

TikTok and the Prevalence of Self-Diagnoses and Psychological Disorders Among Teen Users

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ABSTRACT

The negative implications of social media use on teen mental health are well documented. The effects of TikTok, the world's most popular social media platform, on the mental health outcomes of developing adolescents are an increasing concern. The biological and psychological changes occurring during puberty cause teenagers to seek greater and instant social gratification through a platform with a majority teen user base. Due to the app's complex algorithm that pushes dangerous content to vulnerable teen users, its overly accessible nature, and the prevalence of digital social contagion on the app, TikTok poses a significant risk of promoting mental health disorders and self-diagnosing among its users. This study focuses on two main disorders that have garnered significant attention on the social media platform, Tourette's Syndrome (TS) and Dissociative Identity Disorder (DID). Despite the diseases' rarity, there has been a marked influx of self-diagnosed teens on TikTok. As false self-diagnoses strengthen stigmas and stereotypes while delegitimizing those who actually have the disorder, the need to address this trend of teen self-diagnosing is further exacerbated. Some ways that this trend of teen self-diagnosing could be averted is through 1) limiting teen use of the app, 2) creating a better content filtering system, 3) providing professional checks on mental health content creators, and 4) considering the dimensional HiTOP diagnostics system over the categorical DSM-5. Further research on the full implications of the social media app on the mental health of teenage populations is needed.

Introduction

In today's digitized world, social media is a commonplace activity, especially among the teen population. This high use of social media apps among teens has various implications for their mental health; mental health implications of Facebook, Instagram, and Snapchat have been extensively researched, with some findings concluding that decreased use of social media resulted in lower feelings of loneliness and depression (Hunt et al., 2018). Specifically, the app Instagram has been shown to possibly have negative implications for teens due to the "social comparison, social pressure, and negative peer interactions" that teens encounter on the app (Abrams, 2021). Further, Instagram seems to exemplify the biological desire by teens to seek social rewards, heightening the desire to seek peer approval and increasing the risk of negative self-image (Abrams, 2021). However, compared to apps like Instagram, the recent viral phenomenon TikTok is a platform that does not have as much research coverage. Launched in 2016 and growing in vast popularity to surpass a billion daily users by 2022, TikTok has become one of the most influential social media platforms in the modern world (D'Souza et al., 2023). Moreover, TikTok has especially attracted the teen population, with 67% of all teens saying they have used TikTok in a 2022 survey, surpassing the aforementioned platforms such as Instagram, Snapchat, and Facebook (Vogels et al., 2022). Due to TikTok's great influence on the teen and young adult population, its mental health implications need to be researched; however, due to the relative newness of the platform, current research on the topic is lacking. Despite the app being so new, the few research papers that are available already show that TikTok contributes to development of mental health disorders such as DID

(Giedinghagen, 2022), Tourette's syndrome (Giedinghagen, 2022), and anorexia (Logrieco et al., 2021). This paper aims to highlight existing research on Tiktok's influence on mental health in teenagers to begin to determine whether and what kind of interventions may be necessary. This paper synthesizes the existing research available on the mental health effects of TikTok with implications derived from research on more established social media applications. Gaps in the research literature are enumerated, along with suggestions for future research.

Throughout this study, I will answer one main question: "Does social media, specifically Tiktok, affect the prevalence of self-diagnoses and psychological disorders among teen users?" Using both pre-existing research and reputable news and information sources, I will cover various topics, including the reason why Tik-Tok is a breeding ground for self-diagnoses and mental health disorders, the susceptibility of teenagers to mental-health-related content, and the full mental health implications of TikTok.

