Information Fatigue Syndrome and Digital Burnout[*]

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Abstract:

Around 2000 years ago, the Roman philosopher Seneca the Younger complained that his peers were wasting their time and money accumulating too many books, admonishing that "the abundance of books is a distraction." Instead, Seneca recommended focusing on fewer but better-quality books and reading them thoroughly and repeatedly. After the invention of the printing press in the 15th century, the plethora of information the machine produced was thought by some to be distracting.

Today, information overload and digital over-stimulation lead to digital burnout — a situation where physical and mental exhaustion is caused by spending too much time in front of screens. Symptoms of this condition are apathy, indifference, or mental exhaustion arising from exposure to too much information. Stress induced by attempts to assimilate excessive amounts of information from the media, particularly social media, the internet, or work makes us ill by interfering with our sleep, sabotaging our concentration and undermining our immune system. David Lewis, a British psychologist, calls this ailment Information Fatigue Syndrome (IFS).

This paper looks at Information Fatigue Syndrome (IFS), and particularly at the contribution of grey literature (GL) to IFS. To better understand the amount of grey literature around us, it is enough just to look at the GreyNet website which lists over 150 grey literature types. They include articles, blogs, images, videos, emails, web pages, press releases, lectures, manuals, academic theses, and many others. Today, grey literature occupies a considerable role and is one of the main contributors to our digital burnout. The diversity of GL types, volume generated and shared, frequency of creation and change, currency, veracity, and value will be reviewed.

The purpose of the paper is to generate suggestions on how to successfully deal with Information Fatigue Syndrome. Additionally, it will offer suggestions on how to continue using valuable grey literature efficiently, and how to do all of this without causing unnecessary stress or wasting time.

Keywords: digital burnout, grey literature, Information Fatigue Syndrome

Introduction

Is there anyone among us today that has not experienced the nagging feeling of having too much information and too little time to deal with it? Do you sometimes feel mental exhaustion from being exposed to too much information? You overly multitask but your concentration and memory fade, while your irritability grows. Your feeling of helplessness grows, together with relationship problems with your colleagues and with your loved ones at home.

Welcome to digital burnout and to Information Fatigue Syndrome where the overwhelming amount of grey literature plays a significant role.

We believe that information fatigue is a new phenomenon, something *sui generis* to the 21st century. However, around 2000 years ago, the Roman philosopher Seneca the Younger complained that his peers were wasting their time and money accumulating too many books, admonishing that "the abundance of books is a distraction" (AZ Quotes).

Lucius Annaeus Seneca

Seneca recommended focusing on fewer but better quality books and reading them thoroughly and repeatedly.

After Johannes Gutenberg invented the printing press in the 15th century, the plethora of information produced, shared and disseminated widely was thought to be very distracting and counterproductive.

Similarly, the introduction of personal computers and especially the creation of the World Wide Web has dramatically increased the amount of information easily available to all of us.

Information Fatigue Syndrome (IFS)

It is well-established that information overload and digital over-stimulation cause digital burnout — a situation where physical and mental exhaustion is caused by spending too much time in front of screens.

Stress induced by attempts to assimilate excessive amounts of information from the media, particularly social media, the internet, or work, makes us ill by interfering with our sleep, sabotaging our concentration and memory, and undermining our immune system and overall well-being.

Information Fatigue Syndrome is defined as a weariness or overwhelming feeling of being faced with an indigestible or incomprehensible amount of information.

David K. Lewis

If we look at the term information fatigue syndrome, also known as information overload or information intoxication, we come across David Lewis (Wikipedia), a British psychologist, who lived from 1941 to 2001, and who is credited with coining the first use of the term. He said that "Having too much information can be as dangerous as having too little. Among other problems, it can lead to a paralysis of analysis, making it far harder to find the right solutions or make the best decisions."

In his report, diabolically entitled *Dying for Information?* (Waddington, 1998) Lewis said in 1996 that an excess of information is strangling many businesses and causing mental anguish and even physical illness in managers at all levels. Lewis speculated that the problem would only worsen, and it seems that his prediction was correct.

