

5-1-2015

The Economic Impact of the MPAA Rating System on Types of Films Made From 2004-2014

Kaitlin Peck

University of Nevada, Las Vegas, peckk7@unlv.nevada.edu

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesesdissertations>



Part of the [Broadcast and Video Studies Commons](#), [Economics Commons](#), [Film and Media Studies Commons](#), and the [Journalism Studies Commons](#)

Repository Citation

Peck, Kaitlin, "The Economic Impact of the MPAA Rating System on Types of Films Made From 2004-2014" (2015). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 2409.
<https://digitalscholarship.unlv.edu/thesesdissertations/2409>

This Thesis is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Thesis has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

THE ECONOMIC IMPACT OF THE MPAA FILM RATING SYSTEM ON TYPES OF
FILMS MADE FROM 2004-2014

By

Kaitlin Peck

Bachelor of Arts in History
University of Nevada, Las Vegas
May 2013

A thesis submitted in partial fulfillment
of the requirements for the

Master of Arts- Journalism & Media Studies

Hank Greenspun School of Journalism and Media Studies
Greenspun College of Urban Affairs
The Graduate College

University of Nevada, Las Vegas
May 2015

Copyright by Kaitlin Peck, 2015

All Rights Reserved



We recommend the thesis prepared under our supervision by

Kaitlin Peck

entitled

**The Economic Impact of the MPAA Rating System on Types of Films
Made From 2004-2014**

is approved in partial fulfillment of the requirements for the degree of

Master of Arts - Journalism and Media Studies
Hank Greenspun School of Journalism and Media Studies

Paul Traudt, Ph.D., Committee Chair

Stephen Bates, Ph.D., Committee Member

Gary Larson, Ph.D., Committee Member

Cian McMahon, Ph.D., Graduate College Representative

Kathryn Hausbeck Korgan, Ph.D., Interim Dean of the Graduate College

May 2015

ABSTRACT

This thesis will examine the economic impact of the MPAA film rating system on the types of films made from 2004 to 2014. The research in this study will examine the violent and sexual content of films. For this research the Motion Picture Association of America rating system is the independent variable, and its financial or economic impact on films made in the last ten years is the dependent variable. An extensive review of previous literature will also help inform the direction of the current study. However, this topic is still relevant because the previous research has appeared to be inconclusive. Furthermore, the film industry and the rating system have both changed significantly in the last decade so that fresh research is needed on this topic. Based on previous studies however, the types of films that have done better at the box-office appear to be those with more violent and sexual content.

The thesis will examine the MPAA rating system to determine the economic impact of the MPAA film rating system on the types of films made from 2004 to 2014. Chapter two comprises a literature review of the previous research based on studies related to the topic. For this topic, the studies included in the literature review will enable this study to sharpen the connection between MPAA rating system and its economic impact on films made in the last ten years. Chapter three will focus on describing the methodology that will be used for this study in order to conduct current research using MPAA-rated films made in the last ten years. Chapter four will focus on the findings of this study, which determined that the outcome of the results was different than what was expected. Although evidence shows that violence prevails at the box-office, none of the hypotheses were fully supported. The final chapter will conclude with a summary.

TABLE OF CONTENTS

ABSTRACT	iii
CHAPTER ONE- INTRODUCTION	
Purpose of the Study/ Research Question	1
Significance of the Study: Why is it Important?.....	2
Categories of MPAA-Rated Films.....	3
History of the MPAA Rating System	4
CARA	10
Thesis Organization	13
CHAPTER TWO- LITERATURE REVIEW	
The MPAA’s Influence on Parental Decisions about Films	15
MPAA Ratings and Content in Films	21
MPAA Ratings and the Box-Office.....	27
Financial Success of MPAA Rated Films with Violent Content.....	32
Other Related Studies	34
Summary of Literature Review.....	38
CHAPTER THREE- METHODOLOGY	
Theory	40
Rationale and Hypothesis	40
Method	41
Measures	42
Sampling Procedure.....	44
CHAPTER FOUR- RESULTS	
Distributors	45
Genre.....	45
MPAA Ratings.....	45
Content.....	46
Frequencies of Gross Earnings	46
Mean Gross Earnings.....	47
ANOVA Test	47
Post-Hoc Test.....	47
CHAPTER FIVE- CONCLUSION	
Interpretation of Results.....	50
Ratings Creep.....	52
What is Still Unknown from the Study.....	54
Strengths of the Study.....	55
Weaknesses of the Study	55
Future Research	56
Final Comments.....	58
REFERENCES	60
CURRICULUM VITAE.....	64

CHAPTER ONE- INTRODUCTION

Purpose of the Study/ Research Question

This thesis seeks to determine economic impact of the MPAA film rating system on the types of films made from 2004 to 2014. The Motion Picture Association of America rating system is the independent variable, and its financial or economic impact on films made in the last ten years is the dependent variable. The research in this study will examine how the MPAA has influenced the evolution of violent and sexual content of films made during the last ten years, in order to test what types of films have drawn the largest audiences and box-office numbers. Based on previous studies however, the types of films that have done better at the box-office appear to be those with more violent and sexual content.

The use of an extensive literature review will help inform the direction of this study, including which type of content will be tested from films made in the last ten years. Although this study is based on previous research, this topic is still relevant because the previous research has appeared to be inconclusive. The film industry and the rating system have both changed significantly in the last decade so that fresh research is needed on this topic.

This chapter will explain the basic purpose of the MPAA rating system, including its significance and why it is still an important topic. Following that will be an overview of the different categories of MPAA-rated films from G to R, and those that go even beyond the R-rating. Next, this introduction will give a brief history of the MPAA rating system by examining why it was initially created, how it has evolved, and how it operates

today. Finally, this chapter will include a brief summary of the organization for the remainder of the thesis, which will set up how the research will be conducted.

Significance of the Study: Why is it Important?

This study is important because films have a significant impact on our society and culture. Typical readers should care about the topic of movie ratings and economic impact because of the fact that people are still paying to see films as a form of entertainment. By doing so, they contribute to the part of our culture that has drawn audiences to theatres since films began. Furthermore, the average movie audience has power over which films do well at the box-office. There are numerous examples of "blockbuster" films that produce significant revenues, particularly during the summer and holiday seasons. One example of such a blockbuster is *Transformers: Age of Extinction*, which was released on June 27, 2014 and earned over \$100 million during its opening weekend (The Numbers, 2015). Therefore, the economic impact of the MPAA film rating system is an important topic to update in order to produce the most current results.

It is also necessary to examine how films have evolved in recent years in terms of their ratings and content. As a result, this research will indicate whether there is an increasing trend of violent and sexual content in films, as well as the economic impact that trend might have on films in the future. If films containing violent or sexual content currently do better at the box-office, it means that people are willing to see those types of films, and more will be made because they draw in larger audiences. For example, *Iron Man 3* (2013) earned over \$408 million in 2013, and it is rated PG-13 for "sequences of intense sci-fi action and violence throughout, and brief suggestive content" (The

Numbers, 2015). Therefore, the economic impact of the MPAA rating system means that films such as this will continue to do well at the box-office regardless of the content.

This study's findings will generate information about ratings and the types of films that currently do well at the box-office. First, this study may be able to identify a trend in the rating system based on the box-office revenues of recent films. Second, the research may also help determine necessity of the current rating system in the future based on the content of recent films. Finally, this study will indicate whether there are examples of films with violence and sex that have been incorrectly rated based on their content. There is a difference between war violence in a film like *American Sniper* (R, 2014), which has earned \$204 million as of this writing, and sci-fi violence in a film like *Transformers* (PG-13, 2007), which earned \$319 million (The Numbers, 2015). This makes a difference of \$115 million between two violent films. Therefore, the goal of this study is to gain the most accurate and current information.

Categories of MPAA-Rated Films

The four main categories currently used in the MPAA rating system are G, PG, PG-13, and R (Motion Picture Association of America, n.d.). A G-rated film contains nothing in adult themes, language, nudity, sex, violence or other content that would be inappropriate for younger children. According to instructions in the MPAA system (Motion Picture Association of America, n.d.), a PG-rated film should be investigated by parents before they let their younger children see the film, as this rating indicates that parents may consider some material unsuitable for their children. A PG-13 rating is a warning to parents to determine whether their children under age 13 should view the film

as some material might not be suited for them. A PG-13 film may go beyond the PG rating in theme, violence, nudity, sensuality, and language. An R-rated film contains more adult material and themes such as language, intense violence, sexually-oriented nudity, drug abuse or other elements. This rating advises parents to take the film's content seriously, and children under 17 are not allowed to attend R-rated films unaccompanied by a parent or adult guardian (Motion Picture Association of America, n.d.).

In some cases, the MPAA system includes films that go beyond the R-rating such as X and NC-17- rated films. The MPAA replaced the X rating with the NC-17 category, which prohibits children 17 and under from being admitted due to strong adult themes. Although the NC-17 rating does not necessarily mean the material is obscene or pornographic, it does suggest that the content is only appropriate for an adult audience. An NC-17 rating can be based on violence, sex, or any other content that most parents would consider too strong for their children. These ratings are meant to inform parents of the content and allow them to judge the appropriateness of certain films based on the ages of their children (Motion Picture Association of America, n.d.).

History of the MPAA Rating System

This section will briefly examine the history of the MPAA system, including the reasons for its formation and the changes it has experienced over the decades. Although this historical account will not include the economic aspects of the rating system, it is still significant to address the background of the MPAA and how it has evolved. Doing so will provide a clearer understanding of how the rating system currently operates and how it has become increasingly tied to box-office receipts over the years. In other words, this

history of the rating system will only be an historical narrative rather than an economic account, in order to provide an explanation of the rating system's significance.

The Motion Picture Association of America was founded in 1922, and was then known as the Motion Picture Producers and Distributors of America. The first president of the organization was William Hays (Becker, 1983, p. 249). From its founding, the goal of the MPPDA was to improve the movie industry in order to “stave off government control and to improve its image” (Becker, 1983, p. 249). Furthermore, the organization was also receiving pressure from various religious groups demanding an improvement to the moral standards of the motion picture industry.

In addition to pressure from these groups, the organization also felt the need to improve the film industry following numerous scandals involving actors, including the alleged rape and murder of a silent film actress, for which film star Roscoe "Fatty" Arbuckle was accused (Becker, 1983, p. 248). In light of these incidents, leading Hollywood executives, including Hays, wanted to enact changes in order to deflect attention from further scandals that could potentially harm the industry. The organization needed to come up with a solution that would display the film industry in a more positive light.

