Abstract

The following report is a proposal for a media effects study concerning young children’s recollections of and perceptions about *The Lego Movie* (2014). The purpose of the study is to determine which aspects of an animated film’s complicated storyline young children will remember best, along with which characters and types of scenes they acknowledge most frequently. Possible correlations between the variables of age, gender, and amount of times the film has been viewed will also be investigated. Parents of approximately 150 preschool and kindergarten children from six different classrooms will first be surveyed to obtain general information about each child, then the children will be interviewed individually in order to disclose their personal recollections of and opinions about the film. A literature review containing information about young children’s thought processes and media is provided, along with the proper framework for a comprehensive study on the topic to be completed in the future.
Table of Contents

Literature Review........................................................................................................3
  Research Questions.................................................................................................9
  Hypotheses...........................................................................................................15
Methods.....................................................................................................................17
Expected Results.......................................................................................................21
Discussion................................................................................................................22
  Implications..........................................................................................................22
  Limitations...........................................................................................................23
  Future Research...................................................................................................25
References...............................................................................................................27
Appendix A...............................................................................................................32
Appendix B...............................................................................................................34
Literature Review

Media presence in 2014 is virtually inescapable, especially for the generation of young children growing up today. Modern-day children don’t know a world without screens, mobile devices, videogames, Internet, or the ability of instant gratification; endless entertainment options are immediately available to them with a single “click.” However, despite the continual and rapid advances in technology, the majority of children’s media entertainment still comes from television and movies (Common Sense Media, 2013, p. 9). Both the positive and negative effects of children’s consumption of television programs have been thoroughly considered by researchers, though there aren’t nearly as many studies explicitly regarding children and movies (Padilla-Walker, Coyne, Fraser, & Stockdale, 2013, p. 393). Conducting more studies on the various effects of movies on children will surely provide useful information for the field of media effects research, especially as the quantity of technological gadgets available for watching such screen media continues to increase.

According to Common Sense Media’s (2013) “Zero to Eight” study, “Among families with children age 8 and under, there has been a five-fold increase in ownership of tablet devices such as iPads, from 8% of all families in 2011 to 40% in 2013. The percent of children with access to some type of ‘smart’ mobile device at home (e.g., smartphone, tablet) has jumped from half (52%) to three-quarters (75%) of all children in just two years” (p. 9). Despite these statistics, television is still the predominant mode of young children’s media consumption, and, “…of the roughly two hours (1:55) average screen media use each day, half (50%) is spent watching television on a TV set (:57). This compares to 19% spent watching DVDs, 13% using mobile devices, 10% using
computers, and 9% using video game players” (p. 10). With television shows and movies making up most of children’s media consumption, even with so many other options available, it is clear that continued research on the potential effects of this type of screen media should be made a priority.

Though the Common Sense Media study found that only 19% of children’s average daily screen media time is spent watching DVDs, Thorn (2008) makes the important point that “videos and DVDs are a staple in the lives of preschoolers” (p. 3). I believe that overall, preschool and kindergarten children’s actual time spent watching movies makes up a larger percentage of their media time than what has been reported by Common Sense Media. DVDs on home television sets are not the only mode of movie presentation; movies are also played on live (and recorded) television, in theaters, at school/friend’s houses, and available to stream on tablets. Because of the significant increase in tablet usage with simple, “on demand” streaming abilities, children’s amount of time spent watching movies could significantly increase in the near future, which is another reason why further research on children’s movies should be considered.

The American Academy of Pediatrics (2013) acknowledges how dominant of a force media is in children’s lives, expressing their longtime concerns about “the amount of time that children and teenagers spend with media and about some of the content they view” (p. 959). Interestingly enough, despite major concerns for the welfare of children, “…compared to other areas in health and education, research on effects of media use on very young children has not been a consistent funding priority for the Federal government, foundations, or academic institutions” (Kaiser Family Foundation, 2005, p. 1). Thorn (2008) describes the exigency for media effects research perfectly, stating that,
“The literature on how and what young children learn from media suggests important
directions for future content developers, policy makers, parents and caregivers, but the
research needs to be contextualized in the broader media environment to be useful as we
move into the future” (p. 21). Determining which aspects of movies young children
understand and learn from, whether they result in positive or negative attributes, will
provide an expansive range of useful information for “the broader media environment.”

