

AMENDED Exhibit 3

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

CONFIDENTIAL

Page 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

IN RE: SOCIAL MEDIA)
ADOLESCENT ADDICTION/)
PERSONAL INJURY PRODUCTS) MDL No. 3047
LIABILITY LITIGATION)

SUPERIOR COURT OF THE STATE OF CALIFORNIA FOR THE
COUNTY OF LOS ANGELES - SPRING STREET COURTHOUSE

COORDINATION PROCEEDING)
SPECIAL TITLE [RULE 3.400])

SOCIAL MEDIA CASES) Lead Case No.
22STCV21355

This Document Relates To)

STATE OF TENNESSEE, ex rel.)
JONATHAN SKRMETTI,)
ATTORNEY GENERAL and)
REPORTER,)
v.)
META PLATFORMS, INC., and)
INSTAGRAM, LLC.)
-----)

CONFIDENTIAL - ATTORNEYS' EYES ONLY
PURSUANT TO PROTECTIVE ORDER
VIDEO-RECORDED

DEPOSITION OF ALISON LEE, Ph.D.
(Pages 1 - 465)

Covington & Burling
415 Mission Street, San Francisco, California
Thursday, February 6, 2025, 9:19 a.m.

- - - -

REPORTED BY: ELAINA BULDA-JONES, CSR 11720

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Page 17

1 Q. All right. Thank you for bearing with me
2 through that.

3 To begin, could you please introduce
4 yourself to the jury.

5 A. My name is Alison Lee. I am a researcher.
6 And my areas of focus are youth thriving, community,
7 sense of belonging, and particularly --
8 traditionally in K-12 context, but now also in
9 digital spaces.

10 Q. Okay. So I'm going to hand you a document
11 that will be Exhibit 1.

12 (Whereupon, Meta-Lee Exhibit 1 was marked
13 for identification.)

14 BY MR. DUNBAR:

15 Q. Feel free to take a second to review it.
16 Let me know when you're ready.

17 Ready?

18 A. Uh-huh.

19 Q. So I'll represent to you that this is your
20 LinkedIn profile, which we pulled from that website.

21 Did you prepare this yourself?

22 A. Yes, I did.

23 Q. Does it accurately reflect your
24 professional and educational history?

25 A. Yes, it does.

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Page 18

1 Q. Can you please tell the jury a little bit
2 about your education.

3 A. Sure.

4 I went to Teachers College, Columbia
5 University for initially what was a master's in
6 educational psychology that then eventually turned
7 into a Ph.D. in cognitive science and education with
8 an application towards educational technology.

9 I also collected a master's in learning
10 analytics at Columbia, which was a new program
11 designed to take machine learning applications into
12 education and psychology. So how could we use the
13 latest techniques in modeling and statistical
14 modeling and use that to make inferences about what
15 people are thinking and feeling in a particular
16 digital environment.

17 Q. Okay. Do you understand that you're here
18 today to talk about your employment at Meta?

19 A. Yes.

20 Q. Before we dive into that, can you tell us
21 about your employment history prior to joining Meta?

22 A. Yes, I can.

23 After I graduated from Columbia -- during
24 my time at Columbia University, I had already
25 started to do a number of research consulting, both

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Page 19

1 for -- at tech companies as well as education
2 non-profits.

3 My first role coming out of my grad school
4 experience was working for an education nonprofit
5 called EL Education, which is not at all about
6 technology. It was an organization that was focused
7 on the school model that enabled young people to do
8 work that matters to them. It's a K-12 systems
9 model. We partnered with 132 schools around the
10 country, 17 different school districts. And that
11 work, initially, as a senior research scientist, was
12 focused on this idea of character and belonging.

13 So how do we help young people cultivate
14 the kinds of skills that enable them to thrive, what
15 does that mean for them to be able to lead their own
16 learning, to have a sense of purpose, to have
17 empathy and care for other people, and to pursue
18 work that really matters to them.

19 And what was clear from that research was
20 that kids, in order for them to feel empowered to do
21 that work, have to be situated within communities
22 where they feel safe. They feel a sense of
23 belonging. They feel a sense of care from the
24 people around them and they feel supported to do the
25 work that matters most to them.

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Page 20

1 And so I spent about five years sitting in
2 circles in classrooms all around the country,
3 whether it was here in Oakland, California; Queens,
4 New York; Saint Paul, Minnesota; Beaverton, Oregon,
5 asking kids, like, what does belonging mean to you,
6 what does that feel like, who are you surrounded by,
7 where do you find it. How does respect, trust,
8 care, empathy factor into whether or not you feel
9 safe to have a sense of belonging.

10 And while all the schools that we were
11 part of were -- cared deeply about creating the
12 conditions where kids could feel that way, what was
13 increasingly clear was that many kids around the
14 country that don't go to EL schools do not get that
15 sense of community and connection from the schools
16 that they -- that they attend.

17 And so where they're not getting it from
18 the local communities that they have, they were
19 increasingly turning to digital communities, right.
20 Creating spaces for themselves to feel safe, to feel
21 heard, to explore their interests. They were
22 creating communities that they were leading on
23 Discord and they're going on Reddit and learning
24 things for themselves. They were connecting with
25 other people that were -- shared affinities with

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Page 21

1 them, right. And finding safe spaces for
2 themselves.

3 And yet, many of the adults that were in
4 these young people's lives either were afraid to
5 have a conversation about digital spaces or
6 pretended like they were just not good for kids,
7 right. Especially educators were not quite ready to
8 have those conversations about those digital
9 community spaces as places where young people were
10 actually engaging in deep learning and community.

11 And so that was what led me to really
12 deeply care about what is it about this space that
13 adults seem to be missing around how young people
14 are engaging in digital communities. We need to
15 understand that better because there can be a lot of
16 good that can happen in it. There can be a lot of
17 power. In fact, young people are already leading
18 the way and carrying those spaces for good.

19 And there's also likely a lot of harm that
20 may happen as a result of lack of support to those
21 young people, especially in those digital spaces
22 that were not designed for young people in the first
23 place.

24 Q. Thank you.

25 So just one point of clarification, I

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Page 22

1 mentioned we're going to be talking about your
2 employment at Meta. Was that company formerly known
3 as Facebook?

4 A. Yes.

5 Q. Okay. Can we agree that when I use the
6 term "Meta" in this deposition, I'm referring to the
7 company that used to be known as Facebook?

8 A. Yes.

9 Q. Okay. Now, when did you join Meta?

10 A. Well, according to this, March 2021.

11 Q. Okay. And you worked for Instagram in
12 particular, right?

13 A. Correct.

14 Q. Okay. Can you say a little more about
15 your ambitions when you joined the company?

16 A. Yeah. So the transition was in 2021. I
17 had just wrapped up what was a really painful role
18 at EL, transitioning all of our schools into a
19 digital format. It was during the pandemic.

20 And so it was incredibly painful to see
21 particularly young people, who were the first in
22 their families to hopefully graduate from high
23 school and go on to college, suddenly drop out of
24 school in order to help support their families. And
25 it was incredibly painful to see the inequities that

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Page 23

1 were happening across the country, especially due to
2 the pandemic. And I was burnt out from that role.

3 And I -- what I saw at Instagram was,
4 number one, the ability to make an impact on a
5 larger scale. I felt like if there is something --
6 even though I felt a great degree of impact in the
7 small nonprofit that we were -- it's not a small
8 nonprofit, but when you think about it relative to
9 the larger population, 130 schools is nothing,
10 right.

11 And so I was thinking, like, the tradeoff
12 and impact of being able to make impact on the kids
13 that attend the 130 schools versus a larger scale
14 impact on the large swaths of young people that are
15 using Instagram. Could I be making a better impact
16 in that way.

17 It was also not all completely altruistic.
18 I was burnt out working for a nonprofit, carrying a
19 lot of student debt at that point, and so my
20 aspiration was can I get -- find myself more
21 stability and security by working at a place like
22 Instagram, where I could have some upward economic
23 stability and growth.

24 Q. Okay. So with regard to the work you just
25 described to make internet spaces more safe for

CONFIDENTIAL

Page 24

1 young people, were there specific things you wanted
2 to achieve at your role at Instagram?

3 MS. BARNHART: Object to the form.

4 THE WITNESS: My goals at Instagram were
5 to -- especially knowing that I was working in the
6 integrity space, asking pretty critical questions
7 around how do we keep young people safer on our
8 platform, and also how do we create the spaces for
9 when they do thrive to make that more intentional.
10 What might young people need to actually be
11 supported to thrive.

12 And by "thrive," I mean feel fullest
13 expression, feel safe to express themselves, to find
14 the people that they care about, to find communities
15 that they care about. How do we intentionally
16 design towards that and then also mitigate any harms
17 that might happen.

18 I also had a very particular orientation
19 towards equity. Given my research at EL Education,
20 it was super clear that there were some pretty
21 foundational variations in who got the most
22 resources in education versus least resources. Who
23 felt the most safe versus least safe. Deepest sense
24 of belonging versus least sense of belonging in our
25 communities.

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Page 25

1 And those were driven by socioeconomic
2 lines, by gender lines, by LGBT identification, by
3 English language learning lines, by racial lines.

4 And so I cared really deeply about that to
5 say if that is true in so much of our societal
6 systems that there are systematic groups that are
7 closer to harm and further from safety, then that is
8 also likely true in digital systems and safety that
9 augment and replicate those same societal systems.

10 And so my aim, even though I was not hired
11 as an equity researcher, was to look at, as
12 integrity, who are we keeping safe on our platform,
13 who is closest to safety, who are we best serving,
14 and who are we furthest from serving well.

15 BY MR. DUNBAR:

16 Q. Were you able to have as much impact as
17 you hoped on the issues you cared about during your
18 time at Instagram?

19 A. I had some impact. But I don't think it
20 was to the extent that I had hoped for. I had very
21 open questions about what that impact might look
22 like, given that it was my first experience in a big
23 tech company. I knew that it was going to be a
24 massive organization that had lots of competing
25 priorities, lots of different teams. And so I

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Page 26

1 didn't go in thinking that I was going to change,
2 like -- like, I don't think my ego would have been
3 that big for me to expect that I would have changed
4 the entire organization.

5 But I had hoped that the research that I
6 had -- would have had, joined a larger course of
7 voices that would have galvanized towards change.
8 And I think that was partially realized, but not
9 fully realized in the way that I had hoped.

10 Q. Okay. I think we're going to have a
11 chance to talk about that a bit today.

12 But before we do, can you tell me which
13 positions you held during your tenure at Instagram?

14 A. Yep. So I was a senior UX researcher
15 focused on relevance integrity.

16 (Whereupon, a brief discussion off the
17 record.)

18 THE WITNESS: It -- I can explain what
19 that means in a moment.

20 I was there from March 2021 until
21 May 2022. That title did not change, despite some
22 reorganizations that were happening. So I had
23 shifted from being on the relevance team, which is
24 the Feed team at Instagram, from March until maybe
25 September or October. And then around October,

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Page 27

1 there was a massive reorganization, where anybody
2 who touched trust and safety and integrity were then
3 reorganized under an umbrella trust and safety and
4 social impact pillar.

5 My title didn't change during that time,
6 but the structure of where I sat changed.

7 After that, I joined the central Meta
8 responsible AI team, also as a senior researcher.
9 That happened from June to December of 2022.

10 BY MR. DUNBAR:

11 Q. Can you help me understand the skills you
12 believe you brought to your role at Instagram?

13 A. Aside from the expected skills that are
14 required for a mixed-methods researcher at that
15 level, so I was expected to deploy both quantitative
16 and qualitative methods to answer critical questions
17 around my area of focus. I was expected to
18 formulate those research questions myself, to
19 execute that, and to also translate those research
20 insights into actionable recommendations to either a
21 product team or specific engineers on my team or to
22 larger organizational wide sort of recommendations
23 for what we would do in response to that research.

24 I think that's expected for anybody at the
25 senior researcher level. I think -- on top of that,

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Page 28

1 I think I added very specific areas of expertise
2 around how do young people think and learn, given my
3 background in cognitive science. I think I added
4 expertise around how young people learn in
5 communities, what is a social component of it. How
6 do young people seek out communities and sense of
7 belonging. So all of that research around social
8 situativity, right.

9 And then finally my orientation towards
10 equity. So really asking these questions around who
11 is farthest from harm, who is closest to harm, who's
12 closest to safety.

