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The impact of movie reviews vs. word of mouth on post-viewing evaluations of films

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The impact of movie reviews vs. word of mouth on post-viewing evaluations of films

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Table of Contents

List of Tables

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Abstract

Moviegoers regularly encounter movie reviews and word of mouth (WOM) prior to seeing a film. This thesis examined (1) whether reviews and WOM influence moviegoers' post-viewing opinions of a film and (2) whether this information's influence is moderated by moviegoing frequency. Using a between-subjects factorial design, the study gave participants positive or negative information about a film that they were led to believe came from either professional movie reviews or students at their university. Participants then watched the film and gave their opinions of its quality. The study found that, regardless of valence or source, this information did not significantly influence participants' post-viewing opinions of the film. In addition, frequency of moviegoing did not moderate the information's impact on those opinions. Potential explanations for these results and future directions for study are discussed.

Chapter 1: Introduction and Statement of the Problem

For many years, consumers of media entertainment have relied upon the opinions of professional media evaluators in deciding which works are worth their time and attention. In the realm of the American cinema, film critics have been especially important in developing a culture in which the opinions of those with a certain degree of education, experience, and ostensibly some form of expertise are promoted as worthy and reliable sources of information and advice. This is the case not only because film critics are usually well versed in the art, production, and culture of the movie industry, but also because critics have the opportunity to view most films before they are released to the general public.

For an illustration of the perceived importance of movie critics, one need only examine the prevalence of film reviews throughout the mass media. These reviews can be found in several different media formats, including magazines, websites, and television. In fact, some film reviewers have acquired followers who hold their opinions in such high esteem that these consumers decide to see or avoid films almost solely because of the critics' reactions to them. For instance, the television show *Siskel and Ebert* (later *Ebert and Roeper*) was a syndicated television staple for many years, earning a place in the pop culture lexicon and numerous Emmy award nominations in the process. Though it slowly lost some visibility and esteem, possibly due to the growing number of similar programs and other film review sources, films that earned "two thumbs up" continued to trumpet the rating as an indicator of their quality and the worthiness of the increasingly substantial financial investment required to see them.

Marketers of films that do not receive such rave reviews are still likely to seek out some sort of critical approval, even if the source is less reputable than they would like. A

Sony Pictures Entertainment marketer even went so far as to fabricate the reviews of a fictional critic named "David Manning," who was oddly consistent in his praise of Columbia Pictures films that included such critical flops as *The Animal* and *Hollow Man* (Horn, 2001). The fact that a film studio would risk so much in terms of reputation and legal consequences—which it suffered when the fabrication was revealed and Sony eventually agreed to pay $1.5 million in restitution (*USA Today*, 2005)—simply to portray its films as critical favorites certainly provides support for the perceived importance of the professional film critic.

In addition, film reviews are now catalogued as a means of determining a general consensus on the quality and entertainment value of new releases and older movies alike. For instance, the websites Rotten Tomatoes (www.rottentomatoes.com) and Metacritic (www.metacritic.com) serve almost exclusively as compilers of print and electronic reviews from critics throughout the United States, with the idea that a larger sample size will produce some sort of consensus and a more valid judgment of a film's quality. In fact, it is not unusual for these sites to gather more than 100 reviews of a widely released film. It is worth noting that both of these sites place restrictions on the sources of such reviews to ensure that they display the opinions of only those they deem well established and credible. This fact places such sites firmly in the realm of professional criticism. For those unwilling to invest the time necessary to read their reviews, both sites provide visitors with a percentage indicating what proportion of critics recommend a particular film.

Moreover, there seems to be at least some evidence of a correlation between positive film reviews and the number of media consumers who decide to see a film, which can be easily measured by a film's box office totals. According to the results of a study conducted

by Reinstein and Snyder (2005), "… an early positive review increases the number of consumers attending a movie in total over its entire run rather than simply shifting consumers from viewing the movie later rather than earlier" (p. 48). The findings of this study agree with the results of a survey reported in a 1994 *Wall Street Journal* article by Jacqueline Simmons (as cited in Eliashberg & Shugan, 1997), which found that "one-third of moviegoers see movies because of favorable reviews by critics" (p. 70).

These results certainly seem to vouch for the idea that professional film critics have a direct and significant impact on the moviegoing public. However, there are undoubtedly other forces that influence the perception and behavior of audiences. Among the most important of these is word of mouth, here defined as both interpersonal communication and mediated opinion (e.g., text messages, email, social networking sites, Web-based message boards) expressed by those who are not professional film critics. Though these latter forms of communication are mediated, they typically do not take the form of traditional mass communication. More importantly, consumers typically have a more intimate connection with word-of-mouth sources than with professional movie critics.

Professional film criticism and word of mouth do not operate in a vacuum, however, with the former possessing the capacity to shape the latter. According to Reinstein and Snyder (2005), "A positive review may influence one consumer to view the movie, who then influences others to view the movie through word of mouth" (p. 49). While this word of mouth may result from actually viewing a movie or from reading professional critics' reviews, consumers who rely on this mode of communication acquire their information from sources who are closer to them—in terms of social proximity, aesthetic taste, or both—than professional movie critics ever could be. Whether word of mouth comes through mediated

technology or interpersonal communication, the characteristics of the source, and the relationships developed with that source, provide a meaningful distinction between word of mouth and the information received from professional critics. The interpersonal barrier that exists between the professional film critic and the media consumer is nonexistent in word of mouth, and this can be reduced to a simple reason: It is a form of two-way communication. When one receives information and opinions from word-of-mouth sources, one has the opportunity to interact and determine why those sources feel the way they do. This distinguishes such sources from the non-interactive film critics working for print and electronic media.

Americans' media use has increased each year since the beginning of the decade (Associated Press, 2006), meaning that there are more and more avenues for professional critics to reach audiences. However, this also opens up opportunities for greater exposure to word of mouth via the Internet, where people can discover their favorite hotspots and become sometimes intimately connected with those who frequent them. This is commonly seen on Internet message boards, where visitors go for the opinions of those who, like professional critics, have already viewed a film. Many of these visitors are so accustomed to certain message boards that they become well acquainted with those who regularly frequent them and provide such feedback.

In addition, word of mouth continues to play a large role in the development of perceptions and behavior. According to a study by Liu (2006), "WOM [word of mouth] information offers significant explanatory value for box office revenue, especially in the early weeks after a movie opens" (p. 74). This finding provides support for word of mouth as an integral means by which moviegoers receive information and advice about films.

The power of word of mouth, often referred to as a movie's "buzz," can also be seen in more casual observations of the industry. It is well-understood that positive and negative buzz can have a profound impact on perceptions and observations both before and after the release of a movie, as it is a subject that consistently receives attention from movie experts and the general media alike. While some of that buzz may come from the diffusion of professional reviews, the majority of it comes via word of mouth. As Lynda Obst, a producer at Paramount Pictures and writer for *New York Magazine*, puts it, "By the Net and by Blackberry transmission, word of mouth rules" (2006, p. 2).

It seems that many movie studios are becoming aware of the power of word of mouth, sometimes resorting to desperate measures in their attempts to harness it. Sony Pictures Entertainment, the same company responsible for the infamous "David Manning" fabrication, was also "one of a number of film companies subsequently caught using employees to promote films in audience-reaction video clips" (Gumbel, 2002). The tactic of gathering and advertising audience reactions to a film may not be as established as the professional film review, but movie studios are clearly convinced of their power to influence moviegoers.

