The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430

Gender Preference towards the Choice of Video Streaming Service Providers among Youth in Covid-19

Kalia,Gitanjali[a] and Garg, Pankaj[b]
[a] School of Mass Communication, Chitkara University , Punjab, India
[b]School of Mass Communication, Chitkara University , Punjab, India
Corresponding details: gitanjali.kalia@chitkara.edu.in

Abstract: Media content providers, through video streaming services have revolutionized the way of providing entertainment to its viewers. They have not only changed time, date and venue of our content consumption but has also upsurged new media watching habits. The study was conducted to study the preference and reasons of preferring one video streaming service provider over others electronic platforms during the spread of Covid-19. 286 youth within the age group of 15-24 formed the sample of the study and online survey was conducted to gather their responses due to the Covid restrictions. The data was further tabulated and analysed with the help of t-test through SPSS. The research concluded Hotstar and Netflix to be the preferred medium for the males whereas Voot was the most popular application amongst females. Pricing was found to be the least satisfying criterion among both the categories whereas quality, language and variety showed varied response.
Keywords: OTT platforms, video streaming providers, video streaming services,Covid-19

Introduction:

Digitalization and Globalisation has led to the use of Internet for the limitless access of information, entertainment, leisure and social interconnectedness among the global citizen. The upsurge of smartphones equipped with multimedia and advanced communication technology has revolutionized the way media content is being consumed. This convergence has led to new media termed as over the top media that has made way for video streaming platforms and services. Video streaming provides a provision to play TV shows, movies, serial and other formats of one's own choice. It is a type of format in which the video content is directly delivered to the end user. In such streaming service the users can watch their preferred programmes directly online without downloading them on any device.

Media is the major source of infotainment in our country. Nobody ever thought that this pandemic will affect everyone so badly that they have to spend their life within four walls for years or more. The biggest challenge was to engage the youngsters as there was low options for youth's entertainment and OTT players created special content for the youngsters that kept them engaged and entertainment while being at home (Negi, 2022).

The Covid wave changed the whole market scenarios as the companies, movie theatres, malls were shut and people had to stay up at homes. Therefore, people had to switch towards home based entertainment channels. Where television programmes were providing repetition content due to the halt of the entertainment business and non occurrence of shooting, OTT platforms emerged as the saviour for the people. Films were struggling as the theatre were closed temporarily, web series kept the audience hooked with the new content formats.

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430
Video streaming services such as Netflix, Prime Video, Disney+ Hotstar, Zee5, etc., have turned the tables with the way consumers used to consume content. The Covid pandemic has seen an increase in viewership and subscriptions towards these streaming platforms, with people of different age groups adapting to changing viewership trends (Sridhar & Phadtare, P. (2022).

India is on brim of being the fastest growing market for video streaming platforms. In one of the recent reports, India is set to enter the top ten OTT video markets by 2022 with a growth rate of 22.6% CAGR. OTT video revenue in India is expected to touch 5,595 crores by 2022 (PWC, 2017).

Another reason for the upsurge of this new media technology is inexpensive data and the increased data consumption. Bharti Airtel spokesman in an interview said, “The increase in video streaming activities is the result of the dipping data cost that has led to increase in average data consumption by 100% over the past years”.

This change has enabled the consumers to consume content as per their preference in context of information, entertainment and social activities. Whether it is Netflix, Amazon, ATL Balaji, Hotstar, etc. these video streaming services are expanding in a big way. They are not only changing media gallery but also way it is consumed technologically. Viewers gratify their needs of information, entertainment or mood management through directly engaging and interacting with content and sharing it with like minded people present on social platforms. The adolescents create their own content as a self expression and self actualization. Facebook is the most popular social networking forum among adolescents for gratifying their needs for integration, interacting and adjusting to the social environment (Shao, 2008).