The majority of past research on children’s screen media has focused on either the
positive effects of educational programs or the negative effects of violent content (Kaiser
Family Foundation, 2005). Though many of these results can be generalized to apply to
other forms of screen media, there is still an inherent need to specifically examine the
content of and reactions about children’s entertainment films. The film and entertainment
industries are integral aspects of modern American culture, and they show no sign of
decline. Research shows that films watched during childhood have long-lasting effects on
a person (Young, 2000; Sun & Scharrer, 2004), and what a child retains from these films
could have interesting implications for their future.

Sun and Scharrer (2004) conducted a study on college students’ reactions to
Disney’s *The Little Mermaid*, a film that these students watched growing up. Despite
becoming thoroughly educated about the various problematic aspects it contained,
students fully resisted any negative criticism of the film, defending it with various
justifications (p. 54). Even if a popular film contains inappropriate or problematic content
for children, will these children grow up thinking that what they have witnessed is
acceptable? What are the future consequences movies could have on children? How
much can children actually understand? What type of movie content is truly appropriate?
One of 2014’s most popular children’s films, *The Lego Movie*, is an artifact that elicits these types of questions. Warner Brothers produced the rated-PG film, which was released on February 7th, 2014. From February to September 2014, it grossed $257,760,692 domestically, and $468,060,692 worldwide, making it the fourth highest grossing film of 2014 (Box Office Mojo). According to “Rotten Tomatoes” film reviews, critics voted *The Lego Movie* the third best movie of 2014 (Rotten Tomatoes, 2014, Top Movies), coming to the consensus that, “boasting beautiful animation, a charming voice cast, laugh-a-minute gags, and a surprisingly thoughtful story, *The Lego Movie* is colorful fun for all ages” (Rotten Tomatoes, 2014, *The Lego Movie*). With such substantial box office success, it is safe to assume that much of the film’s audience was made up of children. Despite the film’s high praise and positive reviews, is *The Lego Movie* truly appropriate for young children?

With every single aspect of the film—backgrounds, action effects, and characters—made from Legos, it is indeed “colorful fun.” The film is about an “average” construction worker named Emmet who always follows the instructions and sticks to his routine. While at work one day, he accidentally finds an ancient “relic,” which was prophesized to be found by someone called “the Special” in order to save the universe from the evil Lord Business. Lord Business, also known as President Business, has a plan to destroy the Lego universe by gluing everything together. Wyldstyle, a creative “Master Builder” who was searching for the relic herself, witnesses Emmet’s find and assumes he is “the Special.” Together, they embark on a journey to save the Lego universe, even though Emmet has never heard of the prophecy, “Master Builders,” building from creativity rather than following the instructions, or anything else that Wyldstyle is talking
about. This action-packed animated film features the voices of Chris Pratt, Morgan Freeman, Will Ferrell, Liam Neeson, Elizabeth Banks, and many other popular Hollywood stars.

Because *The Lego Movie* is based on well-known toys, it specifically targets the young children who play with them regularly, along with children who have the possibility of becoming future consumers. The small, plastic, brightly colored toy bricks have been favorites of children since their creation in 1958; according to The LEGO Group’s website, Legos have been named “Toy of the Century” two separate times. With such long-lasting success, it is no wonder that Legos have evolved from being just toys to the pervasive empire they represent today; based on their original bricks, the Lego franchise now boasts multiple theme parks, video games, television shows, movies, merchandise, and more. Lego figures are essentially action figures, and according to Bainbridge (2010), “the action figure has become a point of intersection for adult pleasures and childish fantasies, structured narratives and free-ranging play, material culture and digital culture – and through this breaking down of barriers, arguably become one of the most potent (if overlooked) symbols of media convergence” (p. 839). Because Lego bricks and “action figures” have been played with by so many different generations of children, the film appeals to a broad audience: current-day children who play with the toys now, and adults who are nostalgically reminded of their own childhood.

I am a twenty-three-year-old college student, yet I felt the need to see *The Lego Movie* within the first week it had been released. Despite the fact that it is technically a children’s film, I admit that I succumbed to their brilliant marketing campaign, charmed by the idea of flawless computer-generated animation bringing my childhood toys to life.
The film was artistically appealing and amusing, but as I sat in the theater, I couldn’t help but feel like the storyline was far too complicated for the children in the audience to understand. In addition to the overall narrative, there were some potential implications with each of the main characters, complete with an unsettling love triangle and several scenes conveying blatant patriarchal norms. I had assumed that children would blissfully and unwittingly overlook these disadvantageous aspects of the film, but unfortunately, I was wrong.

