

WHY DO WE LIKE MORALLY AMBIGUOUS CHARACTERS?
THE ABILITY OF CAUSAL ATTRIBUTIONS TO MEDIATE CHARACTER MORALITY'S
IMPACT ON CHARACTER APPEAL

By

Clare Grall

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Communication – Master of Arts

2015

ABSTRACT

WHY DO WE LIKE MORALLY AMBIGUOUS CHARACTERS? THE ABILITY OF CAUSAL ATTRIBUTIONS TO MEDIATE CHARACTER MORALITY'S IMPACT ON CHARACTER APPEAL

By

Clare Grall

Entertainment studies have paid considerable attention to the psychological mechanisms that govern audience reactions to morally ambiguous characters in narrative drama. Researchers working in this area have begun to question the ability of affective disposition theory (ADT: Zillmann, 2000) to explain why audiences like morally ambiguous characters even when they perform behaviors normally considered unacceptable. The current paper replicates and extends a recent study by Bowman, Roman, and Knoster (2014) to determine whether the attributions made by audience members can explain their responses. Bowman et al. (2014) examined how the *origin story* of a morally ambiguous character in narrative drama can influence viewer dispositions and resultant enjoyment toward both the character and narrative. The origin story, often in the exposition of a story, gives us the background on the protagonist. Using logic from attribution theory, this study tests the proposition that the consistency of behaviors in a narrative will shape the attributions made by audience members, and that these attributions will mediate the influence of immoral behaviors on character and narrative appeal.

TABLE OF CONTENTS

LIST OF TABLES	iv
LIST OF FIGURES	v
INTRODUCTION	1
LITERATURE REVIEW	4
The Morally Ambiguous Behavior of Spider-Man	4
Applying Affective Disposition Theory to Morally Ambiguous Characters	6
Attribution Theory	8
METHOD	13
Participants	13
Procedure	13
Stimuli	15
Measures	16
Change in Character Liking	16
Attributions of Cause	17
Perceived Valence of Behavior	17
RESULTS	19
Hypothesis Testing	20
Descriptive Statistics	22
Testing the Hypothesized Model	23
DISCUSSION	26
Limitations	28
Future Directions	30
ENDNOTES	32
APPENDICES	34
Appendix A: Outcome Stimuli	35
Appendix B: Origin Story Stimuli	36
Appendix C: Pre-Experiment Measures	37
Appendix D: Post-Experiment Measures	39
REFERENCES	41

LIST OF TABLES

Table 1. Change in Liking for Spider-Man from Bowman et al. (2014)	6
Table 2. Comparison of Change in Liking Means	19
Table 3. Attribution Scale Reliability	20
Table 4. Descriptive Statistics	22
Table 5. Test of Hypothesized Model	25
Table 6. Outcome as Moderator of Internal Attributions and Liking	32

LIST OF FIGURES

Figure 1. Hypothesized Model	11
Figure 2. Step 1 and Step 2 of Muller et al. (2005) moderated mediation test	24
Figure 3. Correlations when Spider-Man is perceived to be Bad or Neutral	25
Figure 4. Correlations when Spider-Man is perceived to be Good	25

INTRODUCTION

Bowman et al. (2014) conducted a study investigating how the origin story of a morally ambiguous character in narrative drama can influence viewer dispositions and resultant enjoyment toward both the character and narrative. The origin story, often in the exposition of a story, gives us the background on the protagonist. Building on work by Raney (2003, 2004), which reasons that audiences for entertainment want to enjoy themselves, Bowman et al. (2014) argued that positive origin stories allow audiences “to accept potentially repugnant behaviors regardless of the actual actions enacted or the underlying motivations which drive them” (p. 5). This claim followed from logic suggesting that a positive origin story increased liking for the protagonist, and when a liked protagonist does something immoral later in a story, audience members acknowledge the actions as bad but do not judge the protagonist harshly. We refer to this type of liked protagonist (i.e., one that does bad things) as a morally complex or morally ambiguous character.

In arguing that audiences will accept the immoral behaviors of a hero (or morally ambiguous character) regardless of the behavior or its motivations, Bowman et al. (2014) embraced a line of reasoning by Raney and Janicke (2012) suggesting that “moral judgment plays an insignificant role in the formula of liking morally complex characters” (p. 158). In principle, this position challenges affective disposition theory’s suggestion that audiences for narrative drama are constant moral monitors (Zillmann & Cantor, 1976). In essence, it argues that audience members morally disengage when considering the actions of a liked protagonist (see Raney & Janicke, 2012). However, Bowman et al. (2014) did not design their study to test this proposition, leaving their findings open to other explanations.

Bowman et al. (2014) argue that although the immoral action might have some negative impact on liking for the hero, unless the act is startlingly bad, its impact on liking will be small in most cases. This occurs because the origin story acts like an anchor, which constrains audience's perceptions of the hero's actions as good. They add to this argument stating that if a narrative presents a negative origin story for a hero (i.e., an origin story showing that a liked protagonist did something bad in the past), the discordant nature of the origin story creates a level of cognitive complexity that constrains audience perceptions of subsequent immoral actions by the hero even more. In this case, the cognitive complexity makes it more difficult for audience members to make sense of the behavior. As a result, subsequent immoral actions will have even less negative impact on liking for the hero. Based on this reasoning, they predicted that an immoral act by a hero in the body of a narrative would decrease the liking of that character (and the narrative) less if the origin story was discordant with the hero narrative (i.e., it told of past immoral behavior by the character) than if the origin story was concordant (i.e., it told of past moral behavior).

Their study failed to observe this pattern. Instead, they observed an overall decrease in liking whenever an immoral act was performed in the body of the story by the morally ambiguous character regardless of origin story. Moreover, in contrast to predictions, they observed that the immoral act decreased liking for the character even more when the origin story was discordant (immoral in this case) than concordant. Bowman et al.'s (2014) anchoring logic cannot account for this pattern; however, the decreased liking for the character when the immoral act was paired with an immoral origin story may be explained by alternative logic related to content features specific to this condition. Unlike other conditions, the performance of an immoral act in the discordant origin story provided the audience with two instances of immoral

behavior. The present study offers and tests an alternative explanation that audiences do not make judgments of a hero's behavior regardless of motivations, but instead make attributions for the act based on the consistency of the character's behaviors over time. When observing consistently immoral behaviors, participants in the Bowman et al. (2014) study made internal attributions to make sense of that behavior. The present study posits that observing multiple instances of immoral behavior by a morally ambiguous character leads participants to judge that character as an immoral person, therefore causing the low measures of liking reported in the original study.

The following study presents a replication and extension intended to test an alternative explanation for Bowman et al.'s (2014) results. Instead of arguing that moral judgment plays an insignificant role in the liking of some characters, the current study argues that the consistency of a character's actions will influence the extent to which audience members attribute those actions to internal or external causes, which will subsequently influence character liking. The study tests the proposition that causal attributions will mediate the impact of character actions on changes in character liking. More specifically, consistency of actions will increase internal attributions, which will increase change in liking either positively or negatively in line with the valence (positive/negative) of the actions consistently performed. An account of the logic underlying this proposition begins by describing the original study, with emphasis on the components most relevant to the alternative explanation offered. It first reviews related literature to lay the logical foundation for the rival hypotheses tested.

LITERATURE REVIEW

The Morally Ambiguous Behavior of Spider-Man

Bowman et al. (2014) examined how the origin story of a morally ambiguous superhero could influence viewer dispositions. The origin story of a superhero narrative gives a specific type of background information. It tells the audience how a character with unusual abilities came to acquire them. Bowman et al. (2014) selected the Marvel graphic novel Spider-Man character as the exemplar for study.