13 Q. Okay. While you were at Instagram, did
14 you use the skills you just described to produce
15 high quality work product to the best of your
16 ability?

17 MS. BARNHART: Object to the form.

18 THE WITNESS: I hope so. I think so. I
19 tried my best to do so.

20 BY MR. DUNBAR:

21 Q. When you communicated with colleagues, did
22 you try to convey accurate information to the best
23 of your ability?

24 A. Yes.

25 Q. Did you strive to conduct your work with

CONFIDENTIAL

Page 29

1 integrity and honesty during your time at Instagram?

2 A. Yes.

3 MS. BARNHART: Object to the form.

4 BY MR. DUNBAR:

5 Q. During your work at Instagram, did you do
6 a significant amount of work on the Reel surface?

7 A. Yes, I did.

8 Q. And just for clarity, can you explain what
9 a surface is in the context of Instagram?

10 A. Sure.

11 A surface is a specific component of the
12 platform. So there's actually multiple surfaces
13 even within a single product. So you can -- for
14 example, if you pull up Instagram, the first place
15 that you have of the four tabs that are on the
16 bottom is the feed. Within the feed there's
17 actually multiple surfaces, right.

18 There's Stories at the very top. If you
19 click on it, you will see people posting these
20 24-hour videos or pictures. That's Stories at the
21 very top.

22 And then even within the feed there are
23 multiple surfaces, right. So as you're scrolling
24 through Instagram, what you will see are two
25 different types of content: Connected content,

CONFIDENTIAL

Page 30

1 which is content from people that you follow or
2 accounts that you follow, and unconnected content,
3 which is from people you do not follow. Those are
4 the recommended content that Instagram shows you,
5 right.

6 So one of the surfaces that we often talk
7 about in that feed itself is in-feed
8 recommendations, IFR, right. That's -- within the
9 feed, interspersed throughout your connected
10 content, are these recommendations that are in your
11 feed.

12 Let's assume that you have been on
13 Instagram all day and you've been scrolling all day
14 and you finished seeing all the possible content
15 that you could possibly see from your connected
16 accounts. The people that you follow. Once you hit
17 the very bottom of that, there's another surface
18 called end of feed recommendations. That's actually
19 a slightly different set of recommendation
20 algorithms that dictate end of feed, or EOF,
21 compared to in-feed recommendations.

22 Another surface that's relevant to this
23 conversation around Reel recommendations is the
24 Explore tab. So if you go to the bottom of
25 Instagram and you click over to the -- the little

CONFIDENTIAL

Page 31

1 icon that looks like a magnifying glass, that's
2 called Explore. It's where you go to search for new
3 content. In that -- it is called the Explore tab.
4 And in the Explore tab, you will see both Reels and
5 normal posts interspersed throughout that. And
6 that's another surface.

7 Q. Okay. So you just mentioned Reels as one
8 of the surfaces that one might use on Instagram.
9 Can you just explain the Reels surface in layman's
10 terms?

11 A. Yeah, the Reels -- Reels is a type of
12 content actually.

13 Q. Okay.

14 A. And Reels can be entered into many
15 multiple surfaces, right. You can inject it into
16 the in-feed recs. You can inject that into the
17 Explore. And there's actually a separate -- there
18 was, at one point -- I keep forgetting whether they
19 took that away or they brought it back. There was,
20 at one point, a Reels tab unto itself. That's
21 another surface.

22 Q. Okay.

23 A. At the time in 2021, it was a -- the
24 newest product that Instagram had launched. And
25 they had hired me specifically to conduct Reels

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Page 32

1 integrity and safety research because it was such a
2 new product. They were building fast. There were
3 clear market competitive motivations to build that
4 product fast and make it as compelling as possible.

5 And I was a -- prior to me, there was only
6 one other integrity researcher on the relevance
7 integrity team. And so they actually hired me on to
8 focus specifically on Reels integrity. Because at
9 that point the product had existed for maybe a year,
10 not even. And they were just starting to dig into,
11 okay, how do we make sure that this is a safe
12 product.

13 Q. I'm going to hand you a document which
14 will be Exhibit 2.

15 (Whereupon, Meta-Lee Exhibit 2 was marked
16 for identification.)

17 BY MR. DUNBAR:

18 Q. Please feel free to take a moment to
19 familiarize yourself. If it's helpful, I'm
20 introducing the exhibit just for the title and the
21 date.

22 Ready?

23 A. Yeah.

24 Q. Okay. Does this appear to be an article
25 from Meta's website titled "Introducing Instagram

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Page 45

1 BY MR. DUNBAR:

2 Q. As before, take a moment to familiarize
3 yourself with it.

4 This is going to be Exhibit 4, for the
5 record.

6 Okay. Do you recognize this document?

7 A. I do.

8 Q. Okay. Is this a document that you worked
9 on during your time at Instagram?

10 A. Yes, it is.

11 Q. Okay. Does it appear to be an accurate
12 reproduction of that work?

13 A. Yes, it does.

14 Q. Okay. Is this a slide deck that was
15 generated as part of the Reels integrity work we
16 just discussed?

17 A. Yes.

18 Q. Okay. Did you ultimately generate two
19 slide decks for your Reels integrity work?

20 A. Oh, I think there was a lot more than two.
21 I think you'd have to get more specific on which.

22 Q. Okay. At least two?

23 A. At least two, yes.

24 Q. So we'll turn to another deck in a bit,
25 but for now, could you please read the first slide

CONFIDENTIAL

Page 46

1 for the jury.

2 A. The timeline one or --

3 Q. The cover.

4 A. -- TLDR?

5 Q. The --

6 A. The very top. Okay. "Emerging Reels
7 Integrity Challenges. Alison Lee."

8 Q. Does that first slide indicate you were
9 the author of this deck?

10 A. Yes.

11 Q. When you prepared this presentation, did
12 you make best efforts to deploy your skills as a
13 researcher?

14 MS. BARNHART: Object to the form.

15 THE WITNESS: Yes.

16 BY MR. DUNBAR:

17 Q. Did you approach this work with integrity?

18 MS. BARNHART: Object to the form.

19 THE WITNESS: Yes.

20 BY MR. DUNBAR:

21 Q. Did you intend that this would convey
22 important information to colleagues within
23 Instagram?

24 A. Yes.

25 Q. Turning to the deck's second slide, you

CONFIDENTIAL

Page 47

1 note in the upper left-hand corner, quote, "I
2 reviewed the related body of Reels, integrity, and
3 well-being (equity, teens) research to identify key
4 priority areas for Reels."

5 Do you see that?

6 A. Yes, I do.

7 Q. Does this mean that you reviewed a host of
8 internal research in preparing this presentation?

9 A. Yes.

10 Q. Slide 2 reads, on the left side here,
11 "TLDR: The Reels ecosystem makes it more vulnerable
12 to integrity challenges."

13 Do you see that?

14 A. Yes, I see it.

15 Q. And TLDR is an acronym for "Too Long,
16 Didn't Read," right?

17 A. Yes, that's right.

18 Q. So, in other words, TLDR means summary.
19 Okay.

20 On the right side of that slide, there is
21 some information organized as 1, 2, and 3.

22 Do you see that?

23 A. Yes, I see it.

24 Q. Can you help me understand? What does
25 that first item mean?

CONFIDENTIAL

Page 48

1 A. The first item reads, "There are multiple
2 Reels teams launching a high volume of product
3 improvements, leading to increases in sexually
4 suggestive and objectionable content."

5 And the recommendation below that says,
6 "Reels product teams should coordinate to release
7 launches strategically, and consider integrity
8 impacts proactively for new product launches."

9 Before I get into this particular one,
10 it's quite -- before any researcher starts new
11 research in any sort of new area, the first thing
12 that they do is conduct a literature review. What
13 do we already know about the space. What do we know
14 about how the system is set up. What do we know
15 about prior existing research.

16 So that's what this literature review is,
17 is that due diligence in that first step. Part of
18 that review is to look specifically at, well, how is
19 this particular system changing very quickly. What
20 are the things that might lead to potential risk.

21 This first bullet is talking about the
22 fact that there are many, many teams that are
23 working on Reels, launching a high volume of product
24 launches. So anytime you have many, many people
25 working on a single product, that means inherently

CONFIDENTIAL

Page 49

1 higher volatility, right.

2 If -- let's say we were all collectively
3 together trying to build a bike, and you're
4 responsible for gears, and I was responsible for
5 wheels, and somebody else was responsible for the
6 handlebar. But all of us are constantly tuning and
7 improving our section, our little section of the
8 bike. Inherently, that's going to mean, man, this
9 thing does not fit with that thing, or maybe the
10 culmination of those two things together are
11 creating increased volatility, right.

12 And so that's -- that's naming that this
13 increased volume and pace of product improvements
14 may be leading to the increases that we -- in
15 sexually suggestive and objectionable content.

16 At that time, we had been already tracking
17 what our models were detecting as the prevalence of
18 objectionable content and prevalence of sexual
19 content. And even from our models at that state,
20 was already detecting that were -- there were higher
21 rates of both of those types of content on the Reels
22 platform, on the Reels content type, compared to our
23 other ones.

24 Q. Okay. I think we'll have a chance to get
25 into that in a bit more detail down the road. But

CONFIDENTIAL

Page 50

1 moving ahead here, the second system of that --
2 sorry -- strike that.

3 The second sentence of item one says,
4 "Reels product teams should coordinate to release
5 launches strategically, and consider integrity
6 impacts proactively for new product launches."

7 Do you see that?

8 A. Yes, I do.

9 Q. In your view, as someone who researched
10 Reels integrity, was Instagram launching product
11 improvements to Reels without sufficiently
12 considering the integrity impacts?

13 MS. BARNHART: Object to the form.
14 Foundation.

15 THE WITNESS: There are integrity
16 guardrails that are in place for product teams. [REDACTED]

17 [REDACTED]

18 [REDACTED] [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

CONFIDENTIAL

Page 51

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED] [REDACTED]
12 [REDACTED] [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED] However, what
18 we saw as a result of the Reels work was that that
19 was not sufficient to actually prevent these
20 products from regressing integrity in the longer
21 run, either in isolation, but in a time series way,
22 so maybe it didn't regress integrity in the
23 short-term, in the [REDACTED] that it was
24 [REDACTED], but it did lead to regressions
25 maybe a month out or two months out or three months

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Page 52

1 out. So that's one way that it was not sufficient
2 to consider that impact.

3 And the other way that it didn't consider
4 the impact was the additive cumulative or the
5 interaction effects between multiple launches. What
6 that means is that if you've got many, many launches
7 that are happening at the same time, and all of them
8 are just before that 5 percent threshold, maybe this
9 one regresses at 3 percent, that one regresses at
10 4 percent, well, cumulatively, collectively if
11 you're launching 20 product launches over the course
12 of a month, those things are going to add up
13 cumulatively.

14 We also did not test for whether there
15 were interaction effects. So going back to that
16 bike analogy, maybe you're working on a pedal that
17 makes you go faster, and I'm working on the chain
18 that makes you -- us go faster. Our goal, both,
19 collectively is to make this bike more fun and
20 faster. What we didn't realize was that there was
21 an interaction effect, where the combination of your
22 pedals and my gears actually made it more unsafe,
23 more volatile, right.

24 So there were no -- to my knowledge, there
25 were no post-talk or -- post-talk as in after the

CONFIDENTIAL

Page 53

1 fact -- or interim sort of analyses to assess
2 whether or not there were inter -- cumulative
3 effects, long-term effects, or interaction effects
4 between the product launches that ultimately
5 regressed integrity.

6 What we did see, though, was whatever was
7 happening in that black box, that, later on, the
8 cumulation of all of these launches, did lead to
9 integrity regressions.

10 BY MR. DUNBAR:

11 Q. Okay. So, in short, you did not believe
12 that Instagram was sufficiently considering the
13 integrity impacts before launching these product
14 improvements?

15 MS. BARNHART: Object to the form.
16 Foundation.

17 THE WITNESS: I think that the integrity
18 guardrails that they put in place were not
19 sufficient to seriously consider the integrity
20 impacts and that there were other alternative
21 strategies that they could have used.

22 BY MR. DUNBAR:

23 Q. Okay. So moving ahead to Item 2 on the
24 right side here, can you please explain the second
25 item on this slide?

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Page 54

1 A. Uh-huh.

2 MS. BARNHART: I am going to object that
3 this calls for a narrative and lodge a standing
4 objection to these kind of vague questions that
5 result in very long testimony.

