

AMENDED Exhibit 228

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

Unpacking “Rewarding Experiences”

All of us at Instagram have the benevolent goal to make our products and features a positive experience for people. We want to add value to their lives on a daily basis, by providing a platform to connect to the people and interests they love. **So, how do we ensure we fulfill our mission, not only functionally, but in a way that makes daily usage deeply rewarding?**

Commented [1]: I'd bring in the mission here to give us the umbrella that rallies us all in the opening sentence .

We conducted 1 hour in-depth interviews with 12 people (4 teens, 4 young adults, 4 adults) with low to high Instagram engagement to uncover what reward means to them in the context of Instagram and competitor apps (Snapchat, TikTok and Youtube). We synthesized this data with academic literature to understand how this aligns with habitual behavior cycles.

TLDR:

- As expressed by participants and defined by the psychological motivation cycle, reward is the satisfaction one feels when they achieve the desired outcome from actions they have taken to fulfill a need. This means, when an app does the job it was hired to do consistently, quickly and effectively, usage of the app itself is perceived as a rewarding experience overall by users.
- Participants described three experiences that produced deep feelings of reward when using Instagram and/or any one of the competitor apps:
 - Building relationships (existing or new)
 - Discovering desirable content
 - When either of these led to a real-world outcome (such as hanging out, making money, starting a project, etc).
- The ratio of time spent to reward received was perceived as unsatisfactory on Instagram. Participants did not feel rewarded as often or as deeply on Instagram in comparison to competitor apps.
- The path to satisfying their intent had a major impact on the participants' perception of how rewarding using the app was. In comparison to competitors, the combination of content and interactions on Instagram presented distractions that could easily derail the user from fulfilling their intent faster.
- When reward was reached less often or slower than expected, people described opening the app habitually and using it passively instead of intently. This was the case for many participants who used IG.

Commented [2]: since I see that you looked at the academic lit and talked to people, I'm curious where this definition is drawn from? or is this the conclusion across both parts?

Recommendations

1. Reward users by contributing more to their higher level intrinsic motivations.
 - a. **Building Relationships:** Building relationships requires a reciprocal interest between people. Today that reciprocity is mainly expressed through lightweight interactions that some users perceived as superficial and didn't help them further their connection. Focusing on conversation starters or profile features that help connections easily identify things they have in common can increase the opportunity for users to deepen their connection.

- b. **Discovering Desirable Content:** Identify differentiated account use cases (finsta, interest acct, business acct, etc.) and use those distinctions to help users build a graph that will more directly deliver the rewards associated with their intent.
- c. **Discovering Desirable Content:** Encourage users to leverage search to reliably find the people and content that they want. Elevating the search experience will take some of the oneness off of passive discovery surfaces (Like Feed, Reels and Explore) to predict what users want at a session level by giving them the ability to find it on their own.
- d. **Real-World Outcomes:**
 - 2. Increase the perception of reward reliability by leveraging want-rate for notifications at the user level to reduce friction and distractions and ensure a rewarding outcome for each notification they receive.
 - 3. Invest in interventions that help people (especially young people) control their usage. The IG Well-Being team has proposed several solutions that have been well received in research. We should continue to explore, iterate and test these tools and track satisfaction with usage over time upon implementing them.

Feeling rewarded

Reward is the satisfaction one feels when they achieve the desired result of an action they have taken to fulfill a need. This means, when an app does the job it was hired to do consistently, quickly and to satisfaction, the app is perceived as a rewarding experience overall.

Furthermore many people say they are overwhelmed by their media consumption habits, but they reflect on their app session positively when they have had a rewarding or satisfying experience.

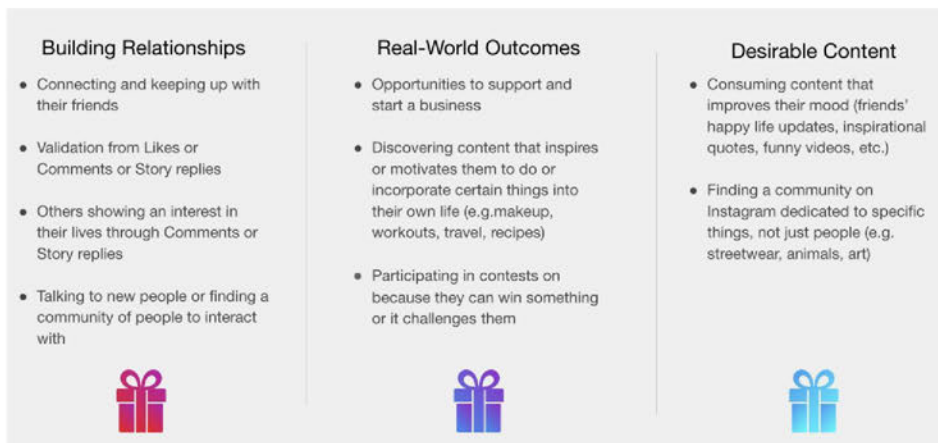
Participants in our research study said they felt rewarded most when they **connected with friends** (existing or new), when they **consumed content that resonated with them** and when either of these led to a **real-world outcome** (such as hanging out, making money, starting a project, etc).

