

Comparison of The Motivations Behind Facebook Users And TikTok Users

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On my honor as a University Student, I have neither given nor received
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Introduction

Donald Trump signed an executive order to ban the use of TikTok in the United States in August 2020. However, the younger generation continued to use TikTok regardless of the government warnings. With other social media platforms such as Facebook still available, it's quite bizarre that users continued to use a banned platform like TikTok. What motivates these users to continue using TikTok over any other platform?

For my thesis I will be studying the user motivations behind TikTok and Facebook. Specifically about what is the purpose of spending time on each platform, what role offline friendships play in the use of each platform, and how does each platform's design and algorithm affect the user's motivation.

Research Question

The comparison of user motivation for Facebook versus TikTok can be broken down into five questions for each respective platform.

First, who are the users? The clearer the target audience of each platform is, the more context we have about the motivations behind each platform.

Second, what is the purpose of spending time on the platform? Figuring out the purpose of each platform helps lay a baseline to find the deeper underlying motivations behind each platform.

What role does offline friendships play in the platform? Both algorithms have different

requirements for offline friendships, so the clearer the role of offline friendships, the more of an understanding can be made about the motivations behind each platform.

How do the algorithm and user interface design differ? The bigger the difference between each platform's technical algorithms and user interface, the more of a difference that can be found between the motivations between each platform.

Finally, how do the different algorithm designs attract different users? Figuring out how the design specifically attracts different users gives a clearer perspective of the deeper reasons why a user chooses one platform over the other.

Breaking down this STS investigation into those five questions will help make the results both broad and deep, while being understandable and clear.

Literature Review

Ross (2008) theorizes that the general motivation of Facebook users is to connect with their previous offline social circle. Many other researchers agree with the theory that Facebook requires a prior social circle to have the best experience. (Droguer, 2011; Bumgarner, 2007; Lyndon, 2011; Pempek, 2008). Herman (2019) states that TikTok has no social circle requirement. Other research on TikTok motivation claims the same as well. (Omar and Dequan, 2020; Bresnick, 2020). These theories can be attributed to the fact that users on Facebook have to be more social and have a close network to be able to use the platform, which may lead to more extroverted individuals favoring Facebook. Users on TikTok don't necessarily need a social network, so potentially more introverts and insecure users will favor TikTok. The Facebook algorithm appears to continue sticking with the social network requirement to fully engage with

the platform, while TikTok is currently seeing and is predicted to continue having massive user popularity. Therefore these sources theories and results seem to be valid in the current standards.

Droguer (2011) targeted his research primarily on 17-37 year olds with a focus on 18 year olds. Many other studies on Facebook research have targeted specifically college students around 18-22 year olds as well. (Bumgarner, 2007; Lyndon, 2011; Pempek, 2008). Hernman (2019) primarily niched his research on the generation of 13-18 year old TikTok users. Many other TikTok user studies have targeted 13-18 year olds as well. (Omar and Dequan, 2020; Bresnick, 2020). The difference in the age group targeting between the two different platforms could've happened as college students to have a larger social circle being acquainted with friends from elementary school, middle school, high school, college, and extracurriculars. On the other hand, 13-18 year olds may not have a large enough social or a well-developed attention span which could explain why they would favor TikTok more. While this being said, the audience of both platforms are always changing based on updated circumstances so the Facebook targeting of 18-22 year olds may not be as good of choice as the market is always shifting.

In terms of motivations for businesses specifically, Swani (2013) states that businesses on Facebook are primarily motivated on focusing through Word of Mouth marketing. At the same time, De Veirman, Hudders and Nelson (2019) claimed businesses on TikTok focus more on paid influencer shoutouts to generate the most revenue. This difference in marketing can be attributed to the fact that Facebook focuses more on a social circle, which is more favorable for businesses who have an existing clientele or customer base in their social circle. This word of mouth marketing from their social circle to outside of the social circle helps generate more revenue. On the other hand, TikTok doesn't require a social circle so a business's previous

clientele doesn't play as much of a role and isn't as favorable to a business on TikTok. What is more favorable is influencer shoutouts which drive more traffic to a business's product or service generating more revenue for a business on TikTok. Considering businesses are still posting today on Facebook and relying on Word of Mouth marketing while influencers on TikTok are still shouting out certain products, the sources appear to be valid in today's social media market.

