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EXHIBIT 10

[WIP] MYST Escalation Talking Points

Last updated: March 18, 2023

Commented [1]: @ [REDACTED]@meta.com & @ [REDACTED]@meta.com -Before circulating this as a pre-read ahead of our meeting with Anya/Funda et al., let's create a clean copy.

Goal(s) of doc:

- 1) Prepared in advance of a meeting with Curtiss, Lauren, Bryce, Funda, Anya, [REDACTED], and [REDACTED] re the MYST Study.
- 2) Outline Meta's strategic goals—both internally and from an external narrative perspective—in the well-being space; especially in light of the current company environment.
- 3) Present suggestions on how to modify the MYST study in order to preserve its internal impact and to align with Meta's internal and external goals (should it be externalized). These suggestions are for discussion.

Strategic goals

Both the environment Meta is operating in and the MYST study have evolved over the past 6-8 months, such that the study goals and Meta's goals in the youth well-being space no longer match each other. Below outlines the internal and external company goals that MYST—and other research in this space—should orient around.

Internal goals

The goals of research in this space should be to improve the services we offer so that we support and do no harm to the well-being of our users (in the case of MYST, youth well-being). Do to this, there needs to be a clear articulation of how results from any study will inform product strategy or development.

External goals

We don't recommend publicizing MYST, but if the study were to become public (proactively or reactively), it would be viewed as being endorsed by Meta and therefore should be designed to credibly advance the following external-facing goals.¹

1. **Advance the credibility of research that finds small or null correlations between social media well-being and/or well-being relative to other factors.** There is a body of research that posits that there are other factors that have a much stronger influence on youth well-being than social media (e.g. safety in school, access to dependable

¹ We also understand that Legal Counsel

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mental health care, pandemic-related changes, social inequalities). Our research should be designed to bolster that body of work by overcoming the limitations of previous studies on this topic to validate these findings and hypotheses (nb: that incorporating log data isn't sufficient for overcoming many limitations).

2. **Deflate conversations about research claiming causal connections between social media and mental health and well-being.** There are studies where negative correlations between social media and well-being are treated as casual. Research we undertake should be able to provide alternative explanations about why those relationships may exist, if the evidence supports it.
3. **Make the issue bigger than social media.** Research should be designed in a way that provides a holistic understanding of the relationship between youth well-being and technology and other factors (e.g., cultural and environmental factors that lead people to use technology and their use of technology), rather than focusing on Meta-specific product offerings.
4. **Demonstrate that Meta is aligned with the interest of parents** when it comes to youth well-being.

Outstanding issues/risk and ideas to address/mitigate them

Even with the modifications that have been made to MYST to-date, there are three primary buckets of risks that remain.

1. MYST is likely to find negative associations between teen mental health and social media (this becomes particularly risky due to the risk #2);
2. Product implications are unclear; and
3. The study does not directly address the criticism that Meta is facing right now, nor does it advance the narrative that Meta wants to move forward.

The table below outlines specific issues/risks within each of these broad buckets, along with ideas on how the study might be modified to mitigate those risks, while further aligning with the strategic goals outlined above. These ideas are not firm recommendations, but rather starting points for our discussion.

Issue/Risk	Idea(s) to mitigate risk
MYST is likely to find negative associations between teen mental health and social media.	
From a probabilistic standpoint, the sheer number of negative outcomes measured in MYST, the study is bound to find negative associations between IG and FB and teen mental health. (NB: Adding additional positive outcomes/measures doesn't address this issue because each outcome is independent.)	Measure support effectiveness or satisfaction to both inform the product <i>and</i> to de-risk. We know that how satisfied people are with certain interventions is important.

Furthermore, using mental health (MH) as outcomes results in low expected ROI. 1. We know that there is little evidence connecting social media use to negative MH outcomes. 2. Any correlations are very small, and likely related to other, idiosyncratic factors. 3. A study using MH outcomes is expected to provide little actionable product data.	
MYST only allows for insights into Facebook and Instagram. This means that we can not benchmark findings against peers or other hypothesized factors, placing the focus of the conversation solely on Instagram and Facebook. For example, if the study finds that time spent late at night on Instagram is poor for teen mental health, we won't be able to show that this is a phenomenon generalizable to phones, technology, or other apps that may have similar impacts on teens (i.e., we make a technology-specific impact look like it is IG-specific)	Make the issue bigger than social media: 1. Incorporate passive tracking of other apps on respondents phones. 2. Incorporate research about additional factors, i.e. usage of other media like television, video games, and messaging apps feelings of academic pressure, fear at school, exposure to other risk factors (many of these may be sensitive)
Product-specific independent variables. The extent to which the independent variables (log/behavioral data) that the research team will use in their analyses are product specific will further compound the scope issues. If the study finds that teen mental health is more related to a product-specific experience (e.g., friend count, number of likes, etc.) that will again drive the narrative to Instagram and Facebook. Even if incorporating additional design and factors (as per 2 above), the detail from in-house log data presents a risk of finding associations that are spurious or the result of multiple testing. These are more likely, since the richest set of data is associated with Meta services.	Ensure in the analysis to only utilize independent variables that are common across social media platforms (e.g., time spent, time of day accessed, I30, etc.).
Focus on vulnerable populations. The analytic plan focuses on cutting the data by populations that are differentially at risk (i.e., gender & race). Even within a 6-month study period, we are more likely to find negative associations because they are focusing on vulnerable groups.	If measures of support effectiveness are incorporated, it would be more informative to cut the data by that measure and sentiment towards support products—even within vulnerable groups. This places the emphasis on a) who is getting support; and b) if/how support tools differentially impact vulnerable populations. From a product impact perspective, it

