Time in App Cohort Analysis

Agenda

- Overview
- Analysis
  - Time in App
  - Creation
  - Engagement
  - Retention
  - Following
  - Messaging
- Recap and Next Steps

Key Questions

- What is our core loop?
- What do our most engaged users do in the app?
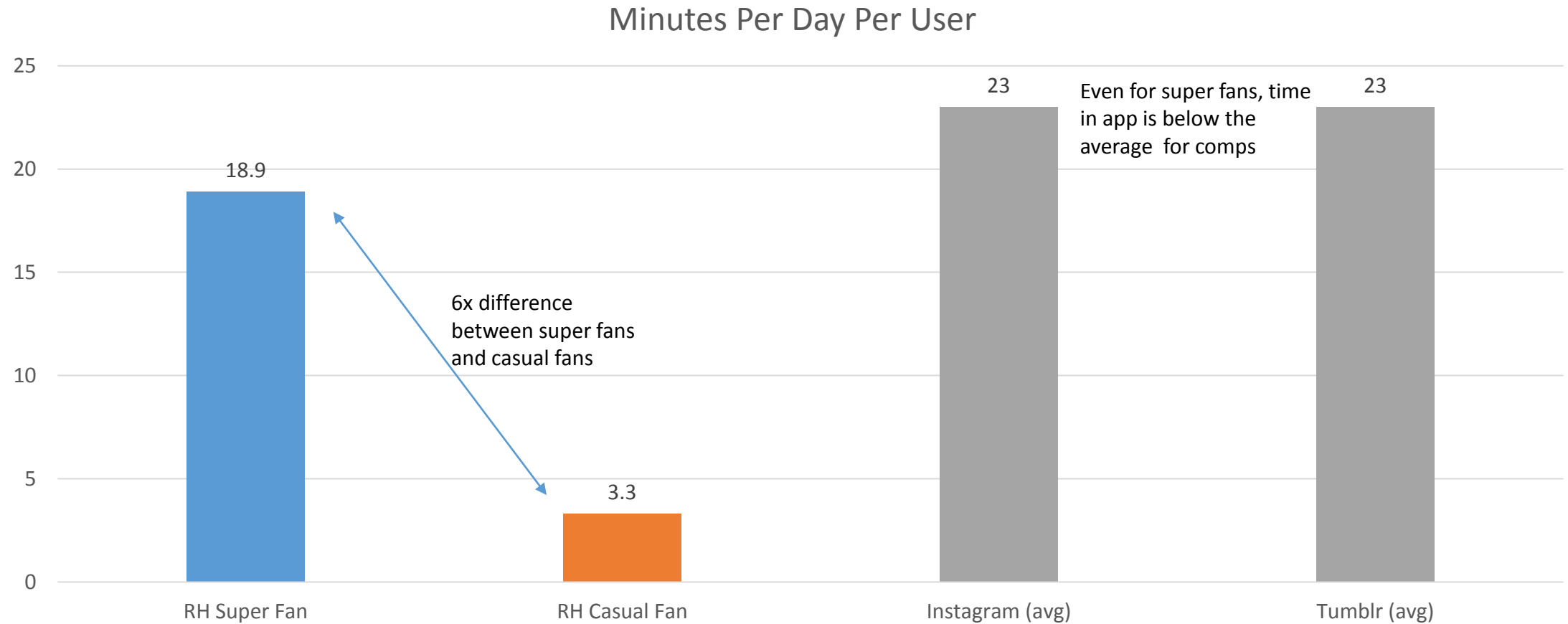
Methodology

