A study of the relationship between online movie reviews and the intention to watch the movie

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Abstract

Aim/purpose – This study explores how the content feature and source of eWOM affect people’s intentions and further analyses the effectiveness of eWOM on people’s intention to watch movies.

Design/methodology/approach – The study considers two dimensions of movie reviews, including the source (anonymous or acquaintance) and the content feature (concrete or abstract), adopts a 2x2 between-subject design, and then analyzes online questionnaires (N = 313) via statistics analysis methods.

Findings – The findings showed that if the source is from an acquaintance and the content feature is concrete, then people will have the highest intention to watch the movie. In addition, the acting skills of the cast and the love of the movie genre also enhance the positive influence on the viewer’s experience.

Research implications/limitations – The respondents were selected only in Taiwan so this paper do not explain any differences among different countries. For example, cultural differences exist between the West and the East in the content feature of eWOM.

Originality/value/contribution – If a type of genre is greatly accepted by the audience and generates huge box-office revenue, then producers and movie companies might keep making movies in these kinds of genre to secure profits. Therefore, box-office movies will usually fall into these certain types of genres, and there will be an abundance of them released in the near future.

Keywords: source of eWOM, content feature of eWOM, online movie review, between-subject design.
JEL Classification: C12, C90.

1. Introduction

The rapid development of the internet provides many media channels (e.g., blogs, social network sites, online discussion forums) for people to share their opinions and experiences and exchange information online. Social media play an important role during marketing campaigns (e.g., Alalwan et al., 2017; Appel et al., 2020; Bampo et al., 2008; Kotler & Zaltman, 1971; Lou & Yuan, 2019; Mangold & Faulds, 2009; Neti, 2011; Southwell & Yzer, 2007; Subramani & Rajagopalan, 2003; Xiang & Gretzel, 2010; Wibowo et al., 2021), and therefore, electronic word-of-mouth (eWOM) has become one of the most important sources when consumers need more references or to make decisions (e.g., Chu & Kim, 2011; Huete-Alcocer, 2017; Hussain et al., 2018; Jalilvand et al., 2011; Jalilvand & Samiei, 2012b; Litvin et al., 2008; Sotiriadis & van Zyl, 2013; Zhao et al., 2020). EWOM might be influential to potential customers via numerous aspects like its channels (the way it is spread), platforms (where it is seen), content feature (how it is told), and its source (who said it).

Watching movies is one of the most popular recreation activities in a person’s spare time (Currell, 2010; Shaikh et al., 2004; Shaw & Dawson, 2001; Zimmermann & Reeves, 2009). People nowadays can easily gain access to watching movies by going to theaters, renting DVDs, or simply paying for online streaming platforms. Many past studies have also paid attention to exploring which factors influence the intention of watching movies (e.g., Duan et al., 2008b; Hsiao & Yang, 2015; Rewtrakunphaiboon, 2017; Tefertiller et al., 2020).

As for the structure, this paper: first, provides the theoretical background presenting the underlying theories; second, it defines online movie reviews and highlights people’s intention to watch a movie right after they read online movie reviews and introduces the influence of eWOM to consumers; third, it describes the methodology applied in the empirical study; finally, it explores how the content feature and source of eWOM affect people’s intention and further analyzes the effectiveness of eWOM on people’s intention to watch movies.
2. Literature review
2.1. Comparison between WOM and eWOM

In traditional WOM, people communicate orally in person (Bickart & Schindler, 2001), which means that the messenger might know or have some kind of connection to the receiver. Therefore, it is likely that the receiver can easily decide to what extent the messenger’s information is trustworthy. Although WOM can be one of the most influential resources when consumers are making decisions, it still has several limited boundaries like geography and time (e.g., Bhatnagar & Ghose, 2004; Godes & Mayzlin, 2004; Maxham & Netemeyer, 2002a, 2002b).

Along with the development of Web 2.0, cross-country WOM is no longer a limitation and the sharing can be saved in an internet database that can be viewed anytime and anywhere. Moreover, eWOM can easily spread through numerous platforms and channels quickly, making it a more convenient way for people to collect information and suggestions (Hoffman et al., 1996; Hoffman & Novak, 1996). People are currently able to exchange information and opinions about products, share their self-experiences, or simply browser feedback of others through the internet, which then become eWOM (Hennig-Thurau et al., 2004), online word-of-mouth, or word-of-mouse (Gelb & Sundaram, 2002). As eWOM can be split into different categories in many ways, there are numerous channels and platforms for spreading eWOM, such as blogs, bulletin boards system (BBS), online discussion forums, instant messaging, Facebook (FB), Instagram (IG), Twitter, social network and online review sites, etc. (Babić Rosario et al., 2016; Bickart & Schinkler, 2001; Gelb & Sundaram, 2002; Gvili & Levy, 2018; García-de los Salmones, Herrero, & Martínez, 2021). Through these channels, people are allowed to post any thoughts they have or easily search for opinions they are looking for. Kiecker & Cowles (2001) divided eWOM into four different types: spontaneous, quasi-spontaneous, independent or third party-sponsored, and corporate-sponsored. Overall, unlike traditional word-of-mouth, eWOM provides a unique way for people to communicate due to being anonymous and convenient, involving multiple individuals, and being available to others for an indefinite period of time (Hennig-Thurau et al., 2004).