As per the latest BARC report, Youth are amongst the top target group for the content consumption on the OTT platforms and constitute of total 32% of total viewership and is growing tremendously over the years. In addition, the engagement of Youth with the Television has increased since the last year and currently stands at 3 hours and 34 minutes which is at par with the entire TV viewing universe. On the contrary, it was found that there is no relationship between the time spent on OTT platforms with the respect to the devices used for streaming on OTT platforms (Bellamkonda, 2021). The effect of OTT players on DTH players has also started showing. Anil Dua, CEO Dish TV opined that though there has been few difficulties in connections due to the advent of OTT platforms like Netflix, Hotstar and Amazon Prime Video especially in metro region but due to our net additions being on higher side, there is no need to worry for the DTH players.

Review of Literature:

Bulky Television sets have been replaced by smart phones & smartphones by the individuals for the online streaming of videos and surfing the internet. OTT platforms generally stream their video content in two ways, firstly by on demand streaming and the secondly by programmed or scheduled streaming. The difference between the both lie on time of playing the content where on demand videos can be played any time but programmed videos are played as per the scheduled time. (FMI: Future Market insights, 2018).

In one of the recent study (Patnaik, 2022) User behaviour, Technological flexibility and customer centric were found to be the prime factors that influenced the OTT content. Lockdown during Covid and people being asked to work from home has been the major reason

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430
for boasting the viewership of the OTT platforms. Tracking the scenario, the researcher found that an age, city, occupation and income group has played a major role in gauging the use of OTT platforms. The researcher also studied the viewership duration during lockdown that has increased from 0-2 hours to 2-5 hours along with the spending power increasing from 100300 per month (Fernandes, S., & Madnani, N, 2020).

Smartphones are the most preferred device for personal video consumption, while PC/ laptops are used more for video viewing with family and friends in India. Daily engagement time hovering around the 4-hour mark; mobile screens attract more engagement than any other media including television (Culture Machine and IMRB, 2017). With only 40 OTT stages and restricted territorial substance, this medium has made another specialty for itself in metropolitan India. Corona virus has played a very critical job in mass appropriation of the medium in metropolitan areas where individuals have preferred paying control over semi-metropolitan or country India (Nijhawan, 2020).

Due to digitalization, traditional television has lost their monopoly. Yi-Ning Katherine Chen (2016)19 - inspected how OTT administrations can fill in as a substitute for TV in Taiwan. As various organizations keep on contributing to the online video web based market, the need for internet fairness laws or suggestions about how to manage were examined. OTT services are providing new screens and content to consumers and faster network technology is an additional factor in it. With a platform to experiment, OTT has given way to directly reach out to the consumers with producers and broadcasters to experiment with new content formats. Availability of the OTT content in a reasonable price is one of the major factor of the success of OTT platforms. They create content according to the consumers need which changes timely. The researcher mainly specified four target groups' users for OTT TV service i.e. Students, Expats, Content Seeker and Tech Savvy (Baccarne, 2018). According to this research paper, higher data usage is required for using OTT services, hence its generating revenue for telecom operators and creating revenue for service providers due to App purchasing and subscription charges. Various factors like cost, content, availability, high speed internet, smart phones are leading to OTT players *(Sujata, 2015).* Users like to watch streams, to chat while watching, and to reward performers by using emoticons (Scheibe, 2016).
In a study, it was found that placing western content along with Bollywood content on the top of the OTT platforms doesn't attract the online audience towards the video streaming service. Indians spend 93% of their time on watching online content in Hindi and other regional languages. Also it was found that Netflix's more than two –third content was in English language and only Bollywood movies were available in Hindi. Amazon Prime holds a larger market share as 65% of their content is in English followed by 25% content in Hindi and more than 10% in other regional languages (IHS Markit with Quartz, 2018).

Problem Statement:

From the literature, it is analyzed that the research on video streaming service providers has been restricted to its market share along with its technical aspect and media devices used for its services but not much attention has been paid to preferences of different demographics using these services.