While the general user motivations behind each respective platform appear to be similar in all sources, the deep specific motivations interpreted by each source was different. For Facebook, Ross (2008) stated Facebook was mostly a tool for communication among a social network. Droguer (2011) theorized Facebook was used to connect with individuals a user may have forgotten otherwise. Bumgarner (2007) claimed Facebook was mostly used for gossip and talking about other people's profiles. Lyndon (2011) stated that Facebook was used primarily to stalk previous romantic relationships. Finally, Pempek (2008) theorized Facebook was used to establish an identity in a user's social circle. On the other hand for TikTok, Herrman (2019) stated users favor TikTok solely because it requires the least amount of attention or emotional attachment. Omar and Dequan (2020) claimed TikTok was mostly used as TikTok is an opportunity for self-expression without needing a social circle. Finally Bresnick (2020) stated TikTok's advanced video editing features made it a "virtual playground" that helped younger generation users find a form of creative expression. So although for both platforms, the general motivation is clear, the individual specifics of the motivation is still not a majority conclusion. This could mean there hasn't been enough research done, or could be caused by the hypothesis that every user is different in social media which lead to the motivations behind each user to be unique as well. Although social media algorithms constantly change, the motivations for each platform appear to remain consistent throughout time so the sources appear to be valid for

today's age.

While there are hundreds of sources of research on the motivations behind specifically college students on Facebook, there isn't much known research on TikTok, and no comparison between Facebook and TikTok. There also isn't a lot of known research on how either platform's algorithm specifically plays a role in user motivation. Facebook has been one of the most popular social media platforms for over a decade now and TikTok is one of the most rapidly growing social media platforms out there. Knowing the motivations behind each platform will give content creators, advertisers, and brand sponsors more of a holistic view on their social media strategies as well having an overall edge over the competition when the motivations of Facebook users versus TikTok users are clearer.

STS Framework and Method

Based on my research topic about comparing the motivations between TikTok users and Facebook users, SCOT's framework and the Mediation theory make the most sense to use in analyzing these motivations. SCOT analyzes the diverse perspectives from not just designers or system builders, but also users, I believe SCOT is the most applicable STS framework, as my research focuses primarily on users and their motivations, compared to each respective platform's design team or specific technical systems. The Mediation theory analyzes how two parties conform and adapt to each other rather. I believe Mediation theory is the most applicable ethical framework, as my research focuses on what makes users attracted to specific features about the TikTok and Facebook algorithms.

Data Collection

I have eight questions for my survey (See Appendix 1).

I sent out my google form surveys to over a hundred 18-22 year old college students, since that is a large enough sample size and 18-22 year old college use both TikTok and Facebook. (See appendix 2 for the link to the google form survey.)

I received 94 responses back. (See appendix 3 the link to my data collection worksheet containing the answers to all 94 surveys and theme notes).

See appendix 4 and 5 for charts and a table of all percentages I've gathered from the survey responses.

Data Analysis

The first step in using the SCOT framework is identifying RSG's. For my specific investigation, the RSG's are the following: TikTok Users, Facebook Users, The TikTok Team, The Facebook Team, TikTok Paid Sponsors, Facebook Advertisers, TikTok Content Creators, and Facebook Content Creators.

Now in terms of how the various RSG's interpret their respective social media platforms and the problems it tries to address, TikTok users mostly use the platform to pass time and consume engaging content. Facebook users use the platform to connect with friends and be up to date with their social circle. The TikTok team just wants to have the most addicting app with the most user use-time. The Facebook team wants to have the most popular app overall in the social media market. Both TikTok Sponsors and Facebook Advertisers just want to create the most amount of revenue from their paid sponsorships and advertising. TikTok Content Creators want

to maximize TikTok's organic reach, build the largest possible following, have the most amount of engagement per post, and build an elite brand for paid sponsorships. Facebook Content Creators want to build their following and engagement as well, while a certain subsection of Facebook Content Creators also want to build a brand for a monetizable business.