To study the origin story's influence, they created two origin stories that were either concordant or discordant with the Marvel comic superhero, Spider-Man. The concordant origin story was a more detailed version of the original Spider-Man origin story in which Peter Parker, after being bit by a radioactive spider and given spider-like superpowers, chooses not to stop a burglar from escaping a crime scene. The burglar, running to get away, kills Peter's Uncle Ben while stealing the victim's car. Peter, after realizing his horribly regretful mistake, chooses to use his power to fight crime. The discordant origin story begins with the same description of how Spider-Man gets his powers. However, the story states that Peter abuses those powers by attempting to rob a bank and failing. After escaping, his Uncle Ben tries to calm Peter down, but Peter is inconsolable. He loses control of his powers and kills Uncle Ben. Peter then chooses to spend his life fighting crime to atone for his sins. The discordant origin story paints Spider-Man as a morally ambiguous character who behaves both as a hero and also a villain.

Bowman et al. (2014) developed the predictions for their study by integrating logic from disposition theory (Raney, 2003; Zillmann, 2000) and recent investigations into narratives with morally ambiguous characters (Krakowiak & Oliver, 2012). They reasoned that a discordant origin story would alter viewers' assessments of the character's morality and, subsequently,

viewers' dispositions toward the overall narrative. Their belief that origin story would influence character judgment and subsequent narrative appraisals was predicated upon the assumption that moral evaluations of characters often happen during the exposition of a narrative, where viewers use expectations based on prior exposure to similar narratives to form initial dispositions toward characters. These initial judgments provide an evaluative (moral or immoral) anchor, which restricts judgments of subsequent events to be in line with the initial moral evaluation.

Bowman et al. (2014) also argue that such morally ambiguous characters (referred to as antiheroes by Bowman et al.), are more cognitively engaging and complex than traditional heroes. Using the cognitive complexity argument, Bowman et al. (2014) reasoned that negative actions by the character in the body of a narrative should decrease the liking less if the origin story was discordant rather than concordant with previously held dispositions toward the character. In the case of superheroes, a discordant origin story would be one that told of past immoral behaviors by the character rather past moral behaviors. The authors tested their hypothesis experimentally using a 2x2x2 factorial design that varied the valence (good or bad) of Spider-Man's actions in a story (helping a child or killing a defeated and unarmed criminal), the outcome of Spider-Man's actions (reward or punishment), and the origin story (concordant or discordant).

The findings of the study produced a pattern of means that were contrary to expectations, showing that bad actions produced the lowest liking score, *especially* when paired with the discordant origin story (see Table 1). Based on additional regression analyses, the authors attributed all of the decreases in liking to the discordant origin story. They then provided a potential explanation for this pattern, which stated that the discordant origin story was too immoral and left no room for participants to judge Spider-Man's behavior as good or bad.

Table 1.
Change in Liking for Spider-Man from Bowman et al. (2014)

		Origin	
		Concordant	Discordant
Action	Good	-0.5	-1.03
	Bad	-1.48	-1.9

The present study tested the alternative explanation that when viewers make causal attributions for the behaviors they observe characters perform, and these causal attributions shape subsequent dispositions. The logic underlying this alternative uses attribution theory to describe mechanisms left originally unspecified in affective disposition theory and applies this logic to explain the evaluation of morally ambiguous characters and their behavior.

Applying Affective Disposition Theory to Morally Ambiguous Characters

Affective disposition theory (ADT) provides an explanation for the processes governing how audiences come to enjoy various forms of entertainment media. ADT first appeared as the disposition theory of mirth (Zillmann & Cantor, 1972) and now extends several other genres; the most relevant to the present study is drama. Zillmann's (2000) affective disposition theory of drama states that viewers act as "untiring moral monitors" who will enjoy narratives in which good outcomes come to good characters and when bad outcomes come to bad characters. Conversely, viewers will dislike narratives in which good things happen to characters they deem bad and when bad things happen to character they deem good. In consuming narratives, viewers will make moral judgments about the decisions and motivations of characters, the strength of their approval determining the strength of their positive disposition.

The logic of ADT transfers easily to dramatic narratives where the main characters, or protagonists, behave morally in juxtaposition to the immoral actions of antagonists. In such cases, audiences anticipate positive outcomes and fear negative outcomes for the moral

protagonist. Raney (2004) and other scholars have suggested, however, that when the main character behaves immorally as well as morally, ADT alone cannot explain liking for narratives with morally ambiguous characters, as positive outcomes for the immoral decisions and motivations of the main character should be repugnant.

Narratives with morally ambiguous characters have achieved great popularity in recent popular culture in such shows like *The Sopranos*, *Dexter*, and *Breaking Bad*. Because morally ambiguous characters perform immoral actions, it might be assumed that viewers would not like those characters. However, there is evidence that audiences do enjoy those narratives, and the success of such shows has led to the evaluation of morally ambiguous characters outside the framework of ADT (Shafer & Raney, 2012). Preliminary investigations on the liking of morally ambiguous characters have followed logic from Raney (2004) arguing that viewers can form dispositions toward characters before observing moral behaviors. They do this using preexisting story schema, which are mental shortcuts for understanding the content, structure, and progression of stories in varying genres (Mandler, 1984). Over time, viewers observe similar stories and create mental shortcuts from these stories that serve the disposition formation process. If viewers rely on story schema, they will enjoy narratives regardless of the characters' immoral decisions and motivations because they are accustomed to liking the protagonist. This means that the moral monitoring portion of ADT is not pertinent to the enjoyment of narratives with morally ambiguous characters. His logic is consistent with the reasoning of Bowman et al. (2014) who argued that the origin story activated preexisting story schema, and this schema acted as an anchor, which limited change in dispositions. While this is one explanation for antihero enjoyment, another explanation comes from research on attribution theory.

Attribution Theory

Attribution theory explains that humans act as naïve scientists, always looking for causal relationships in the social world to answer questions about why things happen. The theory states generally that when humans observe a behavior they make attributions about the causes of that behavior (Kelley & Michela, 1980). Kelley's covariation model (1973) deals specifically with how observers form attributions about an *actor's* behavior. It explains that an observed action can be attributed to a *person* (i.e., the actor), (target) *stimulus*, or (surrounding) *circumstances*. Using terms common in other attribution theory research (cf. Kelley & Michela, 1980) the present study grouped stimulus and circumstances into a single category called *external* attributions, and relabeled person as *internal* attributions. Internal attributions implicate dispositional causes within the self, such as personality traits, whereas external attributions implicate situational causes outside the self, such as circumstances or stimuli in the environment. Although Kelly's model applies to cases involving the observation of either one or several behaviors, the present study focuses specifically on attributions after witnessing multiple behaviors.

The covariation model explains three criteria that lead observers to make internal or external attributions, referred to hereafter as criteria for valid attributions. According to Kelley (1973), "an effect is attributed to the one of its possible causes with which, over time, it covaries" (p. 108). In observing several behaviors over time, the observer will attribute the cause of behavior to another variable that has been present at each observation. These criteria are consensus, distinctiveness, and consistency. Consensus refers to other people's behavior in similar situations. If everyone acts similarly in a particular situation, consensus is high. Distinctiveness refers to an actor's behavior in similar situations. If the person has never acted in

this way before in this situation, distinctiveness is high. Consistency, the most relevant characteristic to this study, refers to how reliable a behavior is over time. When observing consistent behaviors by one person over time, the cause must then also be consistent. Kelley (1973) holds that whatever consistently covaries in observation with the behavior should be perceived as a reliable cause of behavior. When the consistency of an actor's behavior across time and space is high, it leads to higher internal attributions, meaning it is something about the person that is causing the consistent behavior. When consistency is low, it leads to higher external attributions, meaning that things in the changing environments or situations are influencing behavior.

