

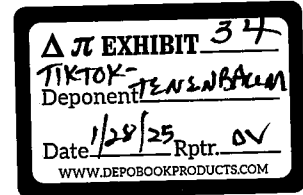
AMENDED Exhibit 540

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation



[TikTank] Wellbeing impacts - research report

11 March 2020

Analysis and recommendations are those of TikTank and do not reflect company position.

Objectives of this report

1. Increase understanding among GR/PR and senior leaders of the evidence on the links between screen time/online platforms and young people's wellbeing, to increase confidence when responding to questions on this topic from external stakeholders.
2. To consider what more we could or should do to ensure that TikTok makes positive impact and prevents harm (Platform Principles #3, #5)

Executive summary

- **Perceptions about the risks of screen time are not grounded in solid evidence (Section III).** While some research has found associations between screen-based activities and negative effects such as increased risk of anxiety or depression, cause and effect are not fully understood; it could be that children and young people who already have mental health problems are more likely to spend more time on their devices.
- **Not all screen time is created equal.** Very high levels of device use are associated with slightly poorer psychosocial functioning, while passive use appears to be associated with more negative outcomes compared to active engagement. Device use at bedtime is associated with problems of sleep quality and quantity.
- **Two of TikTok's main strengths from a wellbeing perspective are that it values authenticity rather than encouraging the 'perfect' image, and encourages active creation and engagement rather than passive use.** We should continue to play to these strengths.
- In terms of vulnerabilities, **our high proportion of younger users** mean that we may need to take more precautions than other platforms with older user bases (Section IV).
- **Consideration of TikTok and competitors' wellbeing initiatives (Sections V, VI)** suggests that YouTube may be offering slightly more in terms of tools to inform and empower users, and Facebook is doing more to support research into the links between media technologies and youth development and wellbeing, having announced a \$1 million grant in this area.
- Recommendations made in Section VII are that we should:
 - Maintain our position as a **content platform rather than a social media company**;

Commented [1]: Need to be cautious about conflating lack of evidence of harm with evidence of no harm.
[THUMBSUP] 2020-03-11 08:14:46

Commented [2]: Absolutely agree with this. The amount of time users spend in front of a screen is only one metric.
[JIAYI] 2020-04-21 15:21:44

Commented [3]: This is an important USP for TikTok which has much higher levels of active engagement than other platforms. Encouraging users to be creators as well as consumers is a good example of how TikTok can move beyond mitigating potential harm to having a positive impact/enhancing wellbeing.
[JIAYI] 2020-04-09 06:39:06
[JIAYI] 2020-04-09 13:39:18
[JIAYI] 2020-04-15 11:06:07

Commented [4]: YES - There has been some research done on the gaming world that supports theories that "creating" apps build lots of cognitive muscles (sequencing, foresight, critical reasoning, etc.) - and is TT a platform that offers lots of interactive opportunity than a social media app. In many ways, TT is like a digital Makerspace, and we should lean into that.
[THUMBSUP] 2020-04-21 18:29:12

Commented [5]: How do we know that TT has higher levels of active engagement? Any data come to mind you can share?

Commented [6]: bumping this up. I've asked around to try to find this info, but have struck out so far!

Commented [7]: @Jordan Furlong this was information that was shared with me when I first joined but my understanding is that figures for active engagement (content creation vs consumption) are lower than previously suggested. @Foster Xumay be able to advise on what % of users post videos.
Jordan Furlong : [THUMBSUP] 2021-08-13 10:53:35

Commented [8]: This is very helpful to make strong argument on addiction issue in the BCG report.
[THUMBSUP] 2020-03-19 04:20:11

- **Note the underdeveloped evidence base** when addressing questions from government stakeholders about the wellbeing impacts of screen time;
- **Explore collaborations with academic researchers** to gain more evidence about the impacts of TikTok use in particular; and
- **Be prepared to implement product-level changes** due to heightened regulator focus on persuasive design.

Commented [9]: This would be fantastic. Let me know if you'd like any recommendations of people working in this area.