6 MR. WARD: You can answer.

7 THE WITNESS: Okay.

8 BY MR. DUNBAR:

9 Q. Okay. Let's try it this way. I'll
10 withdraw the question.

11 The second item on the slide says, "The
12 focus on entertainment/mimicry, and the teen
13 audience leaves Reels more open to 1) sexually
14 suggestive and offensive content and 2)
15 vulnerability of younger people."

16 Do you see that?

17 A. Yes, I do see it.

18 Q. Just beneath that, it says, quote, "Reels
19 teams should build user-centered tools (audience
20 controls, recommendation feedback) and preventive
21 mechanisms (i.e., tuning ranking models, protections
22 for minors) to keep users safe."

23 Did I read that correctly?

24 A. Yes.

25 Q. In the second sentence of that second

CONFIDENTIAL

Page 55

1 point, you suggest that Reels team should build
2 user-centered controls, such as audience controls,
3 and recommendation feedback.

4 What did you mean by "audience controls"?

5 A. That -- audience controls means that right
6 at that point -- and if you even go back to the
7 original press release that was given under
8 Exhibit 2, even that document names that, at that
9 point, there was only two types of audiences that
10 you could have for Reels. You could either have
11 that private, set to private, so only people who you
12 permit to follow you to see those Reels, or
13 completely public, which means that it is fully open
14 to anybody who's on the platform.

15 Audience controls means being able to tune
16 or tailor who might your content reach. And that
17 came from, initially, some feedback from users
18 telling us that there were specific audiences that
19 they wanted to reach. And I think it would also be
20 an interesting -- like, at that time, it was
21 suggested as a user-centered tool. So if users had
22 a particular preference, could we give them that
23 option to tune who got to see their data -- or who
24 got to see their content.

25 Q. Okay. So through your research at

CONFIDENTIAL

Page 56

1 Instagram, is it fair to say that you learned Reels
2 posted by young users were distributed by Instagram
3 in ways those young users would not prefer?

4 MS. BARNHART: Object to the form.
5 Foundation.

6 THE WITNESS: I think that were true in
7 general, that there were content that was being
8 distributed on Reels that were reaching audiences
9 that users did not intend as original audience. And
10 we also conducted research that showed that young
11 people had a preferred audience that they wished to
12 reach.

13 And there was also research that suggested
14 that particularly young women who were producing
15 content on Reels were experiencing unwanted
16 interactions as a result of their content being
17 shown to people that they did not wish to have it be
18 shown to.

19 BY MR. DUNBAR:

20 Q. Do you know how that happened?

21 MS. BARNHART: Object to the form. Calls
22 for a narrative.

23 THE WITNESS: It would happen the way that
24 any other Reel would be distributed to a public
25 audience, which is that it was sourced from the

CONFIDENTIAL

Page 57

1 billions of posts that are created every day and
2 then shown and recommended to users on the basis of
3 what a -- any particular user's preferences are --
4 or detected preferences are, right. And we use that
5 through the user signal.

6 So, for example, Chris, if you're really
7 into bikes, we would try to know that through your
8 user interactions and preference signals. So if you
9 follow a lot of bike content, if you like, share,
10 DM, do all of these user signals, we would use those
11 signals to recommend content that you have engaged
12 with previously.

13 BY MR. DUNBAR:

14 Q. Okay. So, in other words, were
15 Instagram's algorithms delivering young users' Reels
16 to people those young users were not connected to?

17 MS. BARNHART: Object to the form.
18 Foundation.

19 THE WITNESS: Yes.

20 BY MR. DUNBAR:

21 Q. And did that distribution sometimes
22 endanger those young users?

23 MS. BARNHART: Object to the form.
24 Foundation.

25 THE WITNESS: I think I would like to

CONFIDENTIAL

Page 58

1 refer specifically to some of the research that we
2 had conducted that specifically named that there
3 were young people, particularly young women, who we
4 surveyed or interviewed, that named -- that they
5 experienced unwanted interactions or unwanted
6 contact as a result of their Reels being shown to
7 people that they did not want their content being --
8 or that they had no knowledge or awareness or
9 control over that content being shown to.

10 BY MR. DUNBAR:

11 Q. Okay. I think we'll be able to get into
12 that in a little more detail later. But to the
13 specific question -- strike that.

14 Was that one example where that
15 distribution could endanger young users?

16 MS. BARNHART: Object to the form.
17 Foundation.

18 THE WITNESS: Can you repeat that question
19 again?

20 BY MR. DUNBAR:

21 Q. Sure.

22 Was that one example where the algorithmic
23 distribution could endanger young users?

24 A. Yes, it could endanger young users as a
25 result of that distribution.

CONFIDENTIAL

Page 59

1 Q. Okay. So returning to the second sentence
2 in Item 2, what did you mean by "recommendation
3 feedback"?

4 A. Recommendation feedback was the ability to
5 collect information from users that say, hey, you
6 showed me this content of bikes, but I actually have
7 no interest in bikes, so can I see less of this. Or
8 I'm not interested.

9 So those user controls already exist in
10 feed, right. So if you click on a particular, like,
11 menu button on a particular unconnected content, you
12 could say not interested. But those recommendation
13 tools were not yet explicitly built for Reels. They
14 were built for your feed.

15 Q. So were Instagram's algorithms sending
16 young users categories of content on Reels that the
17 young users did not want to see?

18 MS. BARNHART: Object to the form.
19 Foundation.

20 THE WITNESS: It's hard to say whether
21 they did or did not want to see. At that time,
22 Reels ranking, I would say, was in its most nascent
23 form. And so it was just taking the most popular,
24 most generic popular stuff that they could find and
25 showing it to as many people as possible.

CONFIDENTIAL

		Page 60
1	[REDACTED]	
2	[REDACTED]	
3	[REDACTED]	
4	[REDACTED]	
5	[REDACTED]	
6	[REDACTED]	
7	[REDACTED]	
8	[REDACTED]	
9	[REDACTED]	
10	[REDACTED]	
11	[REDACTED]	
12	[REDACTED]	
13	[REDACTED]	
14	[REDACTED]	
15	[REDACTED]	
16	[REDACTED]	
17	[REDACTED]	
18	[REDACTED]	
19	[REDACTED]	
20	[REDACTED]	
21	[REDACTED]	
22	[REDACTED]	
23	[REDACTED]	
24	[REDACTED]	
25	///	

CONFIDENTIAL

Page 61

1 BY MR. DUNBAR:

2 Q. Okay. And we'll have a chance to talk
3 about that a bit more in a bit. But going back to
4 the document.

5 In that same sentence, you also say,
6 "Reels teams should build preventative mechanisms,
7 i.e., tuning models, ranking models, protections for
8 minors, (to keep users safe)."

9 Where you recommend "tuning ranking
10 models," what did you mean?

11 MS. BARNHART: Objection. Calls for a
12 narrative.

13 THE WITNESS: I have to really go back and
14 look specifically at because you have to remember
15 that this is a TLDR of a large -- of a larger slide
16 deck. So forgive me if I actually flip further into
17 the slide deck to remember what I was referencing.

18 There's a couple of different points, I
19 think, that are related to this. We had named that
20 there were -- there's two -- there's two points I
21 would name to this around tuning ranking models.
22 The first is that we saw that different subsurfaces
23 on Reels were more vulnerable to spikes in
24 objectionable and sexually suggestive data.

25 So, for example, Reels cover, which is a

CONFIDENTIAL

Page 62

1 particular subsurface, it's basically when you click
2 on -- before you click on a video, there's, like, a
3 static image and a lot of times people would put
4 sexually suggestive content or really sensational,
5 like clickbait-y covers. So we saw that was a
6 subsurface that was problematic.

7 In-feed unit, what we called RIFU, Reels
8 in-feed unit, that's what was being injected into
9 people's feed, that was also a different -- that's a
10 completely different ranking model, right. So
11 that's what -- that might be one way that I meant
12 around tuning ranking models. Is there ways that,
13 if we know a particular subsurfaces are riskier than
14 others, can we do some tuning to the riskier models,
15 right.

16 And the second connected piece here is
17 this idea of focus on entertainment and mimicry and
18 the teen audiences. And if you remember, Reels is
19 basically Instagram's version of TikTok. And so at
20 the time, everybody was locked up inside and doing
21 TikTok dances. We're doing these, like, silly
22 trends. And many of those trends are very benign,
23 right. And those trends are oftentimes -- once it
24 goes viral, everybody's producing those videos at a
25 higher rate.

CONFIDENTIAL

Page 63

1 So -- and there were some trends that were
2 quite risky. So, for example, we talked about the
3 Wap trend for teens, which was a particular dance
4 that was to a song that was risky, that young people
5 were, in particular, engaging in. Or trends that
6 were mocking disabilities. Those are two different
7 instances of trends that were non-recommendable, but
8 were going viral very quickly.

9 And so that was another recommendation to
10 say, given that Reels was built on this idea of a
11 virality, of things catching on like wildfire and
12 moving very quickly, can we get ahead of bad trends
13 before they catch fire. So that's another method of
14 tuning a ranking model in order to actually try to
15 not let -- let good trends go forward, but if there
16 is trends that are, you know, non-recommendable, can
17 we get ahead of that.

18 BY MR. DUNBAR:

19 Q. Okay. Do you know how many minors were
20 using Reels at this point?

21 MS. BARNHART: Object to the form.

22 THE WITNESS: I wouldn't be able to name
23 that number.

24 BY MR. DUNBAR:

25 Q. Okay.

CONFIDENTIAL

Page 64

1 A. There was a dashboard at that time that
2 indicated the number of people that we thought were
3 under 18. But I can't remember that number.

4 Q. Would it be fair to say that there were at
5 least hundreds of thousands?

6 MS. BARNHART: Objection. Form. Asked
7 and answered. Lacks foundation.

8 THE WITNESS: I think that's probably a
9 modest estimation.

10 BY MR. DUNBAR:

11 Q. Do you think it would be fair to say that
12 there were millions of young users using Reels at
13 this time?

14 MS. BARNHART: Same objections.

15 THE WITNESS: Yes, I think so.

16 BY MR. DUNBAR:

17 Q. Could you please turn ahead to slide
18 number 5.

19 Does this slide provide a little more
20 context about the relationship between product
21 launches and integrity issues we were just
22 discussing?

23 A. A little bit more detail. It names
24 specifically the volume of launches and the -- what
25 proportion of those launches led to integrity

CONFIDENTIAL

Page 65

1 regressions.

2 Q. It says at the top of the right side, "We
3 released a high volume (100-plus in H1 2021) of
4 product launches, 17 leading to integrity
5 regressions."

6 Do you see that?

7 A. Yes, I see it.

8 Q. Could some of those integrity regressions
9 mean that Reels was less safe than it was before?

10 MS. BARNHART: Object to the form. Asked
11 and answered.

12 THE WITNESS: Less safe than it was
13 before, that's one possibility. Another possibility
14 is that our integrity models were getting better and
15 so they were actually detecting the -- like, the
16 prevalence of bad content at a higher rate. So
17 maybe it was underestimating it before and it was
18 getting better, and it was becoming more accurate
19 now.

20 What it does also say, though, is that
21 where the product -- before the product launches
22 came out, the prevalence that was detected at that
23 point -- prior to the launch, is lower than the --
24 than the integrity prevalence after they were
25 launched.

CONFIDENTIAL

Page 66

1 BY MR. DUNBAR:

2 Q. In any case, it says here that more than
3 100 product launches occurred in the first half of
4 2021 and 17 of those led to integrity regressions,
5 right?

6 A. Yes, that's right.

7 Q. Okay. Could you please turn ahead to
8 slide number 8.

9 I think you mentioned this point a second
10 ago, but could you please just read this slide for
11 the jury.

12 A. Sure.

13 On the left-hand side, it says trends --
14 is that right, the trends, mimicry, and
15 entertainment?

16 Q. I think that may be one slide ahead. I'm
17 looking at...

18 A. Uh-huh.

19 "Mimicry, trends, and entertainment: great
20 for engagement, not so great for integrity. Who's
21 at greatest risk?"

22 Q. What is the implication when you say that
23 mimicry, trends, and entertainment were great for
24 engagement, not so great for integrity?

25 A. Yeah.

CONFIDENTIAL

Page 67

1 MS. BARNHART: Object to the form. Calls
2 for a narrative.

3 THE WITNESS: If you flip to the
4 subsequent slide after, it describes specifically
5 what those things are.

6 Mimicry means that you're following
7 somebody else's trend, right. So somebody creates a
8 video with a particular dance. You follow that by
9 mimicking it.