Referring back to the results found in Bowman et al.'s (2014) study, the pattern of means showed that liking for Spider-Man was lowest when a bad action was paired with the discordant origin story. This was true regardless of the story outcome. An explanation for this pattern, outside of focusing solely on origin story influence, takes into account the extent to which Spider-Man's behavior in the story remained consistent with subjects' preexisting perceptions of the character. To explicate this fully, consider Spider-Man's behavior in the different conditions on the study.

Bowman et al. (2014) argued, and demonstrated empirically with a pre-test survey, that people started the study with positive attitudes toward Spider-Man. In the experimental condition where Spider-Man performed a good action and the origin story was concordant, behavior in both the body of a narrative and in the origin story were consistently in line with the subjects' initial perceptions that Spider-Man is a hero (i.e., a good man) who does good things. In the condition where Spider-Man performed a bad action and the origin story was discordant, Spider-Man's behavior in both cases consistently violated initial perceptions that Spider-Man is good. In

the two mixed conditions (good action with discordant origin or bad action with concordant origin), behaviors were inconsistent (i.e. sometimes in line and sometimes out of line) with initial positive perceptions of Spider-Man. An attribution interpretation of Spider-Man's behavior might consider the extent to which these behaviors consistently upheld or violated subjects' initial perceptions, and the extent to which this should lead subjects to make internal attributions.

According to the covariation model (Kelley, 1973), high consistency of behavior leads to internal attributions. Therefore, when Spider-Man's behavior is consistently good, participants will make internal attributions maintaining their like for Spider-Man and their belief that he is a good person. Similar logic suggests that when Spider-Man's behavior is consistently bad, participants will again make internal attributions; this time blaming Spider-Man for his misdeeds and decreasing both their like for him and belief that he is a good person. Lastly, in the two conditions where Spider-Man's behavior is once good and once bad, low consistency will lead participants to make fewer internal and more external attributions. As such, while the bad behavior may have some negative impact on like for Spider-Man and belief in his goodness, this influence should be weaker than when Spider-Man's behavior is consistently bad. In all cases, the attributions made should mediate and predict change in liking of the character and the story in accordance with ADT logic.

According to this perspective, audience members continuously monitor the decisions and motivations of character behaviors in a narrative. Characters judged by audiences to behave morally are liked and those judged to behave immorally are disliked. However, only when audience members attribute behaviors to internal cause will judgments of character morality be influenced. If Spider-Man's behavior is consistently good and in line with initial positive perceptions, internal attributions will lead to strong positive dispositions. Subjects will continue

to both perceive him as moral and like him. If Spider-Man's behavior is consistently bad, and thus consistently in conflict with initial perceptions, subjects will make internal attributions that lead to strong negative dispositions. Lastly, when Spider-Man behaves inconsistently, subjects will make more external attributions, weakening the impact of bad behavior on negative dispositions toward the character.

With this explanation in mind, the following path was hypothesized. Consistency of behavior increases perceptions of internal attributions. Subsequent to this, an increase in internal attributions should increase change in character liking, moderated by the perceived valence of the consistent acts, such that the positive influence of internal attributions on character liking will increase as the perceived valence of behavior becomes more positive (i.e., moral). This is hypothesized model is represented in Figure 1.

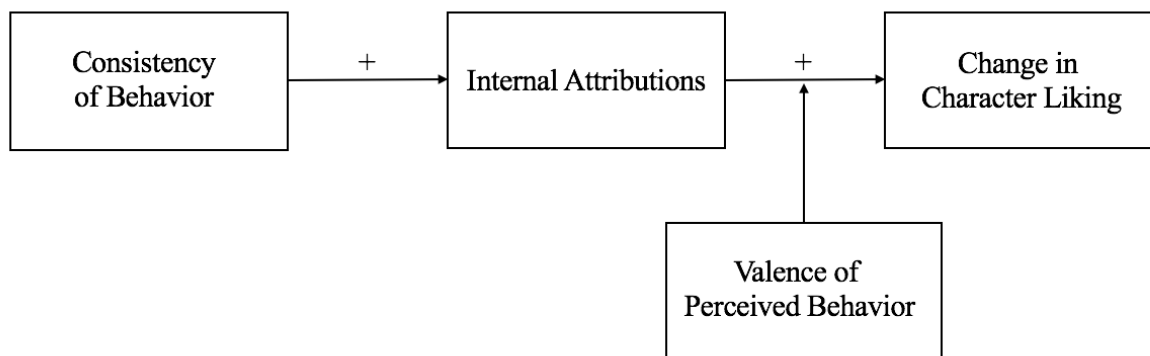


Figure 1. Hypothesized Model.

In Figure 1, consistency of behavior refers to Spider-Man's behavior across multiple points in the story narrative. Behavioral consistency is high when the story action and origin story are either both concordant with the hero narrative (i.e., exemplify moral actions) or both discordant with the hero narrative (exemplify immoral actions). Consistency is low when the story action and origin story are mixed (i.e., one is concordant with the hero narrative while the

other is discordant). Internal attributions represent the extent to which subjects attribute Spider-Man's behavior to motivational forces within him (such as a personal goal or trait) or outside of him (such as the circumstances surrounding the behavior). Change in liking refers to measured differences in disposition toward Spider-Man from before to after exposure to the story stimuli. Perceived valence of behavior (scored for positivity) refers to the extent to which subjects perceive Spider-Man's behavior to be good or bad (i.e., moral or immoral). Notably, these perceptions are expected to vary from low to high positive valence as a function of the righteousness of Spider-Man's behavior in both the body of the story and story origin. Perceived valence scores are expected to be lowest in the condition where the origin story shows Spider-Man kill his Uncle Ben, and the story body shows him kill a defeated criminal. Perceived valence scores are expected to be highest in the condition where the origin story shows Spider-Man fail to stop his Uncle Ben's killer, and the story body shows him help a child. Finally, perceived valence scores are expected to vary in between these highest and lowest scores in the two conditions where the origin story and story body are mixed.

METHOD

The current study replicated experimental procedures used by Bowman et al. (2014) with several additions: Key among these was the addition of two scales that measured the attributions (internal and external) made by participants regarding the motivations for Spider-Man's behavior. A 2x2x2 factorial design produced eight versions of a narrative that varied the valence of Spider-Man's action in the body of the story (good or bad), the valence of the story's outcome for Spider-Man's (good or bad), and the actions in the origin story (concordant or discordant with the hero narrative). Consistency of behavior, operationally defined by manipulating content in the story's body and story origin, acted as the independent variable. Change in character liking, observed through measures of character disposition in pre- and post-surveys, served as the dependent variable. Attributions of cause, measured in a post-survey with both close- and open-ended questions, served as a mediating variable. Perceived valence of behavior, measured with a close-ended questions a post-survey, served as a moderating variable.

Participants

Undergraduate students ($N = 280$) recruited from a large Midwestern university received course credit for participating. Their ages ranged from 18-29 ($M = 20$, $SD = 1.66$). Seven cases with either no recorded data or duplication were discarded, leaving a final sample size of 273. The institution's ethics review board approved all experimental procedures, all of which adhered to the American Psychological Association's ethical principles (2009).

Procedure

Participants were seated in front of a computer screen that led them through a programmed protocol. After giving consent, they were redirected to a page with a cover story stating that the experiment was conducted in partnership with a comic book company that

wanted to pilot test potential superhero narratives. This light deception ensured psychological validity. A debriefing statement at the end of the survey fully explained the deception and its purpose.