With the different RSG's interpreting their respective social platforms and addressing problems in different ways, the various RSG's have to negotiate their differences as well. TikTok users simply swipe to the next piece of content if the content isn't engaging. The users' likes, comments, shares, and watch time also play a huge role in content shown. Facebook users can dislike pieces of content. Just like TikTok Users, Facebook users' reactions, comments, and shares play a huge role as well. Facebook users can also unfriend any member of their social circle as well. The TikTok team wants to design the most addicting algorithm to have the most use-time out of any social media app. The Facebook Team just wants to design the most favorable social media platform in the market. TikTok sponsors want to find the best influencers to generate the most amount of traffic to their product or service. Facebook Advertisers adapt and comply with the advertising rules laid out by the Facebook team. TikTok Content Creators adapt to what the audience wants, as each individual post focuses more on quality content than simplifying relying on a previous social circle to engage. Facebook content creators also adapt to what the audience wants, but more adapted to a user's offline social circle.

There is a closure mechanism to settle the debate, allowing certain solutions to be accepted and implemented. For Tiktok, if a Content Creator's content is engaging, the TikTok team is happy with the quality content and organically shows it to more TikTok users. With the content having higher organic reach, the Content Creator is happy reaching more people and

building up a larger following. The user is happy being shown the most high quality content. Finally the advertisers are happy because there's a larger source of traffic of users to advertise to. For Facebook a very similar scenario applies. If a Facebook Content Creator's content is engaging, Facebook is happy recognizing the engagement and shows the content to more of the content creator's social circle. The Content Creator is happy having more reach and engagement. The user is happy being shown the best possible content from their social circle. Finally the advertisers are happy because there is a larger source of traffic to market to.

As for the Mediation theory, the second a user opens the TikTok app, the short attention-grabbing content immediately hooks the users in to spend minutes if not hours on the platform. While seemingly harmless, the TikTok platform and the TikTok user are not just two pre-given "poles" of interaction. Rather, both parties are mutually shaping each other.

How is that? Well for starters, as a user continues to enjoy content on TikTok, the user becomes more accustomed to engaging short entertaining videos making it extremely difficult for the user to go back consuming longer form pieces of content and written posts. As for the TikTok platform, the algorithm constantly tests out which content does the user engage most with customizing the content to the user's interest. So not only does the user end up getting affected by the relationship between the parties, but the platform itself also shapes itself to the best interest of the user.

On Facebook, the mutual shaping of the Facebook platform and the TikTok platform isn't as apparent. Facebook's content contains a lot more written posts and longer form videos. This type of content doesn't shorten the user's attention span, and isn't exactly tailored to the user as much as TikTok's content is. At the same time, Facebook doesn't shape itself to use as

much as Tiktok does for its users. Instead of handing it's user custom tailored content, most Facebook users have to go actively search for content and Facebook groups that interest them. With the weaker mutual shaping of the Facebook platform to its users compared to the Tiktok platform and it's users, it's clear why Tiktok is becoming one of the fastest growing social media platforms in the digital age today.

Based on the 94 survey responses, I've found that regardless of personality type, social circle size, or connection size, TikTok is always favored by 18-22 year olds. However, if an individual is an introvert it is more likely that individual will favor TikTok, than if an individual is an extrovert to favor TikTok. However, again as stated above, regardless if the individual is an introvert or extrovert, TikTok remains the more favored choice.

For the individuals who chose Facebook, they prefer the platform because of genuine interaction, the ability to connect with friends and more importantly, and to be able to host events and get-togethers. Specific features individuals prefer about Facebook is the integrated messaging with friends, inviting and connecting with others, video with information, and again to organize events and get-togethers.

For the individuals who chose TikTok, they prefer the platform because the content is more exciting and quick for their shorter attention span, tailored towards their interest, and the content is never-ending. Specific features individuals prefer about TikTok is how easy it is to discover new never-ending content, the quick and attention grabbing videos, unlimited scroll, and how easy it is to message friends content that reminds them of that friend.