Indeed, both movie reviews and word of mouth have become prevalent and frequently utilized forms of opinion. This observation leads to this study's primary questions: Do these forms actually influence moviegoers' evaluations of films? If so, which of the two has more impact on those evaluations?

This study aims to achieve several objectives. First, it seeks to address a familiar issue from an uncommon perspective. While some studies have examined the impact of movie reviews and word of mouth on consumers' expectations of a film (Mizerski, 1982; Wyatt &

Badger, 1990; d'Astous & Touil, 1999), and others have examined the extent to which moviegoers prefer and utilize one source over another (Faber & O'Guinn, 1984; Cooper-Martin, 1992), few have actually investigated the extent to which these sources influence moviegoers' evaluations of a viewed film. More importantly, little research has systematically compared the influence of movie reviews and word of mouth on audience evaluations using an experimental design. This study attempts to examine an important component of an industry that continues to play a growing role in American society. According to the National Association of Theatre Owners, U.S. theaters grossed $5.02 billion in 1990, $7.67 billion in 2000, and $9.48 billion in 2006. These statistics point to the fact that movies have become firmly ingrained into the American entertainment culture and will likely serve an important function in the future.

Chapter 2: Literature Review and Theoretical Framework

This chapter analyzes related research findings and theoretical frameworks to predict the influence of interpersonal contacts' word of mouth and film critics' movie reviews on moviegoers' post-screening evaluations of a film. An examination of film criticism's development helps provide some context for the investigation that follows.

Mass-Mediated Film Criticism: A Background

The history of American film criticism stretches back to at least 1915, when poet Vachel Lindsay published *The Art of the Moving Picture* in response to the release of D.W. Griffith's film, *The Birth of a Nation* (Lopate, 2006). Lindsay, a proponent of the new medium, attempted to draw parallels between it and the traditional, more culturally revered artistic expressions such as painting, theater, classical music, and dance. However, the first motion pictures were "widely dismissed as crude spectacles…. somewhat akin to mass hypnosis" (Lopate, 2006, p. XIII). In response to this derision, early movie critics tended to adopt a condescending attitude toward films as a means of avoiding the negative connotations associated with viewing them.

Over the next few decades, however, film's stature rose in the eyes of the general public; at the same time, a culture of serious and insightful professional evaluators began to develop around the medium, including such important figures as Otis Ferguson, James Agee, and Robert Warshow (Lopate, 2006). These critics began to stress the unique characteristics of the medium and promote it as legitimate art. Many of these individuals began to evaluate films through a socio-cultural, political, or psychological lens, and found in them a reflection of the societies that produced them.

Indeed, the importance of film—and the usefulness of evaluating it to determine the factors that define its influence and its potential to reflect society—was validated during the First World War. It was then that the U.S. government first began to recognize the rising stature of films in the public's eyes and took measures to utilize them in the war effort (Ward, 1981). The recognition of the medium's ability to impact the public continued during World War II, when the study of mass communication took root. It was at this time that the United States government created the Office of War Information (OWI), an agency primarily responsible for the creation of propaganda films intended to boost both troop and civilian morale (Kilbourne, 1992).

Several pioneers and giants of the mass communication field, including Wilbur Schramm and Paul Lazarsfeld, were intimately involved in examining the groundbreaking Nazi propaganda films that elicited support among Germany's citizenry—and developing similar techniques of mass persuasion (Schramm, 1997). While their research agenda did not qualify as traditional film criticism, which typically seeks to explicate the artistic and aesthetic value of the medium's works, it provided further fuel for the conception of film as a serious medium worthy of serious consideration.

Film criticism continued to grow and evolve throughout the 1960s and 1970s, as "movies did matter to a population that read [the opinions of] movie critics and believed discussing movies was significant" (Haberski Jr., 2001, p. 188). However, Haberski Jr. (2001) argues that critics soon began to lose the cultural relevance they had acquired as catalysts of national discussions regarding the artistic quality and social significance of the medium. This trend resulted partly from a developing cultural dichotomy between films as "art" and movies as "entertainment," with academically inclined film programs frequently

clashing with the increasingly commercial nature of Hollywood-industrialized movies (Haberski Jr., 2001). At its best, the medium was previously seen as both. Over time, however, the burgeoning dichotomy meant that serious discussions became the sole domain of intellectuals or pseudo-intellectuals. This paradigm shift coincided with a more general dismissal of "art" as a viable topic of debate (Haberski Jr., 2001). The fact that the concept of "movies as art" had served as the rallying cry for a generation of professional critics and film-lovers meant that this dismissal effectively extinguished the public's consistent engagement with film criticism.

Nevertheless, it is undeniable that film criticism continues to play a vital role in the entertainment media landscape. As Lopate (2006) puts it, "It is arguable … that in the last fifty years more energy, passion, and analytical juice have gone into film criticism than into literary criticism, or probably any other writing about the arts" (p. XIII).

Still, it seems that film criticism has changed considerably over the past few decades, morphing from a topic of discussion into a cultural instrument utilized by many—that is, from the realm of scholarly discourse to the realm of entertainment reviews. In asking what constitutes good criticism, Simon states that "it is easiest to begin by defining the commonest form of bad criticism, which is not criticism at all but reviewing. Reviewing is something that newspaper editors have invented: it stems from the notion that the critic is someone who must see with the eyes of the Average Man or Typical Reader (whoever that is) and predict for his fellows what their reaction will be" (as cited in Lopate, 2006, p. XXIII).

Lopate (2006) recognizes that a semi-personal relationship between consumers and film critics may yet exist, stating, "The film critic we trust and read regularly becomes a kind of old friend whose conversation we cherish and to whom we turn eagerly for opinions and

advice" (p. XXIV). Still, while it is undeniable that certain critics—chief among them Roger Ebert (Wloszczyna & DeBarros, 2004)—continue to command an audience that feels intimately connected with them, this seems to be the exception to the rule. Information overload may well have something to do with this trend toward deindividualization, which is epitomized by the rise of websites such as Rotten Tomatoes and Metacritic. Though these sites do recognize the reviewers whose opinions they distribute, the focus is more on the ratings themselves than the credibility of those providing them or even the review that underlies the rating. Thus it seems that many have come to use movie reviews for the purpose of "singling out the best Friday-night date choices and zeroing in on four stars and letter grades" (Lopate, 2006, p. XXIII).

Research on Film Criticism and Word of Mouth: A Synopsis

Most of the research on movie reviews and word of mouth has been conducted in an effort to determine how large of an impact they have on box office revenues and moviegoers' expectations of films, with some finding an influence and others a lack thereof. Reinstein and Snyder (2000) found evidence that positive movie reviews can have a significant bearing on box office returns, though this power to influence moviegoers may lie with a select group of well-known reviewers. Eliashberg and Shugan (1997) concluded that reviews are significantly correlated with cumulative box office totals but may not influence early returns, indicating that they may not motivate movie attendance but can nevertheless effectively forecast it. Ravid (1999), meanwhile, found that the total number of reviews a film receives—regardless of valence—is an effective predictor of box office revenue; that is, the more reviews a movie receives, the more money it is likely to earn at the box office.

On the other hand, studies by Faber and O'Guinn (1984) and Cooper-Martin (1992) concluded that word of mouth from interpersonal sources is seen as more useful than movie reviews. Likewise, Levene (1992) conducted a survey of university students showing that word of mouth is among the most important determinants of seeing a film, with positive critical reviews reported as only the tenth most important factor.