Though there is a lot of potential for OTT platforms, pain points related to streaming video services are aplenty too. Consumers are still frustrated by technical difficulties. Inspite of

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430
Video streaming services providing variety in content and formats, consumers are not satisfied with the types of content available on the streaming platforms. Therefore, there is an urgent need for streaming services with ad-supported models to rework their strategies (IBM Cloud, 2018).

The video streaming landscape in India is being radically transformed, but data regarding video viewership remains hard to come by. The above studies shows that India has been a potential market for the global video streaming platforms but much content displayed on these service providers is yet to be studied in details with context to its audience. In this context, our study intends to understand the preferences as regards choice of streaming services and their division on the basis of gender.

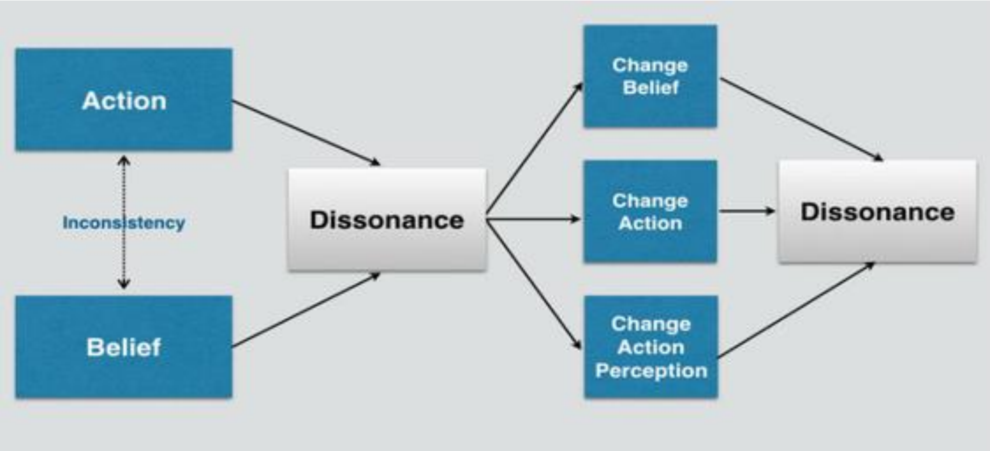
Objectives of the study:

- To understand the importance of advertising towards creating preference for particular video streaming providers.
- To evaluate the video streaming providers preferred by males and females.
- To study the parameters affecting the choice of video streaming provider by males and females.

Theoretical Framework:

In media, there are many theories that emphasise on the relationship between the media content and its impact on the audience. As this study focuses on video streaming service providers and its preference among the different genders in youth, therefore theory of '**Cognitive Dissonance**' by Leon Festinger is best suited for this study. This theory lays emphasis on consistency between action, belief and perception. When applied to media, this theory states that media audience enters in the stage of discomfort if the media doesn't cater as per their needs and requirements. It emphasises on the psychological discomfort that arises out of inconsistency between the action and belief by watching some particular media channels and programs and rejecting others.

Figure 1: Theory of Cognitive Dissonance



Source: Festinger (1957)

Festinger through his theory spelled out that when content expectation doesn't match the requirement of the audience, they the audience tries to either shift the medium of entertainment or programmes that match more to their beliefs.

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430

Research Methodology:

In order to conduct the research on this topic, the researchers planned to adopt the following methodology-

Sampling: Though the universe for the study constitutes of all netizens but to make the research feasible, youth in the age group of 15-24 were selected as the sample.

Sample Size: The sample size for the study was 286 respondents.

Research technique: Survey method was used as research technique and online questionnaire was used as tool for the collection of the data. The questionnaire was designed through Google forms so as to maintain the accuracy. The data was later tabulated and graphically represented using Microsoft Excel along with the application of t-test.

Data Analysis:

The study was conducted on a sample of 286 youngsters who fall in the age group of 15-24. Attempt was made to analyse the preference towards choice of streaming service providers on the basis of gender. The classification of the responses on the basis of gender and age group is shown in Table 1 and 2.

