

Awareness of Information Overloading Through social media and Its Impacts on Health Among Saudi Population – A Survey Analysis

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Abstract:

The internet and social media represent one of the biggest technological advances of the twenty-first century. These days, social media and internet services come with an abundance of materials that can be used in a variety of contexts. Because of the high prevalence of depression and related illnesses, excessive use of internet devices such as mobile phones and social media can change people's behaviour and influence their health. [1] All people, regardless of age, career, or social status, frequently experience information overload. Vast volumes of digital data are constantly available via popular mobile technologies. While this could seem like a big advantage at first, it can also make you feel overwhelmed. Due to their strong reliance on cellphones and familiarity with digital technology, high school kids are particularly susceptible to information overload since they are regarded as "digital natives," meaning they have grown up with and understood digital technology. Similarly, this deluge of knowledge affects everyone else, regardless of age.

This study looked at how risk perception and social media tiredness were related, as well as how depression symptoms were impacted by social media overload. The purpose of this

exploratory study is to comprehend how students and other individuals react physically, emotionally, and mentally to information overload. The data used in this study is the annual publication of data provided in Datareportal and Saudia social media [3]. An estimate was made of the total amount of time that people will spend on the internet from 2015 to 2023, following the rise in internet usage. In this research the Analytical Hierarchical Process (AHP) is used to analyze the data to compare the effect of different social media usages on health and behavior. The results and findings obtained in this study produced relevant insights about increasing awareness of excessive social media usage of KSA citizens' and its impacts on their health as well as health-related behaviors, physical activity, and risk factors like depression and obesity.

Keywords: social media, digital natives, internet usage, depression, obesity.

Introduction:

Social media has become a necessary part of daily life and the public's main communication tool. They make it easier to learn about friends' life and the latest events across the world. They also let you pass the time and express your ideas, feelings, and opinions. One distinctive feature of social media is its ability to reflect public opinion in real time. Moreover, using the Internet raises one's knowledge of society, politics, and economics. Additionally, it promotes social interaction and conveys the illusion that users are actively participating in every event, as seen by the importance of the ideas they share in their messages and comments. Regrettably, the COVID-19 pandemic-related quarantine procedures have resulted in an increase in the number of social media users. Between July and September 2020, the social media audience grew by 180 million as compared to the same period in 2019 [2].

Recognizing the part social media plays in the dissemination of false information is crucial. The World Health Organization (WHO) created the term "infodemic" in response to this, to characterize the abundance of accurate and high-quality online information regarding the pandemic, including false information that jeopardizes people's physical and mental health and

makes it more difficult to implement effective pandemic control measures. WHO highlights that COVID-19 is the first pandemic in history to see extensive use of social media and technology to keep people connected, safe, and informed. WHO further calls for streamlining the public's access to reliable information. [3]

According to recent studies, people use social media on average for 2.3 hours each days. [5]. Young people in 2022 are accustomed to utilising YouTube, TikTok, Instagram, and Snapchat more and more; according to one-third of them, they use these platforms excessively [6]. The significant amount of time that people spend on social media worldwide has drawn the attention of researchers to the benefits and drawbacks of utilising it. Research has shown that excessive use is mostly associated with lower psychological well-being [7]. However, research also suggests that, depending on the calibre of interactions rather than quantity, a user's use of social media may either improve or worsen their mental health [8].

Literature Overview:

In this study, Beyari suggested that privacy was the least significant factor and entertainment the most important. His studies revealed that likes, comments, and follows were the main contributors to poor mental health (total utility = 56.24). "Games" was the least useful aspect (total utility = 2.56). Because social media features have a big impact on mental health, the study advised users to use extreme caution when dealing with them, especially with likes, comments, follows, media, and posts. [13] social media refers to a wide range of apps that enable users to produce and share media, text messages, and phone conversations among themselves inside a network [14]. Among the social media platforms are Facebook, Twitter, Instagram, and TikTok. Numerous significant social media components were considered in the investigation, such as calls, pages, browsing posts, likes and comments, ads, media sharing, group chats, and private conversations. Social media use has been linked to anxiety, depression, and aberrant sleep patterns [15].

