

Do They Stop? How Do They Stop? Why Do They Stop? Whether, How, and Why Teens Insert “Frictions” into Social Media’s Infinite Scroll

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Teenagers’ social media use is often cast as problematic and addictive, and moral panics are a persistent theme. The scholarly literature reveals a gap in studying whether teens actively resist social media design by applying “frictions” (e.g., screen locks and reminders). The concept of “frictions” is situated in conversation with the “frictionless” design of social media apps, which eliminate stopping cues. Using developmental theory to understand and compare age differences in teen social media practices, this study investigates whether, how, and why teenagers pause or stop social media use. Based on in-depth interviews with 20, 13–16 year olds, from the United States and Canada, this study finds that when teens acknowledge and grapple with feelings of discomfort with social media experiences, some introduce frictions. As policymakers struggle to play catch-up with technology regulation, this study highlights how teenagers are thinking about social media effects, and designing their own exit paths.

Keywords: teenagers, adolescents, technology, social media, algorithms, developmental theory, frictions

Teenagers in the United States use social media (SM) at high rates (Rideout, Peebles, Mann, & Robb, 2022; Vogels, Gelles-Watnick, & Massarat, 2022), but little is known about teens’ stopping or pausing strategies in a media environment optimized for time spent and argued to be designed for addiction (Alter, 2017; Bhargava & Velasquez, 2021; Harris, 2019; Haugen, 2021, McNamee, 2020, Zuboff, 2020). Although prior research has paid close attention to how teens use and linger on SM, scholarship on youth and media reveals a gap in studying how teens might be crafting emergent strategies to resist the pull of “frictionless” (Payne, 2014) design during a crucial developmental period (Fuhrmann, Knoll, & Blakemore, 2015; Orben & Blakemore, 2023).

Operationalizing “frictions” as moments of intentional pause in a media environment devoid of stopping cues, this research breaks from narratives that cast teens as being on the receiving end of technology design, or where teens are spoken for. Instead, it centers on teen experiences, perspectives,

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Date submitted: 2023-05-23

¹ The author is grateful to all the teen participants and their families for their time and enthusiasm, and to Dr. Amy B. Jordan for her encouragement and guidance throughout this project.

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and agency in an often-messy path toward inserting frictions in a frictionless media environment. In keeping with a developmental theory focus, this project asks whether age differences are material in the way 13, 14, 15, and 16 year olds negotiate SM's infinite scroll and what the vocabulary is in which teens talk about the tensions inherent in navigating SM and the design of their habitual digital environments more generally. Through deeply analyzed interviews, this article seeks to showcase a microcosm of teen voices, strategies, and epiphanies as noteworthy complements to the broader commentary on teen SM use.

Situating Teenagers' Social Media Use in Youth and Media Studies

Teenagers have long been the largest and fastest-growing demographic cohort of Internet users (Baker & White, 2010; Subrahmanyam & Lin, 2007). They are experts in technology use (Jensen & Nutt, 2015, p. 207) but are also cast as lab rats in SM companies' "decades long experiment" (Office of the Surgeon General [OSG], 2023, p. 11) that has been argued to exacerbate the tensions between SM use and developmental stage during a critical period of brain development (Orben & Blakemore, 2023). It remains unclear whether SM design is good or bad for teens (OSG, 2023), but the anxieties surrounding teens' technology use are many (Baym, 2015). The assumptions through which youth media use are understood often lack nuance and careful attention to youth voices (Jenkins, Itō, & boyd, 2016; Jordan, 2016; Livingstone, 2021). Moral panics (Cohen, 2011) dominate the broader public commentary around teens' SM use, and concerns about media effects are a consistent theme in youth and media scholarship (Faelens et al., 2021; Greenfield, 2020; Jordan, 2016, 2017; Livingstone & Blum-Ross, 2020; Malin, 2009; Shanahan, 2021; Valkenburg & Oliver, 2019). Research remains critical because teens' lives are "happening now" (OSG, 2023, p. 13), and families are often struggling with questions about newer forms of media/technologies and the role of these media in the lives of their children (Livingstone, 2021).

For youth, digital technologies are embedded into their everyday, as tools to navigate social life (boyd, 2014, p. 26; Vorderer, Hefner, Reinecke, & Klimmt, 2017). Such negotiation may range from the unremarkable to the practical and creative (Henderson, Selwyn, Finger, & Aston, 2015). Youth are constantly negotiating opportunities and risks of SM design, as it relates to their personal relationships (Vaterlaus, Barnett, Roche, & Young, 2016). SM affords youth a niche of their own within a larger public— at arm's length from adults, but with visibility into the adult world. Exploring identity when the teen developmental stage is primed for identity formation enhances the appeal of SM affordances (boyd, 2010; boyd & Ellison, 2007; Dyer, 2015). Time spent on SM can mean much more than preoccupation with networked individualism; it could reflect and shape intimacy and community too (Watkins, 2009). Adolescents' innovative uses are linchpins in the emergence of popular new technologies (Savic, 2021).