WOM for years was considered the widest and most important channel for customers to seek information (Meilatinova, 2021) in a one-to-one and face-to-face exchange about a product or service (Godes et al., 2005). It is usually perceived as a credible and trustworthy way to get messages (Banerjee, 1992; Johnson Brown & Reingen, 1987; Murray, 1991) and has also become one of the
main channels for people to share information, opinions, and experiences with others that forms an influence that one consumer may have on another (Litvin et al., 2008; López & Sicilia, 2014; Sotiriadis & van Zyl, 2013). With the emergence of eWOM, people use it more often than ever before. Even though eWOM is a faster and wider way to spread out information, with the anonymous attribute of eWOM it becomes more difficult and complex for people to determine the credibility of the sources on the internet.

Online reviews and sharing are usually written by customers themselves anonymously, and so they are believed to reflect the truthfulness of their experience and opinions, no matter whether it is positive or negative (Gelb & Sundaram, 2002). The appearance of eWOM has changed consumers’ behaviors and decision-making processes (Chen et al., 2015; Cheung et al., 2008; López & Sicilia, 2014; Perera et al., 2019). When buying things that cannot easily be evaluated, people will tend to engage in WOM before purchasing so that they can know more about the product (Bristor, 1990; Harrison-Walker, 2001; Hussain et al., 2020). It is also believed that WOM greatly affects people’s selection of movies (Bayus, 1985; Faber & O’Guinn, 1984; Kim et al., 2013; Rui et al., 2013). Movie industry experts agree that WOM is a critical factor in sustainability and leads to ultimate financial success (Dogruel & Hao, 2016; Elberse & Eliashberg, 2003; Ulker-Demirel et al., 2018). As a result, we choose a movie as our product to measure eWOM.

One can discuss eWOM in many distinguished aspects. Volume and valence are the most two frequent measurements of WOM (e.g., Eliashberg et al., 2000; Godes & Mayzlin, 2004; Goyette et al., 2010; Mahajan et al., 1984; Mizerski, 1982a, 1982b; Wang & Kim, 2021; Yang et al., 2012). The volume shows the amount of eWOM interaction, and the valence measures the nature of eWOM messages. Since there is already plenty of research on these two dimensions, we shall take a look at the source and content feature of eWOM in this study.

2.2. Motivation of eWOM

The two basic types of motivation in psychology, intrinsic motivation and extrinsic motivation, reflect Wirtz and Chew’s (2002) conclusion, showing that no matter what factors motivate people to be involved in eWOM, they can be summed up into two factors. First, people want to satisfy their desire for something through WOM. Second, they expect that they can obtain something through WOM behavior (Wirtz & Chew, 2002). Moreover, the critical incidental
technique of Sundaram et al. (1998) generalized four positive motivations for eWOM: altruism, helping the company, product involvement, and self-enhancement. This is similar to the result presented by Dichter (1966).

According to Hennig-Thurau et al. (2004), five significant reasons motivate consumers to publish their reviews on a public platform: social benefits, economic incentives, concern for others, and extraversion/self-enhancement. People share their experiences or write reviews and feedback due to their desire for social interaction and their self-worth (Hennig-Thurau et al., 2004). Moreover, members of a virtual society might want to gain their identification of belonging and peers’ evaluation by sharing their opinions online (McWilliam, 2000).

### 2.3. Source of eWOM

Past research mostly discussed the credibility of the source of eWOM by expertness and trustworthiness (Bilgen & Zoghi, 2017; Hovland et al., 1953; Khwaja et al., 2020; Khwaja & Zaman, 2020; Wu & Wang, 2011). The credibility of the source can be one of the various factors that influences eWOM (Cheung et al., 2009; Dholakia & Sternthal, 1977; Hussain et al., 2017; Muda & Hamzah, 2021; Park et al., 2011; Reichelt et al., 2014). Source credibility can be defined as the extent of trust and belief in the source to others (Ganesan & Hess, 1997) and includes two dimensions: the knowledge of the source and the reliability of the source (Flanagin & Metzger, 2003; 2007; McCroskey & Teven, 1999; Metzger et al., 2003a, 2003b; Metzger & Flanagin, 2013; Pornpitakpan, 2004). When the credibility of the source increases, it will also increase trust in the product or service (Pornpitakpan, 2004).

