wellbeing
- Give examples of good and dangerous digital habits
- Relate digital habits to mental or physical health problems
- Recognize your own digital habits and critically think about your online behaviours
- Compare and evaluate different digital habits and conclude on the optimal ones
- Relate digital health and wellbeing to the concept of digital citizenship

Digital health and wellbeing

According to the World Health Organization[2], "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition".

On the other hand, wellbeing as defined by the Oxford English Dictionary[3] is "the state of being comfortable, healthy, or happy." However, it is important to realize that wellbeing is a much broader concept than moment-to-moment happiness. While it does include happiness, it also includes other things, such as how satisfied people are with their life as a whole, their sense of purpose, and how in control their feelings. In this respect, the New Economics Foundation describes wellbeing as the following: 'Wellbeing can be understood as how people feel and how they function, both on a personal and a social level, and how they evaluate their lives as a whole"[4].

Question:

These definitions do not include the term "digital". Do you think they also cover the concepts of digital health and wellbeing? If not, what would you add?

In order to answer the question, let us keep in mind the definition of digital health and wellbeing provided by JISC[5], defining digital health and wellbeing as "the capacity to look after personal health, safety, relationships and work-life balance in digital settings". Some aspects related to digital health and wellbeing also include:

- using personal digital data for positive wellbeing benefits.
- using digital media to foster community actions and wellbeing.
- acting safely and responsibly in digital environments.
- managing digital stress, workload and distraction.
- acting with concern for the human and natural environment when using digital tools.

[2] https://www.who.int/about/who-we-are/constitution
[3] https://www.lexico.com/definition/well_being
[4] New Economics Foundation (2012) Measuring Wellbeing: A guide for practitioners, London: New Economics Foundation.
[5] https://www.jisc.ac.uk/

- balancing digital with real-world interactions appropriately[6].

It is obvious that digital health and wellbeing cover wide-ranging topics and challenges, from the appropriate, timely use of technology and the impact of unreliable or distorted information to the way technology is modifying interactions within families or social groups and between citizens in their everyday life. In order to better understand digital health and wellbeing, we need to have a look at the following different topics which are closely related to these concepts, providing opportunities as well as challenges to everyone's health and wellbeing:

Human interactions

With the proliferation of technologies, one would think that these technological and digital tools would be used to gain an understanding of other cultures and other people, meet people all over the world, maintain and strengthen familial relationships, communicate effectively with others, and help people to become more socially skilful. However, some technological advances cause people to be distracted, overly stressed, and increasingly isolated. Many people are involved in an abundant number of relationships through technology, but sometimes the quantity of these associations leaves people feeling qualitatively empty[7]. Obviously, technology has had a profound impact on what it means to be social and what it means to interact with others in a healthy manner.

An important factor affecting human interactions in the digital world is the "language" used in these interactions. While online technology force-feeds our brain with a constant diet of fast-moving sounds and images, it simultaneously reduces our capacity of people to "read between the lines". Nonverbal cues such as facial expressions and body language are essential facets of communication that facilitate comprehension and lessen the risk of misunderstanding. Taking into account that a large part of today's interactions, especially among teenagers, is reduced to the bare bones of sound, icons and short-cut language, it is certain that the risks of miscommunication and misunderstanding are higher, thus affecting our interactions online.

Emoticons [**:)**] and emojis [ ], for example, have become so firmly ensconced in day-to-day communication streams that in 2015, Oxford Dictionaries even chose an emoji known as the "Face with Tears of Joy" as its Word of The Year. On the other hand, they offer little scope for sensing meaning or discerning patterns in communication, which are so important in developing digital citizenship competences such as listening and observing skills, and empathy. In a nuanceless world, a joke or misunderstanding can very easily escalate into conflict, violence and bullying. At another level, when children are unable to see the nuanced version of a situation, it is much more difficult for them to hypothesize about the consequences of their own actions.

Reflection corner

1. Think about how technology affects your social life and social skills. Think about television, the Internet and social media. What would you say?

2. Swiss tennis player Roger Federer uses emojis frequently on Twitter and has even described an entire day in 43 emojis. Try to describe your day so far with emojis and emoticons. What is the result? Does it really reflect your day? If not, why not?

---

[6] https://thewellbeingthesis.org.uk/foundations-for-success/digital-wellbeing-how-to-have-a-healthy-digital-diet/
[7] https://us.humankinetics.com/blogs/excerpt/technology-can-have-positive-and-negative-impact-on-social-interactions

3. Think of the different meanings the following three emojis have for an older person and a teenager:

a. 🍆 (banned from the Instagram)

b. 🍑

c. 🙏

How their communication and interaction would be affected? Why?

Information processing capacity

Today's over-rich diet of sounds and images has effects on young people's well-being, in particular related to their information-processing capacity. Data often comes from unreliable sources and, on top of this, internet users are consistently profiled by search engines to filter out any information that does not "fit" their profile. Because of this, young people are frequently denied the means of exploring multi-perspective views on issues and can be rapidly polarized towards extreme views, as we are seeing with the rise of hate speech, cyber bullying and poorly informed excessive standpoints[8].

A substantial body of research empirically investigating the multiple potential pathways through which digital technology and the Internet could affect our brains' structure, function, and cognitive development has been emerging. Specifically, the bulk of existing research can be separated into three specific domains, examining how the internet is affecting:

a) attention (i.e., how the constant influx of online information, prompts and notifications competing for our attention may encourage individuals to displace their concentration across multiple incoming media streams – and the consequences this may have for attentional-switching versus sustained-attention tasks);

b) memory and knowledge (i.e., the extent to which we rely on the Internet as our primary informational resource, and how unique properties of online information access may affect how we process new memories and value our internal knowledge);

[8] Digital Citizenship Education Handbook, 2019, Council of Europe

c) social cognition (along with the personal and societal consequences of increasingly embedding our social networks, interactions, and status within the online world)[9].

To complicate the issue further, researchers are showing through Magnetic Resonance Imaging that even moderate use of online technology can result in the overdevelopment of certain parts of the brain and slow down development in other parts. They are pointing to consequent underdevelopment of the prefrontal lobe, which is said to be limiting the capacity of young people to project the outcomes of actions. Kindergarten teachers and child psychologists are also voicing concern that online technology is having a considerable impact on developmental phases in early childhood, markedly prevalent in reduced concentration spans and delayed development of certain motor coordination skills.

Reflection corner

1. Have you ever heard the expression "brain fog"? The brain is an amazing tool, but it has its limits. We often exceed what our brains can process and in so doing reach something called cognitive overload, which means we hit a mental wall that leads to irritability and poor thinking and impacts not only our decision making but our productivity and ability to stay motivated as well[10]. Have you ever experienced a "brain fog"? What caused it? What were the effects?

2. Try to find two contradicting articles/ videos/ pieces of information on the same issue. For example: "Vaccines can cause cancers" and "Vaccines help prevent cancers". Why is it important to read both articles? Would you discard one of them as being "not reliable" or even "fake"? Why?

3. The typical cell phone user touches his or her phone 2,617 times every day, according to a study by research firm Dscout. How is this connected to the amount of information we receive every day? How many times do you touch yours? Be truthful!

Ergonomics

Besides the impact on health and well-being of issues such as bullying and hate speech, excessive use of technology can bring about a range of physical issues from postural distress and lack of exercise to disrupted life balance. Some other physical risks from the use of technology include eyestrain, sleep problems and obesity. These problems are further exacerbated by the plentiful but often misleading health information to be found online, requiring the sharpest of critical thinking skills to sift out the true from the false.

Moreover, excessive use of technology and digital media makes us more vulnerable to their addictive nature. Internet addiction is an umbrella term covering a range of behaviours and impulse-control problems involving the internet, personal computers, and mobile technology. It can be in the form of a gaming disorder, social media addiction, screen addiction, and so on. There are many effects of internet addiction and technology addiction. Some mental effects include depression, anxiety and sudden mood changes while physical effects include headaches, insomnia and unhealthy nutrition[11].

The current focus on beauty and body in today's era of selfies and likes affects young people's perception of physical health through the comparisons they make with other users, mainly on social

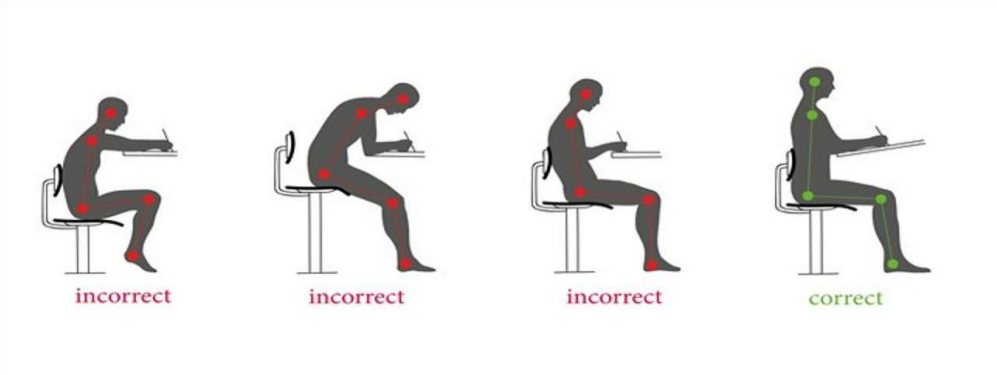
[9] Firth, Joseph et al. "The "online brain": how the Internet may be changing our cognition." World psychiatry : official journal of the World Psychiatric Association (WPA) vol. 18,2 (2019): 119-129. doi:10.1002/wps.20617
[10] https://www.projectmanager.com/blog/prevent-information-overload
[11] https://www.mentalup.co/blog/causes-losses-and-prevention-of-technology-addiction

media[12]. This can rapidly lead young people to seek out nutritional tips that may accentuate eating disorders, such as anorexia, or join groups of "like-minded" people that lead them into other risky behaviours. These challenges are likely to have a lasting effect on a person's social, professional and emotional life, and hence on their role as an active citizen.

Reflection corner

1. Internet addiction encompasses different types of dependencies that can develop with the overuse of the internet or technology in general. Can you name a few? Which one is the most serious or dangerous? Why? Which one is easier to overcome? Why so?

2. Here are some computer postures:



Can you explain why the three ones are labelled as "incorrect" and only the far right one as "correct"? Which of the above postures best describes your posture when using a computer?

3. How would you comment on the following picture?

[12] Dibb, Bridget. "Social media use and perceptions of physical health." Heliyon vol. 5,1 e00989. 8 Jan. 2019, doi:10.1016/j.heliyon.2018.e00989

What is unhealthy about our "need to be told we're beautiful" through our selfies? Any other reasons why people constantly upload their selfies online? Have many have you posted today?

Ethical considerations and risks

As already described, among the numerous ethical considerations and risks related to health and well-being, perhaps one of the biggest ones is linked to impoverished interactions between people. If you have ever been talking to a friend who has pulled their phone out to scroll through Instagram or Facebook, you might have wondered what social media is doing to relationships and human interactions. Even the mere presence of a phone can interfere with our interactions, particularly when we are talking about something meaningful. On the other hand, the increasing number of fake profiles on social media platforms has caused users to feel distrust, suspicion or anxiety when interacting with others online, having a negative effect on the quality and the depth of their interactions.

Another ethical consideration related to the use of digital tools and platforms involves the progressively reduced "field of vision" imposed by the filter bubble search engines build around a person through profiling. This limits the development of openness to cultural diversity and the capacity to engage with other beliefs and worldviews. Radicalization can be one of the side effects if a young person has not developed sufficient analytical and critical thinking skills. In fact, "violent radicalization and extremism are a threat to security, the sense of security, people's wellbeing and the sense of participation, democracy as well as human and fundamental rights"[13].

Self-esteem is another aspect to be taken into consideration. Social media is, to a large extent, built on the selfie trend to take and upload photos of ourselves and our activities, anywhere and at any time. This erodes an individual's knowledge and understanding of self. By portraying ourselves to get a maximum number of likes, "real" lives are tweaked according to popular ideals and trends, diversity is reduced and, rather than shaping the internet, society becomes shaped by it.