While babysitting 3-year-old and 6-year-old sisters, (let’s call them Drew and Livia, consecutively), I noticed that Drew was singing quietly under her breath. Over and over, she repeated to herself, “Everything is awesome! Everything is cool when you’re part of a team…” I immediately recognized the tune as the theme song from *The Lego Movie*; when I asked Drew if she had seen the movie before, she answered by excitedly declaring that it was her “favorite movie ever.” She shared that her favorite character was “the girl Lego—Wyldstyle,” and described her by saying, “she has cool colors in her hair, and she’s Emmet’s girlfriend.” Livia chimed in, asserting that Wyldstyle was Batman’s girlfriend, not Emmet’s. The fact that these girls were debating the love life of a Lego is disconcerting, especially if this was their main takeaway from the film.

The “love triangle” is indeed confusing, with Batman being Wyldstyle’s “official” boyfriend, while Emmet and Wyldstyle blatantly had feelings for each other. *The Lego Movie* website even acknowledges it within Wyldstyle’s character biography, claiming that “since she believes Emmet is the “Special” from The Prophecy who’s destined to save Bricksburg, sparks have been flying between them, in spite of herself… and her current boyfriend” (Warner Bros. Pictures, 2013).
Despite this strange aspect of the film, the story has many other positive messages that the children could have remembered, such as the importance of embracing your own creativity rather than following the leader. Teamwork is another major aspect that is acknowledged in the film, reinforced by the line in the theme song that claims, “everything is cool when you’re part of a team.” These are the simple messages within the film, however, the rather intricate storyline also touches on capitalism, consumerism, oppression, uniformity, identity, gender norms, and adult relationships—topics that are socially significant, but are geared toward older audiences who can identify and appreciate satire. As an adult and a communication scholar, I am able to understand all of the various themes and messages within the film, while younger viewers are most likely not. Baker and Raney (2007) say that, “Although many adults contend that cartoons are obviously fantastical, unrealistic, and therefore harmless to children, the research evidence is to the contrary” (p. 25). Regardless of the fact that many adults chose to view the film, *The Lego Movie* is still intended for children; the story may have been fictional and “fantastical,” but this does not mean that children dismiss the content as so. With so many things going on in one supposed “children’s” film, which aspects of the complex storyline did children viewers truly absorb?

The goal of this proposed study is to determine which parts of a complicated storyline children remember best, and to see if there is a correlation between what they remember and the characters they identify as their “favorite.” Whether or not the gender of the child will influence which character or scenes they choose to acknowledge will also be investigated. The official research questions are as follows:

**(RQ1)** Which aspects of a multidimensional children’s film will preschool and
(RQ2) Which characters from the film will children identify with/claim are their favorites?

(RQ3) Is there a correlation between RQ1 and RQ2?

(RQ4) Are there differences between the types of content and characters acknowledged depending on the child’s gender?

The study will be working under the assumption that children do learn from screen media, since it has been thoroughly proven by past studies. Heintz and Wartella (2012) state that, “A large body of research suggests that young children do learn from watching and interacting with screen media and that what children learn depends on the content presented” (p. 24). However, the type of content presented is not the only variable when it comes to what children learn and remember after watching screen media.

“A review of the research into young children’s learning from television indicates that the likelihood that children will learn from screen media is influenced by their developing social relationships with on-screen characters, as much as by their developing perception of the screen and their symbolic understanding and comprehension of information presented on screen” (Richert, Robb, & Smith, 2011, p. 82). Before addressing children’s development of relationships with characters, children’s cognitive abilities must be addressed; children’s brain development and subsequent stages of cognitive development play large roles in how much a child is able to understand.

According to Thorn (2008), “At approximately 24 months of age the dynamic brain cell process of infancy begins to slow and the child's exploration of the environment rises. In this stage television content can provide substantial educational
enrichment but also negatively affect behavior” (p. 14). After 24 months of age, children
enter the “preoperational stage of development” until they are about seven years old.
According to the widely accepted 1950s research by Piaget, children in this stage exhibit
very specific traits: they have difficulty seeing things from other people’s perspectives,
they have difficulty distinguishing between fantasy and reality, and they pay the most
attention to the perceptual attributes of their surroundings (Wilson, 2009, p. 471-472).

