A Study of the Effect of Film Content Development of Real Events on Psychological and Behavioral Characteristics of Audience and Box Office

Ji-Hun Lee* and Han-Na Kim

Content Development, T&T GOOD TERMS Co., Ltd, Korea; 77spring@naver.com
Department of Public Administration, Kangnam University, Korea; rlagkssk241@gmail.com

Abstract
This study aimed to investigate the effect of film content development on the psychological and behavioral characteristics of the audience and box office. The study also attempted to offer suggestions for the box office success of film companies that produce real event-based films by presenting the characteristics of content development that affect box office success. The implications of this study are as follows:
First, when producing films, current affairs programs or information media need to be used to help audience recognize the real events and the important parts of the events should be visually expressed. Second, films should be produced and expressed in such a way that the audience understands the background of the films as much as possible and that the situations of the past is accepted in terms of the present. Third, films should encompass the time setting, fun point and specific situation about which the audience can share with their reference groups. Fourth, the contents of the events and information on films should be easily recognized, and an environment for movie-watching needs to be created to increase the movie-going activities.

Keywords: Box Office, Film Content Development, Psychological and Behavioral Characteristics of the Audience, Real Event-based Film

1. Introduction

Film is a content product. The Korean film industry has continued to grow in terms of size and profit since the success of the movie ‘Swiri’ and is in its second stage of growth as it shares the value with related industries, including game, music album, publishing and characters.

Along with the growth of the film industry, however, the expectation of movie-goers has been considerably increasing. Thus, the production of film content needs to be accelerated by focusing on the technology, content, subject, creativity and artistry of film production because movie-goers consider them very important. In recent years, many film producers use real events as their materials to develop content that can be empathized and accepted by the audience. However, many questions arise as to what factors influence the psychology and behavior of the audience for the success of films. In this context, the objectives of this study are as follows.
First, the present study aims to establish the relationship between film content development, psychological and behavioral characteristics of the audiences and box office success based on the real events through the literature review. Second, it attempts to present a study model by identifying the association between the characteristics and to perform an empirical analysis. Third, the study aims to offer suggestions for box office success of film companies by presenting the characteristics of content development that affects box office success.
2. Literature Review

2.1 Overview of Korean Film Industry in 2013

In 2013, the total sales of the film industry were 1,883.9 billion won, reaching a record high. This is attributable to increased sales of theaters and recovery of the extra markets and export to overseas markets. Theater ticket sales in 2013 was a record 1,551.2 billion won, an increase of 6.6% from 2012, and the number of the audience also increased by 9.5% from 2012, reaching a record high of 213.32 million. As such, the Korean film industry has continued to grow. In the world film industry in 2012, on the other hand, the sales and rentals of home video have significantly decreased. However, the sales of world film industry in 2012 reached $88,625 million with a slight increase of year-on-year 1.4% due to the increased popularity of franchise movies, such as ‘The Avengers’, ‘The Dark Knight Rises’ and ‘The Twilight Saga’ and the market expansion in digital distribution. In 2013, the world film market size is estimated to reach $90,342 million, a 1.2% increase from previous year. The film industry is expected to grow by an annual average of 3.6%, reaching $106,013 million in 2017, due to the influence of the stably growing box office market and the digital distribution market, which is expected to grow dramatically.

2.2 Film Content Development

2.2.1 Factuality

Factuality refers to a sense of reality, the representation of the reality. ‘Fact’ further extends to the concept of ‘truth’ and a character in fiction has the image of ‘existence’ by an actor. In other word, film constitutes a totally different world with the use of reality, aiming to create a sense of reality like a real world. Factuality is materialized by dealing with the fundamentally existent objects. In other word, factuality starts to be materialized by handling an objective and real fact.

2.2.2 Dramatization

Dramatization refers to imaging where the printed literature, such as poetry, play and novel, is converted into a visualized image. Broadly speaking, dramatization can be defined as ‘a work to modify and appropriately arrange the original creative work such that it can create a new structure, function and shape according to the change in time, space and the audience by changing expressive media’. However, the reason the film industry is not in favor of the expression ‘dramatized film’ is that there is an unpleasant feeling when denying the acknowledgement that film is a differentiated creative work from other arts.

However, there is another argument that dramatization should be accepted as a film artwork because it is ‘re-created,’ not just simply ‘modified’.

