SELF-DIAGNOSIS, ECHO CHAMBERS AND MISINFORMATION

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SURPRISING FACTS

- 7.43 Billion smartphones in use = 90.6% of the global population.
  From 17+ billion in 2024 to 30+ billion in 2030.
- Americans on average engage with their phones 96 times per day for roughly 5.4 hours daily.
  10 hours 39 minutes each day consuming media through devices.
  The average user spends 2 hours & 24 minutes on social media daily.
- Millennials = 77% own a smartphone and spend about 14.5 hours a week engaged with it.
  13% of millennials report spending over 12 hours on their smartphones daily.
- Baby Boomers spend 5 hours using their phones.
  More parents than teens now say they're on their phones too much.
- Three out of five American parents confess to spending more time on their devices than with their children.
  This is in sharp contrast to the slightly less than 4 hours they spend with their kids.

Sources: Pew Research Center, 2025
www.statistica.com, 2025
techjury.net, 2024
Vailshery, 2024

JUNE 29, 2007

- **Bill Gates:**
  Bill Gates says no smartphones before age 14.
- **Sean Parker (Facebook's first president):**
  "We knew it was addictive – and did it anyway."
- **Frances Haugen (Facebook whistleblower):**
  Facebook's own insiders exposed its harm.
- **Chamath Palihapitiya (ex-Facebook exec):**
  "We knew we were manipulating users – I feel tremendous guilt."
- **Chris Marcellino (push notifications):**
  Invented push alerts, left tech to become a neurosurgeon.
- **Loren Brichter (pull-to-refresh):**
  Regrets inventing scroll refresh, now blocks apps and lives offline.
- **Justin Rosenstein (Facebook 'Like' button):**
  Banned himself from Snapchat. Disengaged from the feature he built.
- **Leah Pearlman (co-creator of the Like):**
  Got hooked on her own invention. Now hires someone else to use it for her.

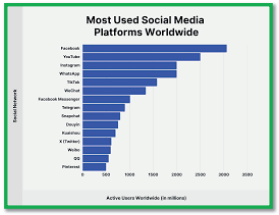
- **Aza Raskin (Mozilla/Jawbone):**
  "It's like behavioural cocaine sprinkled all over your screen."
- **Steve Jobs:**
  Wouldn't let his own kids use the iPad.
- **Tim Cook:**
  Says his nephew isn't allowed on social media.
- **Mark Zuckerberg:**
  Bans screens at home. Has a team to monitor his own posts.
- **Ned Segal (ex-Twitter CFO):**
  Sent fewer than 2 tweets a month – for 12 years.
- **Apple shareholders (2018):**
  Investors begged Apple to address screen addiction.
- **Apple's Response:**
  Launched Screen Time after pressure from shareholders.
- **Digital Sabbath:**
  Tech workers now take screen-free weekends.

STATS...

•Global Usage (2025):
5.2 billion people now use social media – 94% of all internet users.
(Priori Data, 2025)

•Mental Health & Social Media:
Self-diagnosis of mental health issues is surging online – especially on TikTok, Instagram, and Tumblr.
(Adapted from clinical literature on transdiagnostic conditions and digital behaviour)

•Teen Social Media Use:
98% of teens in mental health care use social media – mostly YouTube, Instagram, and Snapchat.
(Aschbrenner et al., 2019)



10 Year Social Media Growth Statistics:

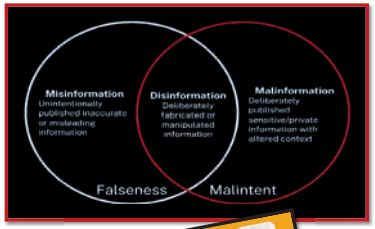
- **2025: 5.24 billion active users (+4.1%)**
- **2024: 5.04 billion active users (+5.8%)**
- **2023: 4.76 billion active users (+3%)**
- **2022: 4.62 billion active users (+10%)**
- **2021: 4.20 billion active users (+13%)**
- **2020: 3.71 billion active users (+7.2%)**
- **2019: 3.46 billion active users (+8.3%)**
- **2018: 3.20 billion active users (+15%)**
- **2017: 2.79 billion active users (+21%)**
- **2016: 2.31 billion active users (+11%)**
- **2015: 2.08 billion active users**