Social Media Impacts on Mental Health

Due to the ubiquitous availability of information, people's interactions with it have changed. Users of smartphones and the Internet, for example, now frequently navigate between and scroll through pages quickly; Rowlands, Nicholas, and Williams (2008) have dubbed this behaviour "horizontal information seeking." Having to divide their focus between the activity at hand and their need to be connected to their devices causes stress for users (Bawden & Robinson, 2009, p. 183). People experience stress in their leisure time as well as at work and school. Teens spend the entire day interacting with their buddies on social media and using their cellphones incessantly. People are therefore inundated with new information and social messages—implicit, explicit, or presumed—all the time. This is how information overload shows up during free time, negatively impacting users' general health (Tildine, 1999), making them feel confused, overwhelmed, and unable of making thoughtful judgements (Rudd & Rudd, 1986).

Social media can even provide helpful information, but it can also overwhelm and cause someone to "freeze up." One of the main responses to stress is the "harmful reaction people have to get excessive pressures or other types of demand placed on them at work" (HSE, 2017). For those who work and for students who consider education their profession, receiving messages from teachers and administrators on their smartphones is a constant habit. This kind of stress can lead to heart disease, insulin resistance, depression, anxiety, and hypertension (HSE, 2017).

Methodology:

The researcher employs the Analytical Hierarchical Process (AHP) as a decision-making model, which employs paired comparisons to identify the most important variables influencing a choice [16]. The researcher's goal in this experiment was to categorize and rank social media aspects that affect people's mental and physical health. This rating will assist in setting priorities for the social media usage characteristics that need personal management. The information was obtained via a data survey portal that provides survey information on social media platforms, including Facebook, Twitter, YouTube, WhatsApp, and usage patterns. It investigates the relationship between social media use and issues with mental and physical health.

AHP process:

1. Define Problem – Create Awareness about social media risk factors
2. Compare – All social media usage with Health impacts
3. Compare analysis of Time utilization
4. Compare Health Issues (physical and mental) in digital era.
5. Check for consistency
 1. Good health form health lifestyle
 2. Using social media and technology with awareness

Data Source:

The study employed data from Saudi Arabian social media and the annual publication of data from Datareportal [3]. Infographic reports about the digital world are available on various web portals. various reports include information on social media usage over time and by region, daily social media usage by country, and apps utilized by category. I gathered data for the Saudi Arabian region, made a data table of people who use social media and how long they use it for, and then produced a chart to illustrate the findings.

Results:

Social Media USAGE'S IMPACT ON CHILDREN

Social media companies set a 13-year-old usage age limit, but new study indicates that 40% of kids between the ages of 8 and 12 are already online, indicating that the age limit is not being observed. Extended screen use can quadruple an individual's risk of acquiring anxiety and depression. Children use social media for three and a half hours a day on average. When children's mental health is neglected due to mindless scrolling, it may be time to disconnect and prioritize their mental well-being.

Social media posts often spread false information because they allow users to highlight their great qualities while hiding their negative ones [17]. Adolescents are more prone to think there's a problem with them since their appearance doesn't match the posts made by their pals than to understand this reality. The authors' study in reference [18] found a significant relationship between users' poor mental health and social media influencers.

In general, social media puts our children's mental and physical health at risk. It should ideally have an impact on a child's sleep, genuine relationships, in-person interactions, and physical activities—all of which should be fostered by nature and human guidance—instead of the tech zone. Effectively encouraging deliberate social media use is crucial.

Social Media USAGE'S IMPACT ON ADULTS

Table – 1

YEAR	Gender	Youtube	Facebook	Instagram	Tik-tok	FB Messengers	Linked In	Snapchat	Twitter
2022	Male	60.1%	76.1%	58.4%	60.9%	75.7%	77.8%	49.6%	65%
	Female	39.9%	23.9%	41.6%	39.1%	24.3%	22.2%	49.65%	35%
2023	Male	60.1%	78%	57.9%	65.8%	78.3%	22.6%	48%	60%
	Female	39.9%	22%	42.1%	34.2%	21.7%	77.4%	51.2%	40%

Source: grouped by the author based on [9][10]

Each year, Datareportal publishes population statistics for Saudi Arabia, which validate the preceding table. (Reference Table 1).