2.2.3 Genre

Some movie-goers choose a movie based on their preferred ‘genre’. Genre is a concept that allows people to perceive a movie before or after choosing the movie at the theater. The genre of a movie is a system of code, customs and visual style that allow the audience to rapidly and somewhat complexly identify the type of narratives they watch. In other word, genre is a term referring to the kind, type and category classified by a narrative system and film style. In addition, the genre of a film is determined by the nature of success factors injected to constitute the contents of the film. In the film market where international trade of products is common, this in turn acts as the type of films produced in a certain country, that is, a factor to form the distribution concentrated on a certain genre.

2.2.4 Identification

Starting from Kelman in the late 1950s, studies on identification have been actively underway in the fields of social psychology and organizational behavior in recent years. The theory of social identification developed in the field of social psychology concerns how people form identification in a group or organization they belong to, and how such identification affects the attitude of such people.

Lee D. G. suggested that the process of identification between oneself and a character of a film is considerably affected by the degree of similarity between the two in terms of gender, age and race, and that the degree of empathy is also systematically associated with the similarity between oneself and the character in terms of attitude and gender.

2.3 Word of Mouth

Word of mouth means a communication or process in which consumers informally exchange information through conversation about certain products or services
they obtained based on their direct or indirect experience, regardless of their commercial benefit\textsuperscript{20}. Although authors define word of mouth in a slightly different way, they have a common ground in that they emphasize the word of mouth on a person-to-person basis\textsuperscript{21}. Westrook\textsuperscript{22} defines word-of-mouth as “informal communications among consumers about the characteristics of products, services or sellers”, while Aaker and Mayer\textsuperscript{23} defines word-of-mouth as a form of communication that becomes the source of information for which the receivers of advertisement talk with their friends and colleagues. According to Arndt\textsuperscript{24}, word-of-mouth is defined as a communication that communicators and receivers make through individual contact from mouth to mouth regarding products, brands or services. Voss\textsuperscript{25} suggested that when purchasing a product, more than 80% of purchase by consumers is affected by a direct recommendation from someone.

In summary, word-of-mouth can be defined as a process of communication where consumers exchange their consumption experience with other consumers\textsuperscript{26}. In this perspective, the present study established the following hypotheses:

H1: The factuality of film content development will positively affect mouth of mouth.
H2: The dramatization of film content development will positively affect mouth of mouth.
H3: The genre of film content development will positively affect word of mouth.
H4: The identification of film content development will positively affect word of mouth.

2.4 Social Aspects of the Times
The social aspect of the times is an image shared or structured by the members of a society regarding a certain object\textsuperscript{27}. This indicates that object groups are not fixed to social aspects, but continue to change by various factors. In other word, the change in social recognition of object groups can lead to a change in policy\textsuperscript{28}. The social recognition of object groups in social aspects of the times is not given, but is a kind of stereotype formed by various factors, such as politics, culture, society, history, mass media, literature and religion. In addition, it is not unchangeable, but continues to change by a variety of factors, including time passage\textsuperscript{29}. In this aspect, the following hypotheses were established:

H5: The factuality of film content development will positively affect social aspects of the times.
H6: The dramatization of film content development will positively affect social aspects of the times.
H7: The genre of film content development will positively affect social aspects of the times.
H8: The identification of film content development will positively affect social aspects of the times.
H9: The word of mouth of film content development will positively affect social aspects of the times.

2.5 Box Office Success
It is very difficult to predict the success of films in advance\textsuperscript{30}. Since the academic studies on the structural factors for box office success started in the 1970s\textsuperscript{31}, many studies have been continuously underway on the success factors of box-office, even today after 40 years\textsuperscript{32}. In his influential study on box office success, Litman\textsuperscript{33} divides the factors affecting box office success largely into the creation area, marketing area and distribution area. The creation area includes the contents of films, such as genre, rating and star casting; the marketing area includes award winning in film festivals and reviews on film; and the distribution area includes such variables as the type of distribution company and movie release date\textsuperscript{33}. The scholars of economics and management, who are interested in the industrial aspect of films and the consumption activities of films as part of economic activities, have tried to investigate the factors influencing box office success or to predict the return of individual films. A study of cultural-economics that emphasizes the social context of cultural product consumption focuses on the association between film product consumption and social class, and further, to investigate the structural pattern of cultural product consumption\textsuperscript{34}. In this context, the following hypotheses were established.