Commented [2]: You might consider reiterating the bullet points above as part of the mitigation, ex: both these points read as "make the issue bigger than social media", to create a mapping b/t sections (devil's advocate is that this could be too wordy). ymmv

Commented [3]: good call.

Commented [4]: Going back to goals - it feels like there might be a tension b/t tight actionability in product AND shared indep vars across apps. Would you recommend the team prioritize one of these goals so they can execute better?

Commented [5]: This would be a risk/benefit discussion, right.

What are the product goals? What are the product goals: (1) have a good experience; (2) add people; (3) de-risk for regulation.

Commented [6]: The actionability idea here being that we figure out what the barriers are and how to reduce them as a follow up if these diffs are observed?

Commented [7]: yeah, let me articulate that.

	provides us with the opportunity follow up on barriers and how to reduce them.
It is unclear how the results will be used to inform product development. We would want to know exactly what those products the teams are focused on developing or modifying. For example, some of the plan talks about group-level analysis by gender, but it's not clear what product decisions that will inform.	1. Update the proposal to outline exactly what the product teams are focused on developing and modifying? 2. Find an alternative Product Sponsor, now that Andy has left the team—someone who can hold product teams accountable for using the study findings
It is unclear how the results will be used to inform product development. We would want to know exactly what those products the teams are focused on developing or modifying. For example, some of the plan talks about group-level analysis by gender, but it's not clear what product decisions that will inform.	Update the proposal to outline exactly what the product teams are focused on developing and modifying?
Now that Andy has left the team and Kuba has moved to a new role, we likely need a new PM sponsor for this project.	Find an alternative Product Sponsor—someone who can hold product teams accountable for using the study findings
The study does not _____, nor does it advance the narrative that Meta wants to move forward.	
Any public release of study findings or public acknowledgement of the study will be de facto endorsed by Meta, as we are the only researchers engaging or funding this study.	1. Strongly encourage not to proactively release the results of this research or discuss it publicly. 2. If the team wants publication/public release to be a goal of the study, then consider co-designing with an academic (NB: this was the original goal of MYST ~1 year ago).
MYST is constructed in a way that assumes the premise of our critics. The framing of what is an outcome variable and what is an independent variable is already in the direction of setting up the narrative to be about social media <i>causing</i> mental health outcomes (vs. the reverse). Furthermore, following people over a period of 6 months is likely too short to tease out reverse causality	Consider running MYST over over a time period that is sufficient for understanding reverse causality.
MYST focuses exclusively on teens without capturing the voice/perspective of parents.	Consider enrolling parents in the study. The recruitment process puts MYST in a unique position

Commented [8]: I think the sponsor part is really important in that it (IMO) would shape which log data would be paired and support experience to measure. Would you recommend that this be secured as pre-req?

Commented [9]: □

Commented [10]: Might want to fold this and the point above about unclear connection b/t results and product dev to make a higher level point - we dk how the results will be actionable and there's no one currently accountable for making sure that they result in product change (if that remains a core goal)

Commented [11]: This is a bit of a long shot, but it's not necessarily clear how the study provides evidence that we are aligned with parents. To the extent that any effort here is showing investment around a common cause, MYST isn't unique?

Commented [12]: yeah, i think they need to survey parents—or incorporate parents, too. we already have them, because they are necessary for consent

	to also enroll parents in the study and explore themes of parental support and alignment.
MYST measures outcomes at 5 points in time (with roughly a month in between), but we will have continuous log data measures. This increases the risk of attributing on-platform behavior to mental health outcomes that were, in fact, influenced by off-platform events that are not measured (i.e., we miss a confounder). In this case, the use of self-report (behavior since last survey) requires people to make an evaluation of what is impacting their mental health/mood.	1. This is partially an issue of not accounting confounding variables. Enrolling parents and/or tracking other app usage may help triangulate information and tease out confounders. 1. Consider enrolling a subset of respondents into more frequent data collection of key measures (i.e. shorter EMA modules between waves).

Parking lot—to be deleted

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Appendix

Coming out of the Core Supporting Narrative work and looking at the challenges that lie ahead—including **PRIV**—and responding to opportunistic critics—there are some key strategic goals and narratives that Meta needs to double-down in the space of youth well-being.

Why doesn't this advance our narrative?

1.

