Evolution of Bollywood: A Study on Taste and Preferences and Income-Expenditure Framework of Consumers

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Abstract

In Indian cinema, the Bollywood industry has seen a steep growth in its creativity and global outreach, from the day of its commencement. The tastes and preferences of consumers influenced the film industry to bring new innovation to keep the audience engaged. The income and expenditure framework of consumers helped in recognizing the genre of films people are interested in spending on. The study aims at understanding how different age groups have a varied array of predilection for Bollywood and how different age groups have varied income and expenditure patterns on films. The sample of 100 participants has been chosen by a simple random sampling technique. A pre-prepared questionnaire was used to collect the data which includes Likert scale and short answer type. The findings of the study are found out through tools like regression analysis and factor analysis. The research concludes that there is a positive correlation between age group of consumers and their expenditure on Bollywood movies. It also concludes that the emergence of young directors and their new contents alongside the entry of online over-the-top mediums like Netflix and Amazon Prime helped in engineering the evolution of Bollywood industry.

Keywords: Bollywood, tastes, preferences, expenditure, age, correlation

1. Introduction and Rationale

Indian Cinema is an amalgamation of various film industries like Telugu, Marathi, Tamil, Hindi (regional languages of India) and others, except English. Together all these diverse branches form the Indian Cinema, world's largest film industry. The Hindi film industry popularly named as Bollywood is the major segment of the Indian Cinema. The name Bollywood came long after the Indian Cinema took over the world. It is inspired by the Hollywood film industry which was known to be reigning back in early times.

Bollywood has existed since 1910s and has matured over time. From silent feature movies like Raja Harishchandra (1913), directed by Dadasaheb Phalke to sound films like Ardeshir Irani's Alam Ara (1931) , it finally progressed towards coloured feature films like Kisan Kanya (1937) directed by Moti B. It has become bigger, better and grander with progression in time and generations.

The Bollywood industry not only grew in its creation and innovation but also advanced statistically through increase in its revenues since 2000 to 2018. From production of 150 films a year, it produced to more than 1000 per year in a decade. The revenues of Indian Cinema have led to US$1.3 billion in 2000 and Bollywood solely represented 43% of this magnificent total. The current statistics of the Indian Cinema grosses a total revenue of Rs14200 crore in 2017 and Bollywood accounted 74% of the total. The evolution of Bollywood contributed a huge section of profits and income for the economic growth of India, since it's a great source for the entertainment sector.

'Bollywood' has been questioned and criticized every now and then. From the demand for new and skilled actors to advanced technology to innovative marketing and advertising to emergence of new online platforms, the criticism it got challenged it to strive harder. It endeavored to raise its standards of production and infrastructural development. This industry motivated truthfulness, originality and depth in its acting / role play. It inspired creativity in its story lines. Gradually it emerged to catch attention of the world. The development of Bollywood industry has been very diverse and evergreen. The factors that have led to this expansion are changes in technology, creativity standards, emergence of various advertising and marketing tools, entry of new generation actors and directors and most importantly the target audience. A movie can expand its impact on the box office only if people visit the cinemas to watch the movie. Consumers are the people for whom amenities are produced or manufactured and because of the consumer's demand, an economy flourish. The tastes and preferences of consumers brings a lot of fluctuation in the industry of Bollywood. Thus, the question arises and points out the dire necessity of considering consumers as the evolutionary factor for our Bollywood industry.

The intent of the research paper is to understand how the interdependence of consumers income and expenditure framework at different age levels affected the Bollywood industry over time. It will also focus on consumer tastes and preferences that led to changes in the Bollywood film industry. The investigation will firstly be conducted through research methodology of regression analysis of different age groups in correlation with their yearly expenditure on movies. Secondly a Likert scale will be used to do the factor analysis of various elements that changed the viewpoint of consumers leading to evolution of Bollywood. The research will be drawn after analyzing other literatures in the same subject area for an accurate and well elucidated findings and conclusions.

