

AMENDED Exhibit 35

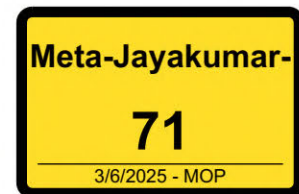
PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

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

MDL No. 3047

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

Document Provided in Native Format

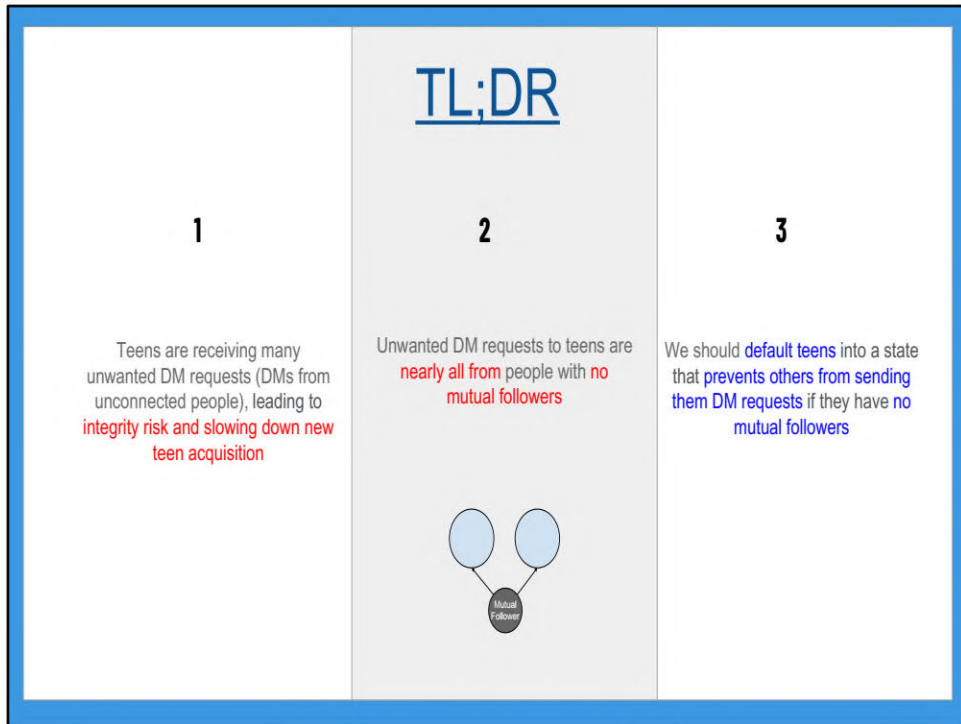




Unwanted DM Requests to Teens

March 2022

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Proposal

Given the vulnerability of teens, we recommend a **medium prescriptive approach** over a **mild one**. Existing solutions focused on severe violations will remain in place.

more prescriptive

1. Strong: Block

Block all DM requests to teens from senders with no mutual followers. Teens can't opt out.

2. Medium: Default

By default, teens will not get DM requests from people with no mutual followers. Teens who still want to get DM requests from these people can opt-in via a graph-based control.

3. Mild: Nudge

The teen default experience will be as before. Create a **graph-based control** for who can DM request you, and nudge teens towards that control when we think they are receiving unwanted DM requests.

Background

What are unwanted DM requests, and how do they relate to teen integrity and acquisition risks?