Exercise 1: A media plan

Objective:

- reflect on the time you spend online
- understand the impact of extensive media use on health and wellbeing
- realize the social or learning value of your online activities
- formulate feedback to your colleagues

Duration: 20 minutes

Tools: pen, piece of paper/forum

Methods: classroom discussions, description, comparison,

Description of the exercise: During this exercise, you will identify media and information that surround you on a normal day. Then, you will compare it with the media your colleagues consume and the time spent on these media. Finally, you will jointly come up with some advice on the use of online media in order to promote a healthy online lifestyle.

Tasks:

[13] https://rm.coe.int/finland-action-plan-2019/16809ea382

- Remember yesterday. Think about the online media you used, the activities you did while using them and the time spent on each activity. The following Table can help you record the data requested:

Date:			
Type of media	What did I do?	How much time did I spend doing it?	Comments

- Present your Table to your colleagues
- Listen to your colleagues as they present theirs and write down comments, similarities and differences in the findings.
- Notice: has everyone included those minutes/ seconds they checked their smartphones "unconsciously"? (For example, when waiting for the bus, while doing something else, or when they checked for messages)
- After all the trainees have presented their Tables, what conclusions can be drawn regarding the time spent on media and the patterns of their use?
- With your colleagues write down some pieces of advice you would give to someone to promote their health and wellbeing when being online. What would be your most important piece of advice to them?
- Reflect on the list of advice you all made. Is there any piece of advice on the list which you would definitely give to yourself? Which one(s)?

Lessons learned: the time we spend on media and the activities we do while online have a direct effect on our health and wellbeing. It is advisable to keep track of our own behaviours and practices, in order to amend them, in case they do not promote our health and wellbeing.

Extension: You can keep a record for a week/ month to check if you have followed some of the advice you recorded with your colleagues. Was it a difficult task to change your online patterns? why?

Recommendation: The time we spend online and the activities we do while online can be modified if we want. Try to replace 1/5 of the time you spend online with another offline activity.

Forum

Objectives:

- Identify media use around you
- understand the factors which influence health and wellbeing

- give feedback

You are invited to describe/ write down what you already know about the topic "Digital health and wellbeing" in the forum Know-Want-Learned.

Tasks:

- Share your media habits, lifestyles and preferences with your classmates
- Share the advice you would give to yourself on the use of digital media
- Reply twice to your colleagues

2. Module 2 – Ergonomics

Upon completing this module, you will be able to:

- Understand how to prevent and eliminate pain, injuries or discomfort when using their computer
- Realize the aspects which facilitate the creation of an optimal environment for working ergonomically
- Explain why maintaining an ergonomically safe environment is important for physical health
- Demonstrate the procedures to keep the workstation environment safe and ergonomically correct

Ergonomics: An introduction

Many people spend hours a day in front of a computer without thinking about the impact on their bodies. They physically stress their bodies daily without realizing it by extending their wrists, slouching, sitting without foot support and straining to look at poorly placed monitors. These practices can lead to cumulative trauma disorders or repetitive stress injuries, which create a life-long impact on health. Symptoms may include pain, muscle fatigue, loss of sensation, tingling and reduced performance.

Ergonomics is a field of study that attempts to reduce strain, fatigue, and injuries by improving product design and workspace arrangement. "Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance."[14]

The terms 'ergonomics' and 'human factors' can be used interchangeably, although 'ergonomics' is often used in relation to the physical aspects of the environment, such as workstations and control panels, while 'human factors' is often used in relation to the wider system in which people work.

Ergonomics, therefore, refers to all workspace arrangements (at home or the workplace). More specifically, computer ergonomics addresses the ways to optimize your computer workstation to reduce the specific risks of computer vision syndrome, neck and back pain, carpal tunnel syndrome as well as other disorders affecting the muscles, spine, and joints.

The benefits of implementing the proper ergonomics techniques include the improvement in productivity since by designing a job to allow for good posture, less exertion, fewer motions and better heights and reaches, the workstation becomes more efficient. Moreover, ergonomics improves quality. Poor ergonomics leads to frustrated and fatigued workers that do not do their best work. When the job task is too physically demanding on the worker, they may not perform their job as they were trained. In the context of a company, ergonomics improves employee engagement. Employees notice when the company is putting forth their best efforts to ensure their health and safety. If an employee does not experience fatigue and discomfort during their workday, it can reduce turnover, decrease absenteeism, improve morale and increase employee involvement. Finally, ergonomics creates a better safety culture. Ergonomics shows a company's commitment to safety and health as a core value[15].

[14] https://iea.cc/what-is-ergonomics/
[15] https://kimekaergonomicpodcast.wordpress.com/2015/05/19/assure-model-lesson-plan-ergonomics-2/

Health risks

Working at a computer for prolonged periods can be harmful to your overall health when you do not monitor your working environment. An unhealthy workstation set-up can cause a range of injuries and health issues, including dry eyes, neck, and backache. In some cases, it can even lead to poor digestion, headaches, repetitive stress injury and vision problems. Let us look at the most common health problems caused by poor computer ergonomics:

- COMPUTER VISION SYNDROME

Computer vision syndrome refers to a group of eye and vision-related problems that result from prolonged computer use. Symptoms of computer vision syndrome include the following:

- dry eyes: Just like other digital devices, computers can cause dry eyes, as they can affect the way we blink. According to the University of Iowa Hospitals and Clinics, a person blinks up to 66 per cent less frequently while using a computer. If you are blinking less, tears on your eyes have more time to evaporate, resulting in red and dry eyes. This can even cause blurred vision in some cases.
- eyestrain: It can occur when we force our eyes to focus in an unhealthy, unnatural position. For example, if our monitor is placed at an awkward angle or too low, our eyes are forced to stay in an unnatural position. These awkward postures strain the eye muscles and can cause pain and aching.
- blurred vision: It is commonly caused by looking at a screen that is too bright or sitting too close to a monitor. It can also be caused by looking at a screen for long without adequate breaks.

- HEADACHES

Headaches are a common complaint from people who spend prolonged periods sitting at a computer. Headaches can occur due to poor lighting in your workspace, glare on the screen, and improper computer brightness and colour. Headaches can also be caused by eyestrain.

Our eyes are more comfortable resting at a point that is further away from the screen. When we look at a computer, our eye muscles have to constantly readjust focus. When there is a conflict between where our eyes want to focus and where we force them to be focused can lead to strain and the eyes become tired. This can often be the cause of our office headaches.

- NECK AND BACK PAIN

Computer users often adapt to a certain position to see the screen better. Straining your muscles to look at a computer is a common cause of back and neck aches, as your body is forced into an unnatural position. This is particularly a problem when people find themselves looking down to see their computer screen rather than adjusting the monitor to match their eye level.

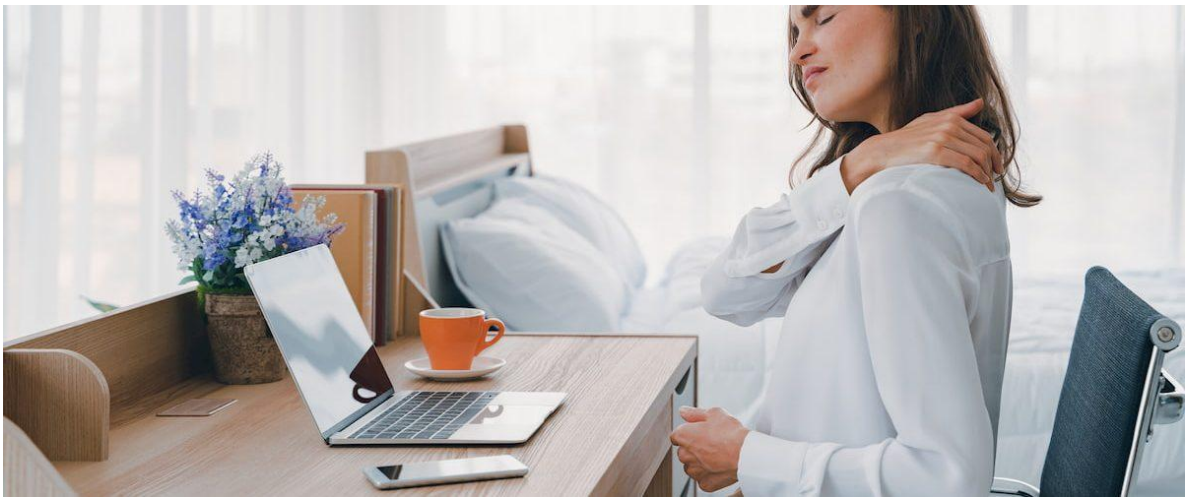
- CARPAL TUNNEL SYNDROME

Carpal tunnel is a condition that causes pain, numbness and tingling in the hand and arm. It causes when one of the major nerves in the hand – the median nerve, is squeezed or compressed as it travels through the wrist. This is commonly caused by the wrong mouse and keyboard placement.

Reflection corner

1. Have you ever experienced any of the aforementioned health problems? What were their causes? How did you overcome these problems?

2. She is in pain; her neck is sore. What advice would you give to this person? Check the environment, her posture, and the position of her computer.



Common mistakes

When working on the computer, some of the most common, detrimental ergonomics-related mistakes are also the following[16]:

- **ignoring ergonomics**: when working from home (or in a café), people are likely to ignore ergonomics. Even though the side effects of a bad desk setup may eventually be treated, many health problems will remain if not treated correctly. If you ignore ergonomics, you risk suffering from eyestrain and irritation, back injuries, soft tissue injuries throughout your body, and nerve compression syndromes (like carpal tunnel).
- **using 'ergonomic' products**: Gel wrist rests, split keyboards, futuristic chairs, “alien-like” mice. At the risk of making you stick out among your peers, these alternative accessories promise a healthier, more comfortable work life. The truth is that "ergonomic" products are often far from that, and because the word is not regulated, manufacturers can slap it on products that may even do more harm than good. In fact, current research reveals that split keyboards -- and a number of other funky-looking choices -- offer little to no advantage over the flat variety, explains Hedge. Likewise, mice that force an extended wrist could contribute to the soft tissue injuries you were trying to avoid in the first place.
- **dismissing early warning signs**: eyestrain, an aching back, weak wrists, and leg pain are all side effects of a poorly arranged workstation, often dismissed as the common issues that come with a desk job. Numbness and slight pain are precursors to chronic health issues. For example, when sitting for prolonged periods of time, unexpected pressure is placed on

[16] https://www.cnet.com/how-to/wake-up-call-are-you-making-these-five-ergonomics-mistakes/

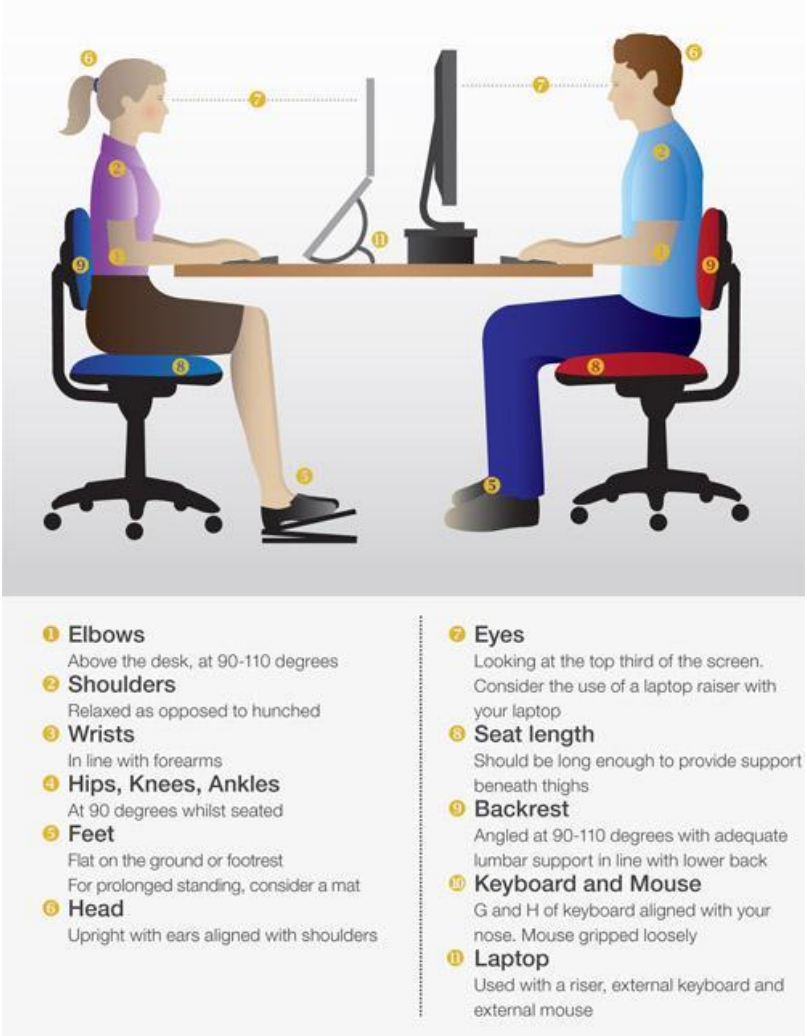
nerves and tissue, causing a chain reaction. Numbness is your body telling you that there is something wrong. You should not ignore it; the moment you detect numbness or pain, get up and move. Then, of course, contact your doctor.