Table 1's data demonstrates that Facebook is the most widely used social media platform, with 78% million male users and 22% female users overall. In terms of user count, YouTube and Instagram are in second and third place, with 57.9% of male users and 39% and 42% of female users, respectively. The three others most widely used social media platforms are Snapchat, LinkedIn, and TikTok. Facebook Messenger, an application for message exchange with a

predominantly male user base (78.3%), closes off the list of the highest ranked social media.

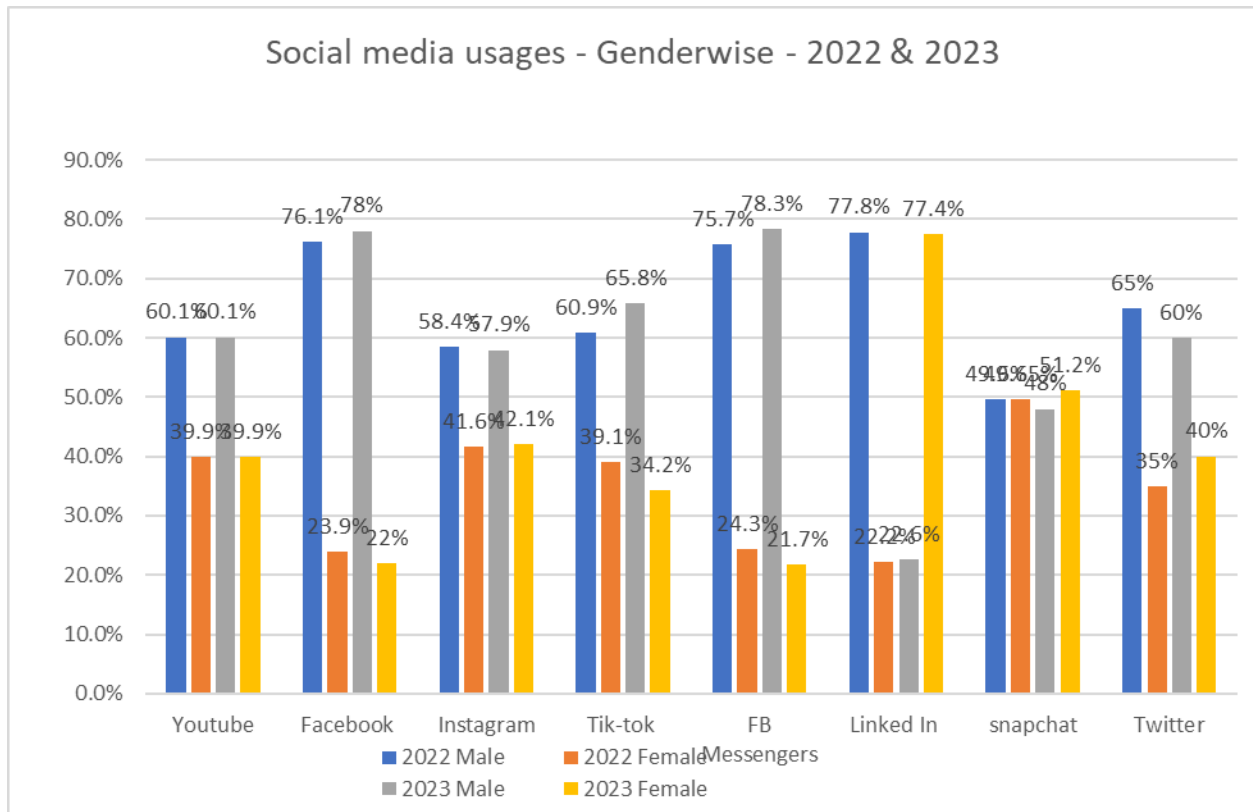


Fig: 1 Source: generated by the author based on [9][10]