Many scholars have situated their work in the gaps between teens' media use and the creation and maintenance of moral panics furthered by journalists, parents, schools, and policymakers (Tiidenberg et al., 2017). Entry points include how teens negotiate the online public sphere (boyd, 2014), children's digital rights (Livingstone, 2021), effects of active versus passive use (Meier & Krause, 2022), differential susceptibility (Valkenburg & Peter, 2013), the role of teen personas on media practices, (Berriman & Thomson, 2015), and the effects of social comparison on SM (Noon & Meier, 2019). A review of literature shows that the term "use" typically focuses on how teens linger on SM rather than how they find moments of closure. This article is built on the premise that teen agency transcends what teens choose to do; it also

implicates what teens choose not to do, or when to walk away. Such agency is not a fixed quality; it is driven by social contexts (Buckingham, 2017; Clément & Buckingham, 2019; Jordan, 2016). Prior research has highlighted that young people can benefit if they are aware of commercial influences, and the operationalization of persuasion in the attention economy (Buckingham, 2017). Such awareness also emerges in the many moments that people and algorithms meet (Bucher, 2017). Multiple studies have examined the vast landscape of teen SM “use,” but few have asked whether, how, and why teens intentionally stop/pause when they are actively scrolling on SM apps. The present study is situated in this gap, and the next section contextualizes “frictions.”

Friction(s): Context and Operationalization

“Friction(s)” is operationalized as any method or combination of methods teens use in their quest for moments of sanctuary (Bachelard & Jolas, 1994; Zuboff, 2020, pp. 475–492). Such refuge is framed within the construct of “this and that, here and elsewhere” (p. 477). Frictions do not mean walking away forever or deleting an app, although it could be that too. The opposite of use is not operationalized as nonuse; it is the liminality between yes and no, between all or nothing in media design that eliminates stopping cues.

Friction is a mirror to the term “frictionless” in social networking. At the F8 developer conference, Facebook CEO Mark Zuckerberg pointed users to the ease and efficiency of “frictionless” design (Payne, 2014). For the attention economy that optimizes time spent, frictionless design is axiom. It fuels the “creepiness” (Chun, 2017, p. 15) of new media, which cultivate habits, embed in daily rhythms, and become invisible. Infinite scrolls and autoplay remove stopping cues for the brain. Personalized recommendations, a signature feature of SM, lower the decision effort for users (Abdollahpouri, Mansoury, Burke, Mobasher, & Malthouse, 2021). Such design makes it easier to keep scrolling than to stop and could make certain types of media environments more tempting for teens (Alter, 2017; Weinstein & James, 2022; Wells, Horowitz, & Seetharaman, 2021). The pull-to-refresh feature—common to a range of digital apps—works much like a slot machine in a casino, according to former insiders from Facebook and Google (Harris, 2019; Haugen, 2021). Likes and follows are engineered to get users hooked to getting likes from other people. The feedback is irresistible but unpredictable, and the formula is not easy to crack (Alter, 2017). The only way of knowing which post becomes popular and which one languishes is to check back from time to time. When such design is multiplied by the number of SM apps that teens use, the race for attention can be understood as a contest that pits corporate ambitions measured in billions of dollars against young people’s needs and priorities during a sensitive developmental period (Fuhrmann et al., 2015).

A former vice president at Facebook acknowledged that he felt tremendous guilt for creating short-term dopamine-driven feedback loops (Lanier, 2018). Congressional scrutiny of SM apps is rising (Hadero & Amiri, 2023), and the teen SM addiction narrative remains firmly in the spotlight (“Americans at Risk: Manipulation and Deception in the Digital Age,” 2020; Bhargava & Velasquez, 2021). Parents, school districts, and governments are suing SM companies over harms they allege children have suffered from addictive design (Johnson, 2023). Whistleblowers allege that SM platforms prioritize profits over safety and hide their internal research on teens’ problematic use from investors and the public (Haugen, 2021).

Bella, 16-year-old Canadian, who we will meet later in this article, spends many hours on TikTok every evening, and often looks at the clock at 10:00 p.m. only to realize she has not started her homework yet. Such media experiences reflect the problematics of frictionless design, but do such experiences also help teens recalibrate their SM use? Building on prior research in youth and media studies, this project explores whether SM design is also nudging teens to develop new habits to pause or stop—and not merely linger.