His conclusions came from a Reuters survey of 1,300 business people in Britain, the US, Singapore, Hong Kong and Australia, which included junior, middle and senior managers in a variety of industry sectors. Two-thirds of those interviewed indicated that stress, attributed to dealing with too much information, had damaged their personal relationships, increased tension with colleagues at work, and contributed to a decline in job satisfaction.

More than 40% felt that important decisions were delayed and the ability to make choices was hampered by excess information. The cost of collecting the surplus data exceeded its value. One-third said they suffered from health problems as a direct consequence of stress related to information overload.

Grey Literature Fatigue Syndrome (GLFS)

Let's look at grey literature and the role it plays as a part of information fatigue syndrome. It is believed that grey literature[†] overload is a major part of information overload and a cause of information fatigue syndrome.

There are two major factors that make grey literature the main contributor to our information fatigue syndrome. They are an extensive variety of grey literature document types and extremely high amounts, the quantity of grey literature output.

Also, grey literature is highly contextual and often software dependent, so it is hard to collect and process, and even harder to make sense of and preserve for future use.

Examples are social media, news items, emails, reports, and data.

Grey Literature Types

To illustrate the huge number of grey literature types, we can consult the GreyNet website (GreyNet, 2022). It lists over 150 document types including databases, data sets, data sheets, data papers, satellite data, census data, and product data, just to mention some of the many data types. See Appendix 1.

Information Fatigue Symptom

So, what are the major symptoms, the visible and observable behavioural and other changes characteristic of someone who suffers from information, including grey literature fatigue syndrome?

They are:

- Apathy
- Indifference
- Mental exhaustion arising from exposure to too much information
- Poor concentration
- Short-term memory failure
- Overly multitasking, resulting in incomplete tasks
- Over-stimulation causing headaches and nausea
- Tension
- Relationship problems at home
- Occasional irritability
- Frequent feelings of helplessness
- Compulsive need to be connected to the internet

Main Causes of Information Fatigue Syndrome

As the great novelist and poet Gertrude Stein put it - *Everybody gets so much information all day long that they lose their common sense.*
Having established the starting ground for information and grey literature fatigue syndrome, let's look now at its main causes.

A. Digital world

Since we live in a different world today, the digital world, its main characteristics and attributes make up the basis for digital burnout.

As of January 2022, the total population of the world was 7.91 billion. 57% of those live in urban areas, and over 67% of the total population or 5.31 billion use a mobile phone.

4.95 billion people, which is well over 60% of the population, are internet users, and almost all of the people connected to the internet are also active social media users.

