

Message

From: Justin Cheng [/O=THEFACEBOOK/OU=EXTERNAL (FYDIBOHF25SPDLT)/CN=RECIPIENTS/CN= [REDACTED]]
Sent: 6/20/2018 1:39:53 AM
To: Moira Burke [REDACTED]@fb.com]; Elena Davis [REDACTED]@fb.com]
Subject: Re: follow up re: problematic use

Plaintiff's Exhibit Markers	
PLAINTIFF	United States District Court Northern District of California
	Case No. MDL No. 3047 (N.D. Cal.)
	Case Title: In re: Social Media Adolescent Addiction
	Exhibit No. 4173
	Date Entered
	By: Mark Busby, Clerk Deputy Clerk

Hi Elena,

I looked more into notification settings, and turns out that you're right! There isn't a global setting for push notifications, only for email and SMS.
Thanks for pointing this out!

(This is the table that data comes from:

https://our.intern.facebook.com/intern/data/info/tables/hive/bi/dim_user_notification_status)

Justin

From: Moira Burke [REDACTED]@fb.com>
Date: Tuesday, June 19, 2018 at 4:44 PM
To: Elena Davis [REDACTED]@fb.com>, Justin Cheng [REDACTED]@fb.com>
Subject: Re: follow up re: problematic use

+Justin

Thanks so much for bringing this up, Elena. I think Justin and I could change our definition of "problematic" based on your points (though Justin and I should talk a little more about the logistics and power before fully committing to this). But I like the idea of being more aligned with you when talking about "problematic."

Based on a definition of "problematic" that includes:

- One or more of these symptoms: Lack of control or FOMO
- AND one or more of these negative life impacts: Less sleep, hurt relationships, negative impact (general), worse performance

We find that 3.1% of FB users have a problem. This estimate is weighted by age, gender, and time spent.

I wish we had included survey questions about persistence over time, but I don't think we have anything that really maps to that concept. A little less than half of that 3.1% also said they "often (4)" or "very often (5)" try to reduce their use of Facebook. I don't think the "reduce" question is great (as you noted, too), so I wouldn't further restrict our definition to require a 4 or 5 on the "reduce" question, too.

Thanks for the notes about behavioral areas. We'll see what behavioral variables align with those areas and work them into our summary. @Justin, could you point Elena to the notifications hive tables / any docs you found about them?

Moira

From: Elena Davis [REDACTED]@fb.com>
Date: Tuesday, June 19, 2018 at 2:57 PM
To: Moira Burke [REDACTED]@fb.com>
Subject: follow up re: problematic use



4173_0001

Hi Moira,

Thanks so much for our conversation today. Here are some insights from the revised version of my deck that may helpful with framing moving forward.

1. In terms of defining a more “clinical” or severe type of problematic use, the three criteria I list as required for all psychiatric disorders are multiple symptoms, persistence over time, and negative life impacts. In this case, negative impacts would be the RESULT of problematic use, not the problem itself. The problem itself, or “symptoms” by my argument, would include cognitive preoccupation (FOMO) and difficulty controlling use. Spending a lot more time that you want to and often trying to reduce use may not be standalone as either symptoms or negative impacts. Maybe I could argue that often/always trying to reduce use could be a sign of persistence of a problem (in that the ongoing attempts to reduce use may mean that they are not successful). Spending a lot more time than you want to may be an impact of problematic use behaviors, but doesn’t seem to be as severe of a negative impact than some of the other ones – more of a mild impact. So my most “severe” cases would have either FOMO or control problems, plus at least one (or maybe two) serious negative life impact areas. It’s probably too much to ask for also a persistence criterion, like trying to reduce use (especially since that isn’t exactly what that item is getting at), but ideally we would have that criterion too for those most severe cases.
2. For particular behavioral areas that people with the most severe problems might be different from others, in my deck I call out the following areas for reward and habits that I think you are already getting at with session frequency and notification frequency/latency for responses. Other areas I call out are more areas where FB may be contributing to problems (updates of Like counts, variable reward, continuous content without breaks) but I think aren’t behaviors we could measure.
 - a. Notifications that come at unpredictable times
 - i. Related to this point – I was unclear how you knew whether people had push turned off at the level of their phone? We weren’t able to get that info during DND tests. Or how problematic users were more likely to have notifs turned off and more likely to respond to them?
 - b. Expectations of quick responses and frequent availability

Thanks again for your thoughtfulness in framing this problem! Happy to discuss further and curious what you might find!

Best,
Elena