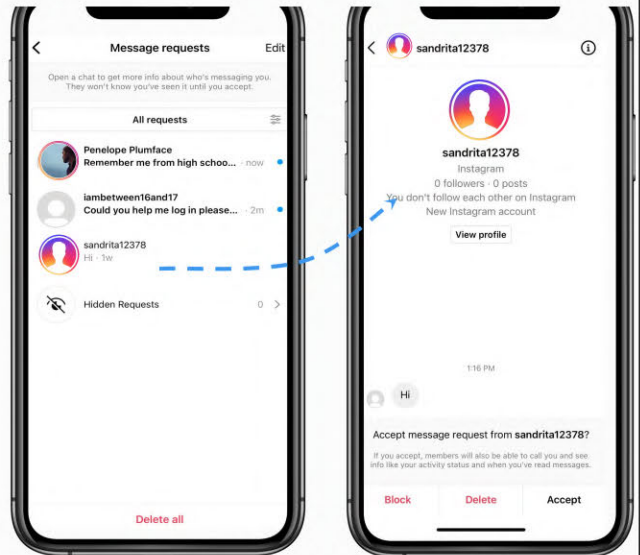
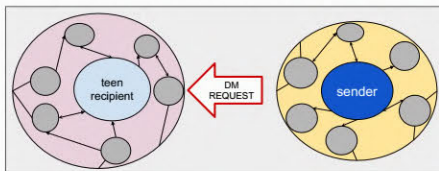
**Unconnected DMs = DM requests,
and
most DM requests are unwanted**

What are DM Requests?

DMs from people you don't follow land in the *Requests* folder

- DMs from people you do follow go directly to your Primary inbox
- **DMs from unconnected people = DM requests**, in IG's privacy model
- This model is the same for public vs. private accounts, and those with high follower counts.

DM Request to Teen from an Unconnected Sender



sandrita12378, who you don't follow, sent you a DM request

If you want to respond, you have to tap Accept, which pulls the DM out of Message requests into Primary

Following definitions from UXR, for IG someone is “unconnected” to you if you don’t follow them on IG. In being “connected”, we also include edge cases of interacting with them on Messenger or being friends with them on Facebook.

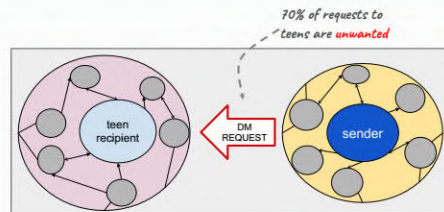
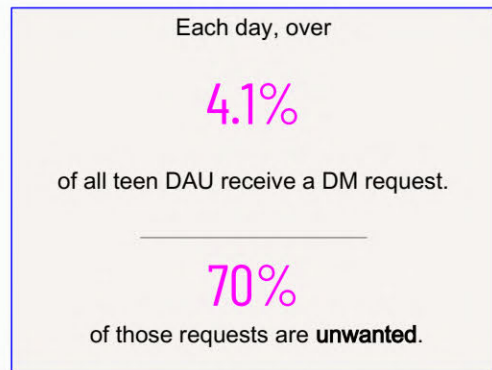
See slide on more background on the definition of an unwanted message

https://docs.google.com/presentation/d/1E3zAmtCsfel3MXyDbspti3ECeh5PT-QmCE04dhajJ0s/edit#slide=id.g1131d1bf08f_0_126

What are Unwanted DMs?

Based on a framework from the FB Messenger team, a DM is "**unwanted**" if it receives at least one of the following responses from the recipient:

- Negative account response (**high** severity/confidence it is unwanted)
 - **Restrict**
 - **Block**
 - **Mute messages**
 - **Report**
 - **Unfollow**
- Negative thread actions (**medium** severity/confidence it is unwanted)
 - **Delete**
 - **Ignore**



(a) Negative responses are defined as occurring with 7d of receipt, following the Messenger Integrity team
 (b) Here ignore is passive, defined as not Accepting the request within 7d of receipt
 (c) Framework based off of FB Messenger unwanted message classification ([link](#))
 (d) Estimates of % DAU are underestimates, since due to EPD, data excludes EUJ.
 (e) Each day, over 2.6% of all DAU receive a DM requests. Over 58% of those are unwanted.
 (f) Throughout this analysis, "teens" are IG's best estimate of actual teens, defined as coalesce(predicted teens, stated teens). Prediction has 80% recall and 95% precision in the US ([link](#))
 (g) % of the DM requests are impressed

See slide on more background on the definition of an unwanted message
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Unwanted DM requests are **integrity**
and **acquisition risks** for teens