- **buying into non-traditional desks**: with the abundance of research supporting the detrimental health costs of prolonged sitting, it's no surprise workers are scrambling to find other options. Beyond stand-up desks, medicine ball chairs and treadmill desks have also been suggested as solutions. You will find dozens of blog posts and magazine articles citing the amazing life difference a standing or treadmill desk makes, but research has yet to support that such configurations are truly ideal. Though standing desks have received quite the hype, research has shown that it greatly increases the risk of carotid artery disease and varicose veins. Likewise, prolonged standing can also diminish our fine motor skills. The ideal setup is instead one that allows for both sitting and standing.
- **relying on ergonomics**: even if your desk setup is optimized to the point of perfection, that unavoidable prolonged sitting will wreak havoc on your body. Slow metabolism, a lower life expectancy, and issues related to poor circulation are still possibilities for those with the most optimized desks. When working in front of the computer you should set up and move at least every hour. If you need help remembering, set an hourly alarm on your phone or computer to remind you to take a walk.

Reflection corner

1. Do you think you are making some of the aforementioned mistakes? What would you consider a mistake regarding your computer ergonomics? How can you correct it?

2. Look at the correct workstation set up, in the following picture. Does it depict your usual practices when working in front of the computer? What is different?



Some solutions

In order to set up your workstation correctly, consideration should be given to the:

- accessories required to operate properly
- layout of equipment on the desk
- location of furniture in the room.

- Keyboards

Place the keyboard in a position that allows the forearms to be close to the horizontal and the wrists to be straight. That is, with the hand in line with the forearm. If this causes the elbows to be held far out from the side of the body then re-check the work surface height. Some people prefer to have their wrists supported on a wrist rest or the desk. Be careful not to have the wrist extended or bent in an up position.

- Chairs

Adjust the seat tilt so that you are comfortable when you are working on the keyboard. Usually, this will be close to horizontal but some people prefer the seat tilted slightly forwards. Your knees should be bent at a comfortable angle and greater than 90º flexion. If this places an uncomfortable strain on

the leg muscles, or if the feet do not reach the floor, then a footrest should be used. The footrest height must allow your knees to be bent at 90º; the height of the footrest may need to be adjustable. Finally, adjust the backrest so that it supports the lower back when you are sitting upright.

- Phones

Avoid cradling the phone between your head and shoulder when answering calls. If you need to use your computer at the same time, use a headset or the phone's hands-free/speaker-phone capabilities if the environment is suitable.

- Monitors

Set the eye-to-screen distance at the distance that permits you to most easily focus on the screen. Usually, this will be within an arm's length. Set the height of the monitor so that the top of the screen is below eye level and the bottom of the screen can be read without a marked inclination of the head. Usually, this means that the centre of the screen will need to be near shoulder height. Your eyes should be level with the tool bar. People who wear bifocal or multi-focal lenses will need to get a balance between where they see out of their lenses and avoid too much neck flexing. The height of the monitor can be adjusted using a monitor riser.

- Desks

Adjust the height of the work surface and/or the height of the chair so that the work surface allows your elbows to be bent at 90º, forearms parallel with the floor, wrist straight, shoulders relaxed. Place all controls and task materials within a comfortable reach of both hands so that there is no unnecessary twisting of any part of the body. Most people prefer the document holder to be between the keyboard and the monitor.

- Lighting

Place the monitor to the side of the light source/s, not directly underneath. Try to site desks between rows of lights. If the lighting is fluorescent strip lighting, the sides of the desks should be parallel with the lights. Try not to put the screen near a window. If it is unavoidable, ensure that neither the screen nor the operator faces the window. If the monitor is well away from windows, there are no other sources of bright light and prolonged deskwork is the norm, use a low level of service light of 300 lux. If there are strongly contrasting light levels, then a moderate level of lighting of 400-500 lux may be desirable.

- Using a mouse

A well-designed mouse should not cause undue pressure on the wrist and forearm muscles. A large bulky mouse may keep the wrist continuously bent at an uncomfortable angle. Pressure can be reduced by releasing the mouse at frequent intervals and by selecting a slim-line, low-profile mouse. Keep the mouse as close as possible to the keyboard, elbow bent and close to the body.

- Posture while typing

Good posture is essential for all computer users. You should adopt a natural and relaxed position, providing an opportunity for movement, from which you can assume a number of alternative positions.

The maintenance of a fixed posture for long periods is tiring and increases the likelihood of muscular aches and pains. In addition, long periods of repetitive movement and sustained visual attention can

also give rise to fatigue-related complaints. It is therefore recommended that operators take regular postural/stretching breaks to reduce intense periods of repetitive movement.

Finally, you should change your posture at frequent intervals to minimize fatigue. Avoid awkward postures at the extremes of the joint range, especially the wrists. Take frequent short rest breaks rather than infrequent longer ones. Avoid sharp increases in work rate. Changes should be gradual enough to ensure that the workload does not result in excessive fatigue.

Exercise 2: What's wrong?

Objective:

- reflect on some common mistakes related to computer ergonomics
- understand the impact of wrong workplace setup on health
- adjust own practices and provide advice to others regarding computer ergonomics

Duration: 20 minutes

Tools: pen, piece of paper, pictures / forum

Methods: classroom discussions, description, comparison,

Description of the exercise: During this exercise, you will be shown some pictures related to computer ergonomics. For each picture, you should decide whether it is the correct way to work on a computer or not. In case of pictures reflecting problematic postures, workstations, etc, provide advice to amend them.

Tasks:

- Look at the following pictures and decide whether they depict wrong or right workstation ergonomics:

a. b.

c.

d.

e.

f.

- For those pictures depicting work positions, lighting, chairs, etc. suggest solutions.
- Compare your answers and suggestions with the ones made by your colleagues. Are they different? How?

Lessons learned: many health problems are related to the ways we work on our computers. There are many ways to change our workstations to achieve better health, without necessarily spending much money!

Forum

Objectives:

- to recognise potential physical dangers when using the computer
- describe preventive methods of dealing with potential hazards
- apply knowledge and skills to real-life situations.

You are invited to describe/ write down what is the best way to use the following workstation items. Imagine you provide advice to a friend who wishes to set up his/ her workstation correctly:

- a chair
- a mouse
- a laptop
- a desk light
- a footrest.

Tasks:

- Write down your answers/ advice
- Share them with the rest of the participants

3. Module 3 – Mental health and media

Upon completing this module, you will be able to:

- Realize and assess their own behaviours when using the social media
- Recognize and identify behaviours which can be considered problematic in the use of social media
- Describe how social media, online gaming and technology can impact mental and emotional health
- Analyse the factors which lead to stress and anxiety in relation to the use of social media
- Design an alternative pattern for their use of social media, when they feel that it is necessary
- Determine the ways to achieve "digital detox"

Introduction

Mental health is defined as a state of well-being in which people understand their abilities, solve everyday life problems, work well, and make a significant contribution to the lives of their communities. Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

The phrase "mental health" is used every day, from being the subject of news reports to coming up in casual conversation. Mental health influences your thoughts and actions, while the status of your mental health can affect many different areas of your life, from your ability to manage stress to how well you maintain your relationships with others. There is a wide range of symptoms associated with mental health problems, including severe changes in mood, feeling a lack of energy, overeating or under-eating, insomnia, excessive sleeping, and increased use of drugs and alcohol.

On the other hand, emotional health is an important part of overall health. It is about having both an awareness of your emotions and the ability to manage and express those feelings in an age-appropriate manner. People who are emotionally healthy are in control of their thoughts, feelings, and behaviours. They are able to cope with life's challenges. They can keep problems in perspective and bounce back from setbacks. They feel good about themselves and have good relationships.

Being emotionally healthy does not mean you are happy all the time. It means you are aware of your emotions. You can deal with them, whether they are positive or negative. Emotionally healthy people still feel stress, anger, and sadness. However, they know how to manage their negative feelings. Research shows that emotional health is a skill which needs to be developed in order to achieve wellbeing and happiness.

Social media and mental health

Social media has recently become part of people's daily activities; many of them spend hours each day on Twitter, Instagram, Facebook, and other popular social media. Thus, many researchers and scholars study the impact of social media and apps on various aspects of people's lives. Moreover, the number of social media users worldwide in 2019 is 3.484 billion, up 9% year-on-year. There is no denying that social media has now become an important part of many people's lives. Social media has many positive

and enjoyable benefits, but it can also lead to mental health problems[17]. Thus, there are both positive and negative implications for our use of this technology. Here we identify some of the pros and cons of social media use, including the effects it can have on our mental health.

- *a. Pro: Raises awareness*

One of the most powerful benefits of social media is the ability for a person or organization to raise awareness of an important issue to a mass audience quickly. Every day, more people are using social media to promote change and make a positive difference around the world. An example of this occurred recently when an advertising company posted a photo of an egg on Instagram with the sole aim to become the most liked photo ever on the platform. In just nine days, the photo did in fact achieve this milestone, receiving more than 52 million likes and 8.6 million followers to date. Once this world record was achieved and had made news around the world, the egg 'cracked under pressure' to raise awareness about mental health and encourage others to talk if they are struggling. Since the campaign launch, the company behind the stunt have set up a website with useful mental health links for countries all around the world, encouraging help-seeking behaviour.

Reflection corner

This is the very popular Instagram picture with the egg. What does it say about the ways people use social media? Would you use this picture to raise awareness on an important global issue? Which one and why?

- *b. Con: Promotes fake news*

Despite many social media platforms' efforts to combat fake news, this has not stopped the global sharing of misinformation. Anyone with a computer or a smartphone and an internet connection has the opportunity to share information with a potentially massive audience and can do so from an anonymous profile. When used for good, social media has the potential to create powerful positive change but when used with bad intentions, it can have equally bad repercussions. In relation to mental

[17] Karim F, Oyewande AA, Abdalla LF, Chaudhry Ehsanullah R, Khan S. Social Media Use and Its Connection to Mental Health: A Systematic Review. Cureus. 2020;12(6):e8627. Published 2020 Jun 15. doi:10.7759/cureus.8627

health, fake news can cause stress and anxiety and intense feelings of mistrust and disbelief, by creating a constant questioning of one's critical thinking and cognitive skills.

Reflection corner

"Fake news travel quicker than real news". Why is that so? Why do people believe in fake news? What advice would you give to someone in order to avoid and discern fake news?

- *c. Pro: Can combat loneliness*

We are social beings, with an inbuilt need to interact, socialize and connect with one another. Social media is often blamed for replacing face-to-face interactions, however for some people, social media is a great platform to facilitate conversations with like-minded people and build friendships. For example, a recent survey found that senior citizens are using social media to stay connected to the outside world. The survey of 1,000 pensioners suggested that 7 in 10 respondents use Facebook to keep in touch and interact with family and friends.

- *d. Con: Can increase loneliness*

According to the social displacement theory, the more time we spend on social media, the less time we are likely to spend socializing face to face. Despite the fact that social media was designed to increase social interaction, a survey has found that people who spent more time on social media every day felt lonelier than those who checked their social media less. The survey also found that people who were on their phones more often were also more likely to feel anxious, depressed, lonely and isolated. Although there are countless ways that social media can bring people together, connecting digitally could be putting our face-to-face relationships at risk and ironically, increase feelings of disconnection and isolation. The more people prioritize social media interaction over in-person relationships, the more they are at risk for developing or exacerbating mood disorders such as anxiety and depression.