Theoretical Foundation: Developmental Theory

This study combines classic theories of cognitive development (Bronfenbrenner, 1977; Flavell, 1979; Greenfield, 2020; Moreno & Uhls, 2019; Piaget, 1972; Wackman & Wartella, 1977) along with recent research in teen brain development (Blakemore, 2012, 2018; Casey, Getz, & Galvan, 2008; Fuhrmann et al., 2015; Steinberg, 2015) to understand and compare whether, how, and why teens 13–16 years old resist frictionless SM design.

Adolescents' ages and developmental stages matter to teen media use. The asymmetries between teens' developmental stages and SM designs are many. Notable ones relate to the teen brain's reward center, executive functioning, risk taking, and peer orientation during adolescence (Blakemore, 2012, 2018; Fuhrmann et al., 2015; Orben & Blakemore, 2023; Steinberg, 2015). Hormonal and physiological changes evolve in parallel with neural and cognitive shifts, and this could make certain types of media design more tempting for teens.

Prior research on human development argues that adolescents' planning and organizing skills are not fully developed during the ages of 13–16 (Casey et al., 2008). Adolescents knowingly engage in risky behavior, and this is often because of influences of feelings, emotions, and peers (Gardner & Steinberg, 2005; Steinberg, 2015). This stage is associated with suboptimal decision making even as the brain is becoming more malleable and sensitive to experience(s) than at any other time in human development (Steinberg, 2015, p. 76). Self-regulation develops linearly and gradually throughout adolescence, and plateaus only in the mid-20s. Metacognition—or the ability to think about one's own thinking—is also at work. Metacognitive awareness allows individuals to reflect on their own thinking, set goals, plan strategies, and monitor progress toward achieving those goals. Metacognition is a skill that can help people thrive in every domain (Fleming & Frith, 2014). The always-on challenge for teens on SM is that their still-maturing regulatory regions of the brain are dealing with twin tensions—an easily aroused reward system coexisting with SM design that eliminates stopping cues and offers instant but unpredictable gratifications. Accordingly, the present study asks:

RQ1: When teenagers are actively using social media apps, do they stop on their own terms, and do age differences rise to a level of importance?

RQ2: In continuation from RQ1, how do they stop, and are there age differences in how they stop?

RQ3: In continuation from RQ1 and RQ2, why do they stop, and are there age differences in why they stop?

The Present Study

The present study conducts a deep analysis of semistructured interviews with 20 teenagers living in the United States and Canada. Across 20 hours of video interviews spanning 60 days, participants aged 13–16 years talked about their media experiences and how their favorite apps fit into the rhythms of their daily lives. TikTok, Snapchat, Instagram, YouTube, Twitter, and Netflix dominated the interviews. Before rolling out the study with 13- to 16-year olds, a pilot study testing the screener and interview protocol was conducted with undergraduate students at Rutgers University in New Brunswick, New Jersey.

The Rutgers Institutional Review Board (IRB) approved this study and instruments (flyer, consent forms, pre-interview questionnaire, interview protocol) in Fall 2022. The pre-interview questionnaire asked for demographic information (name, date of birth, sex/gender, race, and ethnicity), and school grades, daily time spent on SM, after school activities, and feelings about personal SM use (satisfied, dissatisfied, and neutral).

Sampling

Participants were recruited via snowball sampling (Miles & Huberman, 1994; Parker, Scott, & Geddes, 2019). Flyers were circulated through the author's personal and professional networks and posted on SM platforms. Calls for participation offered a detailed description of the study and asked parents/guardians to submit an online consent form opting their children into the study. After initial contact via personalized emails, many parents circulated the recruitment call in their networks, and therefore chain-referral sampling (Biernacki & Waldorf, 1981) was also used. Participants shared the study flyer with their friends and the snowball grew. More than 50 emails were sent, 30 parents completed consent forms, and 20 teens participated.

Sampling for this study was inspired by a case-based logic (Mitchell, 1983) such that each case provides an increasingly accurate understanding of the question at hand (Small, 2009), while remaining attentive to age and sex/gender distribution across the participant list. Age is an important criterion because the focus of the study is to understand and compare age differences in teens' strategies. The present study sampled for a range of perspectives, a longstanding technique in social science research (Weiss, 1995).

