

# A Psychological Survey on Popcorn Brain

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**Abstract**—Popcorn Brain is a mental condition where the brain becomes over stimulated due to constant multitasking and rapid digital consumption, like scrolling through social media reels and shorts. This overstimulation makes it hard to concentrate, reduce stress, impatience, poor decision-making, and a fear of missing out (FOMO). The main causes include over screen time, instant gratification from likes and notifications, and lack of offline activities. To overcome this people can limit screen time, control notifications, set boundaries, improve sleep habits, practice mindfulness, and seek professional help if needed. These steps help to reduce digital dependency and improve mental focus.

**Index Terms**—Mobile Phone, Addiction

## I. INTRODUCTION

Popcorn Brain a term introduced by researcher David Levy from the University of Washington in 2011. Popcorn Brain is a mental condition in which a person wanders from one topic to another while thinking. It is called popcorn brain syndrome. This is a type of weak mental condition that makes it difficult to focus on one thing. Reels and Shorts on social media have increased the problem of popcorn brain. These reel that change in every 30 seconds. They constantly tempt our mind to watch something new. Because of this, our mind cannot stay in one place at a time. As popcorn pops quickly in the microwave, our brains become Overactive and conditioned to constantly expects stimulation. In this situation people can't be able to Concentrate and having difficulty maintaining concentration. People with popcorn brain may also feel mentally restless. The term "popcorn brain" describes the cognitive effects of continuous multitasking, which are especially impacted by the usage of social media. Social media has a various effect on our brain. How popcorn pops quickly, our brain is constantly

switching between tasks and our unable to concentrate on one at a time.

"Popcorn brain" is a term that refers to the idea that our brains are becoming overwhelmed or over stimulated by constant exposure to fast-paced information and digital media, especially through social media, video games, and smart phones. The term suggests that, just like how popcorn "pops" quickly and erratically, our brains are constantly "popping" from one thing to another, struggling to maintain focus, and may even lose the ability to concentrate for extended periods of time.

This concept is often discussed in relation to how technology and digital culture have impacted our cognitive abilities, particularly in terms of attention spans and memory. It's not a formal medical term, but rather a metaphor used to describe the effects of overstimulation on the brain, which some believe could lead to issues like mental fatigue, stress, or difficulty with deep thinking and sustained focus.

The term was popularized in the book *The Shallows* by Nicholas Carr, which explores how the internet and modern technology are reshaping our brains and how we process information.

A. Sample:

In the present survey, information was collected from people through interview method. A total of 1364 people were asked various questions and information was collected from them.

B. Tool:

In the present study, researchers prepared questions and collected information from 1,364 people.

C. Research Design:

The present study is a type of survey study in which people's opinions were taken.

## II. RESULT AND DISCUSSION:

The following were the views of the people in the present survey:

61.2% people said they check their phones frequently.

74.5% people said they keep scrolling even when engaged in some work or activity.

56.9% people said they feel prompted to check their phones as soon as they receive a notification.

61.8% people said they find it difficult to concentrate on tasks.

70.6% people said they feel restless if they do not check their phones frequently.

56.9% people said they do not feel like doing any other task while using their mobile phones.

74% people said they prefer using their mobile phones first to get new information.

70.2% people said they check their phones multiple times within an hour.

80.1% people said they feel nervous if they do not check their notifications immediately.

61.6% people said extreme mobile usage during the day disrupts their sleep at night.

57.1% people said extreme phone use has affected their memory.

77.4% people said they feel lonely and disappointed if they do not receive likes and comments.

51.9% people said staying overly active on mobile devices makes their minds feel constantly tired.

63.3% people said extreme mobile usage affect their ability to generate new ideas.

59.2% people said they frequently experience mood swings.

56.6% people said their thoughts keep shifting from one thing to another.

82.1% people said they forget their primary task when a notification arrives while doing something they enjoy.

54.6% people said they consider the time they spend on their phone was their personal time.

86.4% people said excessive mobile phone usage is inappropriate.

A. How does popcorn brain develop?

1. Constant Multitasking and Information overload: Switching rapidly between tasks, such as answering emails, checking social media, and working on projects, over stimulate the brain. When we multi-task, we tend to work less, making more mistakes and requiring longer time to complete tasks. Information overload occurs when the brain is getting more information that can lead to stress, anxiety and decreased memory.

B. Dopamine Release:

Every new notification message or piece of information on a digital screen triggers the release of dopamine a chemical in the brain associated with pleasure. Overtime, the brain gets addicted to this constant stimulation, craving more of it.

C. Social Pressure and Dependence:

The need to stay connected, responding and keep in touch with digital media create a reward cycle in the brain, leading to dependency and overstimulation.

### III. SIGNS OF POPCORN BRAIN (SYMPTOMS)

Popcorn brain can affect your ability to concentrate on things. It can also add to your stress level and cause you to lose touch with reality.

1. Constant distractions:

Having trouble focusing because of constant interruptions or the temptation to check notifications

2. Poor decision making and retention:

The brain is craving for rapid stimulation makes it harder to concentrate on long term decisions. When you jump between tasks or content, your brain doesn't build strong neural connections which make it harder for memories.

3. Impatience:

Expecting immediate result in every situation and feeling uncomfortable when you're not engaged with digital devices.

4. High Level of Stress - Anxiety:

Popcorn brain is increased stress and anxiety which can arise from constant digital media and multitasking. Rapid information can lead our brain to high stress.

5. Fear of missing out (FOMO):

Anxiety about missing updates or being disconnected from the online world, like social media, Instagram etc.

### IV. CAUSES OF POPCORN BRAIN:

1. Overuse of Screen Time:

Long periods of screen time, particularly when participating in activities like gaming, social media scrolling or short video can over stimulate the brain.

2. Instant Satisfaction:

Because digital platforms frequently for instant rewards (likes comments and notifications) the brain is conditioned for immediate reaction.

3. Lack of offline Activities:

Mental restlessness and a sense of detachment from reality like hobbies, social interactions

V. SOLUTIONS TO DEAL WITH POPCORN BRAIN:

1. Limit your Screen time:

Set specific time slots for Screen activities such as work, entertainment and social media. Keep your phone away from your bed to avoid late night scrolling. Schedule "no screen" time in your day. Such as during meal, an hour before bedtime or during family interactions

2. Control Notifications:

Turn off unnecessary notifications that constantly draw you back to your phone.

3. Set boundaries:

Decide what is most important in your daily life - work, family, health or personal growth.

Avoid checking personal devices during work hours unnecessary. Set boundaries for social media like 15-30 minutes twice a day. By setting these boundaries, you can protect your mental health.

4. Improve sleep Hygiene:

Avoid screen time at least one hour before bedtime to promote better sleep.

5. Practice Mindfulness:

Engage in mind fullness meditation to improve focus and reduce stress. Try deep - breathing exercises or muscle relaxation.

6. Talk to professionals:

If you feel overwhelmed, talk to a therapist or counselor. Explore therapy like Cognitive Behavioral Therapy (CBT) for coping strategies.

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