Commented [10]: Recommendations now at: [HYPERLINK]

Commented [11]: Bay Hub would like to support some US researchers. Co [REDACTED]

[THUMBSUP] 2020-04-09 07:48:02

I. Scope

The UK Chief Medical Officers' [HYPERLINK]

"https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/777026/UK_CMO_commentary_on_screentime_and_social_media_map_of_reviews.pdf" \h } on screen-based activities and children and young people's wellbeing mentions that several issues are at times conflated in discussion. They recognise the following as distinct issues, though they are, at times, interconnected:

1. Screen-time
2. Persuasive design
3. Internet (including social media) content

This report will focus largely on screen time, and on persuasive design insofar as it encourages increased screen time. Content issues are mostly excluded because we believe that there is already good awareness within the company of the need to tackle harmful content on TikTok, including cyberbullying. We have also not considered in this report the specific impacts on young influencers, though this could be an avenue for future research.

II. Context

For children and young people today, being online and using social media have become an integral part of their lives. In 2015, a typical 15-year-old from an OECD country had been using the internet since age 10 and spent more than two hours every weekday online after school, and more than three hours on a weekend day. This has fuelled concerns from [HYPERLINK "https://www.health.harvard.edu/blog/latest-dangerous-addiction-parents-need-worry-mobile-devices-201605109680" \h], teachers, [HYPERLINK "https://www.nbcnews.com/health/health-news/more-teens-addicted-social-media-say-they-re-wisely-distractions-n908126" \h] and governments that digital technologies and social media are addictive, exacerbate feelings of anxiety and depression, disturb sleep patterns, lead to cyber-bullying and distort body image.

In response to these and other concerns, some countries are taking action. In Korea, children can only play games after midnight [HYPERLINK]

"<https://www.straitstimes.com/asia/east-asia/south-korea-to-allow-children-to-play-online-games-after-midnight>" \h]. While the UK seems to have scrapped [HYPERLINK "<https://www.theguardian.com/media/2018/sep/29/health-chief-set-social-media-time-limits-young-people>" \h] to produce official guidelines on screen time limits for children, the Government's [HYPERLINK "<https://www.gov.uk/government/consultations/online-harms-white-paper/online-harms-white-paper>" \h] (April 2019) noted "emerging challenges about designed addiction to some digital services and excessive screen time." The Information Commissioner's Office's [HYPERLINK "<https://ico.org.uk/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services/5-detrimental-use-of-data/>" \h]' which will have legislative force when approved by Parliament, said that the use of "data-driven features which make it difficult for children to disengage with your service is likely to breach the Article 5(1)(a) fairness principle of the GDPR". The idea of requiring platforms to go beyond mitigating harm to a rights-based approach to the design of services accessed by children is likely to become more influential once the UN Committee on the Rights of the Child publishes its [HYPERLINK "<https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>" \h].

In order to respond effectively to such concerns, it is important for TikTok to understand the evidence about the links between digital platforms and wellbeing, as well as its own strengths and weaknesses in terms of promoting young people's wellbeing.

III. Association between social media and screen use and young people's health and wellbeing

There is not evidence of a causal relationship between screenbased activities and mental health problems

There are mixed opinions and research results on whether social media is damaging to the mental health of teens. This is in part due to a lack of evidence and a confusion between correlation and causation. The following presents a good summary:

[A review of the evidence] does not present evidence of a causal relationship between screenbased activities and mental health problems. Some research has found associations between screen-based activities and negative effects such as increased risk of anxiety or depression.

This means that we do not have clear evidence. It means that an association has been observed but cause and effect are not yet fully understood – It could be, for example, that CYP [Children and Young People] who already have mental health problems are more likely to spend more time on social media.

UK's Chief Medical Officers' [HYPERLINK

"https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/777026/UK_CMO_commentary_on_screentime_and_social_media_map_of_reviews.pdf" \h](February 2019)

Since then, a September 2019 study of more than 6,500 12- to 15-year-olds in the US claimed that those who spent more than three hours a day using social media [HYPERLINK "https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2749480" \h] at heightened risk for mental health problems, particularly internalizing problems. However, this was later called into question by [HYPERLINK "https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2758323" \h] who, when they studied the same data but controlled for underlying psychopathology risk more rigorously, only found an association with more than 6 hours per day of social media use.

It has been suggested that social media use may cause indirect rather than direct harm

A secondary analysis of longitudinal data of almost 10,000 adolescents aged 13-16 in England from 2013 to 2015, published in August 2019, found that much of the harm attributed to social media is unlikely to be directly related to social media use, but instead related to the content consumed (e.g. cyberbullying) or the displacement of healthy amounts of sleep and physical activity:

We found that strong, longitudinal associations between very frequent social media use and mental health and wellbeing in girls were largely mediated by cyberbullying and the displacement of sleep and physical activity. The same factors mediated this relationship in boys, but to a much smaller degree...