Participants

Table 1.0 offers a participant snapshot using pseudonyms. Participants comprise middle- and high-school-age adolescents from the United States and Canada—seven 13-year-olds, four 14-year-olds, three 15-year-olds, and six 16-year-olds. Participants in the United States hailed from New York, New Jersey, Kentucky, Delaware, Atlanta, and Washington, DC, and those from Canada were mostly located in and around Toronto. TikTok was the most commonly used SM app. All 20 participants self-reported grades of "mostly As" or "mostly As and Bs," three reported being "dissatisfied" with their SM use, 17 of 20 said they clock more than two hours on SM each day. Teens' responses suggested that they use SM a lot more than two hours. Seventeen of 20 answered "yes" or "maybe" to a screening question that asked if they understand why they see what they see on their SM feeds. Interviews were conducted between November 2022 and January 2023.

Table 1. Participant Snapshot.

Pseudonym	Age	Country	Race & Ethnicity*	Sex*	Most Used Apps
Kate	13	Canada	White	Female	Roblox, Snapchat, TikTok
Veronika	13	United States	White, Italian	Female	Instagram, Snapchat, TikTok
Charli	13	Canada	White	Female	Discord, YouTube
Amy	13	United States	Hispanic	Female	Snapchat, TikTok
Claire	13	United States	Hispanic	Female	Instagram, Snapchat, TikTok
Grace	13	United States	White, Italian	Female	Instagram, Netflix, Snapchat, YouTube, TikTok, Twitter
Lila	13	United States	White	Female	YouTube, TikTok
Rae	14	United States	White, non Hispanic	Female	Instagram, Discord, Twitter
Iris	14	United States	White, non Hispanic	Female	Instagram, Netflix, Snapchat, TikTok
Ruth	14	United States	Mixed	Female	Instagram, Netflix, Spotify, Snapchat, YouTube
Sonya	14	United States	White	Female	Instagram, TikTok
Gaby	15	United States	White	Other	Instagram, Netflix
Amelie	15	Canada	Indian	Female	Instagram, TikTok
Melody	15	United States	Asian	Female	Instagram, YouTube
Ivan	16	United States	African American	Male	Netflix, Instagram, TikTok, YouTube
Erik	16	United States	White, Welsh	Male	Instagram, Netflix, Twitter, TikTok, YouTube
Keith	16	Canada	Indian	Male	Instagram, Netflix, Snapchat, TikTok, YouTube
Bella	16	Canada	Black, Jamaican	Female	Instagram, Netflix, TikTok, YouTube
Anna	16	United States	Hispanic	Female	Instagram, Snapchat, TikTok
Carlos	16	United States	African American	Male	Instagram, Snapchat, TikTok

Note. "Race and Ethnicity" and "Sex" columns reflect participants' description.

Key Interview Questions

All interviews began by welcoming participants and obtaining verbal assent before recording. Participants were informed how their privacy would be protected and reassured that there were no right or wrong answers. They could take breaks or leave midway and still receive a \$25 gift card. Interviews lasted for an average of 55 minutes. The recorded portion began with context-setting questions about that particular day and activities immediately before the call. Participants were asked about their daily routines (first this, then that) and how SM fit into their everyday lives. All participants answered the core questions: "While using SM, do you stop? How do you stop?" and "Why do you stop?" They also shared perspectives on the broader commentary around teen SM "addiction" and how they think SM algorithms work. Transcripts

were uploaded into Dedoose, a Web-based coding app for mixed methods research; interviews were coded and analyzed using flexible coding (Deterding & Waters, 2021)

Results

This section summarizes the key findings for each question by age group, while highlighting participants' responses. The age-wise organization draws on the extant literature on adolescents' developmental stage, which suggests that teens' self-regulation develops in a linear and gradual fashion (Casey et al., 2008, Steinberg, 2015).

Teens' Reactions to the Social Media Addiction Commentary

Participants said they found the broader public debate and commentary on teen SM addiction "offensive" and "judgy." Teens are asking of grown-ups: What about your "addiction" to coffee, Candy Crush, or *The New York Times* app? Five of 20 participants said they were put off by the addiction commentary; six said they were either addicted or that the apps were addictive. Nine reflected on why they may have been addicted or how others are addicted but not themselves.

Participants noted that SM apps were pervasive in their day-to-day lives. Grace, 13, noted that almost everyone on SM is "addicted" but also said that SM users must learn how not to get "attached." Some, like Ruth, 14, compared their use cases with those younger than them—mostly their siblings, and felt that 12-year-olds have "more social media than teens." Teens mentioned their parents or grown-ups engaging in activities that could be contained within the umbrella term "addiction." For Amelie, 15, her father constantly playing Candy Crush on his phone is a sign that "at this point everyone's addicted." Erik's response, below, sums up teens' feelings of being talked down to.

And then these adults, they're obsessed with . . . I don't know coffee or something like that. And I think when people say comments like that, they're definitely removing that nuance from it, and they definitely like to make the comment only about younger people, almost sometimes as a comment of superiority.