Finally there are some limitations to my survey method. I only surveyed 18-22 year olds.

So while this is one of the few age groups that actually use both platforms, there can be other age groups that would produce very different answers. For future work, definitely would look into surveying multiple age groups to compare differences in user motivation between Facebook and TikTok. Also the data showed that stay connecting to family is more important to a Facebook user than to stay connected with friends. Future surveys should include more questions about the size and relationship with family members to see how big of a role family plays in user motivation. The last limitation is that TikTok is currently trending. Facebook has been around for over a decade now. The longevity of Facebook may play a role in the data as well, so another data collection in the next 5-10 years may produce very different results compared to the data collected now.

Discussion

So as stated earlier, social circle and personality type appears to not play a role in the choice between Facebook and TikTok. The deciding factor is how the individual's brain favors short attention span content. This can imply that 18-22 years old in this generation are remembering less and less due to the addictive nature of phones and the evolution of technology. The ease of access of today's world such as Google, Uber Eats, and now TikTok makes it hard for individuals to go against "friction", such as going to the Library to read books instead of google, or to going to the grocery store to cook food instead of just ordering in Uber Eats. Now TikTok is another representation of ease of use, causing Facebook to be the next "Library" compared to "Google".

Another specific feature individuals like to see is the unlimited scroll feature in TikTok. While a seemingly harmless feature, the never-ending content implies that TikTok users utilize

the platform without a purpose. The platform isn't used to find specific information, but rather it is an "escape from reality". It can be implied TikTok users use the platform when their reality is "hard" or as an effort of procrastination. With most of the survey responses favoring TikTok, it appears the 18-22 year old generation in today's age would rather use their free-time or procrastination period on TikTok than to have in-person interactions or even the news.

A feature individuals who prefer Facebook seem to like is the ability to stay connected more with family members. Now with the majority of individuals favoring TikTok over Facebook, it can be implied that 18-22 year olds now-a-days are not as close with their families, and this generation was raised in a way that developed a shallower relationship with family members.

Another feature individuals who prefer Facebook like to see is the organizing events feature. Now again with the majority of individuals favoring TikTok over Facebook, it can be implied that less people want to organize in-person events over just scrolling on TikTok or even just messaging friends. This can be attributed to the coronavirus, but also may be a sign that today's 18-22 year old generation again falls victim to the "ease of use" of messaging over TikTok rather than meeting up in person through Facebook events.

Now going into the topic of messaging, a specific feature that is liked in both platforms is the integrating messaging. On Facebook, individuals can use Facebook messenger to send content to friends. On TikTok, individuals can send direct messages of TikTok videos to friends with one click of a button. It appears no matter the platform, social media is a way to still feel connected with friends, and also gives a good reason to start up conversations with friends as well. However, this can also imply people would rather message through social media than

physically meet up due to the amount of friction meeting up in person compared to just simply messaging on social media.

Now the final feature to dive deep into is how TikTok users enjoy how the content is tailored specifically towards their interest. This can imply again about how the “ease of use” is affecting today's 18-22 year old generation. Tying back to how individuals prefer Google over the library since there is too much friction in going to the library than simply typing in the google search bar on an iPhone, there is now too much friction finding content that interests a user on Facebook compared to having automatic tailored content on TikTok.

Conclusion

Facebook has been around for over a decade now while TikTok is one of the most rapidly growing social media platforms. Knowing on a deeper depth the motivations behind Facebook users compared to the motivations of TikTok users helps for a better prediction of how users interact online and the direction of social media and will be moving toward for years to come.

The purpose of the study was to address the differences in motivations of Facebook users compared to the motivations of TikTok users. The study attempted to answer five questions. First, who are the users? Second, what is the purpose of spending time on the platform? Third, what role does offline friendships play in the platform? Fourth, How do the algorithm and user interface design differ? Finally, how do the different algorithm designs attract different users? Breaking down the research into these five questions helps make the results cover all necessary aspects of a detailed investigation.

SCOT's framework and the Mediation theory were used to analyze these motivations.