Our data suggest that interventions to reduce social media use to improve mental health might be misplaced. Preventive efforts should consider interventions to prevent or increase resilience to cyberbullying and ensure adequate sleep and physical activity in young people.

Viner *et al.*, [HYPERLINK "https://bytedance.feishu.cn/file/boxcngjiINTMSjXZssJMzbo4zT9e" \h] (August 2019)

Although the researchers said the study was the best available analysis of the effects of social media on teenagers, it still had many limitations. For example the data showed how frequently the subjects accessed or checked social media but not how long they spent doing so.

There is also a lack of evidence to indicate a causal link between social media use and bullying incidence or a deficiency of sleep or physical activity, as explored in the following sections.

Cyberbullying is best understood as an additional tool to victimise those already being bullied in traditional ways

Estimates differ on whether cyberbullying is as prevalent as offline bullying. In the UK, a 2019 Ofcom report found that around a fifth of children aged 8-15 say they have been bullied in some way, but the [HYPERLINK "<https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-and-parents-media-use-and-attitudes-report-2019>" \h].

There is evidence of a correlation in some countries between the time spent on social media and the chance of being bullied through that platform. A 2011-12 [HYPERLINK "<https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-018-5682-4>" \l "Tab3" \h] of over 12,000 14-17 year olds in seven European countries found that while Internet use for more than 2 hours a day arose as a risk factor for cyberbullying only in Romania, the odds of having experienced cyberbullying increased when social networking services (SNS) were used for more than 2 hours a day in Romania, Germany and Poland. One of the reasons suggested by the authors was that if social media are used more as a means of communication, it is more likely that they become used for the expression of relational aggression. However, the statistical significance of SNS in increasing cyberbullying victimization probability occurred in countries with high rates of cyberbullying, but not in countries with lower rates, despite the high use of SNS in countries such as the Netherlands and Spain.

A academic [HYPERLINK "<http://www.ox.ac.uk/news/2017-07-12-face-face-bullying-more-common-cyberbullying-among-teenagers>" \h] published in 2017 based on questionnaires completed by around 110,000 adolescents estimated that less than 1% of 15 year olds in England report only being bullied online regularly, compared to 27% who experience only face-to-face bullying methods. Nine out of 10 of the teenagers who were bullied online also faced traditional bullying. This indicates that while cyberbullying may be different in some respects to offline bullying, it is part of the same problem and cannot be addressed in isolation.

Hours of screentime only have a small influence on children's sleep, but screentime before bed is linked with inadequate sleep

A [HYPERLINK "https://ora.ox.ac.uk/objects/uuid:decc2d65-162b-4459-8f28-3418ac715dfc/download_file?file_format=pdf&safe_filename=Przybylski_JPEDS_PrePrint.pdf&type_of_work=Journal+article" \h] of 2016 data on over 50,000 American children found that digital screen time accounted for less than 1.9% of observed variability in sleep outcomes:

"Contextual factors surrounding screen time exert a more pronounced influence on pediatric sleep compared to screen time itself."

The [HYPERLINK "https://europepmc.org/article/PMC/5380441" \h](2016) of the effect of access and use of media devices on sleep outcomes found that bedtime access and use of a cell phone or tablet was significantly associated with inadequate sleep quantity, poor sleep quality, and excessive daytime sleepiness, which presents health concerns.

There is still some uncertainty about relationships of cause and effect with respect to bedtime screen use and low sleep quality, with some suggesting the possibility that those unable to sleep are gravitating to screens and then reporting lower sleep quality and duration. However, given that sleep is critical for the healthy physical, cognitive and emotional development of children, there are grounds to err on the side of caution. When assessing and addressing TikTok's potential wellbeing impacts **we should consider not just how long children are using TikTok for but also when in the day they are doing so.**

The link between screen time and lack of physical activity should not be overstated

The World Health Organisation's emphasis on limiting screen time in a [HYPERLINK "https://apps.who.int/iris/handle/10665/311664" \h] on "Physical Activity, Sedentary Behaviour and Sleep for Children Under 5 Years of Age" was [HYPERLINK "https://www.brookings.edu/blog/education-plus-development/2019/04/26/children-need-digital-mentorship-not-whos-restrictions-on-screen-time/" \h] as being based on bad science, with the document itself admitting that "there was moderate to very low-quality evidence for screen time and adiposity [being overweight or obese], motor and cognitive development and psychosocial health."