TikTok: A Viral Phenomenon

TikTok is a video-sharing platform that places its importance on short videos, usually 15 to 60 seconds in length (D'Souza et al., 2023). It was created by the Chinese company ByteDance in 2016, and released in its present form globally in 2018 (D'Souza et al., 2023). Since its global launch, it has grown in immense popularity, reaching its first billion downloads by only February 2019, obtaining over half a billion more downloads in the next eight months, and reaching over two billion downloads as of April 2020 (Mohsin, 2023). Part of this explosive growth was likely fueled by the COVID-19 pandemic, as evidenced by the app gaining a surge of 315 million downloads only in the first quarter of 2020 (Mohsin, 2023). The app's immense popularity can be attributed to its unique "For You" page, which uses a complex algorithm to curate the users' video feed to meet their interests using triggers such as user interactions, video information, and device/account settings (Hern, 2022; "How TikTok Recommends," 2020). Moreover, the app is extremely accessible, with content being very easy to post compared to other apps and its focus being on the younger generations through short, attention-grabbing, and personalized feeds (Taulli, 2020). However, the very factors that made TikTok such a viral phenomenon also have hidden adverse mental effects on its largely teen and young adult user base: its algorithm repeatedly feeds potentially dangerous content to its teen users (Logrieco et al., 2021; Kelly, 2022), often promoting misinformation (Tucker, 2022) and fueling false self-diagnoses of mental disorders (Schlott, 2022). Other than the mental health risk that TikTok poses, it has also fallen under scrutiny for its invasion of privacy on underage users ("Advocacy Group Says," 2020), explicit content (Duffy, 2022), and even its status as a potential national security threat (D'Souza et al., 2023). Within the short period that it has been released to the public, TikTok has caught the whole world by storm while causing immense controversy. Due to its mainly underage and young adult userbase, the full mental health implications of the app need to be researched and addressed immediately.

Why Is Tiktok the Perfect Formula for Mental Health Disorders?

As briefly covered in the previous section, TikTok has been a major determinant of its users' mental health (Kelly, 2022; "Deadly by Design," 2022; Logrieco et al., 2021; Schlott, 2022). The reason why TikTok is the perfect formula for mental health disorders is largely thanks to its complex algorithm (Kelly, 2022; "Deadly by Design," 2022; Logrieco et al., 2021; Schlott, 2022). Although the highly personalized and user-oriented algorithm helps feed content to keep the user entertained, it also has the adverse effect of promoting dangerous content for vulnerable users (Kelly, 2022; "Deadly by Design," 2022). According to a study by the Center for Countering Digital Hate ("Deadly by Design," 2022), vulnerable teen accounts (i.e. those w/ keywords regarding ED or SH in their usernames) were recommended 3 times more harmful content and 12 times more self-

harm content than standard teen accounts ("Deadly by Design," 2022). Due to its personalized nature, those who were more vulnerable and willing to watch videos regarding self-harm and depictions of mental health disorders were constantly fed similar videos by the algorithm to meet the viewer's preferences, leading to a higher possibility of developing the disorder or self-diagnosing for the disorder ("Deadly by Design," 2022). Moreover, even for new standard teen accounts without any trigger words, the TikTok algorithm recommended suicide content in a mere 2.6 minutes while pushing eating disorder content in 8 minutes ("Deadly by Design," 2022). A case study of a 14-year-old girl struggling with anorexia reported that her anorexia development stemmed from TikTok, where constantly watching other teens talking and sharing about their self-harm and eating disorder experiences inspired her to also partake in these "extreme experiences" (Logrieco et al., 2021). Further, she claimed that she did this so she could be hospitalized and share with others the difficulty of her situation (Logrieco et al., 2021). This case study shows two clear reasons why TikTok is such a big promoter of mental health disorders. Firstly, although advanced, "[TikTok's] algorithms are not yet able to discriminate harmless and harmful content, as this is related to the user's own life experience, which cannot be embedded in the 'formula'" (Logrieco et al., 2021). Secondly, TikTok's easily accessible nature creates a platform in which anyone can post anything they want, without regard to the harm it may cause to its viewers. Both of these phenomena can be seen occurring in a report by the New York Post which focused on the recent rise of TikTok and the self-diagnosing of mental health disorders such as Tourette's Syndrome and BPD, among many others (Schlott, 2022). The report explains that adolescent females, who were most affected by this phenomenon, were spending more time on TikTok due to the pandemic and consuming more mental health content (Schlott, 2022). This uptick in TikTok use caused the algorithm to promote more content regarding mental health and self-diagnosing to this "impressionable population," leading to a outburst of self-diagnoses by these individuals (Schlott, 2022). Moreover, in a situation of digital social contagion, these girls would in turn post their own self-diagnosing and disorder experiences on the platform, further causing more vulnerable adolescents to fall in this self-diagnosing trend (Schlott, 2022). This report shows how both TikTok's highly intelligent algorithm and its easy accessibility cause it a perfect "mental health breeding ground," as those without any medical credentials can create suggestive mental health videos which will in turn be spread to millions of vulnerable users around the world through the TikTok algorithm (Schlott, 2022). The susceptibility of TikTok to promote harmful content that promotes mental health disorders and self-diagnoses needs to be addressed immediately to prevent further damage to the app's teen users.