With the use of the internet, more and more user-generated content (UGC) websites and platforms for online review and discussion have appeared (Akehurst, 2008). In traditional WOM, sources are usually the people with whom the receiver is already acquainted with. However, in eWOM sources can be divided into two segments: whether the source is anonymous or an acquaintance. The source of WOM can be categorized by the closeness of the relationship between the messengers and receivers (Duhan et al., 1997; Johnson Brown & Reingen, 1987). It is believed that the closer they are, the greater valence the suggestions will be (Arif et al., 2016; Frenzen & Nakamoto, 1993; Wirtz & Chew, 2002; Zamil, 2011). Moreover, WOM usually occurs between close relationships (Anderson, 1998; Bristor, 1990; Derbaix & Vanhamme, 2003). As a result, the relationship between messengers and receivers is a key factor to influence the
valence of WOM (Bansal & Voyer, 2000; Johnson Brown & Reingen, 1987). Based on that, it is proposed:

**H1:** An acquaintance-written movie review is perceived to have a higher intention to watch the movie than an anonymous-written movie review.

**H1a:** In the case of an acquaintance-written movie review, having concrete content is perceived to have a higher intention to watch the movie than having abstract content.

**H1b:** In the case of an anonymous-written movie review, having concrete content is perceived to have a higher intention to watch the movie than having abstract content.

### 2.4. Content feature of eWOM

Review content is also one of the main discussion topics of prior studies (e.g., Bronner & de Hoog, 2011; Li et al., 2011; Teso et al., 2018; Williams et al., 2017). Boush and Kahle (2001) conducted a content analysis of eWOM by providing several eWOM message characteristics, which are emotion, formality, civility, conflict, and specific terminology and themes. The content-based feature is also mentioned in some studies (Garg & Dhiman, 2021; Lin et al., 2009; Mudambi & Schuff, 2010). Our study divides the content of eWOM into two segments: abstract and concrete. Some research studies have shown in product reviews that having concrete reviews will gain more helpfulness for viewers (Huang & Li, 2013; Li et al., 2013). We aim to see if this statement remains true when the product changes into a virtual one like a movie. Based on this it is affirmed:

**H2:** A concrete content movie review is perceived to have a higher intention to watch the movie than an abstract content movie review.

**H2a:** In the case of concrete movie review content, a review written by an acquaintance is perceived to have a higher intention to watch the movie than one written anonymously.

**H2b:** In the case of abstract movie review content, a review written by an acquaintance is perceived to have a higher intention to watch the movie than one written anonymously.

### 2.5. Cast and acting skills

Movie stars are one of the main things that influence consumers in their intention to watch a movie (Basuroy et al., 2003; Holbrook, 1999; Litman, 1983; Litman & Kohl, 1989; Prag & Casavant, 1994; Ravid, 1999; Sharda & Delen,
2006; de Vany & Walls, 1999). The stars themselves can be considered as brands that people know. Using stars in a movie exhibits branding and attracts awareness, which creates brand equity. The popularity and the fame of the actor/actress induce consumers to select movies in which they star.

Several studies showed that the popularity or impression of the actor and actress in a film might influence consumers’ choice of movies (Kim & Sieun, 2019; Li et al., 2021; Litman & Kohl, 1989; Saputra & Wiyono, 2021; Sochay, 1994). There are numerous research studies on whether stars do affect the financial performance of movies or not, but until now the findings are mixed. Directors’ casting decisions are a powerful signal to producers about whether their film will be successful or not. However, others found no significant effect in this respect (Litman, 1983; Prag & Casavant, 1994; de Vany & Walls, 1999). Rather than seeking online reviews, it is possible that consumers simply choose the movie based on the cast itself. The support of having star casts participating in a movie indeed positively affects revenue. Nevertheless, producing movies is huge teamwork, and it is not just a sum of each person’s value. Combining the right star and the right cast can be another successful way to produce a promising movie.

Acting skills can be one of the aspects when the population is evaluating an actor or actress. However, it is somehow subjective and hard to judge. Therefore, this study uses the richness of filming experience, professional training, and acting associated award as our measurements of acting skills. Kao et al. (2013) used the number of prizes that the cast accumulated to decide whether the movie is attractive to the audience or not.

\[
\text{Cast} = \frac{\text{director, writer, and four main characters’ total prizes of winning or being nominated}}{\text{number of people}}
\]

Sometimes consumers might match the cast and the movie in their consideration as well (Kamins, 1990). In the study, we want to discuss whether people’s intention to watch movies is affected by the acting skills of the cast. Accordingly, it is proposed:

**H3a:** Acting skills of the cast in the movie have a more positive influence on the intention to watch the movie when the review is written by anonymously than by an acquaintance.