Commenting on this, [REDACTED] Director of Research at the Oxford Internet Institute, University of Oxford, said: "The authors are overly optimistic when they conclude screen time and physical activity can be swapped on a 1:1 basis." He added that, "the advice overly focuses on quantity of screen time and fails to consider the content and context of use. Both the American Academy of Pediatrics and the Royal College of Paediatrics and Child Health now emphasize that not all screen time is created equal." (See above for the relevance of when in the day screens are used, and below on 'How social media is used influences its impacts'.)

Moderate use of screen time may have slight wellbeing benefits

As the UK's Online Harms White Paper [HYPERLINK "https://www.gov.uk/government/consultations/online-harms-white-paper/online-harms-white-" \h]

paper" \h], most children have a positive experience online, using the internet for social networking, educational resources and entertainment. According to non-academic literature, potential benefits from social media for young people include:

- * **Self-expression:** A [HYPERLINK "https://www.saferinternet.org.uk/free-be-me-safer-internet-day-research" \h] of 2000 8-17 year olds in the UK in December 2019 found that 38% find it easier to be themselves online than offline, rising to 54% of disabled young people feeling this way.

- * **Enhancing relationships:** 2018 [HYPERLINK "https://www.ofcom.org.uk/research-and-data/media-literacy-research/childrens/children-and-parents-media-use-and-attitudes-report-2018" \h] showed that nine in ten social media users aged 12-15 state that social media use has made them feel happy or helped them feel closer to their friends.

Commented [12]: What a great statistic.

January 2019 guidance on the health impacts of screen time from the Royal College of Paediatrics and Child Health **didn't find consistent evidence for any specific health or wellbeing benefits of screen time.** However, a [HYPERLINK "https://www.jaacap.org/article/S0890-8567(19)31437-6/pdf" \h] of 2016-17 data from American children and teens published in September 2019 replicated past findings suggesting a parabolic relationship, i.e. that **moderate levels of screen time (1-2 hours a day) were associated with slightly higher levels of psychosocial functioning [a measure of social and emotional wellbeing] compared to lower or higher levels of engagement.** Furthermore, it indicated that children and adolescents would require 5 hours 8 minutes of daily device-based engagement (2.7 Standard Deviations above the average) before caregivers would be able to notice subjectively significant variations in psychosocial functioning.

How social media is used influences its impacts

A 2014 [HYPERLINK "https://akademai.com/doi/pdf/10.1556/JBA.3.2014.016" \h] found that Facebook use can become habitual or excessive, and that **individuals with low psychosocial wellbeing, such as loneliness, anxiety or depression, are motivated to use Facebook to find social support or to pass time. The lift in mood that this provides (mood alteration) leads to deficient self-regulation, and in severe cases, this can eventually lead to negative life consequences.** However, understanding the evidence is complicated by differences in how researchers measure Facebook addiction, reflecting inconsistencies underlying behavioural addictions research in general. **Addiction often has a high threshold associated with it, and talking about compulsive use may be more appropriate.** More systematic research, and more research to establish the links between the purposes for which young people use social media and compulsive use, are needed.

An interesting research question is how whether content is consumed actively or passively may influence its impacts. Some evidence suggests that certain types of **active Facebook usage enhance positive outcomes such as social connectedness** (e.g. study by [

HYPERLINK "<https://research.fb.com/publications/growing-closer-on-facebook-changes-in-tie-strength-through-site-use/>" \h] co-produced by Facebook, 2014; [HYPERLINK "<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3820167/>" \h], 2013). By contrast, a [HYPERLINK "https://ppw.kuleuven.be/okp/_pdf/Verduyn2015PFUUA.pdf" \h] suggested that **passive usage of Facebook by young adults increased feelings of envy over time**. The same study reported that participants used Facebook passively about 50% more than they used it actively, explaining why measures of overall Facebook activity have revealed a negative relationship with subjective wellbeing.

It would be useful to test whether this relationship is replicated on TikTok, i.e. whether higher creation of and engagement with content on TikTok is associated with higher subjective wellbeing.

IV. TikTok's strengths and vulnerabilities

This section considers the potential strengths and vulnerabilities of TikTok compared to other platforms. Further research would be needed to confirm or deny some of these hypotheses.