Aided by his conservative credentials as a Presbyterian deacon and past chairman of the Republican National Committee, Hays was in charge of raising the moral standards of motion pictures (Becker, 1983, p. 249). Under his leadership he initiated the Motion Picture Production Code which “banned sexually suggestive acts and language which some people thought offensive” (Becker, 1983, p. 249). A self-censorship system known

as the Hays Code was also developed, which operated under an extensive list of "don'ts" and "be carefals." This code was intended to monitor "offensive" material and to prevent government interference in filmmaking, including censorship at the state-level.

Beginning in 1945, the organization became officially known as the Motion Picture Association of America, due to the increasing popularity of American films abroad (Motion Picture Association of America, n.d.). This establishment of the new MPAA set in motion more changes that would further affect the film industry in the following decades.

The changes to the MPAA began with the advent of television in the early 1950's, during which time this new medium took over the role of providing entertainment and family-safe content in the comforts of home. This growing popularity of television was likely one of the factors which lead to a drastic decline in ticket sales. To remedy this, the film industry needed solutions based on content to draw audiences back to the movie theatres. Studios sought to attract families away from the living room by "enhancing and exploiting their medium's technological advantages, namely its relatively large image size and its color format" (Film Reference, n.d). The 1950s were the first decade of drive-in movie theaters, stereo sound, and wide-screen formats. As a result, the changes to the film industry in this decade demonstrated the need for an updated rating system in the years to follow.

During the late 1960's, the film industry began seeking other alternatives to the Hays Code censorship in order to promote the artistic freedoms that were being restricted. This change was in response to many of the social changes that were occurring in the United States such as civil rights, women's rights, and labor movements (Motion Picture

Association of America, n.d.). It was because of these changes that many felt the Hays Code was no longer relevant in the film industry.

The current rating system emerged in 1968 with MPAA chairman Jack Valenti. He replaced the Hays Code with a new and improved parent-focused rating system that would endure as a “symbol of American freedom of expression” (Motion Picture Association of America, n.d.). The original Hays Code was binary, and had only authorized movies for distribution based on whether it was deemed “moral” by using a set list of rules. A new rating system was needed to reflect the cultural changes of the time.

While the old Hays Code system was meant to inform filmgoers in general, the new movie rating system was meant to focus more on educating parents when choosing films for their family. In other words, the goals of this system were to give parents “reliable information to enable them to make informed judgments in guiding the attendance of their children” (Friedman, 1973, p. 186). This difference is significant because the rating system changed the attitude towards content in films, and it became specific towards the types of moviegoers it was meant to inform. However, this new rating system was similar to the Hays Code in that it was also meant to serve as an alternative to federal regulation of motion picture content by the United States government. As a result the new system “allegedly forestalled censorship by the federal and local governments” (Friedman, 1973, p. 186).

Even with the new rating system in place, it did not escape controversy. Many questioned its necessity as well as its effectiveness. Friedman (1973) stated that “in

exercising editorial judgment with respect to the vast majority of films commercially exhibited in the United States, the motion picture industry is abridging the rights of filmmakers to disseminate, and of moviegoers to receive, communications in unexpurgated form” (Friedman, 1973, p. 186). It must also be noted, though, that the rating system had only been in effect for a few years at the time this statement was made, and it has continued to be in full use ever since.

Despite the controversy surrounding its effectiveness, the rating system experienced many changes and revisions over the years. The content of films evolved and the set of rules for each rating became more specific. The first set of ratings to replace the Hays Code in 1968 included:

- **G:** General audiences – suggested for general audiences (all ages admitted);
- **M:** Mature audiences – suggested for mature audiences (parental discretion advised);
- **R:** Restricted – persons under 16 not admitted unless accompanied by parent or adult guardian;
- **X:** Adults only – No one under 17 admitted. (Motion Picture Association of America, 2009).

Many confused parents mistook the "Mature" rating to be more severe than the “Restricted” rating. They mistakenly believed that the former rating contained more adult content than the latter (Motion Picture Association of America, 2009). The introduction of the clearer GP rating (General audiences - Parental guidance suggested) replaced the “Mature” rating in 1970 (Hamilton, 1999, p. 208). This rating was later changed to PG (Parental Guidance suggested), and the age limit was raised to 17, though children could

still be allowed into theaters unaccompanied. This revised system was in effect from 1972 to 1984:

- **G:** General audiences – all ages admitted;
- **PG:** Parental guidance suggested – some material may not be suitable for [pre-teenagers] (1972–1978) / [children] (1978–present);
- **R:** Restricted – under 17 requires accompanying parent or adult guardian;
- **X:** No one under 17 admitted (Motion Picture Association of America, 2009).

During the early 1980s, PG-rated movies with significantly violent content sparked another revision of the rating system. Two violent PG-rated movies affiliated with Steven Spielberg, *Indiana Jones and the Temple of Doom* and *Gremlins*, prompted the MPAA to further re-evaluate the system, and in 1984 the PG-13 rating was introduced (Hamilton, 1999). This rating still allows children under 17 to be admitted without a parent or guardian, but it does note that parents are to be "strongly cautioned" of violence or sexual content. The first movie to officially be released with a PG-13 rating was 1984's *Red Dawn* (Filmbug, n.d).

More changes were introduced to the rating system in 1990. One change was the addition of rating descriptors to "giv[e] parents more information about the elements of a movie" (The Film Rating System (Cara), n.d). These descriptors include common examples such as "violence", "sexual content", "language" and "drug references."

The other change was the introduction of the NC-17 (not for children 17 or under) rating on September 27, 1990. The purpose of this rating was to distinguish MPAA-approved adult-oriented films from unapproved X-rated movies. The first movie to be

released with an NC-17 rating was *Henry and June* in 1990 (Filmbug, n.d.). The most current listing of film ratings in effect since 1990 includes:

- **G:** General audiences – all ages admitted;
- **PG:** Parental guidance suggested – some material may not be suitable for children;
- **PG-13:** Parents strongly cautioned – some material may be inappropriate for children under 13;
- **R:** Restricted – under 17 requires accompanying parent or adult guardian;
- **NC-17:** No one 17 and under admitted (Motion Picture Association of America, n.d.).

If a film receives a rating that was not desired, some circumstances still make it possible for producers to bypass the MPAA and release their films as "unrated." These occurrences are often for uncut or extended versions of films.

Films continue to evolve as the audiences' tastes in films and content change. Although studies from previous research show that elements such as violence, language, drug use, and sexuality have been evaluated through surveys and focus groups, they should continue to be evaluated to reflect contemporary concerns and to better assist the public in making the right viewing choices. For example, the introduction of the PG-13 rating in 1984 expanded the scope of the rating system. Although it was not intended to be tied to any specific age, this rating is a warning suggesting to parents to further investigate the content of the film.

CARA

The Classification and Rating Administration (CARA) and the Classification and Rating Appeals Board were established by the MPAA. CARA is an organization made up of an independent group of parents, and it is operated as an independent division of MPAA ("Classification and Rating Rules," 2010). It was created to provide additional warnings to families about a movie's content, and by doing so allow parents to make informed decisions about what their children watch (Motion Picture Association of America, n.d.). The Classification and Rating Appeals Board is an extension of CARA, and issues the ratings for motion pictures exhibited and distributed in the United States ("Classification and Rating Rules," 2010). In other words, it is CARA's job to actually assign the ratings to each film, along with an explanation of the details behind a movie's rating. This means that every movie rated G, PG, PG-13, R and NC-17, identifies the content in the movie that gave it that particular rating, in order to give a more thorough explanation about the content of films.

The Rating Board's purpose of issuing film ratings was to inform parents of the level of certain content in films that may be considered inappropriate for children. As a result, the Board is not responsible for the content of films, nor does it evaluate the quality or social value of those films ("Classification and Rating Rules," 2010). Furthermore, it is not CARA's purpose to "prescribe socially-appropriate values or to suggest any evolution of the values held by American parents, but instead to reflect the current values of the majority of American parents" ("Classification and Rating Rules," 2010, p. 1). Finally, the members of the MPAA are not involved in the Rating Board's assigning of ratings to individual films. The Rating Board is independently run and based

on fees received from producers and distributors of the films submitted for rating ("Classification and Rating Rules," 2010).

The classification and rating rules established by CARA are meant to provide information to the public about the operation of the rating system, as well as the meaning of the ratings to help parents determine each film's suitability for their children ("Classification and Rating Rules," 2010). As a result, one of the rules of the organization states that "[e]ach member of the Rating Board must be a parent and may not have any other affiliation with the entertainment industry. Raters must have children between the ages of five and fifteen when they join the Rating Board and must leave the Rating Board when all of their children have reached the age of twenty-one" ("Classification and Rating Rules," 2010, p. 2).

To summarize, the MPAA has experienced significant changes since its beginning in 1922. The organization established a set of rules known as the Hays Code, in response to government control and pressure from religious groups. The MPAA then gradually evolved over the decades due to cultural changes, and a new parent-focused rating system emerged in 1968 under Jack Valenti. This rating system underwent several revisions until 1990, when it became the set of ratings classifications that are still in use today. Finally, CARA emerged as an independent organization made up of a group of parents, which was given the responsibility of assigning the ratings to films. This group was created to provide additional warnings to families about a movie's content, so parents could make informed decisions about a film's suitability for their children. Although many may question the effectiveness of the rating system, it continues to be a source of information for those who want to know about the content of films.

Thesis Organization

The remainder of the thesis will examine the types of MPAA-rated films made from 2004-2014, including the box-office earnings of those films. Chapter two will offer a literature review on the subject. This literature will make it possible to sharpen the connection between the MPAA rating system and its economic impact, as well as to improve and update the research already conducted by previous studies. This thesis will then be able to examine the sexual and violent content in films made from 2004 to 2014.

Chapter three will describe the study's methodology in order to conduct current research using MPAA-rated films made in the last ten years. The topics included in this chapter will be the theory that will be used, the rationale/hypothesis of the study, the method, and the variables that will be used to conduct the research. The methodology described in this chapter will then set up the procedures and testing needed to conduct the research in the following chapter.

Chapter four will focus on the findings of this study, which determined that the outcome of the results was different than what was expected. Although evidence shows that violence prevails at the box-office, none of the hypotheses were fully supported. Even so, these results will still demonstrate the economic impact of the rating system.