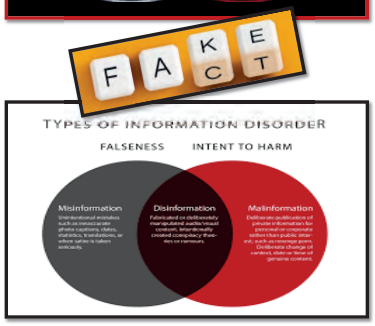
MIS- , DIS, & MALINFORMATION

•Misinformation is false information that spreads, regardless of intent, to mislead others.

•Disinformation is content deliberately created to harm, manipulate or mislead.
Not all misinformation is disinformation, but all disinformation is misinformation.

•Malinformation is content based on fact, but purposely taken out of context to mislead, harm, or manipulate.





- **Social Media & Opinion:**
  Social media has transformed how we access information and form opinions.

- **Information Behaviour:**
  Understanding how we seek or avoid information is key to understanding behaviour in today's media landscape.

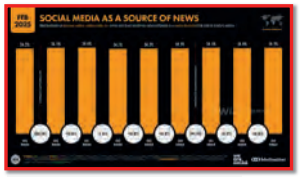
- **Spread of Information:**
  Many factors shape how content spreads on social platforms.

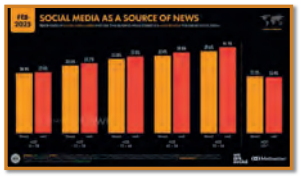
- **Fake vs Real News:**
  On X (formerly Twitter), fake news spreads faster than real news. (Vosoughi et al., 2018)

- **Polarisation & Misinformation:**
  Online polarisation fuels the spread of misinformation.

- **Algorithms & Attention:**
  Feed algorithms shape what we see – and our limited attention reinforces the cycle.

- **Echo Chambers:**
  People gravitate toward content that matches their beliefs – forming digital echo chambers.





Over 1/3 of adults

in the US go to the internet for health questions or triage. Of that third, 35% never visited a doctor to get a professional opinion.

- **Health Searches Online:**
  Health is the third most common online search topic in the US. (Alhusseini et al., 2020)

- **Medical Jargon & Confusion:**
  Online health info often uses jargon – increasing the risk of misunderstanding. (American Psychiatric Association, 2024)

- **Self-Help Site Risks:**
  Symptom checkers and online tests can mislead people into believing they have a diagnosis.

- **Anxiety & Misinformation:**
  Online results can heighten anxiety and shape unrealistic expectations of healthcare.

- **Dangers of Self-Diagnosis:**
  Misinformed self-diagnoses can delay proper treatment and cause harm.

Neurodivergence Online

- **Shift in Perspective:**
  Mental illness is increasingly seen as identity, not illness. (Leveille, 2024)

- **Social Media's Role:**
  Platforms like TikTok validate and amplify neurodivergent identities. (Simons, 2023)

- **"Sick Role" Identities:**
  Some adopt neurodivergent labels for belonging or validation. (Foster & Ellis, 2024)

