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## Investigating Responses to Narrative Cliffhangers Using Affective Disposition Theory

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### ABSTRACT

Despite the prevalence of cliffhangers in popular narrative entertainment, little research has attempted to investigate the impact of these purportedly high-suspense, unresolved narrative endings on audience responses. Guided by affective disposition theory (ADT), in two between-subjects experiments ( $N_{Study\ 1} = 202$ ;  $N_{Study\ 2} = 273$ ) we investigated the extent to which audiences reported greater suspense, enjoyment, and desires for a future narrative installment in written narratives ending in a cliffhanger compared to narratives ending in a protagonist or antagonist victory. Results revealed (1) cliffhanger audiences desired a future story installment more than audiences who read a story ending featuring a protagonist victory (both studies) and antagonist victory (Study 2), and (2) no significant differences in audiences' enjoyment or suspense for those who read a story ending in a cliffhanger compared to those who read an ending featuring either resolution. These findings suggest that cliffhangers may serve as a useful narrative device for maximizing audience retention throughout a series without necessarily sacrificing viewers' enjoyment of the narrative. Results are discussed in terms of their theoretical implications for understanding cliffhangers as a disruption in the story evaluation process outlined by ADT. Practical implications for writers who may consider adopting cliffhangers in their narratives are also discussed.

With the abundance of serial narrative entertainment options available to audiences, storytellers must consider how to keep audiences engaged between narrative installments. Storytellers often craft story endings that contain cliffhangers, which are defined as the interruption of a narrative during a high suspense point (Wirz et al., 2022). Although creators of television shows, films, and books likely rely on cliffhangers as a narrative device that is capable of motivating audiences to continue engaging with a series, surprisingly little research has investigated the extent to which cliffhangers help them succeed in this endeavor. In the present studies, we examine the role of cliffhangers in predicting audience desires for future installments, as well as the extent to which cliffhangers may produce

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enjoyment and suspense in audiences compared to resolved narrative endings. Logic from affective disposition theory (ADT) provides a framework for this investigation.

ADT (Zillmann & Cantor, 1977; Zillmann, 2013) suggests that audiences enjoy narratives in which good outcomes befall liked characters and bad outcomes befall disliked characters. Specifically, audiences are thought to hope for positive outcomes for characters they like, and negative outcomes for characters they dislike. Similarly, audiences are thought to fear negative outcomes for characters they like and fear positive outcomes for characters they dislike. When a narrative resolves and audiences' hopes are realized, enjoyment is produced. If their fears are realized, enjoyment is diminished (Grizzard et al., 2023 2018). However, ADT does not specify how audiences' enjoyment might be affected when a narrative lacks a resolution, such as the case with cliffhangers. The present studies attempt to address this knowledge gap by examining how audience responses to resolved narrative endings compare to unresolved endings (i.e., cliffhangers).

Guided by ADT, we might expect that a narrative with a cliffhanger, which interrupts the story before any outcome occurs, would produce greater suspense in audiences than a narrative with any resolution. In line with ADT, we might also expect a cliffhanger ending to produce (a) *more* enjoyment than a feared-for resolution, as the unresolved cliffhanger leaves the potential for positive outcomes, but (b) *less* enjoyment than a hoped-for resolution, given that cliffhangers do not satisfy audiences' hopes. However, given ADT's contention that experiencing suspense is noxious, the increased suspense associated with cliffhangers may also decrease enjoyment of cliffhangers compared to either resolution type. Given the possibility that cliffhangers may result in diminished enjoyment compared to resolved endings, their prevalence throughout entertainment media may suggest that media creators implement cliffhangers primarily as a method for prompting audiences to return for future installments. The present studies attempt to explore these possibilities by examining audience responses to cliffhangers in written narratives.

Drawing from ADT and research on narrative transportation, we report the results of two studies investigating cliffhangers' impact on audiences' suspense, enjoyment, and desires for a future installment (DFFI). Specifically, and in line with narrative endings that are classically outlined by ADT, we compare audience responses to narratives that end in a cliffhanger, protagonist victory, or antagonist victory. Below, we begin by discussing the popularity of cliffhangers in media entertainment and then review ADT and research on narrative transportation. Finally, we discuss ADT's logic as it might apply to audience responses to narrative cliffhangers and describe two studies designed to test our predictions.

## Cliffhangers in Media Entertainment

Cliffhangers are prevalent throughout narrative entertainment media. Perhaps the medium audiences most often think of as being associated with cliffhangers is traditional, or legacy, serial television programming. Historically, the use of cliffhangers may have been necessary to ensure audiences returned to view legacy television serial narratives each time a new episode was released. However, video-on-demand streaming services such as Netflix and Hulu now typically release entire series at once, enabling rapid viewing of multiple episodes in one sitting (e.g., Rubenking & Campanella Bracken, 2018). Thus, cliffhangers on modern streaming platforms may be more likely to occur at the end of shows' seasons to get audiences to return for another season. Although the use of cliffhangers to keep audiences engaged may have changed from legacy to modern television, their use appears comparatively unchanged for books.

Cliffhangers have been prevalent in written fiction and successful at instigating audience suspense since at least the nineteenth century. In response to the suspense Charles Dickens created surrounding the protagonist's fate in *The Old Curiosity Shop*, which was released in weekly magazine installments throughout 1840, fans purportedly bombarded a dock of New York Harbor waiting for the ship carrying the final story installment – all while shouting “Is Little Nell dead?” as the ship approached (Nussbaum, 2012). Even in modern written fiction, cliffhangers remain prevalent and appear to drive reader suspense (Poot, 2016). Popular multipart series, like *The Blood and Ash* series by Jennifer L. Armentrout, the *Kingdom of Souls* series by Rena Barron, and the first book in the famous trilogy by Suzanne Collins, *The Hunger Games*, intentionally make use of cliffhangers in an attempt to leave audiences in suspense and waiting for the next installment. Depending on authors' writing pace and contractual obligations, there are often multiple years in between installments, even for the most popular series. As such, the proliferation of authors' reliance on cliffhangers in books underscores the importance of investigating audiences' experiences with cliffhangers in written narratives.

Notably, the leisure time audiences spend consuming written entertainment narratives has remained stable for years (Kolmar, 2022). For instance, according to the American Time Use Survey, the average person spends approximately 20 minutes reading narratives for leisure *every day* (Bureau of Labor Statistics, 2020). Taken together, the slower pace of the publishing industry coupled with the stable popularity of reading for pleasure point to the importance of understanding how cliffhangers in written narrative entertainment (i.e., books) influence audience engagement. In the present study, we investigate the extent to which audiences' exposure to narrative endings with cliffhanger endings, compared to resolutions, may predict their suspense, enjoyment,

and intention to consume future installments. Although research investigating the role of cliffhangers on audience engagement is lacking, existing theories of audience responses to narrative entertainment provide a useful framework for this investigation. Specifically, we adopt affective disposition theory (ADT) to guide the present studies.