Strengths

- TikTok's mission is to inspire creativity and bring joy. Our content is largely positive and entertaining, and our focus on content safety is arguably higher than that of other platforms.
- TikTok is a place to be your authentic self, and is content- rather than network-driven. This may mean that the risk of usage increasing feelings of envy may be lower than for some other platforms. We should stay true to our value of authenticity rather than feel pressure to roll out the same level of beauty features that some competitors may have.
- Higher levels of active engagement than many other platforms (e.g. as measured by post and comment rates), which is positive given research that suggests passive use of social media is more harmful (see 'How social media is used influences its impacts,' above)

Vulnerabilities

- * The advertising-based business model encourages optimization for time spent in the app, through our recommender algorithm and the design of new features. In a user [HYPERLINK ██████████] of over 2,300 users in February 2020, when respondents were asked to give a score out of 5 to indicate strength of agreement with the statement 'I spend too much time on TikTok', the average response was 4.0.
- This is an issue common to many platforms. However, some elements of persuasive design may be unique to TikTok; for instance, the fact that when you click the back button on your phone to leave the For You feed/app, you get a prompt saying, 'Tap

again to exit,' which can be seen as increasing friction for users seeking to leave the app.

- * TikTok is particularly popular with younger users, who are seen as more vulnerable to online harms and the negative impacts of compulsive use.
- * The short-form nature of the platform could be said to contribute to decreasing attention spans. However, some have [HYPERLINK "https://www.bbc.co.uk/news/health-38896790" \h] that the idea that attention spans are decreasing is a myth; psychologist Dr. Gemma Briggs says the idea of an "average attention span" is pretty meaningless as "how much attention we apply to a task will vary depending on what the task demand is."
- * There is less educational content on TikTok than on YouTube, making it harder to argue at the moment that increased time spent in the app has learning benefits. However, we have made progress in this area and will continue to increase our educational content over time.
- * Currently we send notifications to users during the school day and in some cases, up until midnight, which could interfere with sleep.

V. TikTok Wellbeing Initiatives

TikTok has various initiatives in place to help users enjoy the platform while reducing negative impacts on their mental and physical health.

Please note that this list may not be exhaustive

1. [HYPERLINK "https://www.tiktok.com/@tiktoktips?lang=en" \h]

- * "TikTok Tips" account promotes privacy, safety, and positive vibes. The account uses popular TikTok influencers to deliver messages about user safety and wellbeing, including tips on how TikTok's safety tools work. In addition, this account serves as a channel for specific **anti-addiction videos**. Once a user has been active for an extended period of time (Day 80mins/Night 60mins) TikTok approved creator videos prompt users to take into account their wellbeing, such as the need to rest or go for a walk. While these videos are shown to all users who reach the time threshold, not just children, they align with the suggestion in the Information Commissioner's Office [HYPERLINK "https://ico.org.uk/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services/" \h] to provide age appropriate content to support conscious choices about taking breaks.

2. [HYPERLINK "https://newsroom.tiktok.com/en-gb/family-safety-mode-and-screentime-management-in-feed" \h] [HYPERLINK "https://newsroom.tiktok.com/en-gb/family-safety-mode-and-screentime-management-in-feed" \h] [HYPERLINK "https://newsroom.tiktok.com/en-gb/family-safety-mode-and-screentime-management-in-feed" \h]

- * Customisable '**Digital Wellbeing**' settings are featured on the app, such as:
 - Password controlled screen time management (though these are less impactful than time limits set at the device level, as they may just push users onto other platforms)
 - Restricted mode, which restricts content that may not be appropriate for all audiences. However this is still not completely child-safe, especially compared to more curated experiences offered by competitors, such as YouTube Kids or Netflix's kids profiles (see Section VI).
 - Family safety mode, which allows parents to (1) set a limit on the family member's watch time, (2) enable Restricted Mode and (3) limit who can send messages to the family member
- * Also featured in the app settings are '**Filter spam and offensive comments**'. Reducing user exposure to such comments is likely to have positive impacts on their wellbeing.

3. Wellbeing publications

- * There are numerous wellbeing focused sections in publications on TikTok available online, such as [HYPERLINK "<https://newsroom.tiktok.com/en-gb/family-safety-mode-and-screentime-management-in-feed>" \h] and the [HYPERLINK "<https://newsroom.tiktok.com/en-us/tag/safety>" \h]
- * There is a [HYPERLINK "<https://newsroom.tiktok.com/en-us/tiktok-parental-guide>" \h] that show parents how to use key tools and features on TikTok, which can help encourage use of the wellbeing settings listed above.