Reflection corner

How can you explain the contradiction of the aforementioned findings?

What about you? Do social media make you more sociable or lonelier? In what way?

- *e. Pro: Normalizes help-seeking behaviour*

It is not uncommon to feel reluctant to talk to family and friends about their health concerns. With so many health services available online today, social media provides a safe space where anyone can ask questions and access a myriad of health resources. From countless health forums, to free online counselling, there are many online services available to support people with questions or concerns. Social media has introduced countless methods of communication and information sharing to normalize help seeking behaviour. For those living in rural or remote locations, social media is also an inexpensive and accessible help seeking option, offering a wide range of resources to those who may not otherwise have access to these resources.

Reflection corner

What are the benefits when "normalizing help-seeking behaviour" through the use of the media and social media? Who benefits from this?

- *f. Con: Inadequacy about your life or appearance*

If not used properly, social media can have hazardous consequences on our mental health. When social media replaces face-to-face interactions, it can have the tendency to encourage anti-social behaviour. While the purpose of social media is to bring people together and connect us, when used incorrectly, it can often lead us to compare our lives with others, having a detrimental impact on our wellbeing. Social media is often referred to as a person's 'highlight reel', only showing the 'best bits' of someone's life. When we spend too much time consuming biased or misleading content, this can make us feel inadequate, often leading to severe psychological and physical issues including low self-esteem and negative body image.

Even if you know that images you are viewing on social media are manipulated, they can still make you feel insecure about how you look or what is going on in your own life. Similarly, we are all aware that other people tend to share just the highlights of their lives, rarely the low points that everyone experiences. However, that does not lessen those feelings of envy and dissatisfaction when we look at pictures or uploads representing those "happy" moments.

Reflection corner

Most of us have heard the term "body image" before. However, do we really know what that means? Take a minute and write down what you think is the proper definition of the term, body image:

1. What are some things that you think might affect a person's body image?

2. If a person has a negative body image, what does that mean? Think of an example of how negative body image might affect a person in their daily life. On the contrary, how might a positive body image influence a person?

Based on your answers, think about the different ways in which media and social media can affect our body image in a positive or negative way. Are they relevant to the image we create of our body and ourselves? How?

- *g. Pro: Creates and maintains relationships*

Social media has fundamentally changed the way we communicate with one another and has transformed the way that we make and maintain relationships. Not only is it a great tool for people who are looking to share their views and meet like-minded people with similar interests, but social media also provides us with the opportunity to stay in touch with people from all around the world. Social media has created opportunities for people who would otherwise never see each other to stay in touch and nurture relationships.

- *h. Con: Cyberbullying*

Although social media creates opportunities to meet like-minded people and foster positive relationships and discussions, common issues like cyber-bullying and trolling are huge contributing

factors to feelings of anxiety and depression. Cyberbullying is the use of technology to harass, bully and intimidate someone else and according to a recent study, cyberbullying is linked to depression and suicide among teenagers. With reports suggesting that cyberbullying is on the increase, unfortunately, it is an ongoing issue that is extremely difficult for social media platforms to mitigate.

Reflection corner

Social media can have a positive impact on relationships (g) or a very negative one (h). Which behaviours and practices lead to the first type of relationship and which to the second? What are the factors influencing the type of relationships we develop through the use of media and social media?

- *Con: FOMO*

Fear of missing out (FOMO) can keep you returning to social media over and over again. Even though there are very few things that cannot wait or need an immediate response, FOMO will have you believing otherwise. Perhaps you are worried that you will be left out of the conversation at school or work if you miss the latest news or gossip on social media? Or maybe you feel that your relationships will suffer if you don't immediately like, share, or respond to other people's posts? Or you could be worried you'll miss out on an invitation or that other people are having a better time than you. In sum, this fear is related to addictive behaviours and practices, leading to further mental health problems.

Reflection corner

1. Scrolling through our social media feeds feels like a harmless part of our daily lives. However, is it actually as harmless as seems? According to social media expert Bailey Parnell, our growing and unchecked obsession with social media have unintended long-term consequences on our mental health. As social media continues to become part of the fabric of modern life – the "digital layer" – abstinence is becoming less of an option. Bailey thinks it is high time we learned to practice safe social before it is too late.

What are the common triggers? How are they affecting you over time? How can you create a more positive experience online? Watch her talk titled "Is Social Media Hurting Your Mental Health?" and answer these questions.

https://www.youtube.com/watch?v=Czg_9C7gw0o&ab_channel=TEDxTalks

2. Look at the information included in the following box:

The vicious cycle of unhealthy social media use

Excessive social media use can create a negative, self-perpetuating cycle:

1. When you feel lonely, depressed, anxious, or stressed, you use social media more often—as a way to relieve boredom or feel connected to others.
2. Using social media more often, though, increases FOMO and feelings of inadequacy, dissatisfaction, and isolation.
3. In turn, these feelings negatively affect your mood and worsen symptoms of depression, anxiety, and stress.
4. These worsening symptoms cause you to use social media even more, and so the downward spiral continues.

How can this vicious circle break?

Signs that social media is impacting your mental health

Everyone is different and there is no specific amount of time spent on social media, the frequency you check for updates, or the number of posts you make that indicates your use is becoming unhealthy. Rather, it has to do with the impact time spent on social media has on your mood and other aspects of your life, along with your motivations for using it.

For example, your social media use may be problematic if it causes you to neglect face-to-face relationships, distracts you from work or school, or leaves you feeling envious, angry, or depressed. Similarly, if you are motivated to use social media just because you're bored or lonely, or want to post something to make others jealous or upset, it may be time to reassess your social media habits.

Indicators that social media may be adversely affecting your mental health include:

- Spending more time on social media than with real-world friends. Using social media has become a substitute for a lot of your offline social interaction. Even if you are out with friends, you still feel the need to constantly check social media, often driven by feelings that others may be having more fun than you.
- Comparing yourself unfavourably with others on social media. You have low self-esteem or negative body image. You may even have patterns of disordered eating.
- Experiencing cyberbullying. Or you worry that you have no control over the things people post about you.
- Being distracted at school or work. You feel pressure to post regular content about yourself, get comments or likes on your posts, or respond quickly and enthusiastically to friends' posts.
- Having no time for self-reflection. Every spare moment is filled with engaging with social media, leaving you little or no time for reflecting on who you are, what you think, or why you act the way that you do—the things that allow you to grow as a person.
- Engaging in risky behaviour in order to gain likes, shares, or positive reactions on social media. You play dangerous pranks, post embarrassing material, cyberbully others, or access your phone while driving or in other unsafe situations.
- Suffering from sleep problems. Do you check social media last thing at night, first thing in the morning, or even when you wake up in the night? The light from phones and other devices can disrupt your sleep, which in turn can have a serious impact on your mental health.
- Worsening symptoms of anxiety or depression. Rather than helping to alleviate negative feelings and boost your mood, you feel more anxious, depressed, or lonely after using social media.

Modifying social media use to improve mental health

If you or a friend of yours have experienced some of the signs indicating that social media use has a negative impact on your mental health, there are some steps to be taken in order to gain better control of this use and consequently achieve higher mental health and wellbeing levels:

Step 1: Reduce time online

A 2018 University of Pennsylvania study found that reducing social media use to 30 minutes a day resulted in a significant reduction in levels of anxiety, depression, loneliness, sleep problems, and FOMO. However, you do not need to cut back on your social media use that drastically to improve your mental health. The same study concluded that just being more mindful of your social media use can have beneficial results on your mood and focus.

While 30 minutes a day may not be a realistic target for many of us, we can still benefit from reducing the amount of time we spend on social media. For most of us, that means reducing how much we use our smartphones. The following tips can help:

- Use an app to track how much time you spend on social media each day. Then set a goal for how much you want to reduce it.
- Turn off your phone at certain times of the day, such as when you are driving, in a meeting, at the gym, having dinner, spending time with offline friends, or playing with your kids. Do not take your phone with you to the bathroom.
- Do not bring your phone or tablet to bed. Turn devices off and leave them in another room overnight to charge.
- Disable social media notifications. It is hard to resist the constant buzzing, beeping and dinging of your phone alerting you to new messages. Turning off notifications can help you regain control of your time and focus.
- Limit checks. If you compulsively check your phone every few minutes, wean yourself off by limiting your checks to once every 15 minutes. Then once every 30 minutes, then once an hour. There are apps that can automatically limit when you are able to access your phone.
- Try removing social media apps from your phone so you can only check Facebook, Twitter and the like from your tablet or computer. If this sounds like too drastic a step, try removing one social media app at a time to see how much you really miss it.

Step 2: Change of focus

Many of us access social media purely out of habit or to mindlessly kill moments of downtime. However, by focusing on your motivation for logging on, you cannot only reduce the time you spend on social media; you can also improve your experience and avoid many of the negative aspects. Next time you go to access social media, pause for a moment and clarify your motivation for doing so. For example:

- Are you using social media as a substitute for real life? Is there a healthier substitute for your social media use? If you are lonely, for example, invite a friend out for coffee instead. Feeling depressed? Take a walk or go to the gym. Bored? Take up a new hobby. Social media may be quick and convenient, but there are often healthier, more effective ways to satisfy a craving.
- Are you an active or a passive user of social media? Passively scrolling through posts or anonymously following the interaction of others on social media does not provide any meaningful sense of connection. It may even increase feelings of isolation. Being an active participant, though, will offer you more engagement with others.
- Does social media leave you feeling inadequate or disappointed in your life? You can counter symptoms of FOMO by focusing on what you have, rather than what you lack. Make a list of all the positive aspects of your life and read it back when you feel you are missing out on something better. Moreover, remember: no one's life is ever as perfect as it seems on social

media. We all deal with heartache, self-doubt, and disappointment, even if we choose not to share it online.

Step 3: Offline activities

We all need the face-to-face company of others to be happy and healthy. At its best, social media is a great tool for facilitating real-life connections. However, if you've allowed virtual connections to replace real-life friendships in your life, there are plenty of ways to build meaningful connections without relying on social media. For example:

- Set aside time each week to interact offline with friends and family. Try to make it a regular get-together where you always keep your phones off.
- If you have neglected face-to-face friendships, reach out to an old friend (or an online friend) and arrange to meet up. If you both lead busy lives, offer to run errands or exercise together.
- Join a club. Find a hobby, creative endeavour, or fitness activity you enjoy and join a group of like-minded individuals that meet on a regular basis.
- Do not let social awkwardness stand in the way. Even if you are shy, there are proven techniques to overcome insecurity and build friendships.
- Volunteer. Just as human beings are hard-wired to seek social connection, we are also hard-wired to give to others. Helping other people or animals not only enriches your community and benefits a cause that is important to you, but it also makes you feel happier and more grateful.

Reflection corner

1. Imagine a friend of yours asks you for advice to reduce the time they spend on media and social media. What would you tell them?

2. In case you feel you need to reduce your time online, write down a "to-do" list to remind yourself of your goal and the steps to achieve it. Compare it with the lists of your colleagues. Do you see any similarities or differences?

Exercise 3: A Media diary

Objectives:

- reflect on the time you spend online and the ways this time affects your mental health
- understand the impact of social media on self-perception and self-esteem
- realize the social or learning value of your online activities when using social media
- formulate feedback to your colleagues

Duration: 20 minutes

Tools: pen, piece of paper/forum

Methods: classroom discussions, description, comparison

Description of the exercise: During this exercise, you will identify your practices when using social media. It is a good point to start any process you might want to make regarding the use of social media. This "Media Diary" will be compared with the diaries of your colleagues to exchange tips and

ideas on the wiser use of social media. Finally, you will jointly come up with some advice on the use of social media in order to promote a healthy online lifestyle.

Tasks:

Answer the following questions regarding the way you use and interact through social media. Try to be as honest and sincere as possible, to gain a better understanding of your practices.

What social media sites do you like and use?

- What does it allow you to do and why is it fun?
- What are the top 5 benefits of social media to your mental health?
- What are the dangers of social media?
- Have you posted something you regret and why?
- Has someone posted something about you which made you angry, sad, and scared or have any other feelings?
- What are the top 5 downsides of social media to your mental health?

