

The Dark Side of Social Media: Psychological Impact on Mental Health in the Digital Age

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Abstract—Social media has become central to modern life with over billions of users globally. Though this social media platforms have major benefits like socializing, connectivity, it also leads to depression, anxiety, body image issues, cyber bullying and sleep disruption. This paper investigates the relationship between social media usage and mental health outcomes, with a focus on depression, anxiety, loneliness, body image disturbance, cyberbullying, and sleep disruption. Drawing from psychological theory, neuroscience, and empirical studies conducted across different age are fundamentally misaligned with long-term human psychological wellbeing.

Index Terms—Social Media, Mental Health, Depression, Anxiety, Cyberbullying, Digital Wellbeing, Adolescents

I. INTRODUCTION

Social media is used widely all over the world. As of 2026, social media platforms such as Instagram, Facebook, tiktok are used so much that an individual's screen time in a day on this platforms is more than 2 hours. For many, especially teenagers this social media platforms have become a primary source to connect, socialise, share their ideas over time. As social media became a mainstream, the rate of depression, anxiety, loneliness have increased sharply over time. The cases of self harm among teenagers rose by 189% between 2009 and 2021. This paper discusses about the rise of social media, impacts, literature review and overall conclusion.

II. LITERATURE REVIEW

Research on social media and mental health has grown significantly over the past decade. Twenge et al. (2018) analysed over 500,000 American adolescents and found that those spending five or more hours daily on social media were 66% more likely to carry at least

one suicide risk factor compared to peers spending just one hour per day [2]. Jean Twenge's book iGen (2017) identified a sharp decline in adolescent mental health beginning around 2012 — the year smartphones became common among teenagers [3].

The most alarming evidence came from within the industry itself. In 2021, internal documents leaked from Meta revealed that Facebook's own researchers had found Instagram made body image issues worse for one in three teenage girls, and worsened suicidal thoughts in 13.5% of British teenage girls surveyed — yet no significant design changes followed [4]. While some researchers, such as Przybylski and Weinstein (2017), argue the effect size is modest [5], the weight of longitudinal evidence and the industry's own internal data make clear the harms are real and unevenly distributed.

III. PSYCHOLOGICAL MECHANISMS AND HARMS

A. Dopamine Addiction

Social media platforms like Instagram, facebook, tiktok, etc. are designed to exploit brain's dopamine system. This apps are created and designed in a way that you cannot resist but to watch the content repeatedly. The colours, designs used for designing the features in the apps are created in such a way that it attracts a human mind to click and watch, and through this you get a dopamine hit which you cannot resist. In this social media platforms there are various contents to watch in various fields which leads to endless scrolling and endless watching.

B. Social Comparison

Social media comparison has become so common these days. It starts with someone out there posting his or her lifestyle, fitness, adventures, etc. and then

people start to compare their life with others as how fun and happy other people life is compared to them which leads to depression, sadness, envy. Comparison can be of fitness, journey, achievements and much more.

C. Cyberbullying

Cyberbullying is way different from traditional bullying as it can follow the victim anywhere. It can affect an individual's mental peace and health easily. As per some research, teenagers face this issue immensely. One can go in depression, have suicidal thoughts, it affects your sleep and overall lifestyle. There are so many suicide cases recorded because of cyberbullying.

IV. VULNERABLE POPULATIONS AND INTERVENTIONS

Adolescents are most at risk, as the prefrontal cortex — responsible for impulse control — is still developing into the mid-twenties, making young people particularly susceptible to social validation rewards. Adolescent girls are disproportionately affected due to greater sensitivity to social comparison and higher rates of cyberbullying. Jonathan Haidt has described the resulting mental health crisis among young women as one of the most urgent and underaddressed public health issues of our time [10]. Addressing these harms requires coordinated action. At the individual level, even modest reductions in daily screen time and shifting from passive scrolling to active engagement produce measurable improvements in wellbeing. At the platform level, removing public like counts, disabling infinite scroll, and providing usage dashboards are technically straightforward steps that have largely gone unimplemented due to commercial priorities. At the policy level, Australia banned children under 16 from social media in 2024, and the UK's Online Safety Act places new legal duties on platforms to protect young users — reflecting a growing consensus that industry self-regulation has failed.

V. CONCLUSION

Social media itself is not harmful when used efficiently. As we have discussed various topics related about the problem of using social media

excessively, how does it impact our mental health in a negative way. We have discussed about topics like the fear of being left out if one is not known to the present trends or following such trends, it gradually affects your brain like you are missing out something and you are far behind from others. While you scroll through reels and shorts there are various contents you come across which makes you interested to watch it and it is actually difficult to come out of that loop.

Social media has both its negative and positive side. It's actually upon us how we follow it, if we are enough aware about it's pros and cons and use it efficiently then using it is not a problem at all. We have a choice to make as to be on the negative side of it or be on a positive side of it, self control is the key.

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