Participants then received a pre-experimental survey containing three items asking questions about five different superheroes, Spider-Man along with four others. Inclusion on the other superheroes served to hide the true purpose of the study. The first and third items came from Bowman et al. (2014). The first item was an initial character disposition assessment. This served as the pre-test disposition measure for change in liking. The second item, added for the current study, provided a close-ended measure assessing the participant's general perception of each of superhero's behavior. It asked, "What do you think about [this superhero's] behavior?" The measure was a 7 point Likert scale (1 = Always does good things, 7 = Always does bad things). This served to test the presumption that subjects in this study begin with positive perceptions of Spider-Man. These perceptions were a necessary precondition for the planned manipulation of the behavioral consistency (concordant and discordant) of Spider-Man's actions in the story's body and origin. The third item was an open-ended question asking participants to indicate their knowledge of the five superheroes. The item instructions stated, "In 100 words or less, what do you know about [this superhero]?" This provided a baseline measure for how much participants knew about Spider-Man and what information about Spider-Man stood out in their minds.

After completing the pre-experimental survey, a screen informed participants that they were "randomly assigned" to read a narrative about one of the superheroes they just rated. In actuality, all participants were randomly assigned to read one of the eight experimentally varied Spider-Man narratives. Finally, after reading their assigned narrative, participants completed the

post-experimental survey, which contained both open-and closed-ended measures assessing internal/external attributions, along with the second assessment of character disposition. The second character disposition assessment served as the post-test measure for change in liking. Following this, participants saw the debriefing page, which explained that this study was not conducted for a comic book company but instead to investigate viewer reactions to particular narratives and characters. In total, it took about 30 minutes to complete the survey and all measures.

Stimuli

The materials used for this study were taken directly from Bowman et al. (2014). The stimuli include comic book panels and written stories. The first part of the stimulus varied comic book panels, which showed Spider-Man performing either a good action or bad action in the body of the story. The good action depicted Spider-Man coming to the aid of a kid being bullied. The bad action depicted Spider-Man, after defeating a gunman, choosing to kill him in front of a crowd of people.

The second part of the stimulus varied the paragraph detailing the outcome (good or bad) associated with Spider-Man's good or bad behavior in the body of the story. The good outcome for the good story-body action showed that the conversation with Spider-Man influenced the boy, and the boy dedicated his life to helping others by running a charity for orphans, and Spider-Man and the boy remained friends. The bad outcome for the good story-body action showed that after walking the boy home, villains catch Spider-Man off guard and kill him. In the good outcome for the bad story-body action, the town supported Spider-Man's behavior to kill the gunman, and they honor him as a hero. Lastly, in the bad outcome for the bad story-body

action condition told of how the town cannot believe that Spider-Man killed the gunman and they call Spider-Man evil. An angry mob hunts and kills Spider-Man.

The third part of the stimulus varied a paragraph explaining the origin story of Spider-Man. Participants were told that a comic book company wanting to play with the story and was testing out a few options. The concordant origin story stated that Peter Parker gained his spider-like powers after being bitten by a radioactive spider. In the body of the story, Peter did not use his new powers to stop a burglar from robbing a store, and the burglar went on to kill Peter's Uncle Ben. Peter then vowed to fight crime to atone for his role in his Uncle's death. The discordant origin story began the same way. However, in the body of the story, Peter abused his new powers and attempted to rob a bank. After failing and almost getting caught, Peter went home where Uncle Ben tried to calm Peter down. Peter lost control of his power and killed Uncle Ben. He then vowed to fight crime and atone for his actions. The four different endings, along with instructions for this part of the stimuli, appear in Appendix A.

The procedure imparted the origin story last for several reasons. First, the study attempted to replicate Bowman et al. (2014), and their original study placed the origin story last. Second, as briefly explained above, if participants read the discordant origin story first, they might have become highly skeptical of the study and not take it seriously. Showing the edited comic book pages first helped ensure believability.

Measures

Change in Character Liking. A single item measure of character disposition assessed character liking before and after exposure to the experimental stimuli. Participants responded to an item asking, "How much do you like Spider-Man?" on a seven-point Likert scale (1 = extreme dislike, 7 = extreme liking). The difference in participant scores on this item from the

pre-experimental to the post-experimental survey served as the measure for change in liking. information about Spider-Man stood out in their minds.

Attributions of Cause. The post-experimental survey contained a single-item open-ended measure and two closed-ended scales measuring attributions of cause. The open-ended measure occurred prior to the closed ended measures in order to prevent scale items from biasing open-ended responses. After exposure to the experimental stimulus, participants responded to an open-ended question that asked, “Why did Spider-Man do what he did?” The question was intended to identify the motivations the participant ascribed to Spider-Man’s behavior.

The first closed-ended measure of attributions was an adapted version of the Causal Dimension Scale II (CDSII; McAuley, Duncan, & Russell, 1992). The CDSII is a 12 item, nine-point semantic differential scale to assess whether participants attributed Spider-Man’s behavior to internal or external factors (see Appendix B). The CDSII has been analyzed for reliability and validity in measuring locus of causality. Cronbach’s alpha for internal consistency averaged across four studies was .67, which was interpreted by McAuley et al., (1992) as acceptable. All items, along with instructions for this part of the survey, appear in Appendix B.

The second closed-ended measure of attributions was a single-item with a nine-point semantic differential response scale. The item stated, “Spider-Man did what he did because of...” and asked participants to select from response options ranging from 9 = his character to 1 = the circumstances. This item served as a redundant measure of internal attributions.

Perceived Valence of Behavior. A single item also served as this study’s measure of perceived valence of behavior. The item stated, “Spider-Man’s actions were...” and again asked participants to select from response options ranging from 9 = consistently good to 1 =

consistently bad. Scores on this item were used to test the hypothesized model's prediction that perceived valence moderates the impact of internal attributions on character liking.

RESULTS

Before analyses on the hypothesized model began, the data were compared with findings from the previous research by Bowman et al. (2014). As stated in the introduction and shown in Table 1, Bowman et al. (2014) observed a pattern of means suggesting that liking was lowest when Spider-Man behaved immorally in both the origin story and his subsequent actions. By contrast, liking was greatest when Spider-Man behaved morally in both the origin story and his subsequent actions. The present study replicated this pattern.

As Table 2 shows, liking was lowest when Spider-Man behaved immorally in both the origin story and subsequent action. Reflecting this, liking was greatest when Spider-Man behaved morally both in the origin story and subsequent action. While replicating the patterns observed previously when Spider-Man's behavior was consistent (i.e., immoral in both the origin story and subsequent actions or moral in both cases), the findings differed slightly for conditions where behavior was inconsistent. In Bowman et al. (2014)'s study, liking was greater when Spider-Man behaved immorally in the origin and morally in subsequent action than when he behaved morally in the origin and immorally in subsequent action. This pattern reversed in the present study. Although the two studies differed in this regard, it is important to note that neither study made specific predictions about which of the two inconsistent behavior conditions would lead to greater liking.

Table 2.
Comparison of Change in Liking Means

	Bowman et al. (2014)		Current Study	
	Good Behavior	Bad Behavior	Good Behavior	Bad Behavior
Concordant Origin	-.5	-1.48	-.51	-.60
Discordant Origin	-1.03	-1.9	-1.62	-1.74

Hypothesis Testing

The predicted model included four variables: consistency of behavior, internal attributions, change in liking for character, and perceived valence of character's behavior (good or bad behavior). Initial inspection of the measures used to represent these variables indicated problems with measurement quality in three of the variables: internal attributions, consistency of behavior, and change in liking for character. In order to address these problems, internal attributions were measured by a single-item measure instead of the proposed scale, consistency of behavior was replaced by perceived consistency, and change in liking was replaced by post-exposure liking scores. These changes are described below.