**H3b:** Acting skills of the cast in the movie have a more positive influence on the intention to watch the movie when the review content feature is abstract versus concrete.
2.6. Movie genre

During the past years, plenty of researchers argued about different sorting types of movie genres, but there is still no specific method to divide all movies into different genres (McKee, 1997, pp. 247-254). Based on scene categorization, Rasheed and Shah (2002) offered a method to classify movies based on audio-visual cues present in previews and then use color, audio, and cinematic principles for further classification into comedy, horror, drama/other, and movies containing explosions and gunfire. Zhou et al. (2010) employed a method for movie genre categorization of movie trailers and divide them into four high-level movie genres: action, comedy, drama, and horror films by mapping the temporally structured trailer features (Simões et al., 2016). Vishwakarma et al. (2021) indicated that movie genre classification emerges as an active and essential area of research, and previous approaches focused on either cognitive or affective content analysis. Therefore, their study took both cognition- and affect-based features into consideration and proposed a novel multi-modality movie genre classification framework including five popular genres: action, romance, comedy, horror, and science fiction. Sharma et al. (2021) proposed a novel framework for movie genre classification using audio features of movie trailers belonging to the five most generic and popular genres, such as action, romance, horror, science fiction, and comedy. For sake of detailed discussion, integrating the past studies, the current one selects fifteen common movie genres that are familiar to audiences: romance, animation, musical, documentary, horror/thriller, crime/mystery, comedy, art, epic, war, action/adventure, fantasy, sciencefiction, drama, and biographical. Accordingly, it is proposed:

**H4a:** Love of the movie genre has a more positive influence on the intention to watch the movie when the review is written anonymously than by an acquaintance.

**H4b:** Love of the movie genre has a more positive influence on the intention to watch the movie when the review content feature is abstract versus concrete.

2.7. Online review platform for movie

There are many different kinds of channels for consumers to search for or read others’ reviews of a movie. Yeap et al. (2013) used the Fuzzy Analytic Hierarchy Process (FAHP) to evaluate eWOM on several platforms, including personal blogs, social networking sites, instant messaging sites, and review sites...
according to two global criteria: information quality and source credibility. The findings showed that people choose review sites as the most preferred channel to obtain opinions on movies. Social networking sites and instant messaging sites are more suitable when exchanging ideas and thoughts.

2.8. eWOM and movies

Movie reviews have always been one of the popular topics in the field of eWOM. Reviews by a third party are important when consumers are evaluating products or services in the “experience goods” markets (Chen & Xie, 2008). It is more difficult to measure a movie’s value than other tangible products before purchasing, and so people usually tend to seek out the opinions of others to lower their risk and uncertainty (Bristor, 1990; Dowling & Staelin, 1994; Harrison-Walker, 2001). Moreover, from an aggregate-level perspective, critics act more as leading indicators than as opinion leaders (Eliashberg & Shugan, 1997). Findings also revealed that consumers generally prioritize source credibility over information quality when looking for a platform to obtain eWOM reviews on movies (Yeap et al., 2013). For these reasons, movie studios commonly quote positive critics’ reviews during their promotions to attract people to watch the movie.

Zhang and Dellarocas (2006) developed a diffusion model of WOM and found that the result does suggest that Yahoo! Movies’ online amateur reviews have a positive and statistically significant influence on others’ intention to watch a movie. Online movie reviews and comments are also used in predicting and influencing box office revenue (Dellarocas et al., 2007). Some studies stated that while the volume of WOM has a positive influence on revenue, the valence of WOM does not affect it that much (Liu, 2006). Still, others suggested that the valence of eWOM is one factor influencing the movie box office (Chintagunta et al., 2010).

Even though volume and valence are two important measures of WOM, other measures like duration, intensity, and desperation also exist (Eliashberg et al., 2000; Godes & Mayzlin, 2004). One study utilized actual WOM data and found that WOM activities are the most active during a movie’s pre-release and opening week. Audiences tend to hold high expectations before the movie’s release, but soon become more critical in the opening week. As a result, studios and theater managers are suggested to observe and respond to eWOM actively especially during the early weeks when most of the revenue is generated and when it is expected to be an unsuccessful movie (Liu, 2006). A study also found that eWOM and box office revenue cannot be simply regarded as cause and effect. Although user rat-
ings do not directly affect revenue, they do influence it indirectly by the volume of eWOM (Duan et al., 2008b). There is a dynamic structure of an increase in eWOM induced by revenue increases that cause revenue to grow again (Bae & Kim, 2013). Duan et al. (2008b) develop a dynamic simultaneous equation system to capture the interrelationship between eWOM and box office revenue.

