

A Systematic Reset: How TikTok is Changing the Path to Musical Fame

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With its rise in global popularity, TikTok has attracted a unique mixture of thousands of unknown, up-and-coming, and world-famous singers, songwriters, and producers. These individuals seek to directly promote their work to a target audience without interference from record labels and mainstream media outlets. A lack of research surrounding the platform has made it difficult to understand the exact impact of TikTok on the music industry, especially since the app exhibits a constant evolution that is difficult to quantify. Through a study of the neurology behind social media addiction and an explanation of creator collaborations, video duets, and popular audios, the complex, collaborative, and intimate relationship between TikTok and music is revealed. Culminating in a case study on Charlie Puth's TikTok account and the creative process behind his hit single, "Light Switch," this paper describes how TikTok changes artist self-promotion and dismantles previously used pathways to musical fame.

Introduction

TikTok, a social media platform launched by the Beijing-based company ByteDance, has become one of the most popular apps in the world. Created in 2016 and preceded by the similarly functioning apps Vine and musical.ly, it exists to share short-form videos among global audiences (Vaterlaus 1). TikTokers use the app for a myriad of reasons like dancing, singing, memeing, sharing political views, spearheading social movements, and collaborating with a global network to produce billions of content videos. TikTok's popularity exploded in 2019, beginning the year with 271 million users and ending with 508 million ("TikTok by the Numbers"). As the world entered the COVID-19 pandemic in early 2020, millions more turned towards the app as a coping mechanism, a source of entertainment, and a way to build virtual communities in a time of isolation. As of July 2020, the app boasts over 1.2 billion active daily users, 100 million of which come from the United States, who spend a daily global average of 52 minutes viewing content ("TikTok by the Numbers").

The Algorithm and Psychological Addiction

One of the defining features of TikTok that lends itself to heightened levels of interaction is the algorithm—the details of which remain largely unexplained by ByteDance. Based on information available in the public domain, the algorithm collects millions of data points from every user to curate a specific type of content in the app's home screen: the "For You Page." By tracking user interactions with content, the algorithm creates a queue of personalized videos that drives constant viewer engagement (Holt).

The algorithmic structure of the app is the basis of how TikTok (and by extension, other social media apps) chemically rewires the brain. The success of the algorithm comes from capitalizing on the naturally occurring neurotransmitter dopamine: a chemical operating within the central nervous system which affects memory, motor coordination, and reward pathways. Dopamine has played an important role in evolution by encouraging or discouraging organisms towards certain survival habits. Dopamine release into the synaptic cleft promotes reward anticipation, and when not released, an organism is diverted away from a specific stimulus or behavior (Burhan et al. 1). In short, release causes reward and absence promotes avoidance.

Dopamine has evolved to play a critical role in the social media feedback loop. For every piece of media that fits a user's desired content, dopamine is released into the brain (Koetsier). In contrast, disengagement from media returns an individual to their set point. Turning off social media effectively removes the constant dopamine release, making the set point feel like a negative emotion as opposed to a neutral state, ultimately causing a craving for the reintroduction of dopamine to the synaptic cleft. Subsequently, the individual returns to the activity to promote the dopamine release, resulting in engagement for an extended period. Combined with the algorithm's purpose to provide bespoke content, TikTok has evolved into the perfect vehicle for easy and fast hits of dopamine. Chasing this release, users open the app and scroll through their For You Pages, searching for rewarding content and navigating away from anything failing to provide gratification.

The never-ending yearning for dopamine has been manipulated by developers of Instagram, Snapchat, Twitter, and TikTok, resulting in physiologic modifications of internal brain chemistry and a troubling attention span decrease among users. An attention span is the ability to focus selectively on an object, topic, or task for a given period; and sustained attention is the ability to retain attention for an extended period of time without distraction (Giraldo-Luque et al. 3). The decreased attention phenomenon and fluctuation of attention associated with social media is best illustrated by a 2019 study examining the popularity trends of Twitter hashtags. By analyzing the frequencies of specific hashtag usage, researchers noted more extreme shifts in the population's collective attention towards individual pop culture topics (Lorenz-Spreen et al. 4). As the rate of content consumption increased, the generation rate for new content increased proportionally. As a result, gains of popularity were steeper and the saturation point—the “peak” of the trend—occurred more quickly: demonstrating the collective shortening of the phases of attention (Lorenz-Spreen et al. 6). These results are exemplified by TikTok's fleeting trends. As more content is produced for the app, different topics and audios are popularized more rapidly, leading to a steeper rise and subsequently steeper decline in popularity. As individual users seek yet another dopamine hit, their interest in popular topics grows, peaks, and dissipates at accelerating paces, alluding to the constant ricochet of collective attention from one post to another.