- Segment user base by time in app percentile
  - Super fans: P99 time in app (top 1% of users)
  - Casual fans: P50 time in app (median users)
- Compare key metrics:
  - Time in app – sessions per day, session length
  - Retention – D1, D7, D14
  - Creation funnel - % creator, creations per creator
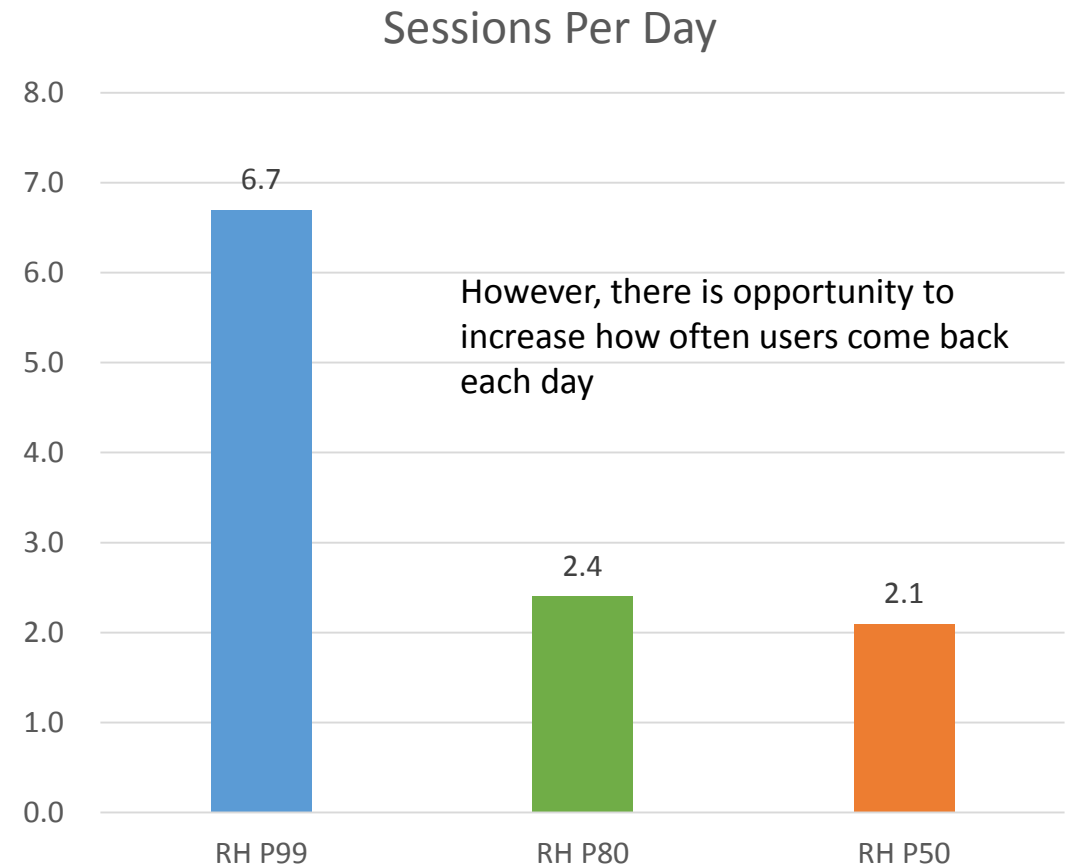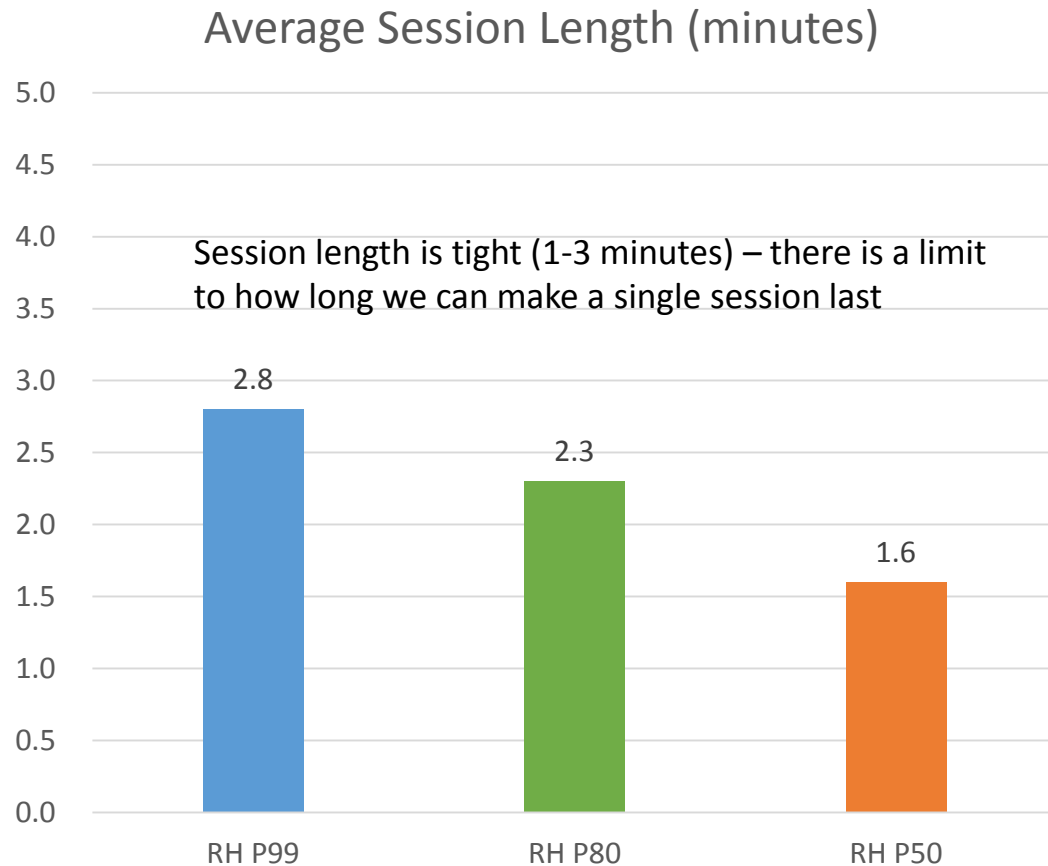 - Engagement funnel (EB, comments, reposts) - % engagers, engagements per creator

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There is large opportunity for improvement in time in app, even for super fans

Minutes Per Day Per User

6x difference between super fans and casual fans

Even for super fans, time in app is below the average for comps

	RH Super Fan	RH Casual Fan	Instagram (avg)	Tumblr (avg)
Value	18.9	3.3	23	23

Sessions per day is the biggest driver of time in app for super fans

Average Session Length (minutes)