Susceptibility of Teens to Mental-Health-Related Content On Tiktok

On top of TikTok itself being a perfect place to exacerbate mental health disorders and promote self-diagnoses, its teen users are also especially susceptible to the content promoted on TikTok. The "mental-health breeding ground" of TikTok and the susceptibility of teens to social media create a dangerous combination for the mental health of the app's teen users. This susceptibility of teens stems from many reasons, including the changing biology of their bodies (Abrams, 2022). An article by the American Psychological Association (Abrams, 2022) highlights this phenomenon, explaining that as children reach the pre-teen age (~10 y.o.), their brains undergo many changes, causing them to "seek social rewards such as attention and approval from their peers" (Abrams, 2022). Biologically speaking, this change in behavior occurs due to the increase of pleasure-inducing hormones such as oxytocin and dopamine in their brains (specifically the ventral striatum), increasing their sensitivity towards attention and approval (Abrams, 2022). Although this biological change serves to help preteens and teens develop social relationships under normal circumstances, the story is vastly different for today's widely online child population (Abrams, 2022). Instead of creating positive and healthy relationships in real life, these biological changes in preteens' brains cause them to become hooked to the social gratification of social media in the form of likes, views, and comments, increasing the risk of teen and preteen users to be exploited and harmed by social media (Abrams, 2022). This biological phenomenon helps explain studies mentioned earlier

in the paper, such as the case study on the 14-year-old TikTok user with anorexia (Logrieco et al., 2021) and the digital social contagion of self-diagnosing among teen girl TikTok users (Schlott, 2022). In both cases, the victims either developed mental-health disorders or self-diagnosed themselves with these disorders to receive social gratification from other users on TikTok. Further, adolescent females have been found to have higher levels of self-diagnosing and developing Tourette's Syndrome symptoms over social media, possibly due to the heightened desire to gain affirmation and attention as a form of "social capital in online communities," or to "mask feelings of anxiety, depression, and lower self-esteem" which are so prevalent during this age (Haltigan et al., 2022). These biological explanations for teens' vulnerability to social media, along with evidence of it already taking place on TikTok and other social media platforms, further exemplifies the need to address TikTok's "mental-health breeding ground."

Analysis of the Self-Diagnosing of Tourette's Syndrome and Dissociative Identity Disorder

TikTok has been shown to have a wide variety of outcomes on teens' mental health. The implications of the app's mental-health-related content and its algorithm range from self-diagnoses of mental health disorders such as Tourette's Syndrome, ADHD, and Dissociative Identity Disorder to legitimate developments of psychological disorders such as anorexia nervosa (Haltigan et al., 2022; Harrison et al., 2021; Rajkumar & Haltigan, 2022; Olvera et al., 2021; Giedinghagen, 2022; Logrieco et al., 2021). This raises the question: What are the true implications of the mental-health-related content on this app? In this section, both the negative and positive implications of TikTok and its promotion of mental-health-related content will be analyzed through research and examples of these implications affecting teens in real life.