The Tik Tok Effect

The algorithm and rapid gratification of TikTok is just one part of the app's appeal: the ability to collaborate and promote individual talents to a wide audience has attracted thousands of musicians who seek to further promote their brand. The influx of this population onto the app has

drastically changed the way the music industry—artists, producers, streaming services, and the songs themselves—operates. While this sector is no stranger to radical change, the influences from TikTok have blurred the boundaries that once existed to categorically separate production processes, genres, and artist promotion. This section dissects this structural disintegration by examining the nature of TikTok duets, exploring case studies of specific creators rising to fame on the app, and investigating the intricacies of TikTok collaborations.

The ability for users to create duets—distinctive split-screen videos with the original content on one side and a user’s “response” on the other—are a principal method for collaboration and self-expression. Over 43% of users report having created a duet (SMPPerth), and millions of musical duets exist: videos where one user will sing or play a song and a second user harmonizes, raps, or plays along to the melody. Acapella duets are very common, especially where one individual with a high voice part will create the foundational video for a different voice part to complete the song. The nature of duets allows ordinary individuals to showcase their own musical talents when they otherwise would not have the backing tracks nor public opportunity to display their abilities. These unique creator-to-creator relationships are seldom found elsewhere and offer a form of organic growth contributing to a user’s potential path to fame.

Another cause of unfettered musical growth comes from TikTok audios: short sounds that back every video, ranging from original creator dialogue to snippets of a song’s lyrics. Often, the popularity of a song or an artist is predicated on their innate ability to become the audio for an original dance. One of the first popular dances was the Renegade, an arm-swinging, hand-clapping sequence choreographed by fourteen-year-old Jalaiah Harmon with audio pulled from “Lottery” by K-Camp (Lorenz). The movements swiftly consumed TikTok, paving the now well-traversed path for songs to become wildly popular through their association with simple choreography. User Haley Sharpe (@yodelinghaley) launched Doja Cat’s “Say So” to TikTok fame, bolstering the artist’s modestly sized fanbase to hundreds of millions of listeners (Tenbarge). Even for already-popular artists like Justin Bieber and The Kid LAROI, their song “Stay” was catapulted to TikTok fame as user David Allen (@totouchanemu) combined a simple hip-shaking dance from Max Taylor (@maxtaylorlifts) with a now-infamous circling drone shot. While Allen’s video received upwards of 300 million views, highly popularizing the song, it also provided an avenue for an average creator to catapult himself from obscurity into a position to create weekly collaborations with famous celebrities like Jason Derulo (Allen).

An audio’s popularity is not solely established upon its application to a dance—TikTok is host to billions of memes and trend videos, where users take a personal anecdote or popular task and apply it to one of the thousands of songs circulating the app. For example, the lyrics “maybe we got lost in translation” from Taylor Swift’s “All Too Well (Taylor’s Version)” are used to share moments of miscommunication between two individuals, often with a funny lens but occasionally with a darker, more serious twist. Despite Swift’s already expansive, diehard fanbase, the audio’s popularity on TikTok allowed more people to discover and interact with her music. Another example comes from Saucy Santana’s “Material Girl (Bass Boosted),” which has inspired a dryly humored trend where users mock their materialistic habits at a time of record U.S. inflation and an unstable economy (Glaze). Again, despite having some fame prior to the sound’s explosion on TikTok, Sananta’s popularity was undeniably assisted by the widespread exposure on the app—

the song now boasts over 20 million plays on Spotify, compared to some of his previous tracks that clock in at a few hundred thousand plays.

The phenomenon of popularizing a song is not constrained to recent tracks: TikTok provides a platform where songs from quite literally any decade can resurge into the popular consciousness. Released in 1996, “It’s all Coming Back to Me Now” by Celine Dion accompanies a trend where individuals dramatically lip sync to the song using household props and lighting to create visual effects. Dion’s music was relatively unknown by a younger generation, but the trend has inspired many users to further explore her career and various albums. In another example, Meghan Trainor’s 2015 song “Title” paled in comparison to other album tracks like “All About That Bass,” but recently became the audio for users to share their stories of self-confidence. After its TikTok fame, “Title” became the fifth most popular song out of a fifteen-track discography, and its newfound popularity finally convinced the record label to approve the release of its music video.

