

Original Research

Received 22 May 2026

Revised 26 June 2026

Accepted 22 July 2026

Natural Resources for Human Health 2026, Vol. 6 (8s): 741–749

KEYWORDS:

OTT platforms, Perceived Ease of Use, Uses and Gratifications, Perceived Functional Value, Content Preference, OTT Usage Frequency, SEM

Understanding the Drivers of Streaming Frequency: A Structural Model of Over-the-Top (OTT) Consumption among College Students

Dr. Rinki S. Moolchandani¹, Dr. Prabhjot Kaur Nayyar², Mr. Abhishek Dubey³, Ms. Sonal Dubey⁴, Ms. Ravnoor Kaur Marwaha⁵

¹Assistant Professor, Department of B.COM (Computer Applications), Dr. Ambedkar Institute of Management Studies and Research, Nagpur, Maharashtra, India
rinki_moolchandani@daimsr.edu.in, ORCID ID- 0000-0002-7352-9189

²Faculty, Department of Commerce, Dr. Ambedkar College, Nagpur, Maharashtra, India
nayyar.prabhjot@gmail.com

³National Manager, Debt Management Services, Bajaj Finance, India

⁴Ex-Faculty, Tirpude Institute of Management Education, Nagpur, Maharashtra, India
abhisonal@gmail.com

⁵Analyst, Deloitte USI, Hyderabad, India kaurravnoor30@gmail.com

ABSTRACT:

Background

From past few years, the rapid growth of Over-the-Top(OTT) platforms has changed the consumption pattern among college students. However, limited research has examined the determinants of actual OTT usage frequency rather than adoption or continuance intention.

Purpose

To identify the significant effect of Uses & Gratifications (UG), Perceived Ease of Use (PEOU), facilitating Conditions (FC), Perceived Functional value (PFV), and Content Preference (CP) on OTT Usage Frequency among college students.

Methodology

A quantitative approach was adopted using primary data from 136 undergraduate students thorough convenience sampling. Data was collected using a structured scale questionnaire and analysed using Structural Equation Modelling (SEM) in Jamovi 2.6. Reliability, validity, correlations and structural relationships were assessed.

Findings

The findings shows that the model explained 13.2% of the variation in OTT usage Frequency ($R^2 = 0.132$). Among all factors considered, Perceived Ease of Use was the only significant positive predictor of OTT Usage Frequency ($\beta = 0.361, p = 0.009$). This means that students are more likely to use OTT platforms frequently when they find them easy and convenient to use. The other factors like Uses & Gratifications ($\beta = 0.148, p = .270$), Facilitating Conditions ($\beta = -0.113, p = .403$), Perceived Functional Value ($\beta = 0.009, p = .950$), and Content Preference ($\beta = -0.053, p = .721$) were not significant. The

findings indicate that ease of use is the key determinant of OTT usage frequency, while additional factors are required to explain students' streaming behaviour.

1. INTRODUCTION

1.1 INTRODUCTION

The growth of digital technology and fast internet has changed the way people watch entertainment. OTT platforms such as Amazon Prime Video, Jio Hotstar, Netflix and other streaming services have become popular among users. It has become much easier to watch Tv programmes, movies, web series, documentaries and other content at anytime and anywhere.

Access to wide variety of content, ease of use and flexibility have made an OTT platforms a crucial part of modern entertainment. Unlike traditional television, OTT platforms allow users to select content according to their preferences and consume it across multiple devices and locations. This flexibility has made OTT platforms particularly among young and college-going users.

The growth of OTT consumption has also changed users' expectations regarding accessibility, content variety, affordability and viewing convenience. Previous studies indicate that factors such as entertainment and other gratifications, ease of use, facilitating conditions, perceived value and content availability influence users' adoption and continued engagement with OTT services (Menon,2022)

However, existing OTT research has largely focused on adoption intention, subscription intention, satisfaction and continuance intention, while comparatively less attention has been given to actual OTT usage frequency. Moreover, technological, functional, motivational, content-related determinants are often examined separately. Therefore, an integrated model is required to identify the factors that most strongly predict students' actual OTT usage behaviour.

Accordingly, the present study examines five potential determinants – Uses and Gratifications (UG), Perceived Ease of Use(PEOU), Facilitating Conditions (FC), Perceived Functional value (PFV), Content Preference (CP) and investigates their predictive influence on OTT usage frequency among college students. The present study helps in identifying the predictors of OTT usage behaviour.

1.2 LITEARTURE REVIEW

Review of Previous Studies

1. OTT Platforms and Media Consumption

OTT platforms give more choice, flexibility and personalised content as compared to traditional television. (Camilleri and Falzon,2021) explained that streaming services has brought a new change in watching television. Young people who want to access with ease and convenience are more inclined towards watching OTT platforms.