The final chapter will conclude with a summary of the research in order to analyze and interpret the results. This chapter will examine what is found in this research, what is still unknown, the strengths and weaknesses of the study, and what future research should do in order to continue this topic. The goal is to provide information on the film rating system that will demonstrate the need for further research.

CHAPTER TWO- LITERATURE REVIEW

Previous scholars have examined the economic, social, and cultural impacts of the MPAA rating system on films. These studies have looked at violent and sexual content in films, and they have shown that different theories and methods can be used for this subject. As a result, these studies were chosen to help direct the larger focus of this study, including the method and measures that were used.

The studies used for this review of literature were organized into the following topics: The MPAA's influence on parental decisions about films; MPAA ratings and content in films; MPAA ratings and the box-office; the financial success of MPAA rated films with violent content; other studies that are related to this topic; and a summary section on this literature.

The first section, the MPAA's influence on parental decisions about films, suggests that the main focus of the MPAA's ratings has been for the benefit of parents. The literature of this section will explore the claim that the rating system was created as a means of informing parents about the content of films. The larger focus for this study will determine whether or not the MPAA is still beneficial for parents, by testing the content and ratings of more recent films.

The second section, MPAA ratings and content in films, will provide an overview of the type of content that has been studied in previous literature. By doing so, it will also direct the larger focus of this study by determining which content in films should be examined further, such as violent and sexual content.

The third section, entitled MPAA ratings and the box-office, will use the literature to draw a relationship between the MPAA ratings and the box-office performance of films. This literature will direct the larger focus of this study by helping to shape the method and measures that will be used.

The next section, the financial success of MPAA rated films with violent content, will draw a relationship between violent content in films and box-office performance. The literature of this section will help shape the main focus of the study, including the hypotheses. This section will also help shape the procedures that will be used for the measures of the study, such as violent content and box-office earnings.

The final section, other studies that are related to this topic, will consist of literature related to the MPAA that discuss different aspects of the subject. While parts of this section may not necessarily direct the larger focus of this study, it will help provide a more well-rounded review of literature. By doing so, it will demonstrate the interesting nature of the MPAA and the need for further studies on the topic.

The MPAA's Influence on Parental Decisions about Films

The purpose of the study by Tickle, Beach, and Dalton (2009) was to evaluate the usefulness of MPAA ratings for parental selection of appropriate films for children. This study was based on previous research theorizing that “adolescents’ behavior is influenced by what they see in popular media, including movies,” which also suggested “an association between viewing violence in media and subsequent aggressive thoughts and behaviors” (Tickle, Beach, and Dalton, 2009, p. 757). The hypothesis of this study stated that more restrictive MPAA ratings (R and PG-13) were associated with increased mean

seconds of portrayals of tobacco use, alcohol use, and sexual content; increased frequency of violent content; and increased salience of drug use. The variables of this study were these risk behaviors in films.

The 100 top grossing movies each year from 1996 through 2004 were content analyzed to measure risk behaviors in each film. The statistical procedure was a multiple regression analysis used to test the hypothesis. The content analysis used for this study showed that the rating system does statistically differentiate mean levels of smoking, drinking, sexual behavior, violence, and drug use in movies, with R-rated films containing the highest levels of each of these behaviors (Tickle, Beach, and Dalton, 2009).

When the variability in the amount of risk behaviors in films was taken into account, it found a large degree of overlap in content between rating categories. Particularly with regard to alcohol and tobacco content, it was found that the rating categories do not adequately distinguish the amount of these behaviors portrayed in a movie. Therefore, although the ratings are supposed to help parents decide whether their children should see a film, they do not clearly differentiate how much of these behaviors were portrayed.

The results of the study showed that the MPAA ratings did not clearly distinguish films based on tobacco or alcohol use. According to the authors, "Fifty percent of R-rated movies contained 124 seconds or more of tobacco use, comparable with 26% of PG-13 and 17% of PG movies. Fifty percent of R-rated movies contained 162 seconds or more of alcohol use, comparable with 49% of PG-13 and 25% of PG movies" (Tickle, Beach,

and Dalton, 2009, p. 756). Therefore, this study shows that the MPAA rating system is not adequate for parents who wish to limit their children's exposure to tobacco or alcohol content in movies because of the high degree of overlap in alcohol and tobacco content between rating categories.

A significant benefit of the MPAA rating system is its impact on parental involvement, which could be a key factor in determining the modifications to the MPAA's rating system regarding certain content in films. The purpose of the study by Longacre, Adachi-Mejia, Titus-Ernstoff, Gibson, Beach, and Dalton (2009) was to evaluate whether parents want smoking and alcohol use to be considered in movie ratings. The previous theory consulted in this study was the MPAA's belief that "films are rated in a manner that most parents would find suitable and helpful in aiding their decisions about their children and what movies they see" (Longacre et al., 2009, p. 218). The research question asked whether cigarette and alcohol use should be included as movie ratings criteria and if movies with cigarette or alcohol use should be rated R. The variables tested were cigarette and alcohol use in films.

This study was designed to examine parental attitudes toward including cigarette and alcohol use as MPAA film ratings criteria, and assigning R ratings to movies containing these behaviors. Using a mixed-method approach that combined survey data with qualitative interviews, the authors investigated whether parents' attitudes toward ratings were influenced by other parental characteristics and explored parents' reasons for wanting to be informed or not about movie smoking or drinking. The statistical procedure was collecting data as part of a longitudinal study of adolescent health behavior involving 2,564 parent/child dyads from northern New England. Over 2,400 parents were surveyed

in a second wave of data collection concerning movie ratings. Qualitative interviews were conducted with a subset of 62 parents 15 months later (Longacre et al., 2009).

About 52% of parents believed cigarette use should be used as movie ratings criteria, and 66% of parents believed alcohol use should be used as criteria. 28.9% supported an R rating for movies with smoking and 41.9% supported R ratings for alcohol. Therefore, although a majority of parents supported including smoking or drinking in ratings criteria, fewer favored R ratings. Although R-rated movies contain the most tobacco and alcohol use, these behaviors are frequently depicted in films rated for younger audiences (Longacre et al., 2009).

The authors noted that “several characteristics of the study may limit the generalizability of our findings. Our regional sample included a primarily white, rural population” (Longacre et al., 2009). This means it was unknown whether parents' views in this study are representative of parents nationwide. Furthermore, the authors acknowledged the possibility that “Movie smoking exposure may be higher among African American and Latino adolescents compared with white adolescents” (Longacre et al., 2009). Thus, movie viewing and attitudes about movie content may differ by race or ethnicity.

The purpose of Cantor’s (1998) study was to examine research related to criticisms of the program-rating system developed by the television industry in the late 1990s. Although no theory was incorporated in this study, the rating system was developed in response to the Telecommunications Act of 1996, and its purpose was to allow parents to block unwanted programs. However, this system was criticized by

parents and child advocates for being “inconsistent with parents' preferences, for failing to communicate useful information, and for making restricted programs more attractive” (Cantor, 1998, p. 54).

The research question asked was what type of rating system parents and child advocacy groups wanted. The variables tested in this study were content-based ratings versus age-based ratings. Based on the review of research in this article, these groups wanted more information about the content of individual programs rather than the age recommendations provided.

A survey method was used for this study, and the statistical procedure employed for collecting data consisted of a series of surveys and questions. National surveys and polls were conducted between August of 1996 and March of 1997 asking parents whether television programs should include a separate rating for their content. A second question asked parents whether age-based ratings provided enough information about the content of programs. This study also measured which content parents felt were most important to include, such as the amount of sex, violence, and language. Finally, another study was done to test whether the effect of ratings influenced children's interest in certain programs.

The findings of the first study showed that “parents overwhelmingly preferred content-based over age-based ratings for television” (Cantor, 1998, p. 55). A poll from 1997 indicated that 69 percent of those surveyed preferred content-based ratings over age-based ratings. The response for the question of whether age-based ratings provided enough information about the content was “a rating such as PG encompasses a wide

diversity of content and leaves the content of a particular program or movie unknown in advance of viewing” (Cantor, 1998, p. 66). Finally, the results of ratings’ effect on children’s interest in certain programs showed that restrictive ratings made programs more tantalizing to children. However, “the findings revealed that most of the rating systems did not significantly affect children’s interest” (Cantor, 1998, p. 62).

A shortcoming of the findings indicated, “the only independent polls that seemed to show parental approval for the new system did not compare the new system to any others” (Cantor, 1998, p. 56). According to *USA Today*, the February 1997 poll of 1036 respondents indicated that of parents who had heard of the new rating system, 52 percent agreed that the system helped them monitor their children's viewing, while 44 percent did not (Cantor, 1998, p. 56).

The purpose of Williamson’s (2007) study was to determine the “parental use and satisfaction with the MPAA system” (Williamson, 2007). Some of the research questions included whether parents liked the current rating system, and which content they felt should be rated more restrictively (Williamson, 2007, p. 85). This study theorized that there was a disconnect between the types of content parents find inappropriate for their children and the content the MPAA considers with ratings. The variables tested were the various content rated in films, including violence, sexual content, profanity, drug use, nudity, and alcohol use.

The method used was a multi-method investigation of the MPAA rating system, which included focus groups with parents and non-parents. The methods used were a quantitative content analysis of MPAA-supplied “rating reasons” for individual films

released in 2005, a quantitative content analysis of fifty full-length feature films released in the United States theatrically during 2005, and a qualitative analysis of those same fifty films (Williamson, 2007).

The results found several content variables were positively related to rating designation, including sexual content, sexual innuendo, nudity, profanities, marijuana use, hard drug use, alcohol use, and other adult content. Violence was not significantly related to rating designation. Therefore, ratings were found to be “inconsistently applied based on the inclusion of similar types of content in films of various ratings” (Williamson, 2007).

The focus groups were used to determine the “parental use and satisfaction with the MPAA system” (Williamson, 2007). It was found that parents were unanimously dissatisfied with the MPAA system because of its “lack of clarity and consistency” (Williamson, 2007). Parents of teenagers were most concerned with violence, sexual content, and language. Less concern was expressed with the depiction of drug use, drinking, or smoking (Williamson, 2007).

To summarize this section, parental involvement is a key factor in determining the modifications to the MPAA’s rating system regarding certain content in films. These studies indicate that parents are generally dissatisfied with the MPAA due to its lack of clarity and consistency, and that they prefer content-based ratings over age-based ratings. Overall, the findings of these studies indicate that the MPAA rating system is not adequate for parents who wish to limit their children's exposure to adult content.

