

The Psychological Grasp of Social Media

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Author Note

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Abstract

This paper explores the mechanisms by which social media psychologically grasps the attention of its users and how easily behaviors can be learned from it. The paper discusses the nucleus accumbens and its role in the mesolimbic system to positively associate stimuli with dopamine rewards, and how the social media algorithm uses it to retain user engagement. It concludes that, despite the family's role in providing a viewpoint to interpret media, social media will ultimately shape how youth act and develop in their relationships, interests, and lives.

Keywords: social media algorithms, dopamine, social learning theory

The Psychological Grasp of Social Media

Social media is the subject of the modern time. It is a revolutionary technology, allowing for essentially an infinite amount of content to be shared. Along with it is much scrutiny, from fears in the courts to the general public (see e.g. *24-656 Tiktok Inc. V. Garland (01/17/2025)*, 2025; Dewey, 2024). Further, Kelly & Donohew liken media to the primary socialization method in contemporary youth (Kelly & Donohew, 1999, p. 1033). Henceforth, we must analyse the psychological influence that social media has on adolescents. Most teens surveyed by the Pew Research Center report to using social media (“Teens, Social Media, and Technology 2024,” 2024). According to Marcelino 2023, “adolescents often engage in a variety of unlawful behaviors without realizing the consequences” (Isnawan, 2025, p. 236). The concept of Social Learning Theory (1973), introduced by Robert Akers, states that juveniles are more likely to engage in actions when they are affirmed and normalized by those they associate with (Cullen & Wilcox, 2010). This paper will attempt to identify how social media engages the user and shapes the biases of adolescents.

Methods

This research will primarily be focused on literary review. By performing a literary review, this article attempts to describe the psychological grasp that social media provides to encourage delinquency in youth. Sources were found using keywords such as “dopamine,” “social media,” “learning theories,” and “development.” First, it argues that a dopamine reward system on social media is established through likes and reposts. Next, it establishes the theories of how people

learn. Lastly, this paper discusses the implications of social media's psychological hold on adolescents.

Literature Review

Dopamine Rewards on Social Media

Social media is an outlet for teens to express themselves and connect with others. It is a form of media, content being fed to the users to gain attention. One method it uses to keep attention is through its vast content structure.

The nucleus accumbens (NAcc) is “a key node of mesolimbic dopamine (DA) circuitry” (Klawonn & Malenka, 2019, p. 119). The mesolimbic system is responsible for regulating dopamine as a reward to positively reinforce actions or stimuli (Lewis et al., 2021, p. 1). This association between stimuli and the positive outcome interpreted from the dopamine release can be “necessary for survival and maintenance of a species,” such as in eating (Lewis et al., 2021, p. 2). Despite this, it can also foster the creation of bad habits.

Sherman et al. found that the NAcc is implicated when subjects received positive feedback on their own posts and viewed other people's *liked* posts (Sherman et al., 2016, p. 1033). Not only that, but media portraying risky behaviors were found to be supported through a like if it already had received likes from peers.

After a post is liked, the social media algorithm engages. The social media algorithm is majorly used to recommend content to the user to retain engagement on the platform (Harris & Cho, 2023). Retained engagement leads to more exposure to advertisements, which results in more

profit for the social media platform (Kim, 2017, p.148). In doing so, it provides personalized content to the user. The mesolimbic system relates a certain type of content to the positive dopamine release, and the social media algorithm takes advantage of this association and provides positively-associated content.

De et al. notes a physical change in brain matter with social media addiction. The cycle of dopamine release may have altered the brain as seen in drug and alcohol addicts; however, there is no current evidence supporting or dissuading this. Notably, the difference between substance addiction and social media addiction is that substances directly affect the physical health of its user rather than the psyche of the individual.

Social Learning Theory

Social Learning Theory is an idea posited by Richard Akers that combines differential association and behavioral learning theories (Cullen & Wilcox, 2010, p. 6). It involves “differential reinforcement, imitation, definitions, and differential association” (Cullen & Wilcox, 2010, p. 7). In short, repeated exposure to a behavior that is positively reinforced in a social setting leads to normalization from the view of the individual.

Normalized behaviors result in lessened cognitive control, which is supported by the findings of Sherman et al., having results that correlate with “Multiple theoretical models (Casey, 2015; Steinberg, 2008) [that] posit that risk taking in adolescence arises in part from heightened neural sensitivity to reward combined with immature capacity for cognitive control.” (Sherman et al., 2016, p. 1033). It means that these behaviors become second-nature, impulsive actions that do not naturally call for deep decision making.

Primary Socialization

The Primary Socialization theory states that the behaviors of a child are socially learned from the family, school, and peer clusters (Kathleen & Lewis, 1999, p.1034). However, Kathleen & Lewis posit the possibility of media having a more central role to the Primary Socialization Theory than is currently known. They describe that the family provides the style of communication on which the child builds on and uses to interpret media, and how media dictates the peers they socialize with from cliques to other shared interests (Kelly & Donohew, 1999, p.1035-6). Although the family originally provides the view from which children interpret media, social media—through the Social Learning Theory—will eventually shape them to become adolescents that imitate the behaviors popularized on social media. From this, friendships will also change with different interests, overall changing the user's life.

Discussion

Because social media algorithms prioritize retaining user engagement, adolescents are trained to spend as much time on social media as possible. They get short-term dopamine rewards one after another with every similar post the algorithm provides. Further, adolescents tend to compare themselves with the curated self that others portray on social media. The algorithm, being designed to provide personalized content, will continue to show posts that show that curated self. With social media becoming a prominent part of adolescents' lives, it is important to be aware of the possible implications of prolonged use. Further research must be done on the long-term impacts of social media on the transition between adolescence and adulthood in how it shapes our psyche.

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