2. Uses and Gratification Theory

According to Uses & Gratification Theory (UGT), people choose media based on certain factors such as entertainment, anytime access, subscription benefits and staying connected with others. The theory was introduced by (Katz et.al;1973), while recent research conducted by (Gupta et.al,2025) suggests that factors like social connection and entertainment are two important factors which affect the people's willingness to use different OTT platforms.

3. Technology Acceptance Model

The Technology Acceptance Model introduced by Davis (1989), highlights perceived ease of use and usefulness as drivers of technology adoption. Empirical evidence from Venkatesh & Bala (2008) and Gupta et.al (2025) shows that ease of use significantly predicts OTT adoption and adoption and frequency of use, making usability a critical factor for students (Gupta et.al.,2025).

4. Perceived Ease of Use (PEOU)

Simple navigation, easy content search and convenient access can encourage repeated platform usage. Perceived ease of use is one of the important predictor which tells how easy it is for users to use an OTT platforms. Indian OTT research based on UTAT2 and SEM identified effort expectancy/ease of efforts as an important determinant of OTT behavioural intention (Bhattacharyya et al. 2022).

5. Facilitating Conditions (FC)

Facilitating Conditions include the availability of resources and infrastructure required for OTT consumption, such as smartphones, reliable internet connectivity, bandwidth and compatible devices. UTAT2 -based research has included favourable infrastructure conditions as an important factor in OTT adoption and usage (Bhattacharyya et al. 2022)

6. Perceived Functional value (PFV)

Perceived Functional value reflects the practical benefits users obtain from OTT platforms, including convenience, accessibility, flexibility and availability of desired services. Research on streaming continuance found that perceived value significantly influences satisfaction and continuance intention, while perceived ease of use also contributes to continued viewing behaviour. Recent Indian evidence further suggests that perceived value can be more influential than subscription cost in shaping OTT user intentions. (Chavadi et. al.,2025)

7. Content Preference (CP)

Content preference is a major consideration in OTT consumption because user select platforms based on the availability, variety and relevance of preferred content. Previous SEM research in India found video-content availability to be an important determinant of OTT satisfaction, while content quality was also associated with hedonic motivation (Kumar et al.,2021). Most recent research continues to identify content availability and personalisation as important factors in OTT engagement.

1.3 Research Gap

Although previous studies have examined OTT adoption, subscription and continuance intention among Users & Gratification, UTAT2 and perceived value models, relatively limited attention has been given to actual OTT usage frequency as the dependant variable. Existing studies have also examined technological, motivational, functional and content related factors through different frameworks. Therefore, the present study integrates Users & Gratification, Perceived Ease of Use, Facilitating Conditions, Perceived Functional value and Content Preference to determine their predictive influence on OTT Usage Frequency among college students using SEM. This approach also enables identification of the most significant drivers of OTT usage behaviour.

1.4 OBJECTIVES

1. To understand students' attitude towards different predictors of OTT platforms (Uses & Gratification, Perceived Ease of Use, Facilitating Conditions, Perceived Functional Value, Content Preference).
2. To examine inter-construct correlations and test discriminant validity.
3. To test the predictive power of – Uses and Gratifications (UG), Perceived Ease of Use (PEOU), Facilitating Conditions (FC), Perceived Functional value (PFV), Content Preference (CP) on OTT Usage Frequency.
4. To identify the significant predictors of OTT usage behaviour among college students.

1.5 Research Hypotheses

- H1- Uses and Gratification has a significant effect on OTT Usage Frequency.
- H2- Perceived Ease of Use has a significant effect on OTT Usage Frequency.
- H3- Facilitating Conditions has a significant effect on OTT Usage Frequency.
- H4- Perceived Financial value has a significant effect on OTT Usage Frequency.
- H5- Content Preference has a significant effect on OTT Usage Frequency.

2. RESEARCH METHODOLOGY

2.1 Study Material

For the present study, quantitative approach has been used. Primary data has been collected through a structured questionnaire. The population of the study comprised undergraduate students, and the unit of analysis was an individual undergraduate student. A sample of 136 undergraduate students was selected using a convenience sampling technique. The questionnaire was prepared using questions adapted from previous validated studies.

2.2 Sample Collection

Data is collected from a sample of 136 college students capturing demographic details such as program of study, living arrangement, monthly allowance and preferred device, along with attitudinal measures towards OTT Platforms. Six constructs - Uses & Gratifications (UG), Perceived Ease of Use (PEOU), Facilitating Conditions (FC), Perceived Financial Value (PFV), Content Preference (CP) and OTT Usage Frequency (OUF) were measured using multi-Likert scale questionnaire.