[†] *Grey literature represents any recorded, referable and sustainable data or information resource of current or future value, made publicly available without a traditional peer-review process (Savić 2017).*
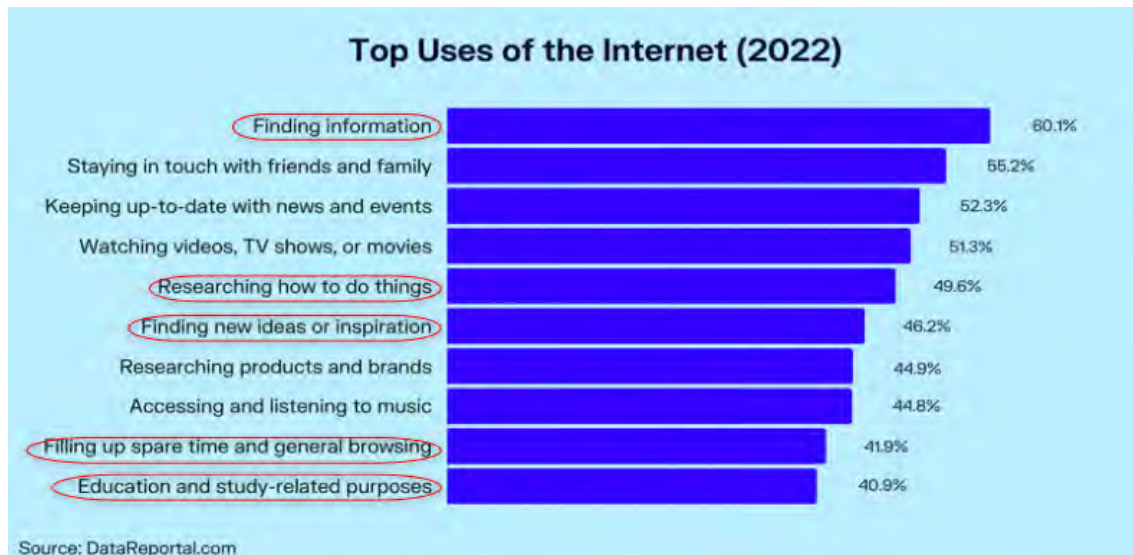
B. Internet use
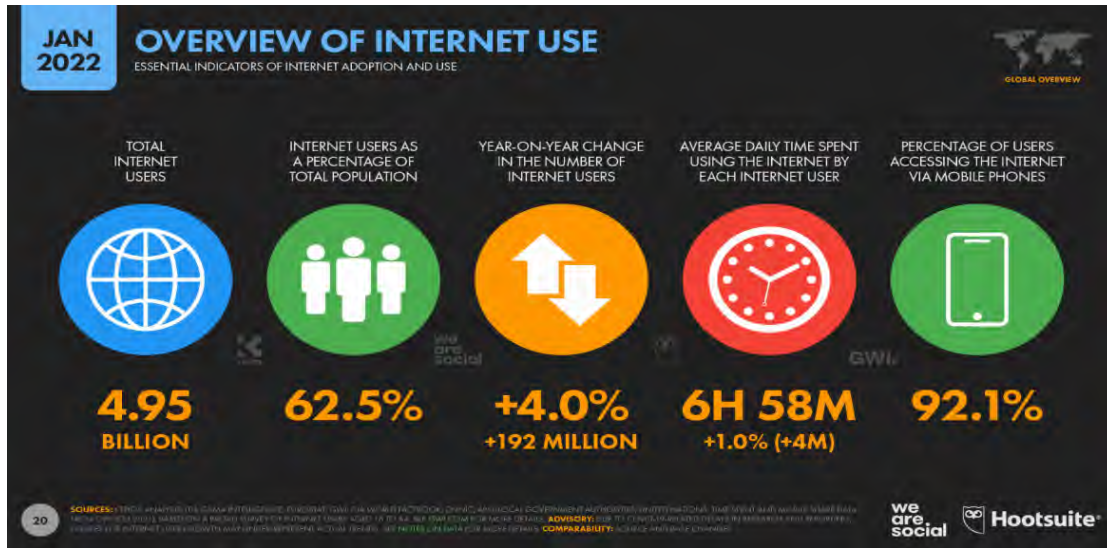
Consulting the illustration above (Datareportal, 2022) regarding the overview of internet use, let's concentrate on just the two last figures.

The average DAILY time spent using the internet by each internet user is almost 7 hours. This is an astonishingly high number of hours spent, which should make us all think hard about its usefulness and our reasons for spending so much time using it.

For all of us who are creating, providing, and organizing information and grey literature on the internet, the statistic that 92.1% of users access the internet through their mobile phones should be of the utmost importance. The previous reality of personal computers (PCs) occupying this major role is not valid anymore. It is clear that focus has dramatically shifted towards the use of mobile devices. To that end, we need to direct our efforts towards this relatively new tool and adjust our internet and web presence consequently.

The above graph (Oberlo 2022) of top internet uses shows that the majority of people are using it to search for information, communication, and entertainment. It is encouraging that there is a high percentage of use geared towards education and study, which should be encouraged, especially for school-age internet users.