### **Affective Disposition Theory**

ADT conceptualizes enjoyment of narratives as a product of audiences' emotional investment into the characters, the suspense they feel in anticipation of those characters' outcomes in the story, and their observation of the characters' actual story outcomes (Zillmann & Cantor, 1977; Zillmann, 2013). According to ADT, audiences' evaluation of stories can be distilled down to a seven-stage process (Tamborini et al., 2021; Zillmann, 2013). Stage 1 begins with audiences' observation of the characters. Stage 2 requires a moral evaluation of the character's actions, leading to Stage 3, where audiences' resulting affective dispositions are projected. These first three stages are referred to as the *character evaluation process*. Drawing from previous work suggesting that audiences tend to like, and root for, moral characters and dislike, and root against, immoral characters, the present study attempts to instigate character liking for a protagonist by emphasizing their moral *virtues*, and character disliking for an antagonist by emphasizing their moral *vices* (Eden et al., 2017; Grizzard et al., 2021; Oliver et al., 2019; Tamborini et al., 2021).

Next, in Stage 4, audience reactions divide into two categories: of hoping- or fearing-for character outcomes. In particular, audiences hope positive outcomes befall liked characters and negative outcomes befall disliked characters. In contrast, audiences are thought to fear that negative outcomes will befall liked characters and positive outcomes will befall disliked characters. Stage 5 is characterized by audiences' observation of the story's actual character outcomes. Based on characters' outcomes, Stage 6 specifies that audiences should experience emotions that are either positive or negative. Finally, Stage 7 is characterized by audiences' judgment of the characters' associated outcomes. Narrative enjoyment results when audiences' hopes are satisfied. Stages 5 to 7 are referred to as the *story evaluation process* (Zillmann, 2013). Typically, audiences are not prompted to evaluate the story until they have observed the characters' outcomes in Stage 5. However, cliffhangers elicit an evaluation of the story while audiences are still in the suspense-filled Stage 4, where they are left hoping for positive outcomes and fearing negative for liked characters. Thus, the present study focuses on the suspense audiences experience at Stage 4 as critical for understanding audience responses to narrative cliffhangers.

## Suspense

According to ADT, after audiences have formed dispositions toward characters, but before they have observed the story's outcomes for those characters, they are thought to experience suspense (Madrigal et al., 2011). *Suspense*, which is critical to ADT's fourth stage, is defined in ADT terms as "a noxious affective reaction that characteristically derives from the respondents' acute, fearful apprehension about deplorable events that threaten liked protagonists, this apprehension being mediated by high but not complete subjective certainty about the occurrence of the anticipated deplorable events" (Zillmann, 1996, p. 208). When a story outcome is revealed, suspense is resolved and transitions to other affective responses appropriate to the outcome, such as relief at protagonist victory or frustration at antagonist victory (Tamborini et al., 2021; Zillmann et al., 1975; Zillmann, 2013). The affective responses audiences have following suspense is proportional to their attachment to the characters (Raney, 2003). Thus, suspense's *resolution* prompts the final stage of the story evaluation process, and is thought to be a key determinant of audiences' enjoyment of a narrative (Raney, 2003; Zillmann et al., 1975).

## Enjoyment

In narratives that feature resolutions, suspense is relieved from observing characters' narrative outcomes. If positive outcomes befall liked characters and/or negative outcomes befall disliked characters, audiences' hopes are satisfied and story liking increases. On the contrary, if negative outcomes befall liked characters and/or positive outcomes befall disliked characters, audiences' fears are realized, and story liking is diminished. Although more effortful types of story liking are possible (e.g., appreciation), story resolutions containing positive outcomes for liked characters and negative outcomes for disliked characters are thought to require minimal effort from audience members to evaluate the story. This minimally effortful form of story liking is referred to as *enjoyment* (e.g., Eden et al., 2017; Grizzard et al., 2018). Despite an abundance of evidence suggesting audiences' story evaluations are based on the suspense resolution that comes from observing the outcomes of the story and characters (Eden et al., 2015; Grizzard et al., 2018; Oliver et al., 2019; Raney, 2003; Zillmann & Cantor, 1977; Zillmann, 2013), narrative endings are not always so simple. The present studies attempt to advance ADT research for a third type of narrative ending: cliffhangers.

## An ADT Account of Cliffhangers

In line with ADT, we conceptualize cliffhangers as a narrative's premature, high-suspense disruption that occurs before the story outcome, prompting

audiences' evaluation of the story installment before they have observed the main characters' outcomes. Specific to ADT stages, cliffhangers leave audiences in Stage 4, where they are prompted for a story evaluation because the narrative has ended, while still hoping for positive outcomes for liked characters and negative outcomes for disliked characters. For example, the fifth book in George R. R. Martin's *A Song of Ice & Fire* series, *Dance with Dragons*, left audiences in uncertainty wondering if a main character had died after being stabbed in the mutiny at Castle Black. Unfortunately for fans, this cliffhanger has not yet been resolved in the books, as George R. R. Martin has yet to release the promised next books. Notably, ADT does not specify how audiences will respond to narratives that lack character outcomes or resolutions. The present research attempts to fill this gap by investigating audience responses to narratives with cliffhanger endings.

### **Previous Research on Cliffhangers**

To this point, there have been few investigations into the impact of cliffhangers on audiences' perceptions of narratives. Although early work by Zillmann and Bryant (1975) examined audience responses to narratives with unresolved endings, to our knowledge, only one study to date has examined the extent to which unresolved serial narratives that end in a high-suspense moment (i.e., cliffhangers) might impact audiences' story evaluations. Specifically, Wirz et al. (2022) investigated the role of cliffhangers in serial television programming. They exposed participants to three or four episodes of a drama series that varied in its inclusion of a cliffhanger or a resolved story outcome. Results suggested that serial television cliffhangers led to higher levels of suspense as indicated by arousal, but they did not affect audiences' narrative enjoyment or intentions to continue watching (Wirz et al., 2022).

The work done by Wirz et al. (2022) provides important foundational research into the mostly unexplored world of cliffhangers, but questions about audiences' responses to cliffhangers remain. For example, in Wirz and colleagues' study, the endings were sectioned into "not a cliffhanger" and "cliffhanger." The present study extends work by Wirz et al. (2022) to compare narrative endings that feature a cliffhanger to those which feature a protagonist victory or antagonist victory. This nuanced comparison adds to extant ADT research by examining the manner in which audiences' evaluations of cliffhanger narratives compare to narrative resolution types that are traditionally outlined by ADT.