SCOT was chosen as it analyzes the diverse perspectives from not just designers or system builders, but also users. SCOT was the most applicable STS framework, as my research focused primarily on users and their motivations, compared to each respective platform's design team or specific technical systems. The Mediation theory was chosen as it analyzes how two parties conform and adapt to each other rather. The Mediation theory was the most applicable ethical framework, as my research focused on what makes users attracted to specific features about the TikTok and Facebook algorithms.

Surveys were conducted of 18-22 year old college students as the research method of choice. Based on the surveys, more users no matter the personality type, social circle size, or connection size favored TikTok over Facebook. Based on the given answers, users preferred TikTok over Facebook due to 2 major factors. TikTok has more engaging tailored content than Facebook, as well as TikTok has a seemingly endless amount of content. Based on these two factors, it's clear that the motivations behind Facebook or TikTok isn't based off of a user's offline social circle, but rather simply to the convenience of how easy TikTok allows a user to find interesting content and almost have an "escape from reality".

Having users of both Facebook and TikTok be more aware of their motivations behind each platform will only provide more benefits. Awareness is the first step to solving a problem. So if a user does eventually have any problems with Facebook or TikTok, they'll have the knowledge of why they use the platform and if they can fulfill their motivating needs elsewhere.

In a more specific sense, it is now clear why the younger generation of users continued to use TikTok even with Trump essentially banning the use of the social media platform in the United States. Simply no other app makes it as "frictionless" as possible to find content tailored

to the interest of the user, as well the “escape from reality” that can be a major sign of procrastination or general unhappiness.

Bibliography

- Bresnick, E., 2020. *Intensified Play: Cinematic Study Of Tiktok Mobile App*. [online] D1wqtxts1xzle7.cloudfront.net. Available at:
<https://d1wqtxts1xzle7.cloudfront.net/61258421/Intensified_Play_TikTok_EthanBresnick_04252019_revised.pdf?1574126594=&response-content-disposition=inline%3B+filename%3DIntensified_Play_Cinematic_study_of_TikT.pdf&Expires=1607110332&Signature=XIxy8-8nG2lWDW~vFI-fVUUHFMI-OMDizWVTOMVQ8aPg1WMCcxKXxEAVMhjHsywsWQXteC7hzqbGfB0YamsACH6sEvyweXK3Ksn84HK6MVH3LQzoZcO2EQvhUuA4xyNXrx9O6b5z4Us0l6lba-sAhLkIm6h68iu80WZR3HNhIuUEusveKVWTLlnXC6j615hWTgJ-d0vMs8VmdJ4nGor4GTloivPVFZXluZ35lWkCoDMt7CdMYHS2~pINRNwP41dcj-ikKZ-2ZtS7YTgFyqNNCIpb0wU~u6FhKD1N~IoQ5FRC1Xzj2kAS-TwThVt5IzL-pYN3xd3qxknBG6L7VkJZCDg__&Key-Pair-Id=APKAJLOHF5GGSRLRBV4ZA> [Accessed 4 November 2020].
- Bumgarner, B., 2007. *You Have Been Poked: Exploring The Uses And Gratifications Of Facebook Among Emerging Adults*. [online] journals.uic.edu. Available at:
<<https://journals.uic.edu/ojs/index.php/fm/article/view/2026>> [Accessed 4 November 2020].
- De Veirman, M., Hudders, L. and Nelson, M., 2019. *What Is Influencer Marketing And How Does It Target Children? A Review And Direction For Future Research*. [online] /www.frontiersin.org. Available at:
<<https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02685/full>> [Accessed 4 November 2020].
- Droguer, N., 2011. *What Is The Motivation For Using Facebook?*. [online] sciencedirect.com. Available at:
<<https://www.sciencedirect.com/science/article/pii/S1877042811007087>> [Accessed 4 November 2020].
- Herrman, J., 2019. *How Tiktok Is Rewriting The World*. [online] res.tigerge.cn. Available at:
<<http://res.tigerge.cn/20200713/%E8%A1%A5%E5%85%851%20How%20TikTok%20Is%20Rewriting%20the%20World.pdf>> [Accessed 4 November 2020].
- Lyndon, A., 2011. *College Students' Facebook Stalking Of Ex-Partners*. [online] Mary Ann Liebert, Inc., publishers. Available at:
<<https://www.liebertpub.com/doi/abs/10.1089/cyber.2010.0588>> [Accessed 4 November 2020].