A common theme regarding the mental-health-related content of TikTok and its users is the prevalence of self-diagnoses and the sharing of these self-diagnoses over the app in the case of digital social contagion. A major disorder that has attracted self-diagnosing from users of the platform is Tourette's Syndrome (TS) (Haltigan et al., 2022; Rajkumar & Haltigan, 2022; Olvera et al., 2021; Giedinghagen, 2022; Müller-Vahl et al., 2021; Jargon, 2021). Recently, especially during the COVID pandemic, Tourette's Syndrome content has risen to a new high on TikTok, with videos containing the keywords #tourette and #tic increasing in views by 7% to a total of 5.8 billion views during three weeks in March of 2021 (Jargon, 2021). This phenomenon coincides with the sudden influx of self-diagnosed teenage females flooding hospitals across the country. Since March 2020, doctors who usually saw one or no Tourette's Syndrome patients a month reported seeing 10 per month, and hospitals that saw around one or two patients per year before the pandemic reported seeing around 60 (Jargon, 2021). This influx has been coined "mass social media-induced illness" (MSMI), a spin-off of mass-sociogenic illness that is specific to social media (Müller-Vahl et al., 2021). A clear example of this case of MSMI can be seen through the 22-year-old German YouTuber Jan Zimmermann, who makes content on his channel, *Gewitter im Kopf*, and has been criticized by Tourette's experts for exaggerating and faking his mild TS symptoms (Müller-Vahl et al., 2021). Despite this, he has gained mass popularity, especially among teens, over the years, amassing over 2.2 million followers, and uses his popularity to sell merchandise and mobile applications to his fans (Müller-Vahl et al., 2021). After his rise in popularity, a new surge of teens with self-diagnosed TS emerged, with a trend being that many of them 1) had similar or identical "tics" as Jan Zimmermann, 2) coined their own "Tourette's Syndrome" with the same name Jan Zimmermann coined his, 3) had their symptoms suddenly disappear when doing an activity they enjoyed, and 4) had a "rapid and complete remission" of their symptoms after not getting diagnosed with TS (Müller-Vahl et al., 2021). Although this may be a phenomenon that occurred on YouTube rather than TikTok, it still holds strong implications for the potential danger of TikTok, as TikTok's algorithm and explosion in popularity make it even more susceptible to cases of MSMI such as these. MSMI may be an even greater threat to teen users on TikTok as compared to YouTube,

so prevention methods and further research need to be taken immediately. On top of MSMI, a concerning theme in TikTok's videos regarding Tourette's Syndrome is the possible exploitation of self-diagnosing for monetary gain (Olvera et al., 2021). A study on the most viewed Tourette's Syndrome content creators on TikTok found that 1) the majority of these content creators exhibited severe symptoms and side effects of Tourette's Syndrome at much higher rates than as cited in literature (suggesting that many, if not all of these symptoms are either exaggerated or completely faked), 2) most of the creators adamantly denied faking their tics for recognition on the app despite the majority not having doctor's diagnoses to back these claims, and 3) the majority of the creators had merchandise related to their tics or were available for paid appearances (Olvera et al., 2021). This phenomenon on TikTok has various potential severe implications for the teen users who consume this content. First, this trend of self-diagnosing Tourette's Syndrome on TikTok makes the users more susceptible to self-diagnose themselves and leads to further exacerbation of MSMI in TikTok's user base. Further, monetizing these self-diagnosed disorders makes teen users susceptible to being influenced by these popular content creators and getting financially exploited.

Another major disorder that has gained popularity on TikTok is Dissociative Identity Disorder (DID). Patients with DID have multiple personalities or identities (known as alters) due to a traumatic event or a history of extreme abuse (Rajkumar & Haltigan, 2022). It is an extremely rare disorder, as seen by *The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) by the American Psychiatric Association estimating that only 1.5 percent of American adults experience DID in a 12-month period, and the Cleveland Clinic estimating that only 0.01 to 1% of the population have the disorder (Lucas, 2021; "Dissociative Identity Disorder," 2021). Due to its rareness and the severe circumstances under which it occurs, the sudden surge of self-diagnosing of DID by teens in recent years has been a cause for concern (Rajkumar & Haltigan, 2022). This surge has been observed by Dr. Andrea Giedinghagen, a child psychiatrist from Washington University in St. Louis, who states that she has seen "more patients seeking DID diagnoses at the start of the pandemic than she had until that point in the entirety of her career" (Lucas, 2023). This trend of an increase in adolescent DID self-diagnoses has also been observed by Dr. David Rettew, a child psychiatrist at the Oregon Health and Science University, who claims his clinic and many other mental health clinics around the country have seen an influx of adolescents self-diagnosing with the disorder, much of it seemingly being driven by DID-related content on TikTok (Rettew, 2022). The primary concern regarding this increase in DID self-diagnosing is the fact that many of the teens self-diagnose after watching TikTok creators share their DID experiences on the app, raising concerns about the misinformation on the app and its implications for vulnerable teen users (Rajkumar & Haltigan, 2022, Rettew, 2022). There are some possible reasons for this sudden increase in DID self-diagnoses on TikTok and other social media platforms. DID has been observed by both the general public and clinical professionals to be overly romanticized, glamourized, and sexualized by social media platforms (Haltigan et al., 2022). This may be a possible explanation for the increase of DID self-diagnoses in teens on TikTok, as these characteristics may possibly appeal to the impressionable teen mind and would potentially be characteristics that would amass views and have a higher chance to go viral on these social media platforms due to their shock factor (Wolfe et al., 2021). Dr. Matthew A. Robinson, a professional clinician and researcher from Mclean Hospital, Harvard Medical School's largest psychiatric facility, comments on another possible reasoning for this influx of DID self-diagnoses, saying that these self-diagnosed "systems" (people who have DID) are exhibiting signs of "imitative DID," "a form of malingering where people pretend to have the dissociative disorder for attention or status" (Lucas, 2023). He explains how these self-diagnosed DID patients exhibit far different symptoms from legitimate patients, saying, "I have a number of my own patients who I treat for DID and have always understood their experiences to be genuine ... They look and act nothing like the sensationalized [social] media representations created for entertainment purposes" (Lucas, 2023).