### **Examining Audience Responses to Cliffhangers Using ADT**

Drawing on extant ADT research, narratives that resolve audiences' suspense with a positive outcome for the protagonist (protagonist victory) or antagonist



(antagonist victory) could serve as theoretically useful comparison conditions for investigating how audiences perceive cliffhanger endings, which are unresolved. In particular, we might expect a cliffhanger ending to produce *more* enjoyment than a narrative ending featuring an antagonist victory, which audiences typically fear and ultimately dislike, as the unresolved cliffhanger ending leaves the potential remaining for a positive outcome. However, given that audiences' hopes are not satisfied in a cliffhanger ending, ADT logic may predict that narratives with cliffhanger endings would produce *less* enjoyment than a narrative containing a hoped-for resolution. However, to the extent that audiences feel suspense is noxious, the increased suspense associated with cliffhangers could also decrease enjoyment of cliffhangers compared to any resolved ending. Given that ADT's account of narrative enjoyment is explained primarily by audiences' judgments of character outcomes, questions remain regarding how audience responses might fare when the narrative ends in a cliffhanger. The present study attempts to examine how audience responses to cliffhangers might differ from narratives that end in a protagonist or antagonist victory. Rooting this examination in ADT provides a framework for explaining our results in line with existing knowledge on audiences' reception of narratives.

Although ADT's account of story evaluations focuses primarily on audiences' suspense and judgments of story outcomes as central to story appraisal, an additional factor – narrative transportation – has been identified as a critical determinant of audiences' involvement with and evaluation of narratives. Transportation can be defined as the process by which audiences are cognitively and emotionally immersed in a story's world (Green & Brock, 2000). Related to the present studies, previous work has demonstrated that narrative transportation can increase audiences' feelings of suspense, enjoyment, and desires for a future installment (DFFI). Specifically, immersion in a story prompts audiences to create emotional attachments with characters, which can amplify feelings of suspense and subsequently story enjoyment (Green, Brock, et al., 2004; Madrigal et al., 2011; Raney, 2003). Other research has demonstrated that when audiences experience comparatively greater levels of both transportation and enjoyment, they are more likely to report greater DFFI (Green, Rozin, et al., 2004 cited in Green, Brock, et al., 2004). Because individuals may vary in their transportation into the story for reasons other than the story ending, it may be important to account for narrative transportation when investigating enjoyment, suspense, and DFFI. Thus, we examine it as a covariate in the relationship between story type and audience responses.

Although Wirz et al.'s (2022) study provides an excellent foundation for research into audience responses to cliffhangers, their null findings surrounding cliffhangers' effects on audience enjoyment and intention to consume future installments leave questions remaining. On one hand, it could be the case that cliffhangers simply do not affect audiences' story appraisals and



wishes for future installments in the manner that creators think they do. However, we might also expect that using tightly controlled written narrative stimuli, examining audience responses to cliffhangers in comparison to narratives that resolve in ADT-relevant protagonist or antagonist victories, and accounting for narrative transportation (Green & Brock, 2000) would shed additional light on how audiences perceive cliffhangers. This leads to our first research question:

**RQ1:** *Controlling for narrative transportation, will narratives with a cliffhanger ending be enjoyed more or less than a narrative featuring an ending with (a) a protagonist victory or (b) an antagonist victory?*

Logic from ADT suggests that cliffhangers are characterized as high suspense narrative endings that occur before the characters audiences are observing receive outcomes in the narrative. Given ADT's conceptualization of suspense as a noxious affective reaction to *all* narrative events that threaten liked protagonists (Zillmann, 1996), we included a measure of overall story suspense in the present study. However, given the lack of resolution in cliffhangers, we might expect that the suspense audiences experience specifically at a story's *ending* would be unique to cliffhangers compared to resolved endings and would be most likely to drive any observed differences. We conceptualize *story ending suspense* as the arousal audiences experience as a result of the narrative's final event. Although we think that *story ending* suspense may be comparatively higher after cliffhanger endings given that audiences are still awaiting a resolution, we also explore audiences' reports of *overall* suspense given the importance of audiences' affective reactions from *all* narrative events to the processes outlined by ADT. This leads to the second research question:

**RQ2:** *Controlling for narrative transportation, will audiences report greater (a) story ending suspense or (b) overall suspense following a narrative ending with a cliffhanger versus a protagonist victory or antagonist victory?*

Finally, when a task feels incomplete, people feel a pressing urge to complete it (Weigelt & Syerk, 2017; Wirz et al., 2022). Applied to narratives, when a story is interrupted by a cliffhanger ending, audiences are thought to feel an intrinsic motivation toward completing the narrative and observing the characters' outcomes. Although not an outcome specified by initial conceptions of ADT (e.g., Zillmann, 2013), the fact that cliffhangers are purportedly implemented by writers to elicit audiences' desires for additional narrative installments (e.g., Nussbaum, 2012) prompts us to investigate whether cliffhangers are indeed successful in

prompting audiences' desires in this regard. Given ADT's logic that narrative enjoyment is primarily the result of the resolved suspense audiences experience when they witness character outcomes, we might expect that the *lack* of suspense resolution in cliffhangers would prompt audiences to desire future narrative installments that would afford them the character outcomes – and suspense resolution – for which they hope. With that in mind, and in line with Wirz et al.'s, (2022) reasoning, we might expect that, compared to resolved story endings, cliffhangers would lead to greater DFFI. This leads to the studies' final research question:

**RQ3:** *Controlling for narrative transportation, will audiences report greater desires for future narrative installments following a narrative ending with a cliffhanger versus a protagonist victory or antagonist victory?*

## Overview of Current Studies

We conducted two between-subjects experiments in which participants read the same narrative with one of three different endings. Specifically, one condition contained a narrative with a cliffhanger ending. Two other conditions based on ADT served as comparison conditions: one featured a narrative resolution with a protagonist victory, and one featured an antagonist victory. After reading a narrative with one of these three endings, participants completed the studies' measures. Study 1 served as a preliminary study with a smaller sample of college student participants and Study 2 served as the main study with a more adequately powered sample of adults. Stimuli, data, and analysis syntax for both studies are available at: <https://osf.io/f4kv5/>

## Study 1

### Method

#### Sample

A total of  $N = 304$  participants consented to participate in Study 1. Of these,  $n = 34$  did complete all questions assessing narrative comprehension, and an additional  $n = 68$  failed the study's narrative comprehension checks. These participants were removed from further analyses. The remaining  $n = 202$  participants ( $M_{age} = 20.95$ ,  $SD = 3.88$ ; 60.40% female, 37.62% male, 1.49% nonbinary, 0.49% preferred to self-describe) were primarily White (63.37%), though there was representation of other races as well, including Asian (16.34%), Black (14.35%), Middle Eastern (2.97%), American Indian or Alaskan Native (1.49%), Native

Hawaiian or other Pacific Islander (0.50%), or other races (2.48%). Participants were retained for analyses if they completed the narrative comprehension checks; however, some participants did not complete all outcome measures and thus some outcomes used in Study 1's analyses are missing data from a few participants.