Data show that no matter whether participants considered they were addicted or that the apps were addictive, they frowned on the commentary about teens being portrayed as the only ones being hooked.

Do They Stop?

"Do you stop?" is a question all 20 participants answered. "Eventually" was the keyword that surfaced across age groups. Fourteen said they stop on their own, two said no, and four landed somewhere in the middle—more like a "yes, but . . ." Of the seven 13-year-olds, five were confident that they stopped without external nudges. Among the four 14-year-olds, two could pinpoint exactly how they stopped; the third was trying to cut back, and the fourth qualified her answer by saying she does not stop when she's on SM, so she calibrates when she gets in. Of the three 15-year-olds, two said they either did not stop while

on their favorite app, or would not try to. All the six of the 16-year-olds in the study said they stop, but with different levels of confidence about how easily they get off.

The “do you stop?” question did not seem to surprise participants. It was asked 15 minutes into the interview, when participants began describing their habitual SM use. For example, when Carlos, 16, explained how he went on TikTok and kept delaying taking a nap, which he knew was good for him before soccer practice, it is at such moments when the “do you stop?” question was posed—within the context of the activity that the participant was describing.

The vignettes in this section speak to the tensions between use and pause that teens navigate in their SM use. Among the 13-year-olds, Grace, 13, said “I just get out, you know,” while Charli said it’s “hard for me to stop.” In the next age group, the lines blurred between a hard yes or no and pointed to the many meanings the word “stop” could take on in teen SM practices. When Iris, 14, does homework, she puts her phone away, but when she is on SM, she does not stop. For Gaby, 15, if the content does not hook her “within 3 minutes,” she turns away, but some other times, “it goes on for like 20 minutes.” Melody, 15, was the only one among 20 participants who said she would not try to stop. She explained: “When I’m home like there’s like long periods of time where I don’t have to do anything. So I just go on YouTube . . . I stop when it’s like time for dinner.”

Other participants’ responses reflected micro-tactics they were evolving to deal with SM design. The path is often tricky, though. Keith, 16, feels “it kinda messes with you.” Anna, 16, echoed Keith’s sentiment. She noted how “annoyed” she got while trying to take time back from SM scrolling. Carlos, 16, held up his phone during the interview to show 20 alarms starting from 5: 00 a.m. to wake up for school, but he has none set up for stopping SM use. “I definitely don’t have the control,” Carlos said.

Data show that teens across age groups struggle to stop. Parental involvement is mentioned more often by the 13- and 14-year-olds, and gently tapers off among the 15- and 16-year-olds. Across age groups, teens reported feeling “stressed” and “annoyed” when SM interfered with their performance at school and other activities that mattered to them.

How Do They Stop?

Teens’ responses suggest that the 16-year-olds are often more facile and intentional about introducing frictions via non-SM apps like reminders and calendar alerts. None of the 13-, 14-, or 15-year-olds reported such strategies. A common pattern across different age groups was how younger *and* older teens were leaning into the potential of SM recommendations to help them stop or help them craft new routines to get things done. This section pays attention to the actions teens take to stop, with particular focus on personal agency, the possibility of learning from chance encounters with algorithmic systems (Bucher, 2017), and from experiences.

Amy and Veronika, both 13, said they stop around the 15-minute mark using different methods. Through prolonged SM use, Amy has learned that “if it gets to 20 (minutes) I’m just gonna keep pushing it back because it’s happened, like, a lot.” Amy said she now limits her SM use to 10–15 minutes at a time

because that feels “not too short, not too long.” For Veronika, the pull of her gymnastics equipment in the basement competes with SM. Others like Charli, 13, mentioned a mix of parent reminders and emergent self-regulation, with the latter being credited to SM design itself.

Every afternoon, during her 10-minute walk home from school, Charli said she thinks about her to-dos. Once home, she eats a snack, heads to her room, and reaches for YouTube. Once there, Charli explains how she tries to set a “boundary” for herself:

There’s some YouTube videos that are like . . . they play music for 25 min, and then you get a 15 min break to get a snack or watch YouTube, or whatever. So sometimes I play those to try to help my brain. Like, okay, just 5 more minutes of work, and then I’ll take a break, and then I’ll do more work.

Among the four 14-year-olds, Sonya’s story surfaces how much ground some teens can cover in a couple of weeks in terms of media experiences. The week before the interview, Sonya, 14, said she was on TikTok for 18 hours and did not like how that felt for mind and body. Days before participating in this study, Sonya decided that locking up her screen time and not knowing the password was the only way out: “So, I just like . . . I asked my dad to actually set it up. Well, not set up, but I set it up, and he just made a password, so that I couldn’t, like, ignore the time limit.” Sonya (like Charli, 13) also mentioned how SM recommendations nudged her in a new direction: “It’s like seeing all these girls on, like, TikTok going to bed early, and like feeling basically like being able to enjoy life.”