Write down your answers and compare them with the answers from your colleagues.

Lessons learned: the time we spend on social media and the activities we do while online have a direct effect on our health and wellbeing. It is advisable to keep track of our own behaviours and practices, in order to amend them, in case they do not promote our health and wellbeing.

Extension: Research on the effect that selfies can have on body image and subsequently on mental health. Provide advice for the achievement of a positive body image.

Forum

Objectives:

- Identify social media use around you
- understand the factors which influence positively or negatively health and wellbeing when using social media
- give feedback

You are invited to describe/ write down what you already know about the topic “Mental Health and Media” in the forum Know-Want-Learned.

Tasks:

- Share your social media habits, lifestyles and preferences with your classmates
- Share the advice you would give to yourself on the use of social media
- Reply twice to your colleagues

Supplementary reading

Social media and higher education: An international perspective. Bartosik-Purgat M, Filimon N, Kiygi-Calli M. Econ Sociol. 2017;10:181–191. [Google Scholar]

Digital News Report. [Mar;2020]; Newman N, Fletcher R, Kalogeropoulos A, Nielsen R. http://www.digitalnewsreport.org/ 2019 12 [Google Scholar]

Meeting the challenges of evidence-based policy: the Campbell collaboration. Petrosino A, Boruch RF, Soydan H, Duggan L, Sanchez-Meca J. Ann Am Acad Pol Soc Sci. 2001;578:14–34. [Google Scholar]

Physical activity in the prevention and treatment of anxiety and depression. Martinsen EW. Nord J Psychiatry. 2008;62:25–29. [PubMed] [Google Scholar]

Social media use and mental health among young adults. Berryman C, Ferguson C, Negy C. Psychiatr Q. 2018;89:307–314. [PubMed] [Google Scholar]

Does time spent using social media impact mental health?: An eight year longitudinal study. Coyne SM, Rogers AA, Zurcher JD, Stockdale L, Booth M. Comput Hum Behav. 2020;104:106160. [Google Scholar]

For better or for worse? A systematic review of the evidence on social media use and depression among lesbian, gay, and bisexual minorities. Escobar-Viera C, Whitfield D, Wessel C, et al. https://mental.jmir.org/2018/3/e10496/ JMIR Ment Health. 2018;5:10496. [PMC free article] [PubMed] [Google Scholar]

Stress among preclinical medical students of University Sultan Zainal Abidin. Rahman NI, Ismail S, Seman TNAT, et al. https://www.japsonline.com/admin/php/uploads/1110_pdf.pdf J Appl Pharm Sci. 2013;3:76–81. [Google Scholar]

Potential of social media in promoting mental health in adolescents. O'Reilly M, Dogra N, Hughes J, Reilly P, George R, Whiteman N. https://www.ncbi.nlm.nih.gov/pubmed/30060043 Health Promot Int. 2018;34:981–991. [PMC free article] [PubMed] [Google Scholar]

Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. O'Reilly M, Dogra N, Whiteman N, Hughes J, Eruyar S, Reilly P. Clin Child Psychol Psychiatry. 2018;23:601–613. [PubMed] [Google Scholar]

4. Module 4 – Media addictions

Upon completing this module, you will be able to:

- Define the different types of media addictions
- Recognize the symptoms of any type of media addiction
- Discuss the causes of these addictions in relation to youth
- Compare extensive use and addiction of the digital media
- Diagnose media addictions on themselves and others
- Propose individualized measures to minimize such addictions

Media addictions: The meaning and nature of media addictions

The internet is exciting, progressive, revolutionary and captivating. It has changed the way we live, work, educate, communicate, entertain – even love. But it is also fair to say that its addictive power is such that many people may find themselves entirely engrossed in the cyber world.

The discussion on the issue of media addictions has already started in the '90s when personal computers and the internet started spreading in working environments and most households. One of the first definitions was provided by Young (1998 and 2004), by which the internet addiction is an impulse-control disorder that does not involve an intoxicant[18]. Since then, a broad terminology has been devised in order to describe the problematic behaviour that a user may develop with an application and/or a digital tool.

Internet addiction – also called cyberspace addiction, compulsive computer use, pathological internet use, and internet dependence – has not yet been officially listed as an addiction in the Diagnostic and Statistical Manual of Mental Disorders (DSM), but there is a broad consensus that when our engagement in a certain activity takes priority over other important areas of our life and negatively affects our wellbeing, then this activity should be considered as an addiction.

Can you now consider how many people you know are engaging in Netflix marathons? Getting sucked into YouTube channels about sports, hairstyling, farses or even bog opening? Spending years playing poker online with imaginary friends? Or spending their days scrolling down through Facebook and Instagram? Let's consider the number of children devoting years of their lives playing Minecraft and Fortnite, or adults spending their working days checking the news?

Internet addiction – the compulsive and frequent activity on the internet – can have real effects on real people's lives. Internet addictions affect people's work, education, financial capacity, social lives and emotional well-being.

Reflection corner

Social media and video games: How much time do you spend on each of these media every day? Would you consider the time you spend there as excessive?
Compare your findings with the findings of your colleagues. Do you find similarities or differences?

Now watch the following video:
https://www.youtube.com/watch?v=QugooaNRnsk&t=62s&ab_channel=BilalFarooq

[18] Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. CyberPsychology & Behaviour, 1(3), 237–244. https://doi.org/10.1089/cpb.1998.1.237

The video depicts images and behaviours related to different types of media addictions? There is no script for the video. Write a title for the video and a paragraph of 100 words imagining there is a voice-over function reciting what you have written.

The five types of media addictions

Young as early as 1999 asserted the broadness of the term internet addictions and suggested five different sub-types that could better describe the type of internet addiction that people encountered. These were:

1. Video game addiction: the compulsive use of adult websites for cybersex and cyberporn.
2. Cybersexual addiction: over-involvement in online relationships
3. Net compulsions: obsessive online gambling, shopping or day-trading
4. Information overload: compulsive web surfing or database searches.
5. Computer addictions: obsessive computer game playing

Since then, however, there has been further discussion and research around the problematic use of online tools and relatively recently two new terms were introduced into our vocabulary. These are FOMO and the Nomophobia.

FOMO - or the fear of missing out – is a real phenomenon that is becoming increasingly common and can cause significant stress in people's lives. The term was added to the Oxford English Dictionary only in 2013[19]. This term refers to the uneasy and sometimes all-consuming feeling that you are missing out on something better, something that your peers are doing. The advent of the smartphone and the social media era has resulted in the greatest experience of FOMO[20]. FOMO results in a constant monitoring of what is happening online and a constant need to be digitally present and participate in the digital world. However, FOMO also relates to the comparisons people make of their own lives with the lives demonstrated in social media.

Nomophobia is coined from the words "no mobile phone phobia", meaning a phobia associated with the absence of a mobile phone. It is a situation that indicates the absolute symbiotic relationship that modern man develops with his smartphone. In cases where the cell phone has been stolen, discharged or has no signal, the person experiences, among other things, feelings of intense anxiety or panic, inability to concentrate and a feeling of isolation. The fear of being without a phone centres primarily on the inability to communicate with others, a general feeling of being disconnected and not being able to access information and generally giving up convenience[21].

Reflection corner

FOMO and Nomophobia:

Watch the following video on the effects of experiencing the Fear of missing out:
https://www.youtube.com/watch?v=CczZMmYB2FU&ab_channel=As%2FIs

[19] Barker, E (2016). This is the Best Way to Overcome Fear of Missing Out. June 7, 2016 retrieved from https://time.com/4358140/overcome-fomo/

[20] Wolniewicz CA, Tiamiyu MF, Weeks JW, Elhai JD. Problematic smartphone use and relations with negative affect, fear of missing out, and fear of negative and positive evaluation. Psychiatry Res. 2018;262:618-623. doi:10.1016/j.psychres.2017.09.058

[21] Yildirim C, Correia AP. Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Computers in Human Behaviour*. 2015;49:130-137. doi:10.1016/j.chb.2015.02.059

Which effects are shown in the video? Write down a list and share it with your colleagues.

Now watch the following video on Nomophobia:

https://www.youtube.com/watch?v=XtaJmbWWNSI&ab_channel=CraftyKnowledge

What was the most alarming piece of information on the video, according to you? Why is it alarming? Discuss it with your colleagues and formulate a common answer to your findings.

The reasons behind media addictions

We must be very careful in the use of terms that separate healthy from pathological behaviours. Especially, when the discussion revolves around the use and the abuse of technological means then the boundaries become even more fluid. In this discussion, it is important to consider the reality of each individual.

The addictive behaviour is an escape behaviour; an escape from those sides of reality that become unbearable for the individual. Several researchers confirm that pre-existing psychosocial problems (such as loneliness, depression, social phobia, anxiety disorders, etc.) form the background of a problematic relationship with the new digital means[22]. These situations affect the individual's perception of himself and lead to the formation of a negative self-image; while at the same time the remote and secure patterns of digital communication seem more attractive and less threatening. Therefore, loneliness and a personal sense of helplessness seem to be key factors in developing a problematic relationship with technological means. As expected, in both these cases communication seems more attractive and less threatening. A personal sense of weakness beyond leading to a negative self-image may also contribute to a negative image of the world around the person. People can be experienced as dangerous and the world around the person as unworthy of trust. This is the reason why the internet world is so attractive to them. The remotely controlled participation and communication that is required by the world of the internet reduces their feelings of insecurity.

The vastness of cyberspace - with its continuous update with new data, tools, websites and platforms - along with the vast ocean of information provided by the internet keep the user continuously occupied and alert. People with an existing tendency towards impulsive behaviours are more likely to have problems with technological tools and online games[23].

Finally, research shows that the already high-stress levels of work, school, and student life are associated with the development of problematic relationships with the internet and smartphones[24].

In summary, the main causes related to media addictions are:

- pre-existing psychosocial problems
- negative self-image
- high tendency for impulsivity
- high stress from external factors (e.g. work, school obligations, etc.)

---

[22] Caplan, S.E. (2003). "Preference for Online Social Interaction: A Theory of Problematic Internet Use and Psychological Well – Being", Communication. Research (30), 625 – _648, 627.
Davis, R.A. (2001). A cognitive – behavioural model of pathological internet use. Computers in Human Behaviour, 17, 187 – 195.

[23] Walther, Birte & Morgenstern, Matthis & Hanewinkel, Reiner. (2012). Co-Occurrence of Addictive Behaviours: Personality Factors Related to Substance Use, Gambling and Computer Gaming. European addiction research. 18. 167-74. 10.1159/000335662.

[24] Jun, S. & Choi, E. (2015). Academic stress and internet addiction from general strain theory framework. Samaha, M. & Hawi, N.S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life. Computers in Human Behaviour, 57, 321-325.

Reflection corner

Look at the following posters:

What aspects of media addiction do they reflect? Write a short comment for each poster to connect the content of the poster and the issue of media addiction

Symptoms and diagnosis of media addictions

Internet addictions have not yet been formally recognized as mental health disorders and have not been included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). This makes official diagnosis difficult to achieve.

However, both practitioners and plain internet users understand the characteristics and the symptoms that accompany internet addictions. Behavioural scientists agree[25] that all types of internet addictions contain the following four components:

1. Excessive use
2. Compulsive use,
3. Withdrawal,
4. Tolerance, and
5. Adverse consequences.

The following list provides a series of diagnostic criteria that are used to detect addictions in other technological tools and applications and for addictions in general:

- over-indulgence with the internet,
- the need to increase internet time to achieve satisfaction,
- repeated attempts to reduce or discontinue use,
- anxiety and depressive episodes when the internet is not available,
- exceeding the time of use that the person originally intended,
- endangering the work or relationships of the individual due to his / her internet use,
- the use of false arguments to support the engagement or concealment of use,
- the use of the internet as a means of regulating mood.

[25] Jorgenson AG, Hsiao RC, Yen CF. Internet Addiction and Other Behavioural Addictions. *Child Adolesc Psychiatr Clin N Am*. 2016;25(3):509-520. doi:10.1016/j.chc.2016.03.004

At the same time, this excessive use and/or inability to control this use may cause the person to experience feelings of guilt, while he/she may react aggressively when others point out the seriousness of his behaviour or try to impose rules on his use (usually, parents to children).