### **Procedure**

Study 1 participants were recruited from communication courses at a northeastern US university in exchange for credit toward course requirements. After consent, participants were told they would be reading an installment from an ongoing series about two siblings, with the next installment scheduled to be released approximately one month later, and then randomly assigned to read one of the three narratives (protagonist victory  $n = 72$ , antagonist victory  $n = 70$ , or cliffhanger  $n = 60$ ). After reading, participants summarized the story they read, and answered four comprehension questions to ensure data quality. Participants' data was retained for analysis if they properly summarized and answered all comprehensions correctly. Multiple choice comprehension questions asked participants to identify the main characters and their relationship, as well as identify the narrative ending. Participants were then asked questions about their evaluations of the story and its characters, as well as demographic questions. All research procedures were approved by the institution's ethics review board.

### **Materials**

The stimulus consisted of a written narrative manipulated to feature one of three endings. The main portion of the narrative was the same for all three conditions, with the protagonist, Morgan, being introduced as she saved children from a burning orphanage. It is revealed that the antagonist, Morgan's brother Milo, not only burned down the orphanage, but had been terrorizing the city at large. Forced into action, Morgan tracks her brother down, which leads them to a cliffside for their final confrontation. At this point the three conditions diverged from each other.

In the first comparison condition, Morgan (the protagonist) is victorious when she pushes Milo (the antagonist) off the cliff to his death, effectively saving the rest of the city. In the second comparison condition, Milo (the antagonist) is victorious when he pushes Morgan (the protagonist) to her death, dooming the city. Finally, the third condition was the cliffhanger ending. In the cliffhanger condition, Morgan and Milo each prepare for a final fight, and the narrative ends at the height of suspense on the cliffside, just prior to the siblings' confrontation. No one dies in the cliffhanger condition, and it is unclear who would win the final confrontation.

## Measures

**Story ending suspense.** To best account for suspense perceived by audiences throughout the narrative, we measured *story ending* suspense and *overall* story suspense. To capture story ending suspense, we used two separate self-report measures following Wirz and colleagues (2022). First, we used a “feelings thermometer” where participants expressed their stress on a scale from 0 (*totally relaxed*) to 100 (*highest level of distress ever experienced*) to assess the distress they felt when reading the story’s ending ( $M = 44.01$ ,  $SD = 25.79$ ; Benjamin et al., 2010). Then, we used the arousal dimension of the Self-Assessment Manikin (SAM; Long, 1980), asking participants how they felt when they read the story’s ending on a scale ranging from 1 (*excited*) to 5 (*calm*;  $M = 3.04$ ,  $SD = 0.99$ ).

**Overall suspense.** To capture overall suspense, we repeated the two self-report measures used to account for story ending suspense, but this time asked participants to report their suspense levels toward the overall story using the feelings thermometer ( $M = 43.06$ ,  $SD = 23.87$ ), and the SAM arousal question ( $M = 2.97$ ,  $SD = 0.99$ ).

**Enjoyment.** Participants’ enjoyment of the narrative was measured with four items on a seven-point Likert-type scale ( $\alpha = .77$ ). Items were anchored at 1 (*strongly disagree*) to 7 (*strongly agree*). Three items were adapted from Wirth et al. (2012), to ascertain overall positive entertainment experience (e.g., “Overall, the story was entertaining”). An additional reverse-scored item was added to measure the impact of the story ending (“The ending decreased my enjoyment of the story”). The four items were averaged ( $M = 4.59$ ,  $SD = 1.14$ ).

**Desire for a Future Installment (DFFI).** DFFI was measured using two items on a five-point Likert-type scale ( $\alpha = .89$ ; “I really want to read the next installment to know how the story resolves,” “How likely is it that you would continue to read the series?”) in line with Wirz et al. (2022). The items were anchored at 1 (*strongly disagree*) to 5 (*strongly agree*;  $M = 3.20$ ,  $SD = 1.10$ ).

**Narrative transportation.** Participants’ level of transportation was measured with a 14-item scale ( $\alpha = .78$ ; Green & Brock, 2000). The six-point Likert-type scale was anchored at 1 (*not at all*) to 6 (*very much*). Example items included “While I was reading the narrative, I could easily picture the events in it taking place;”  $M = 3.26$ ,  $SD = 0.66$ ). Narrative transportation did not differ by condition ( $F < 1$ ).

**Character morality and liking.** Character morality and liking were assessed for both the protagonist (Morgan) and the antagonist (Milo). Although we did not

expect condition to impact perceptions of character morality or liking, we included them due to their importance in ADT. To assess character morality perceptions, we adapted nine items from a scale by Grizzard et al. (2018) that had participants rate character behavior (e.g., “Morgan’s behavior was ethical”). All were measured using a six-point Likert-type scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Character morality was assessed for both Morgan and Milo ( $\alpha_{\text{Morgan}} = .86$ ,  $M = 4.67$ ,  $SD = 0.89$ ;  $\alpha_{\text{Milo}} = .85$ ,  $M = 1.64$ ,  $SD = 0.79$ ).

To assess character liking, we adapted six items from a scale by Krakowiak and Tsay-Vogel (2013) (e.g., “I liked Morgan as a character”). All were measured using a six-point Likert-type scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Character liking was assessed for both Morgan and Milo ( $\alpha_{\text{Morgan}} = .75$ ,  $M = 3.49$ ,  $SD = 0.66$ ;  $\alpha_{\text{Milo}} = .75$ ,  $M = 1.68$ ,  $SD = 0.71$ ).

## Results

To ensure audiences’ perceptions of the protagonist or antagonist did not significantly vary by condition, we ran two ANOVA with condition as the independent variable, and character morality for the protagonist (Morgan) and antagonist (Milo), respectively, as the dependent variable. We then repeated these analyses for character liking for both the protagonist and antagonist. Results showed no significant difference among the conditions for audiences’ perceptions of morality for Morgan or Milo ( $F < 3$ ,  $p > .10$ ), and no significant differences among the conditions for audiences’ liking of Morgan or Milo ( $F < 3$ ,  $p > .10$ ). Thus, we conclude that neither character morality nor liking significantly impacted the differences by condition that we observe in Study 1. See Table 1 for means and standard deviations for all outcome variables for Study 1.

