SECI2143: PROBABILITY & STATISTICAL DATA ANALYSIS

2020/2021 – SEMESTER 2

REPORT : INFLUENCE OF TIK TOK ON UNIVERSITY STUDENTS

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INTRODUCTION

Tik Tok is an app which allows users to create videos up to 60 seconds with trending filters and soundtracks. Users could upload any genre of videos they liked from entertainment videos to motivational videos and even promotional videos. Along with the rise in popularity of various social media platforms, Tik Tok has successfully made its way out at the right time and has gained huge popularity in the society. According to Sensor Tower, for March 2021, Tik Tok with 58 million installs, became the most downloaded non-gaming app in the world (Chan, 2021).

Furthermore, the younger generation who are also known as Tik Tok creators spend most of their time on Tik Tok and shown additional interest in hashtag challenges which makes Tik Tok a more valuable chance for marketers. Lots of marketers, online sellers and brands use Tik Tok as a platform for branding purposes as many new businesses received millions of views and blew up after their short videos went viral on Tik Tok "for you page". Artists also use Tik Tok to promote their new songs, create trending dances and fashion styles. The amount of people following challenges and trends on Tik Tok is mindblowing, so it is normal to say that Tik Tok is the trendsetter app in 2021. Therefore, we chose this topic to shed light on the influence of tik tok on university students.

As Tik Tok continues to outgrow and perform better than other mature social media such as Facebook, Instagram and Snapchat, this study aims to investigate the uniqueness of tik tok features on how it became a world leading app which attracts people to use. This study also explores the types of video contents that university students preferred and why they are willing to spend their precious time on Tik Tok. Besides, this study also looks into the influence of Tik Tok famous influencers in the field of university students daily life as many creators gain their fame, followers and incomes through Tik Tok.

All things considered, we hope that this study could provide university students with useful information on the usage and special features of Tik Tok which attracts younger generations and also benefits others to use the social media platform to spread awareness wisely. Other than that, we also hope that this study could be useful in future research and findings on related topics and have the ability to create another better world leading app.

METHODOLOGY

To obtain results for our research, we have decided to do a survey among university students through Google Form. With that, we have prepared a questionnaire related to our purpose of doing this research and our target is to get 60 respondents. In the survey form, there are 4 parts which are part A, B,C and D. For part A, the focus is on demography of respondents. Other than that, part B is about frequency usage like how many hours they use the app in a day. Next, for part C the questions are about respondents's preference in Tik Tok. For example, what type of content they watch, their favourite features in the apps and many more. Lastly, part D asks respondents on their view about how awareness can be spread in Tik Tok.

We choose Google Form as a platform to do the survey because most university students are familiar with it. Not to forget, it is reliable and easy to use since we can spread the survey only by giving people the link. After we construct the questionnaire and approved by Dr Chan Weng Howe, we distribute the survey on Whatsapp, Telegram and also Instagram. After a few days, we managed to get our target respondents which are 62 people.

After that, we went through the data and did some cleaning because some of the data are irrelevant and they are not in the same format. Then, we import our data into Excel and save it in the format xlsx file. From this survey, we collected various types of data which are quantitative data and qualitative data. Not just that, we are also able to collect ratio class, interval class, nominal and ordinal class.

Last but not least, we analyze the data by using software R studio. This software helps us to visualize the data in many forms of graphical representations. Such as bar charts, histograms, pie charts and so on. On top of that, every form of visualization provides us different kinds of insight related to the topic. We analyze, understand and present our findings from the survey in a form of report.

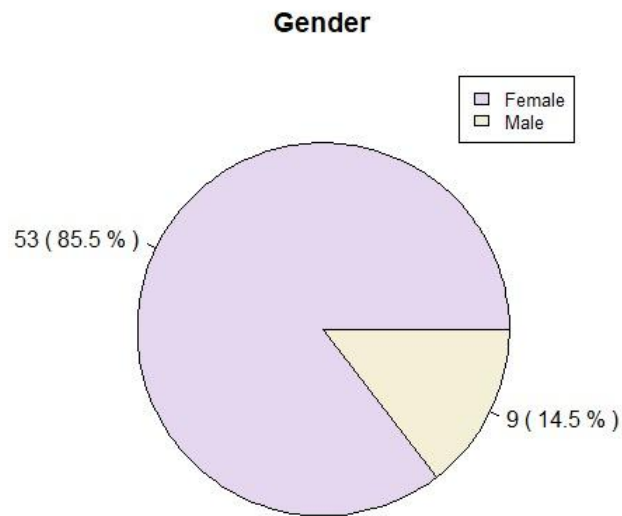RESULT ANALYSIS AND DISCUSSION

Part A: Demography

Gender

Figure 1.0 Pie chart on gender of the samples

Pie chart above shows the gender of 62 respondents who had answered our survey form. All respondents are students from University Teknologi Malaysia which consists of 53 female students and 9 male students. The percentage of female respondents is 85.5% higher than the percentage of male students which is 14.5%.
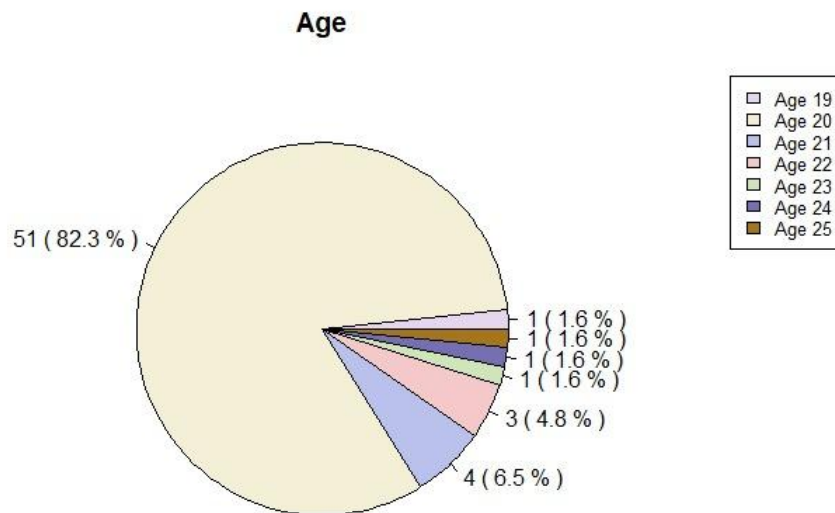
Age