Table 1: Gender bifurcation of the sample

Male	161
Female	125
Total	286

Table 2: Age group of the respondents

Age group	**Frequency**
15-18	45
19-21	185
22-24	56
Total	286

Coming to the source of information that affects the choice of streaming service provider, it is clearly evident that the majority of respondents made the choice of streaming service provider through internet itself (Table 3). The second highest number is affected by ‘Word of Mouth’ followed by television. The responses may be immensely useful to streaming service providers to understand the importance of internet advertising over television and other media while promoting their service.

Table 3: Source of information

Source	**Frequency**
Internet	204
Magazines	1

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430

Newspapers	8
Television	35
Word of Mouth	38

The respondents were asked to pick the service provider chosen to stream content. The responses are tabulated to represent the frequency of different service providers in the study. The data is also represented gender wise to have clear understanding of the preference of the males and females.

Table 4: Service provider tuned the most

Streaming Service Provider	Frequency	Male	Female
Alt Balaji	1	1	0
Amazon Prime Video	30	17	13
Eros Now	2	2	0
Hotstar	46	25	21
Hungama	3	0	3
Jio Cinema	12	5	7
Netflix	149	93	56
Sony LIV	9	8	1
Voot	30	7	23
Zee5	4	3	1
Total	286	161	125

It is evident from Table 4 that Netflix is the undisputed leader in streaming services in India. More than 50 percent of the sample stream Netflix followed by Hotstar. This is pretty interesting given the fact that Netflix has only paid mode unlike Hotstar which provides some content for free (with a rider in some cases). The majority of respondents streaming Netflix and Hotstar are males. Interestingly, Out of both genders, Voot is a clear favourite of females as 23 respondents out of 30 tune to it. One of the reasons for this skewness could be the type of content streamed on Voot. Amazon Prime Video is another provider popular with the youngsters. In spite of huge price differential between Prime Video and Netflix, Netflix has managed to achieve the top position.

To understand the rating of streaming service providers on the basis of different parameters such as pricing, content quality, content variety, language and content availability, independent samples t-test was conducted on SPSS. The results of t-test are shown in Table 5 and Table 6.

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430

Table 5: Parameters that affect the choice of service provider

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Pricing	1.00	160	2.0563	.82605	.06530
	2.00	126	1.9444	.74087	.06600
Quality	1.00	160	1.5188	.68195	.05391
	2.00	126	1.7063	.67013	.05970
Variety	1.00	160	1.6750	.74858	.05918
	2.00	126	1.6905	.62564	.05574
Language	1.00	160	1.5500	.66162	.05231
	2.00	126	1.6190	.69117	.06157
Availability	1.00	160	1.7625	.79691	.06300
	2.00	126	1.8175	.83331	.07424

Table 5 shows various parameters (and their corresponding means) that affect the choice of streaming service. Lower mean signifies higher satisfaction. Gender 1 represents males and gender 2 signifies females.

Males are most satisfied with the quality of service followed by language options. They are least satisfied with the price at which the services are offered by their service provider. This result complements the preference given to Netflix in rankings in spite of Netflix being more expensive than other streaming service providers. Females are most satisfied with the language options available with the service providers followed by variety. Pricing is again the least satisfactory criteria. The sample of the study containing only youth could be one of the compelling factors of this result as most youngsters would be dependent on their parents for payment of streaming service provider bills.

Further, a two-sample t-test was used to test the hypothesis and assess whether there was a significant difference in the satisfaction level of the parameters that males and females deem important (Nargundkar, 2007). The results of the test have been shown in succeeding tables.

Further, since the significance level of 'Levene's test for equality of variances' is greater than .05 (refer to table 6) for pricing, quality, language and availability, we can assume that group variances are equal. This establishes that there is a significant difference pricing, quality, language and availability as perceived by males and females. On the contrary, there isn't a significant difference in variety as perceived by males and females.