**Table 1.** Means and standard deviations for all outcome variables in Study 1.

Outcome	Protagonist Victory Condition	Cliffhanger Condition	Antagonist Victory Condition
Protagonist morality	4.57 (.92)	4.70 (0.81)	4.76 (0.92)
Antagonist morality	1.54 (.77)	1.83 (0.79)	1.64 (0.70)
Protagonist liking	3.47 (.59)	3.52 (0.69)	3.49 (0.70)
Antagonist liking	1.59 (.63)	1.82 (0.79)	1.64 (0.70)
Enjoyment	4.91 (1.09) <sup>a</sup>	4.53 (1.12)	4.33 (1.14) <sup>b</sup>
Story-ending suspense – SAM	2.94 (.99)	2.92 (0.98)	3.24 (0.98)
Story-ending suspense – Feelings thermometer	46.27 (23.88)	47.76 (25.51)	38.51 (27.51)
Overall suspense – SAM	2.89 (1.03)	2.87 (0.98)	3.14 (0.94)
Overall suspense – Feelings thermometer	47.04 (22.41)	43.46 (22.10)	38.62 (26.26)
Desire for future installment	3.06 (1.03) <sup>b</sup>	3.45 (1.20) <sup>a</sup>	3.13 (1.15) <sup>b</sup>

Standard deviations appear in parentheses. Different superscripts within each row indicates statistically significant differences at  $p \leq .01$ .

To answer RQ1, asking how a narrative with a cliffhanger was enjoyed compared to narratives with protagonist or antagonist victories, we conducted an ANCOVA with condition as the independent variable, enjoyment as the dependent variable, and transportation as the covariate. Results revealed that condition significantly impacted participant enjoyment when controlling for narrative transportation,  $F(2, 198) = 5.44, p = .01, \eta_p^2 = .05$  (effect of covariate:  $F(1, 198) = 47.55, p < .01, \eta_p^2 = .19$ ). Pairwise comparisons (using Sidak adjustment for multiple comparisons) showed participants who read the protagonist victory enjoyed the story significantly more than those who read the antagonist victory,  $p = .004, 95\% \text{ CI } [0.15, 0.96]$ . Results comparing the enjoyment of the protagonist victory to the cliffhanger ending and comparing the antagonist victory to the cliffhanger did not reach statistical significance ( $p > .10$ ). This suggests that audience enjoyment is significantly greater for narrative endings with protagonist versus antagonist victories; and although the pattern of means suggests cliffhanger endings are enjoyed at a level somewhere in between these resolutions, this difference is not statistically significant.

To examine RQ2a, we conducted two ANCOVAs: each with condition as the independent variable, transportation as the covariate, and the story-ending suspense measures as separate dependent variables. Results showed that although transportation was associated with story ending suspense measured by both the feelings thermometer,  $F(1, 194) = 13.29, p < .01, \eta_p^2 = .06$ , and the SAM suspense measure,  $F(1, 198) = 23.25, p < .01, \eta_p^2 = .11$ , condition did not impact the story ending suspense as measured by the feelings thermometer or the SAM suspense measure, both  $F < 3$ .

For RQ2b, the same ANCOVA procedure was used as in RQ2a, this time with the overall suspense feelings thermometer and SAM suspense measures as the dependent variables. The first overall story suspense ANCOVA included the feelings thermometer as the dependent variable, and although transportation was a statistically significant predictor of overall story suspense,  $F(1, 187) = 18.20, p < .01, \eta_p^2 = .09$ , condition was not,  $F < 2$ . Analysis of the SAM measure of suspense showed the same pattern, where transportation was a significant predictor of overall story suspense,  $F(1, 198) = 31.25, p < .01, \eta_p^2 = .14$ , but condition was not,  $F < 2$ . Taken together, results of RQ2 showed no evidence that audiences' feelings of story-ending or overall suspense differed by condition.

Finally, to answer RQ3, asking if condition impacted DFFI, we conducted an ANCOVA with DFFI as the dependent variable, condition as the independent variable, and the transportation as the covariate. Participant condition significantly impacted the DFFI when controlling for narrative transportation,  $F(2, 198) = 5.10, p < .01, \eta_p^2 = .05$  (effect of covariate:  $F(1, 198) = 117.65, p < .01, \eta_p^2 = .37$ ). Specifically, pairwise comparisons (using Sidak adjustment for multiple comparisons) showed participants who read the cliffhanger ending reported greater DFFI than participants who read about a protagonist

victory,  $p = .007$ , 95% CI [0.11, 0.84], but not antagonist victory,  $p = .06$ , 95% CI [-0.01, 0.72]. These results show that cliffhangers instigate audiences' desires to consume future narrative installments significantly more than narrative endings featuring protagonist victories.

### **Study 1 Discussion**

Overall, this study revealed that cliffhanger endings yielded greater DFFI in audiences, but no significant differences were found for enjoyment, story ending suspense, or overall suspense. Results for RQ1, examining enjoyment, align with those of Wirz et al. (2022) who found no differences in audiences' enjoyment of cliffhangers versus resolved endings. Results regarding RQ2, looking at suspense, run counter to the findings of Wirz et al. (2022) by offering no evidence that audiences reading a cliffhanger reported higher levels of suspense than those reading about a protagonist or antagonist victory. Finally, results of RQ3, examining DFFI, also run counter to Wirz et al.'s (2022) findings, as cliffhanger readers reported significantly higher DFFI compared to readers of protagonist victories. Taken together, the findings of this preliminary study begin to suggest that authors may benefit from including cliffhangers in narratives as an effective method for increasing DFFI in readers. Study 2 attempted to directly replicate the procedure from Study 1 with a better-powered and potentially more generalizable sample of adults.

## **Study 2**

### **Method**

#### **Sample**

An a priori power analysis was conducted using G\*Power to determine the sample size needed for this study. Based on the results of Study 1 and past research (Wirz et al., 2022) examining the impact of television cliffhangers on similar outcome measures, we expected a medium effect size ( $f = .20$ ), with an alpha of .05. Results showed a total sample of 244 participants, with  $n = 82$  participants per group, was required to achieve power of .80.

For Study 2, participants were recruited through CloudResearch.com, an online research recruitment platform, for a study that sought to understand "audience perceptions about story outcomes." A total of  $N = 320$  participants were recruited. Of these,  $n = 47$  failed the narrative comprehension checks or provided the same responses to all questions. These participants were removed from further analyses. The remaining  $n = 273$  participants ( $M_{age} = 41.31$ ,  $SD = 12.35$ , age range = 21–70; 50.37% female, 48.18% male, 1.10% nonbinary) were primarily White (80.95%), though other races were also present in the sample, including Black (9.89%), Asian (5.86%), American Indian or Alaskan Native



(2.20%), Middle Eastern (0.73%), Native Hawaiian or other Pacific Islander (0.37%), and other races (1.81%). Participants were paid \$1.50 for their participation, which lasted around 10 minutes.