Omar, B. and Dequan, W., 2020. *Watch, Share Or Create: The Influence Of Personality Traits And User Motivation On Tiktok Mobile Video Usage*. [online] Learntechlib.org. Available at: <<https://www.learntechlib.org/p/216454/>> [Accessed 4 November 2020].

Pempek, T., 2008. *College Students' Social Networking Experiences On Facebook*. [online] sciencedirect.com. Available at: <<https://www.sciencedirect.com/science/article/abs/pii/S0193397308001408>> [Accessed 4 November 2020].

Ross, C., 2008. *Personality And Motivations Associated With Facebook Use*. [online] sciencedirect.com. Available at: <<https://www.sciencedirect.com/science/article/abs/pii/S0747563208002355>> [Accessed 4 November 2020].

Swani, K., 2013. *Spreading The Word Through Likes On Facebook: Evaluating The Message Strategy Effectiveness Of Fortune 500 Companies | Emerald Insight*. [online] Emerald.com. Available at: <<https://www.emerald.com/insight/content/doi/10.1108/JRIM-05-2013-0026/full/html>> [Accessed 4 November 2020].

Appendix

1. Survey Questions

- a. What age group are you in?
- b. Are you an introvert or an extrovert?
- c. What is your preference for an ideal friend group?
- d. How large is your social circle?
- e. Do you prefer Facebook or TikTok?
- f. Why do you prefer that platform over the other?
- g. 7. What specific features of that platform do you like about it?