10 Trends, in general, just means that
11 there's a particular format that's getting popular
12 and so you follow that trend, right. So a lot of,
13 like, the ice bucket challenge would be considered a
14 trend, right.

15 And also, entertaining content, things
16 that were meant to be funny, things that were meant
17 to be salacious or exciting. Many of them are
18 benign, but some of them oftentimes were considered
19 borderline non-recommendable. And so that's what we
20 were seeing here.

21 In this particular content -- in this
22 particular blue slide here, it was talking
23 specifically about dimensions that were leading to
24 the greater likelihood of [REDACTED]

25 [REDACTED]

CONFIDENTIAL

Page 68

1 BY MR. DUNBAR:

2 Q. Okay. And at that time, were trends,
3 mimicry, and entertainment prominent features of the
4 Reels experience?

5 MS. BARNHART: Object to the form.
6 Foundation.

7 THE WITNESS: I would say that trends and
8 mimicry were probably the primary things that the
9 Reels platform was designed to promote. That was
10 what made TikTok incredibly competitive during the
11 pandemic, was this rise in trends and mimicry, doing
12 dances or filming videos that were funny or
13 entertaining for themselves or for their audience.
14 And these viral trends that everybody else could hop
15 onto to do together.

16 BY MR. DUNBAR:

17 Q. So as you previewed, the next slide in
18 this deck, slide 9, provides additional context
19 about what we've been discussing.

20 The first sentence on the right side of
21 that slide reads, "Ranking models cause integrity
22 regressions by increasing the prevalence of
23 non-recommendable content."

24 Could you please explain that statement
25 for the jury?

CONFIDENTIAL

Page 69

1 A. That's right. So that's looking
2 specifically at what dimensions of those product
3 launches we mentioned earlier. So do you remember,
4 there were many teams that were working on improving
5 the entertainment engagement quality of Reels,
6 right.

7 And so when we look at the particular
8 launches that were causing the most egregious
9 integrity regressions, that was actually the
10 engineering team's work. They went in and looked at
11 all the different product launches that were
12 regressing integrity the most.

13 [REDACTED]
14 [REDACTED]
15 [REDACTED] [REDACTED]
16 [REDACTED],
17 [REDACTED]
18 [REDACTED] [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED] [REDACTED]
25 [REDACTED]

CONFIDENTIAL

Page 70

1 The mimicry submodel and down --
2 downranking watermarked media. So watermarked media
3 is anything that has a watermark that indicates that
4 that content came from somewhere else. 99 percent
5 of the time for Reels, it was TikTok. There was a
6 TikTok watermark on the side because TikTok was
7 smart and said anytime you create a video on TikTok,
8 we're going to put a little TikTok icon on the side.

9 So downranking watermark media was
10 probably somebody's team that was saying, like, we
11 want less content stolen from TikTok and more
12 original Instagram content. So by downranking. But
13 all three of these models increased the prevalence
14 of sexually suggestive content.

15 Q. Okay. And that blue sentence at the top
16 of the right side says "non-recommendable" --
17 "non-recommendable content" -- strike that.

18 A moment ago, did you explain that
19 non-recommendable content is a category of content
20 that Instagram defines that is not appropriate for
21 promotion?

22 A. It is content --

23 MS. BARNHART: Object to the
24 characterization.

25 THE WITNESS: Non-recommendable content is

CONFIDENTIAL

Page 71

1 content that, if we detect it to be
2 non-recommendable, we would not want to show it to
3 people who otherwise do not follow that account.

4 BY MR. DUNBAR:

5 Q. And do I understand correctly that ranking
6 models here refer to Instagram's formulas that
7 influence what content users will see?

8 A. Yes, that's right. It's one of two models
9 that influences what users will see.

10 Q. Okay. So does this blue sentence mean
11 that Instagram's own formulas were promoting content
12 on Reels that Instagram itself deemed appropriate --
13 inappropriate for promotion?

14 MS. BARNHART: Object to characterization.
15 Foundation.

16 THE WITNESS: There are different
17 treatments based off of the score that's assigned to
18 a non-recommendable content, right, because all of
19 this is machine detected. So it is not a binary --
20 if we put a piece of content in front of you, right,
21 and you're a machine, you're not a human, without
22 human expertise labeling, we cannot tell if a
23 particular piece of content is what -- with a
24 hundred percent certainty, unless we get a human to
25 look at it, that it's sexually suggestive or not.

CONFIDENTIAL

Page 72

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But the reason why these scores matter, in my explanation, is based off of what [REDACTED]

[REDACTED] So let me back up for a second.

I talked about ranking as one of two different types of models that we use to source content to share with people, right. So on a given day, there might be millions of posts that are created, right. There's so many people on our platform, they're all creating content. [REDACTED]

CONFIDENTIAL

Page 73

1 [REDACTED]

2 [REDACTED] [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED] [REDACTED]

8 [REDACTED] [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED] [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED] [REDACTED]

24 [REDACTED] [REDACTED]

25 [REDACTED]

CONFIDENTIAL

Page 74

1 [REDACTED]

2 [REDACTED] So that's what this is talking
3 about --

4 BY MR. DUNBAR:

5 Q. Okay.

6 A. [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED] [REDACTED]

11 [REDACTED]

12 [REDACTED] [REDACTED]

13 [REDACTED]

14 So those probability thresholds are
15 actually really important and that's how content
16 that's otherwise considered non-rec may make it to
17 the ranking model. But the challenge is, for every
18 content that maybe is downranked by integrity might
19 be upranked by some other component of the
20 engagement model.

21 Q. So as a product of the process you just
22 described, were Instagram's formulas promoting
23 non-recommendable content to users?

24 MS. BARNHART: Object to the form.
25 Foundation.

CONFIDENTIAL

Page 75

1 THE WITNESS: Non-recommendable content
2 certainly made its way into recommendations. That
3 much is clear.

4 BY MR. DUNBAR:

5 Q. Okay.

6 A. Despite integrity treatments that were
7 applied at both sourcing and ranking, it was
8 abundantly clear to our users, and even within our
9 internal investigations, that there was
10 non-recommendable content that was being shown to
11 users.

12 Q. Okay. And just to be clear, that was
13 occurring even where a user did not follow the user
14 who posted the content?

15 MS. BARNHART: Object to the form.
16 Foundation.

17 THE WITNESS: Correct. Correct.

18 BY MR. DUNBAR:

19 Q. So the final two sentences on this slide
20 state, quote, "Unconnected dancing videos featuring
21 young girls raise safety concerns. Studies and
22 internal feedback suggests that people are
23 uncomfortable with seeing and concerned about the
24 safety of unconnected Reels content of tween and
25 young girls dancing and posing."

CONFIDENTIAL

Page 76

1 Do you see that?

2 A. Yes, I see that.

3 Q. And in this context, does unconnected mean
4 these people are not following one another?

5 A. Correct. Unconnected means that it is
6 content that you are not -- from an account you are
7 not following.

8 Q. Okay. So is this describing instances
9 where Instagram's algorithms deliver Reels content
10 of tween and young girls dancing and posing to
11 people who did not otherwise know those girls?

12 MS. BARNHART: Object to the form.

13 THE WITNESS: Yes, that's right.

14 MS. BARNHART: Characterization.

15 BY MR. DUNBAR:

16 Q. Do you know if those unconnected
17 recipients include adults?

18 A. Yes.

19 Q. Could those unconnected recipients include
20 pedophiles?

21 MS. BARNHART: Object to the form.
22 Foundation.

23 THE WITNESS: If the pedophiles were known
24 to us, and [REDACTED]

25 [REDACTED]

CONFIDENTIAL

Page 77

1 [REDACTED]
2 [REDACTED], they would not be shown to
3 those particular groups.

4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]

9 BY MR. DUNBAR:

10 Q. Okay. So just a few slides ago, we read
11 that Instagram launched 100-plus so-called product
12 improvements in the first half of 2021, right?

13 A. Yes, that's correct.

14 Q. And in all those so-called improvements,
15 Instagram did not solve this problem?

16 MS. BARNHART: Object to the form.
17 Characterization.

18 THE WITNESS: At this moment in time, it
19 did not solve this problem.

20 BY MR. DUNBAR:

21 Q. Do you believe Instagram acted urgently
22 enough to determine why its algorithms were
23 surfacing unconnected videos of tween and young
24 girls dancing and posting to unconnected users?

25 MS. BARNHART: Object to the form.

CONFIDENTIAL

Page 78

1 Foundation.

2 THE WITNESS: I think that because this
3 content was otherwise considered benign, right,
4 there was nothing sexually suggestive about it, they
5 treated it as an -- a content quality problem rather
6 than necessarily a child safety problem.

7 Where it became a child safety problem [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED].

11 But otherwise, any dancing videos that
12 people were displeased about or were, like, I don't
13 care about this, why is this an issue, they treated
14 it as an engagement problem and not necessarily as
15 an integrity problem.

16 And so the assumption was that the more
17 content and the better content that we got and the
18 better the engagement models we got and the more we
19 get people to produce content that's not just kids
20 dancing, it would solve that problem. It would
21 solve that quality engagement problem.

22 BY MR. DUNBAR:

23 Q. Okay. So just to be clear, on the point
24 about Instagram's algorithms surfacing unconnected
25 videos of teen -- tween and young girls dancing and

CONFIDENTIAL

Page 79

1 posing, do you believe the company acted urgently
2 enough to solve that problem?

3 MS. BARNHART: Object to the form. Asked
4 and answered.

5 THE WITNESS: My team's response -- or
6 rather, my response was first to ask who is creating
7 this content, right. Where is this coming from and
8 what do we know from there. And we actually did
9 continuous investigations after that point -- or
10 rather, I did. I took on that mantle of being,
11 like, well, is it coming from accounts that are
12 otherwise parental accounts, right. Is it mom's
13 account that someone's borrowing to make a dance.

14 Is it somebody who's lying about their age
15 and pretending that they are 15, 16 years old when
16 they were actually younger, in which case we would
17 take action to actually shut those -- those accounts
18 down. Or, and more egregiously, are they aggregator
19 accounts. So accounts that were intentionally
20 collecting videos of young girls dancing for their
21 own interests. And that would indicate CSAM
22 concerns.

23 That latter one where we started to notice
24 that there was a significant pattern of aggregator
25 accounts was taken very seriously by Meta. There

CONFIDENTIAL

Page 80

1 was a cross-product team, a legal expert, CSAM
2 experts, people who were expertise in that
3 particular product, that said we need to go after
4 those aggregator accounts because we know that they
5 are intentional bad actors.

6 But for the former two, where it was,
7 like, well, otherwise this content is technically
8 benign, right. People are allowed to dance on our
9 platform. It might be not be desirable on our
10 platform, but they're allowed to dance. And little
11 kids are allowed to dance. They did not consider
12 anything more than just as better content comes up,
13 it will take care of that problem.

14 MR. DUNBAR: Respectfully, Dr. Lee, I need
15 to move to strike that answer to the extent it did
16 not respond to my specific question. My question
17 was a little bit different.

18 Q. Specifically, with regard to the
19 algorithms surfacing unconnected videos of tween and
20 young girls dancing and posing, do you believe the
21 company acted urgently enough to solve that problem?

22 MS. BARNHART: We'll oppose that motion.
23 That answer was just as responsive as the many other
24 narrative responses you've been eliciting throughout
25 the day, Counsel.

CONFIDENTIAL

Page 81

1 THE WITNESS: I think that the company
2 took some components of these risks seriously and
3 others did not. As for sharing Reels of kids
4 dancing and posing, I think they treated it like any
5 other sort of undesirable but benign content type.

6 BY MR. DUNBAR:

7 Q. Do you believe the company should have
8 devoted more resources to solve this problem sooner?

9 MS. BARNHART: Object to the form.
10 Foundation.

11 THE WITNESS: I think they could have done
12 very specific engineering solutions that could have
13 moved faster to resolve this challenge. So, for
14 example, detecting the age of the subject within a
15 particular content. And saying, hey, as a policy
16 line or as a flat rule, we're not going to show
17 content of -- that depicts people that we think are
18 likely to be 12 years old or under to people who
19 they're unconnected to. That could have been a
20 solution, both an engineering and a policy solution.