Specifically regarding screen media, typically developing children in this stage
tend to focus on “salient formal features in a program, such as animation, sound effects,
Being attracted to such features is called perceptual boundedness (Springer, 2001), and
“the consensus has been that children often make erroneous or unsophisticated
judgments, and represent superficial concepts and beliefs, as a result of their undue
attention to immediately present perceptual detail” (Springer, p. 691). Springer explains
that this can happen when “…a particular competency is immature or altogether lacking,
whether that competency happens to be operations, symbolic representation, analogical
reasoning skills, naive theories, domain-specific knowledge networks, or strategies” (p.
691). Young children in the preoperational stage simply can’t process materials or cues in
the same way that a fully developed adult can.

In general, “research into children’s comprehension of the moral lessons in
television shows would suggest that preschool- and kindergarten-aged children generally
do not learn the complicated, thematic elements that program designers embed into their
stories” ((Richert, Robb, & Smith, 2011, p. 92). This is particularly problematic when
considering the types of content young children are exposed to in movies, since Mares
(2006) suggests that even positive aspects of a storyline (like prosocial themes) are obvious to adults and older children, but “…may pass by young viewers wholly unnoticed” (p. 238).

While children in the preoperational stage are “perceptually bound” to physical attributes of a film, it has also been determined that “repetition may help young viewers overcome the initial effects of striking physical appearance, enabling them to take other features, such as a character’s personality and behavior, into account” (Mares, p. 238). Heintz and Wartella (2012) explain that, “Repetition—literal repetition—viewing the same content over and over again—enhances comprehension and learning. With very young children, repetition does not decrease attentiveness, and has been shown to increase audience participation” (p. 23). Though it is not a specific research question for the proposed study, the frequency of children’s viewings of *The Lego Movie* will be taken into consideration when assessing the content that children remember and address. If a child is particularly knowledgeable about certain aspects of the storyline, it could be related to the amount of times the film has been viewed.

Though the girls I babysat from the example are in no any way involved in this study—they solely contributed to the inspiration—it is still possible to make broad generalizations about their comments based on the previous research. The notion of “perceptual boundedness” could be why 3-year-old Drew enjoyed the film so much; it was comprised of bright, primary colors, loud sounds, and action-packed scenes that weren’t entirely scary because they were made from toys. It could also explain why she made a comment about the character Wyldstyle’s hair, since it contained noticeably bright colors. Another explanation for Drew’s observations could be that children learn
better from visual cues rather than auditory information (Rolandelli, 1989), “however, part of the difficulty lies in the fact that the typical language of television is linguistically difficult and incomprehensible for young children thereby increasing their reliance on the visual modality to obtain plot information” (Rolandelli, p. 78).

Drew did mention the fact that Wyldstyle had a boyfriend, which could imply that she was somewhat able to follow the storyline; however, the amount of times she has viewed the film is unknown. Regardless, Drew’s knowledge would suggest that even at her very young age, she wasn’t completely distracted by the salient visual and auditory attributes of the film. That being said, many scenes between Emmet and Wyldstyle, who Drew assumed to be dating, provided visual cues to the audience that they were indeed interested in each other; altered lighting, “romantic” music, and prolonged gazes usually took place during Emmet and Wyldstyle’s interactions. Completing a content analysis regarding these visual signals could be helpful in order to determine a more accurate representation of which aspects of the film young children truly pay the most attention to and why.

Another possible reason that Drew brought up Wyldstyle’s love life could be because she appointed Wyldstyle as her “favorite character.” When children recognize and like a character, they pay closer attention to the subject matter, and Rimal, Figueroa and Storey (2013) say that, “even 3-year-olds have high levels of cartoon recognition on the basis of media consumption and that recognition of characters is associated with liking the product category” (p. 596). “Liking” is also related to identification, and children identify with characters most like them (Rosaen & Dibble, 2008). Considering Wyldstyle is the only main female character with a speaking role, she is the most similar
character to Drew. When children identify with someone, they tend to imitate their actions (Bandura & Huston, 1961), which could have potentially negative consequences depending on the actions in consideration. That being said, identification with a character leads to increased emotional investment with the program, which in turn can lead to increased learning (Richert, Robb, & Smith, 2011). Assuming a film portrays positive behaviors, actions, and messages, learning through character identification can be a good thing.