MPAA Ratings and Content in Films

The purpose of Thompson and Yokota's (2004) study was to "characterize available information about violence, sex, and profanity content of movies as a function of rating; quantitatively explore the relationships between content, ratings, and economic information; and test for a trend of decreased stringency of rating criteria (i.e., 'ratings creep') as a function of time" (Thompson and Yokota, 2004, p. 1). This study was conducted due to the parental and public health concern over children's exposure to violence, sexual themes, profanity, and substances. However, limited research quantifies the correlations between movie content, ratings, and economics. It also addresses the issue of the ratings creep, which states that more recent films in the current ratings categories include more adult content than older films that appeared in the same categories. No theory was incorporated, but the hypothesis stated that age-based ratings alone do not provide good information about the depiction of content in films, and the criteria for rating movies became less stringent over time. The variables tested include film content, ratings, and available economic information (Thompson and Yokota, 2004).

This study compares the MPAA age-based ratings for films rated G, PG, PG-13, and R with "information about content to determine the relative importance of potentially objectionable material in determining ratings and to examine the distribution of violence, sex, and profanity content across ratings" (Thompson and Yokota, 2004). The method was a content analysis measuring the correlation between the variables. The statistical procedure employed included a complete database of movie ratings available from the MPAA to "characterize the content information (including any indicated reasons noted for ratings) for all movies released between January 1, 1992 and December 31, 2003" (Thompson and Yokota, 2004, p. 1).

Also added to the database were three content-based scores for violence and gore, sex and nudity, and profanity. Information was also obtained on gross revenues and movie budgets from the IMDbPro, which is a subscription service for entertainment professionals. This database provides a variety of services including film production and box office details, as well as a company directory.

The findings of this study showed that “large variability exists in the types of content that receive different MPAA ratings, the MPAA rating reasons correlate with higher scores assigned to content-based ratings, and the number of reasons indicated increases with the age-based rating category” (Thompson and Yokota, 2004, p. 2). Higher rated content in movies were found as a function of time, suggesting that the MPAA applied less stringency in its age-based ratings over time between 1992 and 2003. Animated films rated G by the MPAA received a significantly higher content-based score for violence on average than non-animated films rated G. Therefore, movies with the same rating can differ in the amount of objectionable content.

The analyses of this study suggested that age-based and content-based rating information provide useful insights about films, as well as correlations between higher scores for different types of content and age-based ratings (Thompson and Yokota, 2004). The authors also noted that this study “provides the first comparison between content-based ratings and the MPAA's age-based ratings and rating reasons, and it provides important information for parents and physicians about the content and ratings of films” (Thompson and Yokota, 2004). Finally, the results of this study suggested the need for “consideration of efforts to standardize rating criteria over time” due to the influence of the ratings creep (Thompson and Yokota, 2004).

The purpose of Jenkins, Webb, Browne, Afifi, and Kraus' (2005) study was to determine whether the MPAA's rating system distinguishes among the three primary rating categories (PG, PG-13, and R) with respect to violence. The authors noted that with the classification and ratings system in place, "films were no longer being released for general audiences but rather had their audience determined for them by a rating board that was hired to evaluate the objectionable content that films contained and assign a corresponding age-based rating" (Jenkins, Webb, Browne, Afifi, and Kraus, 2005, p. e512). No theory was used in this study, but the research question asked in this study is whether PG, PG-13, and R represent three distinct categories in regard to the violent content in films. The variables used were examples of violent content.

The statistical procedure employed for this study was a sample of all films from the 100 top-grossing American films of 1994. The use of a data abstraction instrument was designed to code each act of violence within the sample of 100 films. Furthermore, the method used to collect the data included a series of Poisson regression models to "examine the association among rating, seriousness of violence, and primary reason for the rating assignment" (Jenkins et al., 2005, p. e512). This analysis was meant to assist viewers in understanding violence in films.

The results showed that the total average number of violent acts within each film by rating category increased with each rating. In addition, the acts of violence identified in these films were also measured based on their level of seriousness and primary factors. Films rated PG had an average of 14 violent acts, PG-13 films had an average of 20, and R-rated films had an average of 32 violent acts. However, the results also showed that the ratings were not an accurate measure of predicting the frequency of violence in films.

The authors noted that “for all three rating categories, the predicted number of violent acts was almost identical for films with violence as a primary factor” (Jenkins et al., 2005, p. e515).

The results of this study highlight the issues of the CARA rating system and “demonstrate its failure to identify clearly violent content in American films” (Jenkins et al., 2005, p. e515). The authors noted that the ratings system appeared to make clear-cut distinctions between PG-, PG-13-, and R-rated films when considering violent content, as R films contained more acts of violence than the latter ratings. These figures demonstrated that “films with a more restrictive rating contained, on average, more violence as well as higher levels of seriousness” (Jenkins et al., 2005, p. e515). However, these results also failed to acknowledge the inconsistencies in the application of the system. Therefore, the authors concluded that “CARA has failed to adhere to its definitions of the PG and PG-13 ratings” (Jenkins et al., 2005, p. e515).

The purpose of Leone’s (2002) study was to examine the MPAA’s assertion that sexual and violent content are treated equally when rating a film. Several previous behavioral theories were identified, which “attempt to explain the effects of media violence, which, in turn, provide a possible framework for CARA members’ motivations, rationales, and ultimately the ratings decisions they make” (Leone, 2002, p. 941). These behavioral theories include: social learning; disinhibition; desensitization; and excitation transfer or arousal theory (Leone, 2002, p. 941). The first hypothesis for this study stated that “sex and violence are not treated equally based on a content analysis of 210 sequences from 13 films consisting of material present in unrated or NC-17-rated—but not in R-rated—versions of the same film” (Leone, 2002, p. 938). It was also

hypothesized that “more sexual sequences than violent sequences would be removed from R-rated films” (Leone, 2002, p. 938). The variables used in this study were violence and sexual content in films.

The method used in this study was “a content analysis of selected material from unrated or NC-17 videocassette versions of R-rated films. The ‘selected material’ is that material that was not present in the R-rated version of the film, but appears in the unrated or NC-17 videocassette version” (Leone, 2002, p. 945). The first hypothesis was tested by measuring the sequences present in the director’s cut videocassette versions of the film but not in the R-rated version. For the second hypothesis, the material was measured for violent and sexual content.

Results showed that the MPAA did not treat sexuality and violence equally when assigning a rating to a film. According to the author, “This study attempted to test the notion of different treatment of violent and sexual content by analyzing the material present in the unrated or NC-17 rated version (the director’s cut) of a film, but not in the R-rated version of the same film” (Leone, 2002, p. 949). Even so, this study did indicate the ability to categorize films based on their violent and sexual material. Although the results of this study showed that explicit content may not be treated equally, it still provided useful information regarding how the content of films can be measured.

To summarize, this section examines the relationship between age-based ratings and film content. The findings from the studies indicate that age-based ratings alone do not provide sufficient information about the depiction of content in films, and that the criteria for rating films has become less stringent over time. Although it was determined

that variability exists in the types of content that receive different MPAA ratings, these studies still suggest that a combination of age-based and content-based ratings do provide useful information about films.

MPAA Ratings and the Box-Office

A way to measure the MPAA's influence is by examining whether the ratings assigned to films have an effect on their financial success at the box office. The purpose of Austin, Nicolich, and Simonet's (1981) study was to examine whether the MPAA ratings assigned to films had an effect on their financial success at the box office.

Although no theory was incorporated, the authors noted that, "The restricted ratings (R and X) were originally foreseen as handicaps, but also symbols of 'forbidden fruit' attractiveness; the unrestricted ratings (G and PG) were predicted by some to affect box office positively ('safe') or negatively ('childish')" (Austin, Nicolich, and Simonet, 1981, p. 28).

However, further evaluation indicated that the films rated G and X were more harmful to box office success, while the films rated PG and R were more helpful. The hypothesis stated that films rated PG and R were more likely to achieve financial success than the films rated G and R. The variables were film ratings and financial success. The latter was measured as a computer analysis of approximately 5,000 rated films from 1968-1979, to determine "which rating gives a film the best odds of achieving box-office 'success,' defined as domestic rentals of at least \$1 million in 1969 dollars" (Austin et al., 1981, p. 28).

The method used for this study was a descriptive method, and the statistical

procedure employed was the measure of the MPAA ratings for feature films from 1969-1979 to evaluate the relationship between film ratings and financial success at the box office. However, “causal relationships cannot be inferred from these findings because many variables in the film production and release system could not be ‘controlled’” (Austin et al., 1981, p. 28). The three tables included in this article measured the MPAA ratings for feature films from 1969- 1979, a summary of the frequencies and success ratios of MPAA- rated films, and a measure of the MPAA rating frequencies and success ratios.

The findings of this study indicated that PG and R films were generally favored over G and X films. In 1969, 68.3 percent of the films were rated PG and R in comparison to the 31.7 percent of films that were rated G and X. The annual success ratios of MPAA- rated films ranged from 15.1 percent in 1974 to 30.5 percent in 1979, and the rated films with rentals made over 1 million dollars. PG proved the most successful category with an overall success ratio of 26.7 percent. The remaining categories had success ratios of 24.2 percent for G-rated films, 13.7 percent for R rated films, and 5 percent for X-rated films (Austin et al., 1981).

The relatively low success ratios of R and X could be explained by certain restrictions imposed by the MPAA, which in turn would affect potential audience sizes. As a result, this suggests that the rating system was acknowledged by movie audiences as well as enforced by individual theatres (Austin et al., 1981, p. 28). Another interesting aspect of the findings is the fact that the most popular category with producers, the R rating, has only the third highest success ratio. The authors noted that this may just be

evidence that “the public's moral tastes are more conservative than Hollywood's” (Austin et al., 1981, p. 29).

The purpose of Austin’s (1980) study was to better understand the relationship between the MPAA and the financial success of films. This was achieved by examining the study used to test the potential influence of the MPAA’s film-rating system on movie attendance. The theoretical basis for the influence of the MPAA's rating scheme was Brehm's theory of psychological reactance. This theory stated that “individuals become psychologically aroused when any given behavioral freedom of theirs (such as unencumbered movie selection and attendance) is eliminated or threatened with elimination” (Austin, 1980, p. 91).

Therefore, based on this theory and self-reported data, the main hypothesis of the article stated that the participants in this study most frequently attended films rated either PG or R, indicating that the MPAA rating of films influences movie attendance (Austin, 1980). The variables tested were film ratings and movie attendance. No additional source was used for the latter variable, since the research was based on self-reported data and the results came from the actual film attendance reports of the participants.