2.9. Purchase intention

Purchase intention is a measurement of the possibility for the consumer to buy a product or service. Although it is not possible for people to follow their intention of purchase by a hundred percent when buying things, companies can still find out what kind of products is attractive to the market (Engel et al., 1993; Taylor et al., 2012). If the purchase intention is high, then it means that the opportunity for consumers to purchase the item is relatively higher (Dodds et al., 1991). The popular Theory of Planned Behavior (TPB) by Ajzen (1991) suggested that the best indicator for future behavior is a current intention, which is affected by attitude, subjective norms, and perceived behavioral control. WOM is known to play an important role in influencing and forming consumer attitudes and behavioral intentions (Chatterjee, 2001; Chevalier & Mayzlin, 2006; Sen & Lerman, 2007; Smith & Vogt, 1995). When it comes to adopting technology, WOM from peers and social influence significantly impact subjective norms (Bhattacherjee, 2000). According to Ajzen (1991, p. 188), perceived behavioral control “is assumed to reflect past experience as well as anticipated impediments and obstacles.” Jalilvand and Samiei (2012a, 2012b) also proved that eWOM has a significant impact on perceived behavioral control. Behavioral intention is believed to be used to directly predict actual behavior (Ajzen & Fishbein, 1980). Empirical studies stated that online reviews do influence consumer behavior (Chatterjee, 2001; Chen & Xie, 2008) and even have significant power to affect consumer loyalty and purchase decision (Gruen et al., 2006).

3. Research methodology

3.1. Experimental design

Based on the previous literature review and the purpose of this study, we establish a research framework as in Figure 1. It shows that we divide our eWOM into the source (stranger and acquaintance) and content feature (abstract and concrete).
Figure 1. Research framework

The study conducted a 2 (eWOM source: anonymous, acquaintance) x 2 (eWOM content feature: concrete, abstract) between-subject design. There were four different kinds of questionnaires and the intention to watch the movie was examined as the dependent variable (Table 1).

Table 1. 2x2 Between-subject design

<table>
<thead>
<tr>
<th>Source</th>
<th>Concrete</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stranger</td>
<td>Questionnaire A</td>
<td>Questionnaire B</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>Questionnaire C</td>
<td>Questionnaire D</td>
</tr>
</tbody>
</table>

3.2. Data and sampling

The study selected people between 18 and 50 years old in Taiwan as the target population and gave out 80 questionnaires for each segment and 320 questionnaires in total, and the survey (SurveyCake, a popular online survey tool) by questionnaire was conducted online and distributed through social media (e.g., FB, IG) during the period from 16 September to 15 October in 2019. There are four major sections in our questionnaire: watching intention for the movie, acting skills of the cast, genre of the movie, and demographic variables. We received a total of 320 questionnaires, and 313 of them were valid, including 78 A questionnaires (anonymous X concrete), 79 B questionnaires (anonymous X abstract), 76 C questionnaires (acquaintance X concrete), and 80 D question-
naires (acquaintance X abstract). In each category, demographic variables were presented in frequency with percentages. In the study, we performed all data analyses using SPSS (Statistical Package for Social Sciences) for Windows, Version 22 (IBM SPSS Statistics, Version 22.0, Armonk, NY, USA).

4. Research findings/results

4.1. Reliability analysis

The result showed that the questionnaire is reliable with Cronbach’s α above 0.8. All the items are highly correlated and consistent. The watching intention of the movie has Cronbach’s α of 0.894. The acting skills of the cast have Cronbach’s α of 0.881.

4.2. Descriptive analysis

Table 2 shows the characteristics of respondents, and 62% of them are female. More than 72% of the respondents are 18 to 25 years old. About 34% of them have a monthly disposable income of between NT$5,001 to NT$10,000.

Table 2. Characteristics of the respondents (N = 313)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>119</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>194</td>
<td>62</td>
</tr>
<tr>
<td>Age</td>
<td>18~25</td>
<td>226</td>
<td>72.2</td>
</tr>
<tr>
<td></td>
<td>26~33</td>
<td>61</td>
<td>19.5</td>
</tr>
<tr>
<td></td>
<td>34~40</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>41~50</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Occupation</td>
<td>Student</td>
<td>190</td>
<td>60.7</td>
</tr>
<tr>
<td></td>
<td>Public servant</td>
<td>11</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Service industry</td>
<td>32</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td>Freelancer</td>
<td>14</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>7</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Finance and insurance industry</td>
<td>14</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Information and technology industry</td>
<td>19</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Manufacturing and transportation industry</td>
<td>9</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Business industry</td>
<td>6</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>Military or police</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>9</td>
<td>2.9</td>
</tr>
</tbody>
</table>
4.3. Hypotheses’ verification

Table 3 shows the test results of H1 and indicates that an acquaintance-written movie review is perceived to have a higher intention to watch the movie than an anonymous-written movie review. It is consistent with previous studies. Furthermore, Table 4 shows that H1a and H1b are both validated. In both acquaintance and anonymous situations, having concrete content feature of a movie review is perceived to have a higher intention to watch the movie than having abstract content.