H10: Word of mouth will positively affect box office success.
H11: Social aspects of the times will positively affect box office success.

3. Research Method
3.1 Hypothetical Model
For an empirical analysis, a study model and hypotheses were established, as in Figure 1, to investigate the factors affecting box office success based on previous studies of film content development and the psychological and
behavioral characteristics of the audience. The present study is divided largely into three parts: film content development (factuality, dramatization, genre and identification), psychological and behavioral characteristics of the audience (word of mouth and social aspects of the times), and box office success.

3.2 Studied Film

This study attempts to investigate the effect of real event-based films on box office success. Thus, the scope of the study is limited to the films based on real events. The selected films include 'A Long Way Gone', 'Wish', 'Silenced', 'The Attorney' and 'Another Promise'.

3.3 Measurement

In order to measure film content development, psychological and behavioral characteristics of the audience and box office success, the study is based on the following previous studies: Film content development is based on the studies of Kim KH35, Seo MJ36, Song JK37 and Song YS38; the psychological and behavioral characteristics of the audience are built upon the studies of Kim KH35 and Kim JJ39. Box office success is based on the studies of Seo MJ36 and Song YS38 with an appropriate modification for this study. The Likert 5 point scale was used and the responses were coded as follows: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, and strongly agree = 5.

3.4 Data Collection and Analysis

The subject of this survey included those who watched the selected movies more than once. The selected movies are 'A Long Way Gone', 'Wish', 'Silenced', 'The Attorney' and 'Another Promise'. The survey on the sample group was conducted for 43 days between October 19, 2014 to November 30, 2014. A total of 350 questionnaires were distributed and 326 were collected, of which 301 questionnaires were used for the analysis as a valid sample, excluding 25 unsuitable questionnaires. The reliability of the valid sample was tested with the Cronbach’s α, and the confirmatory factor analysis was used to achieve internal validity of discriminant validity and convergent validity. A frequency analysis was done for the general characteristics of the subjects. Afterward, a test was performed for the fit of the structural equation model and the causal relationship of the concepts.

4. Results

4.1 General Characteristics of Participants

The general characteristics of the subjects are as follows. Of the total 301 respondents, 114 (37.9%) were male and 187 (62.1%) were female, with female being almost the double of male. The majority of the respondents were in the age group of 20 - 25 (70.8%) and the highest bracket of monthly income was less than 500,000 won (56.50%). As for occupation and final education, students (80.1%) and high school graduation (75.7%) were the highest. It was found that 45.5% of respondents watch movie once a month, and the percentage of respondents who watch movie with their friends (41.2%) was high. With regard to the cost of watching movie per month, 10,000-20,000 won (34.6%) was the highest percentage, while the Internet (50.8%) was used the most to obtain information on movies.

4.2 Reliability of Validity Checks

A confirmatory factor analysis was performed to analyze the validity of constructs. The confirmatory factor analysis is to analyze the measurement model to test convergent validity and discriminant validity of constructs. Given that a factor loading of 0.4% or greater is considered to indicate a high correlation between the factors and variables41–43 the validity of constructs of this study was found to be high enough, as shown in Table 1. As for the goodness of fit of the measurement model, the X²/df value of variables was mostly smaller than 2, while RMR and RMSEA values were smaller than the cut-off value. In addition, GFI, AGFI, NFI, CFI, IFI and TLI values were mostly greater than 0.9, and Std. loadings and C.R values were overall good enough, indicating a high convergent validity. It was also found that
the questionnaire items have the representation as study items because the Average Variance Extracted (AVE) was mostly 0.5 or greater.

After performing a confirmatory factor analysis, a correlation analysis was done to roughly check what direction or relation the variables used in this study have. Overall, it was found that there was a significant relationship among the variables.