However, there is a dearth of literature regarding whether movie reviews and word of mouth actually have the capacity to influence moviegoers' evaluations of a film after they have seen it—and if so, which of the two has more impact. While systematic analysis of film critics' and interpersonal sources' power to influence post-viewing attitudes is scant, a few studies have attempted to measure it.

The Impact of WOM on Post-Screening Film Evaluations

The first (and perhaps only) study to draw causal conclusions regarding the influence of word of mouth on film evaluations came from Burzynski and Bayer (1977), who considered it an investigation of conformity in the tradition of social psychologists such as Asch (1958). The authors conducted a field experiment in which they planted three independently operating pairs of confederates in a public movie theater. These confederate pairs exited the theater with patrons who had just finished viewing an earlier showing of a film, expressing their opinions about it in the form of easily overheard dialogue as they passed potential subjects waiting in line to see the same film. One pair of confederates spoke highly of the film, uttering comments such as, "I wouldn't mind seeing this one again" and "The acting was fantastic, but the plot was even better" (Burzynski & Bayer, 1977, p. 216). Another pair expressed disdain for the film: "You couldn't pay me to see that thing again"

and "Well, another two bucks shot" were among the insults the pair loudly proclaimed (p. 216). The third pair, representing the control condition, paused to examine a poster for the film without commenting on it.

After the film, a theater employee randomly distributed questionnaires to a total of 20 subjects per condition under the guise of aiding the theater's management in selecting future films based upon the responses of its patrons. A one-way ANOVA found a statistically significant difference ($F = 6.80$, $p < .01$) among the three groups. However, while a Tukey test revealed a significant difference between the evaluations of the positive and negative WOM groups ($q = 4.62$, $p < .01$), it found no significant difference between either of the experimental groups and the control.

An Examination of Source-Audience Similarity

Burzynski and Bayer's (1977) field study seems to have effectively simulated word of mouth. However, while the confederates were ostensibly coming out of a movie that the subjects were waiting in line to see, there was no indication that they were deliberately portrayed or perceived as similar to the subjects in other potentially meaningful ways (e.g., age, personality, education). Indeed, word of mouth is often gathered from sources who share similarities with the receiver. Thus, it is worth considering whether word of mouth from a source perceived as similar to oneself (e.g., a friend or family member) would—unlike the preceding study—have a significant effect on post-viewing evaluations.

The concept of similarity, however, is difficult to explicate. As O'Keefe (2002) noted, the seemingly obvious assumption that "greater similarity means greater [attitude change] effectiveness" (p. 200) is moderated by several important stipulations. First, there are a great

number of dimensions on which people may perceive themselves as similar or dissimilar, meaning that general statements about the relationship between similarity and persuasiveness are difficult to make. As O'Keefe (2002) put it, "Different particular similarities or dissimilarities will have different effects" (p. 200). Second, it has been suggested by some researchers that similarity does not have a direct impact on persuasiveness (Simons, Berkowitz, & Moyer, 1970; Hass, 1981); instead, it may be that "similarities influence persuasive outcomes indirectly, especially by affecting the receiver's liking for the communicator and the receiver's perception of the communicator's credibility (expertise and trustworthiness)" (O'Keefe, 2002, p. 200).

Attitudinal similarity (i.e., perceived similarity of attitudes on issues other than the topic of potential influence), however, has generally been shown to engender greater liking (Berscheid, 1985; Byrne, 1969)—and liking a source has been consistently shown to have a positive effect on persuasiveness under many circumstances (Rhoads & Cialdini, 2002; Eagly & Chaiken, 1975; Giffen & Ehrlich, 1963; Sampson & Insko, 1964). As a consequence, attitudinal similarity seems to have a positive impact on persuasiveness in at least some cases.

Taken a step further, other non-attitudinal similarities (e.g., personality, background) may induce greater liking for a source when those similarities are perceived as providing information about attitudes—and hence, can also lead to greater source influence (O'Keefe, 2002; Eagly, Wood, & Chaiken, 1978; Simons, Berkowitz, & Moyer, 1970). Still, research on source-receiver similarity is mixed. While some studies have concluded that source-receiver similarity is positively related to source influence (Brock, 1965; Woodside & Davenport, 1974), other researchers have found that similarity may reduce persuasiveness

(Infante, 1978; Leavitt & Kaigler-Evans, 1975). Moreover, some have found no correlation between the two (Klock & Traylor, 1983; Wagner, 1984).

The relationship between similarity and credibility is likewise complex. Perceived similarity between a source and the audience may enhance evaluations of the source's expertise when the similarity is related to the topic of persuasion and thus provides meaningful information (O'Keefe, 2002). Because movie preferences often differ greatly according to such characteristics as age, personality and background, a person who shares such traits with an opinion source might well perceive the source as high in relevant expertise. However, if a person sees similarity as an indicator that an opinion source's relevant experience is no greater than one's own, similarity may lead to a decrease in perceptions of expertise (Perloff, 2003; O'Keefe, 2002). Thus, it comes as little surprise that some studies have indicated a positive relationship between similarity and expertise (Mills & Kimble, 1973) while others have discovered a negative link (Delia, 1975) or none at all (Swartz, 1984).

The Impact of Movie Reviews on Post-Screening Film Evaluations

Experimental research on film critics' capacity to influence moviegoers' evaluations of a film is also extremely limited. However, Wyatt and Badger (1984) did conduct a laboratory experiment to test the effects of positive, negative and mixed movie reviews on subjects' expectations and subsequent opinions of a screened film. The researchers embedded each of the three types of reviews into a lengthy questionnaire that elicited demographic information and general habits of media use, while a control group that read no review also viewed the film.

A one-way ANOVA revealed statistically significant differences among the groups' evaluations of the film in accordance with the valence of the reviews. However, while the Scheffe procedure found statistically significant differences between the evaluations of the positive and negative review groups, only the negative review group differed from the control group—that is, those in the positive review group rated the film no more highly than did those who had not read any review. Moreover, the evaluations of the mixed review group did not differ significantly from those in the negative review group.

It is important to note that the subjects were given no information other than the review itself; thus, they could make no judgments about the critic other than those deduced from the review. D'Astous and Touil (1999), however, conducted an experiment that tested (among other hypotheses) whether a critic's reputation—analogous to a critic's perceived credibility—would have a significant effect on subjects' general attitudes toward an unscreened film. Similar to the findings of Wyatt and Badger (1984), they found that a critic's reputation affected subjects' attitudes toward a film for negative, but not positive, reviews (d'Astous & Touil, 1999).

An Examination of Source Credibility

D'Astous and Touil's (1999) investigation of critics' prestige is but one study in a long line of research focused on the significance of source credibility. Credibility itself is typically seen as a construct composed of two distinct but highly entangled factors: expertise and trustworthiness (O'Keefe, 2002). The impact of perceived credibility on a source's attitudinal influence must be taken into account, particularly because some research supports the notion that credibility has a larger impact than similarity or liking (Lupia & McCubbins,

1998; Simons, Berkowitz, & Moyer, 1970). This fact would seem to have an important bearing on any predictions regarding the influence of film critics, who might be assumed to possess greater perceived credibility than interpersonal sources. Interestingly, however, a study by Faber and O'Guinn (1984) indicated that college moviegoers perceived word of mouth from friends to be more credible than movie reviews gleaned from the media. This finding could indicate that film critics are generally perceived as higher in expertise but lower in trustworthiness.