Table 6: Independent samples test

		Levene's Test for Equality of Variances					
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference
Pricing	Equal variances assumed	1.294	.256	1.189	284	.236	.11181
	Equal variances not assumed			1.204	279.188	.230	.11181
Quality	Equal variances assumed	1.863	.173	-2.327	284	.021	-.18760
	Equal variances not assumed			-2.332	270.553	.020	-.18760
Variety	Equal variances assumed	3.987	.047	-.186	284	.852	-.01548
	Equal variances not assumed			-.190	282.972	.849	-.01548
Language	Equal variances assumed	.085	.770	-.859	284	.391	-.06905
	Equal variances not assumed			-.855	262.877	.394	-.06905
Availability	Equal variances assumed	.002	.963	-.587	284	.571	-.05496
	Equal variances not assumed			-.584	262.745	.573	-.05496

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430

Table 7: t test for equality of means

		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Pricing	Equal variances assumed	.09406	-.07333	.29694
	Equal variances not assumed	.09285	-.07097	.29458
Quality	Equal variances assumed	.08061	-.34627	-.02893
	Equal variances not assumed	.08044	-.34597	-.02923
Variety	Equal variances assumed	.08304	-.17892	.14797
	Equal variances not assumed	.08130	-.17550	.14454
Language	Equal variances assumed	.08037	-.22725	.08915
	Equal variances not assumed	.08079	-.22813	.09003
Availability	Equal variances assumed	.09685	-.24560	.13567
	Equal variances not assumed	.09737	-.24668	.13676

Conclusion:

Therefore, it can be concluded that video streaming preferences do differ on the basis of gender and market situation. Internet advertising is found to be most apt medium for creating preference of these video streaming platforms among netizens followed by word of mouth. During Covid wave, Netflix and Hotstar were found to be most preferred Video streaming providers by males due to their preference towards quality and language whereas Voot was the preferred provider for female netizens due to content provided on it with context to language and variety. Price was the found to be parameter with least satisfaction for both the genders.

Further scope:

The study would go a long way to assist the streaming service providers in understanding the prime target market. This would also help these companies to market their services in a better fashion. The study provides insight into the choice of content and parameters affecting the choice of service provider. The companies can use the findings of the study to fine tune their offerings and increase revenue & profitability.

References:

[1] App Annie. (2017). State of Video Streaming Apps in Asia. Retrieved from www.appannie.com/intelligence

[2] Bellamkonda, S. T., Gangwar, V. P., Sudhagoni, V. S., & Adepu, N. (2021). Profiles and Preferences of OTT Users in Indian Perspective. European Journal of Molecular & Clinical Medicine, *7*(8), 5106-5142.

[3] Bhawan, M. D., & Marg, J. L. N. (2015). Regulatory Framework for Over-the-top (OTT) services 27. Telecom Regulatory Authority of India (Vol. 2).

[4] Chakravarti, N. (2018). 478 million mobile Internet users by June 2018: IAMAI. Retrieved from http://www.asianage.com/technology/in-other-news/020418/478-million-mobile-internet-users-by-june-2018-iamai.html

[5] Denz, A. (2017). New Study Reveals Consumers Are Not into Live Video Streaming _ Business Wire. Retrieved from https://www.businesswire.com/news/home/20171206006184/en/New-Study-Reveals-Consumers-Live-Video-Streaming

[6] Dhal, R. (2018). Can Netflix Scale in India. Retrieved from https://www.linkedin.com/pulse/indian-m-class-premium-ott-rajeev-dhal

[7] Festinger, L. (1957). A Theory of Cognitive Dissonance. Stanford, CA: Stanford University Press.

[8] Huang, T.-Y., Handigol, N., Heller, B., McKeown, N., & Johari, R. (2012). Confused, timid, and unstable. Proceedings of the 2012 ACM Conference on Internet Measurement Conference - IMC '12, 225. Retrieved from https://doi.org/10.1145/2398776.2398800

[9] Madnani, D., Fernandes, S., & Madnani, N. (2020). Analysing the impact of COVID-19 on over-the-top media platforms in India. International Journal of Pervasive Computing and Communications.