The last form of audios rising to fame occurs when a creator uploads original sounds to their videos by taking inspiration directly from follower comments. Seventeen-year-old Gayle (@gaylecantspell) created an original song based off of a fan comment suggesting she should write a breakup song based on the alphabet, first performing an acoustic draft of her hit song “abcdefu” to over 5.5 million TikTok viewers (Gayle). Since its official release, her song has gained over 540 million Spotify streams and has become the TikTok track for teenage angst. Other users like Lauren Paley (@laurenpaley) exemplify how TikTok fame isn’t predicated on the traditional format of writing new music: her acapella performances in an apartment building stairwell boast impressive vocal covers of songs like “My Heart Will Go On” by Celine Dion (Paley). Paley’s willingness to cover songs suggested by her followers and Gayle’s songwriting based on audience requests represent the organic fan-to-creator interactions found on TikTok. To great effect, both singers combine their raw musical talent with their fan bases to boost their content through the dopamine-driven algorithm, creating a meaningful musical fame that has wide-reaching implications beyond the social media app.

Light Switch: A Case Study

The singer that has created the most successful TikTok model to date is Charlie Puth, the thirty-year-old American who released the popular songs “We Don’t Talk Anymore” and “See You Again.” Puth’s first TikTok was posted on December 1st, 2019, and he quickly grew a following yielding an average 2 to 3 million views per video. Capitalizing on the chaotic and unpredictable nature of the app, Puth curates a video profile of himself lying in bed, brushing his teeth, and laying in a hot tub. He duets and stitches fan videos to promote their musical abilities, settles musical theory debates, and blindly reacts to audios sent in by fans. He pokes fun at his perfect pitch and musical “nerdiness” while simultaneously showing the audience deeper moments like failed relationships and struggles with hate comments. Most importantly, though, Puth uses his easygoing, natural rapport with his followers to directly show the processes he uses to make his music.

This phenomenon is best illustrated by the documentation of the life cycle of his most recent single “Light Switch.” Puth begins the video with his stereotypical, widely-memed catchphrase: “what if there was a song that started like...?” (Puth). Before he can fully finish mimicking the noise with his mouth, a new clip plays, playing the proposed noise on a computer editing software. This triplet cycle—proposing a concept, vocalizing the noise, then playing the idea formally on the computer—repeats five or six times in a row, layering different sounds and vocals as each clip continues. In a stroke of fevered music making, Puth runs around his studio to find “a weird sound effect,” hitting different objects with his hand until he flips a light switch (Puth). TikTok transports the audience into the mind of a musical genius, hauling viewers on a 46 second journey beginning with a simple melody and ending with a fully fleshed out demo track.

This initial clip showing the birth of “Light Switch” has garnered over 119.5 million views, and Puth very cleverly capitalized on this format to further show the song’s five-month creative process. His subsequent videos hold a flair of authenticity unlike any other, where fans are literally brought into the recording studio to see the exact instrumental steps that birthed “Light Switch.” Phone calls between producers and Puth are broadcast to millions of viewers, snippets of the song are released online mere minutes after being written, and his genuinely awed and giddy reactions are captured by the camera as he hears the chorus for the first time.

Years ago, it would have been unconscionable to have this traditionally intimate process so publicly displayed and used as advertisement. However, Puth’s masterful use of TikTok intimacy has proven to be a wildly successful method: within mere hours of release, the song had already reached 1 million streams and was climbing steadily up the Billboard charts (Puth). Now, roughly two months after its initial release, “Light Switch” has surpassed 85 million streams on Spotify; a statistic demonstrating that there is inherent value in further study and imitation of Puth’s methodology.

Lessons for the Future

For artists seeking to increase fame and build their social influence, TikTok is the most effective method for reaching a broad target audience. The app offers a powerful formula where artists can share their music, interact with fans, and collaborate with other creators in a colorful display of musical talent. A recent study conducted by MRC Data discovered that 63% of TikTok users heard new music while scrolling through their For You Pages, and 75% of TikTok users have discovered new artists through their time on the app (TikTok). When an artist understands how to successfully wield the available tools on TikTok, they can share a raw, intimate image of their life and music production processes with a global fanbase.

Charlie Puth executes this model on a daily basis, giving the public glimpses into his role in the changing, modernizing music industry. Whether a conscious decision or not, Puth structures his content using rapidly punctuated sounds and clips layered one after the other in an unpredictable yet tightly regulated display of chaos, resulting in hit after hit of dopamine to satisfy the viewer’s short attention span and desire for instant gratification. This structure plays into the social media feedback loop, giving users the cycle of dopamine release that they are accustomed

to receiving after opening the app. Puth's high engagement levels with video comments and dueting fan videos makes his followers more likely to interact with his content, subsequently boosting it through the cyclical algorithm patterns to reach an exponentially larger number of For You Pages.

