

What are common qualities of highly rated Netflix films?

By Felicia Huffman

Question: What are qualities of highly rated Netflix films?

Goal: to find and explain the similarities between highly rated Netflix films in order to figure out the pattern of films that do significantly better than others

Initial Question: What is the most watched show on Netflix this week and how does that compare to previous most-watched shows?

Why it evolved: The lack of a single, or even two datasets to fully answer my question.

Want to predict: What traits should a film have in order to have the highest chance at being successful

The Data

- Needed data with ratings of Netflix films along with traits.
- Found on Kaggle: a dataset with movie title, rating, duration, genre, certificate, description, and stars.
- The data was modified to better suit the needs of the question

Data Before Wrangling

title	year	certificate	duration	genre	rating	description	stars	votes
Cobra Kai	(2018â€“)	TV-14	30 min	Action, Comedy, Drama	8.5	Decades after the	['Ralph Ma	177,031
The Crow	(2016â€“)	TV-MA	58 min	Biography, Drama, History	8.7	Follows the politi	['Claire Fo	199,885
Better Call	(2015â€“2022)	TV-MA	46 min	Crime, Drama	8.9	The trials and tri	['Bob Ode	501,384
Devil in Oh	-2022	TV-MA	356 min	Drama, Horror, Mystery	5.9	When a psychiatri	['Emily Des	9,773
Cyberpunk	(2022â€“)	TV-MA	24 min	Animation, Action, Adventure	8.6	A Street Kid tryin	['Zach Agu	15,413
The Sandr	(2022â€“)	TV-MA	45 min	Drama, Fantasy, Horror	7.8	Upon escaping at	['Tom Stur	116,358
Rick and M	(2013â€“)	TV-MA	23 min	Animation, Adventure, Comedy	9.2	An animated seri	['Justin Ro	502,160
Breaking B	(2008â€“2013)	TV-MA	49 min	Crime, Drama, Thriller	9.5	A high school che	['Bryan Cr	1,831,340
The Imper	(2022â€“)	TV-MA	45 min	Action, Adventure, Drama	6.3	After an experim	['Morgan T	3,123
Blonde	-2022	NC-17	166 min	Biography, Drama, Mystery	6.2	A fictionalized ch	['Andrew L	935
Stranger Ti	(2016â€“)	TV-14	51 min	Drama, Fantasy, Horror	8.7	When a young bc	['Millie Bol	1,149,889
End of the	(II) (2022)	R	89 min	Action, Crime, Drama	4.7	In this high-octan	['Millicent	5,122
The Walkir	(2010â€“2022)	TV-MA	44 min	Drama, Horror, Thriller	8.1	Sheriff Deputy Ri	['Andrew L	970,060
Glass Onio	-2022	PG-13	139 min	Crime, Drama, Mystery	8.1	Famed Southern	['Rian Johr	547
Do Reveng	-2022	TV-MA	118 min	Comedy	6.4	Drea and Eleanor	['Jennifer t	13,457
I Came By	-2022	TV-MA	110 min	Thriller	6.1	Follows a young t	['Babak An	16,230
No Limit	-2022	TV-MA	118 min	Drama, Romance, Sport	5.8	Roxana Aubrey d	['David M.	1,695
	1899 (2022â€“)		60 min	Drama, History, Horror	9.6	Multinational imr	['Ben Ashe	853
Peaky Blin	(2013â€“2022)	TV-MA	60 min	Crime, Drama	8.8	A gangster family	['Cillian M	531,058
Fate: The \	(2021â€“)	TV-MA		Action, Adventure, Drama	6.9	A live-action ada	['Sadie Sov	43,179
The Lord o	-2001	PG-13	178 min	Action, Adventure, Drama	8.8	A meek Hobbit fr	['Peter Jac	1,844,055
Grey's Ana	(2005â€“)	TV-14	41 min	Drama, Romance	7.6	A drama centeres	['Ellen Pon	303,617
Supernatu	(2005â€“2020)	TV-14	44 min	Drama, Fantasy, Horror	8.4	Two brothers foll	['Jared Pac	439,597
American I	(2011â€“)	TV-MA	60 min	Drama, Horror, Sci-Fi	8	An anthology seri	['Lady Gag	312,970
The Accide	(2022â€“)	TV-MA	50 min	Action, Biography, Crime	7.4	A civilian busines	['Ha Jung-v	2,056
NCIS	(2003â€“)	TV-14	60 min	Action, Crime, Drama	7.8	The cases of the	['David Mc	145,895
Friends	(1994â€“2004)	TV-14	22 min	Comedy, Romance	8.9	Follows the persc	['Jennifer /	979,424
Shameless	(2011â€“2021)	TV-MA	46 min	Comedy, Drama	8.6	A scrappy, feisty,	['Emmy Rc	239,541
Modern Fa	(2009â€“2020)	TV-PG	22 min	Comedy, Drama, Romance	8.5	Three different b	['Ed O'Nei	423,963
Ozark	(2017â€“2022)	TV-MA	60 min	Crime, Drama, Thriller	8.5	A financial advisc	['Jason Ba	309,552
Echoes	-2022	TV-MA	326 min	Drama, Mystery, Thriller	5.9	Leni and Gina are	['Michelle	9,380
The Crow	-2022	PG-13	123 min	Action, Thriller	6.5	When the CIA's	['Anthony	133,126