Iris’s approach is different. She leaves her phone in the kitchen when she goes to her room to do schoolwork and picks it up only when she is finished with academic deliverables. She watches her favorite show for a few minutes just so “I could eat my snack and, like, not have to worry about anything.” When her snack is done, Iris sets her phone down on the kitchen counter. Does she get tempted to stay longer with the show? “I do. But I don’t,” Iris replied.

Rae, 14, lives on a farm, surrounded by chickens, cows, cats, and horses. Rae says she admonishes herself when she finds herself getting sucked into Instagram and reminds herself to do something more “useful.” Rae noted that seeing cat videos nudges her to go outside and play with the cats on her farm. Ruth, 14, reported having screen time locks set up on her phone—“everything turns off at 11 p.m.”—and also reflected on what she called her “weird” method for organizing herself, which she said her father does not understand.

Like if it’s 1:53, then I’ll stop at 1:55, or if it’s 2:30, and I’m like well, I’m still watching, let me stop at 2:40, I do it in like 5 and 10s like . . . That’s kind of like how I organize my brain, and so sometimes when my dad comes over, and he’s like are you still on YouTube and then it’s like 1:56. I’ll be like 4 more minutes.

Among the three 15-year-olds in the study, two said they stop (only) when dinner is announced, and one said they stop because of a combination of a parent’s reminder to put the phone away, schoolwork, or getting “bored.” Gaby, 15, was juggling preparation for three upcoming tests on the day she joined this

interview. Gaby describes her SM use as a tool for a “mild level of excitement” while doing homework. Reminders from Gaby’s mother operate as the second layer of friction when Gaby keeps scrolling for extended periods of time.

Of the six 16-year-olds in the study, two (Keith and Erik) use either a reminder app on the phone itself or an online calendar app like Google Calendar to help them stop. Three of them (Anna, Bella, Carlos) shoot a quick glance at the time on of their phones as a stopping cue. Ivan turns his notifications off when he does not want to be “bothered” while playing football and working out. Keith said other people may find his method of organizing himself “confusing,” but he is clear about how he keeps it all together. He keeps telling himself “don’t mess this up” and confirms this is self-motivated and not coming from his parents, who used to remind him but don’t do that anymore. For Keith and Erik, both 16, reminders/calendar alerts are the first things that they see on the screen when they pick up their phones; these function like a do-now, trumping SM notifications. Erik, a self-reported “overthinker” who is “adamant” about getting things done, uses a combination of reminders and SM recommendations to stop.

What you would call like aesthetic studying videos where they have like a nice drink, and they’re at a nice desk, and that, normally is what pops up on my feed. So I almost use that as a reminder like.

Teens’ responses highlighted how younger teens in the study are using strategies similar to what the older teens use—like SM recommendations—to stop and get things done. However, only the 16-year-olds were using calendar/reminder apps to counter SM’s pull. Here too, teens describe feelings of stress while trying to self-regulate their SM use, but they are learning from these very experiences and making microchanges.

Why Do They Stop?

Across age groups, teens’ answers to the “why do you stop?” question connected dots from an intricate web of experiences. Teens’ responses suggest that they do make meaning from the tensions that surface at the intersection of SM design and their developmental needs within the context of their social environments. For many participants—including the youngest—their answers to the “why?” question were less about why they stop SM use and more about why they stop themselves from even getting on SM in the first place. So, they stop before they cannot stop. Each of the 14-year-olds reported entirely different reasons. The 15-year-olds are hyperaware that if they get on to their favorite SM app, they may not get off in time to get other things done. For the 16-year-olds, their imminent entry into college tends to be top of mind, as junior-year grades are a vital ingredient in the college admission process. The 16-year-olds noted that their SM use does shift on account of advice from mentors at school.

For Charli, 13, getting on YouTube or not is determined by her assessment of how long any particular homework is going to take, or when it is due. If it’s a weekday and the work is due the next week, Charli said, “I’m just gonna keep watching YouTube.” Lila, on the other hand, talked about feeling “frustrated” about not wanting to be on TikTok, not being able to get off it, and then, something had to give. Finally, Lila decided she would do homework first and then go on TikTok. In Amy’s case, a few forces

converged. She did badly on a test after staying on the phone too much. Her parents advised her to be more social and less on her phone. Amy noted that she and her elder sister are encouraged to go out of the house and meet peers in person. Amy has developed new micro-habits—she now looks at the time on the top left of her phone and switches off at 15 minutes. In parallel, Amy’s elder sister introduced Amy to romance novels—something that Amy carries “everywhere” with her now. Amy noted that the act of keeping a romance novel in clear view creates a competitive environment—SM now has to compete with other things.