Literature Review

A study was conducted on the non-elite class which includes the poor, rural and lower middle-class Indian society and how they perceived the globalization of Bollywood. It focused on ethnography of the people in India and their understanding of the globalization of Bollywood. The paper examines different factors and elements felt by the audience of lower class in response to the growth of Bollywood. Based on several instances, the study proposes that evolving Hindi film content is parting ways with the interests and opinions of local and rural audiences. The data for the study was collected from the rural and local public of Patiala, Punjab. The age group was between 22-39 years and it included the students of Punjab University and some local and nearby families. The research methodology used was

ethnography and interviewing from a pre-prepared questionnaire. The findings of the study unfolded that the rural people did not only want entertainment in the films but also required a sense of connection with their own lives. The study concluded that Bollywood concentrated extremely on the urban and metropolitan societies tastes and preferences which unintentionally neglected the desires of the rural audience and made them less likely to watch the films. And if this continues then gradually the poor people are going to lose interest in Bollywood. (Rao 2007)

A study was conducted on the diverse posters of different eras of Bollywood. Its main aim is to understand how the lifestyle and culture blossomed and modified over time in the reflection of the film posters. The paper also analyses how film posters are an important tool for publicity of the film and how the posters represent the art of the film theme and entice the audiences. The study advocates that the film posters deliver the socio-economic, political, cultural and technological advances occurring in different times, alongside they also presented the various designing and demonstrations of film posters materializing over the decade. The data for the study was extracted through case study method, where 5 Bollywood film posters i.e. Kalyan Khajina (1924), Do Bigha Zaminn (1953), Mother India (1957), Bobby (1973) and Dilwale Dulhania Le Jayenge (1995) were researched. The findings from the divergent posters depicted different situations and colours of the country at that particular time period like rising woman empowerment and humbleness, story of a peasant, youth culture and changes in customs and lifestyles of people in India. The conclusion achieved from the study was that the Bollywood film posters reflected a decade of miscellaneous style of designing and demonstration of different times and it also established that the posters manifested the socio-economic, cultural, political and technological progresses of different times. (Goswami 2017)

A study was conducted on how the developing Bollywood industry became a crucial factor for the economic growth for India. The study is a review study based on analysis and review of several literatures related to Bollywood in terms of its globalization, its correlation with the trade market, its connection with the Indian diaspora and its comparison with Hollywood. The main objective of the study is to prove that today's Bollywood can be seen as an economic factor for a country's growth and the findings in different sections of the paper caters to that. The conclusion of the paper sums up to the fact that the storyline of Bollywood not only got inspired from the lifestyle of people but also inspired the lifestyle in itself and due to its unsurpassed connection with the Indian diaspora, a lot of new technologies and techniques helped the production in the country to increase. (Theodore 2015)

A study was conducted on how secularism evolved in the Bollywood films over time and its linkage with concepts like, 'tolerance', 'nationalism' and 'fraternity'. The study investigates and analyses several movies like from 1931-2016 and tries to elucidate on the objective of the paper. Numerous facts and views from Bollywood veterans and other important people were obtained and examined for precise conclusions. It was established that the content of movies shifted from mythology to social issues to romanticism as the years passed and India progressed politically and socially. It was concluded from the study that the Bollywood cinema was never secular in its growth and evolution rather it was always affected with the socio-political situations of the country. (Bharti 2017)

A study was conducted on how globalization affected the cultural congregates, through a case study of Bollywood. The paper analyzed that the evolution of Bollywood films and contents didn't imply the western assimilation of culture. The paper rather suggested that the advantages of early mover, by cultural clusters may be eroded because of globalization, as it creates a promenade for more information, talent and capital allowing other clusters to access the export markets. The study also analyses the role of Indian diaspora and offers a discussion over concepts of flaws and bridgeheads of people globally. The research methodology used is case study of Bollywood including qualitative and quantitative data analysis. The conclusions of the study globalization nourished the Bollywood. The rise in new distributions and technologies could not help Hollywood globalize in to India but advantaged Bollywood. It helped Bollywood in development of new products and improve its brand globally. It also stated that the various economies of Hollywood drew a pathway of growth for Bollywood. Among the two largest film clusters, Bollywood evolved bigger and better through globalization when compared to Hollywood. (Lorenzen 2009)

2. Research Gap

There is a lot of work done on the evolution of Bollywood in terms of changes in the creativity of posters of films, changes in the subjects of the film contents, and its globalization. A lot has been studied about how the evolutionary changes of Bollywood affected the economy of India and lifestyle of its people, but a study on how the income and expenditure framework of people and their interests, based on their age, led to advancement of the Bollywood is not researched on much. Hence, there is a lack of finding in the subject of how different opinions of people of different age groups led to varied factors that succored in the evolution of Bollywood other than the ones already researched on. Also, the age factor has never been an important variable in determining the progress of Bollywood.