Major Integrity and Acquisition Risks for Teens from Unwanted DMs, According to UXR

- **DM's are the most problematic interaction vector for teenagers on Instagram,** including bullying, harassment, and more severe violations. ([link](#))
- For early teens (13-15) in the US, lack of parent approval is the top reason they **do not have an IG account**, and the #2 reason they believe their parents are not OK with them using IG is **unwanted people they don't know contacting them** ([link](#))

"Inappropriate interactions are common... many users (particularly young girls), even expect to have these experiences when using Instagram,"-- external child safety partners ([link](#))

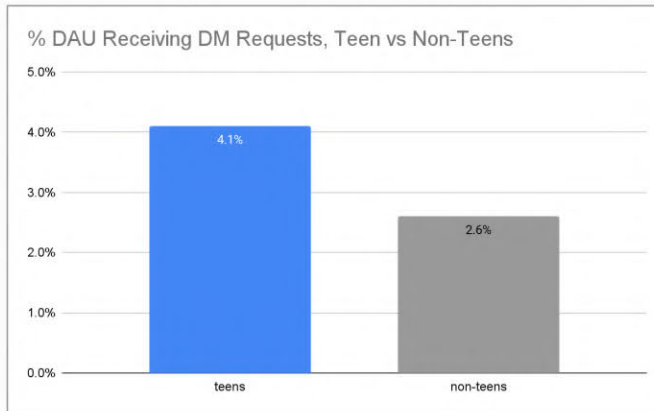
In recent interviews with external child safety partners, a key issue that they cite is that

()

Teens are More Likely to Receive DM requests...

Teens are 50% more likely than non-teens to to receive a DM request

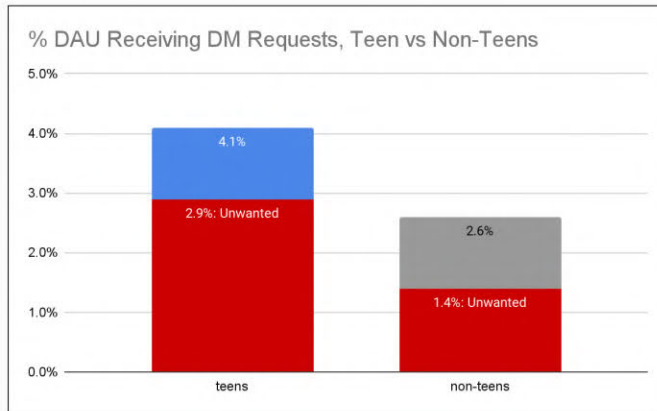
4.1% of Teen DAU receive a DM request, vs 2.6% of non-Teen DAU.



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(b) Estimates of % DAU are underestimates, since due to EPD, data excludes EU.

... and Teens get a Larger Share of DM Requests that are Unwanted**Teens are 2x likely than non-teens to receive an unwanted DM request**

2.9% of Teen DAU receive an unwanted DM request, vs 1.4% of non-Teen DAU.

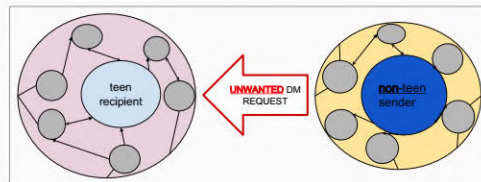


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How can we prevent teens from receiving unwanted DM requests?

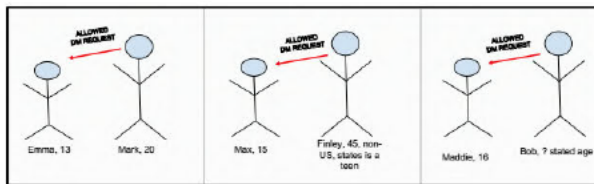
Who should be able to send a teen a DM request?

