

PREFERENCE OF GENRE AMONG UMD STUDENTS VS U.S POPULATION WITH NETFLIX MOVIE AND TV

INST462-0101

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Background

In the last couple of years, the popularity of streaming services has significantly increased. According to the data company Statista, "Netflix reported 73.4 million paid streaming subscribers across the United States and Canada in the third quarter of 2022". Netflix offers a wide variety of content to its subscribers. The popularity of movies and TV-shows genres offered by the platform may vary in each country. Therefore, we have decided to focus on the analysis of the Netflix content preferences of United States users.



Objective

In the first quarter of 2022, Netflix reported losing about 1 million subscribers worldwide. This could be a consequence of the stream platforms' competitive market, inflation, or simply that most content available on the platform is no longer appealing to their subscribers (Lawler).

Inflation and market competition are harder factors to measure. In addition, one of the reasons why Netflix is losing their subscribers is content (Vatu, 2022) and this will impact their business because the streaming video services are dominating one of the media market fields. Therefore, we have decided to explore and compare the content preferences of US Netflix users in particular the movies and TV-show genre preferences among UMD students. This will allow us to evaluate whether the lack of content in certain categories could be a link to the decline of subscribers. If categories offered by Netflix tend to have more content from unpopular categories. We could present Netflix with a recommendation to create or acquire new content relevant to users' preferences. This would overall benefit the company, positively impact users' satisfaction, and avoid losing subscribers.

On the other hand, if we find that Netflix is indeed offering more content in users' favorite genres, we would consider the association between the decline in subscribers and the amount of content offered by the company.

Data Collection

Netflix Movie and TV show

This survey for INST462 to identify the UMD Undergraduate student's preference on Netflix programs. You can take this survey about 4-5 mins. If you are a subscriber of Netflix, please let us know which movie and TV show are your favorite with including American movie and TV show.

Which of the following best describes you?

- ☐ InfoSci student
- ☐ Non-InfoSci student
- ☐ Add option or add "Other"

What is your year of study? *

- ☐ freshman
- ☐ sophomore
- ☐ junior
- ☐ senior
- ☐ +5 years

Figure 1. Survey sent to UMD students.

A	B	C	D	E	F	G	H	I
Timestamp	Which of the following best describes you?	What is your year of study?	Do you own a Netflix acc?	What genre do you prefer?	What is your favorite movie?	What is your favorite TV show?	What genre do you prefer?	What is your favorite TV show?
10/10/2022 20:50:01	Info Science student	25-34	senior	No, I don't use Netflix	Jurassic park	Jurassic park	comedy	
10/10/2022 12:28:57	Info Science student	19-24	senior	Yes, I do own an account	City of God	Friday	animation	
10/10/2022 14:40:02	Info Science student	19-24	junior	No, I don't use Netflix	Jurassic Park	Jurassic Park	comedy	
10/10/2022 18:45:10	Non-Info Science student	25-34	junior	No, I don't use Netflix	What happened to Mond	What happened to Mond	action	
10/10/2022 16:50:07	Non-Info Science student	19-24	senior	Yes, I do own an account	Clueless	Clueless	drama	
10/10/2022 17:11:44	Info Science student	19-24	junior	No, I don't use Netflix	Born to be wild	Da 5 Bloods	crime	
10/10/2022 18:40:54	Info Science student	19-24	sophomore	Yes, I do own an account	Despicable Me	Megamind	animation	
10/10/2022 15:46:20	Info Science student	25-34	junior	No, I don't use Netflix	Rush hour 3	Rush hour 3	history	
10/10/2022 20:30:25	Info Science student	19-24	junior	No, I don't use Netflix	Rush Hour	Princess express	crime	
10/10/2022 20:52:11	Info Science student	19-24	sophomore	Yes, I do own an account	One note	One note	comedy	
10/10/2022 20:10:39	Info Science student	19-24	sophomore	No, I don't use Netflix	The Interview	Life	thriller	
10/10/2022 22:06:39	Info Science student	25-34	senior	Yes, I do own an account	Rambo	Last blood	action	
10/10/2022 22:18:05	Info Science student	19-24	junior	Yes, I do own an account	The Week Of	The Week Of	comedy	
10/10/2022 10:08:00	Info Science student	19-24	senior	No, I don't use Netflix	Twins in Trouble	Inception	comedy	
10/10/2022 9:11:56	Info Science student	19-24	senior	Yes, I do own an account	Taken	Taken	crime	
10/10/2022 19:44:03	Info Science student	19-24	senior	No, I do not use Netflix	One piece film 2	Shawshank Redemption	animation	
10/10/2022 12:34:30	Non-Info Science student	19-24	senior	Yes, I do own an account	Star wars	Tomb Raider	comedy	
10/10/2022 13:38:30	Non-Info Science student	19-24	senior	Yes, I do own an account	Star wars	Star wars	drama	
10/10/2022 12:38:49	Non-Info Science student	19-24	senior	Yes, I do own an account	How to lose a guy in 10	How to lose a guy in 10	drama	
10/10/2022 12:38:25	Non-Info Science student	19-24	first-year student	No, I don't use Netflix	The other guys	The other guys	animation	
10/10/2022 14:32:05	Non-Info Science student	19-24	junior	No, I don't use Netflix	Emergency	Emergency	comedy	
10/10/2022 14:34:28	Non-Info Science student	19-24	senior	Yes, I do own an account	on ahead on	Despicable Me	documentary	
10/10/2022 14:44:40	Info Science student	19-24	junior	Yes, I do own an account	Shawshank redemption	Shawshank redemption	crime	