Still, some research has shown that highly credible sources are not necessarily more influential than sources low in credibility, and that, in some cases, the opposite may be true. Whether a high-credibility or low-credibility source is more influential seems to be primarily dependent upon whether the message advocates a position favored by the receiver (i.e., a pro-attitudinal message) or one to which the receiver is opposed (i.e., a counter-attitudinal message) (O'Keefe, 2002). The findings suggest that high-credibility sources enjoy a persuasive advantage when disseminating a counter-attitudinal message, while comparatively low-credibility sources are more influential when promoting a pro-attitudinal message (O'Keefe, 2002; Petty & Cacioppo, 1996). However, those exposed to word of mouth or movie reviews typically encounter them before they have seen a film. Hence, the pro-attitudinal / counter-attitudinal distinction is less germane to the moviegoing scenario, suggesting that assertions regarding the influence of credibility are difficult to make.

In summary, comparing the findings of Burzynski and Bayer (1977) with those of Wyatt and Badger (1984) does not allow one to draw solid conclusions or generate sound hypotheses regarding which of the two opinion sources is more influential when it comes to audiences' post-screening evaluations of films. Moreover, conflicting results regarding the

importance of source similarity and credibility also make generalizations difficult. Fortunately, related research does provide a viable framework for making predictions regarding the attitudinal influence of interpersonal sources and film critics.

Preference Heterogeneity and Source Characteristics

Feick and Higie (1992) developed a theoretical framework with the aim of explaining and predicting the conditions under which source similarity and source expertise have the greatest influence on consumers' attitudes toward a good or service. They argued that the impact of these source characteristics is related to a concept they coined "preference heterogeneity." According to the authors, "Preference heterogeneity is the extent to which individual tastes and preferences for a good or service vary across consumers" (p. 9). They stated that goods or services in the high preference heterogeneity class are subject to great variability (i.e., low consensus) of opinion among consumers because people typically seek different benefits from them or weigh their attributes differently. On the other hand, goods or services are classified as low in preference heterogeneity when consumers evaluate them in a uniform way (i.e., there is relatively high consensus). People typically do so when they value similar attributes and place roughly the same amount of importance upon those attributes, leading to more objective standards of evaluation. Feick and Higie (1992) considered movies among the services high in preference heterogeneity; services such as auto repair, accounting, and plumbing were deemed low in preference heterogeneity.

Feick and Higie (1992) also asserted that consumers who encounter high preference heterogeneity products focus upon, and are hence influenced by, sources perceived as similar to themselves—and that this similarity plays a more significant role than perceived source

expertise in the evaluation of such products. Though neither specifically investigated movies, the results of two experiments strongly supported this proposition. In these two studies, the subjects' attitudes toward high preference heterogeneity services (and those who endorsed them) were more strongly influenced by similar, non-expert sources than those considered to be dissimilar experts.

Neither of the experiments in Feick and Higie's (1992) study examined post-usage attitudes or evaluations of the hypothetical services. However, because films are ostensibly quite high in preference heterogeneity—and because interpersonal sources providing word of mouth are ostensibly higher in perceived similarity—several hypotheses can be posited within a framework in which post-screening evaluation of a film is the dependent variable.

H1: Regardless of valence, word of mouth will have a stronger influence than movie reviews on subjects' post-screening evaluations of a film.

This hypothesis, combined with the results of previously cited experimental studies, provides the basis for positing several more. Considering H1 through the lens of Wyatt and Badger's (1984) study of movie reviews leads to several predictions regarding the potential moderating influences of valence on both reviews and word of mouth. As previously noted, Wyatt and Badger (1984) did find a significant effect of negative movie reviews on subjects' post-screening evaluations of a film. Thus:

H2a: Negative movie reviews will have a significant effect on subjects' post-screening evaluations of a film.

Burzynski and Bayer's (1977) experimental study of word of mouth found that neither positive nor negative forms influenced moviegoers' evaluations of a film. However, because word of mouth from *high-similarity sources* is here hypothesized to have a greater

impact than negative movie reviews—which in H2a are posited to have a significant effect—the present study also hypothesizes that:

H2b: Negative word of mouth will have a significant effect on subjects' post-screening evaluations of a film.

Based upon Wyatt and Badger's (1984) failure to find a significant influence of positive movie reviews, it is further posited that:

H3: Positive movie reviews will not have a significant effect on subjects' post-screening evaluations of a film.

While the premise of H1 logically leads to the presumption that positive word of mouth will also have a greater impact than positive movie reviews on subjects' evaluations of a film, Wyatt and Badger's (1984) failure to find a significant influence of positive movie reviews—combined with the conflicting conclusions regarding the impact of source similarity—leads to a question:

RQ1: Does positive word of mouth have a significant effect on subjects' post-screening evaluations of a film?

The propositions outlined above are organized in a matrix shown in Table 1.

Valence of Message	**Opinion Source**	
	(Similar) Interpersonal Sources	(Dissimilar) Film Critics
Positive	Positive WOM	Positive Movie Review
Negative	Negative WOM	Negative Movie Review
Neutral	Control	

Table 1: Experimental conditions

It is also worth considering the factors that might moderate moviegoers' susceptibility to word of mouth or movie review influence. Research rooted in the elaboration likelihood model provides especially useful insight into this topic.

The Elaboration Likelihood Model

The elaboration likelihood model (ELM) asserts that there are two different methods through which people process—and are persuaded by—incoming messages: the central route and the peripheral route (Petty & Cacioppo, 1986a). The central route is characterized by effortful evaluation of message arguments, sources, or issues, while the peripheral route is distinguished by the use of simple cues or heuristics to make quick judgments about them. The model also proposes that the likelihood people will engage in elaboration—that is, the degree to which they will think about the arguments or assertions contained in a message—is primarily determined by their motivation and ability to do so (Petty & Cacioppo, 1986a; Petty & Wegener, 1999).

According to Petty and Cacioppo (1986a), the motivation to elaborate upon a message is heavily influenced by the extent to which the message is seen as personally relevant, which is a dimension of an individual's level of involvement with a person, topic or issue. People who highly involved with an issue, for instance, are motivated to engage in central route processing (Petty & Cacioppo, 1979b, 1984, 1996) and are less likely to utilize peripheral cues or heuristics. Meanwhile, those low in involvement are more likely to rely upon peripheral cues or heuristics and are less likely to engage in careful elaboration of a message.

Several heuristics are commonly utilized by people who lack motivation (or ability)

and thus engage in peripheral processing. Chief among these are the credibility heuristic—the idea that "statements by credible sources can be trusted" (O'Keefe, 2002, p. 149)—and the liking heuristic—exemplified by the statement, "People I like usually have correct opinions" (p. 149). A great deal of research has revealed a strong relationship between level of involvement and the influence of credibility as a peripheral cue. As a person's level of involvement in a given issue increases, the impact of an opinion source's credibility on that person's attitudes declines (Wilson & Sherrell, 1993; Petty, Cacioppo, & Goldman, 1981; Petty & Cacioppo, 1979b; Rhine & Severance, 1970; Johnson & Scileppi, 1969). As previously noted, however, the influence of credibility in the moviegoing environment is difficult to judge due to the inapplicability of pro-attitudinal / counter-attitudinal research to this milieu (see p. 16). Still, research has also shown that the impact of similarity / liking diminishes as the personal relevance of an issue increases (Petty, Cacioppo, & Schumann, 1983; Chaiken, 1980). As previously established, source similarity also seems to be positively related to attitudinal influence in cases of high preference heterogeneity.