What are the true effects of social media-mediated self-diagnosing, and is it a purely harmful practice? Based on available research on social media-mediated self-diagnosing, the implications seem to be overwhelmingly negative (Lucas, 2021; Schlott, 2022; Croston, 2020; Styx, 2022; Lucas, 2023; Rajkumar & Haltigan,

2022). Although there are cases made about the positives of self-diagnosing such as the destigmatization of disorders and the increased knowledge around disorders (Krouse, 2022; Phillips, 2022), they are countered by the potential of self-diagnosing to conversely strengthen stereotypes and stigmas and spread misinformation (Lucas, 2023; Styx, 2022; Croston, 2020). Further emphasizing this point are a variety of significant negative implications for self-diagnosing, such as the strengthening of harmful stereotypes and stigmas, the ostracization and dismissal of opinions of health professionals who speak on the subject, and the growing mistrust of legitimate disorders on social media (Lucas, 2021; Schlott, 2022; Croston, 2020; Styx, 2022; Lucas, 2023; Rajkumar & Haltigan, 2022). A particularly interesting negative implication is the strengthening of harmful stereotypes and stigmas, as people often believe that destigmatization of mental disorders is a benefit of self-diagnosing (as aforementioned) (Lucas, 2023; Krouse, 2022; Phillips, 2022). Although social media-mediated self-diagnoses “dispel stigma with jokes and memes” (Krouse, 2022) and open the door to more conversations on these disorders (Phillips, 2022), social media-mediated self-diagnoses are often provoked by grossly stereotyped versions of the disorders, which only serve to further ingrain harmful stereotypes and stigmas (Croston, 2020; Styx, 2022). For example, many of the ADHD and autism self-diagnoses on TikTok are based around the romanticized and music-based “stimming” trends on the app, which grossly misrepresents the reality of the disorders and strengthens the stereotypes around autism and stimming (Croston, 2020). This misrepresentation of disorders is harmful to those who experience the actual disorder in their daily lives, as “falsely constructed narratives (e.g., the self-diagnoses based on exaggerated stimming) only serve to further the community from properly destigmatizing disabilities” (Croston, 2020). Another major negative implication of social media-mediated self-diagnosing is the tendency of those with the disorder to ostracize and dismiss the opinions of health professionals who speak out on the subject (Lucas, 2023). An example of this is the Tiktok community’s reaction to the clinician of McLean Hospital Dr. Matthew A. Robinson’s lecture on his concerns about DID and TikTok (Lucas, 2023). Dr. Robinson’s lecture revolved around the point of “imitative DID,” where he claimed that most of the self-diagnosed DID personalities on the app were presenting a “sensationalized” version of DID due to their own misunderstanding or desire to gain attention, which in turn causes more users to self-diagnose with these stereotyped and exaggerated versions of the disorders (Lucas, 2023). This lecture received immense backlash from the online DID community, with McLean Hospital being flooded with hateful reviews and petitions created to revoke Dr. Robinson’s medical license, claiming that he was “discrediting their experiences” and further “entrenching the stigma” around the disorder (Lucas, 2023). This immense backlash led to many health professionals declining to speak on the subject when pressed for interviews, fearing the “cancel culture” perpetuated by TikTok, saying that “they didn’t want to make any enemies” (Lucas, 2023). This situation highlights one of the greatest dangers of social media-mediated self-diagnosing, which is the tendency of self-diagnosed patients to be “dismissive of the opinion of medical professionals” and fuel their diagnosis and representations of DID based on the opinions of similar-minded TikTok users (Lucas, 2023). Further, as health professional Dr. Giedinghagen, a psychiatrist at the Washington University, states, young people who self-diagnose often seem to base their identities around the disorder (Lucas, 2023). The backlash from Dr. Robinson’s lecture on imitative DID suggests that these dangerous effects of social media-mediated self-diagnosing are involved; the dismissive attitudes of the self-diagnosed teens towards Dr. Robertson’s concerns suggest the identity that they created around their supposed “DID” was threatened (Lucas, 2023). Furthermore, this dismissal and ostracization of health professionals who threaten the identities of self-diagnosed teens creates a situation in which professionals cannot even speak on the subject to afflicted teens and provide adequate help (Lucas, 2023). The last major negative implication of social media-mediated self diagnosing discussed in this paper is the growing mistrust of legitimate disorders on social media (Lucas, 2023; Lucas, 2021; Styx, 2022). Due to the rapid increase in teens and TikTok users self-diagnosing, counter-trends have emerged, as people started to “fakeclaim” content creators who talked about these disorders (Lucas, 2021; Styx, 2022). Although many of these “fakeclaiming” accusations are directed towards those who self-diagnose based on misinformed stereotypes, this