2.3 Analytical Methods

The data analysis involved descriptive statistics, reliability test, convergent validity, factor loadings, inter-construct correlations, fit indices.

2.4 Statistical Analysis

Statistical analysis has been done using Jamovi 2.6 version.

3. RESULTS AND DISCUSSION

3.1 Descriptive Statistics

Table 1. Descriptive Statistics of Constructs

Construct	Mean	SD	Skewness	Kurtosis
UG	3.483	0.869	-0.151	2.972
PEOU	3.718	0.862	-0.412	2.731
FC	3.755	0.890	-0.511	3.039
PFV	3.583	0.989	-0.309	2.600
CP	3.674	0.852	-0.322	2.769
OUF	2.126	0.682	0.748	3.175

The descriptive statistics (Table 1) shows that students generally hold positive attitude towards OTT platforms, with Facilitating Conditions (M=3.76) and Perceived Ease of Use (M=3.72) rated highest. Normality checks (Skewness & Kurtosis) confirmed the data were suitable for SEM analysis.

3.2 Reliability and Convergent Validity of Constructs

Table 2. Reliability and Convergent Validity of Constructs

Construct	Cronbach α	Omega	CR	AVE
UG	.825	.827	.827	.445
PEOU	.758	.759	.759	.512
FC	.722	.736	.736	.484
PFV	.828	.834	.834	.626
CP	.820	.826	.826	.489
OUF	.668	.707	.707	.353

Table 2 shows that most of the constructs were reliable. Cronbach's alpha coefficients ranged from 0.722 to 0.828, whereas the composite reliability values ranged from 0.736 to 0.834. Perceived Ease of Use (PEOU) and Perceived Financial Value (PFV) showed the best results with $\alpha = 0.828$ and AVE = 0.626. In contrast, OTT Usage Frequency fell short of the reliability benchmark ($\alpha = 0.668$), and several constructs -UG, FC, CP, and OUF-reported AVE values below 0.50 pointing to weak convergent validity. This suggests that while students' attitude was measured consistently, the items did not always capture a single, coherent construct, particularly in the case of usage frequency.

3.3 Standardized Factor Loadings of Indicators

Table 3. Standardized Factor Loadings of Indicators

Construct	Indicator	Loading
UG	UG1	0.627
UG	UG2	0.699
UG	UG3	0.725
UG	UG4	0.650
UG	UG5	0.720
UG	UG6	0.565
PEOU	PEU1	0.742
PEOU	PEU2	0.704
PEOU	PEU3	0.699
FC	FC1	0.602
FC	FC2	0.721
FC	FC3	0.754
PFV	PFV1	0.784
PFV	PFV2	0.831
PFV	PFV3	0.758
CP	CP1	0.746
CP	CP2	0.770
CP	CP3	0.671
CP	CP4	0.665
CP	CP5	0.633
OUF	OUF1	0.663
OUF	OUF2	0.643
OUF	OUF3	0.164
OUF	OUF4	0.618
OUF	OUF5	0.708

Most items loaded strongly (0.60 – 0.83) confirming they represent their constructs well. PFV indicators were the strongest (0.758-0.831) showing clear measurement reliability. OUF3 was problematic (loading =0.164, non-significant), weakening the OTT usage frequency construct. UG items ranged from 0.565-0.725 showing moderate but acceptable loadings. Overall, the measurement model is adequate.

3.4 Construct Level Correlational Matrix

Table 4. Construct Level Correlational Matrix

	UG	PEOU	FC	PFV	CP	OUF
UG	1	0.657	0.666	0.645	0.742	0.346
PEOU	0.657	1	0.744	0.68	0.619	0.338
FC	0.666	0.744	1	0.654	0.659	0.246
PFV	0.645	0.68	0.654	1	0.759	0.245
CP	0.742	0.619	0.659	0.759	1	0.245
OUF	0.346	0.338	0.246	0.245	0.245	1

3.5 Discriminant Validity

Table 5. Discriminant Validity Assessment Using the Fornell - Larcker Criterion

Construct	Distinctiveness ($\sqrt{AVE}$)	Highest Correlation	Comparison
CP	0.699	UG = 0.742, PFV = 0.759	Distinctiveness lower → poor validity
OUF	0.594	All predictors < 0.35	Distinctiveness higher → good validity

For CP, the distinctiveness score (0.699) was lower than its correlation with UG (0.742) and PFV (0.759). The results indicate the poor discriminant validity for Content Preference (CP) as it overlaps with other constructs. In contrast, OTT Usage Frequency (OUF) shows good discriminant validity because of its distinctive score (0.594) which is highest than all its correlations (<0.35). Here, OTT usage frequency is clearly distinct from all predictors.