**Table 3. Test results of H1**

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>5.017</td>
<td>0.9270</td>
<td>7.238</td>
<td>0.008</td>
</tr>
<tr>
<td>Stranger</td>
<td>4.627</td>
<td>1.1927</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** p < 0.001.

**Table 4. Results of H1a and H1b**

<table>
<thead>
<tr>
<th>Source</th>
<th>Content feature</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>Concrete</td>
<td>5.232</td>
<td>0.9051</td>
<td>0.046</td>
<td>0.830</td>
</tr>
<tr>
<td></td>
<td>Abstract</td>
<td>4.812</td>
<td>0.9064</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stranger</td>
<td>Concrete</td>
<td>4.831</td>
<td>1.3042</td>
<td>1.495</td>
<td>0.223</td>
</tr>
<tr>
<td></td>
<td>Abstract</td>
<td>4.425</td>
<td>1.0409</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < 0.05, ** p < 0.01.
Table 5 shows the results of H2 and points out that a concrete content movie review is perceived to have a higher intention to watch the movie than an abstract content movie review. This is in line with previous studies. In addition, Table 6 shows H2a and H2b are both supported. Both concrete and abstract content feature situations, having acquaintance-written movie reviews, are perceived to have a higher intention to watch the movie than those written anonymously.

**Table 5. Test results of H2**

<table>
<thead>
<tr>
<th>Content feature</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Concrete</td>
<td>5.029</td>
<td>1.1393</td>
<td>1.227</td>
<td>0.269</td>
</tr>
<tr>
<td>Abstract</td>
<td>4.620</td>
<td>0.9917</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** p < 0.001.

**Table 6. Results of H2a and H2b**

<table>
<thead>
<tr>
<th>Content feature</th>
<th>Source</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Levene’s test for equality of variances</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Concrete</td>
<td>Anonymous</td>
<td>4.831</td>
<td>1.3042</td>
<td>5.255</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>Acquaintance</td>
<td>5.232</td>
<td>0.9051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstract</td>
<td>Anonymous</td>
<td>4.425</td>
<td>1.0409</td>
<td>2.195</td>
<td>0.140</td>
</tr>
<tr>
<td></td>
<td>Acquaintance</td>
<td>4.812</td>
<td>0.9064</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < 0.05.

Table 7 illustrates that H3a is validated and means that the acting skills of the cast in the movie had a more positive influence on the intention to watch the movie when the review is written anonymously than by an acquaintance. However, based on the results, H3b is rejected, and the acting skills of the cast have a more positive influence on concrete content feature movie reviews.

**Table 7. Results of H3a and H3b**

<table>
<thead>
<tr>
<th>Adjusted $R^2$</th>
<th>Beta</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction between Acting Abilities and Source</td>
<td>0.149</td>
<td>0.350</td>
<td>6.705</td>
</tr>
<tr>
<td>Interaction between Acting Abilities and Content Feature</td>
<td>0.178</td>
<td>0.385</td>
<td>7.491</td>
</tr>
</tbody>
</table>

Note: *** p < 0.001.
Table 8 shows that H4a is supported and states that love of the movie genre has a more positive influence on the intention to watch the movie when the review is written by anonymously than by an acquaintance. However, based on the results, H4b is rejected and love of the movie genre has a more positive influence on concrete content feature movie reviews.

<table>
<thead>
<tr>
<th></th>
<th>Adjusted $R^2$</th>
<th>Beta</th>
<th>$t$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>InterGenreSource</td>
<td>0.093</td>
<td>0.259</td>
<td>4.773</td>
<td>0.000***</td>
</tr>
<tr>
<td>InterGenreContent</td>
<td>0.083</td>
<td>0.231</td>
<td>4.260</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

Note: *** $p < 0.001$.

Next, we conducted a weighted average method to rank the genres under the love of movie genre. The respondents ranked their top five favorite movie genres and give 5 points to their 1st genre, 4 points to their 2nd genre, and so on. Table 9 shows that action/adventure, drama, and comedy are the top three favorite movies.