The excessive use of the internet leads to a series of problems and physical symptoms, which relate mainly to the sitting position and the excessive screen time. These symptoms include amongst others:

- back pains and waist pains
- Carpal Tunnel Syndrome
- Vision problems
- Headaches
- Sleep disorders
- Eating disorders
- Neglect of personal hygiene

Reflection corner

Social media is addicting - practically all of us have dealt with this. Are Instagram and Facebook on your side? No, they are built to profit off of your need for connection, while they truly have a very negative effect on our psychology.
Watch the following video
https://www.youtube.com/watch?v=fouSmgZBXsU&ab_channel=TopThink
and reflect on the ways social media affect our brains and our psychological status. Share your thoughts with your colleagues.

Ways to address and combat media addictions

The internet has been very successful in filling in any empty time. The first thing most people do when left alone is grabbing their smartphone, laptop or tablet, start browsing their social media feeds or check the news, although 99% of what they look at when browsing the internet will mean nothing to them after a few minutes. Most people know that they are probably spending too much time online. But what almost no one understands about this topic is how to stop it.

- Admitting it

The first step to combating media addictions is admitting their existence. Once you admit the existence of an addiction you will be able to pinpoint those websites, applications and social media platforms that take up most of your time and then you may decide either to control the time you spend with them or to completely abstain from them.

- Seeking Support

Support may come in several forms and can range from the support of a family member, a significant other and/or a friend to the support of a specialized professional, or even an internet addict support group. Goal setting with others is a powerful mechanism to keep oneself accountable and one's behaviour in check and, also, all these sources of support may provide strategies and techniques to control one's behaviour.

- Limit their Use

Total abstinence from the internet is neither possible, nor desirable. Internet is a powerful mechanism to support our work, family, educational and personal lives as long as it is not abused and does to interfere with our practices in our daily life. Setting realistic goals that respond to an appropriate estimation of the time one should set aside for personal usage of the internet and sticking to this goal is an important step to dealing effectively with excessive internet usage.

- Get Out and Socialise

Remind yourself of the thrill that results from real-life interactions and experiences with friends, families and others. Set a target of going out, walking, exercising or simply breathing some fresh air more frequently, at least daily. Spend time in real life and try to develop and maintain true relationships, instead of online relations.

- Routines and Time Management

Routines help develop more organized lives. Time management techniques and strategies are important weapons to deal with internet addictions. Time management is loosely defined as the process of planning and controlling how much time to spend on specific activities. People who successively devise time management techniques will be able to control the time that they purposelessly spend on the internet.

- Make Online Devices Inaccessible

An extreme measure to control one's exposure to the internet - if there is a feeling that things are getting out of control - would be to try to make digital devices inaccessible for a fixed period of time. How about a long weekend without your smartphone? How about a short trip without your laptop? How about uninstalling those applications that take up most of your time? Or what about discontinuing your Netflix subscription? All these extreme measures might be a powerful solution.

Reflection corner

Imagine that a very close friend of yours demonstrates behaviours and feelings related to some type of media addiction (to social media/ video games/ online buying/ FOMO). S/he spends more than 12 hours a day on the Internet and gradually loses interest in the activities s/he used to like. Write down some advice you would give to him/her in order to confront his/her behaviours and realize the dangers behind overusing the Internet.

Links to services providing support to addicted people

1. The Center for Internet and Technology Addiction: https://virtual-addiction.com/
   The Center for Internet and Technology Addiction (CITA) serves as one of the world's preeminent resources for neurobiological and psychological research into Internet and technology addiction, dependency, and abuse. Founded by renowned cyberpsychologist Dr David Greenfield, a pioneer concerning compulsive and addictive use who led the first large scale study of Internet use in 1999 with ABC News, CITA sets out to treat patients, train medical professionals on how to diagnose and treat problematic tech use, and educate the public-at-large through talks, resource development, and appearing in a wide variety of major media outlets (CNN, NBC, CBS, Fox, Time, NPR).

   CITA is dedicated to practical action-based solutions that recognize the value and potential of technology while also allowing people to plug back into life.

2. The American Journal of Psychiatry – Issue for DSM V: Internet Addiction
   https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2007.07101556

3. Better Internet for Kids https://www.betterinternetforkids.eu/

Reflection corner

Research for similar organizations and services providing support in your country. Research on the available data on the types of media addictions they handle and the incidents they deal with per month/year. What does this say about your society? What recommendations would you make to provide help and support to people who face internet addiction?

This is a poster on smartphone addiction. Write a catchy phrase or slogan to be added at the bottom of the page. Keep it brief and try to make it as informative and effective as possible

Exercise 4: Dealing with digital stress

Objectives:

- reflect on the time you spend online and the ways this time affects your mental health
- understand the impact of social media on self-esteem and on offline activities
- realize the different ways media addiction can manifest itself in everyday activities
- contemplate your own practices regarding the use of digital devices
- formulate feedback to your colleagues

Duration: 30 minutes

Tools: pen, piece of paper/forum

Methods: classroom discussions, description, comparison

Description of the exercise: During this exercise, you will choose one of five different case studies and discuss the ways they are related to different types of media addictions. You will present the causes, the effects and the ways to respond to these cases, in the most effective manner.

Tasks:

- Choose one of the following cases, according to your personal experience (something similar has happened to you or to a close friend of yours):

Case study 1

You and your best friend both go on trips for the summer. Your trip is fun, but when you check your friend's feed, it seems like s/he is having an amazing time and you cannot help feeling jealous.

Case study 2

> You feel sad because you got a bad mark on a test, so you post a message asking your friends to cheer you up. When only a few of them reply, though, you feel worse than you did before.

Case study 3

> You just got a new expansion of your favourite game, and the first mission is really long. You do not want to stop without finishing it so you stay up late and wind up oversleeping.

Case study 4

> You check your social media in the morning and see all your friends posting about going out for pizza together the night before- without you. You could go because you were working, but still, you feel like they are teasing you with the posts.

Case study 5

> Two of you are going to a new big movie, on the opening night. You get annoyed with your friend because she keeps texting other friends about the movie and checking the movie's hashtag on Twitter to see what other people are posting about it.

- Analyse the case by asking some of the following questions:
  - Is this related to any type of media addiction? If so, which one?
  - Which parts of the case study indicate a problematic relationship with the media?
  - The feeling described, are they justified? Or are they excessive?
  - What would be the best reaction or response to these cases? Why?
- Write down your answers and share them with your colleagues. Find similarities and differences in the case you have chosen the same case.
- Discuss the relevance of media addictive behaviours to everyday activities and reactions.

Lessons learned: the time we spend on social media and the activities we do while online have a direct effect on our mental health and psychological wellbeing. It is advisable to take notice of the instances which might reveal some type of media addictive behaviour in you or in others.

Forum

Objectives:

- Identify different types of media addictions
- understand the factors which can lead to addictive behaviours
- design counter actions to combat these addictions
- give feedback

You are invited to describe/ write down what you already know about the topic "Media addictions" in the forum Know-Want-Learned.

Tasks:

- Share your knowledge on the issue
- Share the advice you would give to yourself on the correct use of media
- Reply twice to your colleagues

5. Module 5 – The healthy use of digital tools and online devices

Upon completing this module, you will be able to:

- To recognize how different aspects of the use of the media can cause mental and emotional problems
- To realize the importance of online privacy and digital footprints
- To explain how fake news can cause distress and anxiety
- To summarize the factors in the use of media that endanger health and wellbeing

Digital footprints

Digital footprints matter. Our posts on social media, comments in online forms, zoom calls, app downloads and email activity form our online history and can potentially be seen by other people, or tracked in a database. We are aware of this in a variety of ways, from the Snowden case that dominated the public eye in 2013 but has occupied it to this day, to the "small letters" contained in the consent forms we sign, by clicking on "I agree" on social media or company tenders for the drawing of various products.

In this section, we will try to answer the following wide range of questions relating to our digital footprints:

- **What is a digital footprint?**

Everything we do in the digital world leaves a trail, which is stored in virtual spaces, very far from our location. In this way, all of us, continuously, by our mere existence in the digital world contribute to the development of a growing portrait of who we are online. This profile is both more available and more public than we assume. But the possible effect of the availability of this profile has to be understood.

- **Why does this matter?**

Our digital profile and our digital data are stored and often shared for advertising purposes with other companies unknown to us. Very few - perhaps only the very young and the very old - can invoke ignorance of the fact that through our mere presence in the cyber world we continuously channel towards the new digital tools a vast amount of information about ourselves.

The exploitation of our digital data is reluctantly accepted in the context of a globalized consumer society, where entertainment, recreation and information come at the cost of a storm of advertising for products that an algorithm has chosen as desirable for us.

In addition, this exposure of personal data and digital profiles to such a wide and often unknown audience has allowed for the emergence of new forms of data breach or fraudulent online behaviour.

Phishing, pharming, identity theft and other similar concepts have entered our vocabulary in order to describe situations involving the invasion of privacy data, primarily for profit but also for purposes of revenge and humiliation.

- **Why should you care?**

The simplest reason is that your digital footprints reveal a lot about you. Even if you have nothing to hide not everything about you is appropriate to every audience, for all time. They build up into a detailed picture of your lives and habits and that information has commercial value. Your digital footprints are monetized by organizations with which you have no relationship and which you cannot control. Few people realize how intimate their digital footprints are or how commonly the resulting data is shared by third parties.

Managing your digital footprint is also important in order to protect your reputation, maintain your ability to decide where and how your personal information is shared and in order to guard yourself against financial loss. Your digital footprints can be taken out of context and

Everybody has information that they only want to share in specific contexts. It may be personal, financial, medical, religious or any other type of information. There are probably circumstances under which you are comfortable sharing personal information with organizations through the internet but would not want that same data spread around. With today's tracking mechanisms, most internet users do not have the control to prevent that kind of spread. There's no easy way on the internet to say no to most forms of tracking and certainly no way to say you can share this but not that.

- **How can you manage your digital footprints?**

An easy start to managing your digital footprint is the realization that what you post or say online. Most things on the internet are expected to stay there long after we have been gone.

Another effective method to manage your digital footprint is by performing regular Google searches. What you see is what others see when they perform similar searches. Do not be afraid to delve past the first two pages of the Google results. As a further step, you may decide to clean up your digital footprint by removing photos, content and links that you consider inappropriate.

Avoid linking your social media account to other websites. Although it might be faster, it gives access to your data and your "friends" data to other organizations.

Reflection corner

Lots of middle school students post and share information about themselves – and others – on social media. However, in a world where "oversharing" might seem normal, it is important to think about our digital footprints -- the things we leave behind online. In this video, you will hear what teens have to say about sharing on social media, and you can think critically about the decisions you're making any time you post something online.

Watch the following video:
https://www.youtube.com/watch?v=ottnH427Fr8&ab_channel=CommonSenseEducation
Then write down a "To Do List" addressed to yourself on the things you should remember regarding your digital footprint and your online reputation. Share it with your colleagues.

Online sharing

Sharing is an everyday occurrence online. People all over the world share whether it is a tweet, photo, video song and many more. However, there is a problem. Nowadays, too much information is being shared online, which could arise a problem. Information that can be shared online[26]:

- YouTube videos reviewing products
- An audio recording of your online videos and put them on your website or blog.
- Slide share presentations
- Graphs
- Infographics
- Webinars
- Music
- Text format of your video blog posts
- Microsoft Office Documents
- PowerPoint presentations documents
- Newsletters
- Press releases about your brand
- News items about your company
- Share your humour. Mix up your lousy content with some funny photos/articles and even with cartoons and many more.

The information that cannot be shared online are:

- Your current location

Firstly, never share your place online. When the user sends their position online, the user is putting themselves at risk. Many people are not aware that status or tweet may also expose their location on social media. So, always make sure that your privacy and location services are set up correctly.

- Confidential information about your identity

Secondly, never share personal information online. Personal details like full name, phone number and address, can all be used by potential identity thieves. Also, do not share this information about family members too. So, don't make it easy for identity thieves by posting for the world to see.

- Financial information

Information like account numbers, loans, and credit card information should not be revealed. It is generally safe to use online banking and make purchases with credit cards on reputable sites.