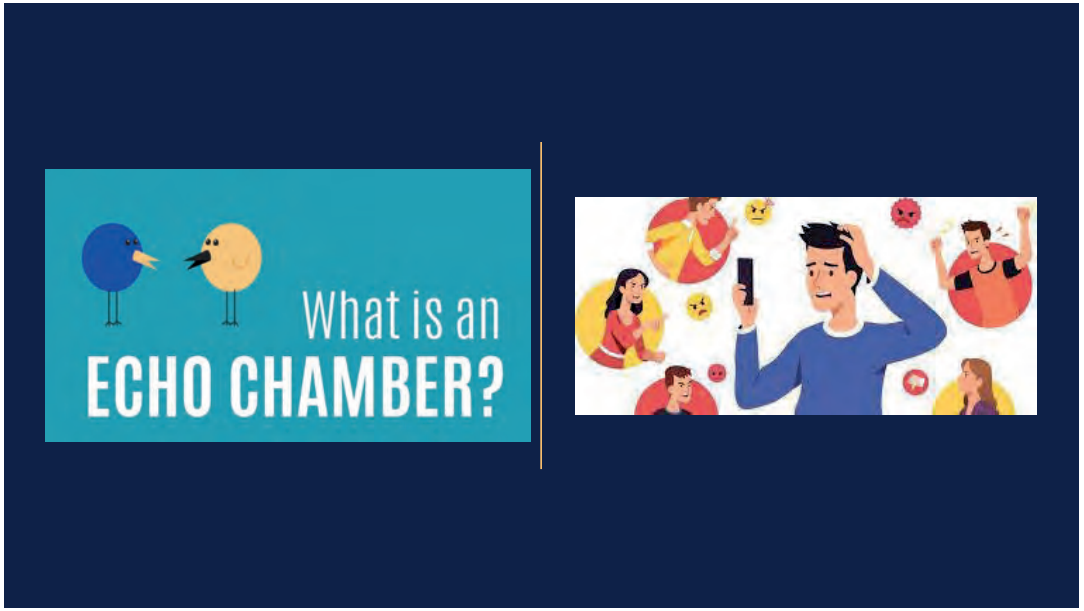
- **Impact on Mental Health:**
  This trend can delay care, mislead diagnoses, or create false symptom presentation. (Foster & Ellis, 2024)

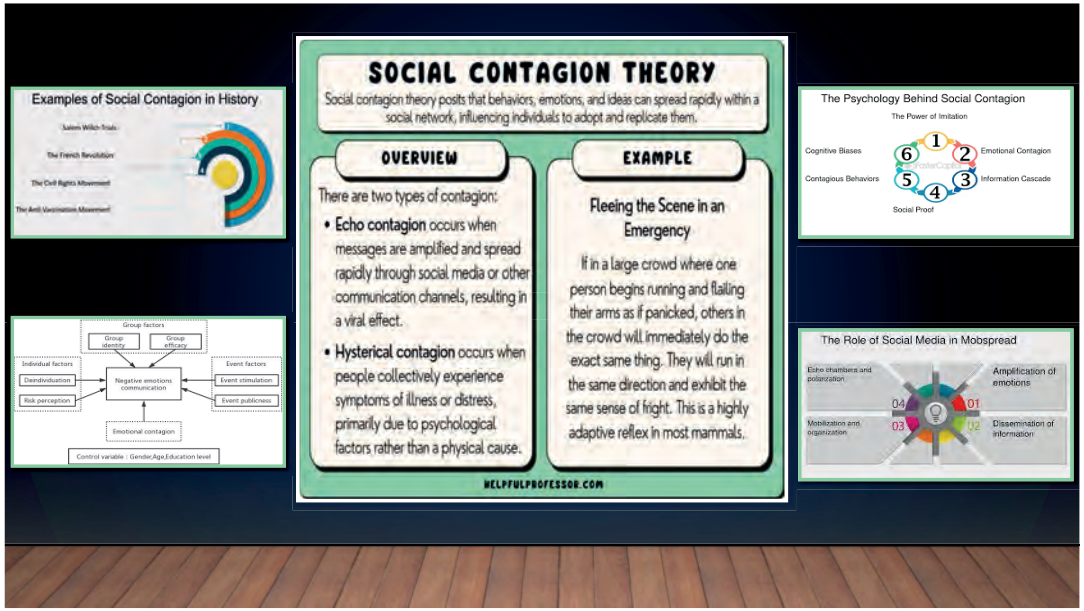
- **Importance of Nuance:**
  Not all experiences are the same – some find it empowering, others may misuse the label. (John Cromby, 2024; Chellappa, 2025)