Previous solutions focused on DM requests to teens **sent from non-teens.**

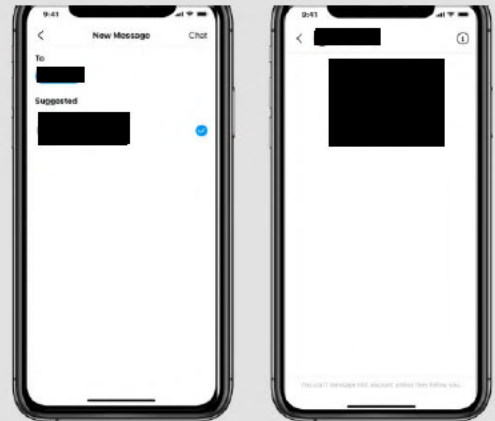


IG's Previous Effort to Block Non-teens from Sending DM Requests to Teens

- A year ago, we promised to block teens from receiving DM requests from non-teens ([link](#))
- We **still allow** the following types of senders to make DM requests to teen DAU:
 - Senders with stated age 18-20 (35% of DM requests to teens)
 - Senders with no stated age (18% of DM requests to teens)
 - Senders outside the US who state they are teens, but may not be teens



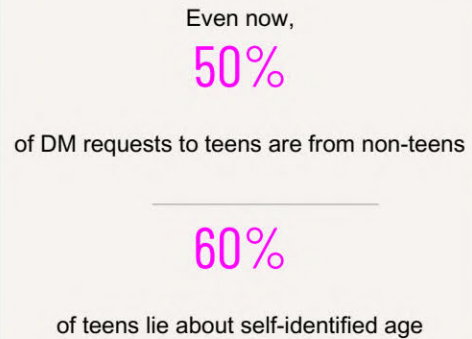
Sender POV, IG's Previous Effort



* Throughout this analysis, “teens” are IG’s closest estimate to actual teens, defined as coalesce(predicted teens, stated teens). It has 80% recall and 95% precision in the US ([link](#))

Previous Effort to Block Non-teens from Sending DM Requests to Teens Haven't Solved Teen Problems

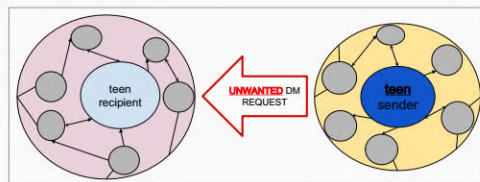
- In practice, **there have been many gaps in fulfilling our promise:**
 - In blocking DM requests, we use stated age everywhere outside the US, but 60% of actual teens lie and say they're non-teens*
 - Even now, 50% of DM requests to actual teens are from non-teens
- **Unwanted DM requests are still a top user problem:** all UXR research cited took place *after* this product was launched



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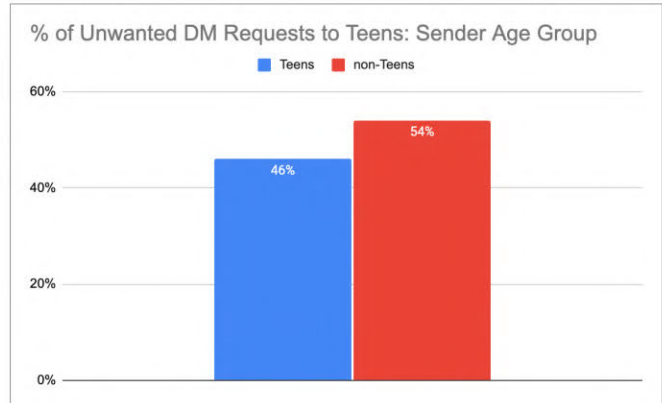
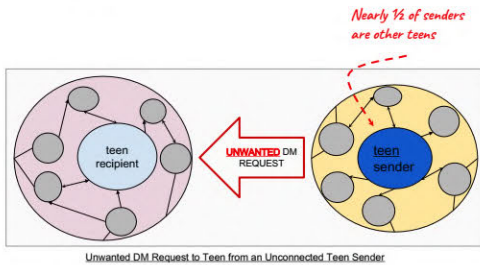
2) 60% figure from core dims figures, which show 40% recall for stated age, see ([link](#))

DM requests to teens **from other teens** are just as problematic.