First, internal attributions were measured with a single scale containing four dimensions. As can be seen in Table 3, the multi-item scales used to measure each dimension were moderately or highly unreliable. Although two of the dimensions, external and personal control, approached or reached an acceptable reliability, the ability of those dimensions to accurately measure level of internal attributions for the purpose of this study is questionable. The attribution scale that was adapted for this study was originally intended for use of measuring attributions made about the self, not about others. The present study focuses on attributions an observer makes about an actor or character. Although the measure was adapted to relate to Spider-Man, it may not sufficiently measure the construct of internal attributions. Due to the unreliability of the attribution measure, the single item attribution measure was used to assess level of internal attributions.

Table 3.
Attribution Scale Reliability

Dimension	α	M	SD
External control	.68	5.37	1.62
Personal control	.72	3.87	1.67

Table 3. (cont'd)

Locus of Control	.37	4.59	1.47
Stability	.32	4.84	1.55

After data collection, it became clear that two variables posed in the hypothesized model (i.e., manipulated consistency and change in liking) did not properly measure the concepts intended. As such, additional measures were used to represent these variables in analyses. These were perceived consistency and the post-exposure liking score.

In the original design, Spider-Man's behavior was manipulated to be consistent or inconsistent. According to Kelley and Michela (1980), to be more accurate in testing, an attribution experiment must measure the extent to which observed behavior of interest is perceived to covary with one or more of the attribution criteria for valid attributions (i.e., consistency in this study). As such, it is the *perception* that the behavior is consistent rather than the reality of the behavior being consistent that determines whether observers make internal or external attributions to its cause.

To create a measure of perceived consistency, a survey item was manipulated. The item was a semantic differential question, which asked participant's their perception of how Spider-Man behaved ranging from 1 (consistently good) to 9 (consistently bad). This scale was folded in half to create a new scale from 0 (inconsistent) to 5 (highly consistent). The same item was used to measure the perceived valence of Spider-Man's behavior, whether participants viewed his actions as good or bad. By folding the valence scale, a variable was created that was conceptually different from the perceived valence of Spider-Man's behavior measure. The correlation between the two variables was weak ($r = -.25$).

The last variable adjusted was the post-exposure liking measure, which replaced the change in liking measure. The decision to use the post-exposure liking measure was based on recognition of a procedural confound that affected the change in liking measure but not post-test liking scores. The study manipulated the origin story so that some conditions received an origin that was consistent with participants' pre-existing perceptions of the Spider-Man narrative (and their liking of Spider-Man by extension) while other conditions received one that was inconsistent with pre-existing perceptions (and liking). In essence, the pre-exposure liking measure could be thought of as a measure of liking that came in the middle of the consistency manipulation. Thus, the origin story manipulation was confounded with pre-exposure liking and, by extension, was also confounded with change in liking from pre-exposure to post exposure. Because participants' post-exposure liking scores were not subject to the same concern, the post exposure liking measure was used to test the hypothesized model.

Descriptive Statistics

Before testing the hypothesized model, descriptive statistics were examined to look for any signs of problems with the data. Means and standard deviations for variables in the model are presented in Table 4.

Table 4.
Descriptive Statistics

	Perceived Consistency		Internal Attributions		Liking	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Spider-Man Perceived as Bad	.96	1.14	4.61	2.40	3.74	1.62
Spider-Man Perceived as Good	1.99	.98	4.88	2.59	5.04	1.23

The perceived consistency scale ranged from 0 (perceived inconsistent behavior) to 5 (perceived consistent behavior). Participants rated Spider-Man's behavior to be significantly more consistent when they perceived him as good than if they perceived him as bad ($t = 7.95$, $p <$

.01). Although it was not predicted that Spider-Man's behavior would be perceived as more consistent when he was good than when he was bad, the comparatively high consistency scores when Spider-Man was perceived as good may be a function of expected positive behavior from a known comic superhero.

The internal attributions item asked participants to rate Spider-Man's behavior as being caused by 1 (the circumstances) to 9 (his character). Participants made similarly neutral levels of internal/external attributions regardless of whether they perceived Spider-Man as good or bad. The character liking measure ranged from 1 (extreme dislike) to 9 (extreme like). Liking is significantly higher when Spider-Man's behavior is perceived as good ($t = 7.37, p < .01$). This comes as no surprise and supports generally accepted notions that that perceptions of behavior as good or bad are key to determining how behaviors influence liking.

Testing the Hypothesized Model

Muller, Judd, and Yzerbyt (2005) explicate a process for analyzing moderated mediation, which was used to test the hypothesized model. According to Muller et al. (2005), the first step was to check if the independent variable, perceived consistency, significantly correlated with the mediator, internal attributions. Analysis revealed this to be the case ($r = .15, p < .05$). Given this, the next steps suggested by Muller et al. (2005) were to create an interaction term comprising the mediator and the moderator and enter this term into a regression equation along with measures of the mediator and the moderator to predict the outcome measure. The interaction term was created by multiplying the two single items measuring perceived valence of behavior and internal attributions. This term was entered along with the single items measuring perceived valence of behavior and internal attributions to predict post exposure liking. The results of the regression equation are shown in Table 5.

Table 5.
Test of Hypothesized Model

	β	t	p	R	R ²	Adj. R ²
Internal Attributions	.08	.64	.52			
Perceived Good/Bad Behavior	-.30	-2.81	.01			
Internal Attributions X Perceived Good/Bad Behavior	-.36	-2.37	.02			
Model				.56	.31	.31

The interaction term was significant ($\beta = -.36$, $p < .05$), which means the effect of internal attributions on liking changes at different levels of the moderator (valence). The results of the first two steps are shown in Figure 2.

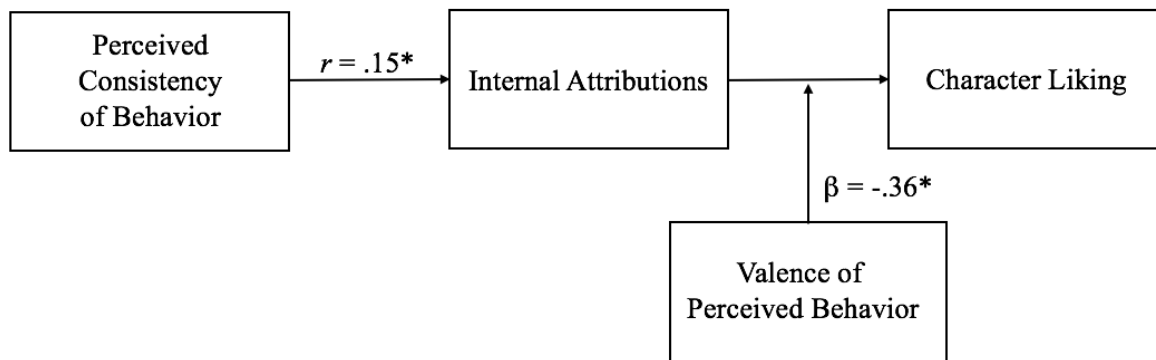


Figure 2. Step 1 and Step 2 of Muller et al. (2005) moderated mediation test.

Muller et al. (2005) suggest using a tertiary split to explore the outcome variable under varying levels of the moderator. However, given that there was a clear conceptual distinction in the moderator between behavior perceived as good versus bad, the pool of subjects was split into two groups. The response scale for the item “Spider Man’s behavior was consistently good” ranged from 1 (Consistently Good) to 9 (consistently bad). The two groups were created as follows: Those who scored between 1 and 4 were combined into a group labeled “perceived Spider-Man as good” whereas those who scored between 5 and 9 were combined into a group labeled “perceived Spider-Man as bad.” Correlation was used to analyze the separate paths when

Spider-Man was perceived as good and when he was perceived as bad. Results of Muller et al. test for the separate models are shown in Figures 3 and 4.