Since Wyldstyle is the main female presence in the film, it is likely that young girls will identify with her and claim that she is their “favorite character.” Because of this, girls may remember more about the scenes and parts of the storyline involving Wyldstyle than any other character. For the same reason, young boys will most likely identify with one of the male Lego characters, though there are more male Lego figures than female Lego figures to choose from. In addition to the boys identifying with male figures simply because they are male, the level of action associated with each character will most likely affect the boys’ attentiveness and attachment. Studies show that violent content appeals more to boys than girls (Weaver, Jensen, Martins, Hurley, & Wilson, 2011), and many of the scenes in The Lego Movie contain somewhat violent action.

Yokota and Thompson (2000) define violence on screen as “intentional acts (eg, to cause harm, to coerce, or for fun) where the aggressor makes some physical contact that has potential to inflict injury or harm” (p. 2716). The true amount of violence in The Lego Movie can only be quantified by a content analysis, but it is clear that many of the scenes have “violent” intent when fighting against “the bad guys.” It has been proven that viewers widely accept violence as positive when the “good guy” has a good reason to be
WHAT YOUNG CHILDREN RETAIN FROM COMPLEX ANIMATED FILMS

Doing a bad thing (Krakowiak & Oliver, 2012), which could further increase young boys’ liking for one of the “good guys” who participate in the action.

Based on the extensive research on identification and media violence, I believe that the gender of the viewer will play a large part in which character is liked and which type of content is acknowledged. Because of this, the following hypotheses have been formulated:

**H1**: Girls will like Wyldstyle.

**H2**: Boys will like either Emmet or Batman.

**H3**: What children say about the content of the movie will be related to their “favorite character.”

As previously mentioned, Bandura and Huston (1961) acknowledge that when children identify with someone, they tend to imitate their actions. This is an aspect of Bandura’s social cognitive theory, which Pajares et al. (2009) summarize in terms of how it applies specifically to media effects. They explain that when people observe behavior seen in the media, they rehearse those behaviors. “For mediated content to positively affect members’ behaviors, the audience must pay attention to attractive or similar models realistically performing relevant behaviors” (Pajares et al., p. 287). In terms of children and *The Lego Movie*, their identification and association with particular characters could play a large role in what they learn and remember. Whether or not they will rehearse the behaviors they learn from these characters is yet to be determined, but social cognitive theory could help explain why it is children identify with characters on screen.
The Lego Movie is clearly intended for entertainment purposes; it does not claim to be an educational learning film. However, in an interview with the Los Angeles Times, the film’s writers and producers Phil Lord and Christopher Miller claim that the film is meant for every child (and adult) to embrace their creativity (LA Times, 2014). “We wanted to see if we could make a hero's journey story where the hero was not extraordinary but extra ordinary — with no special talent whatsoever, who could be any one of us. If we could pull that off, maybe we could make a movie that empowered every person who saw it…we wanted to make a movie that made you feel more creative when you walked out than when you walked in” (LA Times, 2014). Considering that children have a hard time picking up abstract themes and following storylines, it is possible that children will not retain any of the intended positive messages. “Ultimately the effects of television must depend on the content that resides in the viewer’s memory, not the content as it resides on the television screen” (Mares, 2006, p. 216).

What truly resides in children’s memories regarding The Lego Movie is what this study will attempt to determine. There is a chance that children will only remember the specific characteristics and flaws of their “favorite character,” since identification with characters generates higher attentiveness. However, studies show that increased viewing of the content will allow for greater comprehension (Mares, 2006), which means that the children who have seen the movie multiple times may have a better understanding of the overall storyline. All variables from the parent questionnaire and interviews with children must be considered when trying to come to a consensus about children’s level of understanding. By completing this study and determining which aspects of the film
young children are able to acknowledge, valuable insight will be provided on children’s cognitions and possible influences when it comes to retention of a complicated storyline.

Methods

For this study, a convenience sample containing students from three preschool classes and three kindergarten classes will be used. Assuming all of the parents and guardians consent, this will allow for a sample size of approximately 150 students ranging from ages two to six. Before any children are personally addressed, a brief 2-paged questionnaire will be distributed to parents and guardians in order to obtain general information about each child (see Appendix A). This questionnaire has fill in the blank, yes or no, and multiple choice questions regarding their child’s movie-watching habits, focusing on *The Lego Movie* in particular. Though there are many variables which could potentially be of significance, the main variables that will be determined via the questionnaires are gender, age, whether or not the child watches movies, whether or not they have seen *The Lego Movie*, how many times the child has seen *The Lego Movie*, and adults’ perceptions of the film. The questionnaire also doubles as a consent form, obtaining parent/guardian signatures to represent informed approval of their child’s participation in the study.