### **Procedure and materials**

The procedure and stimuli used in Study 2 were identical to those in Study 1. Participants were prompted for consent, told they would read an installment from an ongoing series slated for release next month, and randomly assigned to one of the same three ending conditions from Study 1 (cliffhanger  $n = 86$ , protagonist victory  $n = 96$ , antagonist victory  $n = 91$ ). Following reading, they answered story comprehension questions, story related measures, and demographics.

### **Measures**

The same measures used in Study 1 were repeated in Study 2.

**Suspense.** To measure story ending and overall suspense, we again used the arousal dimension of the SAM ( $M_{story-end} = 2.74$ ,  $SD_{story-end} = 1.09$ ;  $M_{overall} = 2.79$ ;  $SD_{overall} = 1.09$ ) and the feelings thermometer ( $M_{story-end} = 51.27$ ,  $SD_{story-end} = 28.12$ ;  $M_{overall} = 50.48$ ;  $SD_{overall} = 27.62$ ).

**Enjoyment.** Participants' enjoyment was again measured with four items on a seven-point Likert-type scale ( $\alpha = .82$ ;  $M = 4.76$ ;  $SD = 1.38$ ).

**DFFI.** DFFI was measured using two items on a five-point Likert-type scale ( $\alpha = .96$ ;  $M = 3.42$ ;  $SD = 1.36$ ).

**Narrative transportation.** Participant transportation was measured with 14 items on a six-point Likert-type scale ( $\alpha = .86$ ;  $M = 3.91$ ;  $SD = 0.84$ ). Like in Study 1, narrative transportation did not differ by condition ( $F < 1$ ).

**Character morality & liking.** Finally, character morality and liking were again assessed for Morgan and Milo. Character morality was assessed with nine items on a six-point Likert-type scale ( $\alpha_{Morgan} = .93$ ,  $M = 5.09$ ;  $SD = 0.95$ ;  $\alpha_{Milo} = .81$ ,  $M = 1.29$ ;  $SD = 0.54$ ). Character liking was assessed with six items on a six-point Likert-type scale ( $\alpha_{Morgan} = .86$ ,  $M = 3.82$ ;  $SD = 0.87$ ;  $\alpha_{Milo} = .61$ ,  $M = 1.41$ ;  $SD = 0.54$ ). To improve the reliability of the character liking measure for the antagonist, we dropped two items ("I liked Milo as a character" and "I could not see myself doing what Milo did"). Dropping these items improved the reliability ( $\alpha_{Milo} = .85$ ,  $M = 1.20$ ;  $SD = 0.50$ ).

**Table 2.** Means and standard deviations for all outcome variables in Study 2.

Outcome	Protagonist Victory Condition	Cliffhanger Condition	Antagonist Victory Condition
Protagonist morality	5.00 (1.11)	5.02 (0.97)	5.26 (0.70)
Antagonist morality	1.23 (.51)	1.36 (0.67)	1.29 (0.42)
Protagonist liking	3.81 (.96)	3.81 (0.87)	3.87 (0.79)
Antagonist liking	1.13 (.43)	1.29 (0.60)	1.20 (0.45)
Enjoyment	4.99 (1.45) <sup>a</sup>	4.72 (1.20)	4.54 (1.44) <sup>b</sup>
Story-ending suspense – SAM	2.71 (1.09)	2.67 (1.08)	2.84 (1.12)
Story-ending suspense – Feelings thermometer	49.00 (27.87)	53.87 (26.84)	51.22 (29.63)
Overall suspense -SAM	2.85 (1.10)	2.69 (1.00)	2.82 (1.17)
Overall suspense -Feelings thermometer	47.22 (27.52)	52.80 (25.49)	51.71 (29.58)
Desire for future installment	3.20 (1.31) <sup>b</sup>	3.67 (1.28) <sup>a</sup>	3.42 (1.45) <sup>b</sup>

Standard deviations appear in parentheses. Different superscripts within each row indicates statistically significant differences at  $p \leq .01$ .

## Results

As with Study 1, to ensure that audience perceptions of the protagonist's or antagonist's morality did not significantly vary by condition, we ran two ANOVA with condition as the independent variable, and character morality perceptions for the protagonist (Morgan) and antagonist (Milo), respectively, as the dependent variable. We then repeated these analyses with the character liking measures for Morgan and Milo. Results revealed no significant difference of character morality or character liking between the conditions for Morgan or Milo (all  $F < 3$ , all  $p \geq .10$ ). Given this, we again conclude that character morality or liking did not significantly impact the differences by condition that we observe in Study 2. Means and standard deviations for all outcome variables in Study 2 can be seen in Table 2.

To investigate RQ1, which asked whether a cliffhanger ending was enjoyed more than an ending with a protagonist or antagonist victory, we conducted an ANCOVA with condition as the independent variable, enjoyment as the dependent variable, and transportation as the covariate. Condition significantly impacted participant enjoyment when controlling for narrative transportation,  $F(2, 269) = 3.91$ ,  $p = .02$ ,  $\eta_p^2 = .03$  (effect of covariate:  $F(1, 269) = 75.78$ ,  $p < .001$ ,  $\eta_p^2 = .22$ ). Examining pairwise comparisons (using Sidak adjustment for multiple comparisons) revealed the protagonist victory was enjoyed significantly more than the antagonist victory,  $p = .02$ , 95% CI [0.07, 0.92]. There was no significant difference between the cliffhanger ending and the protagonist victory, or between the cliffhanger ending and the antagonist victory (both  $p > .10$ ). This pattern of means replicates the pattern found in Study 1.

To examine RQ2a, asking whether condition impacted story ending suspense, two ANCOVAs were run with condition as the independent variable, transportation as the covariate, and the SAM arousal or feelings thermometer as the respective dependent variable in each ANCOVA. Echoing Study 1,

results showed that although transportation was associated with participants' feelings of suspense at the story ending as measured by both the feelings thermometer,  $F(1, 269) = 58.81$ ,  $p < .01$ ,  $\eta_p^2 = .18$ , and the SAM suspense measure,  $F(1, 269) = 52.02$ ,  $p < .01$ ,  $\eta_p^2 = .16$ , condition did not impact the story ending suspense with either the feelings thermometer or the SAM measure, both  $F < 2$ .

