**Forum:** World Health Committee

**Issue:** Combating the negative effects of information overload on people's mental health

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## Introduction

Widespread access to modern technology has facilitated access to information, however, this "Information Era" has its dangers. The exposure to the overwhelming flood of knowledge can result in adverse repercussions for mental health and wellbeing. It is important to note that we live in a world where information is the strongest commodity in place for simple transactions such as communication.

The strongest indicator of information overload is the effect of cognitive capacity on an individual's interpersonal communication. The concept of information overload can be defined as "the stress that an individual may experience when the extent to which information is available exceeds the ability to be processed by the information user" (*Information Processing and Management, Volume 2).*

Being susceptible to information overload due constant exposure can leave one vulnerable to the very real threat of mental health disorders such as anxiety and depression. It is somewhat of a cognitive barrier which can frustrate the information user, and has recently become an emerging problem due to our reliance on the internet and technological devices to carry out daily tasks and responsibilities. This has created even more pressure due to the rising use of technology and the unfiltered sources of information, since nowadays anyone can create and create publications without a content filter. It then becomes difficult to understand and process information, so technology users can face difficulties making decisions due to the presence of an overwhelming amount of knowledge.

As previously mentioned, information overload can be harmful to mental health because it can cause the brain to process information in a way that makes it difficult to focus. It can ultimately lead to anxiety since one feels overwhelmed in the realm of the abundance of information and can ultimately increase the release of the stress hormones cortisol and adrenaline. An individual's wellbeing is the result of multifaceted psychological effects that are influenced by one's mental health and internal cognitive processes. The information

processing capacity can vary among individuals according to their different mental capacities and networks.

The effect of information overload can be clearly seen in regards to the severe nature of COVID-19. The ongoing pandemic has had economic, social and political effects on society and has changed our lives forever. This crisis resulted in an increase of mental health disorders which culminated from social distancing, severe economic impacts, and the uncertainty of the uncontrollable spread of the contagious pathogen. The plethora of information on the pandemic has been broadcasted across several communication channels and has only contributed to an ongoing state of mass fear.

# Term Definitions

## Information Overload

This concept was best described by Wilson (2001) by stating that Information overload is "... a perception on the part of the individual that the flow of information is associated with work tasks is greater than can be managed effectively and a perception that overload in this sense creates a degree of stress for which his or her coping strategies are ineffective" (p.113). The access to unlimited information causes a drawback on mental health instead of positively benefitting the individual as a personal resource.

## Information Processing

The term information processing can be referred to as the manipulation of the information available to the user in order to produce individual understanding of a given issue. Used as a psychological term, this concept describes the general process of how individuals acquire, decipher, and react to experiences in their given reality. Memory and personal understanding is what influences the ability to retain certain information, and the three stages of memory that work together to evolve conscious awareness are sensory memory, short term memory, and long term memory.

## Cognitive Capacity

Also known as cognitive abilities and functions, which oftentimes refers to the skills required to process and filter information during the acquisition of knowledge. It is the innate ability to understand given information by manipulating it in order for one to better understand its context. People have different cognitive capacities because it is dependent on the amount of information that one's brain is able to retain.

## Behavioral Intention

This term refers to any of the given external factors that could potentially influence a given behavior at any given time. It could be the intention to use a technological model that affects the user's experience, which in this case relates to the overload of information on

the internet. This then influences the conscious act of performing or not performing a future behavior.

# Background Information

## Historical Context

The term "information overload" was only first used in the book, *Future Shock*, written by Alvin Toffler in 1970. In this book, he referred to the definition of the term as the difficulty that an individual may face when understanding a given issue, which can then influence the decisions made due to the high presence of information. Hundreds of years earlier information overload was still a pressing societal issue that was undermined for a long time. In 1540, the invention of the printing press and the mass production of books made more information available to society. The idea of proprietary access or control of information became a pressing concern and in 1545, a swiss scholar by the name of Konard Gessner, created the first comprehensive list of books to steer people out of confusion due to the overwhelming amount of information that could all of a sudden be accessed. Mental health and wellbeing was not a primary concern during this time, however the concept of cognitive capacity and the exposure to excessive information having an effect on work efficiency caused worry in some individuals.

## Effect of COVID-19

The negative effects of information overload on mental health could clearly be seen as a result of the pandemic. The severity of COVID-19 all around the world has had adverse effects on physical and mental wellbeing, while also significantly impacting individual lifestyles. As of February 6th, 2022, there have been a total of 5,755,094 deaths, and is still affecting people all over the world. Due to the high influence it has had on everyone's lives globally, the pandemic has generated intensive media coverage throughout multiple outlets. Access to this information is crucial in informing the public to oversee their wellbeing, however the domination of coronavirus on all media outlets and communication lines has led to an abundance of information with contradicting beliefs and ideas. One effect that was observed is that when individuals are presented with more information than they are capable of processing and understanding, there is an extent of information

avoidance, which leads to inadequate decision making due to the ignorance of recommended behaviors. Social isolation, reduced physical activity, and reduced intellectual stimulation can potentially increase the risk of cognitive decline and dementia in older adults.