counter-trend from self-diagnosing is also targeted towards content creators who have received legitimate professional diagnoses (Lucas, 2021; Styx, 2022). This trend is mainly seen in DID content creators, where those with professional diagnoses and proof are even bombarded with hateful comments and faking accusations, further stigmatizing and inconveniencing these legitimately affected individuals (Lucas, 2021; Styx, 2022). Furthermore, this “fakeclaiming” trend is often quite toxic, with doxxing and death threats experienced by those who have valid diagnoses. This adversely affects the mental state of these individuals who are already dealing with the struggles of DID (Lucas, 2021; Styx, 2022). These trends show the need to combat self-diagnosing, as the fake and stereotypical nature of most self-diagnosed content creators are why this trend of “fakeclaiming” gained so much popularity (Lucas, 2021; Styx, 2022). This counter-trend to self-diagnosing was exactly what Dr. Robinson was trying to combat and address, as he was, in his words, “deeply concerned about social media representations and self-diagnosis, and the way it likely delegitimizes DID for those that have the diagnosis” (Lucas, 2023). In other words, his concern was that the imitative DID that he was pilloried for discussing could lead to the delegitimization and mistrust towards those actually afflicted with the disorder (Lucas, 2023).

As can be seen by the many negative implications of self-diagnosing based on social media, self-diagnosing is a dangerous trend that threatens to worsen stigmas and stereotypes around disorders, dismiss and ostracize the opinions of medical professionals who speak on the subject, and delegitimize and create mistrust towards those actually afflicted from these disorders (Lucas, 2021; Schlott, 2022; Croston, 2020; Styx, 2022; Lucas, 2023; Rajkumar & Haltigan, 2022). The rise of self-diagnosis from TikTok would likely benefit from policy changes in the app or intervention for those who have self-diagnosed.

Discussion

TikTok appears to be a major determinant of its teen users’ mental health. Its potentially harmful algorithm and susceptibility to misinformation has been seen to possibly lead to harmful practices such as self-diagnosing and stereotyping disorders. Self-diagnosing is potentially harmful because it strengthens stigmas and stereotypes around certain disorders and leads teenagers to rebuff the opinions of professionals. Lastly, it leads to growing mistrust of those who share their legitimate disorders on social media, as seen by the trend of threatening DID creators and accusing them of faking their disorders. Despite the research illuminating the concerning link between TikTok and mental health, there are several limitations to consider.

This paper is limited by the dearth of research on TikTok. As the app became such a phenomenon in recent years, there is a lack of credible research papers from academic journals that discuss the app itself, let alone its implications on the teen population and mental health. However, this including reputable and widely-recognized news and other information outlets to bolster clinical research partly addressed this limitation. Further, the inclusion of these sources helps bridge the gap between the academic community and other information outlets that are often overlooked in the formulation of research papers. Although this paper includes reputable news sources, it is limited because there is a lack of multi-method designs in the clinical research. Therefore, much of the research is correlational. Research is needed to understand the effects of TikTok on teen mental health that incorporates multiple research methods and studies this problem longitudinally. For instance, behavioral paradigms that allow researchers to observe teenagers interacting with TikTok in real time could be helpful.