C. Social media

How much time do we spend on social media apps? Statistics show that monthly, on average, we spend almost 24 hours on YouTube, 20 hours on TikTok, and the same on Facebook. Another 19 hours are spent monthly on WhatsApp, the most popular communication app.

Generally speaking, an average social media user spends between 80-90 hours monthly on various social media apps. Translated into weekly work hours, we spend over two work weeks browsing various social media or reading messages we've received.

So let's review this, on average, every user spends almost half of his or her productive work hours on social media blindly devouring content that is often questionable.

Let's have a quick look at some YouTube statistics in 2022 (DemandSage 2022):

- There are 2.6 billion YouTube users
- Viewers watch over 1 billion hours of video every day
- Localized in over 100 countries and 80 languages
- 63% of watch time derives from mobiles
- 400 hours of video uploaded every minute
- The most popular video platform

D. Data

The amount of data available around the world in 2020 was estimated at 59 zetabytes (ZB). While it is predicted that this will reach a mind-boggling 175 ZB by 2025.

One ZB (Intellobics 2011) is equivalent to one trillion gigabytes. If each bit is a coin around 3mm thick, one ZB made up of a stack of coins would be 2,550 lightyears. This would get you to our nearest star system, Alpha Centauri, 600 times (TechCentral 2021). To put it into a closer perspective, one ZB is equivalent to 36,000 years' worth of HD-quality video.

E. Email

In a work environment the quantity of emails sent and received represents probably the main contributor and cause of information fatigue syndrome. It is estimated that there are 4.3 billion email users around the world (Oberlo 2022), and there is also an evident trend that the number of email users is growing.

People around the world send over 333 billion emails daily (Statista 2022).

F. Journals

Regarding journals, in 2009 we passed the 50 million mark of the total number of scientific papers published in various journals since 1665 (Jinha 2010). Approximately 2.5 million new scientific papers are published each year.

As of 2014, there were approximately 28,100 active scholarly peer-reviewed journals (Ware 2015). This excludes the increasing number of predatory, fake scientific journals, which produce high volumes of poor-quality research.

G. Books

It is estimated that there are between 500,000 and one million books published annually (Bobby 2022).

With self-published authors, there are close to 4 million new book titles published each year. Unfortunately, the typical self-published author sells only about five copies of his/her book.

The average US book now sells fewer than 200 copies per year and fewer than 1000 copies over its lifetime.

According to Google, there have been 130 million books published since the invention of Gutenberg's printing press in 1440. However, this doesn't factor in books published after 2010, nor does it include self-published book titles.

In 2021 a total of 826 million books were sold in the US. An interesting fact is that 75% of people surveyed in the US prefer print to e-books or audiobooks.

Let's remind ourselves of Seneca's message, that it does not matter how many books we have, but rather how good these books are.

Information Fatigue Syndrome Solution

Is there a solution to Information Fatigue Syndrome?

The solution to Information Fatigue Syndrome is not simple or straightforward.
Some main actions to deal with it are the following:
- Filter all the information that comes your way and make sure that you don't contribute to the digital burnout of others by spreading and sharing unnecessary information
- Sharpen your focus when looking for and using grey literature and any other information
- Focus on essential, not on interesting
- Prioritize
- Pick reliable and trustworthy sources of grey literature
- Delegate
- Ask for help
- Learn to say NO
- Shut down disrupting devices
- Separate business from private time
- Relax, go for walks, meditate

There is also a role that information specialists could play. They can:
- Help with filtering information
- Maintain lists of high-impact resources
- Prioritize readings and research materials
- Do preliminary search
- Determine reliable and trustworthy sources
- Offer learning and research hubs
- Provide opportunities to experience modern IT environments
- Offer information and KM training
- Encourage exploration, creation, and collaboration
- Provide no-stress and quiet spaces
- Become pillars of open-access and open science

And finally, let's consider a huge wastepaper basket to be a possible solution for information fatigue syndrome, since as Albert Einstein said, '***information is not knowledge!***'

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