## Technological Influences on the dissemination of information

The development of communication channels and information available online has drastically increased the rates of poor mental health states and behaviors relating to information overload. Currently, there are over 2.5 quintillion bytes of data that are uploaded to the internet on a daily basis. The multitude of information flows from many devices such as smartphones, computers, tablets, books, etc, which ultimately causes distraction and overwhelming stress. Living in an age of information and technological advancements, we are all recipients of information through instant messages, phone calls, news outlets, emails, and social media. An overexposure to digital media can result in detriments to one's emotional wellbeing, and some of the physical effects include headaches, vision loss, weight gain/loss, and carpal tunnel syndrome. Somehow, human psychology attributes the inability of humans to reach a decision/conclusion when presented with multiple options or a substantial amount of data that must be processed. The rise of internet use has significantly contributed to the overload of information by facilitating access to the myriad of information available, and has since then shown to be both beneficial yet detrimental to physical and mental wellbeing.

## Impact on mental health

In spite of the attention that this pressing issue has received, recent studies have actually found that problematic internet use and the overload of information is correlated with adverse mental health effects. These include emotional instability, social withdrawal, depression, anxiety, desolation, issues with self-esteem, etc. Negative feelings of failure are attributed to oneself when the amount of information exceeds the user's ability to build an understanding of it. The overwhelming exposure to various sources of information causes

confusion and can affect overall work performance, which results in several implications regarding the individual themselves and their organization, and can lead to self-deprecating thoughts. Hallowell (2005), claims that "a negative neurological effect of information overload can cause Attention Deficit Trait (ADT)", which he characterizes as a stress state in which the patient is harmed psychologically. The individual is affected by experiencing difficulty with organization and restrain, as well as unfortunately encountering high levels of stress and anxiety (Hallowell, 2005).

# Countries and Organizations Involved

## The United States of America

Information overload costs the United States economy an average of $900 billion annually. 28% of a corporate individual's day is consumed by technological communications on devices, which is around 28 billion lost working hours. The United States has also faced the largest increase in billable clinical hours for mental and physical health determinants that can be attributed to the increment of technology usage.

## China

China's censored media restricts the access to certain information sources, and the government claims that this decision was partially made in order to "protect the physical and mental health related to the people's vital interests". However, the distortion of information from the rest of the world has just about the opposite effect. Censorship indicates fear in society and the mental health of its citizens has plummeted in recent years due to the artificial barriers placed on certain knowledge.

## Japan

The prevalence of mental health disorders is not generally common in Japan, which could potentially be attributed to the stigma surrounding mental health in Japanese culture. As a result of collective stigma on mental health disorders, citizens rarely seek treatment, which means that the cases are underreported. Hospitals in the country can set private prices since psychotherapy and alternative coping mechanisms are not covered by public health insurance.

## Brazil

The total health expenditure per capita is $597 and the magnitude of their budget to GDP is 7.6. In the past decade, a wide variety of services were established in order to maximize the country's limited resources and benefit its citizens. Recently, Brazil has undergone a major reform to their mental health system by providing free access to support resources and

psychotropic medicines. They have devised a system which has proven to be effective in which primary health care workers and "mental health teams" facilitate referrals to administer psychiatric treatments.

## European Union

As a result of the coronavirus pandemic, the European Parliament acknowledges the importance of upholding mental health and looks to strengthen policies regarding the wellbeing of its citizens. The policies and services are deemed to be the responsibility of each individual country, however concern has been raised by a vast majority. Depression and anxiety are among the most common mental health conditions that exist within the European Union. Although there may be concern for these individuals, national public healthcare systems are not required to recognise treatment for these diagnoses. There is still stigma around receiving psychotherapeutic treatment and access to these support systems have resulted to be unsatisfactory with universal healthcare coverage.

## Timeline of Events

**1908**     The beginning of the mental health reform movement, starting with the publishing of Clifford Beers' autobiography, *A Mind That Found Itself*. He brings attention to his struggle with mental illness and the stigma surrounding disorders that other individuals such as him have had to endure.
Beers founded the Connecticut Society for Mental Hygiene, which later developed into the National Committee for Mental Health.

**1917**     As requested by the Surgeon General, Mental Health America passed the "mental hygiene" program, which was then used by the Army and Navy as preparation for WWI.

**1963**     Congress approved the "Community Mental Health Centers Act", which enables various construction grants for mental health centers throughout the United States. The legislation was then enacted and signed by President Kennedy.

**1990**     The foundation, Mental Health America, "played a leading role in the development of the Americans with Disabilities Act, which protects mentally and physically disabled Americans from discrimination in such areas as employment, public accommodations, and state and local government services".

**11th of September 2001**     Many studies were conducted in which it was found that those who experienced the attack themselves or repeatedly witnessed the events online, were at a very high risk of developing long term psychological problems, such as PTSD, depression, or substance use disorders.

**2004**

The Garrett Lee Smith Memorial Act, which raises awareness for youth suicide and is a prevention program is passed. Since its expansion, it has been looking to include suicide prevention programs for people of all ages.