For RQ2b, asking whether participants' overall story suspense was impacted by condition, the same ANCOVA procedure was used as in RQ2a, this time with the overall suspense feelings thermometer and SAM suspense measures as the respective dependent variables. Again, echoing Study 1 and RQ2a, transportation was a significant predictor of overall suspense measured by the feelings thermometer,  $F(1, 269) = 100.98$ ,  $p < .001$ ,  $\eta_p^2 = .27$ , but condition was not,  $F < 2$ . Analysis of the SAM measure of suspense showed the same pattern, where transportation was a significant predictor,  $F(1, 269) = 89.35$ ,  $p < .001$ ,  $\eta_p^2 = .25$ , but condition was not,  $F < 2$ . Taken together, as with Study 1, results of RQ2 revealed no significant differences across conditions for suspense participants felt either at the story ending or for the overall story.

Finally, to examine RQ3, which asked if reading a narrative ending with a cliffhanger impacts DFFI, we conducted an ANCOVA with DFFI as the dependent variable, condition as the independent variable, and transportation as the covariate. Echoing Study 1, condition significantly impacted DFFI when controlling for narrative transportation,  $F(2, 269) = 6.77$ ,  $p = .001$ ,  $\eta_p^2 = .05$  (effect of covariate:  $F(1, 269) = 244.21$ ,  $p < .001$ ,  $\eta_p^2 = .48$ ). Specifically, pairwise comparisons showed participants who read the cliffhanger ending reported greater DFFI than participants who read both the protagonist victory,  $p = .001$ , 95% CI [0.17, 0.87], or the antagonist victory,  $p = .04$ , 95% CI [0.016, 0.72].

## Study 2 and General Discussion

### Overview of Findings

Despite cliffhangers' prevalence in popular entertainment media, little research has attempted to investigate their impact on audience responses (but see Wirz et al., 2022). Guided by ADT, the present studies attempted to investigate the extent to which narratives featuring cliffhanger endings may produce more or less suspense, enjoyment, and desire for future narrative installments in audiences compared to endings featuring protagonist or antagonist victories. Overall, results revealed that audiences desired a future installment of a story (DFFI) more when the narrative they read ended in a cliffhanger compared to either a protagonist (both studies) or antagonist victory (Study 2). However, no differences emerged between cliffhanger endings and either resolved ending type for audiences' enjoyment, story-ending

suspense, or overall story suspense. The fact that these findings were consistent across both studies suggests that cliffhangers may serve as a useful narrative device to maximize DFFI and retain audiences without necessarily sacrificing viewers' enjoyment of the narrative.

### ***Desire for Future Installment***

Results supported that DFFI was significantly higher for audiences who read a narrative with a cliffhanger compared to narratives ending in either a protagonist (both studies) or antagonist victory (Study 2). This shows that audiences may be particularly motivated to continue stories that do not have a definitive ending. Notably, these findings are directly counter to those of Wirz et al. (2022) who found that longer audiovisual narratives ending in cliffhangers did not result in greater DFFI than non-cliffhanger endings. From an ADT perspective, there is no theoretical reason to expect that the effect of cliffhangers should differ by medium. Thus, these results may point to the efficacy of cliffhangers for instigating audiences' DFFI in comparatively shorter stories characteristic of those used in the present study, but not longer narratives (e.g., those used by Wirz and colleagues). Future work should attempt to examine different story lengths across media types to clarify the boundary conditions of these effects.

### ***Enjoyment of Cliffhangers***

Echoing Wirz et al. (2022), our results revealed no statistically significant difference in audiences' enjoyment of the narrative with the cliffhanger ending compared to either of the comparison narratives which featured a resolution. Importantly, rooting this investigation in ADT illuminated the fact that average liking scores for the narrative with the cliffhanger ending tended to be greater than the antagonist-victory condition, but less than the protagonist-victory condition, although this difference was not statistically significant. Coupled with the ADT-expected findings that the protagonist victory ending was most liked, and the antagonist victory was least liked, this pattern of means adds critical nuance to understandings of audience responses to unresolved, cliffhanger endings.

Indeed, the present results suggest that cliffhangers' instigation of premature story evaluation before characters' outcomes were known did not lead to expected decreases in audiences' liking of the story. This may be because the interruption of the ADT process occurs at Stage 4, leaving audiences in an anticipatory stage where they are not fully capable of deciding they dislike a story – at least not yet. A cliffhanger may allow audiences to hold onto their hopes that good outcomes will befall characters they like (i.e., protagonist victory), perhaps prompting their story evaluations to be driven by other story

elements than the narrative outcome. The fact that audiences do not necessarily dislike cliffhangers more than protagonist victories may also be because cliffhangers produce intrigue in audiences' imaginations of what could happen next, similar to how Alfred Hitchcock famously elicited audience suspense by suggesting positive or negative outcomes with the narrative while leaving the rest to audiences' imaginations (Miyamoto, 2019). Future work should attempt to explore the possibility that the factors that audiences take into account when appraising narratives may differ between resolved and unresolved cliffhanger endings. For instance, because audiences might not view a cliffhanger ending as the "real" story ending, perhaps their story evaluations are driven by other variables not accounted for by ADT (e.g., character liking regardless of outcome, writing quality, etc.). Future investigations using a cliffhanger narrative as a comparison condition to resolved stories may shed light on this possibility.

Future research might also consider exploring a wider range of outcomes and narrative cues associated with cliffhangers. For example, audiences may enjoy a story with a cliffhanger, but at the same time may feel frustration with an author for leaving them without a resolution. These additional responses may also affect feelings toward the series or DFFI. Additionally, we note that the present study's stimulus included a cliffhanger that offered no indication to audiences whether the protagonist would win or lose. Often, cliffhangers are not so neutral, as many popular cliffhangers have hinted to audiences that the protagonist would or would not prevail. For instance, the sixth book in J.K. Rowling's Harry Potter series, *Harry Potter and the Half-Blood Prince*, ends suddenly after a beloved main character is killed by another main character. Although the death seems final, that it occurs without any further explanation at the end of the book leaves audiences wondering whether the character is really dead. Furthermore, we might speculate that even despite the presence of a cliffhanger, audiences expect that liked-characters will prevail in the end, due to the cultural prevalence of this story structure. Alongside the expectations audiences bring to narrative endings, future work should investigate audiences' responses to these types of positively- or negatively-biased cliffhangers that offer clues to the characters' outcomes. Such investigations may be useful for assessing the unique role of the story outcomes that audiences *anticipate* for story appraisal.

### **The Role of Suspense**

Cliffhangers are conceptualized as a narrative's premature, *high-suspense* story disruption that occurs before the characters' outcomes are known (Wirz et al., 2022). Narrative transportation was a significant predictor of suspense at both the story ending level and the overall story level, which is important, as it

implies the more immersed an audience is, the more suspense they will feel. These findings align with the basic principles of ADT (Raney, 2003).