Figure 2. UMD students' answers dataset.

We surveyed UMD students (InfoSci and non-InfoSci majors) regarding their favorite movies and TV-shows genre on Netflix. We sent out the survey to fellow students in InfoSci group chats as well as our personal friends to make sure we get a wide range of data from all types of students in majors. It was more accessible to survey undergraduate students as our

audience because we knew we could collect data from them easily in a short period of time. We were able to receive almost 40 responses to our survey. In addition, we created this comparison by referencing Netflix's Movies and TV shows (U.S. only) pre-existing data sets available on [Kaggle](https://www.kaggle.com/). The main purpose is to find similarities and/or differences between the [Kaggle](https://www.kaggle.com/) dataset which includes IMDb data and UMD students' Netflix genre content preferences, which is the survey data we collected.

kaggle

Visualizations

Netflix Contents Genre
2022 contents genre
From IMDB of Kaggle dataset, identify How many genre Netflix has in 2022

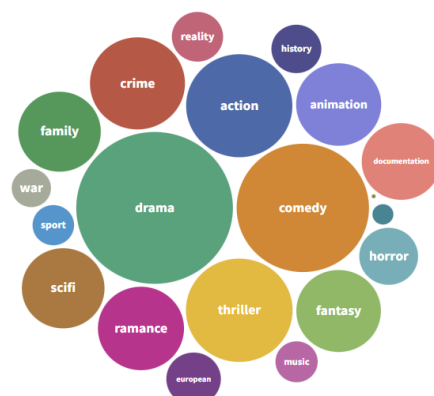
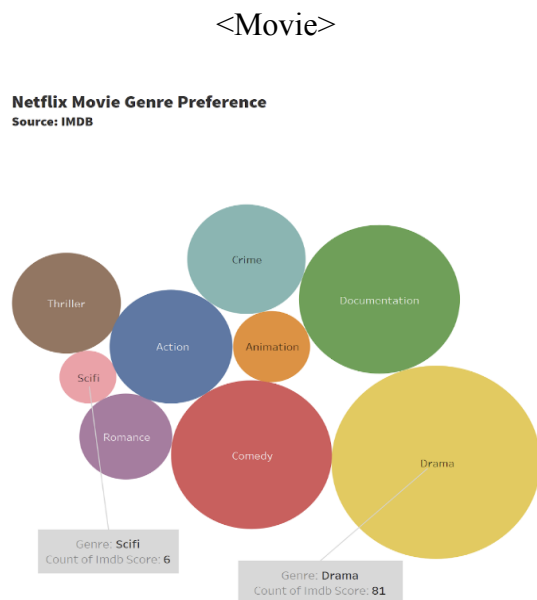
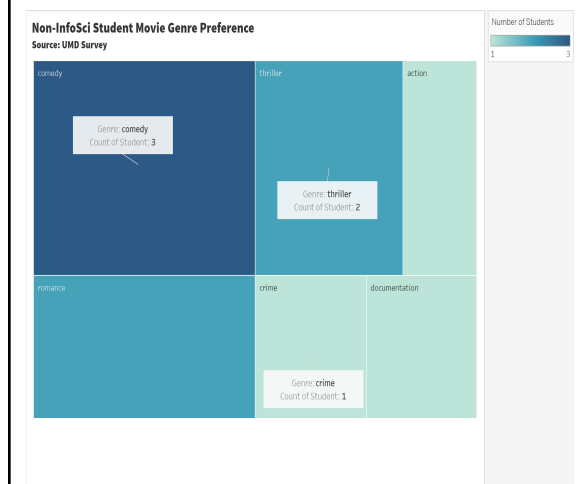
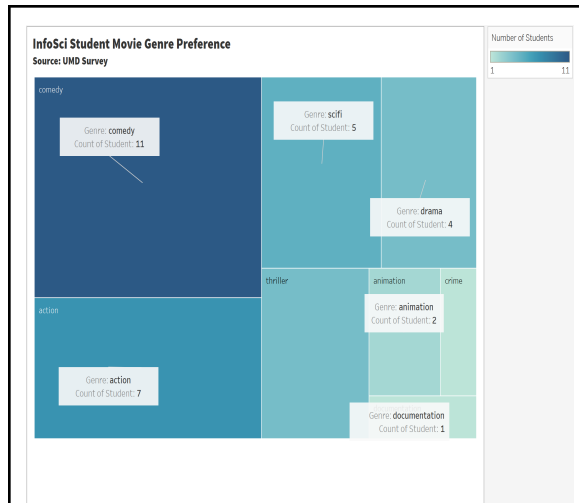


Figure 3. Netflix content by genre.