Legend:
- Age 19
- Age 20
- Age 21
- Age 22
- Age 23
- Age 24
- Age 25

51 (82.3 %)

1 (1.6 %)
1 (1.6 %)
1 (1.6 %)
1 (1.6 %)
3 (4.8 %)
4 (6.5 %)

Figure 2.0 Pie chart on age of the samples

Based on the pie chart above, it shows that the age of respondents is between 19 years old to 25 years old. In our samples, there are 51 respondents who are 20 years old and have the highest percentage which is 82.3%. Other ages such as age of 21 and age of 22 contain percentages below 10%. There are only 4 respondents who are 21 years old showing 6.8% on the pie chart and 3 respondents who are 22 years old showing 4.8% on the pie chart. Other than that, there are 4 respondents who are in different ages which are ages of 19, 23, 24 and 25. Each of the ages hold only 1.6% on the pie chart.

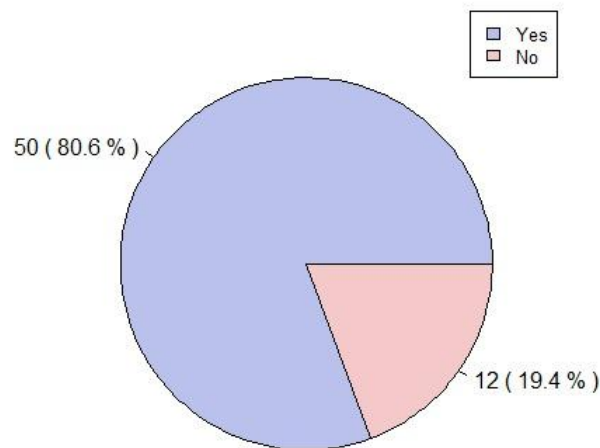**Number of University Students Who Have Tik Tok Account**

Figure 3.0 University students who have Tik Tok Account

Pie chart above shows the number of university students who have Tik Tok accounts. From the pie chart, we can see that there are only a small number of students who have no Tik Tok accounts. 12 of 62 respondents answered that they do not have a Tik Tok account which is 19.4% while another 50 respondents answered that they have a Tik Tok account which is 80.6%. From the observation above, we can conclude that most university students have registered an account on Tik Tok.
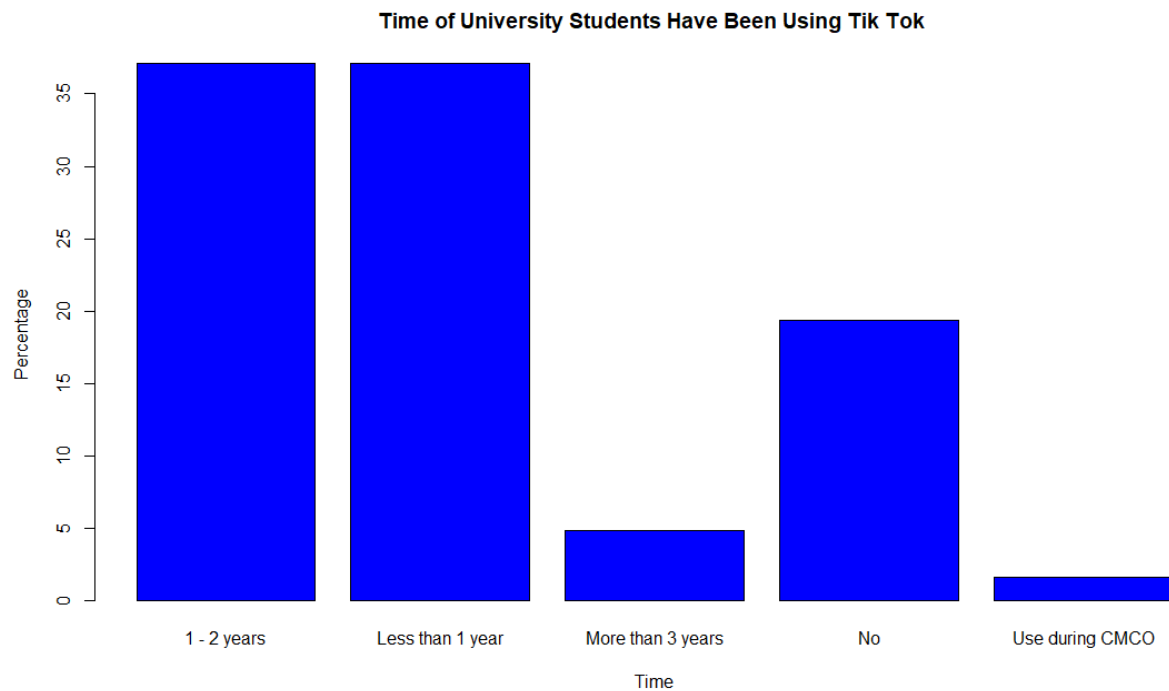
Part B: Frequency Usage of Tik Tok

Time of University Students Have Been Using Tik Tok

Figure 4.0 Time of University Students Use Tik Tok

The bar chart above shows the time of university students have been using Tik Tok in the measurement of years which are less than 1 year, 1 to 2 years and more than 3 years.

Since there are 12 respondents who have no Tik Tok account, there are 12 respondents (19.4%) who answered that they never use Tik Tok in this question. The number of university students who have been using Tik Tok for 1 to 2 years is the same as the number of university students who have been using Tik Tok for less than 1 year. Both of them consist of 23 respondents which is 37.1%. There are only a small number of university students who have been using Tik Tok for more than 3 years which is only 3 respondents (4.8%). Lastly, there are 1 respondents who had only used Tik Tok during CMCO and had uninstalled Tik Tok.