21 BY MR. DUNBAR:

22 Q. Okay. Let's turn ahead to slide 12,
23 please.

24 Could you please read the sentence on the
25 left side of this slide for the jury.

CONFIDENTIAL

Page 82

1 A. Yeah.

2 "Teens are the target audience for Reels,
3 but we have limited knowledge, tech, and tools to
4 keep them safe. But, here's what we do know."

5 Q. Okay. The first two sentences on the
6 right side of this slide say, quote, "Teens hear
7 about and see integrity issues at higher rates on
8 Reels, but they're less bothered by them than
9 adults. Teens especially see and hear about more
10 profanity and nudity, as well as bullying and hate."

11 Do you see that?

12 A. Yes, I do see it.

13 Q. And just to be clear, when you say teens
14 are "less bothered by them than adults," does that
15 mean teens are less harmed?

16 MS. BARNHART: Object to the form.

17 THE WITNESS: It's based off of what is in
18 our TRIPS data. So in our TRIPS survey, we ask a
19 follow-up question after we ask, in the last week,
20 have you seen nudity or have you seen something
21 sexually suggestive. And then after -- if they say
22 yes, then we ask something along the lines -- this
23 is not perfect, but something along the lines of,
24 like, how much did that bother you on a scale of 1
25 to 5.

CONFIDENTIAL

Page 83

1 So that's what that's referencing of,
2 like, how -- that they're less bothered by, it's
3 their own personal, like, a scale of ranking of how
4 much they're experiencing.

5 BY MR. DUNBAR:

6 Q. Okay. So here, it's fair to say
7 "bothered" is not analogous to harmed?

8 MS. BARNHART: Object to the form.
9 Characterization.

10 THE WITNESS: I'd have to look at the
11 survey item itself. I wouldn't -- yeah.

12 BY MR. DUNBAR:

13 Q. Okay. Well, in fact, the next sentence
14 says, "Teens don't think deeply about safety risks
15 until something bad happens."

16 Do you see that?

17 A. Uh-huh. Yes, I see it.

18 Q. The next sentence states, quote, "Consider
19 this with 1) how frequently content featuring minors
20 shows up on Reels recommendations (see slide 9), 2)
21 teens are fueled to produce by likes and comments,
22 and 3) teens are more willing to talk to people who
23 are 'friends of friends.'"

24 Did I read that correctly?

25 A. Yes, you read that correctly.

CONFIDENTIAL

Page 84

1 Q. Okay. Dr. Lee, could you please read the
2 last two sentences on this slide for the jury, the
3 blue sentence and then the sentence beneath it.

4 A. Yeah.

5 "Teens want more control over who sees
6 their content on Reels. While this finding focused
7 on audience control out of social risk (i.e., being
8 embarrassed by content), that aligns with research
9 on teens' preference for privacy, control, and
10 awareness to address harm."

11 Q. Thank you.

12 And the left side of this slide that you
13 read earlier says, "But here's what we know," right?

14 A. Yes.

15 Q. So Instagram knew that teens wanted more
16 control over who sees their content, right?

17 MS. BARNHART: Object to the form.
18 Foundation.

19 THE WITNESS: I think I'd have to look
20 at -- this must -- this finding must have come from
21 a teen safety research study that I included in my
22 literature review. So that's what I'm going to say,
23 is that there must be a study that indicates this
24 finding or else I wouldn't have said it. Which
25 indicates, yes, Instagram would have -- had already

CONFIDENTIAL

Page 85

1 conducted research on this topic.

2 BY MR. DUNBAR:

3 Q. Okay. Fair enough. And I think we'll
4 have a chance to get into that a bit more later.

5 But do I understand correctly that
6 Instagram had not rolled out those kinds of controls
7 at this point since the surface launched?

8 MS. BARNHART: Object to the form.
9 Foundation.

10 THE WITNESS: At this point, there were
11 not specialized user control or audience controls
12 for Reels, no.

13 BY MR. DUNBAR:

14 Q. Okay. And as a result, teen users had no
15 ability to prevent Instagram from recommending their
16 content to adults they did not know?

17 MS. BARNHART: Object to the form.
18 Foundation.

19 THE WITNESS: They had one option for
20 controlling who gets to see their content, either
21 set to private or set to public. And we did see
22 that teens, as a result, if they had experienced
23 something, or if they were just more aware of
24 privacy concerns, would set their content to
25 private.

CONFIDENTIAL

Page 86

1 But to set to private means that they
2 wouldn't -- their content won't be shown to anybody
3 unless they are following them. And what we saw was
4 that teens, especially teen creators, teen
5 influencers who wanted to grow an audience were
6 willing to take that risk to get the reward of being
7 shown to more people because they weren't fueled by
8 likes and comments. They were fueled by growing an
9 audience.

10 BY MR. DUNBAR:

11 Q. Okay. Just one final question on this
12 exhibit, Dr. Lee.

13 To your knowledge, did Meta ever disclose
14 any of the information contained in this slide deck
15 to the public?

16 MS. BARNHART: Object to the form.
17 Foundation.

18 THE WITNESS: Not to my knowledge. It was
19 never intended for public consumption.

20 MR. DUNBAR: Okay. Thank you.

21 I think we're ready to move on to another
22 exhibit. I might propose, if it's okay with others,
23 that we take a quick break.

24 THE VIDEOGRAPHER: Time is now 10:51.
25 Going off the record.

CONFIDENTIAL

Page 101

1 Q. Sure. I'm going to hand you another
2 document.

3 (Whereupon, Meta-Lee Exhibit 6 was marked
4 for identification.)

5 BY MR. DUNBAR:

6 Q. This is going to be Exhibit 6. Please
7 feel free to take a moment to familiarize yourself,
8 and let me know when you're ready.

9 A. Yes.

10 Q. Okay. On the very last page of this
11 document, do you see that you created this document
12 on September 8, 2021? I apologize. It might be the
13 second-to-last page.

14 A. Yes, I see that.

15 Q. Could you -- turning back to the first
16 page, could you describe the goals you had in mind
17 when you proposed this research?

18 A. This was a follow-up from the suggestions
19 that we saw in the previous slide deck that we saw,
20 which was to try to understand are they -- are there
21 things that are motivating young people,
22 particularly young women, to produce this content.
23 How do they perceive it in terms of risk. Who are
24 they intending to reach. And, if they experience
25 any particular harm or greater risk, are they aware

CONFIDENTIAL

Page 102

1 of those risks and what do they do to try to
2 mitigate that risk and how do they keep themselves
3 from harm. That was the intention of this research.

4 Q. Okay. So how did you intend to accomplish
5 that goal?

6 MS. BARNHART: Objection. Calls for a
7 narrative.

8 THE WITNESS: The goal was to find a
9 particular subgroup of young people who are
10 regularly producing on Reels. I think there was a
11 particular intention of finding young people who
12 were producing content that were, you know, dancing
13 videos, or videos that we would say either are,
14 like, benign but risky, right, or on the borderline
15 of sexually suggestive. And interview them in a way
16 that didn't feel judgmental about what they were
17 trying to produce, but really try to understand
18 their experiences, try to understand what was
19 motivating them to produce, who they were trying to
20 reach and what potential risks they perceived.

21 BY MR. DUNBAR:

22 Q. Okay. Just for clarity, is it okay if I
23 refer to this piece of research as the "interview
24 study" moving forward? I know "Interview" is in the
25 title at the top.

CONFIDENTIAL

Page 103

1 A. Yes.

2 Q. Okay. Thank you.

3 So just beneath the title, there's a
4 background section containing a number of bullet
5 points.

6 Do you see that?

7 A. Yes.

8 Q. Okay. I'd like to ask a few questions
9 about that eighth bullet, which is the second from
10 the bottom.

11 Do you see that one?

12 A. Yes.

13 Q. Okay. That bullet says, quote, "'True'
14 exploitation of minors (i.e., suggestive
15 dancing/positioning)."

16 Did I read that correctly so far?

17 A. Yes.

18 Q. It continues, "We need to better detect
19 and filter content depicting minors in sexually
20 suggestive ways on Reels, as the reporting vs.
21 prevalence data suggests that we're permitting many
22 to 'slip through the cracks.'"

23 Do you see that?

24 A. Yes, I see that.

25 Q. Are you saying here that there's a lot of

CONFIDENTIAL

Page 104

1 bad stuff being promoted on Reels that is slipping
2 through the cracks because it does not violate one
3 of Instagram's defined categories?

4 MS. BARNHART: Object to the form.

5 THE WITNESS: It is actually suggesting
6 that it is being flagged as non-recommendable
7 content. Otherwise we wouldn't have the data that
8 shows that sexually suggestive content featuring
9 minors is at a higher rate on Reels than other
10 places.

11 So it suggests that we do actually have
12 models that are trying to predict with some degree
13 of accuracy what this content looks like.

14 And what it's also saying is that, despite
15 the integrity team's best efforts to either filter
16 it out at the sourcing layer or downrank it in the
17 ranking layer, that it is still coming -- filtering
18 through the cracks.

19 BY MR. DUNBAR:

20 Q. Okay. So this is a sort of different
21 issue from what I described.

22 This is, instead, the algorithm's
23 delivering content that is in the non-recommendable
24 category?

25 A. Yes, that's correct.

CONFIDENTIAL

Page 105

1 Q. At this point, do I understand correctly
2 that we're more than a year into Reels' launch?

3 A. This is -- if this was created in
4 September of 2021, in contrast to the press release,
5 yes, it's been a year.

6 Q. Okay. So a year into Reels' launch, the
7 Reels' algorithms are delivering users content that
8 the company categorized as non-recommendable?

9 MR. WARD: Object to the form.

10 BY MR. DUNBAR:

11 Q. Is that right?

12 MR. WARD: Characterization.

13 THE WITNESS: I think that that's true for
14 all of our content types, and it's also true for
15 Reels.

16 BY MR. DUNBAR:

17 Q. So let's look to the final bullet in the
18 background section. That bullet says, quote,
19 "Benign but still risky content featuring minors:
20 Children dancing/posing unto itself is not
21 problematic, but it becomes an issue if bad actors
22 see it."

23 Did I read that correctly so far?

24 A. Yes.

25 Q. Continues, "New approaches to protect

CONFIDENTIAL

Page 106

1 children and teens (i.e., preventing visibility
2 between known IIC adults and minors on other
3 surfaces like Explore) should be ported to Reels as
4 soon as possible."

5 Did I read that correctly?

6 A. Yes, you read that correctly.

7 Q. And what does "known IIC adults" mean
8 here?

9 A. It means that there are accounts that we
10 have flagged that have had previous inappropriate
11 interactions with children on our platform. So they
12 get a flag on our -- on their account.

13 Q. Okay. So are those adult users Instagram
14 has identified for the risk that they may pursue
15 inappropriate interactions with children?

16 A. Yes, that's correct.

17 Q. [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]

22 MS. BARNHART: Object to the
23 characterization. Foundation.

24 THE WITNESS: [REDACTED]
25 [REDACTED]

CONFIDENTIAL

Page 107

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED] [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED] [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 BY MR. DUNBAR:

13 Q. Okay. Just as a reminder, we're a year
14 into the Reels product's launch at this point; is
15 that right?

16 A. Yes, that's right.

17 Q. And that had not yet happened, a year into
18 the surface's launch, or the product's launch
19 rather?

20 A. Not to my knowledge at that time. It
21 could have happened if -- without my knowledge, but
22 I'm making the recommendation clearly not knowing if
23 that has happened or not.

24 Q. Okay. So, as far as you're aware, it had
25 not happened?

CONFIDENTIAL

Page 108

1 A. Yes.

2 Q. Okay. As far as you're aware, did
3 Instagram ever disclose that risk to the public?

4 MS. BARNHART: Object to the form.
5 Foundation.

6 THE WITNESS: Not to my knowledge.
7 BY MR. DUNBAR:

8 Q. Okay. You can set that exhibit to the
9 side.

10 So we just discussed your proposal for the
11 interview study, as you agreed I could call it, that
12 you proposed after your Reels integrity research.

13 Was there a second piece of follow-up
14 research that you proposed following your Reels
15 integrity work?

16 A. Yes. I remember that we also conducted a
17 diary study.

18 Q. Okay. Can you, just in general terms,
19 explain to the jury what that study was about?

20 A. Sure. So, as you recall, there were
21 multiple Reels integrity challenges. The interview
22 that we just -- that we just overviewed was trying
23 to understand one particular slice of the problem,
24 which was, well, young people are producing a lot of
25 dancing videos. We have to solve that dancing video

CONFIDENTIAL

Page 191

1 Q. Okay.

2 A. So maybe it's not added harm, but it's
3 just continuation of harm, rather than mitigation of
4 that.

5 Q. So I'm going to hand you another document,
6 which will be Exhibit 18. And I'm -- as always,
7 feel free to take some time to familiarize yourself
8 with the document. This one is a lengthy document.