Thus, those for whom moviegoing is a high-involvement issue are less likely to be influenced by highly similar / likable sources than those for whom it is not a personally relevant issue. It stands to reason that high-involvement moviegoers attend movies on a more frequent basis than their low-involvement counterparts. Therefore, this study treats frequency of moviegoing as a valid operationalization of the personal relevance variable in the ELM. Given that interpersonal sources are ostensibly higher in similarity / likability than film critics, the following hypothesis can be drawn:

H4: As frequency of moviegoing increases, word of mouth influence on subjects' post-screening evaluations of a film decreases.

While Faber & O'Guinn (1984) did find that word of mouth is perceived as a more credible source of information than movie reviews, the authors did not distinguish between the credibility dimensions of expertise and trustworthiness. As previously mentioned, it seems plausible that word of mouth was perceived as more credible because friends rate higher in terms of trustworthiness (but not necessarily expertise). Thus, it could be that even moviegoers who perceive interpersonal sources as possessing more overall credibility also rate film critics as higher in expertise. While the effects of high versus low expertise are difficult to generalize, a classic study by Petty, Cacioppo, and Goldman (1981) did find that low-involvement subjects were more persuaded by sources high in expertise than by low-expertise sources—and that the reverse was also true. However, Feick and Higie's (1992) study found that subjects presented with high preference heterogeneity services did not seriously take expertise into account. That finding, along with the fact that research has failed to firmly establish film critics as higher than interpersonal sources in perceived expertise, leads to another hypothesis:

H5: Frequency of moviegoing will have no effect on movie reviewers' influence on post-screening evaluations of a film.

Chapter 3: Methods

This chapter explicates the study's research design, the means by which the subjects were chosen, the manner in which the study was conducted, the formal definition and operationalization of variables, and the methods of data analysis.

Research Design

This study employed a 2 (opinion source) x 3 (information valence) between-subjects factorial design (Table 2). The group that received no feedback about the film was considered the control. Upon the conclusion of the experimental manipulation, subjects were asked to complete a survey questionnaire.

Valence of Message	**Opinion Source**	
	(Similar) Interpersonal Sources	(Dissimilar) Film Critics
Positive	Group 1	Group 2
Negative	Group 3	Group 4
Neutral	Group 5	

Table 2: The study's factorial design matrix

The Sample

The participants were members of the entire student body (both undergraduate and graduate students) of Iowa State University. This population was chosen for several reasons. For one, the population is heavily comprised of the 18- to 24-year-old age group, which is a significant proportion of the regular moviegoing audience. In addition, it is a population for

which comprehensive records are kept and routinely updated by the university. This means that a sampling frame containing all known members of the population was readily available.

In order to determine the size of each of the five groups (four experimental, one control), the following equation was utilized (D. Bonett, personal communication, April 10, 2009):

$$n = 8\,\sigma^2\,(z / \omega)^2 + 1$$

where σ^2 is a planning value of the population variance (set to .7),
z is a two-tailed critical z-value (set to 1.96 at 95% confidence),
and ω is the desired confidence interval width (set to 1)

Given these values, this study recruited a minimum of 23 subjects per cell for a minimum sample size of 115.

Experimental Procedure

The participants were sent an email asking them to participate in a study about the moviegoing habits and opinions of college students. The email informed them that the study involved watching a film and filling out short survey questionnaires before and after viewing it. They were also told that their participation in the study would grant them entry into a $100 lottery drawing. Finally, the email asked those interested in participating to send a short reply containing the names of at least three friends who might also be interested in becoming experimental subjects. Three waves of email messages were sent to boost the response rate.

Each group was informed that it would be watching the movie *Big Trouble*. This film was chosen because it is not widely recognized by the general public (earning a mere $7.2 million at the box office), thereby reducing the likelihood that the subjects had previously seen the film or been exposed to information about it. Moreover, the movie received a

roughly equal number of positive and negative reviews, which lessened the chances that the film's inherent quality would overwhelm any potential influences of external opinion on the subjects' evaluations of it. Before viewing *Big Trouble*, the groups were asked to complete a survey questionnaire (Appendix A). This questionnaire contained questions aimed at determining how frequently the subjects attended movies in a theater. In addition, it aimed to elicit general demographic information (e.g., gender, age, college classification).

The questionnaire concluded with a synopsis of *Big Trouble*. This synopsis provided information on the film's genre, director, cast, plot, year of release, and Motion Picture Association of American rating. It also included a manufactured rundown of how the film was received by either film critics or fellow students. The positive movie review condition featured a paragraph stating that 60 out of 77 (78 percent) of film critics gave the film a fairly to extremely positive review. It also included snippets from two of the imaginary reviewers, both of whom were given names and professional associations as a means of creating an air of realism. According to the first reviewer, *Big Trouble*'s combination of great acting, solid plot and interesting characters kept me laughing from start to finish." The second reviewer also provided a largely positive take: "This is an entertaining film—one I would definitely see again."

The positive word of mouth synopsis was very similar to that of the positive movie review condition. The primary difference was that those in the positive word of mouth condition were told that 77 of the friends whom they collectively recommended for the study had already been contacted and watched the same film. They were informed that, of the 77 friends who had seen the movie, 60 (78 percent) gave it fairly to very positive reviews. This was done to simulate word of mouth from the sorts of similar interpersonal sources who

might normally provide it in a natural social setting. The actual feedback was nearly identical to that provided in the positive movie review condition, with just a few superficial tweaks made for the sake of realism. Obviously, some subjects may have discussed participating in the study with the friends they recommended in their email replies. Because they were not actually invited to participate, these friends would have informed the subjects that they had not been contacted about it. The synopsis thus informed the subjects that their friends were asked to lie about their participation to avoid exposing them to information that might introduce extraneous influences.

The negative movie review and negative word of mouth conditions are essentially the converse of their respective counterparts. Participants in both groups were informed that, of the 77 critics or recommended friends who had reviewed the film, 60 (78 percent) gave it fairly to very negative reviews. The comments in the synopses were virtually identical to those in the positive conditions, except that the adjectives were replaced with antonyms (e.g., "great acting" became "bad acting"; "solid plot" became "weak plot"; "interesting characters" became "dull characters"; "kept me laughing" became "had me yawning"; "entertaining film" became "boring film"; "definitely see again" became "definitely not see again").

The control group was given a questionnaire containing the same questions as those administered to the experimental groups. It also contained a synopsis featuring an identical summary of the film but lacking the aforementioned evaluations and feedback.

After watching the film, each group was given a follow-up questionnaire (Appendix B) that aimed to elicit the subjects' attitudes and opinions toward the film via seven-point semantic differential and Likert scales. The semantic differential adjective pairs include

"boring / entertaining," "forgettable / memorable," and "not worth seeing / worth seeing." The Likert scale items include the following: "What was your overall rating of the movie you just watched?" (1 = Poor / 7 = Excellent) "How much did you enjoy the movie?" (1 = Not at all / 7 = A great deal) "Would you recommend this movie to your friends and family?" (1 = Definitely not / 7 = Definitely).

At the end of each experimental session, the study's author debriefed the participants by informing them either that the friends they recommended for the study had not seen the film, or that the professional film critics and their quoted reviews were fictional.

Variables and their Measurement

This study examined the influence of opinion source, information valence and frequency of moviegoing on people's post-viewing evaluations of a film.