Objectives

1. A regression analysis of correlation between different age groups and their expenditure patterns on watching Bollywood movies.

2. A factor analysis of correlation between tastes and preferences of consumers with the evolution of Bollywood.

Research Hypothesis

H1: There is correlation between age group of consumers and their expenditure on Bollywood movies.

H0: There is no correlation between age group of consumers and their expenditure on Bollywood movies.

H2: There is correlation between consumers tastes and preferences with evolution of Bollywood.

H0: There is no correlation between consumers tastes and preferences with evolution of Bollywood.

Research Methodology and Main Findings

In this study, in the first hypothesis, age group of consumers is the dependent variable and the expenditure done on Bollywood movies is the independent variable. In the second hypothesis, tastes and preferences of consumers is the independent variable and evolution of Bollywood is the dependent variable.

The sample population chosen for the study are a varied group of people from different age groups. The age group specifically decided for the paper is between 13years to 63years. The total sample size is of 100 observations. A Simple Random Sampling technique was undertaken to obtain the sample for the study. This technique involves an unbiased group of people that have equal probability of getting selected among the subdivision picked out from the total population. This type of sampling was paired with Snow Ball Sampling i.e. when one sample uses his/her contacts for acquiring further survey.

A pre-prepared questionnaire with 14 questions was circulated through a google document form in the attempt of collecting data for the study. The questionnaire had 10 questions asked based on Likert scale and 4 short sewer type questions. Both the data types led to the formation a quantitative data on the basis of which further analysis was done. The findings are obtained from Microsoft excel and SPSS software.

The tests applied are major econometrics tools for quantitative and qualitative analysis of a particular data. Firstly, regression analysis is used which is a powerful statistical method for examining the interrelation between the independent and dependent variables of a study. There can be two or more variables used in the study that can be examined by this test. It gives us the correlation between the variables. Secondly, factor analysis is used which is a statistical method used to describe discrepancy among observed, correlated variables in respect of a potentially lower number of unobserved variables called factors.

Results of Regression Analysis

Table 1.1 and table 1.2 explains the correlation between age and expenditure pattern of people on Bollywood movies. The tables are formed as a result of the regression analysis of all the data retrieved from the questionnaire.

Table 1.1: Regression two-factor Test Results: Correlation between age and expenditure on Bollywood movies.

Regression Statistics	
Multiple R	0.20541876
R Square	0.04219687
Adjusted R Square	0.03232261
Standard Error	12812.4258
Observations	99

ANOVA						
		df	SS	MS	F	Significance F
Regression	1		701517344	701517344	4.27342106	0.04137622
Residual	97		1.5923E+10	164158255		
Total	98		1.6625E+10			

	Coefficients	Standard Error	t Stat	Pvalue	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	4481.56831	3450.04117	1.29898981	0.19702673	-2365.8084	11328.945	-2365.8084	11328.945
Age	244.237411	118.147448	2.06722545	0.04137622	9.74743187	478.727391	9.74743187	478.727391

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The value of R square is 0.042, which implies that a 4.2% of variation in expenditure done on Bollywood movies (y variable) has been explained by variation in age (x variable). This value isn't a good fit as the value of R square is not close to 1.

If the p-value < 0.05, then we reject the Null Hypothesis and accept the Alternate Hypothesis. Hence the p-value 0.041 is less than 0.05, therefore we reject the null hypothesis and conclude that the findings of the study are statistically significant and the model is overall significant. Therefore, there is correlation between age group of consumers and their expenditure on Bollywood movies.

The significance of F - the significance of F can be examined through the null hypothesis and alternative hypothesis it has. The null hypothesis states that the variables of the study aren't connected with each other and the alternative hypothesis states that there is a connection between the two variables of the study. Here the significance of F is 0.041 which is less than the exact level of significance i.e. 0.05. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

Table 1.2: Correlation Table: Correlation between age and expenditure on Bollywood movies.