Session length is tight (1-3 minutes) – there is a limit to how long we can make a single session last

- RH P99: 2.8
- RH P80: 2.3
- RH P50: 1.6

Sessions Per Day

However, there is opportunity to increase how often users come back each day
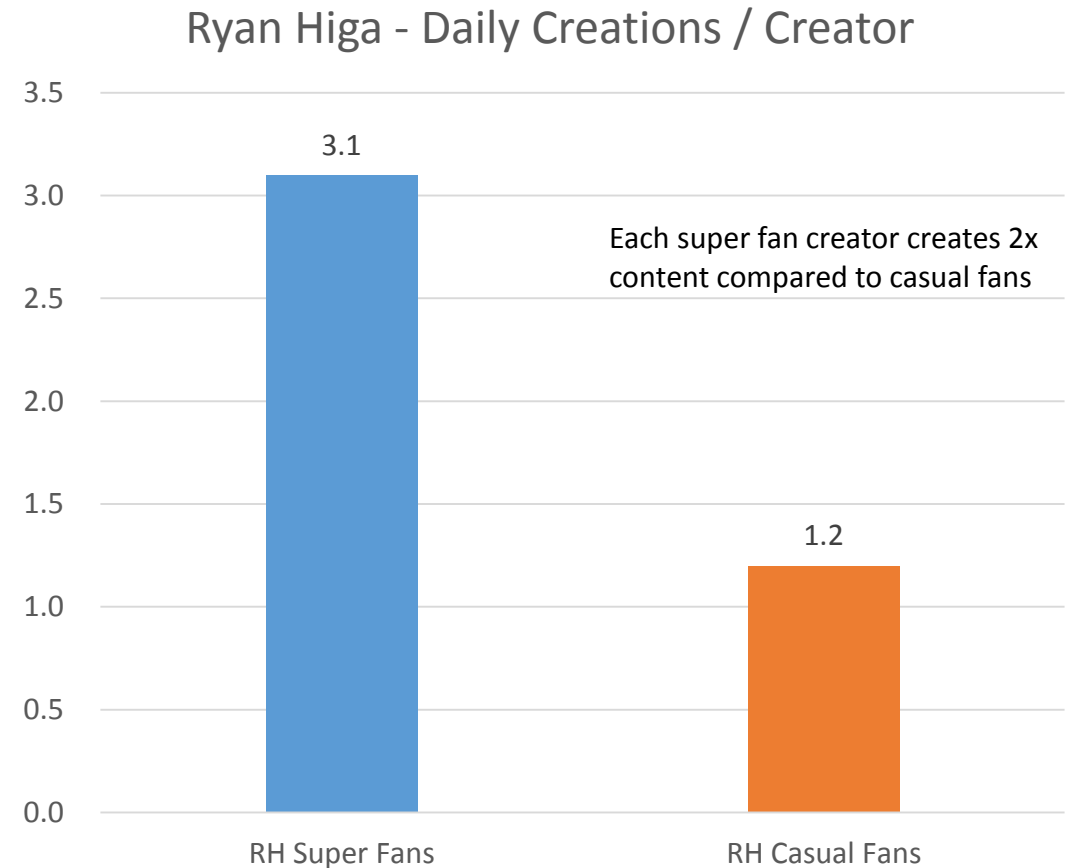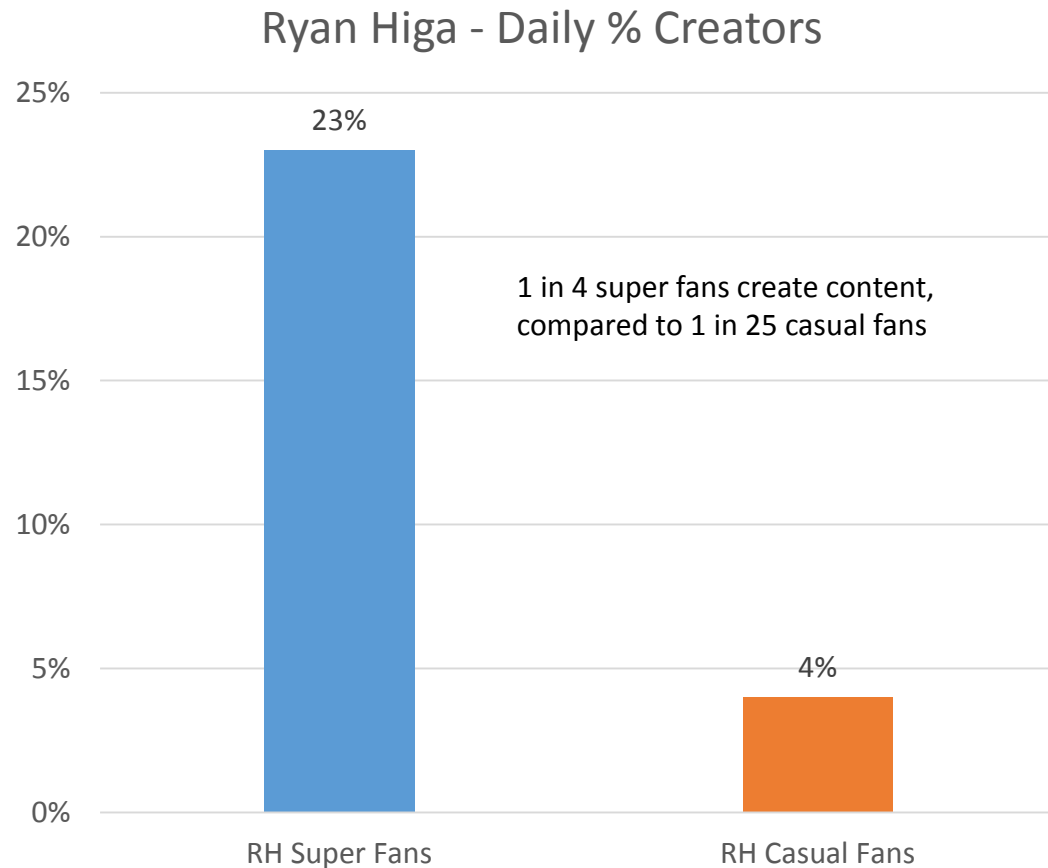
- RH P99: 6.7
- RH P80: 2.4
- RH P50: 2.1