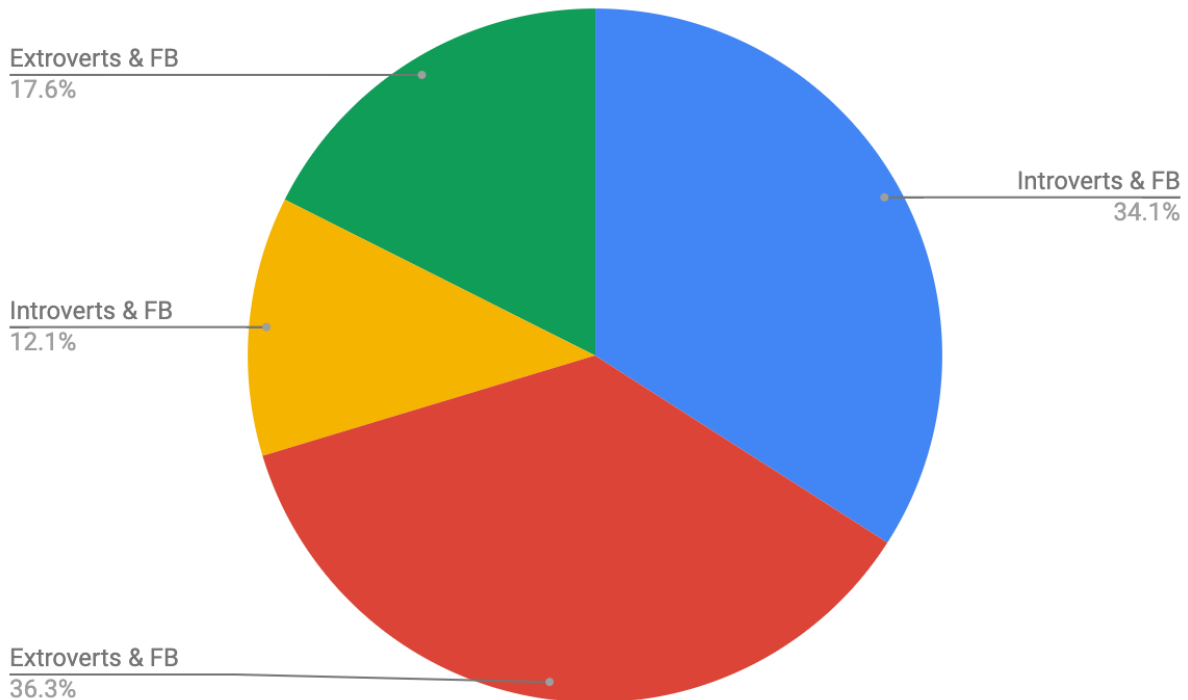
2. Google Form Survey Link

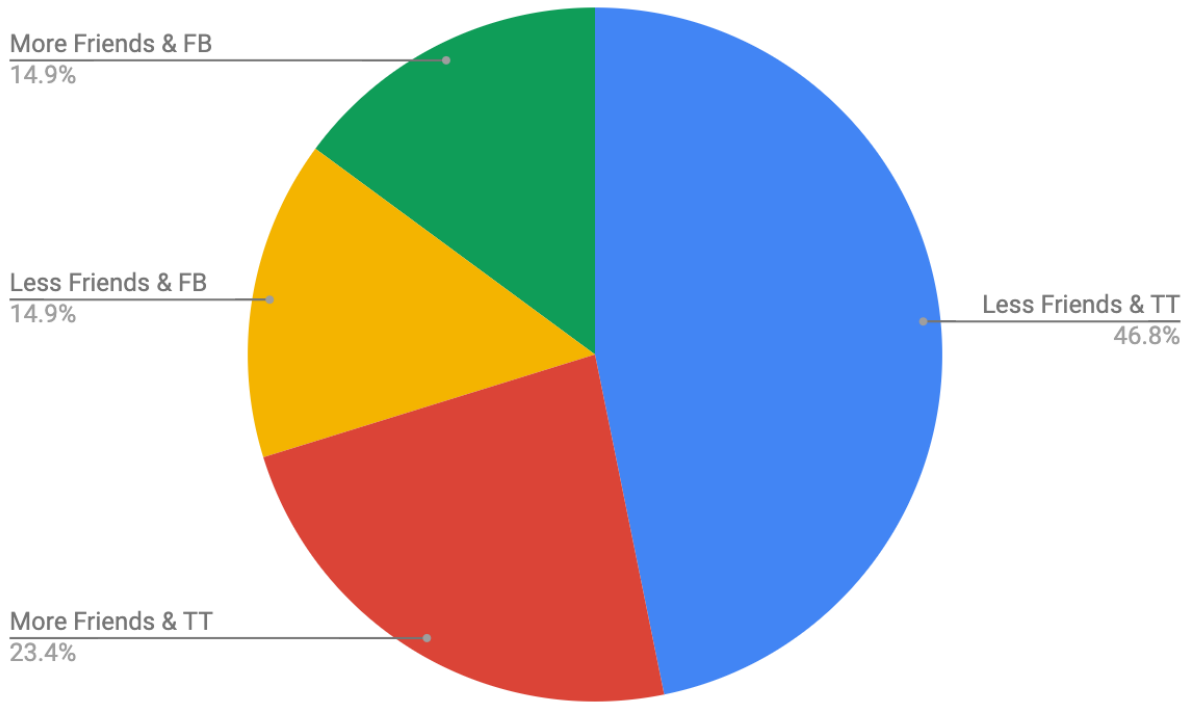
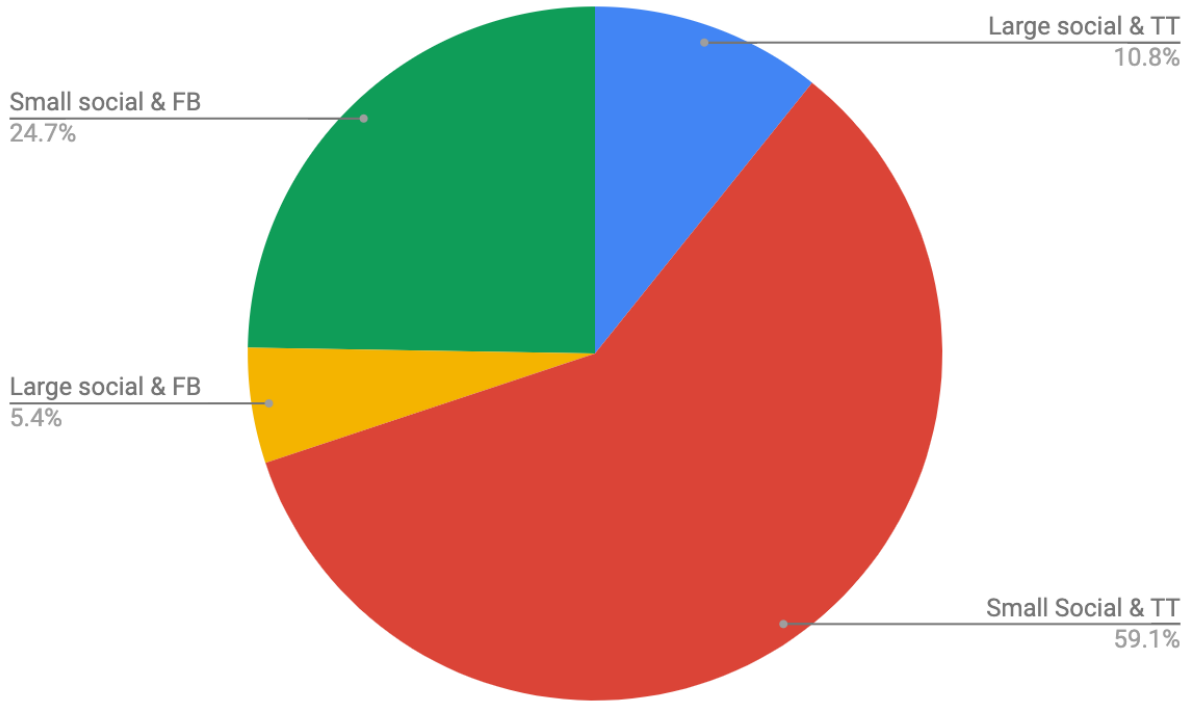
- a. https://docs.google.com/forms/d/e/1FAIpQLSdGA-gDgegXW6OiLqvyfuyLmbzRpkfuhIZp4gqS_YiNOjxpJ7A/viewform