### 4.3 Model Analysis and Hypotheses Test
#### 4.3.1 Path Coefficient of Structural Equation Model

The overall fit indexes of the model presented in this study are: $X^2 = 328.917$, df = 213, $p = .000$, RMR = .036, RMSEA = .043, GFI = .914, AGFI = .888, NFI = .858, CFI = .944, IFI = .945 and TLI = .933, indicating that the model is appropriate to test the hypotheses of this study.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Factor</th>
<th>Std. Loadings</th>
<th>Error Variance</th>
<th>t-value</th>
<th>p-value</th>
<th>C.R.</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factuality</td>
<td>Factuality 1</td>
<td>.788</td>
<td>.215</td>
<td>-</td>
<td>-</td>
<td>0.771</td>
<td>0.631</td>
</tr>
<tr>
<td></td>
<td>Factuality 2</td>
<td>.608</td>
<td>.364</td>
<td>5.514</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dramatization</td>
<td>Dramatization 1</td>
<td>.596</td>
<td>.326</td>
<td>3.302</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dramatization 2</td>
<td>.421</td>
<td>.409</td>
<td>-</td>
<td>-</td>
<td>0.585</td>
<td>0.420</td>
</tr>
<tr>
<td>Genre</td>
<td>Genre 1</td>
<td>.732</td>
<td>.261</td>
<td>-</td>
<td>-</td>
<td>0.734</td>
<td>0.581</td>
</tr>
<tr>
<td></td>
<td>Genre 2</td>
<td>.619</td>
<td>.401</td>
<td>4.201</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td>Identification 1</td>
<td>.486</td>
<td>.546</td>
<td>7.704</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identification 2</td>
<td>.711</td>
<td>.352</td>
<td>11.106</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identification 3</td>
<td>.873</td>
<td>.175</td>
<td>12.170</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identification 4</td>
<td>.719</td>
<td>.407</td>
<td>-</td>
<td>-</td>
<td>0.840</td>
<td>0.577</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>Word of mouth 1</td>
<td>.655</td>
<td>.315</td>
<td>-</td>
<td>-</td>
<td>0.842</td>
<td>0.577</td>
</tr>
<tr>
<td></td>
<td>Word of mouth 2</td>
<td>.825</td>
<td>.205</td>
<td>11.106</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word of mouth 3</td>
<td>.691</td>
<td>.372</td>
<td>9.906</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word of mouth 4</td>
<td>.553</td>
<td>.498</td>
<td>8.224</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social aspects of the times</td>
<td>Social aspects of the times 1</td>
<td>.581</td>
<td>.394</td>
<td>6.115</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social aspects of the times 2</td>
<td>.491</td>
<td>.482</td>
<td>5.597</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social aspects of the times 3</td>
<td>.624</td>
<td>.300</td>
<td>6.305</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social aspects of the times 4</td>
<td>.476</td>
<td>.460</td>
<td>-</td>
<td>-</td>
<td>0.743</td>
<td>0.422</td>
</tr>
<tr>
<td>Box office success</td>
<td>Box office success 1</td>
<td>.793</td>
<td>.265</td>
<td>-</td>
<td>-</td>
<td>0.896</td>
<td>0.634</td>
</tr>
<tr>
<td></td>
<td>Box office success 2</td>
<td>.744</td>
<td>.328</td>
<td>13.304</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Box office success 3</td>
<td>.790</td>
<td>.316</td>
<td>14.258</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Box office success 4</td>
<td>.700</td>
<td>.321</td>
<td>12.388</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Box office success 5</td>
<td>.705</td>
<td>.380</td>
<td>12.491</td>
<td>***(.001)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The test results of the 11 hypotheses established in the structural relation of film content development, psychological and behavioral characteristics of the audience and box office success are summarized in Table 2. It was found that 6 hypotheses were accepted, except 5 hypotheses that showed the P-value greater than 0.05.

### 5. Conclusion

This study aimed to investigate the effect of film content development on the psychological and behavioral characteristics of the audience and box office success. It also attempted to offer suggestions for the box office success of film companies that produce real event-based movies by presenting the characteristics of content development that affect box office success. The implications of this study are as follows:
First, it was found that film content development (factuality, dramatization, genre and identification) did not have a significant effect on word of mouth. This indicates that film content development does not affect word of mouth unless there are understanding of real events, and information and visual recognition of the contents of films. Thus, when producing films, current affairs programs or information media need to be used to help the audience recognize the real events, and the important parts of the events should be visually expressed.

Second, it was found that factuality, dramatization and identification had a significant effect on the social aspects of the times. This suggests that real event-based films can show the background of the times both directly and indirectly and the audience accepts the situation of the times at the current point. Thus, films should be produced in such a way that the audience understands the appearance of the times at the current time as much as possible, and that the past situations are accepted in the terms of the present.