Key takeaway: prioritize features that get casual fans to return more often over extending session times

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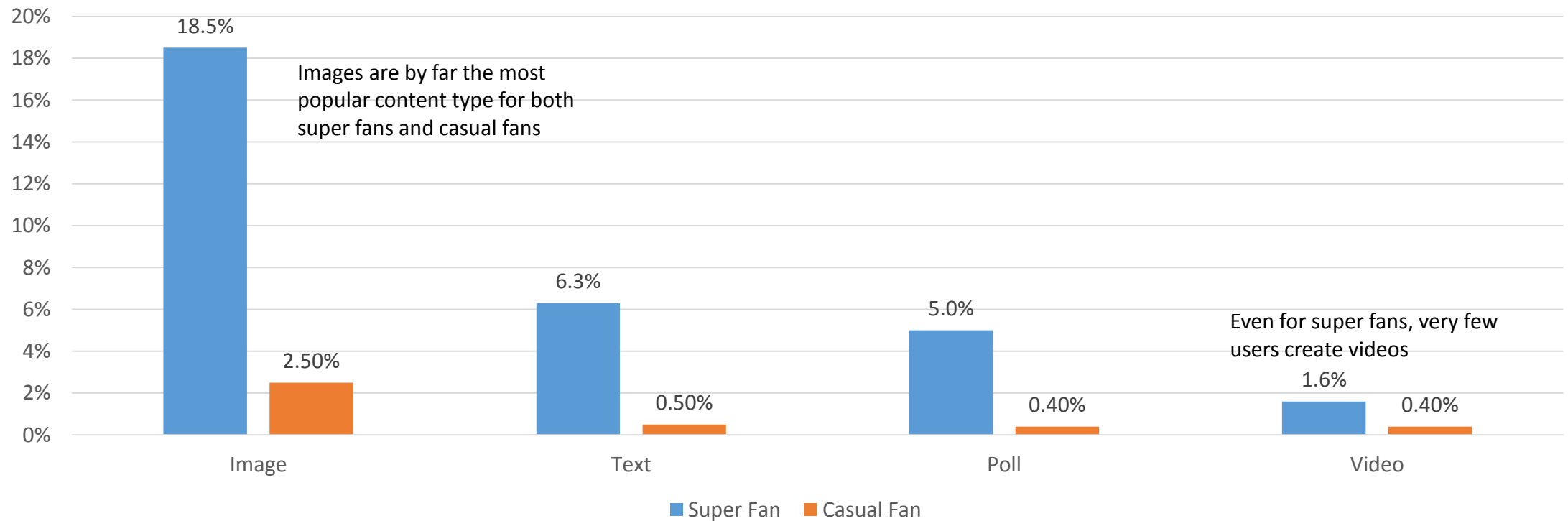 - Messaging
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Super fans create much more than casual fans

Ryan Higa - Daily % Creators

1 in 4 super fans create content, compared to 1 in 25 casual fans

- RH Super Fans: 23%
- RH Casual Fans: 4%

Ryan Higa - Daily Creations / Creator

Each super fan creator creates 2x content compared to casual fans

- RH Super Fans: 3.1
- RH Casual Fans: 1.2

Key takeaway: explore ways to increase creation conversion for casual fans

Images dominate creations

Ryan Higa - % Creators by Content Type

Images are by far the most popular content type for both super fans and casual fans