3.6 Model Fit Indices

Table 6. Goodness-of-Fit indices for the Proposed Model

χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR	R ² (OUF)
504.078	260	1.939	0.850	0.827	0.083	0.234	0.132

The chi-square/df ratio (1.939) indicates acceptable fit, while CFI (0.850) and TLI (0.827) suggest weaker fit. RMSEA (0.083) indicates marginal fit, whereas poor residual fit is reflected by SRMR (0.234). The R² value (0.132) shows that predictors explain 13.2% of the variance in OTT Usage Frequency. Overall, the model indicates mix fit.

3.7 Model Specification Summary

Structural Equation Models

Models Info

Estimation Method	DWLS
Optimization Method	NLMINB
Number of observations	136
Free parameters	136
Standard errors	Robust
Scaled test	Mean adjusted scaled and shifted
Converged	TRUE
Iterations	181
Model	$UG \sim UG1 + UG2 + UG3 + UG4 + UG5 + UG6$ $PEU \sim PEU1 + PEU2 + PEU3$ $FC \sim FC1 + FC2 + FC3$ $PFV \sim PFV1 + PFV2 + PFV3$ $CP \sim CP1 + CP2 + CP3 + CP4 + CP5$ $OUF \sim OUF1 + OUF2 + OUF3 + OUF4 + OUF5$ $OUF \sim UG + PEU + FC + PFV + CP$

Estimated Method: It is suited for ordinal data such as Likert-Scale responses .

Optimization: Numerical method is used to find the model parameters.

Observations :136 respondents.

Free Parameters: 136 parameters are estimated by the model.

Standard Error: Adjust to non-normality.

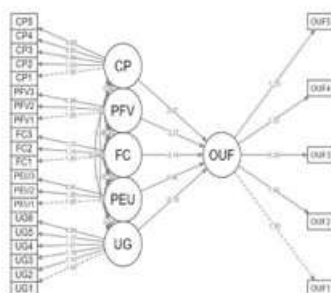
Scaled Test: Mean-adjusted correction for more accuracy in chi-square results.

Converged: TRUE, indicating the model successfully reached **a stable solution**.

Iterations :181 steps were required for convergence.

3.8 Structural Equation Modelling – Path Diagram

Figure 2: Structural Equation Modelling



The diagram is divided into 3 parts – Measurement Model (left side), Structural Model (Middle Connections), Outcome Construct (Right Side).

Measurement Model (left side)

Each latent construct (CP, PFV, FC, PEOU, UG) is linked to its observed indicators (survey items like CP1-CP5, UG1-UG6). The numbers on these arrows are factor loadings, showing how strongly each item reflect its construct.

Structural Model (Middle Connections)

The latent predictors (UG, PEOU, Fc, PFV, CP) are connected to OUF (OTT Usage frequency). The arrows here represent path coefficients. PEOU → OUF has a coefficient around -4.66 showing the modelled effect of ease of use on usage frequency.

Outcome Construct (Right Side)

OUF is measured by five indicators (OUF1-OUF5). Most loadings are strong but OUF3 is weak (0.25), confirming earlier findings that this item does not contribute meaningfully to the construct.

3.9 Structural Path Coefficients and Hypotheses Testing

Table 7. Structural Model Path Estimates and Hypotheses Test Results

Path	β	SE	t	p	Decision
UG → OUF	0.148	0.134	1.107	0.270	Not Supported
PEOU → OUF	0.361	0.136	2.665	0.009	Supported
FC → OUF	-0.113	0.135	-0.839	0.403	Not supported
PFV → OUF	0.009	0.138	0.063	0.950	Not supported
CP → OUF	-0.053	0.147	-0.359	0.721	Not supported

The Structured model (Table 7) tested the predictive power of the five attitudinal constructs on OTT Usage frequency. Among these, only Perceived Ease of Use showed a statistically significant $p(\beta = 0.361, p = .009)$, confirming that usability is the key driver of streaming frequency. Uses & Gratifications had a non-significant effect ($\beta = 0.148, p = .270$) while Facilitating Conditions ($\beta = -0.113, p = .403$), Perceived Financial value ($\beta = 0.009, p = .950$), and Content Preference ($\beta = -0.053, p = .721$) all failed to reach significance.

Together, these predictors explained only 13.2% of the variations in OTT usage ($R^2 = 0.132$) showing that the majority of factors influencing viewing behaviour lie outside the tested model.