TikTok, teens, and mental health disorders are a potentially dangerous combination that has been shown to perpetuate inaccurate self-diagnoses. Due to the problematic implications of self-diagnosing, steps need to be taken to prevent further harm from mental health related content on TikTok. There are a variety of steps that could be taken to address this issue. The most basic and fundamental step to take would be to limit teen social media use (whether it be through changed TikTok policies, parental controls, or self-moderation). If properly enforced and controlled, limited teen social media use would be the most effective way to prevent dangerous self-diagnosing and the development of legitimate disorders, as less time on TikTok would mean

fewer chances to be fed dangerous mental-health-related content by the algorithm or to be influenced by the plethora of stereotyped disorders on the app. It must be noted, however, that this solution would be difficult to strictly create and enforce. TikTok has made previous attempts to set underage time limits which proved ineffective because it was easily bypassed (Morrison, 2023). Another solution may be to not address the time in which teens spend on the app, but rather address the content that they consume during this time. Calls for a better filtering system from TikTok have already been made by users due to the explicit content (i.e. drug and alcohol use, nudity and intense profanity) that teen users are exposed to on the app (Duffy, 2022). This opportunity could be used to implement a new filtering system that accurately determines harmful mental health content (i.e. pro-anorexia, self-harm, misinformation, etc.) to prevent further development of disorders or misinformed self-diagnoses of disorders. The app could also verify the professional legitimacy of mental-health content creators and promote this professionally-informed content rather than having any member of the public able to make mental-health content that may influence and misinform teen users. These changes to TikTok would potentially help prevent further perpetuation of harm through the app, but direct changes to TikTok may have limited success in addressing self-diagnoses broadly. It is also important to examine the systems that may exacerbate these problems. One of these systems may be the accepted diagnostics system of psychological disorders, the DSM-5 ("About HiTOP," n.d.). DSM-5 is the widely accepted diagnostics system by which the majority of psychologists diagnose their patients, but it has many problems, such as its "arbitrary boundaries between psychopathology and normality, often unclear boundaries between disorders, frequent disorder co-occurrence, heterogeneity within disorders, and diagnostic instability" ("About HiTOP," n.d.). These problems stem from the categorical nature of DSM-5, which causes a high possibility for misinterpretation and ease of self-diagnosing, as well as over-identification with a diagnosis that is plagued by arbitrariness ("About HiTOP," n.d.). A solution to this may be the recently proposed HiTOP diagnostics system, which has a more dimensional approach and prioritizes psychological processes over categorical diagnoses ("About HiTOP," n.d.). A newly revised system of diagnosing patients may be the solution to the complicated situation of self-diagnosing.

Another way in which problems related to TikTok and mental health needs to be addressed is by further research focusing on other aspects of these factors. While this paper focuses on the relationships between teens, TikTok, and self-diagnosing/mental health disorders, more research needs to be conducted on specific relationships such as the higher rate of self-diagnosing in females versus males, including the relationship between social media and female teens specifically due to their higher rates of self-harm and depression (Haidt, 2021), and the comparison of TikTok to other social media platforms. Further, questions closely related to this paper need further research, such as whether the self-diagnosing phenomena seen in DID and TS occurs in other disorders, if self-diagnoses are legitimate or not, and why there is little to no research on why teens are interested in mental health. Bolstering these research questions will allow for further progress in fully understanding the relationships between social media apps such as TikTok, teen users, and mental health, while also bridging some gaps in research that exist regarding more specific topics.

This paper illuminates the relationships between TikTok, teen users, and mental health, and gives further insight on specific aspects of mental health that stem from social media use such as social media-mediated self-diagnosing. The contents of this paper show that self-diagnosing is strongly perpetuated by TikTok, and holds strong negative implications that stem from these self-diagnosing cases. Although the paper discusses numerous cases and studies regarding these topics, more research needs to be conducted in order to fill the gap of research concerning the impact that TikTok has on the teen population, specifically their mental health. As TikTok continues to grow in popularity, the need for uncovering its true implications is increasingly important.

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