Opinion source referred to those who provided the movie evaluations included in the pre-screening survey questionnaire. It had two levels: (1) the movie review condition, in which opinions were ostensibly provided by professional film critics; and (2) the word of mouth condition, in which opinions were ostensibly provided by sources similar to the subjects. Professional film critics evaluate movies for a living and are typically employed by print publications or websites. In this experiment, the similar sources were Iowa State students, a proportion of whom included friends recommended by the subjects.

Information valence referred to whether the film critics' and ISU students' (similar sources') evaluations of the movie stimulus were generally positive or negative in nature.

Frequency of moviegoing referred to people's level of involvement with films. This was measured by the subjects' response to the question: "Generally speaking, how many

times do you see films in a movie theater over the course of one year?"

The dependent variable was the subjects' *post-screening evaluations* of the film and was operationalized by the subjects' response to Questions 1-6 in the follow-up questionnaire. These questions asked participants to indicate whether they thought the movie was (1) boring/entertaining; (2) forgettable/memorable; and (3) not worth seeing/worth seeing. They also asked for participants' (4) overall rating of the movie (1=poor, 7=excellent), (5) how much they enjoyed the movie (1=not at all, 7=a great deal), and (3) to what extent they will recommend the movie to friends and family (1=definitely not, 7=definitely). The answers to these questions were summed to create an index whose reliability was determined by computing Cronbach's alpha.

Data Analysis

Hypothesis 1 posited that word of mouth would have a stronger influence than movie reviews on subjects' post-screening evaluations of a film. In order to test the main effect of opinion source, an independent samples t-test was employed to compare the collective movie evaluations of subjects in the two word of mouth conditions with the evaluations of subjects in the two movie review conditions. To confirm Hypothesis 1, the mean movie evaluation score of the collective word of mouth group (Group 1 + Group 3) should be significantly higher than that of the collective movie review group (Group 2 + Group 4).

Hypothesis 2a predicted that negative movie reviews will have a significant effect on subjects' post-screening evaluations of a film, while Hypothesis 2b predicted that negative word of mouth would have a significant effect on subjects' post-screening evaluations of a film. Independent samples t-tests were again employed to compare the movie evaluations of

subjects in each negative condition (Group 3, Group 4) with subjects in the control condition (Group 5). The mean movie evaluation scores of Group 3 and Group 4 should be significantly higher than that of Group 5 to support Hypotheses 2a and 2b, respectively.

Hypothesis 3 posited that positive movie reviews would not have a significant effect on subjects' post-screening evaluations of a film, while Research Question 1 asked whether positive word of mouth would have a significant effect on subjects' post-screening evaluations of a film. Once again, independent samples t-tests were used to compare the mean movie evaluation scores of each positive condition (Group 1, Group 2) with that of the control group (Group 5).

Hypothesis 4 posited that as frequency of moviegoing increased, word of mouth influence on post-screening evaluations of a film would decrease. Because these variables were measured at the interval level, a Pearson correlation test was employed to determine the strength and direction of the association between the frequency of moviegoing scores and post-screening movie evaluation scores of the collective word of mouth group (Group 1 + Group 3). In addition to testing for statistical significance at alpha = .05, a correlation was computed at the 95% confidence level for a confidence interval of .1. To confirm Hypothesis 4, a statistically significant negative correlation should be found between the two variables.

Hypothesis 5 predicted that the frequency of moviegoing would have no effect on movie reviews' influence on post-screening evaluations of a film. Once again, a Pearson correlation test was utilized to test the level of association between the two interval variables. For Hypothesis 5 to receive support, no statistically significant correlation should be found between the two variables.

Chapter 4: Results and Discussion

Results

This study aimed to determine the influence of movie reviews and word of mouth on people's evaluations of a movie after exposure to the film. To establish whether the six items assembled to form an index of participants' post-screening evaluation showed internal consistency, Cronbach's alpha was computed. The resulting value of 0.955 indicated high internal consistency, suggesting that the six items formed a viable index. The inter-item comparisons produced alpha values ranging from 0.713 to 0.857. As a result, each of the responses was judged as relevant to the post-screening evaluation construct.

Hypothesis 1 predicted that word of mouth would have more impact than professional movie reviews on subjects' post-screening evaluations of a film. An independent samples t-test was conducted to compare post-screening film evaluations for subjects in the word of mouth and movie review conditions. Though the absolute mean value for those in the word of the mouth condition was higher (M=4.6375, SD=1.45081), **there was no significant difference in the mean evaluation scores of subjects in the word of mouth and the movie review** (M=4.2630, SD=1.56044) **conditions** [t(86)=-1.161; p=.249; 95% CI (-1.01089, .26550)]. Thus, Hypothesis 1 was not supported.

Hypothesis 2a anticipated that negative movie reviews would significantly influence subjects' post-screening evaluations of a film. An independent samples t-test was thus conducted to compare the film evaluations of subjects in the negative movie review condition with those of the control condition. These results ran contrary to the hypothesized direction. That is, **no significant difference was found between the negative movie review** (M=4.2536, SD=1.60953) **and control** (M=4.2424, SDD=1.20155) **conditions** [t(41)=-.027;

p=.979; 95% CI (-.86408, .84169)]. Thus, Hypothesis 2a was not supported.

A corollary postulation, Hypothesis 2b, predicted that negative word of mouth would have a significant effect on subjects' post-screening evaluations of a film. The evaluations of subjects in the negative word of mouth and control conditions were thus compared using an independent samples t-test. **No significant difference was found between the negative word of mouth** (M=4.5159, SD=1.32487) **and control** (M=4.2424, SD=1.20155) **conditions** [t(41)=-.708; p=.483; 95% CI (-1.05405, .50715)]. Therefore, Hypothesis 2b also failed to receive support.

According to Hypothesis 3, positive movie reviews should *not* significantly influence post-screening opinions of a film. Another independent samples t-test was conducted to compare the evaluations of subjects in the positive movie review condition and the control condition. **The test found no significant difference between the positive movie review** (M=4.2727, SD=1.54521) **and control** (M=4.2424, SD=1.20155) **conditions** [t(40)=-.073; p=.942; 95% CI (-.87400, .81340)]. Hypothesis 3 was thus supported.

Research Question 1 asked whether positive word of mouth would have a significant effect on subjects' post-screening film evaluations. An independent samples t-test compared subjects in the positive word of mouth (M=4.7500, SD=1.58427) and control (M=4.2424, SD=1.20155) conditions, finding no significant difference between the two [t(40)=-1.197; p=.238; 95% CI (-1.36493, .34978)]. **This suggests that positive word of mouth does not have a noticeable impact on post-screening perceptions of a film's quality.**

For Hypothesis 4, a Pearson correlation was computed to assess the prediction that as **frequency of moviegoing increases, word of mouth's influence on post-screening film evaluations diminishes.** Though the negative correlation (r=-.223, n=43) supported the

hypothesized direction, it was not significant (p=.151). Therefore, **Hypothesis 4 did not receive empirical support.**

Finally, **Hypothesis 5 predicted no relationship between moviegoing frequency and the impact of movie reviews.** Once again, a Pearson correlation was computed to test this proposition. No significant correlation between the two variables was found (r=.101, n=45, p=.511). Thus, **Hypothesis 5 was supported.**