Most importantly, Puth's TikToks create a personality and sense of autonomy that is difficult for musicians to portray elsewhere in the public sphere. In formal radio and YouTube interviews organized by producers, artists rarely get a say on how their speech and image is framed by the interviewer and company's post-production team. Puth takes advantage of TikTok's expressive freedoms to film, edit, and publish content that accurately reflects his persona rather than filtering his image solely through the formal interviews made for the public. While he still takes advantage of and understands the importance of speaking to outlets like Vogue, GQ, and Insider, he uses a well-cultivated TikTok presence to remain a constant public persona, introducing new songs and private details of his songwriting process to keep fans hooked. In a time where Puth had all but faded from the popular stage, he manipulated the TikTok process to invert the hierarchy of the music industry, staking a large claim in the personal control of his music career and rekindling a massive public following.

It is important to note the difficulties of following this model. Many artists might shy away from Puth's example to protect their creative process and maintain personal privacy. Even Puth was not immune to these concerns: his delay in releasing the final version of "Light Switch" opened a niche for fans to remix the released TikTok clips into full versions of the song. Puth even noted this phenomenon in a TikTok video, but ultimately the benefits of his publicity for the song drastically outweighed the risks and still led to significant success. Despite so much of "Light Switch" having been revealed online, users who saw Puth's first video and followed the song's musical development held a personal stake in its success beyond TikTok, engaging with it on Spotify, Apple Music, and YouTube.

Conclusion

TikTok's neurological impact and methods of collaboration are paramount to understanding the future of the music industry. By taking advantage of shortened attention spans and using the intimacy and authenticity afforded by the content-sharing structure, musicians and producers can build their existing fanbase and reach entirely new audiences. The app has evolved to become the largest collaborative platform in the world, and its impact has been overlooked and undefined in the context of the music industry for far too long. Future research should confirm the attention span of TikTokers with quantitative data and examine the long-term trends of song popularity throughout the app to clarify the conclusions of this paper. Additionally, potential ethical problems arising from misuse of user data must be examined with the goal of establishing guidelines for product, service, or song promotion within the app.

Many other marketing companies have already recognized TikTok's importance and malleability, like the widening swath of politicians turning to the app to pull in a younger demographic of voters (Kambhampaty). It is time that artists and producers follow in these

footsteps and take advantage of the relatively unexploited methods for creating and promoting an artist's unique self-image in a changing music industry. The opportunity for musicians to have a direct hand in their public portrayal—controlling their TikTok accounts and the content that is posted—takes power away from the recording labels and returns it to the artist so that they can directly mold their path to musical fame.

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Research Statement

This research paper was written for WRT-101, "Whose Land is Our Land? The Rhetoric of American Music," where students were directed to examine the theme of American music within the context of their own academic discipline. As an intended neuroscience major, I chose

to research the effects of TikTok on the American music industry and study ways in which the app's addictive nature could be appropriated by artists looking to gain musical fame.

The research process for this paper was challenging. As a first-year student, I had not yet taken any neuroscience courses nor had I taken classes that enabled me to read dense scientific literature that could answer my question about the step-by-step neural mechanisms of TikTok addiction. I met with librarian Rachel Borchardt, who provided me with many subject guides, keywords, and databases like PubMed and Google Scholar to parse through. The meeting was helpful and I was able to find sources that gave me a broad overview of addiction, but ultimately I could not do an in-depth dive on the pathways given the time constraints and my limited neuroscience knowledge. A complicating factor was a significant lack of any published studies on any sort of effect that came from TikTok use (social, neural, emotional, etc.). As a result, I was forced to look for information about addiction in other types of social media data, for example, by suggesting that a study examining Twitter hashtag trends could provide evidence for the fast-paced addictive nature of social media like TikTok.

The lack of resources for my research questions was not constrained to neuroscience: I struggled to answer other parts of my research questions pertaining to the American music industry. Despite dropping into the research help desk that used to be on the library first floor, I couldn't find reputable, peer reviewed sources that answered my questions about TikTok's impact in the way the project demanded. As a result, I turned to websites that listed TikTok's download statistics or news articles that had a better understanding of TikTok's popularity in the social climate. One of the biggest sources was actually TikTok itself, since so many videos were textbook examples for overnight artist fame and how to take advantage of user addiction to achieve high levels of interaction. I used the library's 24-hour chat feature to learn how to make MLA citations for TikTok videos, but did not use any books in my research since my questions revolved around such a modern topic that the only relevant sources were online articles.

Overall, writing this paper in 2023 could include a more comprehensive analysis of my research question, both because I have gained significant ability to digest scientific literature but also since TikTok has occupied so much of public discussion regarding life in the US. Many more journals and reputable news organizations have created sources that would lend a stronger foundation to my arguments, but ultimately I maximized the resources available to begin a conversation about TikTok, neuroscience, and the music industry.