Among 14-year-olds, the theme about bad test grades and subsequent shifts in SM use came up often. Iris broke into a new routine after getting a failing grade on a math assignment. She started leaving her phone in the kitchen while doing homework. Iris explains the turning point: “So I’m on my phone, and then I forgot to finish the homework and I got in trouble . . . I got an F.”

Ruth’s story of applying frictions spans two continents and has much less to do with bad grades. Less than two years ago, her family relocated to the United States from a foreign country. Ruth, 14, was trying to fit into a new country, new school, and new neighborhood, but her TikTok feed continued to show her videos of her friends’ lives and times in Europe. Ruth’s ForYou page did not deliver what Ruth needed—which was “sanctuary” (Zuboff, 2020). Breaking up with TikTok was hard, says Ruth, but an influencer she follows—Emma Chamberlain—helped soften the blow. “I didn’t realize how bad the problem was until I cut TikTok out of my life,” Chamberlain said in her podcast *Anything Goes* (Chamberlain, 2021; 00:09:52). Ruth took the cue and deleted TikTok.

Gaby stops either because she is bored or because her mother reminds her that she needs to get back on task. Such external nudges are absent in Amelie’s case. So too for Melody. Amelie thinks she is “addicted . . . definitely, yeah.” And Melody does not try to stop.

The 16-year-olds echo the theme of bad grades leading to shifts in SM use. When Bella noticed a “couple of incidents” that dragged her school grades down, she decided to act—“I was like, gosh . . . no!” Soon, Bella tucked into her evenings a new habit—she began setting up reminders on her phone. She explains that she sets each reminder manually every evening: “It’s just like for me as somebody. *For me*,” she said, with emphasis on “For me” as a contrast to TikTok’s ForYou page. Erik, who describes himself as an “overthinker,” said SM brings “nothing but enjoyment.” When Erik’s feed shifts from cooking videos to images of study spaces or college tours, Erik notes that it nudges him back to schoolwork. Carlos stops because he loves soccer. He knows being on TikTok and not napping before practice will affect his performance. Ivan stops because he wants to be “locked in and focused” during his workouts and football practice. Anna glances at the time and gets off. Keith is acutely aware of how easily SM could “mess” it all up.

Data show that several forces are at play when we consider why teens stop/pause their SM use. It is rarely a single experience but more often a set of interconnected ones both online and offline that lead teens to think harder about SM effects and then take actions to self-regulate their use. Participants’ responses highlight that they are constantly thinking about the ways that their SM experiences cause both physical and emotional discomfort. Across all four ages, teens highlighted negative experiences that they credit with shifting their SM behaviors.

"Like, Catch a Fish": How Do Teens Think Social Media Algorithms Work?

Social media make for countless moments when people and algorithms meet (Bucher, 2017). Participants in this study were asked about their understanding of how SM algorithms work based on their media experiences. Questions were asked in the vocabulary that the teens used—like, how does TikTok decide what to show you next? And so on. The term “algorithm” was not used in any question.

Many teens in the study reported having SM access since they were in elementary school or at least the beginning of middle school. By virtue of such habituation to SM apps, teens’ understanding had evolved on a continuum. Three of the participants—Lila (13), Gaby (15), and Keith (16) used the term “algorithm” while explaining their mental models. “Everything we’re talking about today is the algorithm,” Keith, 16, said with confidence. Grace, 13, used a fishing analogy to make her point. Social media works “like, catch a fish,” she said. “Like, if the fish, like, bites .” Lila, 13, said, “It feels like a trap.” Across age groups, teens were able to triangulate how some loosely defined combination of their universe of actions—likes, comments, shares, original posts, searches, scrolling past videos, watch time—fed into personalized SM recommendations. The following sections discuss key findings, address the limitations of the study, and note implications for stakeholders.

Discussion

Across the four age groups (13, 14, 15, 16 years) featured in the study, teens reported feelings of lack of control over their SM use. A parent or guardian’s reminders were a bigger factor for 13- and 14-year-olds to get off SM apps, and less so for 15- and 16-year-olds. Age differences surfaced vividly in the “how do you stop?” section of the results. Nearly all the 16-year-olds reported glancing at the time on their phones—a strategy that only a few of teens in the younger age groups use. Only the 16-year-olds used reminder/calendar apps as friction. Teens’ explanations about why they stop is a mixed bag. Across age groups, many cited negative experiences as a starting point for inserting frictions.