**7th of May 2006**

National Children's Mental Health Awareness Day to raise consciousness about the importance of positive mental health and wellbeing for a child's healthy development in the United States.

**2008**

The advocates were successful in passing the Mental Health Parity Act in congress and officially signing it into law (USA).

**March 2010**

Passing of the Affordable Care Act, which marks the start for affordable health care insurance and accessibility to quality care. For the first time, mental health and substance use disorder services were considered a priority in American healthcare services.

**May 2012**

SAMHSA established the first National Prevention Week to raise awareness on substance abuse and to promote behavioral, mental and emotional health among individuals.

**28th March 2020**

The US death poll surpassed 2000 lives lost due to COVID-19. There were social repercussions like the closing of schools, businesses and lockdown government orders.

**Current Day**

It is estimated that around 792 million people worldwide suffer from mental illness, which translates to around 10.7% of the global population.

## Relevant UN Treaties/Resolutions

### EUR/RC63/R10 - (Implemented in 2013)

This resolution is an extension of the resolution EUR/RC55/R2, and calls for the implementation of mental health policies with the intention to accomplish mental prosperity and social inclusion. It urges all member states to improve the well-being of the entire population by reducing the burden of mental disorders and by promoting social inclusion and equitable opportunities to receive support.

### A/HRC/36/L.25 - (Implemented in 2017)

This resolution was originally submitted and proposed by the Permanent Missions of Brazil and Portugal and was assembled through a constructive negotiation process to guarantee its reception by consensus. It is important to understand that Human Rights Committee resolutions are not legally binded under the International law, however it expresses concern for a relevant topic and moral responsibility of the member states. The main purpose of this resolution is to provoke a paradigm shift concerning both mental health itself as well as the view on its practices and support systems. The purpose of this resolution was to serve as a social advocacy outlet that voices concern for the rights of mental health service users.

### UN Policy Brief: COVID-19 and the Need for Action on Mental Health

This policy brief recognizes that COVID-19 was a physical health crisis that produced a major mental health crisis as a result, and that healthy mental well-being should be a priority in every country's response to recover from the aftermath of the pandemic. The widespread misinformation about the virus and future uncertainty are the roots of distress and a rise in mental health problem rates. The redundant graphic images of severely ill people present in all media sources merely added to the state of fear. In order to minimize the consequences of the pandemic, the brief offers alternative solutions to approach the problem by implementing the recommended actions. UN Secretary General, Antonio

Guterres, launched this policy brief and highlighted that the individuals with the highest risk were, "frontline healthcare workers, older people, adolescents and young people, those with pre-existing mental health conditions and those caught up in conflict and crisis. We must help them and stand by them".

## EB148/20 - (Implemented in 2021)

The title of this passed resolution is, "Mental health preparedness and response for the COVID-19 pandemic", and was drafted by the Director-General. It dwells on the pressing issue of pre-existing mental, neurological and substance use disorders and how rates have risen during the pandemic. This resolution reiterates the importance of ensuring "widespread availability of emergency mental health and psychosocial support" as it becomes normalized and merely a consequence of the global pandemic.

## Previous Attempts to Solve Issue

The Mental Health Act of 1983 is a large segment of the legislation passed that covers the "assessment, treatment, and rights of people with a mental health disorder" passed by the UK National Health Service, NHS. Any individual that is detained under The Mental Health Act is considered to be in need of urgent treatment for some kind of mental health disorder due to the high risk of them physically harming themselves. This legislation in England and Wales raised awareness on the very real ramifications of having a mental disorder and it was the first to state that people can be detained and treated against their wishes if they pose harm to themselves or others in the community. In 2007, the legislation was adapted to modern circumstances and a new version was published.

Another attempt to solve this pressing issue is the incorporation of mental health services such as psychiatry and psychotherapy in the coverage of health insurance policies. An example of its efficiency is the European Union. Although each individual country acts independently from one another, most countries of the EU (around 83%) have a mental health policy in place and cover around 89% of the population with mental illnesses. Having mental health legislation in place has decreased the result of extreme mental illness and self harm rates. Normalization of seeking external help from professionals has also helped reduce overall suicide rates and the healthcare system will support any treatment undergone, although not all health insurances cover this aspect of mental health and wellbeing.

## Possible Solutions

There has been recent research done on wireless geographical information systems, which state that the semantic gap between unstructured data on the internet and higher concepts (spatial and temporal) is one of the most important factors to address when looking to reduce information overload in modern systems. There would be a new emphasis on creating meaningful user profiles by filling this semantic gap to match the user's interests, and to facilitate their tasks instead of showing overwhelming results.

Apart from technological advancements, reinforcing mental health and the support of external resources is important in making progress as a society. Information literacy is a skill that must be shown to young students so that they can act accordingly due to a longitudinal exposure. As the use of technology continues to increase, so does our vulnerability to overwhelming information and our weakened ability to process it. Support to maintain a healthy mental wellbeing should be normalized and encouraged to avoid the effects and consequences that negative mental health could potentially have on the community as a whole.

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