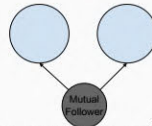
Nearly ½ of Unwanted DM Requests to Teens are from Other Teens

- 70% of DM requests to teens are unwanted
 - 54% of those requests are sent by non-teens
 - **46% of those requests are sent by other teens**

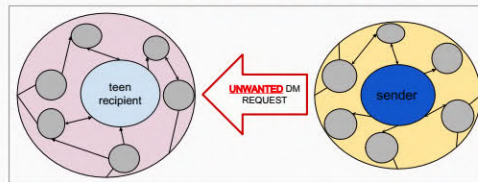


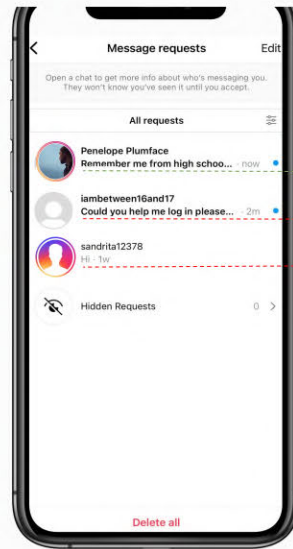
TODO: Look for supporting analysis from bullying work to put in speaker notes
 Even if we effectively block all DM requests to teens from non-teens, we still allow teens to receive the 46% of unwanted message requests that are from other teens

* INSIGHT *



Unwanted DM requests to teens are nearly all from people with **no mutual followers**





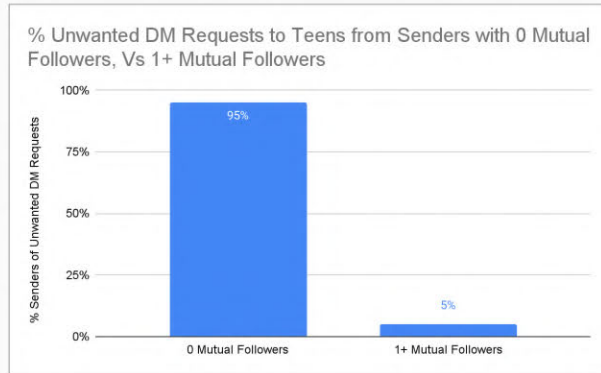
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95% of Unwanted DM Requests to Teens are From People with 0 Mutual Followers

- Out of all unwanted DM requests to teen dau, 95% are from people with no mutual followers
- Only 5% of unwanted requests to teens have at least 1 mutual follower



Opportunity: By Default, Block DM Requests from No-Mutual-Follower Senders to Teens

70%

of all DM requests to teens are unwanted

VS

.

3%

of all DM requests to teens are unwanted if there is **at least 1 mutual follower** between sender and teen

70% (% of all requests that are unwanted) * 95% (% of unwanted from 0 mutual followers) = 67 % (% of all requests that are unwanted, with exactly 0 mutual followers).

... Eliminating the 67% from 70% gives 3%.

Blocking Could Prevent Some Wanted DM Requests

- While over $\frac{2}{3}$ of DM requests to teens are unwanted and are from people with 0 mutual followers, $\frac{1}{4}$ of DM requests to teens:
 - Have no signals that they are unwanted
 - From people with 0 mutual followers
- Until we understand more about which DM requests are wanted, we may want to adopt a more flexible approach than fully blocking, like applying defaults so teens can opt out

Blocking DM requests from 0-mutual-follower-senders would have a:

capture rate of

96%

and precision of at least*

71%

... on unwanted DM requests to teens

* 71% precision assumes that "not unwanted" messages are all valuable, so likely an underestimate of precision of blocking.

Proposal

Given the vulnerability of teens, we recommend a medium prescriptive approach over a mild one. Existing solutions focused on severe violations will remain in place.

more prescriptive

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Block all DM requests to teens from senders with no mutual followers. Teens can't opt out.