9 (Whereupon, Meta-Lee Exhibit 18 was marked
10 for identification.)

11 THE WITNESS: Yeah.

12 BY MR. DUNBAR:

13 Q. Are you ready to go?

14 On the cover sheet for this exhibit,
15 before you get to the slide deck itself, do you see
16 that you're listed as a custodian on the cover
17 sheet? Very first page of the stapled stack.

18 A. This one, yes.

19 Yes, I am.

20 Q. Okay. Do you have any reason to believe
21 that you did not possess this document during your
22 tenure at Meta?

23 A. No, I don't believe there's any reason to
24 believe that.

25 Q. You do not have any reason to believe that

CONFIDENTIAL

Page 192

1 you did not possess it?

2 A. I possessed this, I think -- I believe I
3 was one of the authors.

4 Q. Okay. What is this document?

5 A. This document is a -- highlighting a study
6 on Instagram Teen Reels, uncovering their
7 motivations for producing Reels, their intentions,
8 motivations, and also any risks that they
9 encountered as a result of producing Reels.

10 At the very end of it, it produces a set
11 of recommendations.

12 It's produced on Meta rather than
13 Instagram copy, which we have seen in the
14 PowerPoints, that format. It's in Meta, which
15 suggests that this was either done after the swap
16 into the central social impact team, which means
17 that I was technically no longer an Instagram
18 employee, but a central Meta social impact employee.
19 Or I was reading it out to a Meta audience. I can't
20 recall the exact context.

21 Q. Okay. Could you please turn to the fourth
22 slide which appears to provide a research overview.

23 Do you see that?

24 A. Yes, I do.

25 Q. Okay. Based on this slide, does this deck

CONFIDENTIAL

Page 193

1 appear to discuss things that motivate teens to post
2 on Reels?

3 MS. BARNHART: Objection. Foundation.

4 THE WITNESS: It says here that the
5 research objectives are to identify and examine what
6 motivates teens to post Reels, who they intend to
7 reach as their target audience, and what potential
8 risks or unwanted interactions they might have had
9 and how they responded.

10 BY MR. DUNBAR:

11 Q. Okay. At the bottom of that slide, does
12 it indicate that this information was generated
13 through 20 remote interviews with Instagram users
14 aged 13 to 17 between February and March of 2022?

15 A. Yes, that's correct.

16 Q. Okay. I will represent to you that the
17 first half of this deck discusses a number of
18 positive experiences that Reels can afford teens.

19 Would you agree that Reels, and social
20 media more generally, can be a positive experience
21 for users?

22 A. Yes. I would say that in our research, we
23 have often discussed the connections between the
24 two. That it can be a very positive and powerful
25 experience for them.

CONFIDENTIAL

Page 194

1 Q. But would you also agree that Reels and
2 social media can also expose teens to harmful
3 experiences?

4 MS. BARNHART: Object to the form.
5 Foundation.

6 THE WITNESS: There is -- by inherently
7 publishing on a platform that was not made for them
8 and exposing them to a public audience, there is an
9 inherent risk associated with their production.
10 BY MR. DUNBAR:

11 Q. So is it fair to say that the positive and
12 negative features of Reels or social media are not
13 mutually exclusive?

14 A. They are not mutually exclusive. Just
15 because we have an index on one does not mean that
16 that -- that is the absence of the other.

17 MS. BARNHART: Objection to form.
18 BY MR. DUNBAR:

19 Q. Could you please skip ahead to the 25th
20 slide, which is a title page that reads, "03 Risk
21 factors for unwanted interactions."

22 (Whereupon, a brief discussion off the
23 record.)

24 BY MR. DUNBAR:

25 Q. Because this is a long deck without

CONFIDENTIAL

Page 195

1 pagination built in, I figured this might be a
2 helpful anchor point.

3 But if you turn to the next slide, there
4 is a sentence that reads, quote, "Participants
5 viewed social media as inherently risky. Negative
6 comments and their potential psychological toll were
7 widely accepted as the price of admission."

8 Do you see that?

9 A. Yes, I do see that.

10 Q. Below that statement, there are six blue
11 boxes. Do I understand correctly that those are
12 submissions from the teen respondents?

13 A. Those are pulled quotes from the
14 interviews that were conducted with them, yes.

15 Q. Okay. Could you please read the third
16 blue box on the left?

17 A. The one that starts, "Because"?

18 Q. Yes.

19 A. "Because Instagram can make you depressed.
20 Because if you are a soft-hearted individual, social
21 media can eat you up. All I can say is if you have
22 low self-esteem and is insecure about yourself, you
23 don't really need to be on social media until you
24 deal with yourself and deal with your inner wounds.
25 But until then, I don't think you should really be

CONFIDENTIAL

Page 196

1 on Instagram. P7."

2 Q. Would you agree that low self-esteem and
3 insecurity are common among teens?

4 MS. BARNHART: Object to the form.
5 Foundation.

6 THE WITNESS: I would have to reference
7 extant research on youth well-being in order to
8 answer that question, yeah.

9 BY MR. DUNBAR:

10 Q. Could you please turn to the next slide.

11 Do you see the sentence on this slide that
12 says, quote, "Participants viewed potential physical
13 harm from others as a rare but real risk of posting
14 videos, and of social media use more generally."

15 Do you see that?

16 A. Yes, I do see that.

17 Q. So in addition to the perceived
18 psychological risks discussed on the last slide, the
19 teen respondents also told the company that they
20 perceive physical risks to social media use,
21 correct?

22 A. Yes, that's correct.

23 Q. And "participants" refer to 20 teen
24 respondents between the ages of 13 and 17 who use
25 Reels; is that right?

CONFIDENTIAL

Page 197

1 A. Yes, that's correct.

2 Q. Okay. Would you please skip ahead three
3 slides to the slide with the sentence that begins,
4 "All teen girls."

5 A. Should I wait for us to get to that point?
6 It looks like we're -- that one is one earlier,
7 right?

8 Q. Correct.

9 A. There we go, yes.

10 Q. Are you there?

11 A. Yep.

12 Q. Okay.

13 A. "All teen girls reported that they
14 themselves, or a friend, had received inappropriate
15 compliments or other unwanted sexualized
16 interactions."

17 Q. And just to be very clear, these are 13-
18 to 17-year-olds girls, right?

19 A. That's correct.

20 MS. BARNHART: Object to the form.

21 BY MR. DUNBAR:

22 Q. And every one of them reported that?

23 MS. BARNHART: Object to the form.

24 THE WITNESS: That were part of the
25 sample, yes.

CONFIDENTIAL

Page 198

1 BY MR. DUNBAR:

2 Q. Could you please skip ahead 15 slides to
3 the slide that begins, "User sophistication skewed
4 low."

5 Are you there?

6 A. Uh-huh.

7 Q. That full sentence reads, quote, "User
8 sophistication skewed low, decreasing ability to
9 mitigate risks."

10 Do you see that?

11 A. Yes, I do see it.

12 Q. The next sentence states, "Participants
13 often suggested features that already exist, when
14 they were asked what privacy or safety features they
15 wish were available on IG or TT."

16 Did I read that correctly?

17 A. Yes, you did.

18 Q. Does this indicate to you that users did
19 not have a meaningful awareness of the available
20 safety features?

21 MS. BARNHART: Object to the
22 characterization.

23 THE WITNESS: This would suggest that they
24 desired those features but were unaware that they --
25 how to access them or where they were on the product

CONFIDENTIAL

Page 199

1 itself.

2 BY MR. DUNBAR:

3 Q. And if the users were unaware of those
4 products or did not know how to access them, would
5 those features provide safety for those users?

6 MS. BARNHART: Object to the form.
7 Foundation.

8 THE WITNESS: That's a really hard
9 question to ask. I think when utilized, they can.
10 But if they're not searchable and they're not
11 findable, it certainly limits their ability to help
12 people.

13 BY MR. DUNBAR:

14 Q. So the first bullet under that sentence
15 reads, "Availability of account blocking, comment,
16 deleting, and reporting were the most widely known
17 to participants. How these tools worked exactly was
18 less well understood. Participants who weren't sure
19 what happens when they report or block someone did
20 not feel safer from these tools and were less likely
21 to use them."

22 Do you see that?

23 A. Yes, I do see that.

24 Q. Based on your experience as a researcher
25 at Meta, are safety features such as account

CONFIDENTIAL

Page 200

1 blocking, comment deleting, and reporting effective
2 if users do not know about them or how to use them?

3 MS. BARNHART: Object to the form.

4 THE WITNESS: They are insufficiently
5 effective. They are insufficient for meeting the
6 intentions of that function, yes.

7 BY MR. DUNBAR:

8 Q. Based on your experience as a researcher
9 at Meta, do you believe the company should have done
10 more to educate teen users and their parents about
11 available safety features?

12 MS. BARNHART: Object to the form.
13 Foundation.

14 THE WITNESS: Yes, I think they could have
15 done that better. And that could have been done
16 either by greater outreach and PR about these tools,
17 or a user interface that made those tools clearer
18 and most accessible to users.

19 BY MR. DUNBAR:

20 Q. When you reference the user interface,
21 based on your experience as a researcher at Meta, do
22 you believe the company should have presented
23 available safety features more prominently in the
24 app?

25 MS. BARNHART: Object to the form.

CONFIDENTIAL

Page 238

1 prevalence was.

2 Q. Okay. So turning to this exhibit in front
3 of you, does this appear to be an e-mail you
4 received from Kyle Andrews during your tenure at the
5 company?

6 A. Yes, it does.

7 Q. Do you recall receiving this e-mail?

8 A. I mean, I don't remember...

9 Q. Do you have any reason to doubt that you
10 received this e-mail?

11 A. I have no reason to doubt that.

12 Q. Does this indicate to you that you
13 received access to the BEEF survey presentation?

14 A. Yeah. Yes.

15 Q. You can set that exhibit aside.

16 I'm going to hand you another exhibit,
17 which will be Exhibit 25.

18 (Whereupon, Meta-Lee Exhibit 25 was marked
19 for identification.)

20 THE WITNESS: Thank you.

21 BY MR. DUNBAR:

22 Q. Please feel free to take some time to
23 familiarize yourself with the document and let me
24 know when you're ready.

25 A. Uh-huh.

CONFIDENTIAL

Page 239

1 Q. Okay. Are you ready?

2 A. Yeah.

3 Q. Do you recognize this document?

4 A. I do.

5 Q. Does it appear to be a version of the BEEF
6 survey you received during your time at Instagram?

7 MS. BARNHART: Object to the form.

8 THE WITNESS: Yes, it does.

9 BY MR. DUNBAR:

10 Q. Okay. The title of this slide deck reads,
11 "Bad Experiences and Encounters Framework (BEEF)
12 Survey."

13 Do you see that?

14 A. Yes, I do.

15 Q. And do you see that it notes the data
16 collection period was June 27th to July 8, 2021.

17 A. Yes, I do see that.

18 Q. Okay. If you turn ahead to page 5, does
19 this indicate to you that the BEEF survey involved a
20 user survey where users reported whether they had
21 experienced a range of bad experiences within the
22 last seven days?

23 MS. BARNHART: Object to the
24 characterization.

25 THE WITNESS: Yes, that's right.

CONFIDENTIAL

Page 240

1 BY MR. DUNBAR:

2 Q. Okay. If you turn ahead to page 7, do you
3 see a slide titled "Sample size by issue"?

4 A. Yes, I do.

5 Q. At the bottom right corner of that slide,
6 do you see a cell in that graph that provides the
7 subtotal actual respondent number?