When these things occur participants said they had positive emotions around excitement, curiosity, contentment and fulfillment.

Commented [3]: again, would be helpful to know if this is based on a prior definition or how the participants described it. for example, in the behavioral neuroscience literature, reward is often primarily defined by its impact on learning and behavior, rather than subjective emotional experience. but I imagine for teens using IG, both the emotional experience as well as the way their behavior is impacted matter



Feelings of reward were perceived by participants on a spectrum of user experiences from quick mood boosters (funny memes, short form videos) to long term support (finding a community around a niche interest), reflecting both inner and outer motivations as drivers for usage.

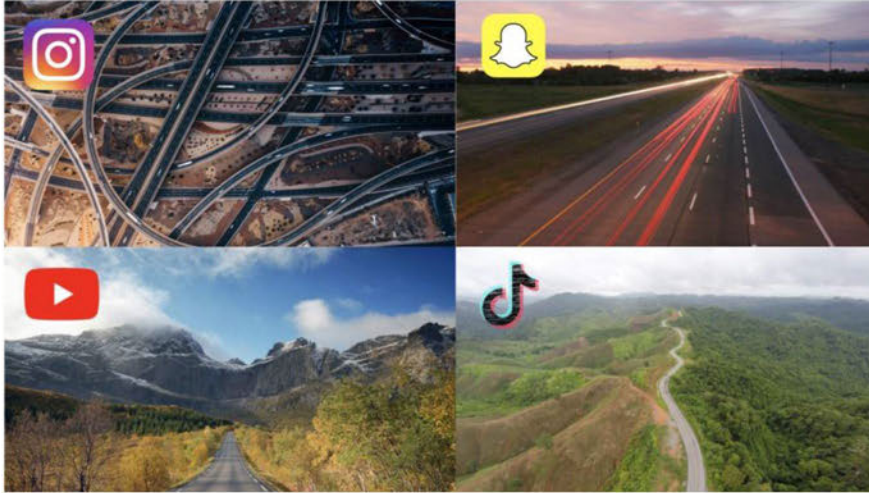


The rewards available on Instagram span this spectrum but according to participants, are not reached as often or consistently as other apps such as Snapchat, TikTok and Youtube. Why?

Reaching reward

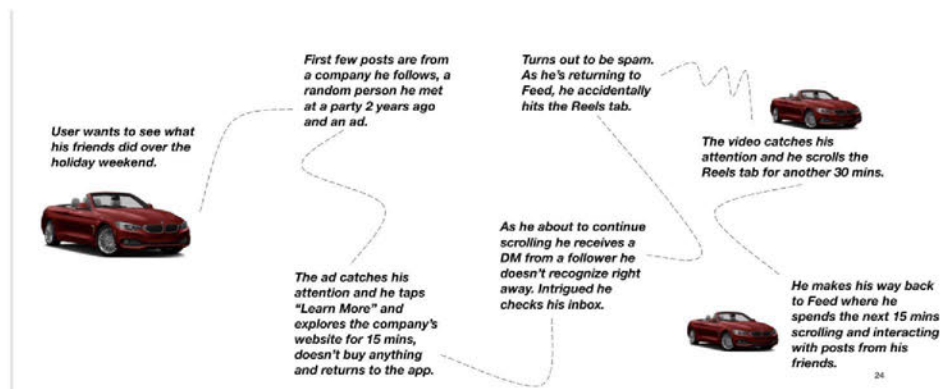
Different apps provide different roads to reward and application features and functionality are the vehicles users expect to take them there. Push notifications are like race cars that fast track

them to reward, whereas the ranking algorithm is like a convertible that cruises a scenic route to reach reward.