	Age	Annual Expenditure on Watching Bollywood Movies
Age	1	
Annual Expenditure on Watching Bollywood Movies	0.1890073	1

The correlation table 1.2 proves the correlation between the age of consumers and their annual expenditure on movies in the study. If the correlation coefficient is between 0-0.4, then it is a weak correlation. If it is between 0.4-0.7, then it is moderately correlated and between 0.7-1.0, it will be strongly correlated. Hence, the correlation coefficient 0.189 states that age and annual expenditure on watching Bollywood movies is positively correlated yet has weak correlation.

After concluding the findings of the two tables, it can be understood that the age of consumer and his annual expenditure on watching Bollywood films are weakly correlated suggesting that age of consumer has little effect on the amount consumer willingly spends on watching Bollywood movies. It is also found out that the age group above 25 years can spend more when compared to the ones below 25 years old as the age group above 25 years have a source of earning. Also, the age group below 25 years have more time to watch movies when compared to the contrary. The regression analysis of the age group data and income expenditure data helped in effectively proving the first objective of the study.

Results of Factor Analysis

The tables shown below represent the results of the factor analysis of all the 10 factors that were chosen to have influenced the Bollywood industry and led to its evolution. The factor analysis of these factors show that which factor was perceived by the consumers as the reason for advancement happening in Bollywood.

Factor 1 (F1)	Entry of young directors have added versatility to the Bollywood film industry.
Factor 2 (F2)	Online platforms (eg. netflix, prime, etc) are influencing storyline of Bollywood movies.
Factor 3 (F3)	Conventional Bollywood industry is increasing its reach through online entertainment platforms. (eg. netflix, etc)
Factor 4 (F4)	Abolishment of several sections in the constitution has affected the content of Bollywood movies. (eg. Made in Heaven, etc)
Factor 5 (F5)	The Bollywood industry has a lot of government intervention in its making.
Factor 6 (F6)	Bollywood industry has become more content driven rather than actor driven.
Factor 7 (F7)	Advancement in cinematic technology like VFX and animation has provided new opportunities for Bollywood industry
Factor 8 (F8)	Trailers and teasers have become strong advertising tools in making a movie popular.
Factor 9 (F9)	Entry of theatre artists in Bollywood movies developed unconventional characters. (eg. Radhika Apte, etc)
Factor 10 (F10)	Emergence of young generation actors has set new talent standards. (eg. singing)

Table 1.3 - Factor Analysis - Correlation Matrix

		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
Correlation	Factor 1	1	0.322	0.494	0.313	0.124	0.352	0.681	0.559	0.501	0.489
	Factor 2	0.322	1	0.589	0.414	0.462	0.153	0.43	0.413	0.562	0.493
	Factor 3	0.494	0.589	1	0.444	0.483	0.258	0.576	0.606	0.559	0.539
	Factor 4	0.313	0.414	0.444	1	0.321	0.226	0.416	0.385	0.469	0.3
	Factor 5	0.124	0.462	0.483	0.321	1	0.137	0.382	0.269	0.32	0.222
	Factor 6	0.352	0.153	0.258	0.226	0.137	1	0.465	0.371	0.2	0.347
	Factor 7	0.681	0.43	0.576	0.416	0.382	0.465	1	0.608	0.493	0.583
	Factor 8	0.559	0.413	0.606	0.385	0.269	0.371	0.608	1	0.541	0.557
	Factor 9	0.501	0.562	0.559	0.469	0.32	0.2	0.493	0.541	1	0.502
	Factor 10	0.489	0.493	0.539	0.3	0.222	0.347	0.583	0.557	0.502	1

The table shows that F1 has a correlation of 0.32 with F2, 0.49 with F3, 0.31 with F4, 0.12 with F5, 0.35 with F6, 0.68 with F7, 0.56 with F8, 0.50 with F9 and 0.49 with F10.

F2 has a correlation of 0.59 with F3, 0.41 with F4, 0.46 with F5, 0.15 with F6, 0.43 with F7, 0.41 with F8, 0.56 with F9 and 0.49 with F10.

F3 has a correlation of 0.44 with F4, 0.48 with F5, 0.26 with F6, 0.58 with F7, 0.61 with F8, 0.56 with F9 and 0.54 with F10.

F4 has a correlation of 0.32 with F5, 0.23 with F6, 0.42 with F7, 0.39 with F8, 0.47 with F9 and 0.30 with F10.