Once the questionnaires are acquired, they will need to be coded. The answers to the open-ended, “fill in the blank” questions will need to be put into categories based on the types of responses provided. Though only one researcher is necessary to conduct this study, an additional researcher would be helpful during the coding process. One researcher should code the questionnaires, while the other codes the children’s responses in order to maintain consistency.
Following the completion of the questionnaires, short, one-on-one interviews will be held with each child, separately from the rest of the class. The purpose of holding individual interviews rather than focus groups is to prevent groupthink amongst the children. Even if two researchers end up helping with the coding process, only one researcher should conduct the interviews, and it should be the same researcher throughout the entire study in order to maintain consistency. Each child will be asked the following questions, in sequential order (See Appendix B):

1.) Have you seen *The Lego Movie*?

2.) What was the movie about?

3.) Did you like the movie?

4.) What was your favorite part?

5.) Who is your favorite character?

6.) Can you tell me about him/her?

It is crucial that these questions be asked in order. The question about the child’s “favorite character” is asked at the end in order to prevent any skewed responses; what the child says about questions 2, 3, and 4 is predicted to be based on the answer to question 5, and asking about their favorite character first may invalidate the results. These questions are worded as objectively as possible in order to prevent the child from being influenced by the wording of the questions in any way. It is possible that some of these questions could be answered within previous questions, though all six questions should be asked regardless of the previous answers given. During the interview, the conversation will be recorded, and the researcher will precisely transcribe the information
once each of the interviews has been completed. The content will then be coded based on the children’s responses.

Before the interviews or coding take place, one of two scenarios must be chosen; both options have their pros and cons, and the researcher should decide which option is most fitting when it becomes time to complete this stage of the study.

**Scenario A**

Scenario A will hold interviews with children who have already seen the movie. The most recent time each child in this category has seen the film will be recorded on their parent questionnaire. Children who have not seen the film recently may be at a slight disadvantage, and may have more trouble remembering details about the film compared to a child who has recently watched it. However, asking questions about the movie without having seen it immediately prior to the interview will allow for children’s true recollections of the film, which is the goal of this study.

**Scenario B**

Rather than asking children questions about *The Lego Movie* “randomly” and out of the blue, students (who were given parent approval) will watch the movie together in a “lab” environment. Even children who have not yet seen the movie (but were given permission to) would have the opportunity to do so. Each of the six classes of students involved in the study would watch the film in their corresponding classrooms. Rimal, Figueroa, and Storey (2013) find that children learn best from screen media when watching in a lab environment and talking about it after, and that “measuring children’s exposure to media content in non–laboratory-based settings is a challenging task” (p. 595). This is mainly because there have been reported inconsistencies with parents’
reports of children’s media exposure (Rimal, Figueroa, & Storey, 2013). By watching the film in the lab environment, researchers have definitive proof that the children being interviewed have seen the film at least once.

By answering questions immediately after the film, children will have a better chance of remembering and understanding the content. However, one of the goals of the study is to determine how much of the film sticks with children, and what aspects they are able to remember long term. It is possible that Scenario B will allow for more detailed responses from children, but Scenario A may provide more insight on children’s honest recollections.

More to consider

Research shows that providing pictures of scenes from the movie or pictures of characters during the interview may spark livelier conversation with children rather than just asking questions (Anderson & Balandin, 2011). Though showing pictures to the children before the questions are asked may skew their responses, perhaps showing children a picture of the character they assert is their “favorite” will allow for a more detailed explanation about them and their role in the story. It is something that should be considered.

Angell (2013) explains that allowing a child to draw during an interview may help them express what is on their mind, which may help them explain what they already know. Though drawing during the interview is just another variable to consider, it may be worth asking each child to draw their “favorite part” of the movie to see what they come up with, and so they have a concrete visual artifact to complement their verbal responses.
Expected Results

(RQ1) Which aspects of a multidimensional children’s film will preschool and kindergarten children focus on? It is expected that children ages 2-7 in the preoperational stage will focus most on the salient formal features of the film, but when asked about the film, they will acknowledge parts of the film that contain their “favorite character.”