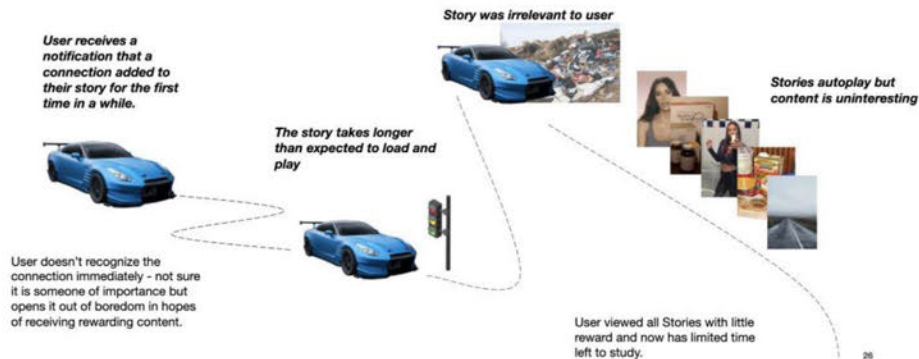


Participants perceived competitors to give them a direct path to reward every time they open the app. Whereas Instagram is a highway system of roads to reach reward but relative to other apps, take more effort to reach.

For example, a user may visit Instagram with a goal in mind but ends up distracted, making stops and changing directions and ultimately requiring more cognitive effort to achieve their goal.



Detours and tangents feel like wasted time when users don't get the reward or satisfaction they came for. For example, when a user receives a push notification from Instagram that they expect to reward them right away but end up on a tangential path in the end.



People expect push notifications to lead them to time-sensitive and/or highly relevant content, but when the notifications are irrelevant or lead to boring content/experiences, they can be seen as annoying or distracting.

When reward can't be reached reliably, people are incentivized to open the app more frequently - but their usage becomes habitual instead of meaningful.

"Mostly I just go on the app just to go on the app. I don't really have a reason to go on the app...I feel like it's just like another thing that I do every day, and it's not like something huge for me; it's just kind of sort of like school." - P6 (teen)

"If I do have these big life updates, you do want to share it with your friends or whatever. That's what's kept me from deleting [Instagram], I guess. It is good to get big life updates from friends and stuff through there, but using it so much has honestly just become robotic and unnecessary." - P11 (young adult)

When the search for reward is exacerbated by either a lack or excess of it, it has negative consequences. When surveyed, 75% of MAP associated [<https://fb.workplace.com/photo.php?fbid=290458578505728&set=a.290456845172568&type=3&theater&ifg=1>] with Instagram. [[HYPERLINK](#)]

"https://fb.workplace.com/photo?fbid=612532732442369&set=a.612531495775826" \h] Young people are especially sensitive to these effects and prone to unhealthy app usage and there is [HYPERLINK

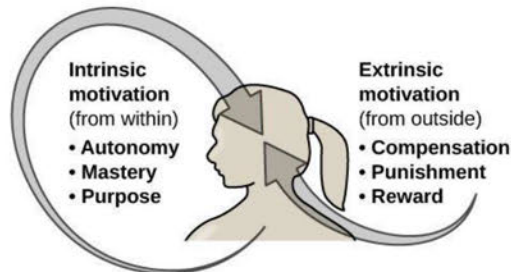
"https://fb.workplace.com/photo?fbid=612532252442417&set=a.612531495775826" \h] that they would be interested in receiving help for their time management.

Recommendations

4. Reward users by contributing more to their higher level intrinsic motivations.
 - a. **Building Relationships:** Building relationships requires a reciprocal interest between people. Today that reciprocity is mainly expressed through lightweight interactions that some users perceived as superficial and didn't help them further their connection. Focusing on conversation starters or profile features that help connections easily identify things they have in common can increase the opportunity for users to deepen their connection.
 - b. **Discovering Desirable Content:** Identify differentiated account use cases (finsta, interest acct, business acct, etc.) and use those distinctions to help users build a graph that will more directly deliver the rewards associated with their intent.
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 - d. **Real-Word Outcomes:** Develop our product experiences to provide a clear path to activity that has implications for the user off-platform. A deeper understanding of intent will help us identify those user goals and learn more about how we can become the obvious utility to reach them.
5. Increase the perception of reward reliability by leveraging want-rate for notifications at the user level to reduce friction and distractions and ensure a rewarding outcome for each notification they receive.
6. Invest in interventions that help people (especially young people) control their usage. The IG Well-Being team has proposed several solutions that have been well received in research. We should continue to explore, iterate and test these tools and track satisfaction with usage over time upon implementing them.

Conclusion

When it comes to apps, providing users rewards (such as strong personalized content recommendations and relevant notifications) that support a productive routine of usage will have longer-lasting benefits associated with their underlying intrinsic motivations. This makes the user feel rewarded *while* using the app and *after* using it - giving them confidence that their time was well spent.