Overall, we can conclude that university students installed Tik Tok for 2 years on average. This means that university students find it necessary to install Tik Tok for fun, entertainment and relaxation.
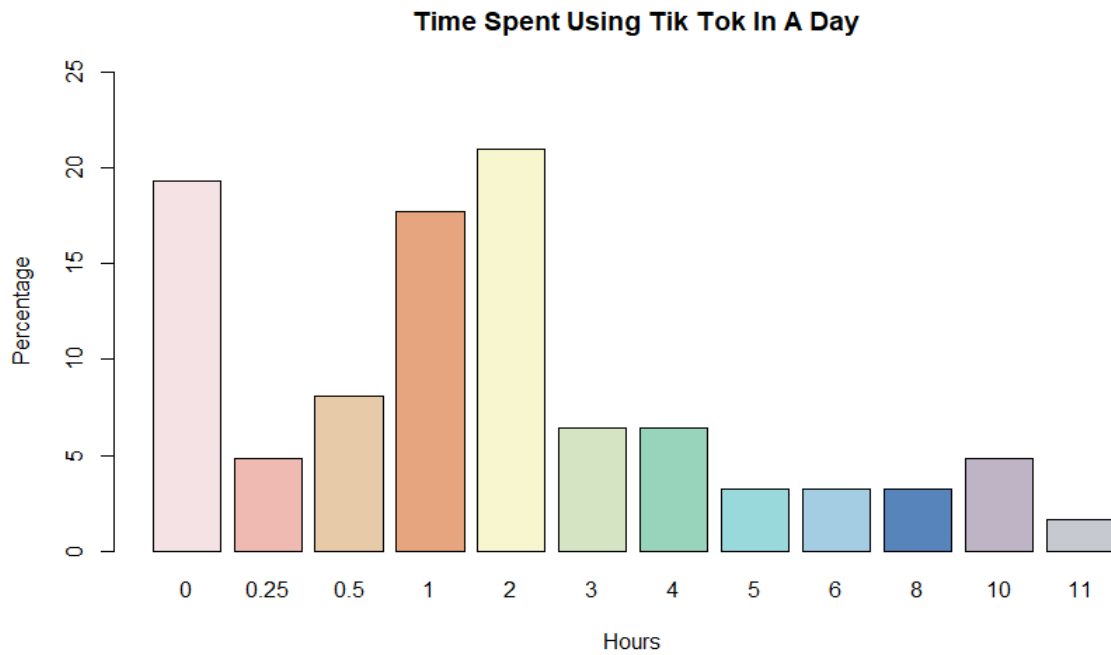
Time Spent Using Tik Tok In A Day

Figure 5.0: Time university student spent using Tik Tok in a day

Based on the barchart above, it illustrates the information regarding the duration of time which university students spent on Tik Tok in a day at a range of 0 to 11 hours.

There are 19.35% of respondents who do not spend time on Tik Tok as they do not use the app. Among those who use Tik Tok, the highest percentage recorded is 20.97% in which respondents spent 2 hours per day on Tik Tok. Moving on to the second highest percentage, 17.74% of the respondents spent an hour on Tik Tok daily. 8.06% of respondents use Tik Tok for 0.5 hours daily followed by 6.45% of the respondents who spent 3 to 4 hours per day on Tik Tok. Respondents who spent 0.25 hours and 10 hours everyday on Tik Tok recorded the same percentage which is 4.84%. Furthermore, 3.23% of the respondents spent 5 to 7 hours per day and only a mere 1.61% of the respondents spent 11 hours which is nearly half a day on Tik Tok.

Overall, it is clear that Tik Tok is a popular app among students for entertainment and time passing as most university students spend hours on it. This also means that this app is quite addictive and students are using Tik Tok daily to create, share and watch videos uploaded on Tik Tok.

Everyday

Frequent

Seldom

Never

31 (50 %)

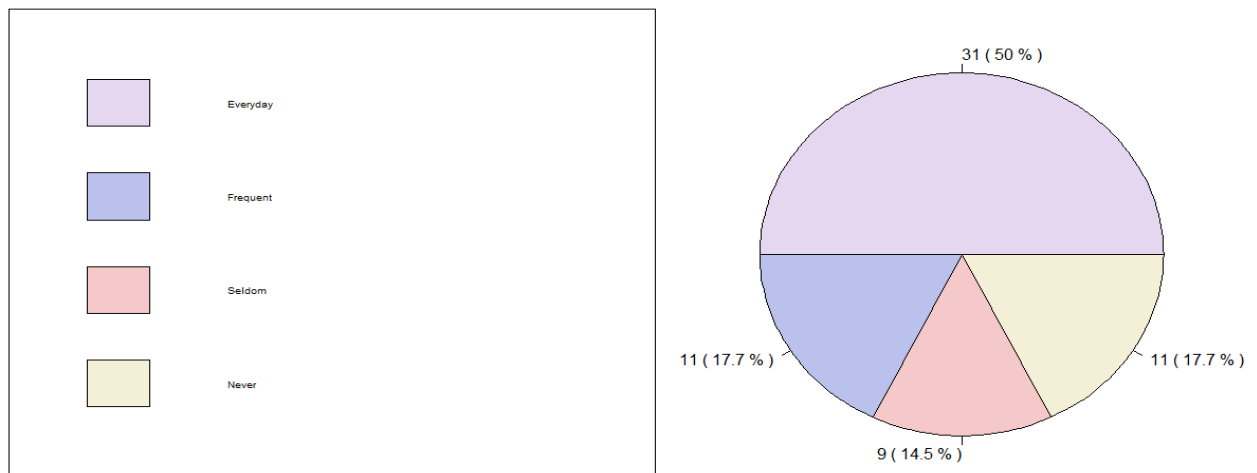11 (17.7 %)

11 (17.7 %)

9 (14.5 %)

Figure 6.0: Amount of time students spend on Tiktok in a week

We have chosen to use pie charts to illustrate the amount of time University students spend on Tiktok in a week. From the pie chart above, we can see that 31 students out of 62 students (50%) use Tiktok every day. The number of students who use the Tiktok application frequently are 11 students (17.7%) while the number of students who seldom use the Tiktok application are 9 students (14.5). Lastly, it is shown in the pie chart that there are 11 students (17.7%) who do not spend any time using the Tiktok application in a week.

From Figure 6.0, we can conclude that most of the University students (82.2%) use the Tiktok application in their daily lives. This might be due to students trying to release stress by watching Tiktok videos since it can be a coping mechanism for University students to cope with their stress. However, there are still quite a few students (17.7%) who do not use or spend any of their time to use the Tiktok application. This might happen because of the lack of interest of the Tiktok application as there are many other social platforms such as Twitter and Instagram that may captivate their interest more.