Summary of the Results

As previously noted, Feick and Higie's (1992) framework of preference heterogeneity suggests that sources high in similarity have greater influence than merely high-expertise sources on people's perceptions of products or services likely to engender a variety of opinions. Based on the presumption that films fall into this category, Hypothesis 1 predicted that word of mouth from ostensibly similar sources would demonstrate greater influence than film critics' reviews on people's evaluations of a film after exposure. However, the experiment failed to support this hypothesis. Two qualifiers may help account for this. First, films were not among the high preference heterogeneity products and services in Feick and Higie's study. It is possible, therefore, that films possess certain characteristics that distinguish them from the products tested by the researchers. Second, and perhaps more importantly, Feick and Higie tested subjects' perceptions of hypothetical products and services, thus failing to garner opinions after subjects had used or been exposed to those products or services. Given that the subjects in the current study actually viewed the film before rating it—giving them the opportunity to develop more definitive opinions about it—it seems reasonable to consider that previously observed impacts of preference heterogeneity

might not manifest themselves as strongly in this case. A final potential explanation arises from a consideration of the preference heterogeneity framework itself. That is, subjects may not have perceived the imaginary word of mouth sources—in this case, their fellow students—as similar enough for preference heterogeneity to wield its previously measured influence. Though each subject was informed that three (ostensibly similar) friends had previously viewed and rated the film, it must also be noted that the film's collective 78 percent approval / disapproval ratings left open the unlikely but reasonable possibility that these friends were among the 22 percent minority.

These potential explanations could also account for the failure to find support for Hypothesis 2b, which posited that negative word of mouth would significantly impact subjects' perceptions of *Big Trouble*. It might also explain the failure to find an influence of positive word of mouth as addressed by Research Question 1.

The prediction that negative movie reviews would have a significant influence on subjects' post-viewing evaluations of a film was derived primarily from Wyatt and Badger's 1984 experiment. The authors found this effect after presenting subjects with only negative information. Though the subjects in the current study's negative review condition were presented with only negative reviews, they were also informed that 78 percent of critics disliked it. While this was done to preserve a sense of authenticity and measure reviews within a more realistic context (films are rarely universally panned, and *Big Trouble* actually received roughly as many positive as negative reviews), the implied 22-percent approval rate may partly explain the disparity. Wyatt and Badger also embedded their reviews in a lengthy questionnaire to counteract the potential influence of demand characteristics. The current study also embedded the negative reviews among other information about the film and

general questions related to moviegoing, but the questionnaire was kept relatively short for recruitment purposes. Thus, it is also possible that some subjects suspected the purpose of the survey and subsequently reacted with more positive evaluations than they might otherwise have given. As expected, however, the study supported the prediction—also based on the Wyatt and Badger (1984) experiment—that positive reviews would not have a significant influence (Hypothesis 3).

In summary, neither word of mouth nor professional reviews—regardless of their valence—seemed to have any significant bearing on subjects' post-viewing opinions of the film *Big Trouble*.

The Elaboration Likelihood Model served as the foundation for Hypothesis 4. The ELM specifically asserts that high involvement in an issue leads to effortful and careful scrutiny of messages related to that issue, whereas comparatively low involvement results in dependence on cues such as source similarity, which is proposed to wield influence in high preference heterogeneity scenarios. Involvement with movies was operationalized as the frequency with which subjects attended movies. Source-receiver similarity was assumed with word of mouth sources. As a result, Hypothesis 4 predicted an inverse relationship between moviegoing frequency and word of mouth's influence—such that as moviegoing frequency increased, word of mouth's influence would diminish. However, the data did not support this conjecture. Why might this be the case?

It has been surmised that Hypothesis 1 was not supported because subjects did not perceive the largely anonymous fellow "students" providing word of mouth opinion as similar enough to activate the mechanisms underlying the preference heterogeneity effect. Similarly, it is possible that a perceived lack of similarity prevented the proposed effects of

the ELM in this case. That is, a perceived lack of similarity would eliminate the potential cue utilized by low-involvement moviegoers—those who infrequently attend films—and thus invalidate an ELM-based comparison with high-involvement moviegoers, resulting in no noticeable difference in word of mouth's influence. It is also possible that frequency of moviegoing was not the most fitting operationalization of personal involvement with movies, and that this disconnect explains the lack of correlation. People attend movies for multiple reasons, some of which are social and ostensibly have little to do with the extent to which they invest in films or characterize the medium as an important component of their artistic or personal identity.

Finally, support for the assertion that moviegoing frequency would not affect the influence of movie reviews (Hypothesis 5) bolsters Feick and Higgie's (1992) finding that expertise does not play a significant role in high preference heterogeneity scenarios, even among relatively low-involvement subjects for whom this ELM tenet might normally apply.

Chapter 5: Conclusions

The present study sought to determine the extent to which professional critics' movie reviews and interpersonal sources' word of mouth influence people's post-exposure evaluations of a film. Irrespective of source and valence (i.e., positive or negative), an experiment found no impact of prior information on those post-exposure opinions. The study also examined whether moviegoers' level of involvement with films moderated these potential influences of prior information, finding no such effects.

Implications of Findings

These findings have significant implications both for scholars of persuasion and the American film industry. The present study suggests that the influence of outside opinion—even the previously established influence of highly similar sources in high-preference heterogeneity situations—is significantly diminished when a person receives firsthand exposure to the object of those opinions. Even if outside opinion does affect the likelihood of seeing a film—or generate certain expectations of it—it seems that people's final judgments of a film are most influenced by the opportunity to "see it for themselves."

In this way, the present findings could be taken to suggest that film belongs alongside the famously intractable politics and religion as a subject especially resistant to opinion change. Though the study did not attempt to change subjects' stated opinions of *Big Trouble* after the fact, subjects nevertheless demonstrated no effects of pre-screening information on their post-screening evaluations. Given that post-screening opinions are ostensibly stronger than their pre-screening counterparts, the study seems to support the notion that changing another's mind about a film—in either direction—is likely an exercise in futility.

This conclusion has direct implications for the methods companies often employ to market their films. More specifically, film marketers should consider the contexts in which they emphasize movie reviews or moviegoer testimonials. Marketers often wind up promoting films to consumers who have already seen it—as with films that have played in theaters for multiple weeks or those recently released on DVD. The present study suggests that marketers encouraging consumers to attend or buy movies will not sway those who have seen them by emphasizing positive reviews or word of mouth. Consequently, marketers would be wise to tailor two campaigns for a film's run in theaters or release on DVD. The first campaign could utilize reviews and word of mouth to attract those who have not seen a film, as this tactic might potentially persuade them to see it. The second, aimed at those who have seen the film, should instead focus on generating maximum awareness (of the film's continued run in theaters or recent release on DVD) and emphasizing other characteristics (e.g., low price point of DVD).

Limitations and Suggestions for Future Study

Given that the present study failed to find an influence of movie reviews and word of mouth on subjects' post-viewing evaluations of a film, several questions should be addressed by future experimental investigations.

The current study was designed to elicit feelings of similarity between word of mouth subjects and their supposedly familiar information sources by making those subjects believe that friends were among those who had viewed a film—thereby generating the significant influence not found in Burzynski and Bayer's 1977 experimental word of mouth study. Because this was not the case, future researchers should determine whether closer

approximations of real-life word of mouth are sufficient to produce said impact. For instance, a future study could recruit student confederates who would, in turn, recruit their friends to participate. The confederates could then be instructed to personally give their friends positive or negative impressions of the film before those friends watched it. This procedure would more closely resemble a scenario in which moviegoers typically receive word of mouth, thereby providing more valid evidence either for or against word of mouth's influence in the moviegoing community. In the same vein, confederates might provide their opinions via micro-blogging or social networking sites such as Twitter and Facebook, perhaps this generation's two most popular avenues for expressing and receiving word of mouth. Given the ubiquity of these sites—and the fact that most relevant studies were conducted prior to their advent—it seems worth investigating whether these modes of communication in any way moderate word of mouth's proposed impact.