Data After Wrangling:

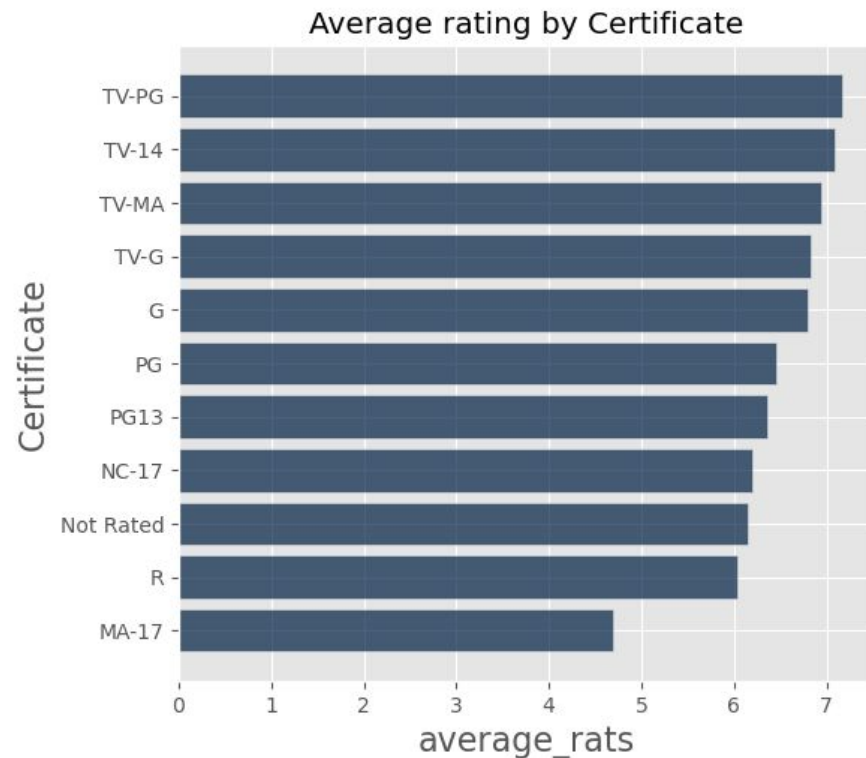
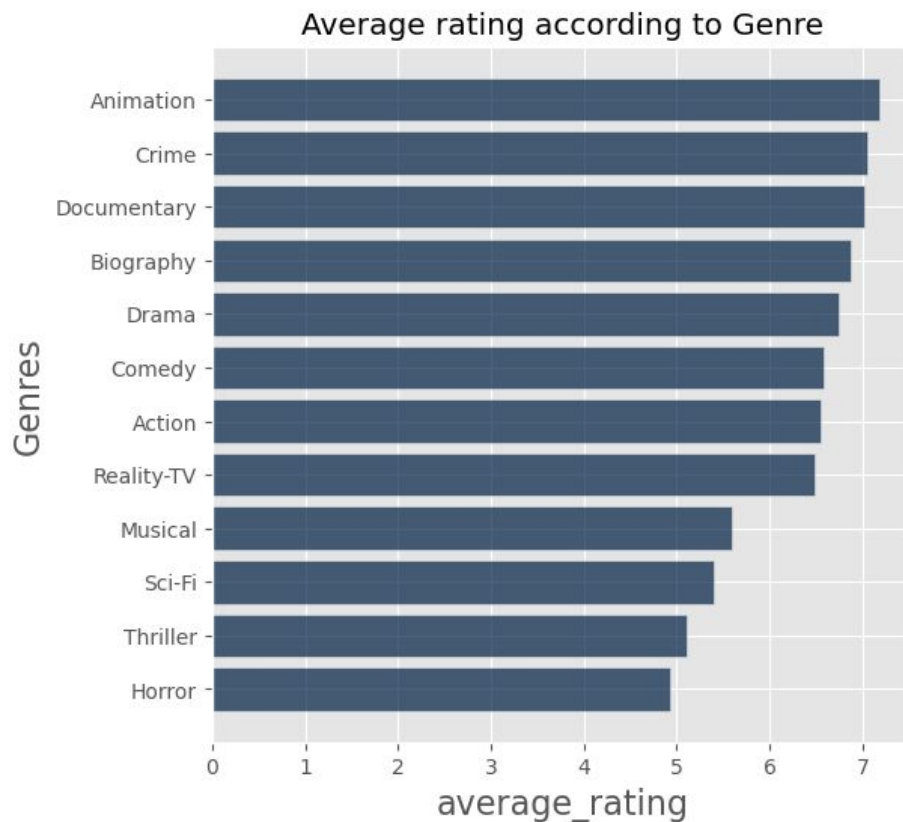
- Unit separated from duration
- Year more clear
- Genres separated by the commas