Teens from the youngest to the oldest in the study showed they were thinking about their thinking—or metacognition (Flavell, 1979) and making micro-changes to push back against SM apps that are optimized to hijack user attention (Harris, 2019; Haugen, 2021; McNamee, 2020). Teens are understanding their minds and directing and controlling it in better ways, iteratively. Their thoughts about SM apps are evolving in parallel with their executive functioning, in a linear and gradual fashion (Steinberg, 2015).

Participants’ responses to three questions (Do you stop? How do you stop? Why do you stop?) suggested that they are constantly engaged in negotiations between SM recommendations versus school work, sport, chores, sleep, and so on. This always-on entanglement puts teens into decision-making mode each time they are actively engaged with frictionless SM design, which intentionally eliminates stopping cues. Should they swipe to the next video on TikTok or not? Should they click on the “next up” prompt (YouTube/Netflix) or not? Should they stop now or a couple of minutes later? The content never stops showing up, so it is up to the teens to make these decisions.

Participants talked about SM design in terms of feeling “edgy, annoyed, stressed,” and “dissatisfied.” Their paths toward inserting frictions is not straightforward. Participant responses highlighted how the design of SM apps exacerbates tensions between the intentional and unintentional; between time well spent and time wasted. Teens’ still-maturing regulatory regions of the brain are dealing with twin tensions: an easily aroused reward system coexisting with SM recommendations that are finely tuned to offer instant gratifications. Despite the persistent tussle, teens in the present study are taking back time with microshifts in their habits. Parent reminders, reminder apps, calendars, clocks, bad grades, homework, sport, and even SM design and recommendations compete with the addictive design of SM apps.

Feeling uncomfortable with some aspect their SM use (content, fatigue, effects on school grades, and more) and allowing themselves the time and space to wrangle with that discomfort is where teens warm to the idea of inserting frictions. The process of inserting frictions is iterative, with many hits and misses. Through it all, teens are constantly thinking about their thinking—or metacognition (Flavell, 1979).

Study Limitations

This point-in-time study is limited in three ways. Participants hail from two Western countries (United States and Canada), the socioeconomic status of participants’ families is not known beyond what the teens mentioned in passing, and participants did not have the opportunity to speak with each other like they would have in a focus group.

Implications

Insights from participants in this study have implications for media researchers, policymakers, and parents—presented below.

For Parents

Teens want their parents to know they are not “really” addicted but do feel stressed by SM. Approaching teen SM use as the gap between teens’ executive functioning and the frictionless design of SM can be an effective entry point for parents’ conversations with their teens. The American Psychological Association (2023), which released its first-ever public health advisory on SM use in adolescence in May 2023, notes the importance of acknowledging that young people mature at different rates and that age-appropriate use means different things to different teens based on developmental trajectory. An important caveat from the APA: Parents must model good SM behavior for best results.

For Media Researchers

Most teens in the study—but not all—said they go to SM when they have “nothing else to do,” are “bored,” or because it’s a “filler thing.” Prior research (Perse, 1990) has noted that ritualistic use is marked by higher selectivity before and during exposure but lower levels of involvement. Comparison of ritualistic versus intentional use of SM apps could be generative to future research.

For Policymakers

Congressional hearings tend to feature speakers who claim that teens don't understand SM designs. Often missing from this picture is the vocabulary in which teens themselves think and talk about their SM experiences. Teens noted that the "addiction" commentary lacks nuance. This study argues that teen perspectives from such studies are vital complements to policymaking in the digital era.

Conclusion

At its core, this study is an attempt to understand and compare age differences in whether, how, and why insert "frictions" into their SM use. In the process, this study seeks to foreground teen voices in the broader public debate around problematic SM use. While much research is focused on investigating SM "use" among teens, this study addresses questions that are complementary and a logical extension of the notion of "use." SM apps are infrastructural for adolescents. By virtue of being immersed in an algorithm-infused media environment, adolescents acquire a particular kind of expertise. When something doesn't feel right about the way these apps fit into their everyday, they mull over it. Findings about how 20 teens insert frictions do not tell us about how *all* teens insert frictions, but they do point us toward epiphanies that make a difference to how teens organize and prioritize their time. This study contributes to scholarly literature by situating teen voices at the center of contemporary debates on SM regulation.

There is broad agreement that SM companies and regulators can do better for teens. What is less clear is what needs to be done, who is going to do it, and what the "it" really is or should be. As policymakers struggle to rein in SM apps, teens in the study show that they are doing more than just "using" SM; they are thinking about its effects and designing their own exit paths. A quick glance at the clock seems innocuous; blink and you miss it, but look carefully and you might find early signs of an unmistakably teen hack of micro-resistance.

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