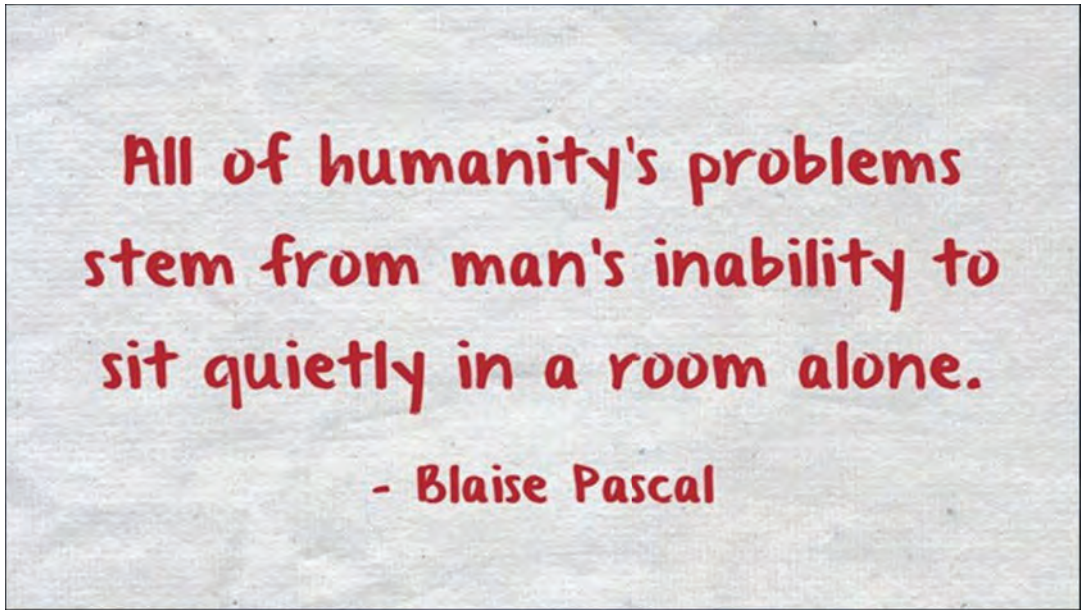
- **The Online "Neurodivergence" Ecosystem:**
  Raises tough questions about identity, diagnosis, and the need for professional support. (Chellappa, 2025)

Risks of Self-Diagnosis

- **Misdiagnosis and Incorrect Perceptions**
- **Delayed or Inadequate Treatment**
- **Increased Anxiety and Stress**
- **Overgeneralisation and Stigma**
- **Harmful Patterns of Behaviour**
- **Validation and Confirmation Bias**
- **Lack of Professional Expertise**


What is an
ECHO CHAMBER?


Examples of Social Contagion in History
SOCIAL CONTAGION THEORY
Social contagion theory posits that behaviors, emotions, and ideas can spread rapidly within a social network, influencing individuals to adopt and replicate them.
OVERVIEW
There are two types of contagion:
• Echo contagion occurs when messages are amplified and spread rapidly through social media or other communication channels, resulting in a viral effect.
• Hysterical contagion occurs when people collectively experience symptoms of illness or distress, primarily due to psychological factors rather than a physical cause.
EXAMPLE
Fleeing the Scene in an Emergency
If in a large crowd where one person begins running and flailing their arms as if panicked, others in the crowd will immediately do the exact same thing. They will run in the same direction and exhibit the same sense of fright. This is a highly adaptive reflex in most mammals.
HELPFULPROFESSOR.COM
The Psychology Behind Social Contagion
The Role of Social Media in Mobspread


All of humanity's problems stem from man's inability to sit quietly in a room alone.
- Blaise Pascal


Q&A