In conclusion, the number of students who use the Tiktok application in their daily lives is much higher compared to the number of students who do not engage in the Tiktok

application in their daily lives. This shows that the Tiktok is a very interesting application as it can attract a lot of people to use the application.

Part C: Preferences of content in Tik Tok

Favourite Tiktok Content of University Students

☐ Motivational
☐ Funny
☐ Food
☐ Dance
☐ Singing
☐ Small Bussiness
☐ Music
☐ Facts
☐ None
☐ Korean Idol
☐ Others

34 (23.9 %)

19 (13.4 %)

13 (9.2 %)

4 (2.8 %)
3 (2.1 %)

19 (13.4 %)

12 (8.5 %)

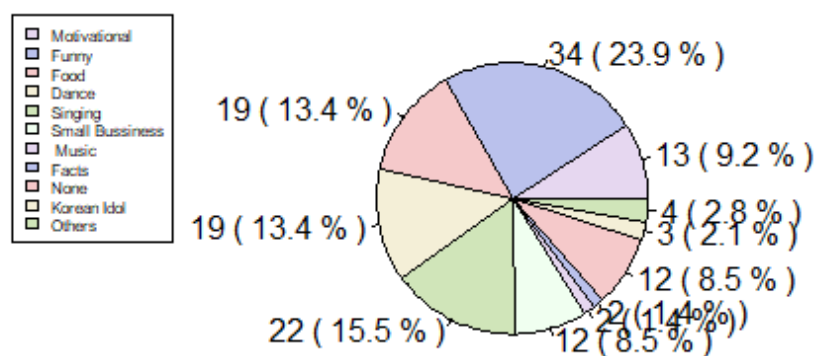22 (15.5 %)

2 (1.4 %)
12 (8.5 %)

Figure 7.0 : Pie Chart showing Type of Contents University Students Prefer

Figure above shows that there are many types of video contents that you can find in Tiktok. That includes funny videos, food, dancing, singing, motivational, small business and many more. Pie charts are best to represent this data as you can see clearly the distribution of data according to its categories.

First, the majority of the students which is 23.9% chooses funny videos as their favorite. Next, we can see that music and facts content holds the least amount of students which is 1.4% (2 students). There are 22 students which is 15.5% from the total respondents who like singing content. In addition, the food and dance category shares the same percentage which is 13.4%. Moreover, 9.2% of the respondents prefer motivational videos. 8.5% of the students like small business content and 8.5% of them like none of the content because they are not a tiktok user. There are 2.8% of them who prefer other content than the one listed in the survey. Lastly, Korean idol category have 2.1% of the respondents who like it

Based on the analysis above, we can conclude that everyone has their own preferences and tastes on what kind of videos they enjoy watching. But mostly, students would choose to watch funny videos and the survey proves it. This is because students tend to get tired from learning, doing assignments and catching deadlines. Whenever they are exhausted, they tend to entertain themselves and ease their mind by watching videos. Tiktok videos can help lift up their mood and gain their energy back to continue doing their work. Various types of content are one of the reasons why students choose and are a user of Tiktok.
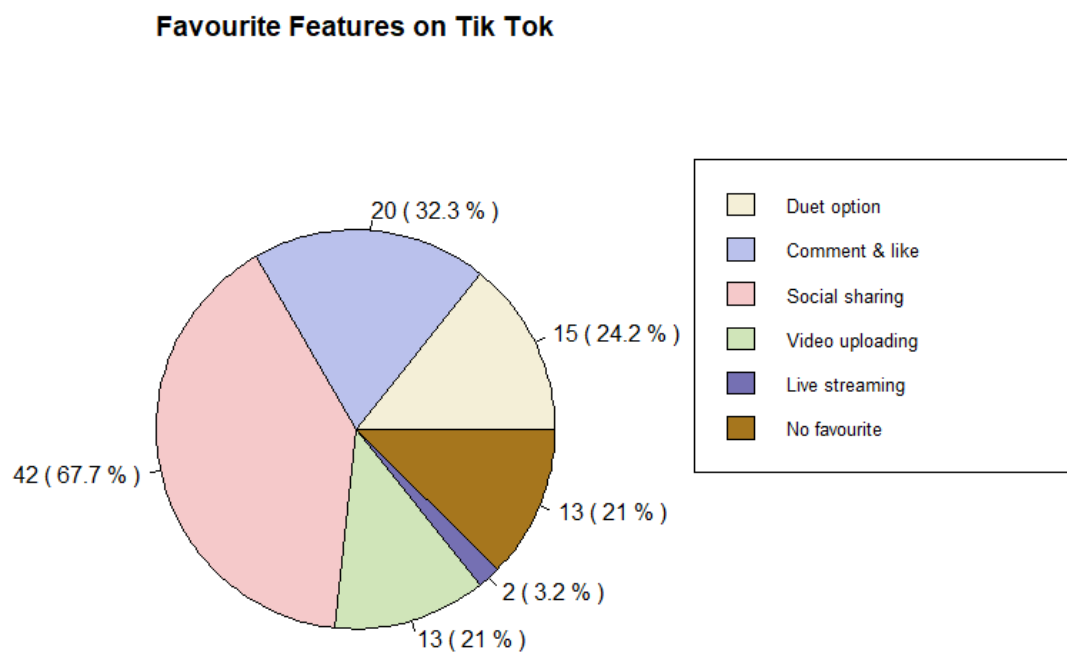

Figure 8.0 Favourite Feature on Tik Tok

Based on the pie chart above, it can be seen that there are 5 different types of features that are available on Tik Tok. We asked the respondents to answer which features are their favourites. Each respondent can answer more than one answer in this question.

First, we can see that social sharing is the most favourite feature on Tik Tok among the respondents. There are 42 respondents who like the feature of social sharing which has the highest percentage, 67.7% followed by the feature of comment and like which has percentage of 32.3% and duet option which has percentage of 24.2%. Next, the number of respondents who like the feature of video uploading is the same as the number of respondents who have no favourite feature on Tik Tok. Both of them consist of 13 respondents which is

21%. Lastly, there are only 2 respondents who like the feature of live streaming on Tik Tok which is 3.2%.