The method used was experimental, and sixty-five high school students participated in this study. The statistical procedure of the data (ANOVA) employed was appropriate given the testing of mean generated from an experiment. However, the results of the experimental manipulation were nonsignificant ($p > .05$), indicating that, “for this sample the MPAA ratings did not affect likelihood of film attendance and that psychological reactance apparently was not aroused” (Austin, 1980, p. 91). The study

used was made up of a self-administered questionnaire given to students asking them about their likelihood of attending four different films with fictional titles and synopses.

The findings of the study showed that “By their own actual film attendance reports, the participants in this study clearly favored those films with a PG or R rating” (Austin, 1980, p. 98). Furthermore, “both the film plot synopses and the MPAA ratings assigned to the synopses appeared credible” (Austin, 1980, p. 96). However, the results of the ANOVA procedure showed no significant difference between the four film-plot synopses and likelihood of attendance. Since the results of the analysis on the study as a whole was non-significant, each individual synopsis could be assumed valid. It can also be assumed that the questionnaire’s instructions were clearly understood since all of the respondents seemed to follow them. Overall, this study indicated that MPAA ratings were actually not a factor in the respondents’ likelihood of attendance.

This study was designed to test the potential influence of the MPAA's film rating system on movie attendance. The experimental instrument was valid, although the results were nonsignificant, thereby indicating that for this sample the MPAA ratings did not affect the likelihood of film attendance. As a result, this study invites at least two other avenues for future research. The first is a replication of the experiment using a probability sample. The second is an expansion of the response scale from five to seven points, which would offer subjects greater discrimination (Austin, 1980).

The purpose of Palsson, Price, and Shores’ (2013) study was to examine a specific case of movie ratings and its effects on revenue statistics. This was to determine the role that content ratings play in influencing people's decision of which movies to

watch in the theater. According to the authors, “We focused on the specific role of ratings by constructing a mature content index for each movie and compare movies with similar amounts of mature content, but that received different ratings” (Palsson, Price, and Shores, 2013, p. 13). No theory was incorporated in this study, but the hypothesis stated that receiving a mature rating (R) reduces a movie's box office revenues and that the movie rating system places specific guidelines on the number of curse words that are allowed at each content rating. The variables tested for this study were film content and ratings.

The method used for this study was a descriptive quantitative method. For the statistical procedure employed in this study, data were collected from *The Numbers*, which provided box office data for all domestically distributed films since 1995. Included in the sample were all motion pictures between 1996 and 2009 for which *The Numbers* provided budget data. It also provided information on each movie's budget, though this information is not publicly available for every movie. These independent measures of the content of a movie were used to construct a measure of how close to the margin of a particular rating each movie was. This allowed the authors to compare movies that appear to have content that would make them equally likely to receive a particular rating, but ended up with different ratings (Palsson et al., 2013).

The findings showed that G films had the highest average revenues (\$80 million). PG and PG-13 films had about the same average revenue (around \$65 million) and R movies had the lowest average revenue (\$35 million). However, nearly each rating had a 55% chance of its theater revenue exceeding its budget. Finally, the number of theaters that showed a movie is highly correlated with the film's rating. The study found that G,

PG, and PG-13 films all had a greater than 90% chance of being qualified as wide release (shown in more than 600 theaters), whereas R films had only a 79% chance (Palsson et al., 2013). Therefore, movie ratings do affect revenue statistics, and content has a surprising role in influencing what types of films people see.

The authors noted, “a limitation to these estimated effects is that, although it’s possible to control for several characteristics of the film, it’s difficult to include a measure of the quality of the movie” (Palsson et al., 2013, p. 20). Even so, further research could still “combine insights about the effects of ratings with the structural approach that has been used to examine the relationship between release date and revenue” (Palsson et al., 2013, p. 20).

To summarize, this section examined the relationship between MPAA ratings and box-office revenues. Different methods were used to test the potential influence of the MPAA's film rating system on movie attendance. Some studies indicated that PG and R-rated films were generally favored, while other findings showed that G-rated films had the highest average revenues. Despite the inconsistency in the findings, these studies indicate that movie ratings do affect revenue statistics, and that content has an effect on what types of films people see. Therefore, these studies were necessary in order to better understand the relationship between the MPAA and the financial success of films.

Financial Success of MPAA Rated Films with Violent Content

The purpose of Ravid and Basuroy’s (2004) study was to “provide project-based evidence consistent with risk averse and revenue maximizing behavior on the part of executives in charge of large projects” in order to shed some light on the economic

motivation behind violent entertainment (Ravid and Basuroy, 2004, p. S155). This topic has been an important issue in discussions of media policy because of the increase in violence, sex, and gore in films as a way to maximize economic revenues.

Previous theories show that having an R rating “does not have a significant impact on the rate of return on film projects or even on various movie-related revenue streams” (Ravid and Basuroy, 2004, p. S155). Therefore, the hypothesis for this study stated that “movies that are very violent or feature sex and violence do not provide excess returns, but they increase revenues, particularly in the international market. Further, they tend to lose money less often and their returns are more predictable” (Ravid and Basuroy, 2004, p. S155). The variables in this study were film revenues and violence.

The method used for this study was a regression analysis. The statistical procedure of this study was random sample of over 200 films released between late 1991 and early 1993. This sample was then reduced to a final observation of 180 films because of various missing data. Finally, the sample was pared down further to 175 films by excluding the five lowest budget films (Ravid and Basuroy, 2004, p. S162). Baseline Services in California provided the budget (negative cost) of each film as well as the domestic, international, and video revenues. The variables employed were film revenues and violence in order to “test the impact of violence on each source of revenue separately” (Ravid and Basuroy, 2004). Thus, the data included domestic box office receipts as well as a proxy for international revenues.

The findings of this study found that much of the economic “action” was in movies that portray graphic violence or in movies that include both sex and violence.

These results support the view that “the production of violent and, in particular, very violent movies is consistent with suboptimal risk choices and revenue maximization motives by studio executives. This is similar to studies of other industries where executives are exposed to significant risks” (Ravid and Basuroy, 2004, p. S186). In other words, this study found that studios were willing to risk promoting more violent films, because they knew that those films would draw higher revenues.

The authors noted that “the discussions in the media and in the political arena have primarily focused on moral and ethical issues. Academic research on the portrayal of violence often focuses on sociological and psychological aspects” (Ravid and Basuroy, 2004, p. S186). However, this study contributed to the debate by focusing on economic issues.

Other Related Studies

The purpose of Moon, Bergey, and Iacobucci’s (2010) study was to investigate how movie ratings from professional critics, amateur communities, and viewers themselves influence revenues. According to the data, the high early movie revenues enhanced subsequent movie ratings and high advertising supported by high ratings maximized the movie’s revenues. The data also showed that sequel movies collected more revenues but received lower ratings than originals. Using individual viewer–level data, this research “highlights how viewers’ own viewing and rating histories and movie communities’ collective opinions explain viewer satisfaction” (Moon, Bergey, and Iacobucci, 2010, p. 108). These ratings explained viewers’ new movie ratings as a measure of viewer satisfaction.

This study also considered the theory from previous research stating that “when movies receive high ratings from either critics or ordinary viewers, revenues increase” (Moon et al., 2010, p. 109). Therefore, the research question addressed in this article is whether there is a reciprocating interaction between reviews and revenues, meaning that strong revenues can subsequently generate more positive reviews for films and vice versa. The variables used for this study were movie ratings and movie performance.

The method used for this study was a correlation analysis. The statistical procedure employed in this article consisted of two types of empirical analysis, movie-level data collected from sources such as professional critics’ ratings and viewer-level data collected from ratings of individual viewers. Both types of data attempted to highlight the relationship between movie ratings and financial performance such as revenues and viewer satisfaction (Moon et al., 2010).

The findings of this study showed that ratings are associated with movie performance, as measured by both movie revenues and viewer satisfaction. The movie-level data analysis implied that “marketers should allocate more ad dollars to movies that garner early high ratings by professional critics. These ratings tend to lead to high ratings by amateurs, which in turn can contribute to enhanced revenues” (Moon et al., 2010, p. 118). For the viewer-level data, ratings were an effective measure of a member’s satisfaction since “this study highlights members’ satisfaction mechanism on the basis of their viewing and rating histories and movie communities’ opinions as internal and external information sources” (Moon et al., 2010, p. 119). The authors noted “We indicate some limitations of this research and shed light on potential avenues for further research” (Moon et al., 2010, p. 119). Therefore, the overall information and data

presented can allow further research to use a combination of movie-level data and viewer-level data to study movie ratings, movie revenues, and viewer satisfaction.

The purpose of Basuroy, Chatterjee, and Ravid's (2003) study was to investigate how the box office performances of films are affected by critics, stars, and budgets. In order to do this the authors "examine[d] the process through which critics affect box office revenue, that is, whether they influence the decision of the film going public (their role as influencers), merely predict the decision (their role as predictors), or do both" (Basuroy, Chatterjee, and Ravid, 2003, p. 103).

One of the previous theories used in this study suggested that critics can serve many functions such as "provide advertising and information, create reputations, construct a consumption experience, and influence preference" (Basuroy et al., 2003, p. 104). The three research questions of this study addressed critics' roles, the effects of positive and negative reviews on box office performance, and the impact of star power and budgets on the box office. The variables tested were star power, critics' reviews, domestic revenues, and budgets.

The method for this study was a regression analysis, and the statistical procedure employed for this study included a random sample of 200 films released between late 1991 and early 1993. The data were gathered from two sources: *Baseline* in California and *Variety* magazine. The authors noted "Although some studies have focused on more successful films, such as the top 50 or the top 100 in *Variety* lists, our study contains a random sample of the films (both successes and failures)" (Basuroy et al., 2003, p. 107).

This sample contained 156 MPAA-rated films and 19 foreign films, covering approximately one-third of all MPAA films released between 1991 and 1993.

Results showed that both positive and negative reviews are significantly correlated with box office revenue, the pattern is consistent with the dual perspective of critics, and stars and budgets moderate the impact of critical reviews. For this sample the authors noted that “the average number of first-week screens is 749, the average first-week box office return is \$5.43 million, and the average number of reviews received is 34 (43% positive, 31% negative)” (Basuroy et al., 2003, p. 109). Using the sample of films, 47% positive reviews and 25% negative reviews were reported. The film with the highest revenue per screen made \$117,812 per screen for two screens, and had the highest total revenue of \$426 million (Basuroy et al., 2003).