title	year	certific	duration	unit	genre	g2	g3	rating	descript	stars	votes
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Blonde	2022	NC-17	166 min	Biography	Drama	Mystery		6.2	A fictionali	['Andrew C	935
Stranger Things	2016	TV-14	51 min	Drama	Fantasy	Horror		8.7	When a yo	['Millie Bol	1,149,889
End of the Road	2022	R	89 min	Action	Crime	Drama		4.7	In this high	['Millicent	5,122
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The Gray Man	2022	PG-13	122 min	Action	Thriller			6.5	When the	['Anthony	172,136

The Ethics of Data Wrangling:

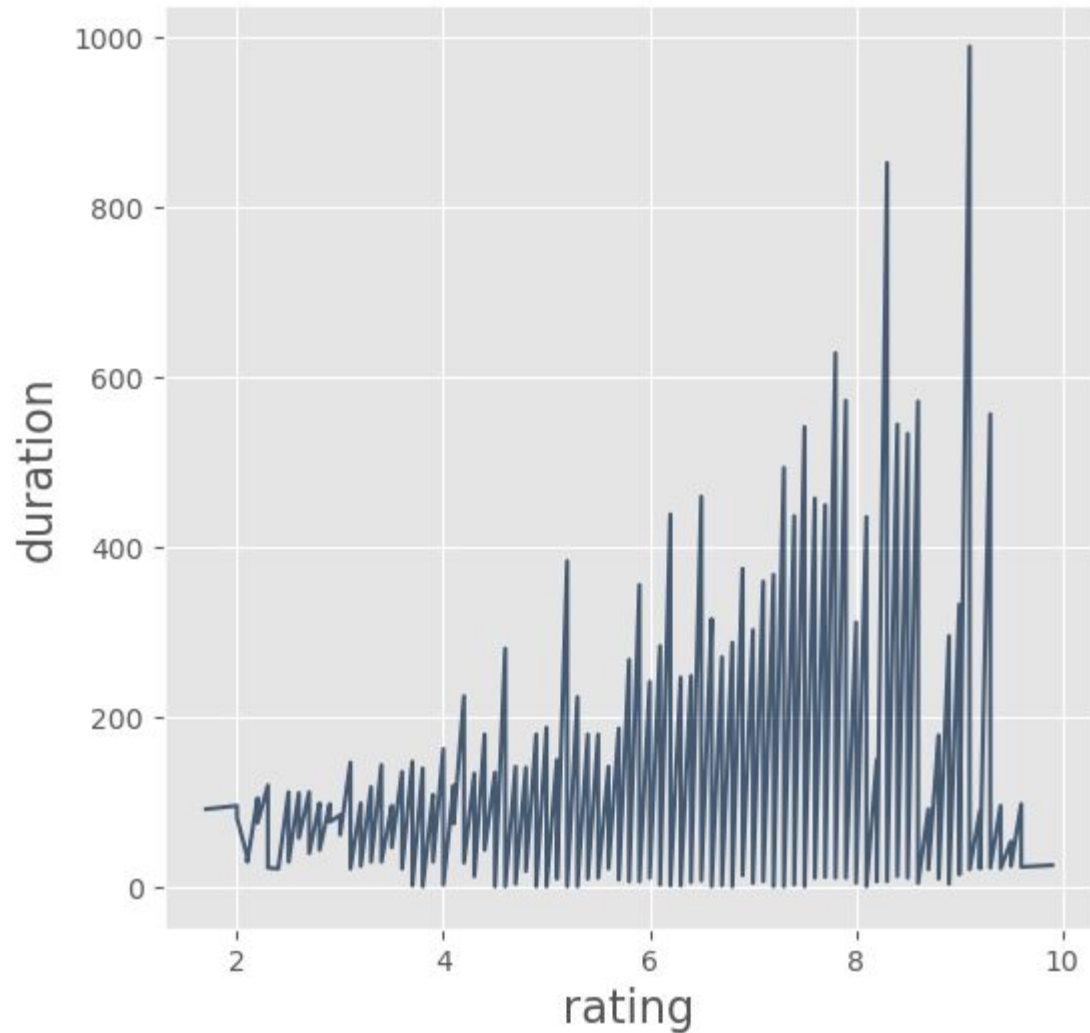
- Bias can play a big role in data wrangling if you let it, but it is important to limit bias and wrangle only to improve your dataset.
- For my project, I had to remove all films whose rating column was blank using Excel. I also used the command line to make copies of my file using the cat command and outputting it to a file to keep the original file in tact.
- Data wrangling is to improve your dataset and ensure it is as accurate as it can be, it is important to limit it to help preserve the qualities of your original dataset.
- In order to minimize concerns about what the results would look like using the whole dataset, you should always share with your audience what changes you made.

The Results



Duration (min) by rating

- Spike at end is a Vietnam war documentary
- Graph appears to imply that longer films are more likely to be rated higher.



Conclusion

- The most highly rated Netflix films are long in duration, animated, and rated TV-PG.
 - This could mean Netflix aims to target families with the popular shows that they provide, which makes sense given the millions of families with Netflix around the world. I am sure that many families are happy to put on the animated films for their children, and are willing to rate them highly when they are also able to enjoy it.
- Based on this data, if a producer wants to make it big I would recommend creating a long, Animated, TV-PG film in order to have the highest chances at being successful.
 - There are many reasons that this could be: Netflix could be targeting families, adults could enjoy watching them because it reminds them of their childhood, or there could be a completely different reason. Further data manipulation with multiple datasets on a larger scale would be needed to narrow down the possibilities.

Sources:

- Found on Kaggle

- itisnarayan63. "Netflix Popular Movies Dataset." *Kaggle*, 24 Sept. 2022, www.kaggle.com/datasets/narayan63/netflix-popular-movies-dataset.

- Kaggle web scraped it from:

- "Ratings, Reviews, and Where to Watch the Best Movies & TV Shows." *IMDb*, IMDb.com, www.imdb.com/. Accessed 6 Dec. 2023.