From the observation above, we can say that social sharing on Tik Tok is the most popular and all the respondents like to use this feature to share all the contents from Tik Tok to other applications. Next, comment and like and duet option are the second and third favourite features on Tik Tok among respondents. This is because comment and like allows us to like and comment on the videos which we can interact with other people on Tik Tok while duet option is a fun feature that we can record a video alongside someone else's video. Live streaming is a feature that we can watch live video on Tik Tok and it is less popular among the respondents. For the respondents who have no favourite feature, we can conclude that they think all the features are equally important and usable.
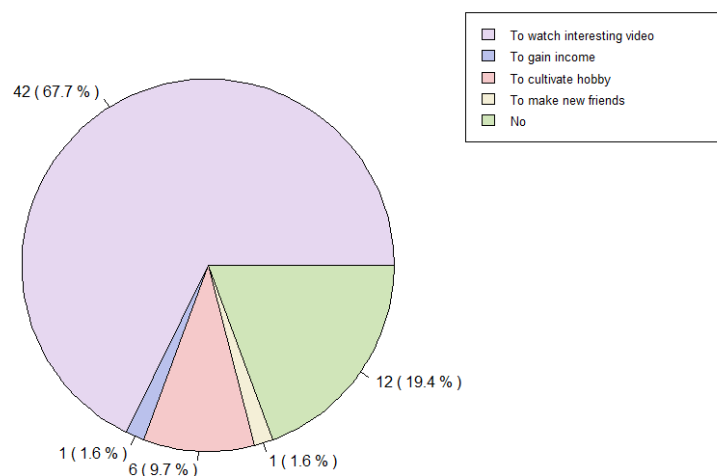

Figure 9.0: Reasons university students download Tik Tok

The pie chart shows the result in which university students are asked about the reasons they download Tik Tok. There are 4 main reasons which are to watch interesting videos, to gain income, to cultivate hobby, to make new friends and a selection 'No' for those who do not have a Tik Tok app.

From the pie chart, it is clear that the majority of respondents download Tik Tok to watch interesting videos with the highest percentage of 67.7% respondents. Only a small percentage of 1.6% respondents download Tik Tok to show themselves on the platform either to be well known or to promote their business in order to gain income. On the other hand, there are 9.7% of Tik Tok users who download the app with the reason to cultivate a hobby. Interestingly, only 1.6% of respondents use Tik Tok to make new friends, this shows that the messaging feature in Tik Tok is not essential to university students. Lastly, there are 19.4% of respondents who did not download the tik tok app.

In conclusion, since watching interesting videos is the most popular reason, it is clear that university students love watching videos on Tik Tok as the plethora of videos are entertaining and they could get new inspirations from those videos. Thus, we are more likely to see more and more social media platforms which allow users to watch as well as create short and trendy videos with more special features in the future.
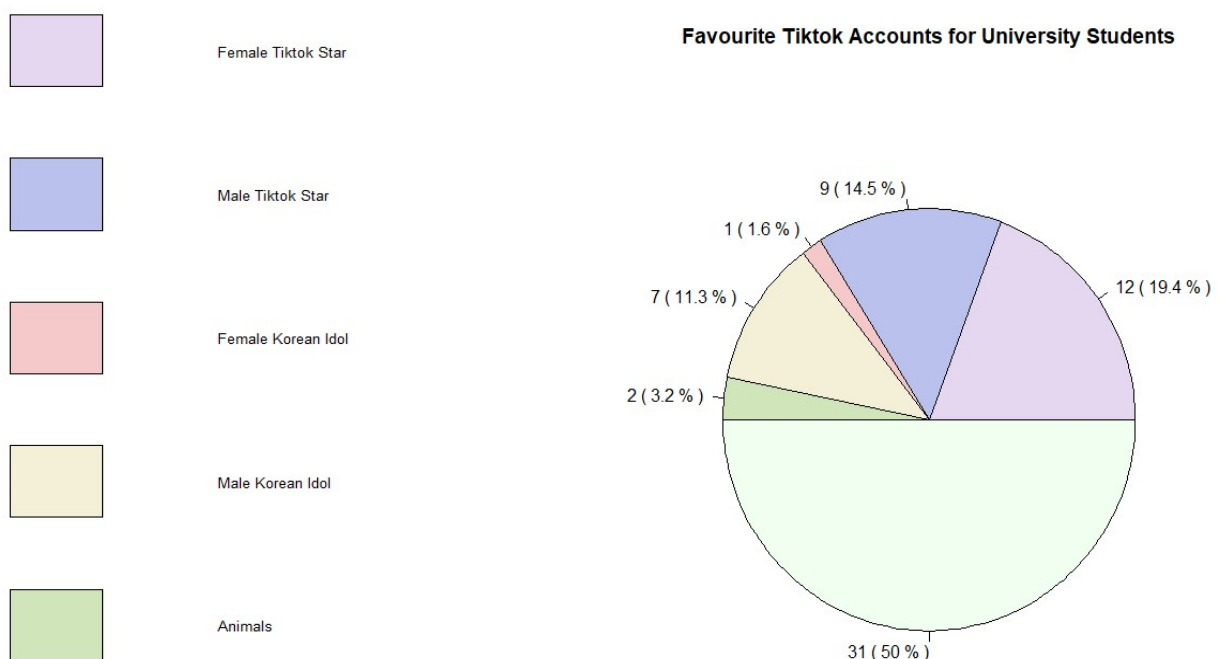

Figure 10.0: Favourite Tik Tok Accounts for University Students

In order to display the processed data for the favourite Tiktok accounts for university students, we used a pie chart to represent the said data. In Figure 10.0, it is shown that out of

all 62 students, 50% (31 students) of the students does not have a specific account that they particularly like. Among the students who have a favourite Tiktok account, female Tiktok stars have the most votes which are as much as 12 students (19.4%) while only 1 student (1.6%) likes female Korean idols. The number of students who like male Tiktok stars are 9 students (14.5%) while there are 7 students (11.3%) who like male Korean idols. Lastly, there are 2 students (3.2%) who chose animals as their favourite Tiktok accounts.