4. [HYPERLINK "<https://www.tiktok.com/safety/resources/safety-partners?lang=en&appLaunch=web>" \h]

- * TikTok works with industry experts, non-governmental organizations and industry associations around the world to build a safe platform for users. In the US, TikTok e.g. collaborate with the Family Online Safety Institute which offers a 7 Steps to Good Digital Parenting Tool and other organizations to share best practices and exchange ideas on safety-related topics.

5. TikTok Kids

- * In the US, kids under 13 can use a version of TikTok where they can create videos but not post them, and they can view only videos deemed appropriate for children.

VI. Competitor Wellbeing Initiatives

A 2017 [HYPERLINK "<https://www.rsph.org.uk/about-us/news/instagram-ranked-worst-for-young-people-s-mental-health.html>" \h] by the Royal Society for Public Health (RSPH) produced a league table attempting to compare the net impacts of five different platforms on the mental

wellbeing of young people. Its survey of 1,500 people aged 14-25 found that YouTube was the only platform with a net positive impact (see Figure 1). The ranking for the remaining four was as follows: Twitter (least negative), Facebook, Snapchat and Instagram (most negative).

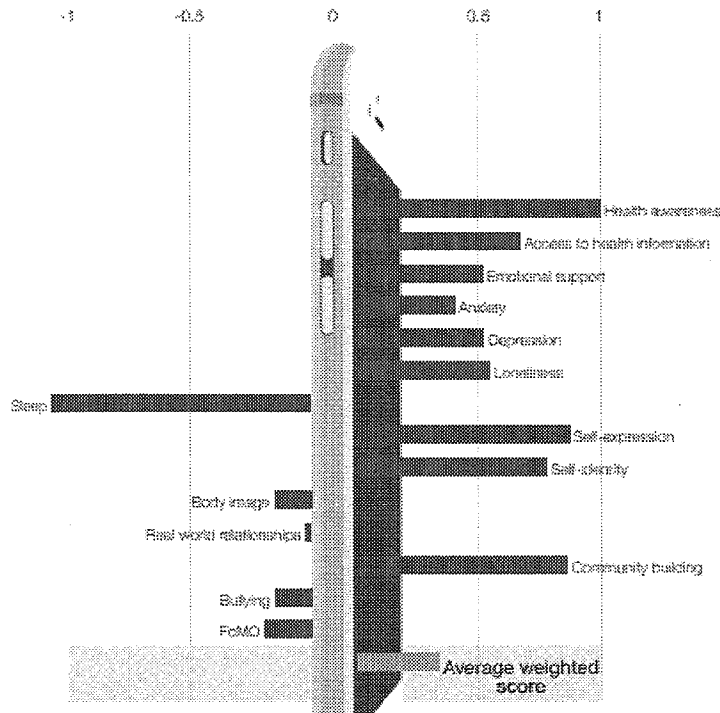


Figure 1: The RSPH [[HYPERLINK "https://www.rsph.org.uk/our-work/campaigns/status-of-mind.html"](https://www.rsph.org.uk/our-work/campaigns/status-of-mind.html)] asked young people to give YouTube a score from -2 to +2 to indicate whether it made different health-related factors worse or better. The results are notable for indicating a positive impact on anxiety, emotional support, depression and loneliness

We now consider the measures other platforms are taking to address wellbeing impacts and protect younger users, which can provide some potential inspiration for TikTok.

1. Facebook: Research articles and Messenger Kids

- **Wellbeing blogs and publications: 'Hard Questions' Series**
 - Facebook publishes articles as part of the 'Hard Questions' Series addressing the impact of Facebook products on society. This often relates to wellbeing.

◦ [HYPERLINK "https://about.fb.com/news/2017/12/hard-questions-is-spending-time-on-social-media-bad-for-us/" \h] invites sociologists, academics and Facebook executives to give their input on the impact of social media use.

• The article emphasizes the importance of **actively interacting with people** on Facebook, rather than passively consuming information, which led to negative social comparison and decreased mood (discussed in Section III).

• It also announced a **\$1 million USD pledge** towards research on the relationship between media technologies, youth development and wellbeing.

• The article raised other user concerns such as how technology is affecting our attention spans and relationships, how technology affects children and how the platform can be as positive an environment as possible.