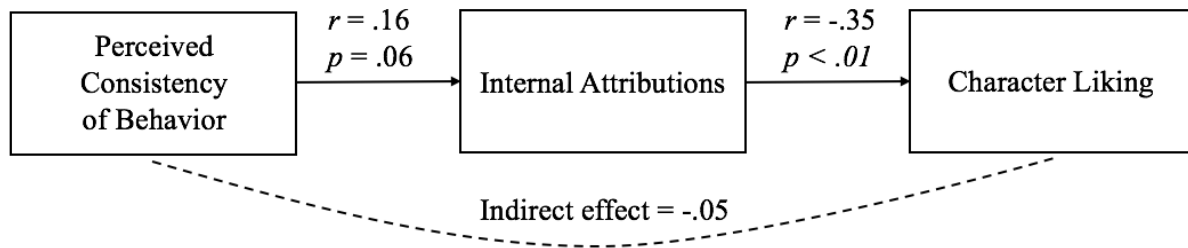


Figure 3. Correlations when Spider-Man is perceived to be Bad or Neutral.

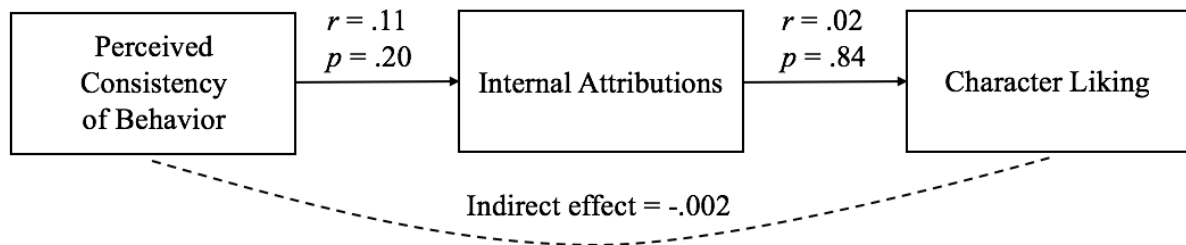


Figure 4. Correlations when Spider-Man is perceived to be Good.

The findings show support for the predicted model only when Spider-Man's behavior is perceived consistently as bad. When audiences perceive characters to perform consistently bad (i.e., immoral) behavior, they make increased internal attributions about that character, which causes a decrease in liking for that character. When audiences perceive characters to be consistently good (i.e., moral), they do not make significantly more internal attributions, and regardless of whether they do, internal attributions have no influence on character liking.¹

DISCUSSION

The discussion begins by explaining the results and their implications for research on disposition theory and morally ambiguous characters. Next, it explicates three limitations of the study: the selective use of Kelley's covariation model (1973), the effects of preconceived notions of Spider-Man on consistency, and the single item measure of attributions. Lastly, discussed are future directions for research on attributions, disposition theory, and liking of morally ambiguous characters.

The present study presents a first attempt to apply attribution theory to disposition formation. This application of attribution theory is built upon an assumption that observers ascribe attributions to behavior similarly in real life and entertainment settings. In doing so, the study focuses attention on cognitive processes involved in forming dispositions that have been overlooked previously. The results indicated that closer consideration of attribution processes could help illuminate the mechanism through which constant moral monitoring influences dispositions toward characters.

The findings of this study suggest that the processes outlined by attribution theory can explain the mechanisms underlying the evaluation of narrative characters that consistently perform immoral behaviors. When participants perceived that Spider-Man behaved in a manner that was consistently immoral, they attributed this immoral behavior to internal causes, which in turn decreased their liking of the character. However, data were not consistent with the same process when the actions of Spider-Man were perceived to be positive. When Spider-Man's actions were viewed as positive, the perceived consistency of his actions did not predict internal attributions, which in turn did not predict liking. In hindsight, the failure to see significant correlations in this latter case may not be surprising. According to Jones, Davis, & Gergen

(1961) when an observer detects a behavior that violates social norms, it will have a greater influence on dispositional, or internal, attributions as compared to observing a behavior that complies with social norms. Because participants perceived Spider-Man's behavior to be moral, and not deviating from the norm, the effect on internal attributions should be weaker and therefore have no significant effect on liking for Spider-Man.

The present study adds a new perspective to research on morally ambiguous characters, including those broadly referred to as antiheroes. Critics have argued that ADT is incapable of explaining audience enjoyment of morally ambiguous characters. Based on this critique, research on the topic has looked outside of ADT for explanation. Raney (2004) argued that audiences rely on story schema, which act as mental shortcuts for the disposition formation process. In relying on schema, audiences will overlook a protagonist's immoral behavior and like the character regardless of the character's actions. Raney and Janicke (2012) stated that audiences morally disengage from a narrative, which allows them to like morally ambiguous characters. Moral disengagement refers to the ability to selectively engage or disengage particular aspects of personal moral codes (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). According to Raney (2004), audiences can come to like a character behaving immorally through disengagement strategies such as moral justification and displacing the responsibility. In calling for an expansion of disposition theory, Raney (2004) builds on schema theory to argue that audiences for narrative entertainment rely on simple heuristics to form initial like/dislike impressions of characters. The audience then perpetuates and defends those strong feelings for the sake of enjoyment. Raney's (2004) line of reasoning suggests that moral monitoring is not vital to the enjoyment of narratives, and audiences will halt the monitoring process to enjoy the narrative. In essence, this perspective suggests that disposition theory cannot account for such audience response

mechanisms. Indeed, Raney and Janicke (2012) stated “ADT would be hard-pressed to explain the role of morality in the enjoyment of narratives containing morally complex characters” (p. 155).

Our logic questions the belief that audiences cease to morally monitor characters for the purpose of enjoyment. While offering no evidence to test such challenges, this study offers an alternative logic consistent with ADT suggesting that viewers do constantly monitor the morality of characters. This logic proposes that rather than ignoring immoral actions altogether, audience members attribute protagonists’ morally questionable behaviors to external causes. Such attributions allow audience members to enjoy the success of characters they have come to like in a manner that is consistent with ADT.

Limitations

There are three main limitations in the present study. This study only manipulated consistency, without consideration of consensus or distinctiveness. Attribution theory makes specific predictions regarding the manner in which the different combinations of consistency, consensus, and distinctiveness lead to internal and external attributions. It identifies specific combinations of high versus low consistency, consensus, and distinctiveness expected to produce either personal attributions, stimulus attributions, or circumstantial attributions. The theory thus allows for more nuanced predictions regarding the causes of behavior based upon these three attribution criteria. For example, high consensus, high distinctiveness, and high consistency in observed behavior should lead to a stimulus attribution, meaning there is a specific stimulus that causes the observed behavior.

Given that the present study varied only consistency, it is possible that the attribution and liking outcomes observed here would differ under varying conditions of distinctiveness and

consensus. Instead of varying simply along the dimensions of internal and external, it is potentially the case that respondents make finer distinctions along dimensions of personal, stimulus, and circumstantial attributions. However, evidence that variation on consistency alone is capable of shaping internal and external attributions and subsequent liking suggests the potential value for applying attribution logic to understanding the mechanisms that govern viewer perceptions and reactions to morally ambiguous characters. Indeed, it is plausible that the more complex distinctions associated with personal, stimulus, and circumstantial attributions may be unnecessary for understanding audience responses to these characters. Regardless of whether a more complete consideration of the attribution model is needed, the current study demonstrates its value to research in this area.