Based on the pie chart above, we can conclude that the majority of the University students (50%) do not have a specific Tiktok account that they like. This may happen due to the existence of the For You page where various Tiktok videos from various Tiktok accounts will be on the For You page specially tailored to the user's preferences. However, for Tiktok users with a favourite Tiktok account, it is shown that the majority chooses a female Tiktok star (19.4%) as their favourite Tiktok account. This might be due to the creativity of the female Tiktok stars as many of the viral Tiktok trends were created by female Tiktok stars so their creativity may have caught people's attention. Female Korean idols have gotten the least number of votes (1.6%) and this may happen because most female Korean idols do not really use the Tiktok application but use other social media platforms such as Instagram.

With that, it is clear that people do not give much attention to the creator behind the video content and do not try to explore or dig deeper to the creator's account but just enjoy the particular video in that particular moment.
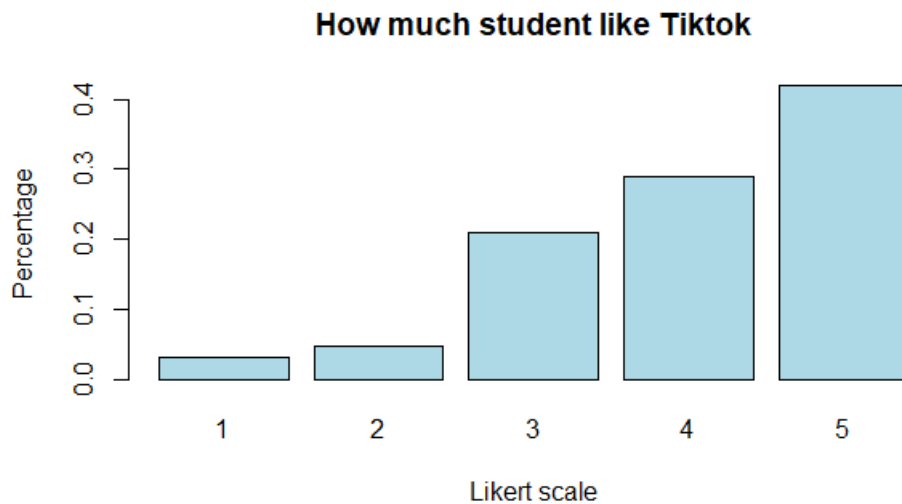
Part D: Awareness on Tik Tok

How much student like Tiktok

Figure 11.0 : Bar Chart on how students like Tik tok.

The bar chart above shows the percentage of students who like Tiktok. On the y-axis are the percentage of students and for x-axis is a likert scale from 1-5 whether they like it or not. 1 show that they dislike it up until 5 shows that they really like Tiktok.

As you can see from the graph above, there are about 40% of students who really like Tik tok which tells us that the majority of the students really enjoy and love using the application. Next, a small percentage of less than 10% shows that they dislike using Tiktok. This is because they do not have the apps and never explore what Tiktok actually is. Other than that, about 30% of the students rate 4 on how much they like Tiktok, 23% of the students rate Tiktok at scale 2 and lastly percentage of students who only like Tik tok in the scale of 2 are 3%.

According to the analysis above, university students are likely to love Tiktok and that is what they rate at 5. This is because Tik tok is a platform where students can ease their mind if they are stressed since they can watch all kinds of short videos they want.For example, if they want to laugh, they can just search for funny videos or even if they need motivation, there are also Tiktokers who love to share motivational thoughts. In addition, the apps is reliable and easy to use, making students keep on coming back to it. That is why majority of students like using Tiktok.
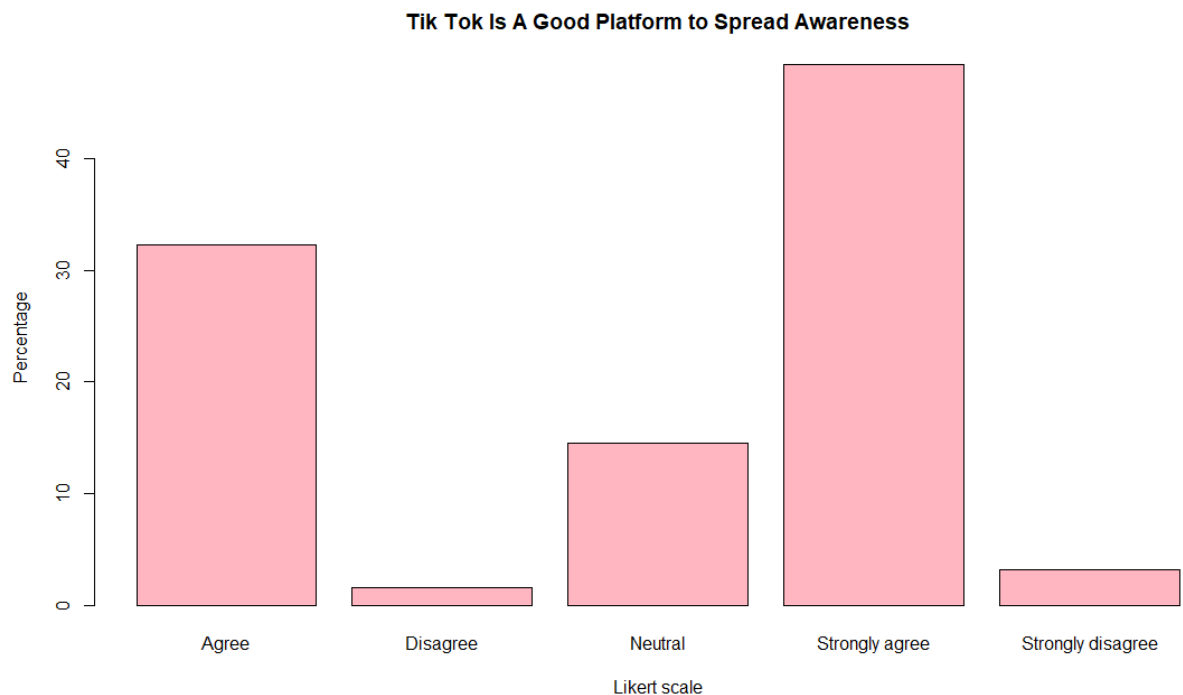
Tik Tok Is A Good Platform to Spread Awareness

Figure 12.0 Bar Chart on Tik Tok Is A Good Platform to Spread Awareness

Bar chart above shows that the agreement of university students on Tik Tok is a good platform to spread awareness. The result is represented in percentage in the bar chart.