The purpose of Leone and Barowski’s (2011) study was to test the ratings creep hypothesis through a quantitative analysis of films in the PG-13 rating category. No theory was used in this study, but the term ratings creep “refers to the belief that various types of adult content escalate in films with the same rating over time” (Leone and Barowski, 2011, p. 53). The analysis of this study suggested a more relaxed attitude toward violent content by the MPAA ratings board that parallels a greater willingness of parents to allow exposure to violence than sexual content in PG-13 films. The MPAA added PG-13 to inform parents that a movie’s content was beyond PG but was not enough for an R-rating. The hypothesis stated that increased levels of sexual and violent content were allowed to “creep” into the PG-13 rating category over time, and the variables were violent and sexual content.

The method used for this study included a quantitative content analysis of 45

films, and the statistical procedure included a series of tables showing a significant increase in violent content in the PG-13 rating category from Time 1 (1988) to Time 2 (1997) and Time 3 (2006). The authors noted “Coders analyzed sample films on DVD. This allowed for pausing and rewinding films, which facilitated accuracy, and, by relying on display timers, allowed for accurate timing of sequences” (Leone and Barowski, 2011, p. 58).

The films in this sample contained far more violence than other kinds of mature content. Over thirteen hundred violent sequences were coded, ranging from one to 226 seconds. The authors found “Every film contained violence, and total amount per film ranged from a low of 3 seconds to a high of 1,380 seconds (23 minutes)” (Leone and Barowski, 2011, p. 61). Although the study also addressed the possibility of an increase in sexual content in the PG-13 classification over time, there was not a great deal of nudity found in this rating category. An ANOVA did not reveal any significant increase over time for this content, and just below 90% of PG-13 nudity was partial.

Summary of Literature Review

This review of literature indicates several points. First, ratings are associated with movie performance as measured by both movie revenues and viewer satisfaction. Second, much of the economic gain is found in movies that include sex and violence. Finally, findings of some of the studies indicate that films contain more violence than other kinds of mature content considered when ratings are assigned. The results of the literature review indicate the need for further examination on violent and sexual content in films.

The strength of the literature review was in the results of many of the studies. One

example found that high ratings by professional critics tend to lead to high ratings by amateurs, which in turn can contribute to enhanced revenues and increased member satisfaction. Other examples indicated that that the MPAA rating system does have an impact on the revenues of films. Finally, it was found that ratings are associated with movie performance, as measured by both movie revenues and viewer satisfaction.

The extensive findings of this research determined that there were some weaknesses in the studies. First, the MPAA does not treat sex and violence equally when assigning a rating to a film, which could lead to inconsistencies when rating films based on their content. Second, MPAA ratings of films are actually not a factor in determining the viewer's likelihood of attendance.

The research on this topic has opened up numerous possibilities for further research. One possibility is the continuation of movie-level data and viewer-level data to further study the relationship between movie ratings, movie revenues, and viewer satisfaction. Second, this topic can continue to measure violence and sex in films and how they determine the correlation of movie ratings with content. Finally, older studies such as those conducted by Austin (1980) and Austin et al. (1981) could be updated to see whether the findings of those studies are consistent with current research.

This literature review did show an economic impact of the MPAA rating system on the types of films that have been made. However, many of the studies contradicted each other, lacked one overall conclusion, and varied in the time frame of the films sampled. This research needed to be updated and narrowed down to a specific time frame. Focusing on 2004-2014 is one way to do so.

CHAPTER THREE- METHODOLOGY

This chapter will focus on the methodology that will be used for this study. Since the literature review on this topic indicates a need for updated research, the focus of this study will be to conduct current research using MPAA-rated films made in the last ten years. The reason for looking at films from this period is due to the fact that studies researching the MPAA rating system in the last ten years have been sparse.

The steps in this methodology will allow the current research to determine the current economic impact of the rating system. The first step for this study will be to determine a theory to guide the research. The next steps will be to determine the rationale and hypothesis, the method, and the measures. The final step will be to determine the sampling procedure for the research. This study will highlight which areas of study should be explored further, demonstrating the need for additional research.

Theory

In research, theory refers to a set of ideas or principles that guide a course of study. Although there are multiple studies on which this current study is based, none of them offer a clear and distinct theory to guide this course of study. Instead, these studies offer perspectives about the relationship between MPAA ratings and box-office revenues. As a result, this study also lacks a distinct theory. However, the research will still be able to determine the factors influencing box-office earnings of films, by drawing a relationship between the impact of ratings and the audience on films. This research will explore factors such as MPAA ratings, violence, and sexual content.

Rationale and Hypothesis

The research found in the literature review indicates that the MPAA rating system has had an economic impact on the types of films made. It also indicates that the types of films that have done better at the box-office appear to be those with more violent and sexual content. This thesis states that the rating system has had a similar or greater impact on films from 2004-2014. This study will also look at the accuracy and consistency of the ratings designations for these films, which was not addressed in the studies of the literature review. Therefore, this thesis will test the following hypotheses:

H₁: MPAA films with ratings containing violent content have produced higher average box-office receipts from 2004 to 2014 compared to films containing sexual or other content.

H₂: With the exception of films rated as violent, MPAA films with ratings containing sexual content have produced higher average box-office receipts from 2004 to 2014 compared to films containing other content.

The sample of films will include those with both violent and sexual content, which will also be used to determine the economic influence of the MPAA rating system on the type of content in films. The final hypothesis states:

H₃: MPAA films with ratings containing both violent and sexual content have produced the highest average box-office receipts from 2004 to 2014 of all rated films.

Method

The method of this research will be an econometric study using a sample of box-office films from the last ten years. The purpose of conducting this type of study will be

to expand the research for this subject. This will be done by categorizing the sample of more recent films based on their box-office receipts and whether they contain violent and/or sexual content. The data will determine whether films containing violence, sex, or both violence and sex have done better at the box office.

Measures

The variables for this study will be MPAA ratings, content, and the box-office earnings of films. The measures that will be tested for this research include: the classifications of MPAA ratings, the names of the sample of films, the genre and distributor of each film, the year the film was released, the gross receipts of each film, and violent and sexual content. The latter variable will be categorized based on the films that contain violent content, sexual content, both violent and sexual content, or other.

Classifications of MPAA Ratings

The ratings that will be used to test this variable will include films rated: G, PG, PG-13, and R. Films rated NC-17 will not be included in this sample because there are not enough films with this rating to include them in the sample. All films included in the sample will be coded according to one of these four MPAA classifications.

The Names of the Sample of Films

The names of all films will be included as part of coding.

Genre of the Films

The genre of each film will be included as part of coding.

Distributor of the Films

The distributor of each film will be included as part of the coding.

Year Film was Released

The year each film was released will be included as part of the coding. The sample of films will only include those released between 2004 and 2014.

Gross Receipts of Films

The gross domestic receipts of the film will be included as part of coding. There were many instances when films were included in the dataset for two consecutive years. For example, *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe* was initially released on December 9, 2005 and made \$225 million. Due to its late release, the film was also listed with the films from 2006, although its gross earning was \$66 million. To correct this, both earnings for the film were added together for a total gross of \$291 million, and was listed only once with the films from 2005. This procedure was repeated for all the films that were duplicated. Finally, extra films were added to replace the duplicates, in order keep the sample at one-hundred films per year.

Film Content

If the words "violence" or "violent content" appear in the film's MPAA rating, and no sexual content appears in the rating, then a 1 will be entered as the code for the film. If the words "sex", "sexuality" or "sexual content" appear in the film's MPAA rating, and no violent content appears in the rating, then a 2 will be entered as the code for the film. If both "violent" and "sexual" content appear in the film's MPAA rating,

then a 3 will be entered as the code for the film. If neither "violent" nor "sexual" content appear in the film's MPAA rating, then an 8 will be entered as the code for the film.

These codes will indicate which films in the sample are given a rating containing variations of violent and sexual content. For example, *The Passion of the Christ* (2004) was rated R for "sequences of graphic violence" (The Numbers, 2015). Another example is *Sex and the City* (2008), which was given an R rating for "strong sexual content" (The Numbers, 2015). Finally, *Mr. and Mrs. Smith* (2005) was rated PG-13 for "sequences of violence" and "sexual content" (The Numbers, 2015).

Sampling Procedure

The questions that will be used to test these variables include: What source will be used for finding a sample of films, and how will the sample of films from the past ten years be drawn? How will the sample of films get classified as "violent" or "sexual"? What will be the source for the financial information of these films? All of these questions will make it possible to test the variables.

The sample of films will be decided by the one-hundred highest grossing films for each year from 2004-2014. Palsson, Price, and Shores' (2013) study will be used as reference to gather this information, which examined a specific case of movie ratings and its effects on revenue statistics. The source that will be used for this study will be *The Numbers*, an online film database which provides box office information for domestically distributed films (Palsson et al., 2013). This source will be useful for finding the box-office receipts of the sample of films, as well as their ratings and content. In other words, all of the measures that were defined above are included in the *Numbers* database.

CHAPTER FOUR- RESULTS

This chapter will focus on the findings of this study, which determined that the outcome of the results was different than what was expected. Although evidence shows that violence prevails at the box-office, none of the hypotheses were fully supported.

Distributors

This study analyzed 1100 films using *The Numbers* database, and 36 distributors were identified. However, only seven studios accounted for 83 percent of the sample. These studios include: Sony Pictures with 16.1 percent of the films, Warner Bros. with 15.2 percent, Universal with 12.1 percent, 20th Century Fox with 11.6 percent, Paramount Pictures with 10.8 percent, Walt Disney Pictures with 10.5 percent, and Lionsgate with 6.6 percent.

Genre

Twelve genres were identified by the database. Although there were no questions of validity, only seven genres accounted for 96.3 percent of the films in the sample. The genres include: Comedy with 24.3 percent, Drama with 16.6 percent, Adventure with 16.2 percent, Action with 14.3 percent, Thriller/Suspense with 11.1 percent, Horror with 7.4 percent, and Romantic Comedy with 6.5 percent.

MPAA Ratings

The distribution of films based on their MPAA ratings is illustrated in Table 1. Films rated PG-13 made up 46.7 percent of the film sample, films rated R with 29.9 percent, films rated PG with 19.9 percent, and films rated G with 3.5 percent of the films in the sample.