- Passwords

Some people are stupid enough to share their passwords. Users need to be careful about any information even if they share their passwords with others. Make sure that you have a different password for each networking site. If one password is stolen, then the other accounts will still be safe.

- Embarrassing statuses and photos you would not want to be shared with your family or employer

[26] https://ictframe.com/what-information-to-share-and-not-share-online/

Remember that anything you share has the potential to be leaked in some manner. So, before you post online, ask yourself, "Would I want my Mom or Boss to see this?". If the answer is No, then do not post it. Generally, your instincts are correct. Always make sure that you are protecting your online reputation. Never share inappropriate information online.

- Private issues

Private and personal matters should never be shared online. If you are not comfortable with sharing the problem with your family and friends, never share it online.

Reflection corner

There is information which can be shared online freely, and information on sensitive issues which should not be shared. Think about the following types of information and decide whether you would share the information. If so, why? If not, why not?

Information/ data	To share or not to share? Comment
your telephone number	
a photograph of you on your 5th birthday	
your bank account number	
a photograph of your mum's new car	
the location of the party you are invited	
a selfie having your first tattoo ever	
a group photo from last summer- no faces appear. just a landscape	

Discuss your answers with your colleagues. Is there a consensus on what to share and what not?

Online Privacy

Privacy means that I can do something without other people knowing, without my will. Privacy is not just a moral concept, but it is a basic human right. Without a sense of privacy, many components of our character could not be developed.

However, the boundaries between the private and the public sphere seem to become increasingly blurred as technology penetrates every aspect of our life.
In 2016, the European Parliament introduced the General Data Protection Regulation (EU) 2016/679 (GDPR). The GDPR is a regulation in EU law on data protection and privacy in the European Union (EU) and the European Economic Area (EEA), but it also addresses the transfer of personal data outside the EU and EEA areas. The GDPR's primary aim is to give individuals control over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU[27].

GDPR is important for a number of reasons. Firstly, it imposes explicit consent whenever data are collected or reused. This means that users are informed of the new regulation and are asked to give their consent, usually through an additional window on the screen, entitled "Your privacy matters" or "We respect your privacy". However, withdrawal from consent is also permitted at any time. Furthermore, this regulation gives access to personal data a company or organisation has about the person and they have the right to get a copy of their data, free of charge in an accessible format.

One of the most important features of this regulation is "the right to be forgotten". If one's personal data is no longer needed or is being used unlawfully then he/she can ask for the data to be erased. This **rule also applies to search engines**, such as Google, as they are also considered to be data controllers. This means that internet users can ask for links to web pages including their names to be removed from search engine results if the information is inaccurate, inadequate, irrelevant or excessive. If a company has made one's personal data available online and they are asked to be deleted, the company also has to inform any other websites where they have been shared that they've been asked for the data and links to them to be deleted[28].

Reflection corner

Watch the following video on GDPR:
https://www.youtube.com/watch?v=Assdm6fIHlE&ab_channel=ITGovernanceLtd
and answer the following questions:
What exactly is the GDPR all about? And what does it mean for data subjects and businesses? What do you need to do? And why should you?
Compare your answers with the rest of your colleagues. Make any corrections necessary.

[27] "Presidency of the Council: "Compromise text. Several partial general approaches have been instrumental in converging views in Council on the proposal for a General Data Protection Regulation in its entirety. The text on the Regulation which the Presidency submits for approval as a General Approach appears in annex," 1000000000000 pages, 11 June 2015, PDF". Archived from the original on 25 December 2015. Retrieved 30 December 2015.
[28] European Union (09/03/2020) Data protection and online privacy. Retrieved from https://europa.eu/youreurope/citizens/consumers/internet-telecoms/data-protection-online-privacy/index_en.htm

Misinformation, disinformation and fake news

A discussion around the healthy use of the internet has to include an analysis of misinformation, disinformation and fake news. The internet is a very powerful communication, information and educational tool but at the same time, a number of questions are raised about the quality and the credibility of the information that are exchanged in cyberspace[29]. The spread and impact of online disinformation in Europe threaten European values and challenge democracies[30].

At times we have come across a number of news items on the internet that draw our attention, such as the death of the President of Turkey R.T. Erdogan, the support of Pope Francis Shocks of Donald Trump for President or an asteroid that is just about to hit Earth. Even if these will be refuted in just a couple of hours these news have already managed to spread around the internet and reproduced on thousands of other sites. False news spread faster, deeper and more broadly than the true ones. In order to further understand their existence, their proliferation and their impact, there is a need for a clearer understanding of the relevant terms.

- **Disinformation** refers to the verifiably false or misleading information created, presented and disseminated for economic gain or to intentionally deceive the public[31].

- **Misinformation**, on the other hand, is again false, misleading and inaccurate information created without an intention to deceive.

Both terms have been associated with fake news. "Fake news" is the term that has prevailed to describe the phenomenon of misinformation through the spread of false news. Of course, this is not a new phenomenon, but its expansion has been favoured through the explosive increase of new media technologies and the firm establishment of online news platforms. Fake news is defined as information that has a low reference to real facts, is fabricated for the purpose of deception and is presented in a journalistic form. Fake news do not have to be completely inaccurate. Fake news may contain information that relates to factual events, but the way in which it relates to other information can lead to a distorted picture. Therefore, the truthiness of facts may range in the wide spectrum of fake news.

Fake news may come into a number of different forms, such as:

1. Satire or Parody sites in a humorous context publish fake news stories which have the potential to deceive users when out read of context.
2. Native advertising is the type of advertising that matches the look, the feel and the function of the media format in which they appear reducing consumers' ability to recognize and identify them.
3. News fabrication, which refers to information that has nothing to do with reality. They are constructed for the purpose of misinformation and may contain misleading information. They may contain references to established institutions and personalities. They usually have a compelling narrative and economic and political motivations.
4. Counterfeiting of audio-visual material such as concerns photos, videos and audio files. The falsification of this material usually involves distorting the narrative it offers and distancing oneself from the true event.

[29] UNESCO. Journalism, “Fame News” and Disinformation: A Handbook for Journalism Education and Training. Retrieved from https://en.unesco.org/fightfakenews
[30] European Commission. Tackling Online Disinformation. Retrieved from https://ec.europa.eu/digital-single-market/en/tackling-online-disinformation
[31] Ibid.

- **What is the impact of fake news?**

Fake news make difficult the existence of effective dialogue and the understanding of the arguments, values and beliefs of another party. They disorient public opinion from important current issues. They lead to the search for scapegoats and often to the dehumanization of a number of people and social groups – such as politicians, ethnic minorities, etc. Fake news can also lead to violence. Fake news create a widespread distrust and cynicism about the media, political processes (e.g. elections) and political institutions (e.g. government). Fake news provoke feelings of uncertainty and reduced confidence in personal judgment.

- **How can I spot fake news?**

Separating fact from fiction accurately can seem daunting. But getting to the truth is always worth the effort – even if it's not what you want to hear! Use these six steps to weed out the truth from the lies[32]:

1. Develop a Critical Mindset

- One of the main reasons fake news is such a big issue is that it is often believable, so it is easy to get caught out. Fake news is also written to create "shock value," that is, a strong instinctive reaction such as fear or anger.
- This means it is essential that you keep your emotional response to such stories in check. Instead, approach what you see and hear rationally and critically.
- Ask yourself, "Why has this story been written? Is it to persuade me of a certain viewpoint? Is it selling me a particular product? Or is it trying to get me to click through to another website? Am I being triggered?"

2. Check the Source

- If you come across a story from a source that you have never heard of before, do some digging!
- Check the web address for the page you are reading. Spelling errors in company names, or strange-sounding extensions like ".infonet" and ".offer," rather than ".com" or ".co.uk," may mean that the source is suspect.
- Whether or not the author or publisher is familiar, stop to consider their reputation and professional experience. Are they known for their expertise on the matter? Or do they tend to exaggerate?
- Be aware that people who spread fake news and "alternative facts" sometimes create web pages, newspaper mock-ups, or "doctored" images that look official, but aren't. So, if you see a suspicious post that looks like it's from the World Health Organization (WHO), for example, check the WHO's own site to verify that it's really there.
- Remember, even if you got the story from your best friend, this gives it no extra authority – they likely did not follow these steps themselves before forwarding it!

3. See Who Else Is Reporting the Story

- Has anyone else noticed the story? What do other sources say about it?
- Avoid leaping to the conclusion that all mainstream media (MSM) output is fake. This can be as unwise as following every rumour or conspiracy theory.
- Professional global news agencies such as Reuters, CNN and the BBC have rigorous editorial guidelines and extensive networks of highly trained reporters, so are a good place to start. But no one is unbiased, and anyone can make a mistake, so keep looking.

[32] https://www.mindtools.com/pages/article/fake-news.htm

4. Examine the Evidence

- A credible news story will include plenty of facts – quotes from experts, survey data and official statistics, for example. Or detailed, consistent and corroborated eye-witness accounts from people on the scene. If these are missing, question them!
- Does the evidence prove that something definitely happened? Or, have the facts been selected or "twisted" to back up a particular viewpoint?

5. Don't Take Images at Face Value

- Modern editing software has made it easy for people to create fake images that look real. In fact, research shows that only half of us can tell when images are fake. However, there are some warning signs you can look out for. Strange shadows on the image, for example, or jagged edges around a figure.
- Images can also be 100 per cent accurate but used in the wrong context. For example, photos of litter covering a beach could be from a different beach or from 10 years ago, not the recent alleged event.
- You can use tools such as Google Reverse Image Search to check where an image originated and whether it has been altered.

6. Check that it "Sounds Right"

- Finally, use your common sense! Bear in mind that fake news is designed to "feed" your biases, hopes or fears.
- For example, it is unlikely that your favourite designer brand is giving away a million free dresses to people who turn up at its stores. Equally, just because your colleague believes that two married co-workers are having an affair, does not mean it is true.

Reflection corner

1. A troll is a fake social media account, often created to spread misleading information.

Each of the following 8 profiles includes a brief selection of posts from a single social media account. You decide if each is an authentic account or a professional troll. After each profile, you will review the signs that can help you determine if it's a troll or not.

Take a look at these profiles and check your “detective” skills: https://spotthetroll.org/start

2. Is it Real or Photoshopped? (by Adobe): Check the photos in the following link and decide whether they are real or a product of photoshop. Share your results with your colleagues.

https://landing.adobe.com/en/na/products/creative-cloud/69308-real-or-photoshop/index.html

3. Play “Reality Check” by Media Smarts and learn how to check whether something is fake or real:

http://mediasmarts.ca/sites/mediasmarts/files/games/reality-check/index.html#/

Share your results with your colleagues and discuss the difficulties of spotting fake news. Write down a list of advice for people of your age, to remember when confronted with a piece of information which seems unbelievable.

4. Research on the new concept of “populistainment”. What is it? What is its connection with fake news? Explain it to your colleagues with simple terms and point out why it is alarming.

You might find the following article relevant and handy for this:

https://www.opendemocracy.net/en/can-europe-make-it/dismantling-democracy-the-right-to-be-entertained/

Exercise 5: Filling in your footprint

Objectives:

- reflect on the availability of personal information online
- understand the impact of such information on your online and offline life
- realize the different ways anonymity can be "broken"
- contemplate your own practices regarding online privacy and your digital footprint
- formulate feedback to your colleagues

Duration: 35 minutes

Tools: pen, piece of paper/forum

Methods: classroom discussions, description, comparison

Description of the exercise: In this exercise, you will brainstorm about what information is available about you online and who can see it, then discuss the relationship between information exposure and online anonymity.

Tasks:

- On a piece of paper, write down some information about you that is available on the Internet (for example, name, address, friends you are connected to).
- If a particular piece of information is easily accessible to many other people online (in other words, very exposed), write it in bigger letters
- If a piece of information is accessible to relatively few people, write it in smaller letters.
- Think about the information you wrote, and share it with your colleagues.
- Participate in the group discussion, answering the following questions:
    1. What are some similarities/differences between the footprints of the different people in the group?
    2. Which of the items listed could be used to uniquely identify you? Which combinations of items could be used?
    3. Are there any items you listed that you wish weren't available online? (In other words, that you wish weren't part of your information footprint?)
    4. What could you do to reduce the exposure of some items in your footprint?
- Write down your conclusions and some advice for the protection of online privacy and personal data.