Table 9. Ranking of the movie genres

<table>
<thead>
<tr>
<th>Movie genre</th>
<th>Total points</th>
<th>Final ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love story</td>
<td>493</td>
<td>5</td>
</tr>
<tr>
<td>Animation</td>
<td>372</td>
<td>7</td>
</tr>
<tr>
<td>Musical</td>
<td>115</td>
<td>9</td>
</tr>
<tr>
<td>Documentary</td>
<td>40</td>
<td>14</td>
</tr>
<tr>
<td>Horror film</td>
<td>95</td>
<td>12</td>
</tr>
<tr>
<td>Crime/Mystery</td>
<td>533</td>
<td>4</td>
</tr>
<tr>
<td>Comedy</td>
<td>568</td>
<td>3</td>
</tr>
<tr>
<td>Art film</td>
<td>109</td>
<td>10</td>
</tr>
<tr>
<td>Epic/Historical</td>
<td>106</td>
<td>11</td>
</tr>
<tr>
<td>War</td>
<td>109</td>
<td>10</td>
</tr>
<tr>
<td>Action/Adventure</td>
<td>811</td>
<td>1</td>
</tr>
<tr>
<td>Fantasy</td>
<td>254</td>
<td>8</td>
</tr>
<tr>
<td>Science Fiction</td>
<td>405</td>
<td>6</td>
</tr>
<tr>
<td>Drama</td>
<td>639</td>
<td>2</td>
</tr>
<tr>
<td>Biography film</td>
<td>46</td>
<td>13</td>
</tr>
</tbody>
</table>

5. Discussion and conclusions

5.1. Research contribution

Online movie reviews have always been one of the popular topics in the field of eWOM. It is more difficult to measure a movie’s value versus other tangible products before purchasing, and so people usually tend to seek the opinions
of others to lower their risk and uncertainty (Bristor, 1990; Dowling & Staelin, 1994; Harrison-Walker, 2001). Third-party reviews have a significant influence when consumers are evaluating products or services in the experience goods markets (Chen & Xie, 2008). Moreover, from an aggregate-level perspective, critics act more as leading indicators than as opinion leaders (Eliashberg & Shugan, 1997). Some studies reveal that consumers generally prioritize source credibility over information quality when looking for a platform to obtain eWOM reviews on movies (Yeap et al., 2014).

This present study proves most of the hypotheses, thus corresponding to previous studies. The findings indicate when looking into the source and the content feature of eWOM separately that eWOM from an acquaintance is perceived to have more influence than those from anonymous people. Most people are used to taking advice from those they are familiar with, and this does not change even if it is a virtual product like a movie. Moreover, the content feature of eWOM does have a significant effect on the intention to watch movies. Concrete content, which usually describes more details and gives out more information, is perceived to be better than abstract content. With the 2x2 between-subject design, the findings show that a movie review written by an acquaintance and also having the concrete content feature is the most attractive combination for people to increase their intention to watch the movie.

The findings also show that the acting skills of the cast in the movie and the love of the genre do affect people’s intentions to watch the movie, especially when the review is written anonymously. If the acting skills of the cast are professional and the movie also happens to be one of the audiences’ favorite movie genres, then people might still be willing to watch the movie even if it is a comment from an anonymous-written review. However, the results do not support that these two interferences also have a positive influence on intention in the case of abstract content feature reviews. The acting skills of the cast and love of the movie genre have a more significant influence on concrete content than abstract content. The explanation for this result might be that people do not pay that much attention to and trust abstract content reviews. Therefore, as long as it is an abstract content review, it only has limited influence on readers. As a result, these two interferences exude a stronger intention to watch the movie when it is concrete content versus abstract content.

The empirical results are consistent with Zhang and Dellarocas’ (2006) findings that online amateur reviews have a positive and statistically significant influence on others’ intention to watch a movie. eWOM and box office revenue cannot be simply regarded as cause and effect. Although user ratings do not directly affect revenue, they do influence it indirectly by the volume of eWOM
(Duan et al., 2008a, 2008b). Online movie reviews and comments are also used in predicting and influencing box office revenue. Some studies state that while the volume of WOM has a positive influence on revenue, the valence of WOM does not affect it that much (Liu, 2006). However, others suggest that the valence of eWOM is one factor influencing the movie box office (Chintagunta et al., 2010). Some studies employ other factors like duration, intensity, and desperation to measure WOM (Eliashberg et al., 2000; Godes & Mayzlin, 2004). One study utilizes actual WOM data and finds that WOM activities are the most active during a movie’s pre-release and opening week. Audiences tend to hold high expectations before the movie’s release, but soon become more critical in the opening week. Movie studios commonly quote positive critics’ reviews during their promotions to attract people to watch the movie. As a result, studios and theater managers are suggested to observe and respond to eWOM actively, especially during the early weeks when most of the revenue is generated and when it is expected to be an unsuccessful movie (Liu, 2006). There is a dynamic structure of an increase in eWOM induced by revenue increases that causes revenue to grow again (Bae & Kim, 2013).

5.2. Managerial implications

Although producers and movie companies are already commonly seen managing and manipulating online movie reviews, their actual influence is still unclear. The findings show when the movie review is from an acquaintance and contains detailed descriptions or information that it will be more persuasive. Therefore, producers and movie companies can put positive comments that have concrete content feature on the top of their webpage or online movie review platforms. When selecting the cast of the movie, choosing an actor/actress with better acting skills will also definitely increase the chance of making a successful movie. Selecting cast members by their fame or simply their appearances might be risky sometimes if scandals or negative rumors are coming out before the movie’s release. However, this strategy seldom goes wrong when those who are really good at acting are a part of the cast. In fact, it may be a better and wiser strategy for a movie company to produce a movie that fits in these genres in order to gain more profits. Nevertheless, some may argue that movies should not be made to cater to the mass population, as they should be an expression of art.