Third, the social aspect of the times was found to have a significant effect on word of mouth. This indicates that the audience who understood the actual situations of the films shares the contents of the films and forms a consensus through a word of mouth to their reference groups. Thus, films should encompass the time setting, fun points and specific situations about which the audience can share with their reference groups.

Fourth, it was found that the psychological and behavioral characteristics of the audience had a significant effect on box office success. This suggests that the audience recognizes and prefers real event-based films and then is involved in collecting related information and watching the films. Thus, the contents of the events and information on the films need to be easily recognized, and an environment for running period and movie watching needs to be created to increase the behaviors of movie-watching.

Although a lot of efforts are made in this study to present meaningful results and implications, there still exist problems to be solved in the future. First, it is difficult to generalize the results of this study because the subject of this study is limited to a few real event-based films. Thus, future studies need to consider the characteristics of real event-based films in a diverse manner.

Second, there are a number of variables involved in the film content factors and purpose of word of mouth.

### Table 2. Path coefficient of model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Channel</th>
<th>Path Coefficient</th>
<th>Estimate</th>
<th>Standardized Estimate</th>
<th>t-Value</th>
<th>p-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Factuality --&gt; Word of mouth</td>
<td>.14</td>
<td>.084</td>
<td>.138</td>
<td>1.335</td>
<td>.182</td>
<td>reject</td>
</tr>
<tr>
<td>H2</td>
<td>Dramatization --&gt; Word of mouth</td>
<td>-.29</td>
<td>.261</td>
<td>-.292</td>
<td>-1.833</td>
<td>.067</td>
<td>reject</td>
</tr>
<tr>
<td>H3</td>
<td>Genre --&gt; Word of mouth</td>
<td>.19</td>
<td>.089</td>
<td>.186</td>
<td>1.860</td>
<td>.063</td>
<td>reject</td>
</tr>
<tr>
<td>H4</td>
<td>Identification --&gt; Word of mouth</td>
<td>-.05</td>
<td>.070</td>
<td>-.049</td>
<td>-.518</td>
<td>.605</td>
<td>reject</td>
</tr>
<tr>
<td>H5</td>
<td>Factuality --&gt; Social aspects of the times</td>
<td>.32</td>
<td>.070</td>
<td>.324</td>
<td>2.873</td>
<td>.004</td>
<td>accept</td>
</tr>
<tr>
<td>H6</td>
<td>Dramatization --&gt; Social aspects of the times</td>
<td>.35</td>
<td>.184</td>
<td>.350</td>
<td>2.358</td>
<td>.018</td>
<td>accept</td>
</tr>
<tr>
<td>H7</td>
<td>Genre --&gt; Social aspects of the times</td>
<td>.17</td>
<td>.070</td>
<td>.174</td>
<td>1.656</td>
<td>.098</td>
<td>reject</td>
</tr>
<tr>
<td>H8</td>
<td>Identification --&gt; Social aspects of the times</td>
<td>.28</td>
<td>.050</td>
<td>.282</td>
<td>3.110</td>
<td>.002</td>
<td>accept</td>
</tr>
<tr>
<td>H9</td>
<td>Social aspects of the times --&gt; Word of mouth</td>
<td>.59</td>
<td>.235</td>
<td>.590</td>
<td>3.332</td>
<td>***</td>
<td>accept</td>
</tr>
<tr>
<td>H10</td>
<td>Word of mouth --&gt; Box office success</td>
<td>.65</td>
<td>.123</td>
<td>.652</td>
<td>7.302</td>
<td>***</td>
<td>accept</td>
</tr>
<tr>
<td>H11</td>
<td>Social aspects of the times --&gt; Box office success</td>
<td>.20</td>
<td>.147</td>
<td>.201</td>
<td>2.500</td>
<td>.12</td>
<td>accept</td>
</tr>
</tbody>
</table>

***P < 0.01
Thus, future studies should further divide the word-of-mouth activities of the audience into psychological and behavioral aspects for the diversity of studies.

6. References

7. Oh YH. A study on reality of film acting - focusing on (the day a pig fell into the well). Film studies. 2013; 58:231–59.
20. Lim JH. A study of online word of mouth effects on music contents through consumer behavior model [Master’s Thesis]. Sangmyung University. 2013.
35. Kim KH. A Study on student’s perceived reality about reality programs [Master’s Thesis]. Ewha Womans University; 1995.
38. Song YS. A study on children's perceived reality about television program [Master’s Thesis]. Ewha Womans University; 1993.