If future studies are able to generate scenarios that find significant effects of movie reviews or word of mouth, researchers should also look to identify the existence of a "ratio threshold"—that is, a ratio of positive to negative reviews or word of mouth opinions necessary to influence moviegoers' evaluations of a film. The present study's ratio of 78:22 positive to negative / negative to positive was evidently too weak to generate an effect, though the impact of this and other ratios could well be moderated by factors such as the dissemination of movie reviews or word of mouth.

Additionally, researchers should further investigate the preference heterogeneity model, specifically its impact on evaluations in "post-usage" scenarios such as that created for the present study. Moreover, the model's influence should be tested against a wider variety of services and products—including films—to determine whether (and if so, why)

there exist specific characteristics of services and products that affect word of mouth's influence in high-preference heterogeneity scenarios.

Future research might also look for alternative operationalizations of moviegoing "involvement" to the frequency of moviegoing utilized in the present study. As previously discussed, moviegoing frequency alone may not serve as a valid indicator of one's involvement with the medium, at least as it relates to the tenets of the Elaboration Likelihood Model. Thus, alternative interpretations might lead to different results about whether involvement influences the impact of word of mouth on moviegoers' evaluations.

It is also worth investigating the impact of audience age, particularly because the vast majority of the present study's sample fell between the ages of 18 and 24. Future studies might determine whether the opinions of older or younger moviegoers are more susceptible to the influence of prior information.

Finally, movie genre should also be investigated as an independent variable. The film screened in the present study, *Big Trouble*, was categorized by marketers and critics alike as a comedy. It would be worth researching whether a drama, romance or action film might alter the impact of the information provided to moviegoers.

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Appendix A

Questionnaire / Introduction

1) My gender is:

__ Female
__ Male

2) My age is:

__ 18-19
__ 20-21
__ 22-24
__ 25-29
__ 30-39
__ 40-49
__ 50+

3) My class is:

__ Freshman
__ Sophomore
__ Junior
__ Senior
__ Graduate student

4) Generally speaking, how many times do you see films in a movie theater over the course of one year?

_____

Below is some general information about the film you are about to watch. Please review it briefly before turning in this questionnaire.

Title: Big Trouble

Genre: Comedy

Director: Barry Sonnenfeld

Cast: Tim Allen, Rene Russo, Stanley Tucci, Tom Sizemore, Jason Lee

Plot summary: In Barry Sonnenfeld's *Big Trouble*, based on the novel by Miami Herald columnist Dave Barry, Tim Allen stars as Eliot Arnold, a former Miami Herald columnist whose wife has left him, drives a Geo, and has an awkward relationship with his teenage son, Matt. When Eliot meets Anna Herk, the wife of crazy moneyman Arthur and mother of Jenny, whom Matt is trying to supersoak, they are immediately attracted to each other. Meanwhile, Puggy, a Fritos fetishist who lives in a tree, falls for the Herks' maid, Nina, as two hit men from Newark out to whack a sometimes wigged-out Arthur also attempt to stay away from the cops.

Year released: 2002

Reception:

[Positive movie review condition]

This movie was reviewed by 77 professional film critics. Of those 77, 60 critics (78 percent) gave the movie a fairly positive to very positive review. James Williamson of *Cinema Today* said, "*Big Trouble*'s combination of great acting, solid plot and interesting characters kept me laughing from start to finish." According to Samantha Jacobs of the *Dayton Daily News*, "This is an entertaining film – one I would see again."

[Positive word of mouth condition]

This movie has been reviewed by 77 Iowa State students, including some of those you recommended for participation in the study. Of those 77, 60 students (78 percent) gave the movie a fairly positive to very positive review. One student said, "The great acting, solid plot and interesting characters had me laughing throughout." According to another, "It was an entertaining movie – one I would see again."

Note: Previous subjects were informed not to tell anyone of their participation in order to prevent leaking certain information that could potentially ruin the results of this study.

[Negative movie review condition]

This movie was reviewed by 77 professional film critics. Of those 77, 60 critics (78 percent) gave the movie a fairly negative to very negative review. James Williamson of *Cinema Today* said, "*Big Trouble*'s combination of bad acting, weak plot and dull characters had me yawning before it was over." According to Samantha Jacobs of the *Dayton Daily News*, "This is a boring film – one I would not see again."

[Negative word of mouth condition]

This movie has been reviewed by 77 Iowa State students, including many of those you

recommended for participation in the study. Of those 77, 60 students (78 percent) gave the movie a fairly negative to very negative review. One student said, “The bad acting, weak plot and dull characters had me yawning before it was over.” According to another, “It was a boring movie – one I would not see again.”

Note: Previous subjects were informed not to tell anyone of their participation in order to prevent leaking certain information that could potentially ruin the results of this study.

Rating: PG-13

Appendix B

Questionnaire

For questions 1-3, please place an "X" on the line that you feel most accurately reflects your opinion of the movie:

1) I thought the movie was:

Boring __ __ __ __ __ __ __ Entertaining

2) I thought the movie was:

Forgettable __ __ __ __ __ __ __ Memorable

3) The movie was:

Not worth seeing __ __ __ __ __ __ __ Worth seeing

For questions 4-6, please circle the number that you feel most accurately reflects your opinion of the movie:

4) What was your overall rating of the movie you just watched?

1 2 3 4 5 6 7
Poor Excellent

5) How much did you enjoy the movie?

1 2 3 4 5 6 7
Not at all A great deal

6) Would you recommend this movie to your friends and family?

1 2 3 4 5 6 7
Definitely not Definitely

Feel free to comment on the movie in the space below:

Appendix C

Approval for the Use of Human Subjects

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Resear
Vice President for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

Date: 6/8/2010

To: Scott Schrage
1306 N 106th Court #224
Omaha, NE 68114

CC: Dr. Lulu Rodriguez
214 Hamilton Hall

From: Office for Responsible Research

Title: The Impact of Utilizing Movie Reviews vs. Word of Mouth on People's Evaluations of Films

IRB Num: 09-283

Approval Date:	6/7/2010	**Continuing Review Date:**	6/25/2011
Submission Type:	Continuing Review / Modification	**Review Type:**	Expedited

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University. Please refer to the IRB ID number shown above in all correspondence regarding this study.

Your study has been approved according to the dates shown above. To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use only the approved study materials** in your research, **including the recruitment materials and informed consent documents that have the IRB approval stamp**.
- **Obtain IRB approval prior to implementing any changes** to the study by submitting the "Continuing Review and/or Modification" form.
- **Immediately inform the IRB** of (1) **all serious and/or unexpected adverse experiences** involving risks to subjects or others; and (2) **any other unanticipated problems** involving risks to subjects or others.
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Research investigators are expected to comply with the principles of the Belmont Report, and state and federal regulations regarding the involvement of humans in research. These documents are located on the Office for Responsible Research website http://www.compliance.iastate.edu/irb/forms/ or available by calling (515) 294-4566.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.