(RQ2) Which characters from the film will children identify with/claim are their favorites? It is expected that children will choose “favorite characters” that are the most similar to them, particularly involving gender.

(RQ3) Is there a correlation between RQ1 and RQ2? It is believed that RQ2 will influence RQ1.

(RQ4) Are there differences between the types of content and characters acknowledged depending on the child’s gender? The predicted answer is yes; girls will focus on Wyldstyle and her relationship status, while boys will focus on one of the main male Lego characters and action scenes.

Based on the research questions, is expected that all three hypotheses will be supported:

H1: Girls will like Wyldstyle.

H2: Boys will like either Emmet or Batman.

H3: What children say about the content of the movie will be related to their “favorite character.”
Discussion

Implications

When looking at *The Lego Movie* from a critical perspective, it elicits many questions about its appropriateness for children audiences, especially when it comes to some of the traits of the main characters. However, without a content analysis on the traits and behaviors of each character, these concerns cannot be accurately considered. Is the film’s content really appropriate for young children to be watching? Will attraction to characters with potentially negative qualities be detrimental to these children in the future? There is no way to tell for sure without conducting a longitudinal study, though we can make assumptions based on prior research that many films watched during childhood do have long lasting effects on a person (Richert, Robb, & Smith, 2011).

If it is indeed determined that young girls identify with Wyldstyle and young boys identify with male characters who participate in violent behavior, there could be future repercussions considering children tend to imitate what they see (Simmons, Stalsworth, & Wentzel, 1999). In addition, Aubrey & Harrison (2004) explain that many animated characters portray gender-role stereotypes, which influence children’s gender-related perceptions. They found that male stereotypical content was more prevalent than female stereotypical content, though most cartoons simply have more male than female characters (p. 125). This is something to consider when addressing the content of *The Lego Movie*; there is a chance that boys may be more affected by the film’s content than girls, due to the many male characters portraying stereotypical male properties such as aggression and the treatment of women.
The final implication is that conducting research with young children is often difficult; overall, children are not able to make the same kinds of adaptive and informed decisions that older children and adults can (Gregan-Paxton & John, 1995). Because of this, what children decide to say in the interview may not be entirely representative of what they remember or understand. However, this does not have detrimental implications for the results of the study; whatever children choose to acknowledge still has value, especially since it will be used to determine the correlation between gender, content-type, and character choice.

Limitations

The sample is a very small (N=150) convenience sample, and it is not representative of the entire population. Because the sample will come from different classrooms within the same school or school district, it is assumed that the sample will come from the same overall socioeconomic group. The parent questionnaire does not ask any questions about race or income, which are variables that have been proven to affect learning abilities and amount of access to electronic media. Creating a larger sample across various school districts and socioeconomic groups could provide important insight and allow for a more accurate representation of the population of young children.

Children in the study are assumed to be in average stages of development; the questionnaire does not take any developmental disabilities or impairments into account. There is also an assumption that English is everyone’s first language; there is a chance that children with developmental issues or language barriers are at a disadvantage, and therefore their cognitive abilities and responses should not be in the same category as other children without these disadvantages. Other personal characteristics of children that
could potentially affect responses that are not acknowledged within the study are personality, mood, and other unique or unforeseen conditions at the time of the interview. Considering one researcher will be in charge of the interviews, it may not be feasible for all 150 interviews to be completed during the same day. Therefore, there may be differences in responses based on what else children are doing at school those days, attention levels, etc.

Though the study seeks to determine “what children retain from animated children’s films with complicated storylines, it only focuses on *The Lego Movie*, and it does not acknowledge other children’s animated movies. Therefore, generalizations about other animated films based on the obtained information may not be entirely accurate.

This study does not gauge any long-term effects; it only addresses children’s initial reactions. There is no way to tell how these particular children will react in the future unless a longitudinal study is created and follow up studies are conducted over time.

Studies show that relying on parent information during a study on children can present a variety of implications and limitations. Surveying parents about children’s media use “…raises a number of problems, including the fact that parents may not be fully aware about children’s television use; data obtained from parents on behalf of their children may be biased as a result of social desirability; and the two data coming from the same source may not be independent of each other” (Rimal et al., 2006, p. 596). Meirick et al. (2009) also support the notion that parents tend to have unrealistic perceptions about their own children’s use of media due to the ideas of “social desirability” and self-
enhancement. Much of the general data about each child is based on the responses from parents and guardians, which could potentially be skewed.