8 A. Yes, I do.

9 MS. BARNHART: Object to the form.
10 Foundation.

11 BY MR. DUNBAR:

12 Q. Does that indicate that over 237,000
13 respondents responded to this survey?

14 MS. BARNHART: Object to the
15 characterization. Foundation.

16 THE WITNESS: Sorry. I'm just reading the
17 text on the side to make sure I fully understand
18 this chart.

19 Yes, that's correct.

20 BY MR. DUNBAR:

21 Q. In your experience as a Ph.D.-trained
22 researcher, is 237,000 respondents a large sample
23 size?

24 A. It is a very --

25 MS. BARNHART: Object to the form.

CONFIDENTIAL

Page 241

1 THE WITNESS: For a survey, it is a very
2 large sample size.

3 BY MR. DUNBAR:

4 Q. And what would be the significance of a
5 sample size that large?

6 MS. BARNHART: Object to the form.
7 Foundation.

8 THE WITNESS: A sample size is important
9 for two things. The first is, does it provide you
10 enough statistical power to make inferences about
11 what's happening. But another way of treating
12 sample size is how -- what does sample size mean in
13 relation to the larger population that you care
14 about.

15 So another question that we would have is,
16 of the sample size here, a very large number,
17 237,923, it certainly would meet the criteria for
18 statistical significance.

19 BY MR. DUNBAR:

20 Q. Okay.

21 A. And let me just answer the second half of
22 that question, which is, that when we think about
23 the population statistics, though, the number of
24 users that are on our platform, which probably total
25 in the millions or maybe -- I don't know what the

CONFIDENTIAL

Page 242

1 number would be right now, 237 as a proportion of
2 that may be small in proportion to that larger
3 population.

4 So the follow-up questions that I would
5 have is to say is this 237 representative of that
6 larger population. At minimum, does it reflect sort
7 of the demographics that we would expect as a larger
8 population sample.

9 Q. Could you turn to page -- strike that.

10 In your research, you were particularly
11 focused on issue rates by surface, right?

12 A. Yes, that's correct.

13 Q. Will you turn to page 12, please.

14 A. Which one is that? Is that the one "Issue
15 rates by surface"?

16 Q. That's correct.

17 Do you see that?

18 A. Yes, I do.

19 Q. In that chart on slide 12, do you see a
20 column for Reels?

21 A. Yes, I do.

22 Q. Are there figures in that column that
23 concerned you?

24 MS. BARNHART: Object to the form.

25 THE WITNESS: I'd have to look very

CONFIDENTIAL

Page 348

1 THE VIDEOGRAPHER: Time is now 6:20.

2 Going off the record.

3 (Whereupon, a brief recess was taken.)

4 THE VIDEOGRAPHER: Okay. Time is now

5 6:26. Back on the record.

0

6 BY MS. BARNHART:

7 Q. Okay. Dr. Lee, could you please take out
8 Exhibit 16 from your pile, and this is a Workplace
9 post called "IG Relevance Integrity FYI" that
10 Mr. Dunbar asked you some questions about earlier.

11 Do you remember that?

12 A. That's right.

13 Q. And if you look at Exhibit 17, kind of
14 next to it, I just want to confirm, Exhibit 17, the
15 "Sensitive Reels Diary Study," that's the same study
16 that's being discussed in Exhibit 16, correct?

17 A. Yes, that's right.

18 Q. Okay. So let's -- let's look at
19 Exhibit 16 first.

20 And in the first two sentences you
21 described the methodology that you used for this
22 diary study, correct?

23 A. That's right.

24 Q. And you say you "asked 54 participants
25 (ages 13 to 24) to submit 374 Reels that they think

CONFIDENTIAL

Page 349

1 might be entertaining for some people, but
2 uncomfortable or upsetting to others."

3 Do you see that?

4 A. Yes, I do.

5 Q. I want to ask you a few questions about
6 this methodology.

7 Of the 54 participants, do you recall how
8 many were teenagers?

9 A. Oh, I'd have to look into the actual diary
10 study itself and the breakdown.

11 Q. Okay.

12 A. I don't recall.

13 Q. And I don't -- I don't recall seeing that
14 breakdown in any of the documents we've looked at
15 today.

16 Do you?

17 A. I don't.

18 Q. Okay.

19 A. Yeah.

20 Q. Fair to say, though, that not all 54 were
21 teenagers?

22 A. Yes, I think so.

23 Q. Okay. And your diary study asked these
24 participants to submit Reels that they thought might
25 be entertaining for some people but uncomfortable or

CONFIDENTIAL

Page 350

1 upsetting to others, right?

2 A. Yes, that's right.

3 Q. So this was not content that the
4 participants necessarily thought were uncomfortable
5 or upsetting, right?

6 MR. DUNBAR: Object to the form.

7 THE WITNESS: Correct. We deliberately
8 used the language of uncomfortable or upsetting to
9 others as a third objective other. Because we
10 didn't want them to name necessarily that the
11 sensitivity was for themselves.

12 However, we did ask them a follow-up
13 question -- two follow-up questions, for every Reel
14 that they submitted, which was: Number one, how --
15 how personally entertaining do you find this Reel to
16 be, and how personally upsetting or uncomfortable or
17 upsetting do you find it to be. And that's covered
18 in the slides later on.

19 The reason why was we wanted to source as
20 many possible sensitive Reels as possible without
21 anchoring it on their own personal sense of
22 upsetting or uncomfortable.

23 BY MS. BARNHART:

24 Q. Why don't we look to the slides in
25 Exhibit 17. If you turn to slide 5, I just want to

CONFIDENTIAL

Page 351

1 clarify.

2 So this chart is showing data relating to
3 the 347, it looks like here, Reels that you asked
4 participants to submit, correct?

5 A. Yes, that's right.

6 Q. And this chart doesn't tell us anything
7 about whether those participants personally found
8 any of this content to be objectionable or
9 uncomfortable, right?

10 A. It's on the subsequent page. That's what
11 the subsequent chart is telling us.

12 Q. And what is -- so you're looking at
13 page 6?

14 A. That's right. The green and red chart.

15 Q. Do you know what, precisely, the question
16 was asked for this -- for this that's shown in this
17 chart?

18 A. It doesn't say on here. I would assume
19 that it would mirror the language that we use in the
20 BEEF survey or TRIP survey, because we try to be as
21 consistent in the way we ask this question as
22 possible.

23 Q. And so you're confident -- your testimony
24 here today is that the question asked was whether
25 the users personally found the content upsetting,

CONFIDENTIAL

Page 352

1 not whether -- how likely they were to rate -- let
2 me start over.

3 Your testimony here today is that this
4 survey asked whether users personally found the
5 content uncomfortable or upsetting, not whether the
6 users thought other people would find the content
7 uncomfortable or upsetting?

8 MR. DUNBAR: Object to the form.

9 THE WITNESS: I'm trying to recall. Give
10 me one moment.

11 Yes. I think that the question that we
12 asked was, rate for us on a scale of 1 to 5, with 5
13 being the most uncomfortable or the most
14 entertaining and 1 being the least entertaining or
15 least discomfort, you find this Reel.

16 BY MS. BARNHART:

17 Q. Okay. There is nothing in Exhibit 16 or
18 Exhibit 17 that reflects those kinds of questions,
19 right?

20 MR. DUNBAR: Object to the form.

21 THE WITNESS: I don't think we ever put
22 the explicit language in here.

23 BY MS. BARNHART:

24 Q. So you're not confident that that, in
25 fact, was asked, because the only question that is

CONFIDENTIAL

Page 353

1 explicitly referenced in these documents is whether
2 the research participant thought other users would
3 find the content uncomfortable or upsetting,
4 correct?

5 MR. DUNBAR: Same objection.

6 THE WITNESS: We named here users
7 perceived the entertainment and harm value of a Reel
8 differently by integrity type. That's what's
9 indicated in Exhibit 16.

10 And then in 17, the title was, we asked
11 users to rate how uncomfortable or upsetting for
12 each Reel submission, and the scores that were
13 produced below.

14 BY MS. BARNHART:

15 Q. So if you go back to slide 5, am I correct
16 that the takeaway from this data is that classifiers
17 aren't perfect?

18 MR. DUNBAR: Object to the form.

19 THE WITNESS: This is explicitly naming
20 that there are both content that is not being
21 classified -- that is either -- in the instances,
22 for example, of nudity and suggestive or drug,
23 alcohol or tobacco sale, should have been caught by
24 the classifiers but was still being shown to users.
25 Or the policies that we were using to train these --

CONFIDENTIAL

Page 354

1 these content types on, were not sufficient to cover
2 the kinds of content that users were saying were the
3 most harmful.

4 So I'll give you an example. Under Animal
5 Cruelty, it is one of the -- it is the -- at the
6 very bottom of the slide 5, of the 24 sample --
7 samples that they submitted that they considered
8 animal cruelty, only 16.7 percent of them were
9 considered non-recommendable. And yet, when you
10 look on slide 6, when we looked at animal cruelty,
11 it had one of the higher ratings of discomfort
12 associated with it.

13 BY MS. BARNHART:

14 Q. All right. You can put this document
15 away.

16 So aside -- well, you did a number of
17 research studies when you worked in the relevance
18 integrity team at Meta, correct?

19 A. Yes, that's right.

20 Q. And you've testified today, broadly, about
21 the general categories of actions you believe should
22 have been taken at Instagram based on your research,
23 correct?

24 MR. DUNBAR: Objection to form.

25 THE WITNESS: Yes. I proposed a number of

CONFIDENTIAL

Page 355

1 proposed product changes.

2 BY MS. BARNHART:

3 Q. Okay. And I want to talk through those
4 specific product changes that you testified about
5 earlier today.

6 So one category of, you know, actions to
7 take in response to your research that I heard were
8 what you called P0 goals.

9 Do you remember discussing P0 goals?

10 A. P0 goals both in --

11 MR. DUNBAR: Object to the form.

12 THE WITNESS: -- my own research, so it
13 was like priority -- the highest priority research
14 that we would do, for myself. I don't know if I
15 ever talked about -- oh, I did. I talked about the
16 P0 goals for the larger team.

17 BY MS. BARNHART:

18 Q. Okay. And, in your view, those were the
19 highest priority actions that Instagram should take,
20 right?

21 MR. DUNBAR: Object to the form.

22 THE WITNESS: For the goals for the team,
23 I did not set those by myself. Those are actually
24 the P0s, P1s and P2s that were set by the entire
25 team. So the -- set by engineering, by our PMs and

CONFIDENTIAL

Page 356

1 by our data scientists.

2 BY MS. BARNHART:

3 Q. Okay. What I'm referring to specifically,
4 and I'll try to find the document, were the two P0
5 goals that you set for yourself relating to research
6 that you wanted to do.

7 A. Yeah.

8 Q. It's Exhibit 8.

9 A. That's separate. Yeah, those are the P0s
10 that I defined for myself.

11 Q. Okay. And just so we're clear, the -- you
12 have identified two P0 self-identified goals today?

13 A. Uh-huh.

14 Q. Is that right?

15 A. Those were --

16 MR. DUNBAR: Object to the form.

17 THE WITNESS: Yeah, self-identified and
18 approved by my manager. So there would be a point
19 where I would get feedback from my cross-functional
20 team and my manager to ensure those are, in fact,
21 the most important P0s. So they're not done in a
22 vacuum.

23 BY MS. BARNHART:

24 Q. Okay. And the two P0s that you identified
25 were two research studies that you wanted to

CONFIDENTIAL

Page 357

1 conduct, the diary study and the interview study; is
2 that right?

3 A. Yes, that is correct.

4 Q. Okay. And, in fact, both of those studies
5 were approved, correct?

6 MR. DUNBAR: Object to the form.

7 THE WITNESS: Eventually, they were
8 approved. I think, when we reviewed the documents,
9 it was January 5th or something like that that they
10 were finally approved. So eventually, but not in H2
11 of 2021.

12 BY MS. BARNHART:

13 Q. Okay. But they were approved, so your two
14 P0 goals that you self-identified were approved
15 eventually?

16 MR. DUNBAR: Asked and answered. Object
17 to form.

18 THE WITNESS: They were set in
19 September -- September 21st, and they were approved
20 January 5th, so three months later.

21 BY MS. BARNHART:

22 Q. Okay. And can you recall any other P0
23 goals that you identified?

24 A. That were not part of this?

25 Q. Correct.

CONFIDENTIAL

Page 358

1 A. We have one that was about amplification
2 and rabbit holes.

3 Q. What was the specific product
4 recommendation, if anything, or research
5 recommendations?

6 A. Research recommendation. The research
7 recommendation was that there were both user
8 reports, and, at the time, there was also a Wall
9 Street Journal investigation that showed how easily
10 it was for people to fall into bad rabbit holes.

11 Rabbit holes are what we call bad
12 amplified states. That means when you -- and we
13 found that cold starts in particular, or being a
14 brand-new user on the platform made it very easy for
15 you to fall into those rabbit holes or those bad
16 amplified states.