The ranking of movie genres might also have something to do with popular movies being released. If a type of genre is well accepted by the audience and generates huge box-office revenue, then producers and movie companies might
keep producing movies in these kinds of the genre to guarantee their profits. Therefore, box-office movies usually fall into these certain types of genres, and there will be an abundance of them released in the near future. Interestingly, the budget and market for biography films and documentaries are getting smaller and smaller since few investors are willing to invest in these movie genres that only have a niche market.

5.3. Limitations and future research

First, the respondents are selected only in Taiwan so this paper do not explain any differences among different countries. For example, cultural differences exist between the West and the East in the content feature of eWOM. Second, we do not know how much the respondents depend upon the internet for information. If they only spend a little time online, then the results might be different. Third, the study only measures the intention to watch the movie. The contribution may be greater if we could actually measure the real purchase behavior after being influenced by movie reviews.

The empirical analysis included only selected factors impacting the box-office revenue, omitting others, e.g., the time of movie release to the cinema (i.e., holiday, competing movie premiere), the number of movie copies distributed on the traditional cinema market, the window of the cinema distribution and of streaming services, or the budget for promotion. Although only selected factors can be analyzed in the paper, it is worth mentioning in the discussion of results that other factors (not included in the empirical study) can impact the box-office revenue in future research.

In this study, we discuss movies as a whole, but actually, there are numerous ways to classify them. Movies produced in Hollywood are very different from those produced in Taiwan. In Hollywood, movie companies tend to spend more than half the budget of the movie on paying the cast and doing marketing. On the contrary, movies in Taiwan usually do not spend that much money on the cast. Future research can focus more on whether the number of stars in a movie has a direct correlation to box-office revenue and how movie companies should divide their budget to gain the most profits. The language of the review platforms and comments may also be a factor influencing online movie reviews, and this can another avenue for future research.
Disclosure statement

No potential conflict of interest was reported by the author(s).

References


A study of the relationship between online movie reviews...


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**Appendix A. The survey questionnaire**
(translated from Chinese edition)

**Questionnaire A**

Supposing you read the following movie review written by an anonymous person on the web:

“Watching the acting skills of OOO and XXX is worthy of your endless aftertaste. The director and screenwriter accurately describe the ups and downs of family, career, and love in your life and me. It is rare to see that a movie produced without a large cost can be so wonderful.”

(Both OOO and XXX are actors’ names.)

**Questionnaire B**

Supposing you read the following movie review written by an anonymous person on the web:

“The movie was great. It was so touching.”
Questionnaire C

Supposing you read the following movie review written by an acquaintance on the web:

“Watching the acting skills of OOO and XXX is worthy of your endless aftertaste. The director and screenwriter accurately describe the ups and downs of family, career, and love in your life and me. It is rare to see that a movie produced without a large cost can be so wonderful.”

(Both OOO and XXX are actors’ names.)

Questionnaire D

Supposing you read the following movie review written by an acquaintance on the web:

“The movie was great. It was so touching.”

After reading the above movie review, answer the following questions, please.

Part I eWOM effect on the intention of watching movies
After reading the online reviews above, please tick your opinion on this movie:
1. I think this is a positive online movie review.
2. I would like to watch this movie.
3. I am more interested in this movie.
4. I want to know more about this movie.
5. I want to know more about this movie.

Part II Acting skills
Please tick your opinion on the acting skills of actors:
1. If the actor/actress in the movie has rich experience in the acting field, it will increase your intention of watching the movie.
2. If the actor/actress in the movie has been trained in the acting field, it will increase your intention of watching the movie.
3. If the actor/actress in the movie has been awarded in the acting field, it will increase your intention of watching the movie.

Part III Movie Genres
Please tick your opinion on the genre of movies:
1. Whether the movie genre is my preference affects my intention to watch the movie.

2. According to your preference, please select and rank your top five favorite movie genres (Fill in the code):
   15. Biography

Part IV
1. Gender: Male__ Female
2. Age: 18~25__ 26~33__ 34~40___ 40~50___ Above 50
3. Occupation: Student__ Public servant__ Service industry__ Freelancer
   Finance and insurance industry__ Business industry__ Education
   Information and technology industry__ Military or police
   Manufacturing and transportation industry__ Others
4. Monthly Disposable Income (USD):
   Less than $200___ $200~360___ $360~715
   $715~1,080___ $1,081~1,430___ $1,431~1,785___ $1,786~3,570___ More than $3,570