Although suspense has been identified as a key component of both ADT's story evaluation process and of cliffhangers specifically, neither study in the present work provided evidence that cliffhangers elicit more overall or story-ending suspense compared to resolved endings. These findings across both studies and both types of suspense explored are directly counter to the results of Wirz et al. (2022), where cliffhangers led to higher suspense, but not enjoyment or DFFI in audiences. Given that the cliffhanger condition did not provide a resolution to the story conflict, we might have expected that responses to at least one of the suspense measures in the present study would have differed for audiences who read the cliffhanger narrative compared to either resolved story. However, the lack of an effect of story condition on either type of suspense leads us to believe that distinguishing overall story suspense from story-ending suspense may not be as critical for identifying what is unique about audience responses to cliffhangers. Future work should attempt to investigate the degree to which audiences experience suspense during cliffhangers versus resolved narrative endings, and whether either type of suspense – perhaps measured with more sensitive instruments – may be unique to audiences' experiences with cliffhangers.

Although it is possible that overall suspense or story-ending suspense do not play the critical role in cliffhangers that we previously thought, we think a more likely explanation for the present study's null findings surrounding suspense are the result of either the comparatively shorter stimulus or the suspense measures used (as we discuss below). ADT states that the suspense audiences feel for characters in a narrative is proportional in magnitude to the relationship audiences develop with them (Raney, 2003). Thus, compared to the longer narrative used by Wirz et al. (2022), it may have been difficult for audiences to create a strong relationship with characters in the short narrative adopted by the present study.

### **Practical Implications**

Practically speaking, the present study's finding that audiences' enjoyment does not suffer substantially with the presence of a cliffhanger should be particularly useful for authors looking to maximize audience retention across a series. Given the present findings suggesting cliffhanger endings were not substantially less liked than typical protagonist victories, writers may rely on these unresolved endings to increase engagement with future installments without necessarily sacrificing enjoyment of any individual installment.

The success of well-known book series with cliffhanger endings seem to bolster this claim. For example, in *The Hunger Games* trilogy by Suzanne

Collins, *The Hunger Games*, book one, ends with a cliffhanger, with the protagonist unsure of her future. *Catching Fire*, book two, ends with an antagonist victory, where the protagonist is unaware of the fate of her family and friends. Finally, *Mockingjay*, book three, ends with a protagonist victory, with the protagonist experiencing newfound peace. The success of Collins' series speaks for itself, with over 80 million copies sold in the US alone, four blockbuster movies based on the book series that made nearly \$3 billion in the box office worldwide, and burgeoning success for the prequel franchise (Robbins, 2020). These figures reflect that the *Hunger Games* remains cultural phenomenon, even over a decade after the first installment's release.

Coupled with the findings of the present study, the *Hunger Games* series demonstrates that the use of varied ending types, paired with worldbuilding that increases narrative transportation (Green & Brock, 2000), can successfully evoke high DFFI and engagement in audiences. That is, even books with cliffhanger endings like *Hunger Games* (an estimated 29 million copies in the US) and antagonist endings like *Catching Fire* (an estimated 21 million copies in the US), can perform at a similar level to traditional protagonist victory endings like *Mockingjay* (an estimated 20 million copies in the US; Robbins, 2020).

### **Limitations**

There are five main limitations to the present study. The first limitation is linked to the use of the SAM and a feelings thermometer as suspense measures. These measures may not be sufficiently sensitive to detect what is likely to be ephemeral audience suspense instigated as a result of exposure to a short, written narrative. Even so, we note that Wirz et al. (2022) implemented physiologically-based measures of suspense yet found mixed results in these outcomes when comparing audience responses to cliffhanger endings versus non-cliffhanger endings. In line with ADT's contention that audience's hopes and fears are intense during the period of time after they begin rooting for/against characters, but before they witness the characters' outcomes, we adopted these instruments in an attempt to measure the intensity of audiences' arousal related to the overall story and story ending. Pragmatically, we also wanted to measure audiences' suspense as rapidly as possible to capture what are likely ephemeral peaks in their arousal. Nevertheless, future studies should continue to investigate what role, if any, suspense plays in audiences' perceptions of narratives ending with cliffhangers, perhaps by pitting multiple measures of suspense against one another in an attempt to investigate which ones are capable of picking up signal in audiences' responses to cliffhangers.

Second, the narrative in the present study was comparatively short, which may have limited audiences' ability to form strong dispositions toward



characters, and ultimately enjoy the story (Raney, 2003). Future researchers should adopt longer narratives in line with Wirz et al. (2022) Third, participants did not select the stimuli they were exposed to in the present study, which could have restricted enjoyment, suspense, and DFFI scores across conditions. Although we might expect that random assignment to conditions would limit participants' scores on these outcomes equally across conditions, future research should investigate audience responses to cliffhangers in more ecological settings that afford participants the ability to select narrative stimuli. Additionally, future researchers investigating DFFI may wish to employ a selection procedure to assess audiences' *actual* future installment behaviors, rather than selection *intentions*, perhaps by creating multiple story installments for participants to select and read.

Fourth, the present study used only one narrative stimulus, which limits the extent to which the current results can be generalized to other narratives. Future work should attempt to replicate the present study's results, and the results of Wirz et al. (2022) using other narratives across media modalities. Fifth, and finally, the loss of  $n = 34$  Study 1 participants who did not complete the entire study and  $n = 68$  Study 1 participants due to failed narrative comprehension checks highlights the need for future research to strive for in-lab studies whenever possible, as opposed to online studies where participants' attention to narrative stimuli is more variable.

## Conclusion

Across two studies, we attempted to examine the manner in which audience responses to cliffhangers in narrative media entertainment may differ from responses to narratives ending in a protagonist or antagonist victory. Findings revealed that audiences desire a future installment of a story more when the narrative they read ended with a cliffhanger compared to a protagonist victory (both studies) or antagonist victory (Study 2). No differences emerged between cliffhanger endings and either resolved ending type for audiences' enjoyment or perceived suspense. These findings suggest cliffhangers may help maximize audience retention throughout a series without necessarily sacrificing viewers' enjoyment. Although more research on cliffhangers is needed, these studies highlight cliffhangers as a potentially useful narrative device for reader retention by authors and publishing companies.

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## Data Availability Statement

The data described in this article are openly available in the Open Science Framework at <https://osf.io/f4kv5/>

## Open Scholarship



This article has earned the Center for Open Science badges for Open Data and Open Materials through Open Practices Disclosure. The data and materials are openly accessible at <https://osf.io/f4kv5/>

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