17 What that means exactly is, let's say you
18 created a new account on Instagram. At that point,
19 we have very little signal about who you are, what
20 you like, what your interests are. But it just so
21 happens that you follow one account about cookies.
22 Okay. Now, that topic can be anything. It just so
23 happens that you chose a benign topic like cookies.
24 Well, because that is the earliest and only signal
25 that we have, what we found was that the algorithm

CONFIDENTIAL

Page 359

1 over-indexed on that single piece of information and
2 started spamming you with cookie content.

3 Now, that's just an undesirable user
4 experience regardless, right. That was an
5 engagement problem. But what we -- what the Wall
6 Street Journal investigation uncovered and
7 accelerated through our research was that those
8 amplified states also apply to things like political
9 polarization, sexually suggestive content, regulated
10 goods content, and other non-desirable content.
11 That was very easy to fall into bad rabbit holes of
12 this bad content. So that was another P0 of
13 research that was a priority for the team.

14 Q. By non-desirable content, do you mean not
15 policy-violating content?

16 A. Non-recommendable content and/or
17 potentially policy violating that we're not catching
18 either.

19 MR. DUNBAR: Objection. Form.

20 BY MS. BARNHART:

21 Q. And what was your specific P0 goal that
22 you articulated with respect to this research?

23 A. The goal was to, number one, identify what
24 are the gateways or what are the mechanisms with
25 which people fall into bad rabbit holes. And then

CONFIDENTIAL

Page 452

1 MS. BARNHART: Object to the
2 characterization.

3 THE WITNESS: Can you specify what you
4 mean by "conduct"?

5 BY MR. DUNBAR:

6 Q. So I'll -- I'll re-ask the question.

7 Do you recall some discussion with Meta's
8 lawyer about whether the harms you identified in
9 your research were harms arising out of content?

10 A. Exposure to content, yes.

11 Q. Right.

12 Will you agree that the problems that you
13 identified on the Reels product weren't about
14 content in a vacuum, but were rather about content
15 plus the recommendations systems on Instagram?

16 MS. BARNHART: Objection. Objection to
17 form. And the characterization.

18 THE WITNESS: Yes, that's correct. Not
19 only was it the exposure to the content, but it was
20 also the ML models that were presenting that content
21 to users. And also, the inadequacy of the integrity
22 models to try to suppress bad content despite the
23 best efforts of an underresourced team.

24 BY MR. DUNBAR:

25 Q. For example, we talked about Meta's

CONFIDENTIAL

Page 453

1 algorithm affirmatively pushing videos that were
2 non-recommendable according to Instagram's own
3 rules, right?

4 MS. BARNHART: Object to the
5 characterization. Foundation.

6 THE WITNESS: Instagram was pushing videos
7 writ large in any way that they could. Those
8 included videos that were benign and also known to
9 have higher rates of non-recommendable content.

10 BY MR. DUNBAR:

11 Q. And in some cases, we talked about
12 occasions where the content that the algorithms were
13 surfacing even fell into the violating category by
14 Meta's categories, right?

15 MS. BARNHART: Object to the
16 characterization.

17 THE WITNESS: Yes, not only
18 non-recommended but violating.

19 BY MR. DUNBAR:

20 Q. And your research found that Instagram
21 Reels was distributing Reels content in ways that
22 young users did not want, right?

23 MS. BARNHART: Object to form.
24 Characterization.

25 THE WITNESS: I think rather than using

CONFIDENTIAL

Page 454

1 the language of saying that users did not want, I
2 think it was not in the way that teen users desired
3 as their optimal audience. And by not meeting their
4 needs for their desired audience, it was exposing
5 them to unwanted interactions and unwanted
6 audiences.

7 BY MR. DUNBAR:

8 Q. And it also found -- your research also
9 found that Instagram Reels was serving users content
10 they did not want to see, right?

11 MS. BARNHART: Object to form.
12 Characterization.

13 THE WITNESS: Yes, according to the diary
14 studies, it's clear there was content that was
15 marked as undesirable by users that they were
16 finding on unconnected surfaces.

17 BY MR. DUNBAR:

18 Q. So would you agree, then, that your
19 research showed that harms associated with Reels
20 weren't just about the content in and of itself,
21 rather the decisions Instagram's algorithms made
22 about what content to promote --

23 MS. BARNHART: Object to form.
24 Characterization. Foundation.

25 MR. DUNBAR: I hadn't yet finished my

CONFIDENTIAL

Page 455

1 question, Counsel.

2 MS. BARNHART: It sounded like you did.

3 MR. DUNBAR: Let me ask it again.

4 BY MR. DUNBAR:

5 Q. So would you agree, then, that your
6 research showed that harms associated with Reels
7 weren't just about the content in and of itself, but
8 rather the decisions Instagram's algorithms made
9 about what content to promote to users?

10 MS. BARNHART: Object to form.
11 Characterization. Foundation.

12 THE WITNESS: I don't think it was an
13 explicit decision that was being made on behalf of
14 any engagement or product lead to say we're going to
15 show undesirable content to users. The decision and
16 the choice was to prioritizing recommending whatever
17 most engaging, most compelling content and videos
18 that were on Reels to as many users as possible. So
19 it wasn't an explicit decision.

20 But it was a consequence, a known
21 consequence that by sharing lots and lots of videos
22 to as many users as possible, part of the -- the
23 videos that were being shown were -- included
24 non-recommendable content that they knew existed at
25 a higher rate than on other products and surfaces.

CONFIDENTIAL

Page 456

1 BY MR. DUNBAR:

2 Q. And do I correct -- recall correctly your
3 testimony that the company could have invested more
4 in the teams responsible for fixing those kinds of
5 problems?

6 MS. BARNHART: Object to the form.
7 Characterization. Foundation.

8 THE WITNESS: Yes. I believe that the
9 company could have invested more in resources, time,
10 energy, head count, and also taken action more
11 quickly and more effectively in response.

12 BY MR. DUNBAR:

13 Q. And in any case, would you agree that
14 Instagram did not warn users about some of your
15 findings about those harms?

16 MS. BARNHART: Object to form.
17 Characterization. Foundation.

18 THE WITNESS: None of my research was
19 shown publicly. It was not intended for a public
20 audience. But even if they did not share explicit
21 research -- my explicit research to a public
22 audience, I do not think that they named the
23 severity and reach of these challenges on their
24 platform.

25 Even the press releases only outlined --

CONFIDENTIAL

Page 457

1 used very vague language around "may" and "we don't
2 want that." But it didn't name that these are real
3 things that were happening nor the rate of those
4 experiences.

5 BY MR. DUNBAR:

6 Q. And your research led you to believe that
7 people were having those kinds of experiences,
8 right?

9 A. Yes. In fact, they were reporting them at
10 higher rates than what we were detecting.

11 Q. For example, we discussed several
12 studies -- strike that.

13 We looked at other studies like BEEF that
14 were not made public, right?

15 A. We looked at BEEF, yes.

16 Q. And you'd agree that the decision to not
17 be fully transparent about the risks that Instagram
18 posed to young users in particular, that lack of
19 transparency could lead to more harm?

20 MS. BARNHART: Object to form.
21 Characterization. Foundation.

22 THE WITNESS: I think that what they were
23 sharing in their CSER report was an -- a
24 deliberately incomplete picture in an underreporting
25 of the rate of harmful content and experiences that

CONFIDENTIAL

Page 458

1 were happening on our platform.

2 BY MR. DUNBAR:

3 Q. To that point, we looked at affirmative
4 statements by Meta that presented a slant impression
5 of Instagram's safety, such as CSERs and the
6 annotated slide decks, right?

7 MS. BARNHART: Object to the
8 characterization.

9 THE WITNESS: Yes.

10 BY MR. DUNBAR:

11 Q. Would you agree that by creating the
12 impression that Instagram was safer than it really
13 was, that could contribute negatively to youth
14 safety, too, right?

15 MS. BARNHART: Objection to the form.
16 Characterization. And foundation.

17 THE WITNESS: I think by underreporting
18 and diminishing the findings that were leaked, and
19 underreporting the prevalence of that, that they
20 prevented the public from understanding the rate and
21 severity of the risks that are associated with being
22 on the platform, particularly for young people.

23 BY MR. DUNBAR:

24 Q. You received some questions from Meta's
25 lawyer getting at the notion that integrity issues

CONFIDENTIAL

Page 459

1 are really hard problems. Is that fair to say?

2 A. Yes.

3 Q. But would you also agree that social media
4 companies have an obligation to make their best
5 efforts to address issues they know exist on their
6 platforms?

7 MS. BARNHART: Object to the form.
8 Foundation.

9 THE WITNESS: I think the difficultness of
10 a problem or the bigness of a problem is not an
11 indicator of whether or not that problem is a
12 priority over a problem to be solved or not.

13 As I named earlier, when it comes to
14 complexity around these problems, what it ultimately
15 comes down to is who is at risk as a consequence of
16 these decisions. Whose safety are we prioritizing,
17 whose voice are we prioritizing, who is closest to
18 safety and who is farthest from safety.

19 And so on that -- in that regard, I think
20 those questions were not the leading questions that
21 dictated the way that Meta acted or else they would
22 have taken young people, who are the most vulnerable
23 people in our society, their safety and well-being
24 more seriously and would have acted accordingly.

25 ///

CONFIDENTIAL

Page 460

1 BY MR. DUNBAR:

2 Q. During your tenure at Instagram, do you
3 feel like the company did enough to warn users about
4 the bad experiences they might encounter on the
5 platform?

6 MS. BARNHART: Object to the form.
7 Characterization. Foundation. Asked and answered.

8 THE WITNESS: No, I do not think that they
9 did a sufficient job.

10 BY MR. DUNBAR:

11 Q. During your tenure at Instagram, do you
12 feel like you did everything in your power to try to
13 reduce known unsafe experiences teens were having on
14 Instagram?

15 A. I think I did the best that I could with
16 the locus of control that I had as a researcher.

17 Q. During your tenure at Instagram, do you
18 feel that the company's leadership did the same?

19 MS. BARNHART: Object to the form.
20 Foundation.

21 THE WITNESS: I think that the leaders at
22 Instagram, their attention and their priorities were
23 elsewhere. Namely, in growing their product,
24 growing the platform, and increasing engagement. I
25 would say that they perhaps cared as a third or

CONFIDENTIAL

Page 461

1 fourth order priority about safety and well-being.

2 I don't think that they did not care at
3 all. And I would say that those other concerns
4 about engagement and growing the platform and
5 product superceded those concerns about safety.

6 MR. DUNBAR: No further questions.

7 Thank you again, Dr. Lee.

8 MS. BARNHART: Nothing further from me.

9 So we can go off.

10 THE VIDEOGRAPHER: Counsel for Meta's
11 total time on the record was 3 hours and 1 minute.

12 Plaintiffs' counsel total time on the
13 record was 5 hours and 37 minutes.

14 (Whereupon, a brief discussion off the
15 record.)

16 THE VIDEOGRAPHER: All Tennessee. Sorry.
17 All Tennessee for 5 hours and 37 minutes.

18 This concludes the deposition. Going off
19 the record.

20 (Whereupon, a brief recess was taken.)

21 MR. WARD: I would like a copy. I would
22 like a copy of the transcript, please.

23 (Whereupon, the deposition was concluded
24 at 8:53 p.m.)
25

CONFIDENTIAL

Page 465

1 STATE OF CALIFORNIA)

2 COUNTY OF YOLO)

3 I, ELAINA BULDA-JONES, a Certified Shorthand
4 Reporter of the State of California, duly authorized
5 to administer oaths pursuant to Section 2025 of the
6 California Code of Civil Procedure, do hereby
7 certify that

8 ALISON LEE, Ph.D.,
9 the witness in the foregoing deposition, was by me
10 duly sworn to testify the truth, the whole truth and
11 nothing but the truth in the within-entitled cause;
12 that said testimony of said witness was reported by
13 me, a disinterested person, and was thereafter
14 transcribed under my direction into typewriting and
15 is a true and correct transcription of said
16 proceedings.

17 I further certify that I am not of counsel or
18 attorney for either or any of the parties in the
19 foregoing deposition and caption named, nor in any
20 way interested in the outcome of the cause named in
21 said deposition dated the _____ day of
22 _____, 2025.

23
24 

25 ELAINA BULDA-JONES, CSR 11720