Spider-Man is a well-known character, and the preconceived notions that participants have toward Spider-Man may override the effect of consistency on attributions and subsequent liking. Of the 273 participants, only four wrote that they had little to no knowledge of Spider-Man. This prior knowledge may have constrained the extent to which the participants' like for Spider-Man could be influenced by the experimental stimuli. Moreover, this knowledge might have shaped the attributions made by participants for Spider-Man's behavior.

The third limitation stems from use of single items to measure internal attributions, perceived consistency, and perceptions of behavior. The four-dimension attribution scale originally intended to measure internal attributions did not show strong reliability. Because of this, a simple single item measure was used. Although the use of a single item in this instance might not fully capture the construct of internal attributions, the fact that the model employing this measure to predict liking of consistently bad characters showed good fit provides initial encouragement for this line of research.

Future Directions

Several questions remain unanswered by this research. The first relates specifically to Kelley's full covariation model. To examine how attributions can mediate observed behavior's influence on liking for a morally ambiguous character, future research should integrate all three attribution criteria into research design. By simultaneously varying consensus, consistency, and distinctiveness, research can further explore the criteria that lead to internal or external attributions of behavior and their influence on subsequent measures of character liking.

Attribution theory argues that low consensus, low distinctiveness, and high consistency produce internal attributions, whereas high consensus, high distinctiveness, and high consistency as well as high consensus, low distinctiveness, and low consistency lead to external attributions. The current study shows that internal attributions lead to decreased character liking. If future research provided evidence that external attributions fail to have the same negative impact on liking, this would support the notion that audiences do not simply cease moral monitoring activity in order to enjoy narrative entertainment. Instead, it would suggest that specific narrative circumstances lead audiences to make external attributions that might give the appearance of moral disengagement. This would provide greater insight on how attribution theory might explicate mechanisms left unspecified by ADT and increase our understanding of the processes that influence liking for morally ambiguous characters and their behavior.

Another unanswered question raised by the current study deals with whether the attributions audiences make about media characters differ from those made about people in real life. Our logic argues that the processes governing audience perceptions of morally ambiguous media characters are no different from those governing perceptions of people in real life. In order to test this logic, research might compare the manner in which consensus, consistency, and

distinctiveness can influence the attributions made by observers and their subsequent liking of real versus fictional characters. Future results may reveal that there are no significant differences when comparing attributions and subsequent liking for a real character versus a fictional character.

While the logic in this study presents a conceptually different approach to understanding the enjoyment of morally ambiguous characters as compared to Raney (2004), it may be that the explanations and psychological processes offered both here and by Raney coexist. Raney (2004) suggests that audiences rely on story schema in order to like a character regardless of their immoral behavior, while the present study asserts that audiences come to understand the causes of character behavior through attributions. If both explanations are true, future research examining these processes simultaneously should demonstrate that their combined influence could account for greater variance in liking than either one of them separately.

ENDNOTES

ENDNOTES

¹ One step in replicating Bowman et al. (2014)'s full procedure included presenting outcomes in the stimuli in which Spider-Man was either rewarded for his actions or punished. This outcome was tested as a moderator of the relationship between internal attributions and liking with a linear regression, and it was not significant. The model is presented in Table 6.

Table 6.

Outcome as Moderator of Internal Attributions and Liking

	β	t	p	R	R^2	Adj. R^2
Internal Attributions	-.11	-2.97	.00			
Outcome	.23	1.11	.27			
Internal Attributions X Outcome	-.01	-.128	.90			
Model				.21	.04	.03

APPENDICES

Appendix A Outcome Stimuli

Your character is: Spider-Man.

The pages you're about to read are still "in progress" so you'll notice that the art and storyline are still a bit rough – this is completely normal as artists and writers will often tweak their products after getting feedback from readers. Please pay close attention to the developing storyline, and we'll ask you about your thoughts once you've had a chance to read them. There should be five total draft comic book pages.

[Respondents will randomly be assigned to one of four conditions (Bad Action, Bad Outcome; Bad Action, Good Outcome; Good Action, Bad Outcome; Good Action, Good Outcome) and read the corresponding stimuli. The actual endings will consist of an image accompanied by a brief narrative explanation of the story's conclusion; the images are found in the last two pages of the "GoodAction" and "BadAction" .pdf files – the sample comic book stimuli]

You've now had the chance to read five sample "in-progress" pages that are being considered for upcoming Spider-Man comics. However, the ending of these pages is still very much in progress – in fact, the writer and artists are still working together to translate the story idea into art.

Below, we have a rough idea for a story conclusion as well as a sample art panel. Please read the information below and take a look at the sample art. When you are finished, please move to the next page of the survey.

Good Act, Good Outcome Ending Explanation: Chris' afternoon with Spider-Man becomes a defining moment for him. He is inspired to follow Spider-Man's example and dedicates his life to helping others. Chris creates and runs a charity for orphans, saving countless children from poverty. Chris and Spider-Man remain good friends, and Spider-Man drops by when he can.

Good Act, Bad Outcome Ending Explanation: Spider-Man is distracted from monitoring the city while he spends the day with Chris, oblivious that he is being followed by a group of enemies. Spider-Man drops Chris off at home. Afterward, his enemies jump him in an alley. Spider-Man is caught off guard and too exhausted to defend himself, and the villains kill him.

Bad Act, Good Outcome Ending Explanation: The media honors Spider-Man for saving the day and killing the gunman. Spider-Man's decision to kill strikes fear into the hearts of New York's villains, who didn't believe that he had it in him until watching the public execution. The people of New York embrace him as a hero.

Bad Act, Bad Outcome Ending Explanation: Spider-Man executing the gunman angers the public, and the media complains he is acting as evil as the villain he killed. Not only are the people of New York outraged, but so are the city's villains. Seeking revenge, they hunt Spider-Man down and murder him in cold blood.

Appendix B

Origin Story Stimuli

Finally, the publishers of Spider-Man are considering a few different directions to take with respect to the character's origin – that is, the “reason” that he is Spider-Man. Below you will find one of these stories; please read this and consider it in reference to the five-page comic book and ending that you just read.

- A. Peter Parker is a mild-mannered, teenaged bookworm given extraordinary powers when bitten by a radioactive spider on a school field trip. Peter uses his new powers irresponsibly. He cons a professional wrestling circuit to make a quick buck. When the organization realizes Peter is conning them, they withhold his winnings. Afterward, a criminal robs the organization. Angry about how they treated him, Peter lets the thief escape. While trying to get away, the thief steals a car from Peter's Uncle Ben, who had gone out looking for Peter. The thief kills Uncle Ben in the process. Peter dedicates his life to fighting crime to atone for his role in his Uncle's death.
- B. Peter Parker is a mild-mannered, teenaged bookworm given extraordinary powers when bitten on a school field trip by a radioactive spider. Peter exploits his new abilities to get back at bullies at his school. Finding it exciting, Peter robs several stores. Believing himself unstoppable, Peter robs a bank but fails and is forced to run away. He returns home to his Uncle Ben, who attempts to calm Peter down. Peter is inconsolable and the two argue. Peter loses control and kills Uncle Ben. Peter's Aunt May returns home after, and Peter lies that Uncle Ben was killed by a burglar. Plagued with guilt, Peter vows to use his powers to atone for his actions – keeping his dark secret all the while.

Appendix C

Pre-Experimental Measures

Thank you for taking the time to fill out this survey. We are conducting research in partnership with a major comic book publication company looking to get a sense for audience reactions to potential new directions in the development of several well-known superheroes. These ideas are still very much “in progress” and before the companies invest more time and money into further progressing them, it’s very common to get the reactions and opinions of a variety of different people.