In the total of 62 respondents, there 30 respondents who strongly agree that Tik Tok is a good platform to spread awareness which holds the highest percentage, 48.4%. The second highest percentage is 32.3% which consists of 20 respondents who agree that Tik Tok is a good platform. From the bar chart, we can see that there are 9 respondents (14.5%) who have neutral opinions on this topic. There are only a small number of respondents who disagree and strongly agree on this topic. There are only 1 respondent (1.6%) who disagree and 2 respondents (3.2%) who strongly disagree.

From the observation above, we can conclude that most university students believe that Tik Tok is a good application to spread awareness. Tik Tok allows users to make or share short videos based on their personal experience, get opportunities to show themselves in reality that they don't have, and experience self-worth, which is a sense of recognition for what they think and do (Zuo et al, 2019).
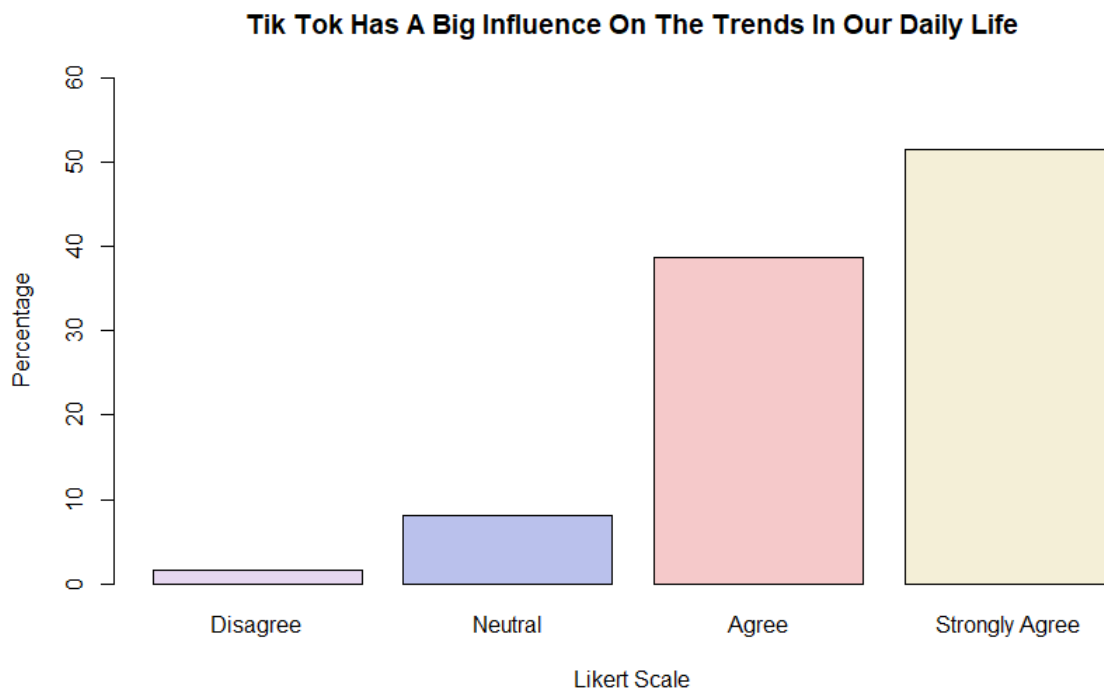
Tik Tok Has A Big Influence On The Trends In Our Daily Life

Figure 13.0: Tik Tok has a big influence on the trends in our daily life

The graph presents the level of agreement at which university students think that Tik Tok has a big influence on the trends in our daily life. The result of this statement is given in percentage.

More than half of the respondents (51.61%) strongly agree that Tik Tok has a big influence on the trends in our daily life. In addition, 38.71% of respondents chose to agree and 8.06% of respondents chose to remain neutral on the above statement. There are only 1.61% of respondents who disagree on the statement that Tik Tok has a big influence on the trends in our daily life and no respondents chose 'strongly disagree' on the statement.

From this data, we can conclude university students have adapted to the rising trends on Tik Tok and tend to be more interactive and engage on the trends which results in a huge amount of downloads of the app. This trend influences the younger generation to participate in a series of either dancing or singing challenges through Tik Tok especially when their favourite creator updated a new hashtag challenge.
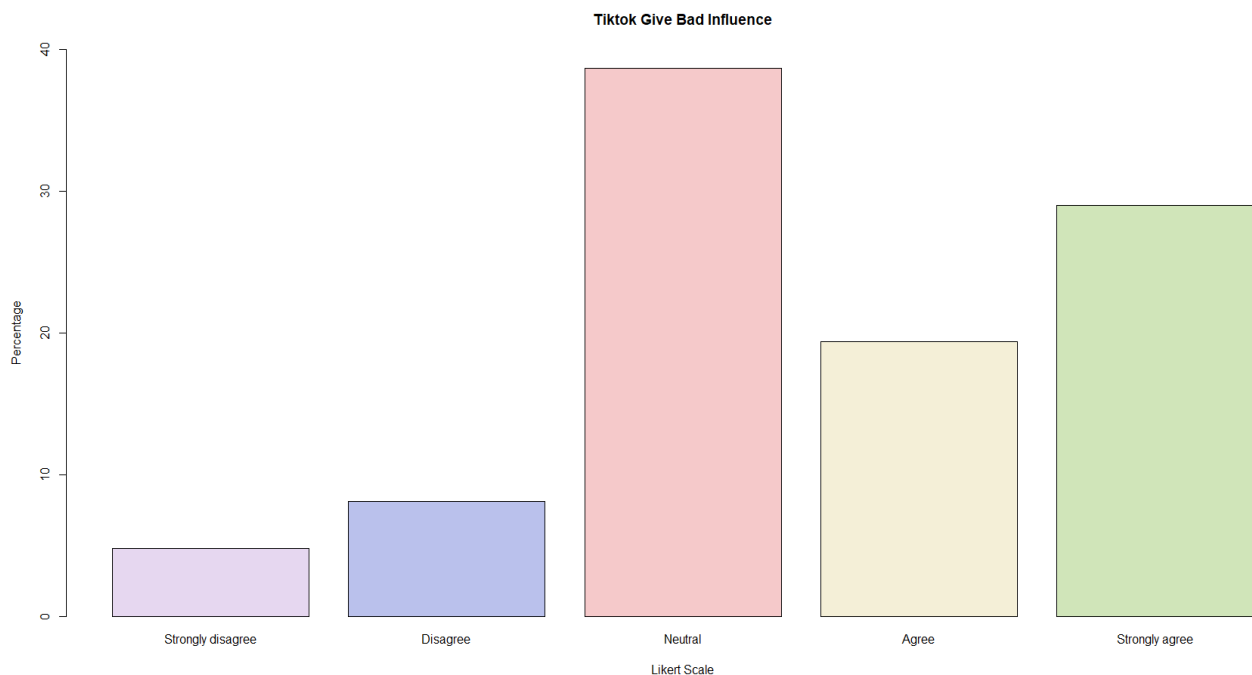
Figure 14.0: Tiktok Give Bad Influence