H1: Uses and Gratifications (UG) has a positive but statistically insignificant effect of OTT Usage Frequency (OUF) ($\beta = 0.148, t = 1.107, p = .270$). Therefore, Hypothesis 1 is not supported.

H2: Perceived Ease of Use (PEOU) has a positive and statistically significant effect on OTT Usage Frequency (OUF) ($\beta = 0.361, t = 2.665, p = .009$). Therefore, Hypothesis 2 is supported.

H3: Facilitating Conditions (FC) has a negative and statistically insignificant effect on OTT Usage Frequency (OUF) ($\beta = -0.113, t = -0.839, p = .403$). Therefore, Hypothesis 3 is not supported.

H4: Perceived Financial Value (PFV) has a positive but statistically insignificant effect on OTT Usage Frequency (OUF) ($\beta = 0.009, t = 0.063, p = .950$). Therefore, Hypothesis 4 is not supported.

H5: Content Preference (CP) has a negative and statistically insignificant effect on OTT Usage Frequency (OUF) ($\beta = -0.053, t = -0.359, p = .721$). Therefore, Hypothesis 5 is not supported.

4. CONCLUSION

From the present study, it is concluded that Perceived Ease of Use (PEOU) is the only significant predictor among the five attitudinal constructs examined. The positive and significant effect ($\beta = 0.361$, $p = .009$) shows that students are more likely to use OTT platforms frequently when they perceive them as simple, convenient and easy to operate.

In contrast, Uses and Gratification, Facilitating Conditions, Perceived Functional value, Content Preference, did not significantly influence usage frequency. Although Uses & Gratification showed a positive relationship, its effect was not statistically significant, while Facilitating Conditions and Content Preference showed a negative weak relationship.

The present study highlighted the importance of platform usability while demonstrating the need for broader models to better explain actual OTT usage behaviour among undergraduate students.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Data supporting the findings of this study are available from the corresponding author upon reasonable request.

BIBLIOGRAPHY

- [1] Bhattacharyya, S. S., Goswami, S., Mehta, R., & Nayak, B. , 2022. *Examining the factors influencing adoption of over-the-top (OTT) services among Indian consumers*. Journal of Science and Technology Policy Management, 13(3), 652–682. <https://doi.org/10.1108/JSTPM-09-2020-0135>
- [2] Camilleri, M. A., & Falzon, L. (2020). *Understanding motivations to use online streaming services: integrating the technology acceptance model (TAM) and the uses and gratifications theory (UGT)*. Spanish Journal of Marketing - ESIC, 25(2), 217–238. <https://doi.org/10.1108/SJME-04-2020-0074>
- [3] Davis, F. D. (1989). *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*. MIS Quarterly, 13(3), 319–340. <https://doi.org/10.2307/249008>
- [4] Gupta, K. P., Joshi, D., & Singh, S. (2025). *On the consumption of OTT services in India: Insights from technology acceptance model and the uses and gratifications theory*. INMR - Innovation & Management Review, 22(3). <https://doi.org/10.1108/INMR-08-2023-0141>
- [5] Katz, E., Blumler, J. G., & Gurevitch, M. (1973). *Uses and gratifications research*. Public Opinion Quarterly, 37(4), 509–523. <https://doi.org/10.1086/268109>
- [6] Menon, D. (2022). *Purchase and continuation intentions of over -the -top (OTT) video streaming platform subscriptions: A uses and gratification theory perspective*. Telematics and Informatics Reports, 5, 100006. <https://doi.org/10.1016/j.teler.2022.100006>
- [7] Nagaraj, S., Singh, S., & Yasa, V. R. (2021). *Factors affecting consumers' willingness to subscribe to over-the-top (OTT) video streaming services in India*. Technology in Society, 65, 101534. <https://doi.org/10.1016/j.techsoc.2021.101534>
- [8] OTT Users' Continuance Intention and Recommendation Behaviour: Navigating Engagement, Experience and Subscription Costs—Chandan A. Chavadi, Monika Sirothiya, Pradeep Pandian, Ravindran K, Dhanabalan Thangam, Sindhu Menon, 2025. (n.d.).
- [9] *Technology Acceptance Model 3 and a Research Agenda on Interventions*—Venkatesh—2008—Decision Sciences—Wiley Online Library. (n.d.). Retrieved from <https://onlinelibrary.wiley.com/doi/10.1111/j.1540-5915.2008.00192.x>
- [10] ChatGPT. (n.d.). ChatGPT. Retrieved from <https://chatgpt.com/>
- [11] jamovi—Open statistical software. (n.d.). Retrieved from <https://www.jamovi.org/index.html>