From IMdb of [Kaggle](#) dataset, we identified what the count was for each genre Netflix offers on their platform. This bubble chart shows the highest and lowest count of each genre on Netflix. Drama has the most count according to the chart with a count of 1,626, which includes both movies and TV shows. Comedy also seems to be very close to drama in the count, which is 1,161 including both movies and TV shows. Dramas and comedies are the top genres Netflix seems to focus their content on.

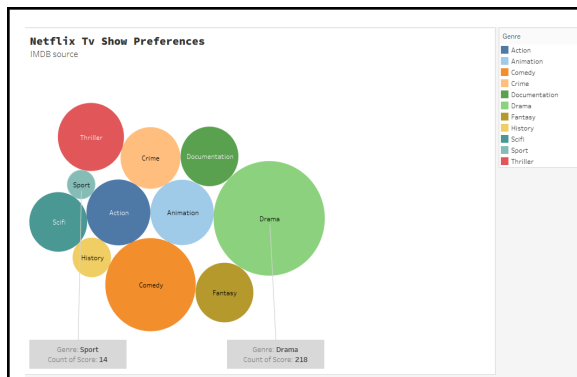


Looking at the bubble chart, we see the genre preferences for movies on Netflix. We took from the dataset that only had an IMdb score of 8 and/or above. The largest bubble is drama and close to that is comedy. The smallest bubble was sci-fi. Drama had a count IMdb score of 81 and Sci-fi had a count IMdb score of 6. Quite a large difference.

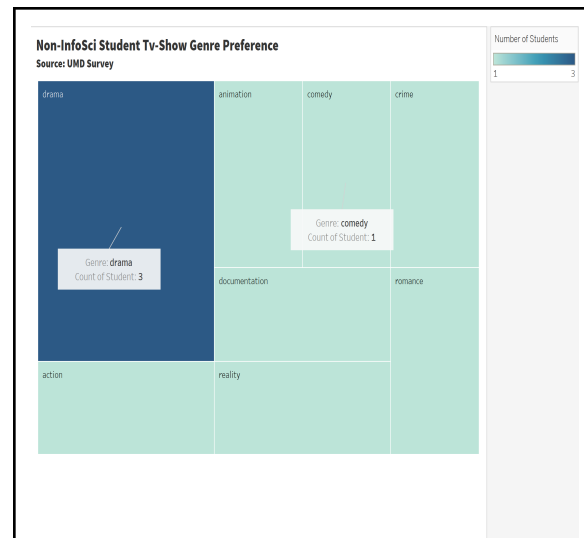


Two treemaps were made for InfoSci and Non-InfoSci students and their movie genre preference based on our survey. The darkest color means the genre with the most count. Both treemaps show that comedy had the most count based on the survey. Students chose the comedy genre as their most preferred compared to other genres for movies.