This study is constructed in a way that assumes the premise of our detractors. The entire framing of what is an outcome variable and what is an independent variable is already in the direction of setting up the narrative to be about social media *causing* mental health outcomes (vs. the reverse). Furthermore:

- If we find no associations, we will be criticized for running this over such a short time period. If there are negative associations, we will be continuously criticized for “finding” and not sharing these negative issues. We may also be criticized for not having conducted this research sooner.
- Study conflates bad moods (especially since we're only measuring them at 5 or 6 points), with well-being and mental health.
- Study is not definitive in addressing the criticisms that are out there. Haidt is not claiming that log data –or a study of this nature–will advance our understanding of the relationship between teen mental health and social media.
 - Not even meeting their standards where they are and going above those.
 - Sample size = 1500, which is unlikely to be powered to find effects.
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Narrative Capture

- **Narrative capture is more likely with studies that have insufficient scope.** Its coverage of factors related to mental health and well-being is too narrow, *i.e.* it does not provide context beyond social media, or it only applies to a single, Meta-owned service.
- **Narrative capture is more likely with studies that have lower levels of aggregation and more causal designs.** Most research is not causal in any way and uses individual-level, cross-sectional data about social media in general rather than data about a single or set of product(s). Longitudinal and causal designs are of higher quality, which makes them difficult to contextualize or refute, even though they often suffer from unique study designs that limit their generalizability to the full population.

Narrative Capture Risk				
Level of aggregation / correlational design	Aggregated & cross-sectional	Oil Data Sharing (FB)	CSER	
	Individual & cross-sectional	Qual Interviews About Instagram		CTIS CDC - YRBS
	Experiment	BEEF/SHIELD		
	Individual & longitudinal	MYST		IYWB
		One Meta Product: Eg. Instagram	Meta services	Competitive Services Factors beyond social media
Scope of services/factors covered				

(from baseline positions)

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Commented [13]: I've been thinking about this a bit – will have some time later today when I get back to outline issues related to this.

I think specifics of product impact may be important.

1. MYST suffers from **narrative capture risk**, which refers to when a group is able to set a prevailing narrative in a way that does not necessarily match the body of existing evidence. Narrative capture is more likely to occur when a study contains a few characteristics, including two major and interacting factors—both of which are characteristics of MYST—are described below and visualized in the [[HYPERLINK \l "w33am8mecox0" \h](#)].

Modification Options to Mitigate Risk

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We organize suggested modifications around these 4 primary risk areas.

Findings are likely to be problematic

Many design and methodological elements of this study that create a high risk of finding and amplifying negative associations between. For example:

Topics

4.

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5. **Additional modifications we recommend:** Support effectiveness or satisfaction are better measures to both inform the product *and* to de-risk. More specifically:
 - a. Using mental health as outcomes results in low expected ROI.
 - i. We know that there is little evidence connecting social media use to negative MH outcomes.
 - ii. Any correlations are very small, and likely related to other, idiosyncratic factors.
 - iii. A study using MH outcomes is expected to provide little actionable product data.
 - b. On the other hand, we know that how satisfied people are with certain interventions is important, but you can measure this better in a satisfaction

framework (i.e. the "support effectiveness" approach from IG, [[HYPERLINK "https://fb.quip.com/pn4IAulyDwgU" \h](https://fb.quip.com/pn4IAulyDwgU)]).

- c. You can test support effectiveness by sampling users/non-users of particular products, asking awareness, and then asking how effective our usefulness was. These are product-actionable.

Design

2. While longitudinal designs are often of higher quality, they come with the risk of making them difficult to refute and contextualize. Longitudinal studies often suffer from unique study designs that limit their generalizability. In the case of MYST a few limits stand out:
 - a. Any study that recruits teens has a somewhat select sample (i.e., you have a sample of teens whose parents consent for them to participate). In a longitudinal design, this will be compounded by attrition, meaning the sample will become more selected over time. There are currently no plans for a sample refresh or attrition weights. While this is probably fine for product work, it will make the findings harder to contextualize.
 - b. Longitudinal analysis standing alone doesn't necessarily causally identify something; you have to get into the specifics (especially if there is pre-existing use, pre-existing mental health, and/or insufficient observational time—which we think there is).
 - c. MYST measures outcomes at 5 points in time (with roughly a month in between), but we will have continuous log data measures. This increases the risk of attributing on-platform behavior to mental health outcomes that were, in fact, influenced by off-platform events that are not measured.
 - d. MYST follows people over a relatively short time period (6 months). This is not clearly established as an appropriate time frame. Some researchers who employ longitudinal designs in this area find reverse causality (i.e. loneliness causes teens to use social media, vs. the other way around), but 6 months is too short of a time period to tease out reverse causality.
 - e. We disagree with the researcher's claim that longitudinal designs have less noise in the data than cross-sectional designs. In this case, the research team will need to specify complex models to satisfy their analytic goals, which introduces a different kind of noise.

Commented [14]: need to be clear that this is an issue because the researchers are talking about this study being generalizable