Lessons learned: sometimes we are unaware of what exists about us online. It is what other people know about us, without ever meeting us in person. It is our responsibility to protect our personal data and protect our "digital footprint".

Forum

Objectives:

- Identify different ways in which our private information can be revealed without us noticing it
- understand the potential effect of this revelation
- discuss the different ways we can protect our online privacy
- give feedback

You are invited to describe/ write down what you already know about the topic "Healthy use of digital devices" in the forum Know-Want-Learned.

Tasks:

- Share your knowledge on the issue
- Share the advice you would give to yourself on the correct use of media
- Reply twice to your colleagues

6. Assessment quizzes

Module 1

1) Which of the following is NOT a nonverbal communication cue?
   a) Facial expressions
   b) Body language
   c) Text messages

2) Research has shown that even moderate use of online technology can result in:
   a) Underdevelopment of the prefrontal lobe
   b) Media addiction
   c) Postural distress

3) A typical smartphone user touches his or her phone …… times every day, according to a study by research firm Dscout
   a) 1,546
   b) 2,617
   c) 3,221

4) The increasing number of fake profiles on social media platforms have caused users to feel:
   a) Anxiety
   b) Security
   c) Loneliness

Module 2

1) Which of the following is NOT a symptom of the computer vision syndrome?
   a) Eyestrain
   b) Blurred vision
   c) Glaucoma

2) The carpal tunnel syndrome is commonly caused by:
   a) Wrong keyboard placement
   b) Treadmill desks
   c) A slim-line mouse

3) When working in front of the computer you should set up and move at least every:
   a) Fifteen minutes
   b) Hour
   c) Two hours

4) Regarding the correct lighting for a workstation, the monitor should be placed …… the light source/s.
   a) Directly underneath
   b) Directly above
   c) To the side of

Module 3

1) According to the social displacement theory, the more time we spend on social media, the less time
   a) We spend socializing face to face
   b) We work
   c) We spend on hobbies

2) FOMO means:
   a) Fear Of Mental Obstacles
   b) Fear Of Missing Out
   c) False Or Malicious Obsession

3) A 2018 University of Pennsylvania study found that reducing social media use to ……. minutes a day resulted in a significant reduction in levels of anxiety, depression, loneliness and sleep problems:
   a) 30
   b) 50
   c) 60

4) In relation to mental health, fake news can cause:
   a) Sleeping disorders
   b) Stress and anxiety
   c) Low self-esteem

Module 4

1) Which one of the following does NOT belong to the main causes of media addictions?
   a) Pre-existing psychosocial problems
   b) Small social circle
   c) High tendency for impulsivity

2) Approximately …… of what we look at when browsing the internet will mean nothing to us after a few minutes.
   a) 50%
   b) 75%
   c) 99%

3) The first step to combating media addiction is:
   a) Making online devices inaccessible
   b) Admitting it
   c) Going out, walking, or exercising

4) Nomophobia is a phobia associated with the absence of …… :
   a) a mobile phone
   b) internet connection
   c) digital presence

Module 5

1) Everything we do in the digital world leaves a trail. This is our:
   a) Online identity
   b) Digital history
   c) Digital footprint

2) The General Data Protection Regulation (GDPR) was introduced in the EU in:
   a) 2002
   b) 2012
   c) 2016

3) A troll is:
   a) A fake social media account, often created to spread misleading information
   b) A source exclusively presenting fake news
   c) A tool to spot fake news

4) …… are better NOT to be shared online.
   a) Newsletters
   b) Webinars
   c) Passwords

7. References

Barker, E (2016). *This is the Best Way to Overcome Fear of Missing Out.* June 7, 2016 retrieved from https://time.com/4358140/overcome-fomo/

Caplan, S.E. (2003*). "Preference for Online Social Interaction: A Theory of Problematic Internet Use and Psychological Well – Being"*, Communication. Research (30), 625 – _648, 627.

Davis, R.A. (2001). A cognitive – behavioural model of pathological internet use. Computers in Human Behaviour, 17, 187 – 195.

Dibb, Bridget. *"Social media use and perceptions of physical health."* Heliyon vol. 5,1 e00989. 8 Jan. 2019, doi:10.1016/j.heliyon.2018.e00989

Digital Citizenship Education Handbook, 2019, Council of Europe

European Commission*. Tackling Online Disinformation.* Retrieved from https://ec.europa.eu/digital-single-market/en/tackling-online-disinformation

European Union (09/03/2020) Data protection and online privacy. Retrieved from https://europa.eu/youreurope/citizens/consumers/internet-telecoms/data-protection-online-privacy/index_en.htm

Firth, Joseph et al. *"The "online brain": how the Internet may be changing our cognition."* World psychiatry: official journal of the World Psychiatric Association (WPA) vol. 18,2 (2019): 119-129. doi:10.1002/wps.20617

Human Kinetics. *Technology can have positive and negative impact on social interactions*, n.d. Retrieved from: https://us.humankinetics.com/blogs/excerpt/technology-can-have-positive-and-negative-impact-on-social-interactions

ICT Frame. *What Information To Share And Not Share Online*, 2018. Retrieved from: https://ictframe.com/what-information-to-share-and-not-share-online/

International Ergonomics Association. *What Is Ergonomics?*, n.d. Retrieved from: https://iea.cc/what-is-ergonomics/

Jisc, 2021. Retrieved from: https://www.jisc.ac.uk/.

Jorgenson AG, Hsiao RC, Yen CF. *Internet Addiction and Other Behavioural Addictions. Child Adolesc â Psychiatr Clin N Am*. 2016;25(3):509-520. doi:10.1016/j.chc.2016.03.004

Jun, S. & Choi, E. (2015). *Academic stress and internet addiction from general strain theory â framework*.

Karim F, Oyewande AA, Abdalla LF, Chaudhry Ehsanullah R, Khan S. *Social Media Use and Its Connection to Mental Health: A Systematic Review.* Cureus. 2020;12(6):e8627. Published 2020 Jun 15. doi:10.7759/cureus.8627

Kimekaergonomicpodcast. *Assure Model Lesson Plan- Ergonomics,* 2015. Retrieved from: https://kimekaergonomicpodcast.wordpress.com/2015/05/19/assure-model-lesson-plan-ergonomics-2/

MentalUp. *Internet and Technology Addiction - Causes, Signs and Tips to Stop,* 2021. Retrieved from: https://www.mentalup.co/blog/causes-losses-and-prevention-of-technology-addiction

Mind Tools. *How to Spot Real and Fake News,* n.d. Retrieved from : https://www.mindtools.com/pages/article/fake-news.htm

Ministry of the Interior Finland. *National action plan for the prevention of violent radicalisation and extremism 2019–2023,* 2019. Retrieved from: https://rm.coe.int/finland-action-plan-2019/16809ea382

New Economics Foundation (2012) Measuring Wellbeing: A guide for practitioners, London: New â Economics Foundation.

Oxford Lexico. Well-being. Retrieved from:https://www.lexico.com/definition/well_being.

Presidency of the Council: Compromise text. Several partial general approaches have been instrumental in converging views in Council on the proposal for a General Data Protection Regulation in its entirety. The text on the Regulation which the Presidency submits for approval as a General Approach appears in annex, 1000000000000 pages, 11 June 2015, PDF". Archived from the original on 25 December 2015. Retrieved 30 December 2015

Profis, S. Project Manager. *Save Yourself! 7 Ways to Prevent Information Overload, 2019. Retrieved from:* https://www.projectmanager.com/blog/prevent-information-overload

Samaha, M. & Hawi, N.S. (2016). *Relationships among smartphone addiction, stress, academic performance, and satisfaction with life.* Computers in Human Behaviour, 57, 321-325.

The Wellbeing Thesis. *Digital Wellbeing – How to Have a Healthy Digital Diet, n.d*. Retrieved from: https://thewellbeingthesis.org.uk/foundations-for-success/digital-wellbeing-how-to-have-a-healthy-digital-diet/ .

UNESCO. Journalism, *"Fame News" and Disinformation: A Handbook for Journalism Education and Training.* Retrieved from https://en.unesco.org/fightfakenews

Wake-up call: Are you making these five ergonomics mistakes?, 2013. Retrieved from: https://www.cnet.com/how-to/wake-up-call-are-you-making-these-five-ergonomics-mistakes/

Walther, Birte & Morgenstern, Matthis & Hanewinkel, Reiner. (2012). *Co-Occurrence of Addictive Behaviours: Personality Factors Related to Substance Use, Gambling and Computer Gaming.* European addiction research. 18. 167-74. 10.1159/000335662.

Wolniewicz CA, Tiamiyu MF, Weeks JW, Elhai JD. *Problematic smartphone use and relations with negative affect, fear of missing out, and fear of negative and positive evaluation.* Psychiatry Res. 2018;262:618-623. doi:10.1016/j.psychres.2017.09.058

World Health Organisation, 2021. Retrieved from: https://www.who.int/about/who-we-are/constitution

Yildirim C, Correia AP. *Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. Computers in Human Behaviour.* 2015;49:130-137. doi: 10.1016/j.chb.2015.02.059

Young, K. S. (1998). *Internet addiction: The emergence of a new clinical disorder.* CyberPsychology & Behaviour, 1(3), 237–244. https://doi.org/10.1089/cpb.1998.1.237

Appendix

Assessment quiz check sheets

Evaluation quiz Module 1 check sheet – correct answers

1c

2a

3b

4a

Evaluation quiz Module 2 check sheet – correct answers

1c

2a

3b

4c

Evaluation quiz Module 3 check sheet – correct answers

1a

2b

3a

4b

Evaluation quiz Module 4 check sheet – correct answers

1b

2c

3b

4a

Evaluation quiz Module 5 check sheet – correct answers

1c

2c

3a

4c

Instructional design review checklist for youth workers

No	Criteria	Yes	No
1. Objectives			
1.1	Are objectives stated clearly for the learner?		
1.2	Are the course requirements consistent with the objectives?		
1.3	Do chapters/topics thoroughly cover the course's objectives?		
1.4	Do the learning objectives match the learning outcomes?		
1.5	Does the overall content and structure of the course meet its instructional objectives?		
2. Structure			
2.1	Does the course have a concise and comprehensive overview or syllabus?		
2.2	Does the course include examples, analogies, case studies, simulations, graphical representations, and interactive questions?		
2.3	Does the course structure use appropriate methods and procedures to measure student mastery?		
3. Content			
3.1	Does the content flow seamlessly, without grammatical, syntactical and typing errors?		
3.2	Is the content up-to-date?		
3.3	Is the content aligned with the curriculum?		
3.4	Are the desirable outcomes incorporated into the content?		
3.5	Is the content in compliance with copyright laws and all its quoted material cited correctly?		
3.6	Does the course engage students in critical and abstract thinking?		
3.7	Does the course have prerequisites or require a technical background?		
4. Assessment			
4.1	Are the assignments relevant, efficient and engage students in a variety of performance types and activities?		
4.2	Are practice and assessment questions interactive?		
4.3	Do the practice and assessment tasks focus on the course's objectives?		
5. Technology - Design			
5.1	Is the design clear and consistent, with appropriate directions?		
5.2	Are the images and graphics of high quality and suitable for the course?		
5.3	Is the course easy to navigate and offers assistance with technical and course management?		
5.4	Is the course navigation structure consistent and reliable?		
5.5	Are the course hardware and software-defined?		
5.6	Are the audio and on-screen text in sync?		
5.7	Does the architecture of the course allow instructors to add content, activities and extra assessments?		

Feedback on topic for students

Assessment of Module						
Course title:	Privacy and Security					
Module Title:	Introducing privacy					
Part A:	On a scale of 1-5 where 1 is the lowest and 5 the highest level of agreement indicate how you feel on the following					
Observations		1	2	3	4	5
1	The subject was interesting					
2	I believe the topics covered were important					
3	I would like to know more about the area					
4	I have learned new things which I am likely to apply in the future					
5	I would like to improve my skills in the area					
6	I am likely to recommend this course					
Part B:	In the space provided please feel free to include any comments and recommendations you wish to make					
Part C:	In the space provided please feel free to include your email address if you would like to be kept informed about this project					