* **Facebook** [HYPERLINK "https://messengerkids.com/" \h] is a more limited platform for kids to use Messenger

◦ Features include: the ability to control the contact list, monitor online activity, report & block contacts, etc.

Commented [13]: Hi [REDACTED]! This is an excellent report. Do you happen to remember the name of this initiative?

Commented [14]: Thank you for your kind comments. Happy to see that it's helpful. Please feel free to use it as needed. All the initiators of this project including me have been leaving from the company. Stay in touch on LinkedIn. Jordan Furlong : [THUMBSUP] 2021-07-08 16:44:26

2. Snapchat: New 'Here for You' tool

• On February 11 2020, Snapchat announced a new tool specifically engineered to provide wellbeing resources to users. When on the app, typing in keywords related to mental health such as "anxiety" or "bullying" will guide users to relevant self-help material including expert advice, anxiety-relieving videos and third-party content. The tool is due to be released in Spring 2020.

3. Instagram: AI-powered anti-bullying technology

• In June 2017, Instagram launched an option to [HYPERLINK "https://about.instagram.com/blog/announcements/keeping-instagram-a-safe-place-for-self-expression" \h] on posts and live video, which can be triggered by the user through settings. In 2019, Instagram strengthened their anti-bullying technology by rolling out artificial intelligence that detects bullying and harmful content and prompts the user to reconsider their comment.

◦ Once offensive language is detected, 'Are you sure you want to post this?' appears, giving the user the option to reconsider their words.

◦ On the recipient's end, a [HYPERLINK "https://about.instagram.com/blog/announcements/instagrams-commitment-to-lead-fight-against-online-bullying" \h] is available, whereby a user can choose whether or not to make a restricted person's comments visible to others by approving their comments.

4. Google/YouTube: Tools, family link, and YouTube Kids

* [HYPERLINK "<https://youtube.googleblog.com/2018/08/tools-to-take-charge-of-your-digital.html>" \h] (from YouTube Blog) outlines a set of tools that aim to help people better understand their YouTube usage and disconnect when needed:

- YouTube has built a **'time watched profile'** that's available in users' [HYPERLINK "<https://support.google.com/youtube/answer/9052667>" \h], letting users check their daily average watch time, as well as how long they have watched YouTube videos today, yesterday and over the past 7 days.
- YouTube [HYPERLINK "<https://support.google.com/youtube/answer/9012523>" \h] for users to set a **'Take a break' reminder** for themselves when they have watched YouTube for a given amount of time.
- Users can [HYPERLINK "<https://support.google.com/youtube/answer/9012820>" \h] to receive **all notifications combined in a single digest per day**, and choose when they'd like to receive their digest
- YouTube has made a change to **send all notifications without sound and vibration between 10pm and 8am**. Users can enable sounds and vibrations, or customize the start and end time for silent notifications in their [HYPERLINK "<https://support.google.com/youtube/answer/9012950>" \h].

* [HYPERLINK "https://families.google.com/intl/en_uk/familylink/" \h] **is an app provided by Google** that allows parents to manage app access, monitor and limit screen time and set a device bedtime. This functionality is more helpful for limiting screen time than time limits offered by individual apps.

* [HYPERLINK "<https://www.youtubekids.com/>" \h] **gives children access to family-friendly content**, whilst also providing parental controls that allow for better control of children's online usage.

- Videos available in the app are determined by a mix of algorithmic filtering, user input and human review.
- Features include: blocking/limiting of content, turning off search, clearing history, etc.
- It has [HYPERLINK "<https://support.google.com/youtubekids/answer/6130541>" \h].
- It is tailored for: Preschool (4 and under), Younger (5-7) and Older (8-12)

5. Netflix: Parental controls and kids profiles

* By [HYPERLINK "<https://help.netflix.com/en/node/264>" \h] under parental mode, parents can prevent their kids from playing a specific TV series or movies or any TV show or movies above a selected maturity level. The maturity levels are: Little Kids (6 and Under), Older Kids (12 and Under), Teens (14 and Under), or Adults (15+).

* Users can [HYPERLINK "<https://help.netflix.com/en/node/10421>" \h] on their Netflix account which will show exclusively kid-friendly content.

VII. Implications and recommendations

1. Maintain our position as a content platform rather than a social media company

While compulsive use of any platforms can still be harmful, for instance through displacing activities such as sleep, positioning TikTok as a content platform should encourage people to think about our wellbeing impacts as analogous to those of Netflix or television, rather than social media platforms like Facebook or Instagram. Limiting network-driven elements on TikTok should help reduce feelings of social comparison/envy from consuming TikTok content.