A bar chart was chosen to represent the processed data for the respondent's response towards their opinion on whether Tiktok gives bad influence towards the users. Based on the bar chart, it is shown that 4.8% of the respondents (3 respondents) strongly disagree while 8.1% of the respondents (5 respondents) disagree on this. Meanwhile, 19.4% of the respondents (12 respondents) have agreed on this statement while 29% of the respondents (18 respondents) strongly agreed. However, the majority of the respondents are neutral which are as much as 38.7% of the respondents (24 respondents).

From Figure 14.0, it is displayed that most of the respondents (38.7%) have a neutral opinion on the question whether Tiktok gives users bad influence. The reason the respondents may think that way is because Tiktok has a variety of contents and it can also be divided into many sides or parts. Each user has their own specialised content algorithm that suits the user's personal preferences. Hence, Tiktok can give a bad influence if the user is on the bad side of the application but it can also give the user good influence if the user is on the right side of the application. Other than that, quite a lot of people strongly agreed (29%) that Tiktok gives bad influence. This may be due to the lack of strict supervision from the company as there are a lot of misguiding or explicit videos that are being shared on the application that could give bad impact to users. With the existence of the For You page, everyone can be exposed to those types of videos. Meanwhile, a few disagreed (8.1%) that

Tiktok gives bad influence and the reason they think so could be the lack of exposure towards the bad side of the application which will give them the impression that Tiktok does not give any bad influence as there are no videos that they have discovered that could do so.

To sum it all up, Tiktok has its good sides and bad sides. While it could give bad influence, as long as the user avoids watching videos that can give bad impact, it is a very good application that can give motivation, good influence and can even educate users more as there are a lot of people who share their knowledge in the application.
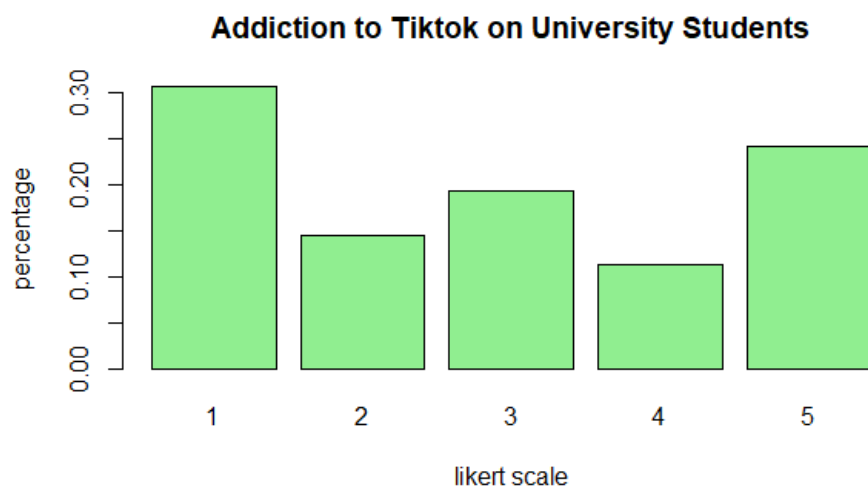

Figure 15.0 : Bar Chart Addiction to Tik tok on University Students.

Figure above shows a bar chart representing how addicted students are to Tiktok. On the y-axis, it is the percentage number of students and y-axis is a likert scale where 1 shows that they are not addicted to up to 5 represents that they are very addicted to Tik tok.

As seen in the graph, the majority of these students are not addicted to Tik tok because 30% of them rate 1 during the survey. This tells us that eventhough they really like the application, they manage to not get overly attached to it. Next, a small percentage of students which is 14% chooses to rate 4 on their addiction towards tiktok. However, about 25% of the students rate 5 which means they are addicted to Tik tok. This is not a good behaviour because their study, health and productivity can be affected. Then, about 20% of the students

rate 3 which means their addiction is still in a controllable state. Last but not least, 15% of the university students rate 2.

From the analysis above, we can conclude that this kind of application is addictive because students keep on scrolling the videos as they enjoy watching them Not to forget, Tiktok has an algorithm where it can read what are one's preferable content and it will continue showing up at the page making students hard to take their eyes off the Tiktok apps. Addiction is a serious matter because it can affect ourselves in many ways, the worst case of all it might ruin our future. Luckily, most of the students know to control themselves and not make Tiktok as one of their addictions.

CONCLUSION

To summarise everything, we have learned about a lot of things by doing this survey. Firstly, we learned that Tiktok is a very well-known application that is used a lot by teens and adults especially University students. It has also consumed a lot of our time in our daily lives as it is quite addicting with its various contents and it has somewhat impacted our lives one way or another as there are a lot of contents from the said application that can either give us benefits or give us harm. In this survey, we also have learned that different people have different preferences as there are respondents with such contrasting tastes and we also came to a realisation that there were actually a lot of different contents in Tiktok that we were not even aware of. Moreover, we had learned a lot of new things and acquired new knowledge and skills by doing this survey and report. We gained knowledge on how to operate and use the Rstudio which was completely foreign to us as we never tried using the application before. In a nutshell, we believe that this experience has helped us a lot by giving us exposure towards new things that can benefit us in the near future.

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Zuo, H. and Wang, T., 2019. Analysis of Tik Tok user behavior from the perspective of popular culture. *Frontiers in Art Research*, *1*(3).