Even for super fans, very few users create videos
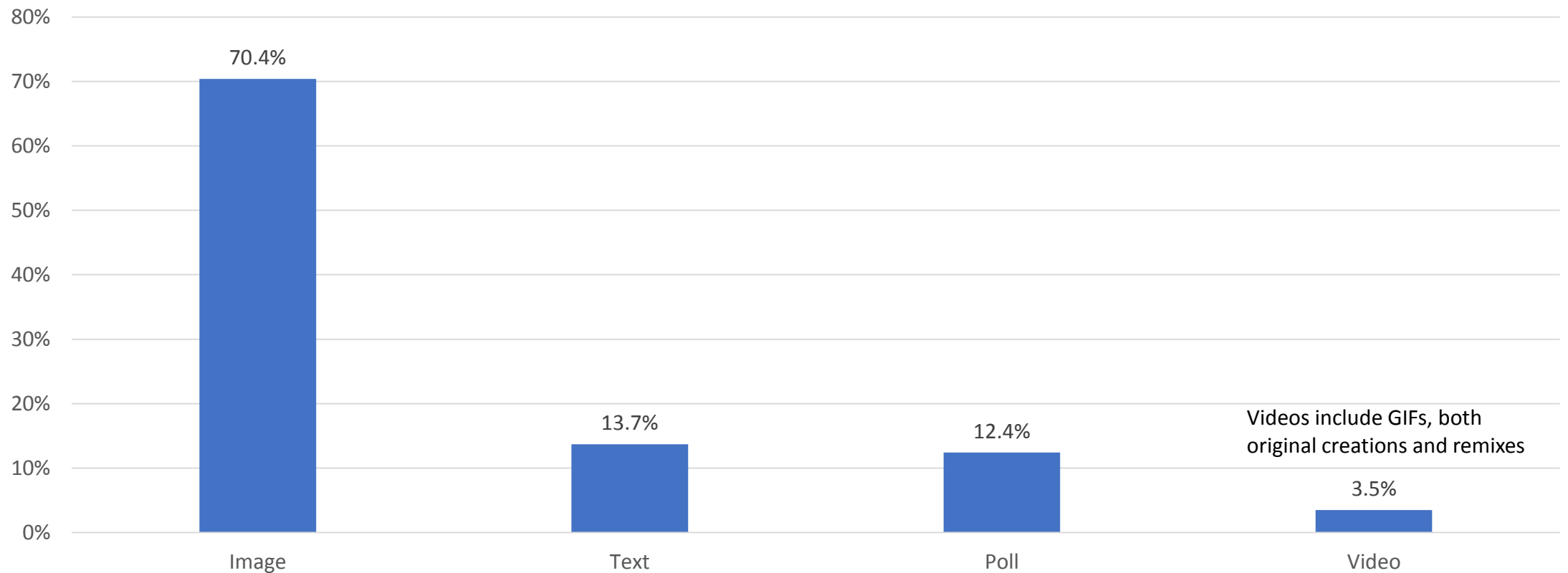

■ Super Fan ■ Casual Fan

Key takeaways:
- Prioritize converting casual users into image creators (e.g., in creation tutorial)
- Deprioritize or drop video / GIF creation

For super fans, images dominates creations

Ryan Higa Super Fans – Distribution of Content Created by Content Type

Image 70.4%
Text 13.7%
Poll 12.4%
Video 3.5%

Videos include GIFs, both original creations and remixes
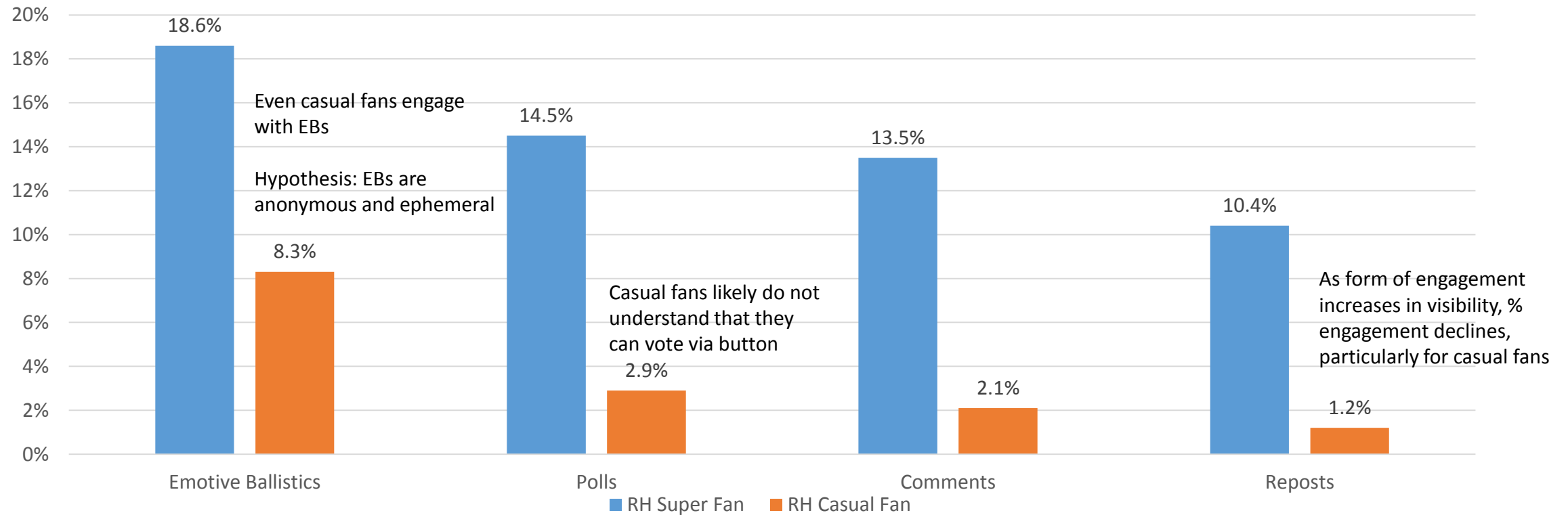
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# Super fans are much more likely to actively engage with content than casual fans

