

# The Impact of Social Media AI Applications on User Behavior



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## Introduction

- I investigated the physiological and behavioral impacts of AI applications on social media platforms within the context of “social media addiction.”
- The term “social media addiction” refers to the chronic, constant use of social media despite the user’s efforts to minimize usage.
- Existing research shows that prolonged social media use is strongly correlated with mental health issues particularly among adolescents (Pantic, 2014).
- There is very little research on the role that AI systems play in recommending the type of content that contributes to addictive behavior and mental health issues.
- The purpose of this study was to investigate the role of AI in promoting harmful content interactions.

## Methods

- Created a list of relevant questions and condensed them into topics including social media addiction, AI developments, social media structure, mental health, and the neurophysiology of addiction
- Reviewed articles from academic databases and other reputable sources and compiled them into an annotated bibliography
- Conducted an interdisciplinary meta-analysis of the sources to explore the relationship between AI on social media platforms and user addiction

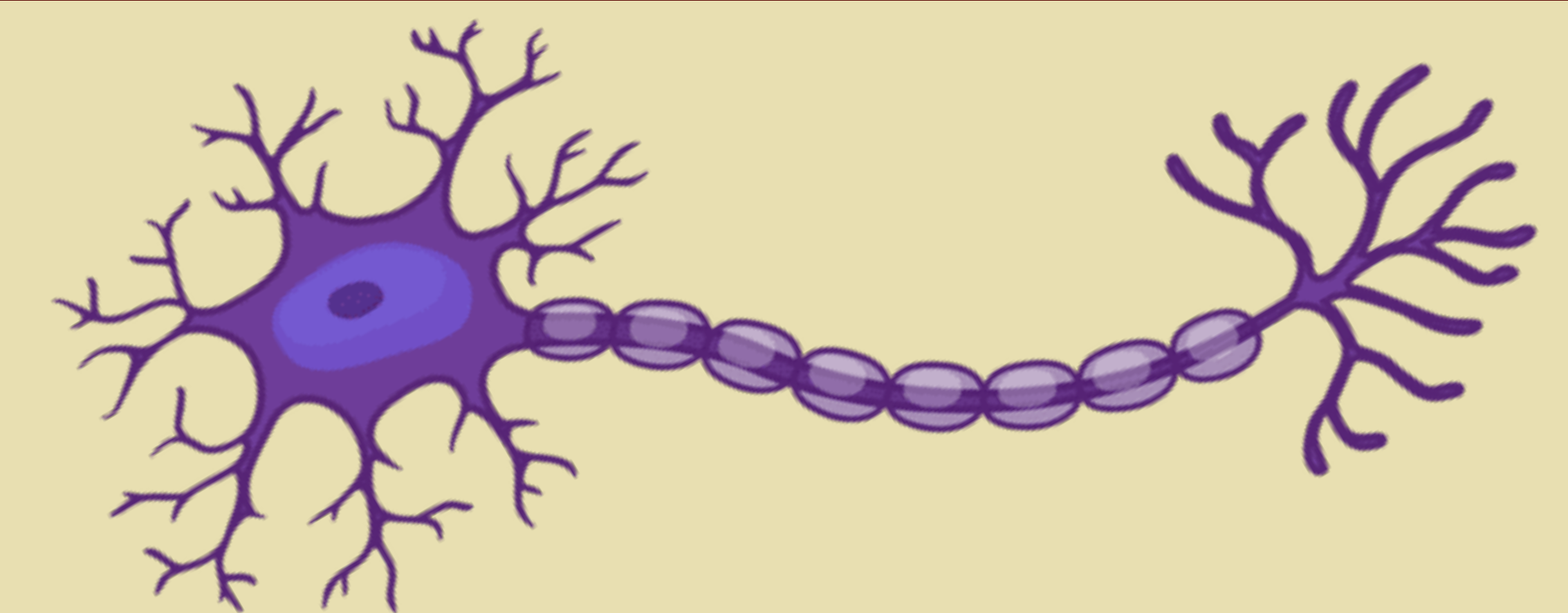
## Results

- I found that previous research indicates that AI applications on social media increase the likelihood of social media addiction.
- In order to encourage user engagement, social media platforms cater to interests by training AI applications with user data.
- The resulting content triggers dopamine production in the brain, which can lead to addictive behavior and overexposure to harmful content.



## Discussion

- While the major social media platforms openly use AI to cater to user interests, I found that this practice is a significant contributor to social media addiction, mental health issues, and ideological radicalization.
- In spite of its potential for harm, AI is a useful tool when managed responsibly.
- In order to limit the risks, social media users should try to stay informed about their data usage and remain aware that social media content is not an accurate reflection of society but of their own likes and worldview.
- Putting “screen time” limits on social media apps can be helpful as well. This can be done in the settings app.
- On a grander scale, it would be helpful for social media companies to allow greater user choice over the types and amount of content they are exposed to.
- In this way, the user can become directly active in the content they consume.
- Further research into the use of AI in social media can work to create an informed public and positively shape the future of AI.



## References

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