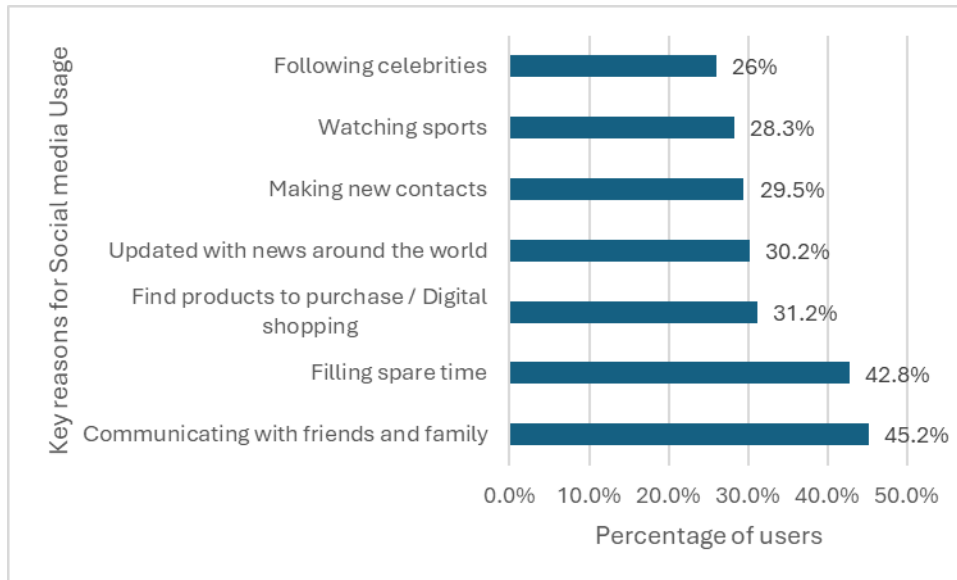


Fig: 2 Source: grouped by the author based on [9,10]

Even while there are many reasons to utilise social media, we can also forecast that usage will increase over time as new, cutting-edge tools and apps for marketing, online shopping, and entertainment are launched. Social media platforms are typically designed to pique your curiosity and compel you to return often to see what's new. It's how businesses create revenue. But just as an addiction to drugs, alcohol, or nicotine can lead to psychological needs, so too can utilising social media. Compulsive gambling can also result in physical problems like obesity, high blood pressure, insomnia, and depression.

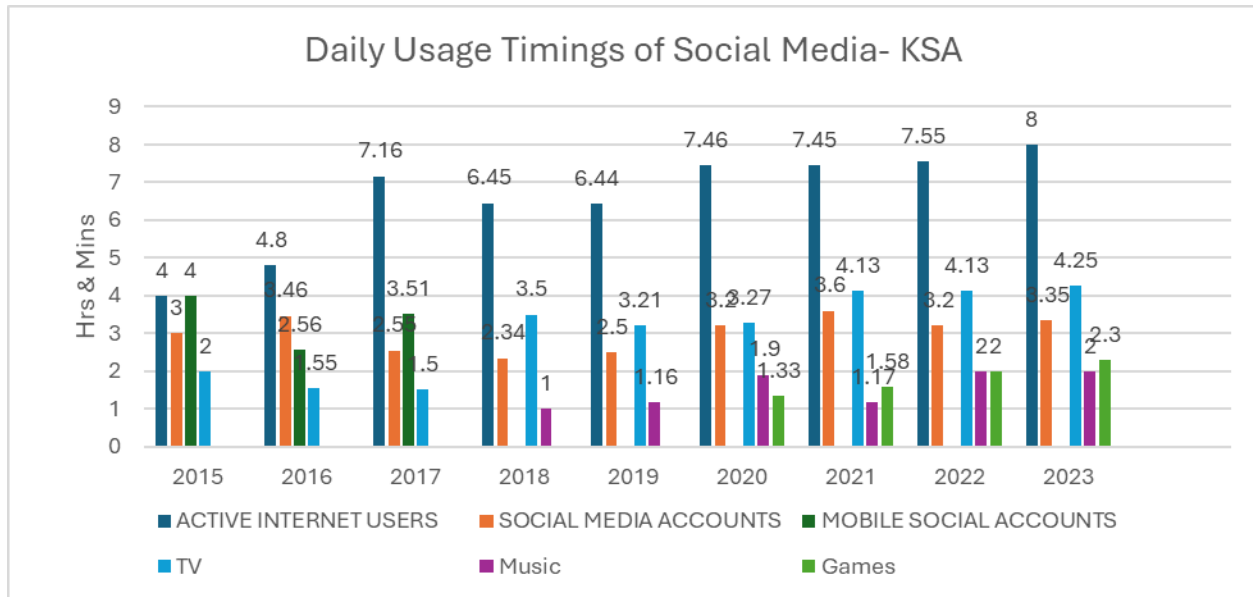


Fig: 3 Source: chart derived by the author based on data [9,10]

The above figure illustrates how social media usage has increased between 2015 and 2023 in line with technological advancements such as the release of new games and applications.