Table 1-MPAA Ratings

		Frequency	Percent	Cumulative Percent
Valid	PG-13	514	46.7	46.7
	R	329	29.9	76.6
	PG	219	19.9	96.5
	G	38	3.5	100.0
	Total	1100	100.0	

Content

The distribution of films based on their content is illustrated in Table 2. Films coded with violent content made up 33 percent of the sample, films with content other than violence or sex with 25.5 percent, films with both violence and sex with 20.9 percent, and films with sexual content with 20.5 percent.

Table 2-Content

		Frequency	Percent	Cumulative Percent
Valid	Violence	363	33.0	33.0
	Other	281	25.5	58.5
	Violence & Sex	230	20.9	79.5
	Sex	226	20.5	100.0
	Total	1100	100.0	

Frequencies of Gross Earnings

The range for the earnings of the films was \$739 million, and the mean gross was \$88 million. The highest grossing film in the sample was *Avatar* (2009) with a total of \$760 million. The lowest grossing film in the sample was *The Last Mimzy* (2007) with a total of \$21 million.

A problem with these results was found in the total earnings of the three highest

grossing films. These films include *Avatar* (2009) with a total of \$760 million, *The Avengers* (2012) with a total of \$623 million, and *The Dark Knight* (2008) with a total of \$531 million. These films exceeded all other films by at least \$82 million. The line was drawn at these three films, because their earnings so far surpassed the rest of the films in the sample that they skewed the results. As a result, the decision was made to omit these films from the sample, which still left 1,097 films to analyze. With these three films omitted, the mean gross was \$86 million, which means that the top three films were responsible for \$2 million of the total mean gross.

Mean Gross Earnings

The mean gross for films coded with violent content was \$102 million, the mean gross for films with other content was \$93 million, the mean gross for films with both violence and sex was \$75 million, and the mean gross for films with sexual content was \$65 million. This indicates that violence and sex sells, but that sex does not sell as much as originally supposed.

ANOVA Test

A one-way between subjects ANOVA was conducted to compare the overall effect of gross receipts on films with violent content, sexual content, both violent and sexual content, and other content. There was a significant main effect of the content of films on gross receipts at the $p < .05$ level for the four conditions, $[F(3) = 14.98, p = .000]$. Because a statistically significant result was found in this one-way test, a Tukey post hoc test was also selected to compare each of the conditions to one another.

Post-Hoc Test

H₁ stated that MPAA films with ratings containing violent content have produced higher average box-office receipts from 2004 to 2014 compared to films containing sexual or other content. Post hoc comparisons using the Tukey HSD test indicated that there was a significant difference between films with violent content and films with sexual content. There was also a significant difference between films with violent content and films with both violent and sexual content. However, there was not a significant difference between films with violent content and films with other content, as the significance level was $p = .463$. Even so, the mean gross for films with violent content was higher than the mean gross for the other content categories. Therefore, H₁ was partially supported. Films with violent content generated a higher mean gross.

H₂ stated that with the exception of films rated as violent, MPAA films with ratings containing sexual content have produced higher average box-office receipts from 2004 to 2014 compared to films containing other content. Post hoc comparisons using the Tukey HSD test indicated that there was not a significant difference between films with sexual content and films with both violence and sex. There was a significant difference between films with sexual content and films with other content. The mean gross for films with sexual content was less than films with both violence and sex. The mean gross for films with sexual content was also less than films with other content. While significant, H₂ was not supported in the direction predicted.

H₃ stated that MPAA films with ratings containing both violent and sexual content have produced the highest average box-office receipts from 2004 to 2014 of all rated films. Post hoc comparisons using the Tukey HSD test indicated that there was a significant difference between films with both sex and violence and films with violent

content. There was also a significant difference between films with both sex and violence and films with other content. However, there was not a significant difference between films with violence and sex and films with sexual content, as the significance level was $p = .527$. The mean gross for films with both violence and sex was higher than films with sexual content, but it was lower than films with violent content. The mean gross for films with both violence and sex was also lower than and films with other content. Therefore, H_3 was only partially supported. Taken together, these results suggest that some cases of violent and sexual content have produced higher-average box-office receipts, while in other cases they have not.

CHAPTER 5- CONCLUSION

This chapter will discuss the results of the study. The first part will be an interpretation of the results, including possible reasons for the outcome. The second part of this chapter will discuss what is still unknown about this topic. The third section will examine the strengths found in the current study, and the fourth section will examine the weaknesses. Finally, the last part of this conclusion will discuss possibilities for future research, including recommendations for how future researchers may influence changes to the current MPAA rating system.

Interpretation of Results

The purpose of this study was to examine the economic impact of the film rating system on the types of films made in the last ten years. For this study, "economic impact" referred to the box-office revenues of films. However, the outcome of the results was different than what was expected. Although evidence shows that violence prevails at the box-office, none of the hypotheses were fully supported. The purpose of the hypotheses was to demonstrate the economic impact of the rating system, by proving that films with violence and sex have produced higher-grossing box-office numbers than films with other content. Even though the hypotheses were not fully supported, the box-office numbers obtained from *The Numbers* database indicated that many films with violent and sexual content still produced remarkable gross revenues. The following will interpret the outcome and discuss possible explanations.

A reason for the outcome is that the measures used for the MPAA classifications lacked sensitivity, particularly for films with a PG-13 or R rating. Although the coding

that was used was specific to the study, the descriptors for the ratings were broad, due to the wide variety of standardized adjectives that were used. For example, *Inglourious Basterds* (2009) is rated R for "strong graphic violence, language and brief sexuality", while *Taken* (2009) is rated PG-13 for "intense sequences of violence, disturbing thematic material, sexual content, some drug references and language" (The Numbers, 2015). Although the descriptors influenced the coding procedure, the results still suggest that the rating system itself is the issue, rather than the way the sample was coded. In other words, these examples indicate that violence and sex are a major part of the film industry, and that the current rating system may not accurately reflect what is being shown in recent films.

Despite the shortcomings of the study, the results say a lot about the current state of the rating system, especially about current films with a PG-13 rating. Teenagers thirteen and over are able to see these films unaccompanied, regardless of the content (Motion Picture Association of America, n.d.). As a result, the MPAA now appears to skew the rating process in order to draw in the largest possible audiences. Films such as *The Hunger Games: Catching Fire* (PG-13, 2013) are often measured by their popularity regardless of content.

Another observation about the results concerns the films themselves. The last ten years have seen major changes to the process of filmmaking. Improvements made to technology and computer-generated effects have made it possible for films like *Avatar* (2009) to push the boundaries of filmmaking. As a result, films are able to depict certain scenes and images much more easily than before. This means that new technology allows films to get away with more scenes of detailed and sometimes graphic violence than was

previously possible. Examples of this kind of technology are often found in epic fantasy films such as *The Hobbit: An Unexpected Journey* (2012), which is rated PG-13 for "extended sequences of intense fantasy action violence, and frightening images" (The Numbers, 2015).

However, the MPAA rating system has not reflected the changes made to film technology and the evolution of film content. Considering that no changes have been made to the rating system since 1990, it can be said that it is behind the times while films continue to evolve. In other words, the way films are made has changed, but the MPAA rating system is now outdated. This imbalance makes the rating system unsuitable for the more recent films.

Ratings Creep

Although the box-office numbers in the results did not show much change in the level of violence and sex in films, there is still evidence to suggest that this type of content has been allowed to "creep" into the film ratings. Recall from Chapter 2 that the term "ratings creep" refers to "the belief that various types of adult content escalate in films with the same rating over time" (Leone and Barowski, 2011, p. 53). This concept was tested to find any indication that changes allowed content to creep into the ratings of the film samples. Specifically, a cross tabulation between MPAA ratings and the film content variable was generated, creating a four-by-four matrix.

Although the box-office results did not produce the expected outcome, the crosstabs that were run showed changes to the MPAA ratings over the ten year period. These crosstabs were used to examine whether a ratings creep was identifiable in the film

sample. Although the G and PG ratings understandably did not show an increase in violent or sexual content, the PG-13 and R ratings showed higher violent and sexual content than expected. However, since violence and sex can be expected for films with the R rating, the PG-13 rating was the main focus for testing the ratings creep. These observations maintain that according to the results of the study, the type of content shown in films has changed in the last ten years. Since the PG-13 and R-rated films in the sample provided a higher content count than expected, there was a noticeable creep of the content in the ratings.

A Chi-Square test was also performed, and a relationship was found between film content and ratings. There was a significant main effect of the content of films at the $p < .05$ level for the four conditions, $\chi^2(9) = 587.82, p = .000$. Therefore, the results of the crosstabs and the Chi-Square test both indicate the presence of a ratings creep in the sample of PG-13 films. Although the hypotheses were not fully supported, these data do suggest that an increase in violence and sex have been allowed to creep into more recent films.

This information on the ratings creep can be used to further analyze the economic impact of the rating system, and how the system is often manipulated to increase box-office revenues. A possible explanation could be that the presence of a ratings creep in the sample is more economically motivated for PG-13 films. In other words, a film with more adult content may still be given a PG-13 rating in order to draw larger audiences, although that film may actually have enough violence and sexual content for an R-rating. Another possibility is that the use of restrictive ratings has the potential to act as bait. This means that films with adult content may be given R or even X ratings in order to

generate curiosity among adult viewers, only to have the original rating later appealed to a lower rating.

Furthermore, the ratings creep also indicates that CARA no longer help parents determine each film's suitability for their children. Instead, evidence of a ratings creep suggests that CARA's process of assigning of ratings has become increasingly skewed so that it is inconsistent. A possible reason for this change is that CARA has not evolved along with the types of films that are being made, so that they lack the means of assigning ratings to films that accurately reflect their content. Regardless of the reasoning, the ratings creep issue suggests that parents can no longer rely on ratings assigned by CARA to determine the suitability of a film's content, indicating that the ratings assigned to recent films has not accurately informed the public about the content of those films.

However, the MPAA claims that the guidelines used for the CARA rating scale are not fixed, but that they are designed to reflect the evolution of film content (Marich, 2013, p. 271). As a result, it is argued that the ratings creep is a moving standard that evolves as society does. The ratings creep has also "resulted in more violence in films rated PG and PG-13" (Marich, 2013, p. 271). Furthermore, it is argued that the level of violence in PG-13 rated movies has "increased over time, blurring the line between PG-13 and R-rated violent content"(Marich, 2013, p. 271). The dilemma CARA faces is being viewed as too loose with the ratings by trying to evolve, or being too rigid by not evolving enough. Therefore, parents should not use their ratings as the only criteria for choosing films for their children in order to avoid confusion.