Daily % Engagers by Engagement Type

Even casual fans engage with EBs

Hypothesis: EBs are anonymous and ephemeral

Casual fans likely do not understand that they can vote via button

As form of engagement increases in visibility, % engagement declines, particularly for casual fans

18.6%
8.3%
14.5%
2.9%
13.5%
2.1%
10.4%
1.2%

Emotive Ballistics   Polls   Comments   Reposts

■ RH Super Fan   ■ RH Casual Fan

Key takeaway: explore ways to increase comment and repost conversion for casual fans

Super fans are much more likely to actively engage with content than casual fans
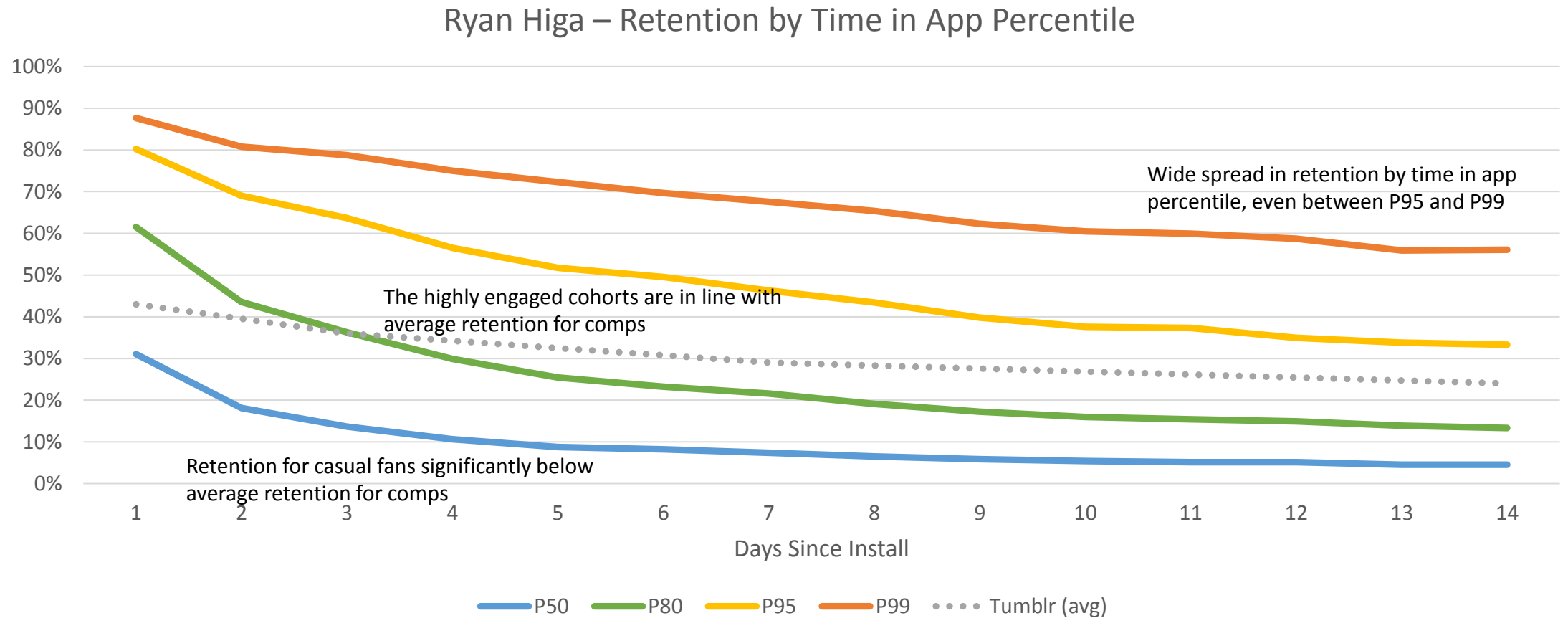