<TV shows>



Now with TV show preferences, we see here a bubble chart that was made. Only shows that had a IMDb score of 8 and/or above were used from the dataset. We see that Drama had the largest bubble with a count of 218 and Sport had the smallest bubble with a count of 14. Once again Drama is the most preferred genre among TV shows based on this dataset.



Both treemaps show TV show genre preference for InfoSci and Non-InfoSci students based on the survey we sent out. According to these treemaps, InfoSci students prefer comedy and Non-InfoSci students prefer dramas. If we could collect more data on students we could maybe see if the numbers go up in a certain genre count.

We can see trends of what genres seem to be more popular than others based on all the visualizations presented.



Reflection

From the data collected and the visualization we made, we could see that content relating to the genre of comedy and drama for TV shows and content for comedy and action shows for movies were highly preferred according to the results we gathered. This result also is backed by research that shows that teens and young adults are more likely to binge on TV shows that have dramatic and comedic effects because it provides a “sanctuary of comfort and relaxation (Matrix)” for them. From Figure 3, we see that Netflix offers many drama and comedy content. This would satisfy our audience we studied as Netflix does focus on content relating to those genres. As a result of this, our study could be helpful to Netflix's business model when it comes to how their content can retain and gain users within the age group of our study. Making sure Netflix continues releasing dramas and comedies whether it be old movies and TV or creating new content with Netflix originals.

Additionally, in the future we will like to study other streaming services, such as HBO Max, Hulu, Disney+ and compare them to UMD student preferences. We would find other public datasets like we did Netflix and create insights on what those streaming services offer with genre content. We would also like to expand on the target group by surveying faculty members. Comparing younger generations vs. older generations to see if there are similarities and differences among genre

preferences. If we had more time in our data collection, we would want to add more questions in our survey to collect more numerical data. A lot of our data is categorical, so there is only so much you do with that data to make visualizations. Numerical data would allow us to create more insights. This is something to keep in mind in the future when continuing this study.

Our study helped us realize that Netflix so far has been doing a good job with their content focus on the preferred genres. We were not able to find any relationship between the loss of Netflix subscribers and the amount of content available in popular categories. Therefore, we would have to explore any other factors that might be affecting the loss in subscriptions.

Sources

Stoll, J. (2022, October 19). U.S.: Quarterly Netflix paid subscribers count 2022. Statista. Retrieved December 6, 2022, from <https://www.statista.com/statistics/250937/quarterly-number-of-netflix-streaming-subscribers-in-the-us/#:~:text=Netflix%20reported%2073.4%20million%20paid,compared%20with%20the%20previous%20year.>

Matrix, S. (2019). The Netflix effect: Teens, binge watching, and

on-demand digital media ...

Retrieved December 7, 2022, from
<https://sites.pitt.edu/~nancyp/uhc-1510/TeensAndBingeWatching.pdf>

Lawler, K. (2022, July 20). Netflix lost a million more subscribers, plans cheaper version with ads: What that means for you. USA Today. Retrieved December 6, 2022, from <https://www.usatoday.com/story/entertainment/tv/2022/07/19/why-did-netflix-lose-subscribers-and-what-does-mean-you/7531540001/>

So, J. (n.d.). Netflix Movies and TV Shows. Retrieved December 6, 2022, from <https://www.kaggle.com/code/jasmineso16/netflix-movies-and-tv-shows>.

Vatu, Gabriela. 6 Reasons Why Netflix Is Losing Subscribers, July 24, 2022, from <https://www.makeuseof.com/why-netflix-is-losing-subscribers/>