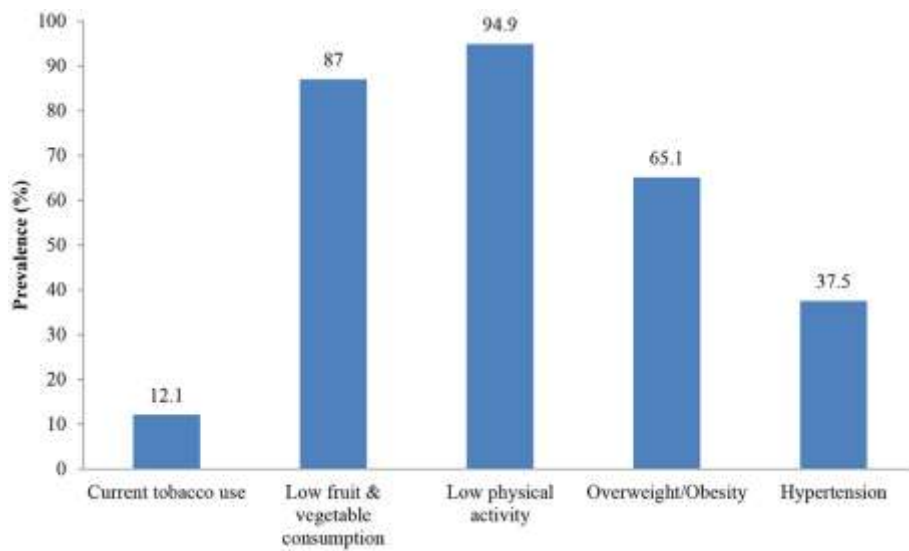


Fig: Graph displaying the prevalence of NCD risk factors [19]

This chart reveals the vast rise in the prevalence of non-communicable disease due to the increase of mobile phones usages which reduces human mobility and raises their health issues.

Hence, we should understand the social media has several detrimental effects on people's lives. They are listed below:

1. Feeling inadequate about your life or appearance
2. Addiction to social media and FOMO
3. Distancing
4. Anxiety and depression
5. Self-centeredness and self-absorption
6. Cyberbullying
7. A decline in self-worth

To overcome these risk factors, you must restrict yourself from being addicted of social media usage. If you are using social media to self-soothe or distract yourself from negative feelings if you use it more often when you are bored, lonely, or unhappy. Allowing yourself to feel and accept the natural activities and nature can help you find better ways to manage your moods, even though it can be challenging. Finally, the findings of this study explore the effects of information overload on individuals, particularly students and adults, and offer recommendations to parents, teachers, and medical professionals on how to help those affected by this situation.

Conclusion:

The goal of this study was to raise awareness of how social media use affects children's, teens', and adults' physical and emotional health. Social media platforms like Facebook, Twitter, and Instagram offer a variety of functions like messaging, media sharing, and gaming, and have become an essential component of contemporary society. Nonetheless, there is rising worry that social media use could be detrimental to mental health, especially among young people who are more likely to use these platforms often.

The study concludes that, depending on how it is utilized and the features that are employed, social media can have both beneficial and detrimental effects on mental health. It is the duty of young people to be aware of the potential risks associated with social media and to mentor adults and children in responsible technology use for a happy and healthy existence. This study recommends that there is a need for a reduction in life-damaging behaviors among people through the adoption of healthy lifestyles such as physical activity and nutritious diets. Moreover, we can prevent the Saudi Arabia people from the prevalence of Non communicable disease risk factors only through living healthy lifestyles which will lead them a successful and healthy life.

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