Daily Engagements Per Engagers by Engagement Type
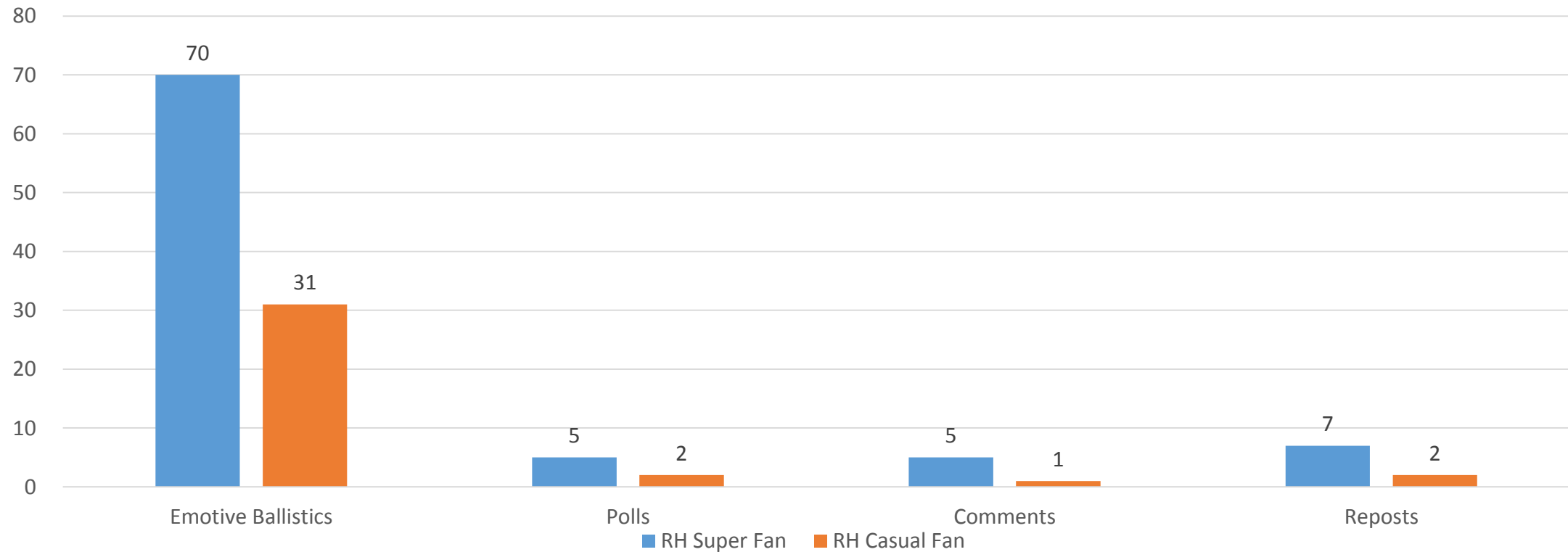
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Opportunity for improvement in retention

Ryan Higa – Retention by Time in App Percentile

Wide spread in retention by time in app percentile, even between P95 and P99

The highly engaged cohorts are in line with average retention for comps

Retention for casual fans significantly below average retention for comps

Days Since Install

P50   P80   P95   P99   • • • Tumblr (avg)

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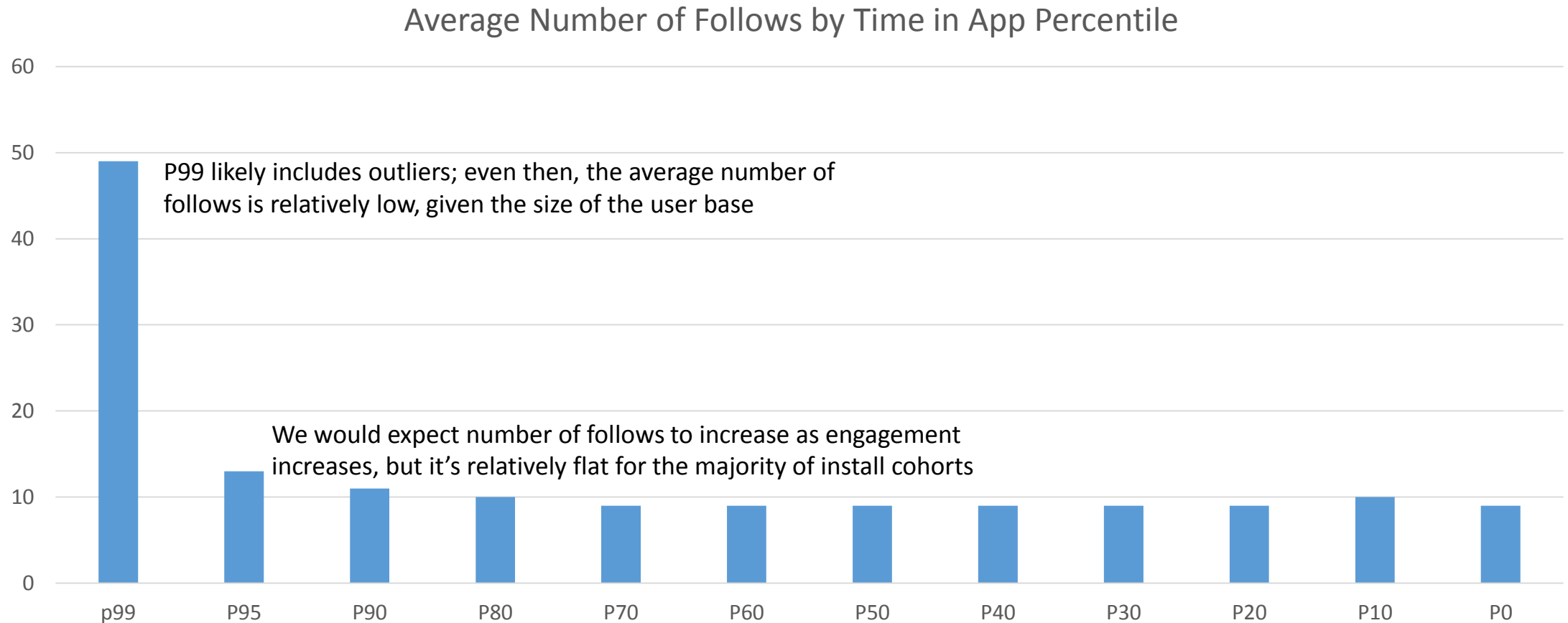 - Retention
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Hypothesis: Following is not a key driver for engagement and retention