F5 has a correlation of 0.14 with F6, 0.38 with F7, 0.27 with F8, 0.32 with F9 and 0.22 with F10.

F6 has a correlation of 0.47 with F7, 0.37 with F8, 0.20 with F9 and 0.35 with F10.

F7 has a correlation of 0.61 with F8, 0.49 with F9 and 0.58 with F10.

F8 has a correlation of 0.54 with F9 and 0.56 with F10.

F9 has a correlation of 0.50 with F10.

Overall the correlation between all the factors is positive and ranges between 0 - 0.7, thus there is a both weak and moderate correlation between the factors.

Table 1.4 - Factor Analysis - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.882
Bartlett's Test of Sphericity	Approx. Chi-Square	432.770
	df	45
	Sig.	0.000

In the KMO and Bartlett's test analyze the adequacy of the sample size, measuring if the sample is fit for finding accurate results. The test results suggest that the sample size chosen for the study is adequate since the value of the test is above 0.7 i.e. 0.882. The sample size for the study was 100 people.

Table 1.5 - Factor Analysis - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.901	49.011	49.011	4.901	49.011	49.011	3.112	31.122	31.122
2	1.201	12.005	61.016	1.201	12.005	61.016	2.989	29.894	61.016
3	0.811	8.114	69.13						
4	0.699	6.988	76.118						
5	0.577	5.772	81.89						
6	0.458	4.576	86.467						
7	0.432	4.319	90.786						
8	0.373	3.734	94.52						
9	0.316	3.155	97.675						
10	0.232	2.325	100						

Table 1.6 - Factor Analysis - Rotated Component Matrix

	Component	
	1	2
F1	0.796	0.202
F2	0.203	0.796
F3	0.448	0.704
F4	0.267	0.594
F5	-0.032	0.767
F6	0.707	-0.048
F7	0.755	0.398
F8	0.694	0.404
F9	0.436	0.633
F10	0.651	0.390

The analysis in table 1.5 and 1.6 observes two factors that affected the most in terms of consumer tastes and preferences for evolution of Bollywood and they are factor 1, i.e. entry of young directors have added versatility to the Bollywood film industry with a 0.796 component that led to 49.011% of variation in the evolution of Bollywood. And factor 2, i.e. online platforms (eg. netflix, prime, etc) are influencing storyline of Bollywood movies with a 0.796 component that led to 61.016% of variation in evolution of Bollywood.

After concluding the findings of the four tables, it can be inferred that different age groups had different perspective of how the Bollywood evolved and chose accordingly from the ten factors taken in the study. The factor analysis of all the varied factors helped in finding a correlation between the consumers tastes and preferences and evolution of Bollywood. After a scrutinized

reading and analysis of the factors, the study could find out two major factors that influenced the evolution of Bollywood according to the consumers. They are emergence of young directors with new contents and entry of online streaming platforms.

3. Conclusion

The study was conducted through a questionnaire circulated to various different age groups. While getting the survey filled, a lot of people hesitated in mentioning their expenditure. It was thus, observed that different age groups tended to spend money differently on watching Bollywood movies. It was also inferred that due to dynamic lifestyles of different age groups, there was a contrasting expenditure framework on watching Bollywood movies. Thus, the study proves a positive relationship between the variables of hypothesis one, which means that the different age groups affected the expenditure done on movies. It was also seen that the correlation is weak and the reason behind that is the small sample size of the study.

The factor analysis of the variables in the second hypothesis reveals that the major influence on progress of Bollywood in regards with consumer predilection was through emergence of young directors and their brand-new contents and the entry of online platforms like Netflix and Prime. Consumers nowadays prefer watching movies online since the respective platforms provide newer and fresh contents and thus the Bollywood celebrities are now acting not only for the big screen but also for the small screen showing progress. The storylines created and thought out by young directors is more appealing for the audience as new brains get brighter stories engaging the consumers.

The limitations for the study are that it was done only by accounting the age groups of the consumers, thus the result may differ from when we might account the different genders. Also, only Indians are being surveyed in the study which limits the responses and results that can be obtained from foreigners, since Bollywood has globalized over time. The sample was biased and most of the samples are area specific since only the western and northern states' public could be reached for the survey. There is a lack of diversity in the samples.

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