However, we will not be able to maintain positioning as a content platform without conscious effort. The product team are already working on projects such as converting real-world friends into mutual follows. A clear steer from the top about our positioning would help ensure product strategy and external messaging are fully aligned.

2. In private meetings with government stakeholders, highlight the need for more evidence

Arguing publicly against the wellbeing risks of content platforms is likely to fuel perceptions of irresponsibility. However, in private meetings with policy stakeholders, we should advise not letting public policy outpace the evidence, and highlight the positive impacts TikTok can have on users' self-expression and creativity. **It is also worth noting that ultimately, screen time is a user/device issue, not a platform issue,** as tighter screen time restrictions on one platform may just push a user to other platforms with less stringent restrictions.

3. Support further research

The greatest research need seems to be for longitudinal primary research that explores whether or not there is a causal relationship between screen-based activities and activities and mental health, and whether any such relationship is moderated by contextual or demographic factors.

The UK Government says in its [[HYPERLINK](https://www.gov.uk/government/consultations/online-harms-white-paper/online-harms-white-paper)

"<https://www.gov.uk/government/consultations/online-harms-white-paper/online-harms-white-paper>"] that it will continue to support such research, but also that it expects "companies to support the developing evidence base around screen time, for example by providing access to anonymised data to researchers as recommended by the CMOs." Facebook's \$1 million pledge towards research on the relationship between media technologies, youth development and wellbeing is an example of industry action in this area.

We recommend analysis of time spent data of younger TikTok users to help determine the proportion of users who may be at risk of compulsive use. We also recommend proactively engaging with relevant researchers to identify potential areas of collaboration, and would be willing to support this through TikTank. Potential questions for investigation could include: how active/passive use of TikTok influences subjective wellbeing; whether or not TikTok use is associated with feelings of envy; and the wellbeing of those who attempt to become, or are, 'TikTok famous.' Potential researchers and topics are at: [HYPERLINK
[REDACTED]

Commented [15]: If we did this analysis, how could we define compulsive use or addiction? A time threshold? # of times a user checks the app / day?

Commented [16]: [REDACTED] curious if you have any thoughts on that?

Commented [17]: @Jordan Furlong let me try & check
Jordan Furlong : [THANKS] 2021-07-22 09:50:00

Commented [18]: There's so much potential for TikTok to align its mission to 'inspire creativity and spread joy' with enhancing wellbeing of children - it would be a fascinating area to explore.

4. Be prepared to implement product changes to support healthy use

The UK's Chief Medical Officers recommend that technology companies "recognise the 'precautionary approach' in developing structures and remove addictive capabilities." Building on this, the ICO's statutory [HYPERLINK "https://ico.org.uk/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services/5-detrimental-use-of-data/" \h] (still to be approved by Parliament) requires platforms to make "the best interests of the child" a "primary consideration" when designing services likely to be accessed by a child. It requires platforms to "avoid features which use personal data to automatically extend use instead of requiring children to make an active choice about whether they want to spend their time in this way (data-driven autoplay features)." While TikTok's For You feed requires swiping to progress to the next video, it could be seen as using data to encourage extended use.

In addition, the UK's Online Harms White Paper states that if emerging evidence "demonstrates a strong link between different elements of screen time and damage to children's wellbeing or development, companies will be expected to take appropriate action to fulfil their duty of care."

We should therefore be prepared to implement product changes to address concerns in this area if needed, including:

- Removing the 'Tap again to Exit' prompt, which could be seen as encouraging users to stay in the app
- Allowing users to see their view time data (as YouTube does)
- Making under-16s answer a Yes/No question after a certain amount of time spent on the For You feed, to indicate whether or not they want to continue.
- Avoiding sending users push notifications around bedtime and (for younger users) during the school day
 - N.B. Currently the latest time at which notifications can be sent depends on the type of notification; some cannot be sent after 9pm but some can be sent up until midnight.

About TikTank

Formed in late 2019, TikTank is TikTok's international policy think tank arm. Through research, engagement, and cross-functional collaboration, TikTank provides internal analysis as well as access to external expertise to inform and educate TikTok and ByteDance leadership on decision making and relevant policy issues. TikTank strives to abide by these [HYPERLINK [REDACTED]] to provide the highest quality analysis possible.

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