Average Number of Follows by Time in App Percentile

P99 likely includes outliers; even then, the average number of
follows is relatively low, given the size of the user base

We would expect number of follows to increase as engagement
increases, but it's relatively flat for the majority of install cohorts
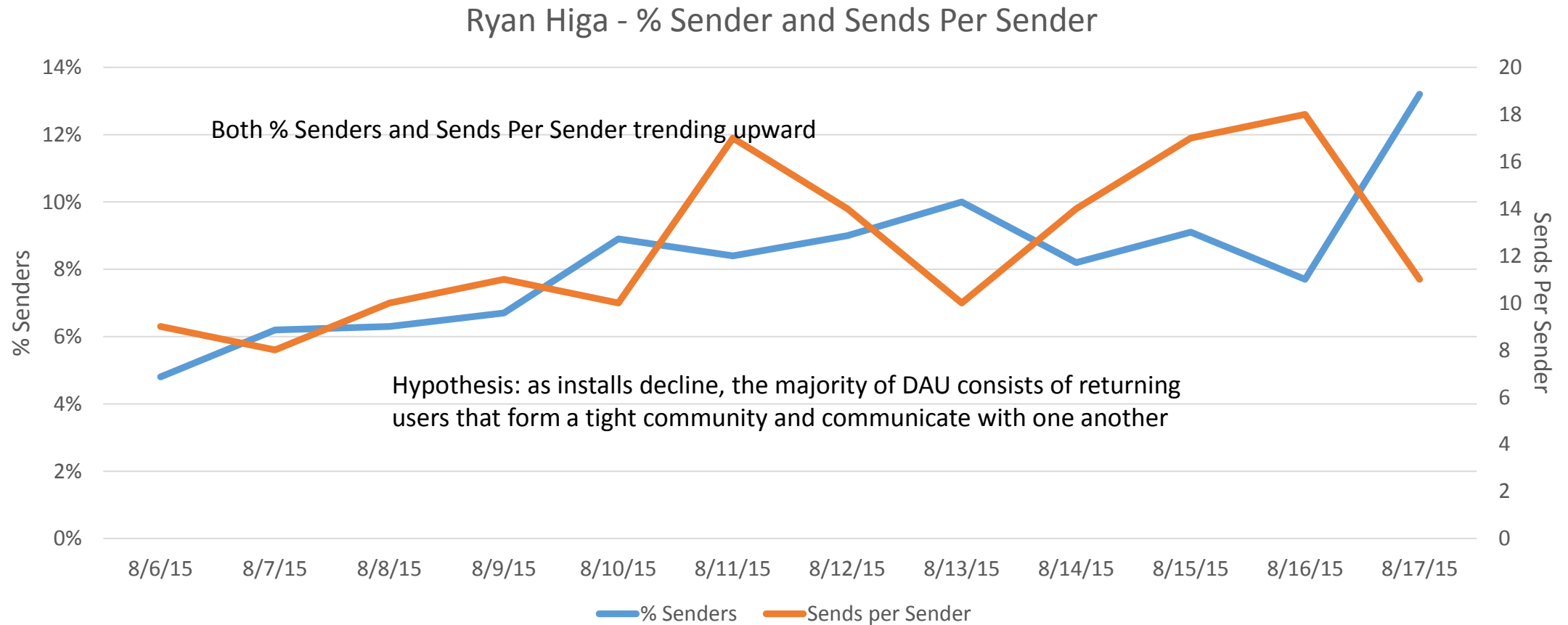
Key takeaway: can we replace following with better curation of community content?

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Daily engagement with messaging increases over time

Ryan Higa - % Sender and Sends Per Sender

Both % Senders and Sends Per Sender trending upward

Hypothesis: as installs decline, the majority of DAU consists of returning users that form a tight community and communicate with one another

Key takeaway: continue to invest in messaging and chat as a core feature for community

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Recap

- Time in app primarily driven by sessions per day
- Super fans create images but not videos
- Highest form of engagement for casual fans is Emotive Ballistics
- Questionable how important following is to engagement / retention
- Engagement with messaging increases over time

Next steps

Drill further session activity to understand core loop:

- Old: Analyze session activity for small set of users (P99 vs. P50 time in app)
  - Results likely correlate with existing cohort analysis
  - Results heavily weighted towards activity early in the user's life
- New: Analyze activity trends for n-day returner (1, 7, 14, 30)
  - Understand how user behavior evolves over time for users that return n-days after install
  - What do users do in the app that gets them to come back in the long term?