At Instagram we use “Jobs” quite often to state what a product is being developed to do for a user. When done well, job statements say how the user hopes *they will feel* during and after hiring Instagram. So beyond metrics and usability, we should also be evaluating how well our proposed user experiences deliver on those feelings. Understanding how our product and features fit into, disrupt or create new user routines is also something we should seek to understand in more detail.



We also do well to start including how the job ladders up to priority segments' underlying - sometimes unarticulated - intrinsic motivations that are driving the desire to do the job in the first place. Is it to build a new friendship with someone who has the same niche interest so that there is someone to talk about it or go to events with...or perhaps it's to learn how to make something for someone so that your effort shows how much you care...or maybe looking for a fashionable dress to wear on a first date to increase your attractiveness and chances of a match.

Our[[HYPERLINK](#)

"<https://fb.workplace.com/groups/Instalnsights/permalink/4217549961626920/>" \h] has illuminated that Instagram has played an instrumental in helping young people explore and develop identity. This is a high value intrinsic motivation that is unique to our platform that we should bring to the forefront of our product strategies especially as we [[HYPERLINK](#) "<https://fb.workplace.com/groups/teamig/permalink/3777361275636822/>" \h]teens.

Understanding and articulating this underlying context in our product visions and plans will motivate us to ensure our products and features deliver on the more meaningful objectives in our users' lives and elevate the reward people feel from our experiences.

So as we continue working hard to give our users our best, let us think beyond the "job" and ask "why?" one more time. Let's make sure our products not only drive the metrics we want but generate the desired feelings of satisfaction that fulfilling the job should produce. Doing so can make us more conscientious of the more meaningful reasons we should provide a product solution and craft an experience that not only does the job, but does it in a truly rewarding way.

Further Reading

[HYPERLINK "https://fb.workplace.com/groups/InstaInsights/permalink/4198889580159625/" \h]

[HYPERLINK "https://fb.workplace.com/notes/[REDACTED]/a-behavioral-heuristic-of-problematic-use/629327054508774" \h]

[HYPERLINK "https://fb.workplace.com/notes/[REDACTED]/listen-to-teens-social-media-connects-inspires-them-but-they-need-help-controlli/748724435487541" \h]

[HYPERLINK "https://fb.workplace.com/notes/[REDACTED]/everything-you-wanted-to-know-about-time-spent/531669614230010" \h]

[HYPERLINK "https://fb.workplace.com/media/set/?set=a.612531495775826&type=3" \h]

[HYPERLINK "http://sitn.hms.harvard.edu/flash/2018/dopamine-smartphones-battle-time/" \h]

<https://books.google.com/books?hl=en&lr=&id=prw14f6SWq8C&oi=fnd&pg=PA67&dq=motivation+cycle+psychology&ots=mcwPTFHynw&sig=hJjYMAzOm-UupRDeC237uqsz2Ss#v=onepage&q=motivation%20cycle%20psychology&f=false>

Autonomy refers to the experience of volition and willingness. When satisfied, one experiences a sense of integrity as when one's actions, thoughts, and feelings are self-endorsed and authentic. When frustrated, one experiences a sense of pressure and often conflict, such as feeling pushed in an unwanted direction. Relatedness denotes the experience of warmth, bonding, and care, and is satisfied by connecting to and feeling significant to others. Relatedness frustration comes with a sense of social alienation, exclusion, and loneliness. Competence concerns the experience of effectiveness and mastery. It becomes satisfied as one capably engages in activities and experiences opportunities for using and extending skills and expertise.

The role of motivation

Motivation is the reason a person behaves in a particular way. There are two types of motivations - intrinsic (inner, personal reasons to do things) extrinsic (outward, self-evident reasons to do things). Extrinsic motivations drive behaviors that produce short-term rewards. Intrinsic motivations drive behaviors that have long-term effects.

This is what some of our competitors are doing. Take YouTube, it is well known for helping people easily search and find content to learn about subjects through longer videos and tutorials. This can contribute to a person's intrinsic motivation to master a skill or form an opinion that has an underlying reward lead to a career change, who they vote for, etc. This was

an especially impactful reward for young adults and adults in our study who are eager to up-level their skills and interests. In the case of TikTok, our teen participants perceived it as rewarding because it featured content created by people their age providing a sense of belonging and companionship without extending themselves to make a connection or have a conversation. Lastly Snapchat, appeals to teens and young adults' intrinsic desire for autonomy and independence through privacy features and little to no authoritative presence making them feel comfortable to discuss sensitive topics and share without fear of judgement.