**Future Research**

I have mentioned numerous times the need for a major content analysis of the film. If it is not done to help code this particular study, it should definitely be done in the future in order to give an accurate representation of behaviors and situations. This is particularly applicable to Wyldstyle, since there are various flaws regarding her character that should be examined in more detail. This is especially necessary if this study proves that most young girls admire her and claim that she is their “favorite character.” Future research should use this information as the basis for a feminist critique, acknowledging in detail the possible implications of Wyldstyle’s actions and how the other male characters treat her, particularly focusing on the strange “love triangle” that is acknowledged within the literature review.

Based on the results from the parent questionnaire, various future studies could be completed. If parents do not allow their children to watch movies, their reasoning is requested, therefore parental perceptions of screen media could be a topic of consideration. Similarly, a study comparing parents’ and children’s perspectives about *The Lego Movie* would provide interesting data regarding cognitive reasoning and storylines. Finally, the questionnaire addresses types of mediums children use most frequently to watch screen media, and a future study focusing solely on children’s entertainment movie consumption and the devices that are used could provide very useful information for content makers and researchers alike.
It is stated towards the end of the literature review that *The Lego Movie*’s creators hoped that viewers would feel creative and inspired after watching the film. A study specifically regarding creativity, teamwork, and children would be very interesting. The movie’s theme song “Everything Is Awesome” asserts that, “everything is cool when you’re part of a team” (*The Lego Movie*). Considering that children learn from televised songs (Calvert, 2001), determining whether or not the theme song inspires creativity and increases teamwork would be worth looking into.

Finally, future research based on this study could heavily dive into advertising, marketing, and persuasion, since the film is essentially a meta-commercial for Lego toys and Lego’s affiliates. Incorporating the findings from this study with how many Lego toys children own or ask for after before and after watching the movie could provide important insight for advertisers of both the toy and entertainment industries.
References

*Pediatrics, 132*, 958-961.


Calvert, S.L. (2001). Impact of televised songs on children’s and young adults’


Print.


Appendix A

Research Study Questionnaire

Please fill out the following information about your child and answer the subsequent Yes/No, multiple choice, and short-answer questions.

Gender: ________________________________________________________________

Age: ___________________________________________________________________

Do you allow your child to watch movies? (Please circle): Yes No

If yes...

Which platform does your child use to watch movies? (Please check all boxes that apply, and circle the mode used most frequently):

- [ ] Movies Playing on Live Television
- [ ] Instant-Streaming on a Television (Netflix, On-Demand, etc.)
- [ ] DVD player
- [ ] Instant-Streaming on a Mobile Device (Laptop, Tablet, Cell Phone, etc.)
- [ ] In-Theaters

How much time does your child spend watching recreational screen media daily? (Please circle):

<table>
<thead>
<tr>
<th>0 mins</th>
<th>0-30 mins</th>
<th>30-60 mins</th>
<th>60-90 mins</th>
<th>90-120 mins</th>
<th>120+ mins</th>
</tr>
</thead>
</table>

Has your child seen The Lego Movie? (Please circle): Yes No

If your child has not seen The Lego Movie...

What is the reason your child has not seen The Lego Movie? ________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Would you allow your child to watch The Lego Movie for this research study? (Please circle):

Yes No
If your child has seen The Lego Movie…

How many times have they seen it? ________________________________

When was the first time they saw it? ________________________________

When was the most recent time? ________________________________

Have you seen The Lego Movie? (Please circle): Yes No

If yes, what were your thoughts on the movie?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Do you think your child understood the storyline?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Do you give your consent to allow your child to answer the following questions about The Lego Movie during a brief interview?:

• Have you seen The Lego Movie?
• Did you like the movie?
• What was the movie about?
• What was your favorite part?
• Who is your favorite character?
• Can you tell me about him/her?

(Please circle):
I agree I do not agree

Parent/Guardian Name (Print): ____________________________________________

Parent/Guardian Signature: _____________________________________________

Child Name: ___________________________________________________________

Thank you for your time and consideration!
Appendix B

Interview/Discussion Questions

Child Name: __________________________________________________________________________

*Attach corresponding parent survey

1.) Have you seen *The Lego Movie*?

2.) What was the movie about?

3.) Did you like the movie?

4.) What was your favorite part?

5.) Who is your favorite character?

6.) Can you tell me about him/her?