3. Data Collection Worksheet Link

- a. https://docs.google.com/spreadsheets/d/1M7WoHZ4XptHZepQMAk8O3jqTNZGAKOM09A9y_9sXQPNo/edit?usp=sharing

4. Pie Charts of Data





5. Table of Data

Introvert Percentage	44.68%		Introverts & TikTok	32.98%
Extrovert Percentage	52.13%		Extroverts & TikTok	35.11%
Other	3.19%		Introverts & Facebook	11.70%
			Extroverts & Facebook	17.02%
No friends	1.00%			
Few close friends	83%		Large social circle & TikTok	10.64%
A lot of friends	16%		Small social circle & TikTok	58.51%
			Large social circle & Facebook	5.32%
A ton of connections	38.30%		Small social circle & Facebook	24.47%
Few good connections	61.70%			
			A few of connections & TikTok	46.81%
Facebook	29.80%		A ton of connections & TikTok	23.40%
TikTok	70.20%		A few of connections & Facebook	14.89%
			A ton of good connections & Facebook	14.89%
If you like TikTok...			If you like Facebook...	
Introvert	48.44%		Introvert	40.74%
Extrovert	51.56%		Extrovert	59.26%
Small Circle	15.38%		Small Circle	17.86%
Large Circle	84.62%		Large Circle	82.14%
Few	66.67%		Few Connections	50.00%

Connections				
A ton of connections	78.57%		A ton of connections	50.00%
If you are an Introvert...			If you are an Extrovert...	
Facebook	26.19%		Facebook	32.65%
TikTok	73.81%		TikTok	67.35%
If small social circle			If large social circle	
Facebook	29.49%		Facebook	33.33%
TikTok	70.51%		TikTok	66.67%
If few connections			If ton of connections	
Facebook	24.14%		Facebook	38.89%
TikTok	75.86%		TikTok	61.11%