[10] Negi, V. (2022). Impact of Over-the-Top (OTT) platform on the changing lifestyle of youth residing in Uttarakhand during Covid-19 pandemic lockdown. *Journal of Positive School Psychology*, 3992-4014.

[11] News bureau. (2018). _We are way behind YouTube and Hotstar in India__ Netflix's Reed Hastings. Retrieved from https://www.afaqs.com/news/story/53299_We-are-way-behind-YouTube-and-Hotstar-in-India-Netflixs-Reed-Hastings

[12] Patnaik, R., Patra, S. K., Mahapatra, D. M., & Baral, S. K. (2022). Adoption and Challenges Underlying OTT Platform in India during Pandemic: A Critical Study of Socio-Economic and Technological Issues. *FIIB Business Review*, 23197145221101676

[13] Timande, S., & Dhabliya, D. (2019). Designing multi-cloud server for scalable and secure sharing over web. International Journal of Psychosocial Rehabilitation, 23(5), 835-841. doi:10.37200/IJPR/V23I5/PR190698

[14] Liu, Y., Guo, Y., & Liang, C. (2008). A survey on peer-to-peer video streaming systems. Peer-to-Peer Networking and Applications, 1(1), 18–28.Retrived from https://doi.org/10.1007/s12083-007-0006-y

[15] Rao, A., Legout, A., Lim, Y., Towsley, D., Barakat, C., & Dabbous, W. (2011). Network characteristics of video streaming traffic. In Proceedings of the Seventh Conference on emerging Networking Experiments and Technologies on - CoNEXT '11 (pp. 1–12). ACM CoNext. Retrieved from: https://doi.org/10.1145/2079296.2079321

[16] Sarkar, J. (2018, June). India video streaming_ Indian video streaming grows 23% YoY - Times of India. Timesofindia.Indiatimes.Com. Retrieved from https://timesofindia.indiatimes.com/business/india-business/indian-video-streaming-grows-23-yoy/articleshow/64488591.cms

[17] Scheibe, K., Fietkiewicz, K. J., & Stock, W. G. (2016). Information Behavior on Social Live Streaming Services. Journal of Information Science Theory and Practice, 4(2), 6–20. Retrieved from https://doi.org/10.1633/JISTaP.2016.4.2.1

[18] Sen, I. (2018). The Streaming Warriors _ MxMIndia. Retrieved from file:///C:/Users/user/Desktop/research/video streaming research papers/The Streaming Warriors _ MxMIndia.html

[19] Sivamol, S., & Suresh, K. (2019). Personalization Phenom: User-centric Perspectives towards Recommendation Systems in Indian Video Services. SCMS Journal of Indian Management, *16*(2), 73-86.

[20] Sridhar, S., & Phadtare, P. (2022). Behavioral shift of generation X towards OTT during Covid'19 in India. Cardiometry, (22), 176-184.

The Ciência & Engenharia - Science & Engineering Journal
ISSN: 0103-944X
Volume 11 Issue 1, 2023
pp: 1421 - 1430
[21] Westenberg Wilma. (2016). The influence of YouTubers on teenagers. University of Twente. Retrieved from http://essay.utwente.nl/71094/1/Westenberg_MA_BMS.pdf

[22] Talukdar, V., Dhabliya, D., Kumar, B., Talukdar, S. B., Ahamad, S., & Gupta, A. (2022). Suspicious activity detection and classification in IoT environment using machine learning approach. Paper presented at the PDGC 2022 - 2022 7th International Conference on Parallel, Distributed and Grid Computing, 531-535. doi:10.1109/PDGC56933.2022.10053312 Retrieved from www.scopus.com

[23] Van Eeden, E., & Chow, W. (2018). Perspectives from the Global Entertainment & Media Outlook 2018–2022 Trending: Trending now: convergence, connections and trust. www.pwc.com/outlook (p. 34). Retrieved from www.pwc.com/outlook