2. Medium: Default

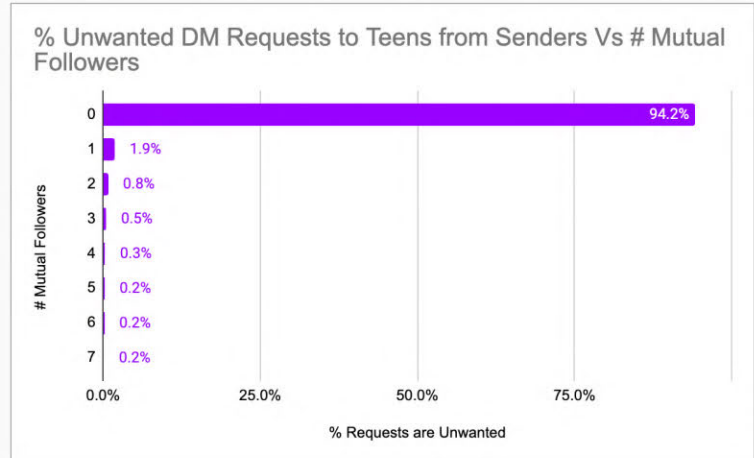
By default, teens will not get DM requests from people with no mutual followers. Teens who still want to get DM requests from these people can opt-in via a follower-based control.

3. Mild: Nudge

The teen default experience will be as before. Create a follower-based control for who can DM request you, and nudge teens towards that control when we think they are receiving unwanted DM requests.

Dramatic Difference in Share of Unwanted DM Requests from 1+-Mutual-Follower Senders

- Out of all DM requests to teens from senders with at least 1 mutual follower, less than 6% are unwanted
- By contrast, over 94% of message requests from senders with 0 mutual followers are unwanted



<https://fburl.com/daiquery/n5d5urpx>

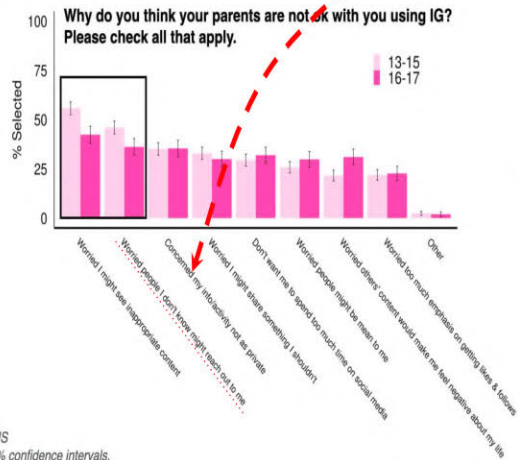
Unwanted DMs are Critical Problem Leading to User Churn, According to UXR and Legal/Policy

- **Unwanted DMs from unconnected people are top privacy people problems**, according to the H2 2021 survey on the Privacy and Severity of People Problems ([link](#))
- In a survey with **churned users** in U.S., Japan, Brazil and India ([link](#))
 - 17% of respondents churned because of negative experiences on IG
 - Of those 17%, 11% it was due to **unwanted contact**
- The IG legal/policy teams have identified unwanted messages from unconnected people as **high value** people problems to address ([link](#))

Receiving ≥ 1 message with a negative action (or a non-action) following 7d

From UXR, "Teen Barriers to Joining Instagram" (Vitousek, 2022: [link](#))

Privacy concerns and unwanted interactions are common reasons US guardian's are not OK with their teens using IG



Unwanted
message requests
to teens

Public Teen DAU Receive the Highest Volume of DM Requests

- **Public teens are 50% more likely to receive a DM request than Public non-teens:** 5.1% of Public teen DAU receive a DM from an unconnected user each day, vs 3.5% of Public non-Teens
- **Private teens are 70% more likely to receive an unconnected DM than Private non-teens:** 2.7% of Private teen DAU receive a DM from an unconnected user each day, vs 1.6% of private non-teens

% DAU Receiving DMs from Unconnected People