What is Still Unknown From the Study

Despite the information found in the research, it is still unclear from this study whether films with violent or sexual content would make them more likely to receive a particular rating. If this was the case, then the data would suggest that some of the rating criteria should be modified. This study also did not test whether the MPAA ratings of films are a factor in determining the viewer's likelihood of attendance. Since the age groups of movie-goers were not included in the sample of films for this study, it is difficult to determine which types of films were most popular with different age groups. Although this was not the focus of this study, it would still be interesting to see if teenagers are seeing more violent and sexual films, and by doing so influencing the ratings assigned to those films.

Strengths of the Study

One strong aspect of this study was the fact that the information needed was thorough and easily accessible. *The Numbers* database used for compiling the film sample provided enough information about each of the films so that much of it was used for the measures in the study; including the ratings classification, box-office receipts, and year of release. Furthermore, the information from the database was easily extracted and compiled into a dataset, making the process of collecting and organizing the information extremely convenient. Overall, this database was extremely useful in conducting this research.

Weaknesses of the Study

Despite the strengths of the study, there were also some weaknesses found. One issue encountered in the study was the fact that the results did not provide the outcome

expected. This is due to the fact that the hypotheses were only partially supported, and only some of the content provided a significant difference. Even so, this does not mean that the results should be seen as a setback. The information provided still said a lot about the type of films that have been made in the last ten years.

As mentioned in Chapter 3, another issue was the fact that no clear and distinct theory was found in the literature review to help shape a clear theory for this study. To address this issue however, more attention was given to the method and measures of this study, in place of a theory. This research included measures such as MPAA ratings, violence, and sexual content. The genre variable was also useful because it indicated which genres of films were the most frequent in the sample. Despite the lack of theory, the literature review still provided perspective about the relationship between MPAA ratings and box-office revenues, allowing for this study to further examine the factors influencing box-office earnings of films.

Future Research

The results of the study indicate that the film industry needs to implement a more updated and efficient rating system, because results indicate that the current system of assigning movie ratings is inconsistent. However, future researchers should be the ones to conduct further studies on films to determine how current films should be rated. The new rating system should also be created without any input from the film industry to avoid the risk of the new system being economically influenced. In other words, future researchers with an interest in the film industry would be best suited to lead the process of making

changes to the MPAA. More in-depth studies would be able to further determine how films should be labeled.

Recommendations for Future Research

There are many ways in which future research can be conducted in order to influence changes to the MPAA rating system. First, initial research should begin with data such as those in this study in order to examine the levels of content in each of the film ratings. An issue with this study was the different levels of violence, ranging from graphic violence to comic violence. However, these different levels of violence were coded the same for the purposes of this study. A future study could refine this research and separate the different levels of violence, in order to see if there is an inconsistency in the ratings classifications. For example, a future study could compare films such as *Scary Movie 4* (PG-13, 2006), which included some comic violence, and *Casino Royale* (PG-13, 2006), which included intense sequences of violent action (The Numbers, 2015). Given the difference between these descriptors, a research question could ask whether films such as these should receive the same rating.

A second possibility for future studies could influence a more refined rating system that would solve the ratings creep problem. This would require research to scrutinize the content seen in individual ratings categories and the descriptors. These descriptors should then be refined in order to give the most accurate description of the content in the film. In addition, the age guidelines should be updated for the individual rating classifications, because the ratings creep suggests that younger audiences are being exposed to more adult content in PG-13 films. Since these ratings have not been changed

since 1990, new guidelines should be based on the types of films kids are watching today. This would require studies on which films are most popular among different age groups.

Future Research from the Literature Review

Some options for future research on the MPAA rating system can also be found in literature review. For example, the overall information and data presented in the literature review can allow future research to use a combination of movie-level data and viewer-level data to further study movie ratings, movie revenues, and viewer satisfaction.

A second option could include more studies to test the ratings creep theory. Although this study briefly examined the influence of the ratings creep, more in-depth analyses of its effect on current films would make an interesting and informative research topic. This is because the current ratings do not provide adequate information about the depiction of violence and sex in films, making the criteria for rating movies less stringent over time. Studies on the ratings creep would allow future researchers to create a more efficient and updated rating system that would more accurately reflect the type of films being made.

Final Comments

Overall, this was an extremely interesting and informative research topic. It provided a lot of information about the current state of the MPAA rating system, which can be used to measure its economic impact on future films. The fact that this was an econometric study was helpful in that the information and research could be immediately accessed. *The Numbers* database was particularly helpful by providing all of the

necessary information in one place. This database would most likely not have been found without the literature review.

Although the results did not fully support the hypotheses as expected, this study can still be considered successful because of the information it provided. The results indicated that sexual and violent content do have an economic impact on current films, and that the rating system has not evolved with these films. Furthermore, the study also indicated that controversial content has been allowed to creep into PG-13 films, which is an issue that can be further addressed. With this information, more in-depth studies can be conducted to influence changes to the MPAA.

This study will hopefully influence a renewed interest in the film industry and the MPAA. Since films are such a major part of our culture, it is important to continuously study both the positive and negative influences that it has on our society. Now that researchers can examine the violent and sexual content in recent films, further steps can be made to evaluate films and improve the rating system. These changes could also help significantly improve the movie-going experience for all different age-groups and audiences, making it more enjoyable for all involved.

REFERENCES

- Austin, B. A. (1980). The influence of the MPAA's film-rating system on motion picture attendance: A pilot study. *The Journal of Psychology, 106*(1), 91-99.
- Austin, B. A., Nicolich, M. J., & Simonet, T. (1981). M. P. A. A. ratings and the box office: Some tantalizing statistics. *Film Quarterly, 35*(2), 28-30.
- Basuroy, S., Chatterjee, S., & Ravid, S. A. (2003). How critical are critical reviews? The box office effects of film critics, star power, and budgets. *Journal of Marketing, 67*(4), 103-117.
- Becker, S. L. (1983). *Discovering mass communication*. Glenview, Ill.: Scott, Foresman.
- Cantor, J. (1998). Ratings for program content: The role of research findings. *Annals of the American Academy of Political and Social Science, 557*(1), 54-69.
- Filmbug. (n.d.). Effects of ratings. Retrieved from <http://www.filmbug.com/dictionary/mpaa-ratings.php>
- Film Rating System (Cara). (n.d.). The evolution of the film rating system. Retrieved from <http://filmratings.com/why.html>
- Film Reference. (n.d.). The television age. Retrieved from <http://www.filmreference.com/encyclopedia/Romantic-Comedy-Yugoslavia/Technology-THE-TELEVISION-AGE.html>
- Friedman, J. M. (1973). The motion picture rating system of 1968: A constitutional analysis of self-regulation by the film industry. *Columbia Law Review, 185*-240.

- Hamilton, D. P. (1999). Hollywood's silent partner: A history of the Motion Picture Association of America movie rating system (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 9941633)
- Jenkins, L., Webb, T., Browne, N., Afifi, A. A., & Kraus, J. (2005). An evaluation of the Motion Picture Association of America's treatment of violence in PG-, PG-13--, and R-rated films. *Pediatrics*, *115*(5), e512-e517.
- Leone, R. (2002). Contemplating ratings: An examination of what the MPAA considers “too far for R” and why. *Journal of Communication*, *52*(4), 938-954.
- Leone, R., & Barowski, L. (2011). MPAA ratings creep: A longitudinal analysis of the PG-13 rating category in US movies. *Journal of Children and Media*, *5*(1), 53-68.
- Longacre, M. R., Adachi-Mejia, A. M., Titus-Ernstoff, L., Gibson, J. J., Beach, M. L., & Dalton, M. A. (2009). Parental attitudes about cigarette smoking and alcohol use in the Motion Picture Association of America rating system. *Archives of pediatrics & adolescent medicine*, *163*(3), 218.
- Marich, R. (2013). *Marketing to Moviegoers a Handbook of Strategies and Tactics*, Third Edition. Carbondale: Southern Illinois University Press.
- Moon, S., Bergey, P., & Iacobucci, D. (2010). Dynamic effects among movie ratings, movie revenues, and viewer satisfaction. *Journal of Marketing*, *74*(1), 108-121.
- Motion Picture Association of America. (2009). Changes in the rating system. Retrieved from

http://web.archive.org/web/20090628032645/http://www.mpa.org/Ratings_hstry_Rvsns.asp

Motion Picture Association of America. (2010). Classification and rating rules. Retrieved from http://filmratings.com/downloads/rating_rules.pdf

Motion Picture Association of America. (n.d.). Film ratings. Retrieved from <http://www.mpa.org/film-ratings/>

Motion Picture Association of America. (n.d.). Our story. Retrieved from <http://www.mpa.org/our-story/>

Motion Picture Association of America. (2009). Ratings history. Retrieved from http://web.archive.org/web/20090628012326/http://www.mpa.org/Ratings_history1.asp

Motion Picture Association of America. (n.d.). What each rating means. Retrieved from <http://www.mpa.org/ratings/what-each-rating-means>

The Numbers. (2015). Retrieved from <http://www.the-numbers.com/>

Palsson, C., Price, J., & Shores, J. (2013). Ratings and revenues: Evidence from movie ratings. *Contemporary Economic Policy*, 31(1), 13-21.

Ravid, S.A. & Basuroy, S. (2004). Managerial objectives, the R-rating puzzle, and the production of violent films. *The Journal of Business*, 77(2), S155-S192.

Thompson, K. M., & Yokota, F. (2004). Violence, sex, and profanity in films: Correlation of movie ratings with content. *Medscape General Medicine*, 6(3).

Tickle, J. J., Beach, M. L., & Dalton, M. A. (2009). Tobacco, alcohol, and other risk behaviors in film: How well do MPAA ratings distinguish content? *Journal Of Health Communication, 14*(8), 756-767.

Williamson, P. A. (2007). Ratings and their reasons: An investigation of the efficiency, application and unintended consequences of the motion picture association of America's film rating system (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3282226)

CURRICULUM VITAE

Graduate College
University of Nevada, Las Vegas

Kaitlin Peck

Degrees:

Bachelor of Arts, History (Emphasis in United States History), 2013
University of Nevada, Las Vegas

Thesis Title: The Economic Impact of the MPAA Film Rating System on Types of Films
Made from 2004-2014

Thesis Committee:

Chairperson, Paul Traudt, Ph.D.
Committee Member, Stephen Bates, JD
Committee Member, Gary Larson, Ph.D.
Graduate Faculty Representative, Cian McMahon, Ph.D.