Below, we’re going to show you a few randomly-generated characters that you might recognize from comic books, movies, video games and other entertainment media products. Please answer the questions that follow each picture.

(Include pictures of each character)

1. Captain America
 - a. On the following scale, how much do you like Captain America? (1 = extreme dislike, 7 = extreme liking).
 - b. On the following scale, tell us what you think about Captain America’s behavior. (1= Always does good things, 7 = always does bad things).
 - c. In 100 words or less, what do you know about Captain America?
2. Spider-Man
 - a. On the following scale, how much do you like Spider-Man? (1 = extreme dislike, 7 = extreme liking).
 - b. On the following scale, tell us what you think about Spider-Man’s behavior. (1= Always does good things, 7 = always does bad things).
 - c. In 100 words or less, what do you know about Spider-Man?
3. Batman
 - a. On the following scale, how much do you like Batman? (1 = extreme dislike, 7 = extreme liking).
 - b. On the following scale, tell us what you think about Batman’s behavior. (1= Always does good things, 7 = always does bad things).
 - c. In 100 words or less, what do you know about Batman?
4. Wolverine
 - a. On the following scale, how much do you like Wolverine? (1 = extreme dislike, 7 = extreme liking).
 - b. On the following scale, tell us what you think about Wolverine’s behavior. (1= Always does good things, 7 = always does bad things).
 - c. In 100 words or less, what do you know about Wolverine?
5. Green Lantern
 - a. On the following scale, how much do you like Green Lantern? (1 = extreme dislike, 7 = extreme liking).

- b. On the following scale, tell us what you think about Green Lantern's behavior.
(1= Always does good things, 7 = always does bad things).
- c. In 100 words or less, what do you know about Green Lantern?

Thank you for your input on these characters. Now, we're going to ask you to read a randomly selected pre-production storyline related to one of the characters you just answered questions about.

Appendix D Post-Experimental Measures

Please answer the following questions based on the story you just read.

Open-ended Attribution Measure

1. Why did Spider-Man behave the way he did?

Adapted Causal Dimension Scale II

Instructions: Based on what you have just read, think about Spider-Man's behavior. The items below concern your opinions of the cause or causes of Spider-Man's behavior. Select one number for each of the following questions:

Is the cause(s) something:

That reflects an aspect of Spider-Man	9	8	7	6	5	4	3	2	1	Reflects an aspect of the situation
Manageable by Spider-Man	9	8	7	6	5	4	3	2	1	Not manageable by Spider-Man
Permanent	9	8	7	6	5	4	3	2	1	Temporary
Spider-Man can regulate	9	8	7	6	5	4	3	2	1	Spider-Man cannot regulate
Over which others have control	9	8	7	6	5	4	3	2	1	Over which others have no control
Inside Spider-Man	9	8	7	6	5	4	3	2	1	Outside of Spider-Man
Stable over time	9	8	7	6	5	4	3	2	1	Variable over time
Under the power of other people	9	8	7	6	5	4	3	2	1	Not under the power of over people
Something about you	9	8	7	6	5	4	3	2	1	Something about others
Over which Spider-Man has power	9	8	7	6	5	4	3	2	1	Over which Spider-man has no power
Unchangeable	9	8	7	6	5	4	3	2	1	Changeable
Other people can regulate	9	8	7	6	5	4	3	2	1	Other people can regulate

Note: The total scores for each dimension are obtained by summing the items, as follows: 1, 6, 9 = locus of causality; 5, 8, 12 = external control; 3, 7, 11 = stability; 2, 4, 10 = personal control.

General Close-Ended Questions

1. Spider-Man did what he did because of...

His character 9 8 7 6 5 4 3 2 1 The circumstances

2. Spider-Man's actions were...

Consistently good 9 8 7 6 5 4 3 2 1 Consistently bad

Liking Scale

On the following scale, in consideration for what you just read, please evaluate how much do you like Spider-Man? (1 = not at all, 7 = very much)

REFERENCES

REFERENCES

- American Psychological Association. (2009). Publication manual of the American Psychological Association. Washington, D.C.: American Psychological Association.
<http://dx.doi.org/10.3109/07380577.2011.629024>
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374. <http://dx.doi.org/10.1037//0022-3514.71.2.364>
- Bowman, N. D., Roman, A., & Knoster, K. (2014, November). "Web-sling to save or shoot to kill?" The impact of dissonant origin and antiheroic action on disposition polarization and enjoyment. Paper presented at the 100th meeting of the National Communication Association, Chicago, IL.
- Jones, E. E., Davis, K. E., & Gergen, K. J. (1961). Role playing variations and their informational value for person perception. *The Journal of Abnormal and Social Psychology*, 63, 302-310. <http://dx.doi.org/10.1037/h0048514>
- Kelley, H. H. (1973). The process of causal attribution. *American Psychologist*, 28, 107-128.
<http://dx.doi.org/10.1037/h0034225>
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual review of psychology*, 31, 457-501. <http://dx.doi.org/10.1146/annurev.ps.31.020180.002325>
- Krakowiak, M., & Oliver, M. B. (2012). When good characters do bad things: Examining the effect of moral ambiguity on enjoyment. *Journal of Communication*, 62, 117-135.
doi:10.1111/j.1460-2466.2011.01618x
- Mandler, J. M. (1984). *Stories, scripts, and scenes: Aspects of schema theory*. Hillsdale, NJ: Lawrence Erlbaum Associates. <http://dx.doi.org/10.4324/9781315802459>
- McAuley, E., Duncan, T. E., & Russell, D. W. (1992). Measuring causal attributions: The revised causal dimension scale (CDSII). *Personality and Social Psychology Bulletin*, 18, 566-573. <http://dx.doi.org/10.1177/0146167292185006>
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of personality and social psychology*, 89, 852.
<http://dx.doi.org/10.1037/0022-3514.89.6.852>
- Raney, A. A. (2003). Disposition-based theories of enjoyment. In J. Bryant, J. Cantor, & D. Roskos-Ewoldsen (Eds.), *Communication and emotions: Essays in honor of Dolf Zillmann*, (pp. 61-84). Mahwah, NJ: Erlbaum. <http://dx.doi.org/10.4324/9781410607584>

- Raney, A. A. (2004). Expanding disposition theory: Reconsidering character liking, moral evaluations, and enjoyment. *Communication Theory*, 14, 348-369. doi:10.1111/j.1468-2885.2004.tb00319.x
- Raney, A. A., & Janicke, S. (2012). How we enjoy and why we seek out morally complex characters in media entertainment. In R. Tamborini (Ed.), *Media and the moral mind* (pp. 152–169). London, England: Routledge. <http://dx.doi.org/10.4324/9780203127070>
- Shafer, D. M. & Raney, A. A. (2012). Exploring how we enjoy antihero narratives. *Journal of Communication*, 62, 1028-1046. doi:10.1111/j/1460-2466.2012.01682.x
- Zillmann, D. (2000). Basal morality in drama appreciation. In I. Bondebjerg (Ed.), *Moving images, culture, and the mind* (pp. 53-63). Luton, UK: University of Luton Press.
- Zillmann, D., & Cantor, J. R. (1972). Directionality of transitory dominance as a communication variable affecting humor appreciation. *Journal of Personality and Social Psychology*, 24, 191-198. doi:10.1037/h0033384 15
- Zillmann, D., & Cantor, J. R. (1976). A disposition theory of humour and mirth. In T. Chapman & H. Foot (Eds.), *Humor and laughter: Theory, research, and application* (pp. 93-115). London: Wiley.